



ENVIRONMENTAL COMPLIANCE SERVICES, INC.



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Massachusetts Department of
Environmental Protection
Central Regional Office
8 New Bond Street
Worcester, MA 01606

November 16, 2015
Project No. 91-218371.13
Document No. 45251

RE: Immediate Response Action Completion Report
Mr. Mike's Mobil-branded Station
238 Main Street
Townsend, Massachusetts 01469
RTN 2-19405

To Whom It May Concern:

On behalf of Global Partners LP, Alliance Energy Gasoline Division (Alliance), Environmental Compliance Services, Inc. (ECS) has prepared the following Immediate Response Action (IRA) Completion Report for the Mr. Mike's Mobil-branded retail gasoline station located at 238 Main Street in Townsend, Massachusetts (herein referred to as the "Site").

On January 14, 2015 at 11:45 am, a two-hour reporting condition occurred at the Site when a gasoline leak was discovered at a fuel dispenser (Dispenser 1/2) during a routine underground storage tank (UST) system inspection. Specifically, it was noted that gasoline was leaking from a two-inch diameter union fitting associated with Dispenser 1/2. The previous UST system inspection was completed three weeks earlier on December 24, 2014 and no leaks from this dispenser were identified at that time. A review of gasoline inventory records did not suggest a loss of product during the period between the UST system inspections on December 24, 2014 and January 14, 2015. Furthermore, the records did not provide evidence regarding a specific date on which the release began. As a result, an accurate estimate of the volume of gasoline leakage at fuel dispenser #1/2 could not be determined.

Upon ECS obtaining knowledge of the release condition, the Massachusetts Department of Environmental Protection (MassDEP) was notified on January 14, 2015 and assigned Release Tracking Number (RTN) 2-19405. MassDEP approved IRA activities at the Site including gasoline inventory reconciliation, removal of the leaking dispenser, field-screening of total organic vapors (TOVs) in nearby catchbasins and in the on-Site convenience store using a photoionization detector (PID), and removal of up to 50 cubic yards of contaminated soil if necessary. A release notification form and the corresponding IRA Plan were submitted to the MassDEP on March 16 and 19, 2015, respectively.

MassDEP Bureau of Waste Site Cleanup (BWSC) transmittal form BWSC105 is being submitted electronically to the MassDEP in conjunction with this IRA Completion Report.

WHERE BUSINESS AND THE ENVIRONMENT CONVERGE
NATIONWIDE COVERAGE

In the following states ECS operates as:

Indiana - ECS of Indiana, Inc.; Arizona - Environmental Compliance Services of Arizona, Inc.; Georgia - Environmental Compliance Services of Georgia, Inc.; Michigan - Environmental Compliance Services of Michigan, Inc.; Mississippi - Environmental Compliance Services, Inc. of Mississippi; Louisiana - Environmental Compliance Services, Inc. of Louisiana; Nebraska - Pangean Environmental Compliance Services, Inc.; Texas - Pangean Environmental Compliance Services, Inc. In North Carolina, engineering and geological services are provided by Environmental Compliance Services of North Carolina, P.C.

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1.0 PERSONS ASSUMING RESPONSIBILITY FOR CONDUCTING THE IRA

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|-----------------------------|--|
| Conducting Response Action: | Mr. David Went Global Partners LP, Alliance Energy Gasoline Division 800 South Street, Suite 500 Waltham, Massachusetts 02454 (781) 402-8893 |
| Licensed Site Professional: | Mr. Shawn Rising, LSP #5539 Environmental Compliance Services, Inc. 588 Silver Street Agawam, Massachusetts 01001 (413) 789-3530 |

2.0 SITE DESCRIPTION

The Site is a 0.5-acre parcel of land improved with a 2,088 square foot convenience store, a shed, four USTs storing gasoline and diesel fuel, and a canopy covering two fuel dispensing islands. The convenience store was built in 1983 and an addition was constructed in 2006. The Site currently operates as a Mr. Mike's Mobil-branded self-service gasoline station. A Site location map and Site plan, illustrating pertinent Site features, have been included as Figures 1 and 2, respectively.

The on-site USTs, consisting of one 2,500-gallon diesel, one 6,000-gallon gasoline, one 8,000-gallon gasoline and one 10,000-gallon gasoline tanks, are located northeast of the convenience store. The fuel dispensing islands are located north of the convenience store.

The Site is connected to the municipal water system. An on-Site septic tank and leachfield are located to the east/southeast of the convenience store. Stormwater catchbasins are located in Main Street to the north of the Site. An open stormwater drainage basin which receives parking lot runoff is located on the south-central portion of the Site.

The Site is located in a mixed residential and commercial area. To the north of the Site is Main Street, across which are retail commercial properties, to the east and south of the Site are residential properties (presumably with basements), and to the west of the Site is Depot Street, across is a funeral home and paved parking lot. The Site has relatively flat topography and the majority of the parcel is paved. A grassy area is located on the south side of the convenience store.

3.0 SITE HISTORY AND DESCRIPTION OF RELEASE CONDITION

3.1 MassDEP RTN 2-641

A tank tightness test was performed at the Site on January 13, 1989 and a leak was detected in a 5,000-gallon gasoline UST formerly located northwest of the Site building near Depot Street. Two 5,000-gallon gasoline USTs were decommissioned and subsequently removed from Site at that time. Groundwater recovery wells were installed in February 1989 and approximately 1,150 gallons of impacted groundwater and light non-aqueous phase liquid (LNAPL) were recovered for disposal.

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A Notice of Responsibility (NOR) was issued to Peterborough Oil Company (the former Site owner) on March 30, 1989 and RTN 2-641 was assigned by MassDEP. A groundwater pump and treat and LNAPL recovery system was installed March 1989 and approximately 4,040 gallons of impacted groundwater and LNAPL were recovered by November 1989.

A Phase I Initial Site Investigation and Tier II Classification were submitted to MassDEP on August 6, 1996. A Phase II Comprehensive Site Assessment (CSA) and a Phase III Remedial Action Plan (RAP) were submitted to MassDEP on June 24, 1999. A Phase IV Remedy Implementation Plan (RIP) detailing the installation of a soil vapor extraction (SVE) and air sparging (AS) remediation system was submitted to MassDEP on November 16, 1999. The SVE system was activated on May 8, 2000, and the AS system was activated on June 29, 2000. A Phase IV Final Inspection and Completion report was subsequently submitted to MassDEP on October 11, 2000. A Remedy Operation Status (ROS) evaluation opinion was submitted to MassDEP on June 27, 2001, and six-month status reports documenting operation and maintenance (O&M) activities were submitted to MassDEP from June 2001 through September 2003.

Operation of the AS system was discontinued in July 2002, and the SVE system was later deactivated in March 7, 2003. An evaluation of soil, soil gas, and groundwater quality was completed in July 2003. The post-remedial evaluation included the advancement of six soil borings within previously impacted portions of the Site, and the collection and quantitative analysis of soil samples. The results of the analyses indicated that concentrations of volatile petroleum hydrocarbons (VPH) were not detected above the laboratory reportable detection limits (RDLs). Two soil gas points were installed in the immediate vicinity of the Site building and sampled to evaluate potential impacts to indoor air. The soil gas sampling concluded that impacts to indoor air from the release were not likely.

Two rounds of groundwater sampling were conducted in April and September 2003 after active remediation was discontinued at the Site. On the basis of historical and post-remedial investigations, it was concluded that petroleum impacts to unsaturated soils within the Disposal Site Area defined for RTN 2-641 had been reduced to background levels (below laboratory detection limits). A Massachusetts Contingency Plan (MCP) Method 2 Risk Characterization was completed. Soil and groundwater quality data were evaluated according to Method 1 Risk Characterization Standards. Soil gas and the potential for impacts to surface water associated with residual impacts to groundwater on the Site were evaluated using Method 2. The Risk Characterization concluded that a condition of No Significant Risk of harm to human health, the public welfare and safety, and the environment was achieved for RTN 2-641. A Class A-2 Response Action Outcome (RAO) was therefore submitted in December 2003.

3.2 MassDEP RTN 2-18629

On July 7, 2012, a sudden surface release of approximately 13 gallons of gasoline occurred at the Site. MassDEP was notified and assigned RTN 2-18629. The source of the release was a faulty meter associated with fuel dispenser #8. The meter discharged gasoline, spraying it against the interior of the dispenser skirt, some of which then drained to the exterior and base of the pump island and beneath the dispenser impacting peastone and soil. The local fire department and Site personnel cleaned up the surface with speedi-dry.

During IRA activities in July 2012, impacted materials beneath the dispenser consisting primarily of peastone were removed to a depth of approximately 2 feet below grade (fbg). Elevated TOV concentrations (287 to 1,291 parts per million [ppm]) were measured in soil headspace following the soil removal. Quantitative analysis of post-excavation soil samples indicated the presence of VPH fractions at concentrations above the MassDEP Reportable Concentrations for S-1 soil (RCS-1). It was determined that the limited excavation effort removed the majority of materials impacted by the gasoline release. Further soil removal was prevented by the presence of the fuel dispenser and product piping.

In July 2012, two groundwater monitoring wells (MW-101 and MW-102) were installed to the north and south of the leaking fuel dispenser. Soil sampling indicated the presence of trace impacts to shallow subsurface soils, locally elevated concentrations of VPH in soil at the groundwater table, and substantially lower impacts to soil at greater depth in the saturated zone. Soils exhibiting the highest levels of residual contamination in borings MW-101 and MW102, present at the groundwater table, were dark gray and in marked contrast to similar materials present at shallower depths in those locations, suggesting the prolonged presence of reducing conditions indicative of petroleum contamination in those areas. The concentrations of residual contamination detected in soil from the vicinity of the groundwater table in boring MW-101, located relatively upgradient with respect to groundwater flow from the release area, were substantially higher than those reported present in shallow soil in the release area and in soil from the groundwater table in boring MW-102, situated relatively downgradient with respect to groundwater flow from the source of the release. These relationships suggested that the impacts to soil observed at the groundwater table in borings MW-101 and MW-102 were likely associated with the historical release and were not associated, or entirely associated, with the July 2012 release.

Groundwater sampling conducted in August and October 2012 indicated the presence of VPH in samples collected from monitoring wells MW-101 and MW-102, substantially lower concentrations of VPH in groundwater downgradient with respect to groundwater flow from the release area in the vicinity of well MW-1, and substantially higher concentrations of VPH in groundwater some distance upgradient with respect to groundwater flow from the release area in the vicinity of well E-3. The results of analyses of groundwater from previously existing wells E-3, OW-4, and MW-1 were consistent with the results of analysis of groundwater samples from these locations during the post-remedial assessment of groundwater quality performed in 2003 prior to submittal of the RAO for RTN 2-641. The results of analysis of groundwater samples collected from wells MW-101 and MW-102 in August and October 2012 were consistent with historical groundwater quality data representing conditions in the general vicinity of the release in July 2012. A Class A-2 RAO and Method 3 Risk Characterization were submitted for RTN 2-18629 in March 2013.

3.3 MassDEP RTN 2-19405

On January 14, 2015, MassDEP was notified of a release at the Site when gasoline was observed leaking from a union fitting associated with Dispenser 1/2 during a routine UST system inspection. MassDEP approved IRA activities at the Site including gasoline inventory reconciliation, removal/repair of the leaking dispenser, field-screening of TOVs at nearby catchbasins and in the on-Site convenience store, and removal of up to 50 cubic yards of

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contaminated soil if necessary. Further discussion of response actions associated with this release is provided in Section 4.

3.4 MassDEP RTN 2-19427

On February 13, 2015, during a Class B Monthly Operator Inspection for the on-Site UST system by ECS Eclipse of Agawam, MA, the inspector discovered what appeared to be a leak from a flex pipe within the diesel STP sump. MassDEP was notified of the release on the February 13, 2015 and assigned RTN 2-19427. The leaking flex line was promptly repaired, and a hydrostatic test was subsequently completed on the diesel STP sump, and it was determined to be tight. A Release Notification and Retraction was submitted to MassDEP on April 13, 2015.

4.0 IMMEDIATE RESPONSE ACTIONS

Response actions conducted at the Site to date for RTN 2-19405 are summarized below.

4.1 Post Spill Site Reconnaissance and Preliminary Assessment

On January 14, 2015, immediately after discovery of the leak at Dispenser 1/2, the crash valves were tripped and this dispenser was deactivated. A technician from WildCo Petroleum Equipment Sales and Service (WildCo), of Manchester, NH was dispatched to the Site on the same date. Upon arrival and inspection of the dispenser, it was reported that a two-inch product line union fitting was leaking. The union fitting could not be loosened to make repairs; therefore, WildCo's compliance division was requested to respond.

A. Govoni Backhoe Service (Govoni) of Shrewsbury, MA subsequently removed Dispenser 1/2 on January 15, 2015 for the purpose of providing access for limited soil assessment activities beneath it. The dispenser was temporarily relocated to the rear of the convenience store and the electrical and product lines were capped. Subsequent to ECS' evaluation of soil conditions beneath the dispenser, further discussed below, the dispenser was repaired by Govoni on January 26, 2015. The super unleaded gasoline product line was tested on January 28, 2015 by WildCo and passed. Dispenser 1/2 was subsequently put back into service at that time.

An ECS field technician arrived at the Site at 3:20 pm on January 14, 2015 to conduct an Imminent Hazard (IH) evaluation and to pre-mark the Site for Dig-Safe notification. Field-screening of TOVs using a PID was completed at two stormwater catchbasins located to the north of the Site in Main Street, on either side of the leaking dispenser, at the stormwater drainage basin on the south-central portion of the Site, at a catchbasin approximately 225 feet southeast of the convenience store, and indoor air within the convenience store (within the restrooms, sales floor, an electrical closet, coolers, office, and cash register attendant area). TOV concentrations ranged from non-detect (0.0 ppm) to 0.2 ppm. Ice was noted to be present in the two catchbasins in Main Street to the north of the Site.

On January 15, 2015, ECS returned to the Site to evaluate soil conditions beneath the leaking fuel dispenser, which had been removed that same morning by A. Govoni Backhoe Service. Mr. Jason Ward from the MassDEP Central Regional Office was also present at the Site during ECS' visit. The leaking dispenser was temporarily located at the western side of the southernmost of the two fueling islands. The fuel dispenser was determined not to have a pan present beneath it. Materials present beneath the dispenser consisted of peastone. TOVs in headspace at four locations beneath the

dispenser were field-screened and concentrations ranged from 122 to 800 ppm. Four samples of peastone were collected at approximately 16 inches below grade and concentrations of TOVs measured in sample headspace ranged from 839 to 1,585 ppm. ECS personnel used a hand auger to attempt to collect samples of native soil beneath the peastone. The hand auger was advanced to approximately 32 to 48" at four locations beneath the dispenser between the product piping. Peastone was encountered at 48" at the easternmost sample, medium to coarse sand exhibiting TOV concentrations of 1,236 and 1,358 ppm was encountered at the two middle samples at 48", and medium to coarse sand with a TOV concentration of 1,624 ppm was encountered at the last (westernmost) sample.

During ECS' Site visit on January 15, 2015, stormwater catchbasins located to the north of the Site on Main Street were screened again for TOVs using a PID, as well as indoor air within the convenience store, and floor drains in the restrooms. TOV concentrations in the catchbasins were non-detect (0.0 ppm), and TOVs in the store were 0.2 ppm. ECS did not observe any exposed piping containing the electrical conduits associated with the UST Veeder Root system or water and septic services inside of the building; therefore, field screening for TOVs in these conduits was not possible.

As part of IRA activities approved by MassDEP, ECS obtained inventory records from December 2014 and January 2015 for the gasoline USTs at the Site. Gasoline inventory reconciliation data was reviewed for the time period in which the release is presumed to have occurred, between December 24, 2014 and January 14, 2015. Records indicate that during this period, the regular unleaded gasoline inventory had a positive variance (+243 gallons) while the super unleaded gasoline inventory had a negative variance (-38 gallons). Based on this data, it appears that the inventory records alone cannot be used to determine the volume of gasoline released at dispenser #1/2.

4.2 Installation of Groundwater Monitoring Wells, February and March 2015

In an effort to assess the horizontal and vertical extent of impacts associated with the gasoline release at dispenser #1/2, ECS initiated a subsurface investigation program consisting of the installation of three on-Site groundwater monitoring wells (MW-103, MW-104, and MW-105), and the collection of select soil and groundwater samples from those locations for analysis of VPH and ethanol.

Installation of groundwater monitoring wells began on February 20 and 25, 2015 and was completed by Drilex Environmental of West Boylston, MA with oversight provided by ECS personnel. The boreholes for each monitoring well were pre-cleared using a vactor truck to depths of approximately 8 to 10 fbg. Soil borings were advanced on the east/southeast and south sides of the fuel dispensing island downgradient of the leaking dispenser (MW-103 and MW-104), and on the west and upgradient side of the leaking dispenser (MW-105).

During pre-clearing activities, ECS personnel field-screened soil samples at one-foot intervals for TOVs using a PID. TOV concentrations from the ground surface to 8 fbg at MW-103 ranged from 1.5 to 5.9 ppm. No staining or petroleum odors were observed. A Geoprobe drill rig was used to advance this borehole to 18 fbg. Soil samples collected at 8-10', 10-15', and 15-20' were field-screened for TOVs, which ranged from 0.3 to 6.7 ppm. A petroleum odor and dark-brown to black-stained soil was noted in the sample collected at 15-20' (a depth at and below the groundwater table). Since low TOV concentrations were measured at this depth (6.7 ppm), it is therefore presumed that the odor and stained soils, observed at the groundwater table depth, are indicative of the previously

described historical release associated with RTN 2-641. This borehole was finished as a two-inch diameter groundwater monitoring well constructed with 10 feet of 0.010-inch slot polyvinyl chloride (PVC) well screen set at 8-18', and attached with flush-threaded joints to 8 feet of solid PVC riser. The annular space around the well screen was backfilled with sand. A one-foot thick bentonite seal was installed above the sand pack to prevent surface water infiltration into the well. The annulus above the bentonite seal was backfilled with native material. The well was finished with a traffic-rated water-tight road box cemented in place flush with the ground surface. Upon completion, ECS developed MW-103 by purging groundwater using a disposable polyethylene bailer.

On February 20, 2015, pre-clearing of MW-104 was initiated; however, concrete obstructions were encountered at approximately 1.5 fbg during two separate attempts, as well as a significant layer of frost, which slowed progress. Drilex Environmental and ECS personnel returned to the Site on February 25, 2015, at which time monitoring well MW-104 was relocated further to the west due to the subsurface obstructions. The location of MW-104 was installed in close proximity to a former on-Site monitoring well OW-5 (decommissioned). Pre-clearing of MW-104 occurred to 10 fbg. Beginning at 1 fbg, soil samples were field-screened for TOVs at one-foot intervals and concentrations ranged from 6.0 to 397.1 ppm, with the highest concentration of TOVs measured between 3 and 7 fbg. The boring was further advanced to the depth of refusal (16.5 fbg) using a Geoprobe. TOV concentrations ranged from 6.6 to 66 ppm in the 10-15' sample and were measured as 30 ppm in the 15-16.5 fbg sample. No petroleum odors or staining was observed in any of the soil samples from this boring. Although elevated TOV concentrations were detected in the soil samples collected from within boring MW-104 at the 3-7 fbg, the apparent absence of obvious petroleum odors reported in the field documentation suggests that they may have been anomalous, and were potentially attributable to extreme cold weather conditions at the time of field screening.

Due to borehole collapse and the limitations of the Geoprobe drill rig operated by Drilex Environmental, a monitoring well could not be installed in the borehole for MW-104 on February 25, 2015. As a result, pre-clearing of the borehole for MW-105 to 9 fbg was conducted on that date. Soil samples were field-screened for TOVs at one-foot intervals and ranged from 4.5 to 14.0 ppm. No petroleum odors or staining was observed. Drilling continued to 20 fbg with the Geoprobe at this location. TOVs measured at the 10-15' and 15-20' fbg intervals ranged from 25.7 to 76.4 ppm, respectively. Due to time limitations, a monitoring well could not be installed by Drilex Environmental in the borehole for MW-105 on February 25, 2015.

On March 16, 2015, ECS provided oversight during the installation of monitoring wells in the boreholes for MW-104 and MW-105. This work was performed by Crawford Drilling Services, LLC of Westminster, Massachusetts using a Geoprobe drill rig. Crawford Drilling Services drilled into the borehole locations previously advanced by Drilex Environmental. An auger attachment was used on the Geoprobe to prevent borehole collapse. Since soils were previously field-screened for TOVs and characterized during the drilling of these boreholes in February 2015, these activities were not repeated on March 16, 2015. Excess soil cuttings from MW-104 and MW-105 were field-screened for TOVs. Soil cuttings from MW-104 were measured at 9.6 and 10.2 ppm, and soil cuttings from MW-105 were measured at 255 ppm. As a result, these soil cuttings were containerized within two 55-gallon drums which were temporarily stored at the Site until they were later removed by TMC Environmental Services on April 9, 2015, and were transported to Northland Environmental, LLC in Providence, RI under a bill of lading.

A two-inch diameter groundwater monitoring well constructed with 10 feet of 0.010-inch slot PVC well screen set at 6.5 to 16.5' attached with flush-threaded joints to 6.5 feet of solid PVC riser was installed at MW-104. A two-inch diameter groundwater monitoring well constructed with 10 feet of 0.010-inch slot PVC well screen set at 8 to 18' attached with flush-threaded joints to 8 feet of solid PVC riser was installed at MW-105. The annular space around the well screens was backfilled with sand. A one-foot thick bentonite seal was installed above the sand pack to prevent surface water infiltration into the wells. The annulus above the bentonite seals was backfilled with native material. Both wells were finished with traffic-rated water-tight road boxes cemented in place and flush with the ground surface. Upon completion, ECS developed MW-104 and MW-105 by purging groundwater using a disposable polyethylene bailer.

Soil samples collected at the groundwater table depth at each boring (10-15 fbg), as well as a soil sample collected at 6-7' at MW-104, which exhibited the highest TOV concentration (397.1 ppm), were selected for laboratory analysis of VPH and ethanol via USEPA Method 8260C. These samples were submitted under chain of custody (COC) to Con-Test Analytical of East Longmeadow, MA on February 27, 2015. The samples were submitted with a trip blank for QA/QC purposes.

According to the laboratory analytical report, VPH carbon fractions and target analytes were not detected at concentrations above the laboratory reportable detection limits (RDLs), with the exception of toluene detected at 0.086 milligrams per kilogram (mg/Kg) in the MW-104/10-15' sample and at 0.067 mg/Kg in the MW-105/10-15' sample. These concentrations are well below the applicable RCS-1 standard of 30 mg/Kg, and the applicable MCP Method 1 S-1/GW-2 and S-1/GW-3 standards of 500 mg/Kg. Ethanol was not reported at concentrations above the laboratory RDLs in any of the samples.

4.3 Groundwater Sampling, March 2015

On March 20, 2015, ECS personnel returned to the Site to collected groundwater samples from monitoring wells MW-103, MW-104, and MW-105. ECS completed a wellhead elevation survey at the same time. The elevation survey determined that groundwater flows in an easterly direction across the site. Note that historical groundwater flow contours, calculated during previous assessment activities, generally indicate a similar groundwater flow direction (southeast); however, previous contours (prepared by others) were developed using the former monitoring well network.

Groundwater samples were collected using low flow sampling techniques and a peristaltic pump. Each monitoring well was gauged for depth to groundwater using an electronic water level meter. Temperature, pH, specific conductivity, dissolved oxygen (DO), and oxidation reduction potential (ORP) in groundwater at each well were monitored at three to five-minute intervals during purging and stabilization was achieved prior to sample collection. Turbidity was measured at the time of sample collection. No odors, oily sheens, or LNAPL were observed at any of the monitoring wells. Depth to groundwater on March 20, 2015 ranged from 12.31 fbg at MW-105 to 13.25 fbg at MW-103.

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Groundwater samples from all three monitoring wells were submitted for laboratory analysis of VPH and ethanol. The samples were stored on ice until received by Con-Test Analytical under COC on March 20, 2015. The samples were submitted with a trip blank for QA/QC purposes.

According to the laboratory analytical report, VPH C₅-C₈ aliphatic fractions were detected in all three groundwater samples at concentrations ranging from 110 ug/L (MW-104) to 1,300 ug/L (MW-103), all of which are below the applicable RCGW-2 and Method 1 GW-2/GW-3 standards. Concentrations of VPH C₉-C₁₀ aromatic fractions were detected in the groundwater samples from MW-103 and MW-105 (1,300 and 440 ug/L) at concentrations below applicable RCGW-2 and Method 1 GW-2/GW-3 standards. VPH target analytes benzene, toluene, ethylbenzene, xylenes, methyl tert-butyl ether (MtBE) and/or naphthalene were detected in all three groundwater samples at concentrations below their respective RCGW-2 and Method 1 GW-2/GW-3 standards. Ethanol was not detected above the laboratory RDL or the RCGW-2 standard in any of the groundwater samples.

Tables 1, 2, and 3 provided a summary of groundwater gauging data, field monitoring data and laboratory analytical results for March 20, 2015. The soil borings logs, groundwater monitoring logs and groundwater analytical report for the March 2015 drilling and sampling events were provided in an IRA Status Report submitted to MassDEP on May 19, 2015.

4.4 Groundwater Sampling, June 2015

On June 11, 2015, ECS collected groundwater samples from monitoring wells MW-103, MW-104, and MW-105. Groundwater sampling logs are provided as Attachment I.

Groundwater samples were collected using low flow sampling techniques and a peristaltic pump. Each monitoring well was gauged for depth to groundwater using an electronic water level meter. Temperature, pH, specific conductivity, DO, and ORP in groundwater at each well were monitored at three to five-minute intervals during purging and achieved stabilization prior to sample collection. Turbidity was measured at the time of sample collection. A slight odor was noted in the samples from MW-103 and MW-104. No oily sheens or LNAPL were observed at any of the monitoring wells. Depth to groundwater on June 11, 2015 ranged from 12.02 fbg at MW-105 to 12.93 fbg at MW-103.

Groundwater samples from all three monitoring wells were submitted for laboratory analysis of VPH. The samples were stored on ice until received by Con-Test Analytical under COC on June 11, 2015. The samples were submitted with a trip blank for QA/QC purposes.

According to the laboratory analytical report, VPH C₅-C₈ aliphatic fractions and/or C₉-C₁₀ aromatic fractions were detected at concentrations above the laboratory RDLs in the samples collected from MW-103, MW-104, and MW-105. The concentration of C₅-C₈ aliphatics in the sample from MW-103 (7,000 ug/L) exceeded the Method 1 GW-2 standard (3,000 ug/L, but not the GW-3 standard (50,000 ug/L). In addition, one or more VPH target analytes were detected in the samples from MW-103, MW-104, and MW-105 above the laboratory RDLs, but below Method 1 GW-2/GW-3 standards.

The groundwater analytical reports are provided as Attachment II. Groundwater analytical results, field measurements, and gauging data are summarized in Tables 1, 2 and 3.

4.5 Installation of Groundwater Monitoring Wells, September 2015

On September 10, 2015, two additional monitoring wells (MW-106 and MW-107) were installed within the eastern portion of the site downgradient of the gasoline USTs and dispensers, to further delineate groundwater impacts. The well locations are depicted on Figure 2.

Installation of groundwater monitoring wells was performed by Crawford Drilling Services with oversight provided by ECS personnel. The boreholes for each monitoring well were pre-cleared using a vactor truck to depths of approximately 7 to 8 fbg. Following pre-clearing, a Geoprobe drill rig was used to advance each borehole.

During pre-clearing activities, ECS personnel field-screened soil samples for TOVs using a PID at approximately 2.5 to 5-foot intervals from the ground surface to the maximum depth of exploration. MW-106 was terminated at approximately 17 fbg due to rock refusal, and MW-107 was terminated at approximately 20 fbg. Concentrations of TOVs were not reported above the instrument detection limit (0.1 ppm) for all soil samples collected, with the exception of the 15-17.5' fbg sample collected during advancement of MW-107 (1.2 ppm). No staining or petroleum odors were reported during this subsurface investigation event.

Both boreholes were finished as two-inch diameter groundwater monitoring wells set at 17 fbg (MW-106) and 19 fbg (MW-107). The wells were constructed with 10 feet of 0.010-inch slot PVC well screen set at the depth of termination, and attached with flush-threaded joints to 7 and 9 feet of solid PVC riser. The annular space around the well screen was backfilled with sand. A one-foot thick bentonite seal was installed above the sand pack to prevent surface water infiltration into the well. The annulus above the bentonite seal was backfilled with native material. The wells were finished with traffic-rated water-tight road boxes, which were cemented in place flush with the ground surface. Upon completion, ECS developed each well by manually purging groundwater using a disposable polyethylene bailer.

ECS personnel completed a wellhead elevation survey of the existing and newly installed groundwater monitoring wells on October 6, 2015. Soil borings logs for MW-106 and MW-107 are provided as Attachment III. Based on the elevation survey and gauging results, groundwater flow direction at the site was determined to be southeast.

Soil samples collected at the groundwater table depth at each boring (15-17.5 fbg) were selected for laboratory analysis of VPH and ethanol via USEPA Method 8260C. These samples were submitted under COC to Con-Test Analytical of East Longmeadow, MA on September 10, 2015. The samples were submitted with a trip blank for QA/QC purposes.

According to the laboratory analytical report, VPH carbon fractions, VPH target analytes and ethanol were not detected at concentrations above the laboratory RDLs. The laboratory RDLs were below the applicable MCP Method 1 S-1/GW-2 and S-1/GW-3 standards. The soil laboratory analytical report is provided as Attachment IV. Soil analytical results are summarized in Table 4.

4.6 Installation of Soil Gas Sampling Points, September 2015

On September 15, 2015, ECS installed two soil gas sampling points (SG-1 and SG-2) through the ground floor concrete slab in the northern portion of the on-site convenience store. The soil gas points are depicted on Figure 2.

Each soil gas point consisted of a brass Vapor PinTM installed in a 5/8-inch diameter hole drilled into the floor to a depth approximately one inch beneath the slab. The top of the Vapor Pins have a barb fitting to attach flexible polyethylene tubing to allow for screening of TOVs and collection of soil gas samples. Upon completion, each sampling point was fitted with a flush-mount cap.

Immediately following installation, TOVs were measured at each point by connecting a PID to the sampling tube. TOVs at SG-1 were 0.6 ppm and TOVs at SG-2 were 0.7 ppm. Additional TOV concentrations measured at each point five minutes following the initial readings and were recorded as 0.4 ppm at SG-1 and 0.2 ppm at SG-2.

4.7 Groundwater Sampling, September 2015

On September 25, 2015, ECS collected groundwater samples from monitoring wells MW-103, MW-104, MW-105, MW-106, and MW-107. Groundwater sampling logs are provided as Attachment V.

Groundwater samples were collected using low flow sampling techniques and a peristaltic pump. Each monitoring well was gauged for depth to groundwater using an electronic water level meter. Temperature, pH, specific conductivity, DO, and ORP in groundwater at each well were monitored at three to five-minute intervals during purging and stabilization was achieved prior to sample collection. Turbidity was measured at the time of sample collection. An odor was noted in the sample from MW-103. No oily sheens or LNAPL were observed at any of the monitoring wells. Depth to groundwater on September 25, 2015 ranged from 13.29 fbg at MW-105 to 14.50 fbg at MW-107.

Groundwater samples from all three monitoring wells were submitted for laboratory analysis of VPH. The samples were stored on ice until received by Con-Test Analytical under COC on September 25, 2015. The samples were submitted with a trip blank for QA/QC purposes.

According to the laboratory analytical report, no VPH carbon fractions or target analytes were detected at concentrations exceeding the laboratory RDLs in the samples collected from MW-106 and MW-107. VPH C₅-C₈ aliphatic fractions and/or C₉-C₁₀ aromatic fractions were detected at concentrations above the laboratory RDLs in the samples from MW-103, MW-104, and MW-105. The concentration of C₅-C₈ aliphatic fractions in the sample collected from MW-103 (4,100 ug/L) exceeded the Method 1 GW-2 standard but not the GW-3 standard. One or more VPH target analytes were detected in the samples collected from MW-103 and MW-104 above the laboratory RDLs, but below Method 1 GW-1, GW-2, and GW-3 standards.

The groundwater analytical report is provided as Attachment VI. Groundwater analytical results, field measurements and gauging data are provided in Tables 1, 2, and 3.

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4.8 Soil Gas Sampling, September 2015

In conjunction with groundwater sampling on September 25, 2015, soil gas samples were collected from SG-1 and SG-2. Initial TOV concentrations measured at each location with a PID and recorded after three minutes were documented below the instrument detection limit of 0.1 ppm.

Dedicated polyethylene tubing was connected to a sampling port on each vapor pin and soil gas samples were collected using 6-liter evacuated Summa canisters equipped with one-hour regulators provided by Con-Test Analytical. Soil gas was collected for approximately 54 minutes at SG-1 and 57 minutes at SG-2.

The Summa canisters were delivered to Con-Test Analytical on September 25, 2015 and analyzed for air phase hydrocarbons (APH).

The laboratory analytical results were compared to the MassDEP residential and commercial/industrial values for sub-slab soil gas¹. According to the laboratory data, concentrations of all hydrocarbon fractions and target analytes were reported below laboratory RDLs, except for C₅-C₈ aliphatic fractions, toluene, and xylenes at SG-1, and C₅-C₈ aliphatic fractions and benzene, toluene, ethylbenzene and xylenes (BTEX) at SG-2. All of the detected concentrations were below both the residential and commercial/industrial values.

The soil gas analytical results are presented in Table 5. The laboratory analytical report is provided as Attachment VII.

5.0 DATA USABILITY

Soil and groundwater samples collected in June and September 2015 were analyzed for VPH according to the MassDEP methods and the MassDEP CAM finalized on August 1, 2003 and revised July 1, 2010. This data has presumptive certainty for precision and accuracy. A review of precision, accuracy, representativeness, completeness, comparability, and sensitivity (PARCCS) is provided below.

Accuracy for VPH analyses was determined by the laboratory use of surrogate recoveries, which were all within the control limits of 70% to 130%. In addition to the above, data representativeness, precision, and quality are evaluated by utilizing laboratory control samples (LCS), matrix duplicate samples, and method blank samples.

Any deviation or anomalies regarding internal laboratory quality assurance and quality control procedures are documented in the laboratory case narrative section of the laboratory analytical reports. Data Usability worksheets are provided with the laboratory analytical reports. The non-conformance issues noted by the laboratory are not expected to adversely impact the usability of these data. The non-conformance issues are documented in the laboratory case narrative section of the laboratory analytical reports. No data were excluded or considered unusable based upon these non-conformances.

To assure sample comparability, all sampling methods were completed in accordance with MassDEP and/or USEPA groundwater sampling procedures in accordance with ECS sampling Standard Operating

¹ Appendix II of MassDEP's Interim Final Vapor Intrusion Guidance dated December 2011 and revised in March 2013.

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Procedures. Sampling containers, preservation methods, and holding times met method specific requirements. All soil and groundwater samples were submitted to the laboratory on ice. The temperature of the soil samples collected on September 10, 2015 and received by the laboratory on the same date was 2.9°C. The temperature of the groundwater samples collected on June 11, 2015 and received by the laboratory on the same date was 3.1°C. The temperature of the groundwater samples collected on September 25, 2015 and received by the laboratory on the same date was 3.1°C. All three sets of samples were received by the laboratory at temperatures within the USEPA recommended temperature of 4°C ± 2°C.

To establish a degree of comparability for soil and groundwater sampling so that all data can be compared with historical and future data, ECS used standard methods of sampling collection. All sampling and testing procedures are well documented so that they can be reproduced.

The sensitivity of the data was reviewed by comparing laboratory method detection limits (MDLs) to applicable standards. Laboratory MDLs were documented below the applicable Method 1 Standards in all samples.

It is the opinion of ECS that the sampling locations and quantity of samples collected are sufficient to further characterize the Disposal Site, monitor the stability of the dissolved phase plume, calculate exposure point concentrations, evaluate potential exposure pathways, and demonstrate secondary source elimination and control.

Any deviation or anomalies regarding internal laboratory quality assurance and quality control procedures are documented in the laboratory case narrative section of the attached laboratory analytical reports.

Based upon this information, ECS is of the opinion that the laboratory analytical data for the soil and groundwater samples collected during the time period covered by this IRA Completion Report is of suitable quality to support the conclusions of this and future reports.

6.0 SENSITIVE RECEPTOR EVALUATION

The Squannacook River is the closest surface water body to the Site and is located approximately 1,200 feet west and 1,300 feet south. Areas of Critical Environmental Concern (ACEC) and National Heritage and Endangered Species Program (NHESP) Estimated Habitats of Rare Wildlife are located along the Squannacook River.

According to the MassDEP Priority Resource Map viewed online at <http://maps.massgis.state.ma.us/images/dep/omv/mcpviewer.htm>, the Site is not located within a Zone II of a public water supply, an Interim Wellhead Protection Area (IWPA) or a Potentially Productive Aquifer (PPA). A mapped Zone II is located approximately 2,700 feet northeast of the Site. A Medium Yield PPA is located approximately 1,200 feet southwest of the Site. There are no known private water supplies within 500 feet of the Site. The MassDEP Phase I Site Assessment Map is provided as Figure 3.

The Site is not located within a current or potential drinking water source area; therefore, groundwater category GW-1 does not apply to the Site. The average annual depth to groundwater at the Site is less than 15 fbg, therefore, category GW-2 applies to groundwater located within 30 feet horizontally of the Site building and occupied off-Site structures. All groundwater has the potential to discharge to surface water; therefore, GW-3 also applies to groundwater beneath the Site.

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Historical subsurface investigations and current groundwater elevations surveys indicate that groundwater at the site flows toward the southeast. All on and off-Site groundwater monitoring wells installed for prior RTNs have been decommissioned.

The MCP Method 1 Risk Characterization soil categories applicable at the Site are S-2 in landscaped areas where adult's frequency and intensity of use are considered to be low and high, respectively, and children's frequency and intensity of use are considered to both be low. Remaining Site soils are categorized as category S-3 due their inaccessibility beneath either pavement, concrete, the existing Site building, or at depths greater than 15 fbg. It should be noted that in consideration of future Site uses, soils located less than 15 fbg are potentially category S-1 soils.

Based on the investigation activities conducted to date, conditions at the Site do not present an Imminent Hazard (IH) per 310 CMR 40.0006 and 40.0951-0955. Site contaminants of concern (COCs) are not known to produce severe or acute effects for short-duration exposures at the concentrations detected at the Disposal Site. On this basis, it is concluded that an IH with respect to human health does not exist at the Disposal Site.

There is no evidence of stressed biota attributable to the release, or of a release to the environment which has or is likely to produce immediate or acute adverse effects on freshwater fish populations. It is therefore concluded that an IH with respect to the environment does not exist at the Site.

As stated in 310 CMR 40.0006, conditions of substantial release migration (SRM) include the following:

- Releases that have resulted in the discharge of separate-phase oil and/or hazardous material to surface waters, subsurface structures, or underground utilities or conduits;
- Releases to the ground surface or to the vadose zone that, if not promptly removed or contained, are likely to significantly impact the underlying groundwater, or significantly exacerbate an existing condition of groundwater pollution;
- Releases to the groundwater that have migrated or are expected to migrate more than 200 feet per year;
- Releases to the groundwater that have been, or are within one year likely to be, detected in a public or private water supply well;
- Releases to the groundwater that have been, or are within one year likely to be, detected in a surface water body, wetland, or public water supply reservoir; or
- Releases to the groundwater or to the vadose zone that have resulted or have the potential to result in the discharge of vapors into a school, daycare or childcare center, or occupied residential dwelling.

The release for RTN 2-19405 has not resulted in the known discharge of NAPLs to surface waters or underground utilities or conduits. VPH C₅-C₈ aliphatic hydrocarbons detected in groundwater samples collected from MW-103 (downgradient of the fuel dispensers) during the June and September 2015 sampling events exceeded Method 1 GW-2 standard. Groundwater samples collected at monitoring wells MW-106 and MW-107 in September 2015, located on-Site and downgradient of MW-103, did not contain VPH fractions or target analytes at concentrations above the laboratory RDLs or applicable Method 1 GW-1/GW-2/GW-3 standards. Based upon existing release information and assessment data, the release is not likely to be detected in a public or private water supply well, surface water body, wetland, or public water supply reservoir. Prior investigations at the Site have estimated an average hydraulic conductivity of 0.445 feet per day, effective soil porosity of 30%, and a hydraulic gradient of

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0.02 ft/ft across the Site (June 1999 Phase II CSA). The estimated groundwater seepage velocity beneath the Site is calculated to be range from 1.63 to 20.08 feet per year. Based upon this information, it is the opinion of ECS that a SRM condition does not exist at the Site.

Critical Exposure Pathways (CEPs) are those routes by which release materials are, or are likely to be, transported to human receptors via vapor-phase emissions in the living or working space of a pre-school, daycare, school, or occupied residential dwelling; or, ingestion, dermal absorption or inhalation of measurable concentrations of contaminants from drinking water supply wells located at and servicing a pre-school, daycare, school, or occupied residential dwelling. The latter is not likely to occur as there are no drinking water supply wells located in the vicinity of the Site. Additionally, based on field-screening of TOVs in nearby catchbasins following the release, field screening of TOVs in indoor air in the convenience store, soil gas sampling conducted beneath the on-site convenience store in September 2015, and relative locations of the on-Site and nearby downgradient structures, it is the opinion of ECS that no CEPs exist with respect to the discharge of vapor-phase contamination into indoor air at the Site or downgradient receptors in the vicinity of the Site.

7.0 CONCLUSIONS

It is the opinion of ECS that response actions conducted for the release which triggered this IRA condition have been sufficient to close the IRA pursuant to 310 CMR 40.0427.

Based on information gathered during IRA activities, including field screening data, analytical results, observations of site conditions and nearby receptors, no conditions of SRM, Immediate or Substantial Hazards, or CEPs exist with respect to the release.

The results of soil samples collected at monitoring wells MW-103, MW-104, MW-105, MW-106, and MW-107 around and downgradient of the leaking gasoline dispenser discovered in January 2015 indicate that the detected concentrations of VPH and ethanol do not exceed applicable RCs and Method 1 standards.

VPH C₅-C₈ aliphatic fractions in groundwater samples collected in July and September 2015 from monitoring well MW-103, located downgradient of the leaking dispenser, exceeded Method 1 GW-2 standards. However, groundwater samples collected at newly installed monitoring wells MW-106 and MW-107 in September 2015, located on-Site and downgradient of MW-103, did not contain VPH fractions or target analytes at concentrations above the laboratory RDLs or Method 1 GW-1/GW-2/GW-3 standards. In addition, VPH constituents have not been reported above the applicable Method 1 standards in the groundwater samples collected from monitoring wells MW-104 and MW-105 during the quarterly sampling events conducted in March, June, and September 2015.

Concentrations of APH in the soil gas samples collected during September 2015 from the soil gas points installed beneath the concrete slab floor within on-Site convenience store did not exceed the MassDEP residential and commercial/industrial values for sub-slab soil gas.

At this time, ECS recommends continuation of quarterly groundwater sampling for VPH at all on-Site monitoring wells, and the collection of soil gas samples for APH analysis at existing soil gas points during the winter of 2015/2016.

MassDEP

Worcester, Massachusetts

November 16, 2015

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A Phase I Initial Site Investigation and Tier Classification Report will be submitted on or before January 14, 2016.

8.0 REMEDIATION WASTE

No remediation waste was generated during this reporting period.

Should you have any questions regarding this report, please contact the undersigned at (413) 789-3530.

Sincerely,
ENVIRONMENTAL COMPLIANCE SERVICES, INC.



Shawn D. Rising, LSP
Senior Project Manager

SDR/kab
Attachments

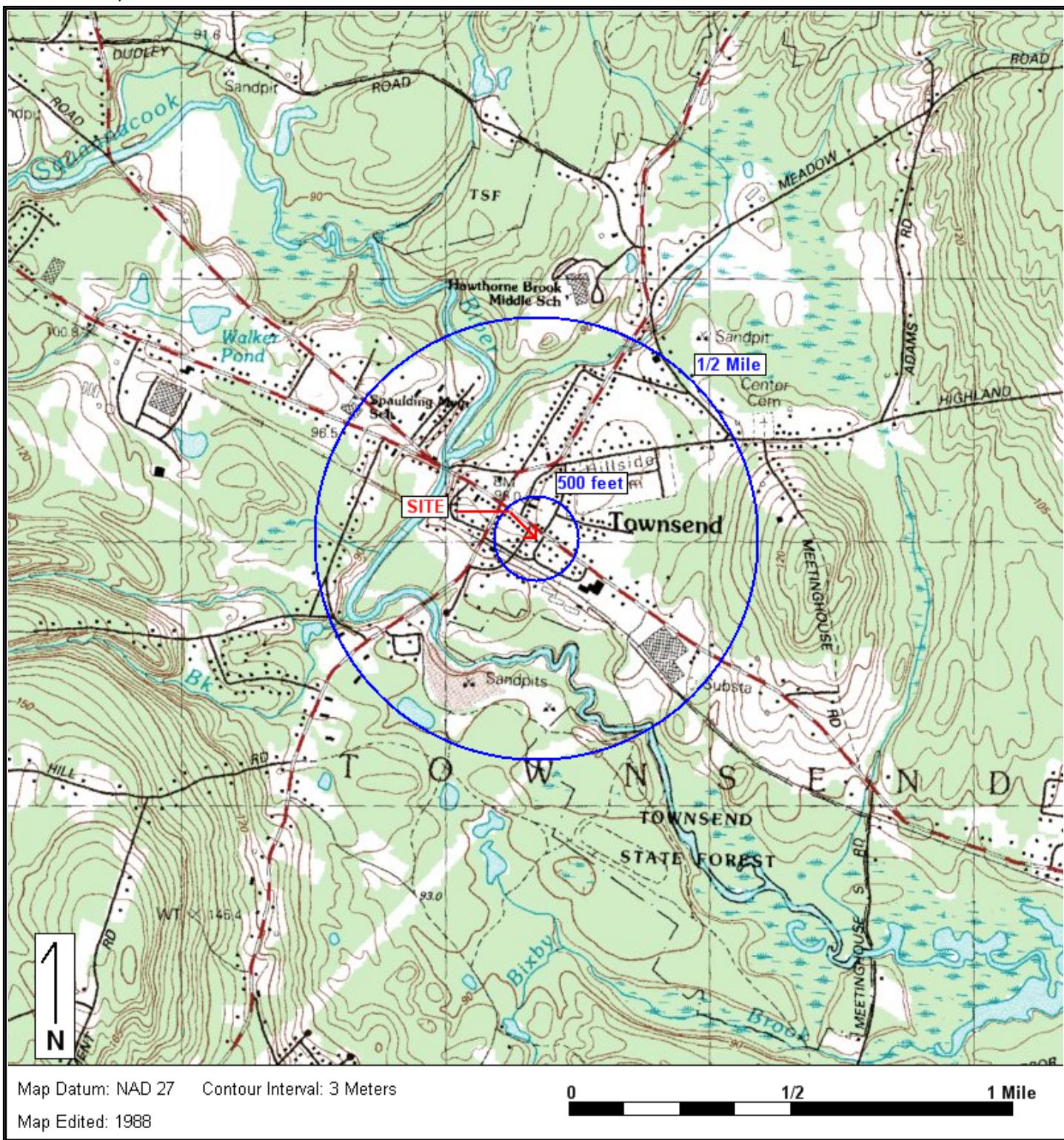
cc: Mr. David Went, Global Partners LP

FIGURES

238 Main St, Townsend, MA
 238 Main St
 Townsend, MA 01469

Environmental Compliance Services, Inc.
 588 Silver Street
 Agawam, MA 01001
 Phone 413.789.3530 Fax 413.789.2776
www.ecsconsult.com

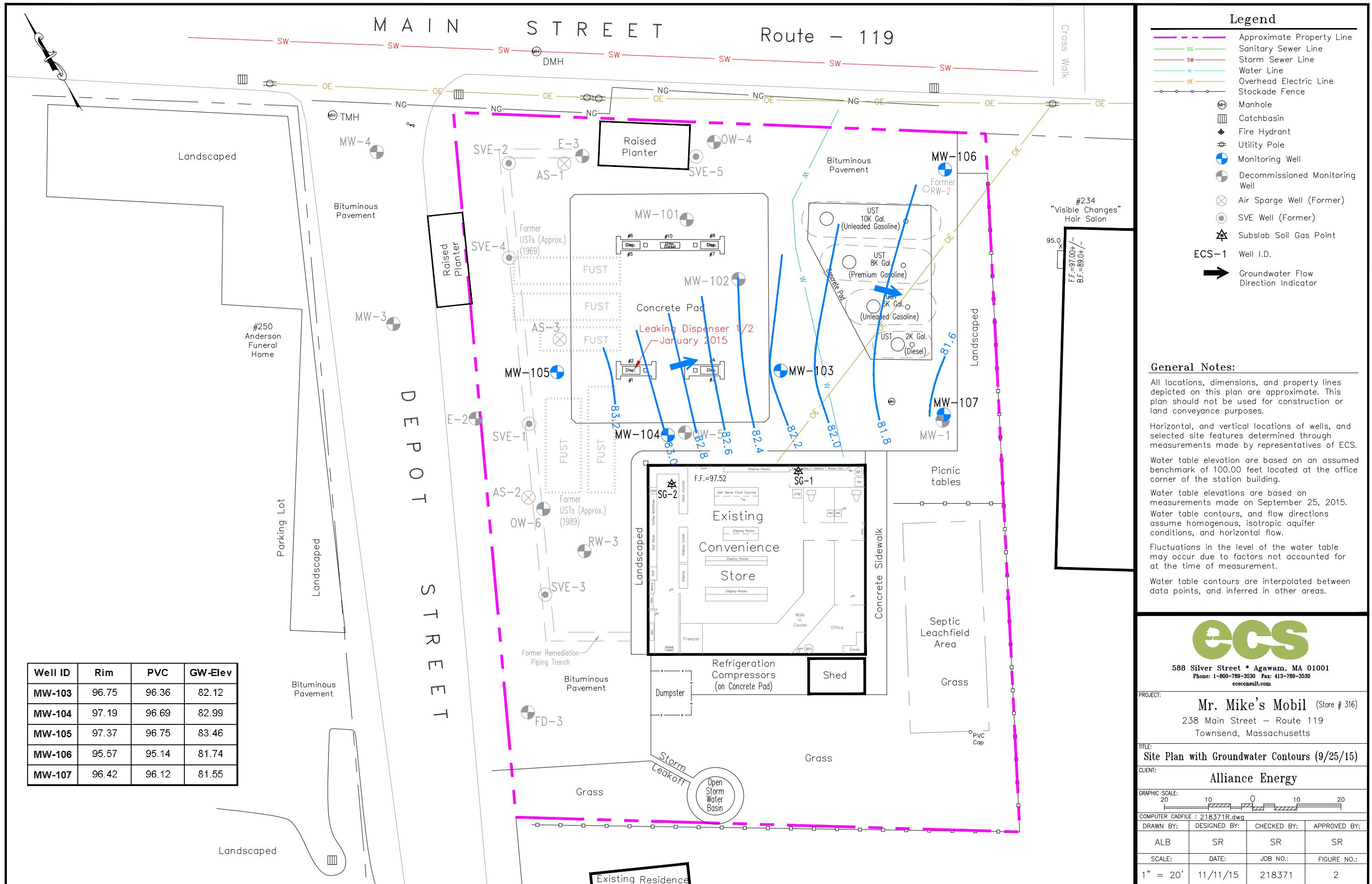
Figure 1: SITE LOCUS



Base Map: U.S. Geological Survey; Quadrangle Location: Townsend, MA

Lat/Lon: 42° 39' 57" NORTH, 71° 42' 15" WEST - UTM Coordinates: 19 278382.72 EAST / 4727239 NORTH

Generated By: Rick Starodoj



| Well ID | Rim | PVC | GW-Elev |
|---------|-------|-------|---------|
| MW-103 | 96.75 | 96.36 | 82.12 |
| MW-104 | 97.19 | 96.69 | 82.99 |
| MW-105 | 97.37 | 96.75 | 83.46 |
| MW-106 | 95.57 | 95.14 | 81.74 |
| MW-107 | 96.42 | 96.12 | 81.55 |

ecs

588 Silver Street • Agawam, MA 01001
Phone: 1-800-789-3530 Fax: 413-789-3530
ecsconsult.com

PROJECT: Mr. Mike's Mobil (Store # 316)

238 Main Street – Route 119
Townsend, Massachusetts

TITLE: Site Plan with Groundwater Contours (9/25/15)

CLIENT: Alliance Energy

GRAPHIC SCALE: 20 10 0 10 20

COMPUTER CADFILE : 218371R.dwg

DRAWN BY: DESIGNED BY: CHECKED BY: APPROVED BY:

ALB SR SR SR

SCALE: DATE: JOB NO.: FIGURE NO.:

1" = 20' 11/11/15 218371 2

MassDEP - Bureau of Waste Site Cleanup

Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

Site Information:

ALLIANCE ENERGY
238 MAIN STREET TOWNSEND, MA
1-000019405

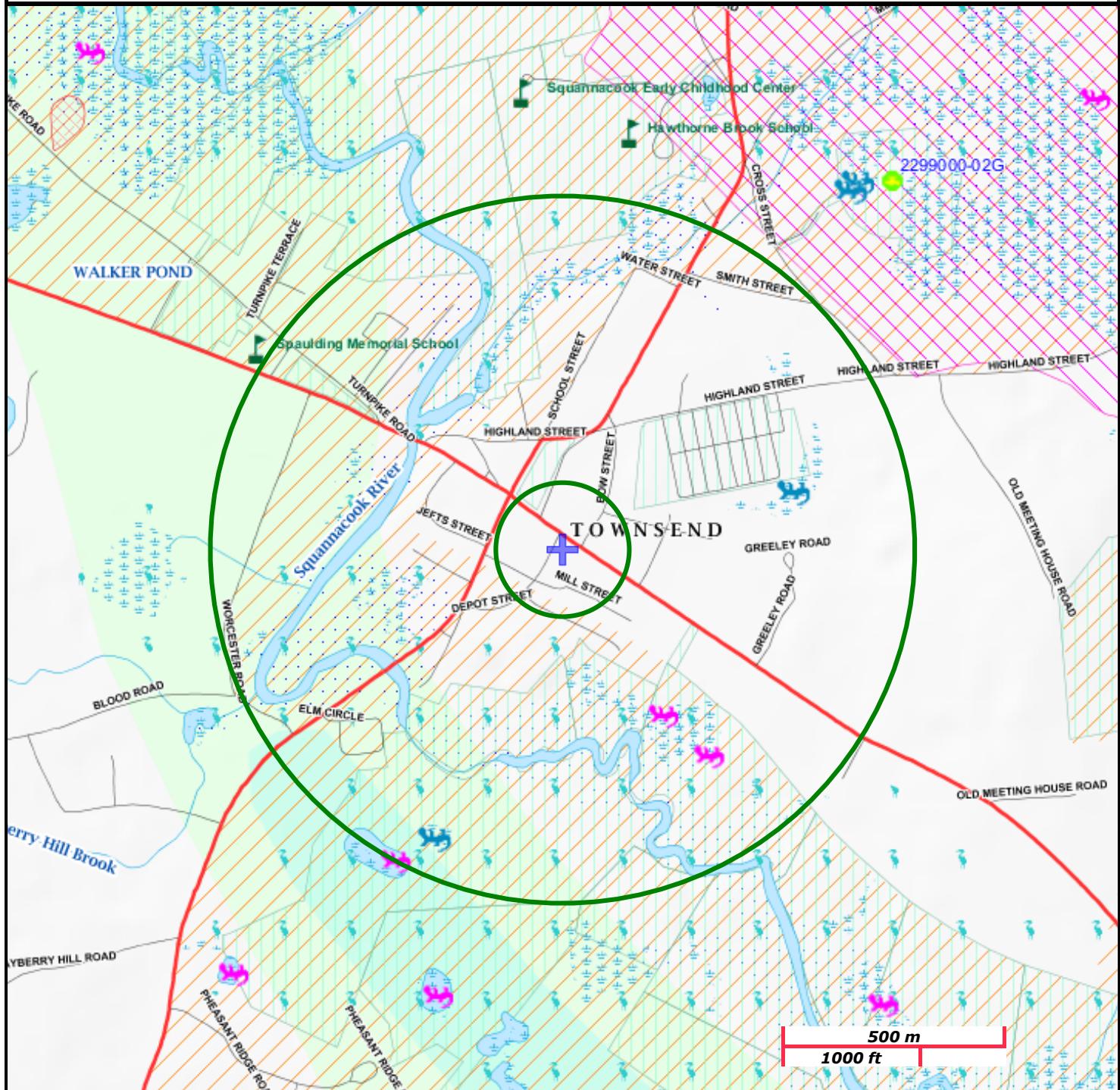
NAD83 UTM Meters:
4727251mN , 278377mE (Zone: 19)
February 9, 2015

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately responsible for ascertaining the true conditions surrounding the site. Metadata for data layers shown on this map can be found at: <http://www.mass.gov/mgis/>.



MassDEP

Commonwealth of Massachusetts
Department of Environmental Protection



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail



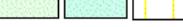
Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct



Basins: Major,PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam



Aquifers: Medium Yield, High Yield, EPA Sole Source



Non Potential Drinking Water Source Area: Medium, High (Yield)

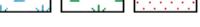
PWS Protection Areas: Zone II, IWPA, Zone A



Hydrography: Open Water, PWS Reservoir, Tidal Flat



Wetlands: Freshwater, Saltwater, Cranberry Bog



FEMA 100yr Floodplain; Protected Open Space; ACEC



Est. Rare Wetland Wildlife Hab; Vernal Pool: Cert., Potential



Solid Waste Landfill; PWS: Com.GW,SW, Emerg., Non-Com.



TABLES

| Global Partners LP 238 Main Street Townsend, Massachusetts | | Table 1 Summary of Groundwater Elevation Data | | | | |
|---|--------------|--|---------------------|---------------------|----------------------|----------------------------|
| Well ID & Diameter (inches) | Gauging Date | Well Casing Elevation (ft) | Depth to LNAPL (ft) | Depth to Water (ft) | LNAPL Thickness (ft) | Groundwater Elevation (ft) |
| MW-103 2" | 3/20/15 | 96.36 | ND | 13.25 | ND | 83.11 |
| | 6/11/15 | | ND | 12.93 | ND | 83.43 |
| | 9/25/15 | | ND | 14.24 | ND | 82.12 |
| | | | | | | |
| MW-104 2" | 3/20/15 | 96.69 | ND | 12.71 | ND | 83.98 |
| | 6/11/15 | | ND | 12.45 | ND | 84.24 |
| | 9/25/15 | | ND | 13.70 | ND | 82.99 |
| | | | | | | |
| MW-105 2" | 3/20/15 | 96.75 | ND | 12.31 | ND | 84.44 |
| | 6/11/15 | | ND | 12.02 | ND | 84.73 |
| | 9/25/15 | | ND | 13.29 | ND | 83.46 |
| | | | | | | |
| MW-106 2" | 9/25/15 | 95.14 | ND | 13.40 | ND | 81.74 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| MW-107 2" | 9/25/15 | 96.12 | ND | 14.50 | ND | 81.62 |
| | | | | | | |
| | | | | | | |

Notes:

NM = Not Measured.
ND = Not Detected
NA = Not Available.
NS = Not Surveyed
Groundwater Elevation = Top of PVC - depth to Groundwater + (0.88 x LNAPL thickness)

| Global Partners LP 238 Main Street Townsend, Massachusetts | | | | Table 2 Concentrations of Volatile Petroleum Hydrocarbons and Ethanol in Groundwater March and June 2015 | | | | | | | | | | |
|--|-------------------------------|-------------------------|----------------------------|--|----------------------------|----------------------|-------------------------|-------------------------|----------------------------|-------------------------|-------------------------|--------------------------------|-------------------------|--------------------|
| Monitoring Well & Elevation (ft) | Sampling Date | Depth to Water (ft) | Groundwater Elevation (ft) | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | Σ BTEX (µg/L) | MtBE (µg/L) | Naphthalene (µg/L) | C5-C8 Aliphatics (µg/L) | C9-C12 Aliphatics (µg/L) | C9-C10 Aromatics (µg/L) | Ethanol (µg/L) |
| MCP Reportable Concentrations (RCGW-2): | | | | 1,000 | 40,000 | 5,000 | 3,000 | NA | 5,000 | 1,000 | 3,000 | 5,000 | 4,000 | 10,000 |
| MCP Method 1 GW-2 Standards: | | | | 1,000 | 50,000 | 20,000 | 3,000 | NA | 50,000 | 700 | 3,000 | 5,000 | 4,000 | NA |
| MCP Method 1 GW-3 Standards: | | | | 10,000 | 40,000 | 5,000 | 5,000 | NA | 50,000 | 20,000 | 50,000 | 50,000 | 50,000 | NA |
| MW-103 96.36 (PVC) | 3/20/15 6/11/15 9/25/15 | 13.25 12.93 14.24 | 83.11 83.43 82.12 | 13 510 550 | 7.4 880 440 | 95 170 230 | 358 425 1,010 | 473.4 1,985 2,230 | 15 290 320 | 49 86 110 | 1,300 7,000 4,100 | ND/400 ND/1,000 ND/1,000 | 1,300 2,200 2,500 | ND/250 NA NA |
| MW-104 96.69 (PVC) | 3/20/15 6/11/15 9/25/15 | 12.71 12.45 13.70 | 83.98 84.24 82.99 | 1.8 13.0 3.8 | 28 2.3 ND/1.0 | 1.9 1.1 8.0 | 5.8 2.1 2.6 | 37.5 18.5 14.4 | ND/1.0 12.0 ND/1.0 | ND/5.0 ND/5.0 6.6 | 110 180 ND/100 | ND/100 ND/100 ND/100 | ND/100 ND/100 250 | ND/50 NA NA |
| MW-105 96.75 (PVC) | 3/20/15 6/11/15 9/25/15 | 12.31 12.02 13.29 | 84.44 84.73 83.46 | 1.6 ND/1.0 ND/1.0 | ND/1.0 ND/1.0 ND/1.0 | 2.5 1.1 ND/1.0 | 7.3 ND/1.0 ND/1.0 | 11.4 1.1 ND | ND/1.0 ND/1.0 ND/1.0 | 5.4 ND/5.0 ND/5.0 | 650 380 180 | ND/100 ND/100 ND/100 | 440 200 190 | ND/50 NA NA |
| MW-106 95.14 (PVC) | 9/25/15 | 13.40 | 81.74 | ND/1.0 | ND/1.0 | ND/1.0 | ND/1.0 | ND | ND/1.0 | ND/5.0 | ND/100 | ND/100 | ND/100 | ND/100 |
| MW-107 96.12 (PVC) | 9/25/15 | 14.50 | 81.62 | ND/1.0 | ND/1.0 | ND/1.0 | ND/1.0 | ND | ND/1.0 | ND/5.0 | ND/100 | ND/100 | ND/100 | NA |

Global Partners LP
238 Main Street
Townsend, Massachusetts

Table 3
Groundwater Geochemical Monitoring Data

| Monitoring Well & PVC Elevation (ft) | Monitoring Date | Depth to Water (ft) | Groundwater Elevation (ft) | pH (SU) | Specific Conductivity (uS/cm) | Dissolved Oxygen (mg/L) | Redox (mV) | Temperature (°C) | Turbidity (NTU) |
|--------------------------------------|-----------------|---------------------|----------------------------|---------|-------------------------------|-------------------------|------------|------------------|-----------------|
| MW-103 96.36 | | | | | | | | | |
| | 3/20/15 | 13.25 | 83.11 | 6.83 | 2,641 | 0.83 | 5.1 | 8.34 | 9 |
| | 6/11/15 | 12.93 | 83.43 | 6.59 | 3,811 | 2.30 | 28.1 | 18.19 | 5 |
| | 9/25/15 | 14.24 | 82.12 | 6.01 | 3,631 | 2.01 | -261.7 | 16.29 | 1 |
| MW-104 96.69 | | | | | | | | | |
| | 3/20/15 | 12.71 | 83.98 | 6.49 | 2,146 | 0.64 | 45.7 | 7.15 | 16 |
| | 6/11/15 | 12.45 | 84.24 | 6.04 | 2,310 | 2.71 | 134.7 | 16.81 | 3 |
| | 9/25/15 | 13.70 | 82.99 | 6.17 | 2,641 | 6.07 | -140.1 | 15.47 | 2 |
| MW-105 96.75 | | | | | | | | | |
| | 3/20/15 | 12.31 | 84.44 | 6.80 | 1,369 | 0.96 | 42.3 | 7.81 | 8 |
| | 6/11/15 | 12.02 | 84.73 | 6.37 | 2,529 | 2.84 | 56.3 | 17.37 | 4 |
| | 9/25/15 | 13.29 | 83.46 | 6.20 | 2,853 | 4.91 | -170.2 | 15.22 | 2 |
| MW-106 95.14 | | | | | | | | | |
| | 9/25/15 | 13.40 | 81.74 | 6.01 | 3,169 | 4.97 | -101.7 | 15.35 | 2 |
| MW-107 96.12 | | | | | | | | | |
| | 9/25/15 | 14.50 | 81.62 | 5.78 | 3,814 | 5.74 | -141.7 | 15.13 | 2 |
| | | | | | | | | | |
| | | | | | | | | | |

NOTES:

ft = feet; SU = standard units; uS/cm = microSiemens per centimeter; mg/L = milligrams per liter; mV = millivolts.

NG = Not Gauged; NS = Not Sampled; NA = Not Applicable; NM = Not Measured.

| | | | | | | | | | | |
|--|--|-----------|-----------|-----------|-----------|-----------|------------------------------------|--|--------------------------|--------------------------|
| Alliance Energy LLC 238 Main Street Townsend, MA 218371 | Table 4 Concentrations of Volatile Petroleum Hydrocarbons (VPH) in Soil Samples | | | | | | | | | |
| Sample Location | MW-103 | MW-104 | MW-104 | MW-105 | MW-106 | MW-107 | Reportable Concentrations | Method 1 Risk Characterization ^{(1), (4)} | | |
| Sample Depth (feet) | 10-15 | 6-7 | 10-15 | 10-15 | 15-17.5 | 15-17.5 | RCS-1 Soils ^{(1), (2)} | S-1, GW-2/GW-3 | S-2, GW-2/GW-3 | S-3, GW-2/GW-3 |
| Sampling Date | 2/20/2015 | 2/25/2015 | 2/25/2015 | 2/25/2015 | 9/10/2015 | 9/10/2015 | | | | |
| TOV Reading (ppm) | 0.3 | 397.1 | 66.6/6.6 | 52.1/25.7 | 0.0 | 1.2 | | | | |
| VPH (mg/kg) | | | | | | | | | | |
| C5-C8 Aliphatics | <11 | <9.7 | <10 | <11 | <12 | <13 | 100 | 100 | 500 | 500 |
| C9-C12 Aliphatics | <11 | <9.7 | <10 | <11 | <12 | <13 | 1,000 | 1,000 | 3,000 | 5,000 |
| C9-C10 Aromatics | <11 | <9.7 | <10 | <11 | <12 | <13 | 100 | 100 | 500 | 500 |
| VPH Analytes (mg/Kg) | | | | | | | | | | |
| Benzene | <0.057 | <0.049 | <0.051 | <0.054 | <0.060 | <0.064 | 2 | 40 | 200 | 400/1,000 |
| Toluene | <0.057 | <0.049 | 0.086 | 0.067 | <0.060 | <0.064 | 30 | 500 | 1,000 | 2,000/3,000 |
| Ethylbenzene | <0.057 | <0.049 | <0.051 | <0.054 | <0.060 | <0.064 | 40 | 500 | 1,000 | 1,000/3,000 |
| m,p-Xylenes | <0.11 | <0.097 | <0.10 | <0.11 | <0.12 | <0.13 | 100 ⁽³⁾ | 100/500 ⁽³⁾ | 100/1,000 ⁽³⁾ | 100/3,000 ⁽³⁾ |
| o-Xylene | <0.057 | <0.049 | <0.051 | <0.054 | <0.060 | <0.064 | | | | |
| Naphthalene | <0.29 | <0.24 | <0.25 | <0.27 | <0.30 | <0.32 | 4 | 20/500 | 20/1,000 | 20/3,000 |
| MTBE | <0.057 | <0.049 | <0.051 | <0.054 | <0.060 | <0.064 | 0.1 | 100 | 100/500 | 100/500 |
| VOCs (mg/Kg) | | | | | | | | | | |
| Ethanol | <11 | <9.6 | <11 | <11 | <14 | <13 | 100 | NSE | NSE | NSE |

TABLE 5
SUMMARY OF SOIL VAPOR SAMPLE ANALYTICAL DATA

Alliance Energy
 238 Main Street, Townsend, Massachusetts
 MassDEP RTN 2-19405

| Results and Regulatory Guidelines are presented in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) | | | | | | | |
|--|-------------|--|--|--------------------------------------|--|--|--|
| Location Identification | SG-1 | MassDEP Residential Sub-Slab Soil Gas Screening Values | MassDEP Commercial/Industrial Sub-Slab Soil Gas Screening Values | Generic Dilution Factor ¹ | Anticipated Exposure Point Concentration (Indoor Air) ($\mu\text{g}/\text{m}^3$) | MassDEP Commercial/Industrial Threshold Values ² ($\mu\text{g}/\text{m}^3$) | |
| Date of Collection | 9/25/2015 | | | | | | |
| Approx. Depth to H ₂ O ECS-12 (feet below grade) | 13.70 | | | | | | |
| TSVP-1 Purged TOVs (ppm) | <0.1 ppmv | | | | | | |
| Analytical Method | MassDEP APH | ($\mu\text{g}/\text{m}^3$) ¹ | ($\mu\text{g}/\text{m}^3$) ¹ | | | | |
| C ₅ -C ₈ Aliphatic Hydrocarbons | 220 | 4,100 | 23,000 | 70 | 3.1 | 330 | |
| C ₉ -C ₁₂ Aliphatic Hydrocarbons | <27 | 4,800 | 16,000 | 70 | NA | 220 | |
| C ₉ -C ₁₀ Aromatic Hydrocarbons | <19 | 700 | 3,100 | 70 | NA | 44 | |
| 1,3-Butadiene | <0.83 | NA | NA | 70 | NA | NA | |
| MtBE | <1.4 | 2,700 | 190,000 | 70 | NA | 39 | |
| Benzene | <1.2 | 160 | 800 | 70 | NA | 11 | |
| Toluene | 5.3 | 3,800 | 310,000 | 70 | 0.08 | 4,400 | |
| Ethylbenzene | <1.6 | 520 | 62,000 | 70 | NA | 880 | |
| Xylenes | 5.6 | 1,400 | 6,200 | 70 | 0.1 | 88 | |
| Naphthalene | <1.8 | 42 | 190 | 70 | NA | 2.7 | |

¹ MassDEP Interim Final Vapor Intrusion Guidance, December 2011

² Commercial/Industrial Indoor Air Threshold Values from MassDEP Interim Final Vapor Intrusion Guidance, December 2011

TABLE 5
SUMMARY OF SOIL VAPOR SAMPLE ANALYTICAL DATA

Alliance Energy
238 Main Street, Townsend, Massachusetts
MassDEP RTN 2-19405

| Results and Regulatory Guidelines are presented in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) | | | | | | | |
|--|-------------|--|--|--------------------------------------|--|--|--|
| Location Identification | SG-2 | MassDEP Residential Sub-Slab Soil Gas Screening Values | MassDEP Commercial/Industrial Sub-Slab Soil Gas Screening Values | Generic Dilution Factor ¹ | Anticipated Exposure Point Concentration (Indoor Air) ($\mu\text{g}/\text{m}^3$) | MassDEP Commercial/Industrial Threshold Values ² ($\mu\text{g}/\text{m}^3$) | |
| Date of Collection | 9/25/2015 | | | | | | |
| Approx. Depth to H ₂ O ECS-12 (feet below grade) | 13.70 | | | | | | |
| TSVP-1 Purged TOVs (ppm) | <0.1 ppmv | | | | | | |
| Analytical Method | MassDEP APH | ($\mu\text{g}/\text{m}^3$) ¹ | ($\mu\text{g}/\text{m}^3$) ¹ | | | | |
| C ₅ -C ₈ Aliphatic Hydrocarbons | 490 | 4,100 | 23,000 | 70 | 7.0 | 330 | |
| C ₉ -C ₁₂ Aliphatic Hydrocarbons | 32 | 4,800 | 16,000 | 70 | 0.5 | 220 | |
| C ₉ -C ₁₀ Aromatic Hydrocarbons | <19 | 700 | 3,100 | 70 | NA | 44 | |
| 1,3-Butadiene | <0.83 | NA | NA | 70 | NA | NA | |
| MtBE | <1.4 | 2,700 | 190,000 | 70 | NA | 39 | |
| Benzene | 1.30 | 160 | 800 | 70 | 0.02 | 11 | |
| Toluene | 6.0 | 3,800 | 310,000 | 70 | 0.09 | 4,400 | |
| Ethylbenzene | 1.8 | 520 | 62,000 | 70 | 0.03 | 880 | |
| Xylenes | 7.0 | 1,400 | 6,200 | 70 | 0.1 | 88 | |
| Naphthalene | <1.8 | 42 | 190 | 70 | NA | 2.7 | |

¹ MassDEP Interim Final Vapor Intrusion Guidance, December 2011

² Commercial/Industrial Indoor Air Threshold Values from MassDEP Interim Final Vapor Intrusion Guidance, December 2011

ATTACHMENT I

GROUNDWATER SAMPLING LOGS – JUNE 2015



Environmental Compliance Services, Inc.
588 Silver Street, Agawam, Massachusetts 01001
MA: (413) 789-3530 FAX: (413) 789-2776

LOW-FLOW GROUNDWATER SAMPLING LOG

| Client: | Alliance Energy/Mr. Mikes Mobil | | | Job Number: | 91-218371 | WELL I.D. | | | |
|--|--|-------------------------------|--------------------------------|--|------------------------------|---------------------------------|-----------------------------|------------------------------|-----------------------------|
| Location: | 238 Main Street, Townsend, MA | | | Date: | 6/11/2015 | | | | |
| Personnel: | Jake | | | Weather: | | | | MW-103 | |
| Stickup? Y / N | Distance From Rim to PVC | Total Depth of Well Rim / PVC | Depth to Product Rim / PVC | Depth to Water Rim / PVC | Standing Water Column (feet) | Middle of Saturated Zone (feet) | Depth to Sample Tube (feet) | TOV @ Well Head (ppmv) | Pump Peristaltic or Bladder |
| | | 17.09 | ND | 12.93 | 4.16 | 15.01 | 15- | | |
| Turbidity at collection (NTU): | | 5 | (Less than 5 NTU is desirable) | | | Duplicate Collected? Y / N | | Filtered Sample Y / N | |
| Stabilization Parameters | | +/- 0.5 deg C. | +/- 0.1 Unit | +/- 10 umhos/cm or within 3% if >300umho | 1 ppm | +/- 10 mV | No Limit | <0.3 feet drawdown desirable | No Limit |
| Volume Purged (gallons) | Time (actual Time) 5 minute intervals | TEMP. (Deg. C) | pH | Specific Conductivity uS/cm | Dissolved Oxygen (mg/L) | ORP mV millivolts | Turbidity NTUs | DTW (feet) | Odors Y/N |
| 0.0 | 11:20 | 17.90 | 6.89 | 3837 | 3.17 | 42.1 | - | 12.93 | |
| | 11:25 | 18.11 | 6.74 | 3819 | 2.79 | 39.8 | - | | |
| | 11:30 | 18.27 | 6.63 | 3819 | 2.33 | 31.7 | - | | |
| | 11:35 | 18.21 | 6.61 | 3812 | 2.31 | 30.1 | - | ✓ | |
| 0.75 | 11:40 | 18.19 | 6.59 | 3811 | 2.30 | 28.1 | 5 | 12.99 | Slight |
| | | | | | | | | | |
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| | | | | | | | | | |
| Well Condition Summary | | | | | | | | | |
| Cover: Y / N | Bolts: Y / N | | Conc Pad OK: Y / N | deteriorated | Gripper: Y / N | | | | |
| Sample Collection Information | | | | | | | | | |
| Sample Time | Appearance | Filtered Sample Turbidity: | | | OTHER | | | | |
| Desired purge flow rate < 100mL/min (slow drip) & turbidity <10 if possible. If turbidity > 10 collect filtered and unfiltered samples. Notify PM of high turbidity and collection of filtered samples prior to lab submittal. | | | | | | | | | |
| Minimum 20 minute purge to establish stabilization. | | | | | | | | | |
| Notes/Calculations: | | | | | | | | | |
| Volume/ Linear Ft of well casing; 1"= 0.041 gal 2" = 0.163 gal 4" = 0.653 gal | | | | | | | | | |



Environmental Compliance Services, Inc.
588 Silver Street, Agawam, Massachusetts 01001
MA: (413) 789-3530 FAX: (413) 789-2776

LOW-FLOW GROUNDWATER SAMPLING LOG



Environmental Compliance Services, Inc.

588 Silver Street, Agawam, Massachusetts 01001

MA: (413) 789-3530 FAX: (413) 789-2776

LOW-FLOW GROUNDWATER SAMPLING LOG

ATTACHMENT II

LABORATORY ANALYTICAL REPORT – GROUNDWATER JUNE 2015



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

June 17, 2015

Shawn Rising
ECS
588 Silver Street
Agawam, MA 01001

Project Location: 238 Main Street, Townsend, MA

Client Job Number:

Project Number: 91-218371.13

Laboratory Work Order Number: 15F0586

Enclosed are results of analyses for samples received by the laboratory on June 11, 2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Lisa A. Worthington". The signature is fluid and cursive, with "Lisa" and "Worthington" being the most distinct parts.

Lisa A. Worthington
Project Manager

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

ECS
588 Silver Street
Agawam, MA 01001
ATTN: Shawn Rising

REPORT DATE: 6/17/2015

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 91-218371.13

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 15F0586

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

PROJECT LOCATION: 238 Main Street, Townsend, MA

| FIELD SAMPLE # | LAB ID: | MATRIX | SAMPLE DESCRIPTION | TEST | SUB LAB |
|----------------|------------|------------------|--------------------|------------------|---------|
| MW-103 | 15F0586-01 | Ground Water | | MADEP-VPH-04-1.1 | |
| MW-104 | 15F0586-02 | Ground Water | | MADEP-VPH-04-1.1 | |
| MW-105 | 15F0586-03 | Ground Water | | MADEP-VPH-04-1.1 | |
| Trip Blank | 15F0586-04 | Trip Blank Water | | MADEP-VPH-04-1.1 | |



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

CASE NARRATIVE SUMMARY

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

MADEP-VPH-04-1.1

No significant modifications were made to the method. All VPH samples were received preserved properly at pH <2 in the proper containers as specified on the chain-of-custody form unless specified 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.

A handwritten signature in black ink, appearing to read "Johanna K. Harrington".

Johanna K. Harrington
Manager, Laboratory Reporting



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

Project Location: 238 Main Street, Townsend, MA

Sample Description:

Work Order: 15F0586

Date Received: 6/11/2015

Sampled: 6/11/2015 00:00

Field Sample #: MW-103

Sample ID: 15F0586-01

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------|------------|-----------------|-------|-----------|-----------|------------------|---------------|--------------------|---------|
| Unadjusted C5-C8 Aliphatics | 8700 | 1000 | µg/L | 10 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 22:32 | EEH |
| C5-C8 Aliphatics | 7000 | 1000 | µg/L | 10 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 22:32 | EEH |
| Unadjusted C9-C12 Aliphatics | 2400 | 1000 | µg/L | 10 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 22:32 | EEH |
| C9-C12 Aliphatics | ND | 1000 | µg/L | 10 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 22:32 | EEH |
| C9-C10 Aromatics | 2200 | 1000 | µg/L | 10 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 22:32 | EEH |
| Benzene | 510 | 10 | µg/L | 10 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 22:32 | EEH |
| Ethylbenzene | 170 | 10 | µg/L | 10 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 22:32 | EEH |
| Methyl tert-Butyl Ether (MTBE) | 290 | 10 | µg/L | 10 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 22:32 | EEH |
| Naphthalene | 86 | 50 | µg/L | 10 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 22:32 | EEH |
| Toluene | 880 | 10 | µg/L | 10 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 22:32 | EEH |
| m+p Xylene | 360 | 20 | µg/L | 10 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 22:32 | EEH |
| o-Xylene | 65 | 10 | µg/L | 10 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 22:32 | EEH |
| Surrogates | % Recovery | Recovery Limits | | Flag/Qual | | | | | |
| 2,5-Dibromotoluene (FID) | 96.9 | 70-130 | | | | | 6/15/15 22:32 | | |
| 2,5-Dibromotoluene (PID) | 79.2 | 70-130 | | | | | 6/15/15 22:32 | | |



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

Project Location: 238 Main Street, Townsend, MA

Sample Description:

Work Order: 15F0586

Date Received: 6/11/2015

Sampled: 6/11/2015 10:50

Field Sample #: MW-104

Sample ID: 15F0586-02

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------|------------|-----------------|-------|-----------|-----------|------------------|---------------|--------------------|---------|
| Unadjusted C5-C8 Aliphatics | 210 | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 16:33 | EEH |
| C5-C8 Aliphatics | 180 | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 16:33 | EEH |
| Unadjusted C9-C12 Aliphatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 16:33 | EEH |
| C9-C12 Aliphatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 16:33 | EEH |
| C9-C10 Aromatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 16:33 | EEH |
| Benzene | 13 | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 16:33 | EEH |
| Ethylbenzene | 1.1 | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 16:33 | EEH |
| Methyl tert-Butyl Ether (MTBE) | 12 | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 16:33 | EEH |
| Naphthalene | ND | 5.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 16:33 | EEH |
| Toluene | 2.3 | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 16:33 | EEH |
| m+p Xylene | ND | 2.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 16:33 | EEH |
| o-Xylene | 2.1 | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 16:33 | EEH |
| Surrogates | % Recovery | Recovery Limits | | Flag/Qual | | | | | |
| 2,5-Dibromotoluene (FID) | 103 | 70-130 | | | | | | 6/15/15 16:33 | |
| 2,5-Dibromotoluene (PID) | 81.3 | 70-130 | | | | | | 6/15/15 16:33 | |



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

Project Location: 238 Main Street, Townsend, MA

Sample Description:

Work Order: 15F0586

Date Received: 6/11/2015

Sampled: 6/11/2015 10:10

Field Sample #: MW-105

Sample ID: 15F0586-03

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------|------------|-----------------|-------|-----------|-----------|------------------|---------------|--------------------|---------|
| Unadjusted C5-C8 Aliphatics | 380 | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 17:08 | EEH |
| C5-C8 Aliphatics | 380 | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 17:08 | EEH |
| Unadjusted C9-C12 Aliphatics | 230 | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 17:08 | EEH |
| C9-C12 Aliphatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 17:08 | EEH |
| C9-C10 Aromatics | 200 | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 17:08 | EEH |
| Benzene | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 17:08 | EEH |
| Ethylbenzene | 1.1 | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 17:08 | EEH |
| Methyl tert-Butyl Ether (MTBE) | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 17:08 | EEH |
| Naphthalene | ND | 5.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 17:08 | EEH |
| Toluene | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 17:08 | EEH |
| m+p Xylene | ND | 2.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 17:08 | EEH |
| o-Xylene | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 17:08 | EEH |
| Surrogates | % Recovery | Recovery Limits | | Flag/Qual | | | | | |
| 2,5-Dibromotoluene (FID) | 125 | 70-130 | | | | | | 6/15/15 17:08 | |
| 2,5-Dibromotoluene (PID) | 91.3 | 70-130 | | | | | | 6/15/15 17:08 | |



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

Project Location: 238 Main Street, Townsend, MA

Sample Description:

Work Order: 15F0586

Date Received: 6/11/2015

Sampled: 6/11/2015 00:00

Field Sample #: Trip Blank

Sample ID: 15F0586-04

Sample Matrix: Trip Blank Water

Petroleum Hydrocarbons Analyses - VPH

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------|------------|-----------------|-------|-----------|-----------|------------------|---------------|--------------------|---------|
| Unadjusted C5-C8 Aliphatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 14:09 | EEH |
| C5-C8 Aliphatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 14:09 | EEH |
| Unadjusted C9-C12 Aliphatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 14:09 | EEH |
| C9-C12 Aliphatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 14:09 | EEH |
| C9-C10 Aromatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 14:09 | EEH |
| Benzene | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 14:09 | EEH |
| Ethylbenzene | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 14:09 | EEH |
| Methyl tert-Butyl Ether (MTBE) | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 14:09 | EEH |
| Naphthalene | ND | 5.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 14:09 | EEH |
| Toluene | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 14:09 | EEH |
| m+p Xylene | ND | 2.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 14:09 | EEH |
| o-Xylene | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 6/15/15 | 6/15/15 14:09 | EEH |
| Surrogates | % Recovery | Recovery Limits | | Flag/Qual | | | | | |
| 2,5-Dibromotoluene (FID) | 94.4 | 70-130 | | | | | 6/15/15 14:09 | | |
| 2,5-Dibromotoluene (PID) | 79.5 | 70-130 | | | | | 6/15/15 14:09 | | |

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

Sample Extraction Data**Prep Method: MA VPH-MADEP-VPH-04-1.1**

| Lab Number [Field ID] | Batch | Initial [mL] | Final [mL] | Date |
|-------------------------|---------|--------------|------------|----------|
| 15F0586-01 [MW-103] | B124124 | 0.5 | 5.00 | 06/15/15 |
| 15F0586-02 [MW-104] | B124124 | 5 | 5.00 | 06/15/15 |
| 15F0586-03 [MW-105] | B124124 | 5 | 5.00 | 06/15/15 |
| 15F0586-04 [Trip Blank] | B124124 | 5 | 5.00 | 06/15/15 |



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

QUALITY CONTROL

Petroleum Hydrocarbons Analyses - VPH - Quality Control

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|---------|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|---------|-----------|-------|

Batch B124124 - MA VPH

| | | | | | | |
|-------------------------------------|-------------------------------|-----|------|------|------|--------|
| Blank (B124124-BLK1) | Prepared & Analyzed: 06/15/15 | | | | | |
| Unadjusted C5-C8 Aliphatics | ND | 100 | µg/L | | | |
| C5-C8 Aliphatics | ND | 100 | µg/L | | | |
| Unadjusted C9-C12 Aliphatics | ND | 100 | µg/L | | | |
| C9-C12 Aliphatics | ND | 100 | µg/L | | | |
| C9-C10 Aromatics | ND | 100 | µg/L | | | |
| Benzene | ND | 1.0 | µg/L | | | |
| Butylcyclohexane | ND | 1.0 | µg/L | | | |
| Decane | ND | 1.0 | µg/L | | | |
| Ethylbenzene | ND | 1.0 | µg/L | | | |
| Methyl tert-Butyl Ether (MTBE) | ND | 1.0 | µg/L | | | |
| 2-Methylpentane | ND | 1.0 | µg/L | | | |
| Naphthalene | ND | 5.0 | µg/L | | | |
| Nonane | ND | 1.0 | µg/L | | | |
| Pentane | ND | 1.0 | µg/L | | | |
| Toluene | ND | 1.0 | µg/L | | | |
| 1,2,4-Trimethylbenzene | ND | 1.0 | µg/L | | | |
| 2,2,4-Trimethylpentane | ND | 1.0 | µg/L | | | |
| m+p Xylene | ND | 2.0 | µg/L | | | |
| o-Xylene | ND | 1.0 | µg/L | | | |
| Surrogate: 2,5-Dibromotoluene (FID) | 42.6 | | µg/L | 40.0 | 106 | 70-130 |
| Surrogate: 2,5-Dibromotoluene (PID) | 34.5 | | µg/L | 40.0 | 86.2 | 70-130 |

| | | | | | | |
|-------------------------------------|-------------------------------|-----|------|------|------|--------|
| LCS (B124124-BS1) | Prepared & Analyzed: 06/15/15 | | | | | |
| Benzene | 90.4 | 1.0 | µg/L | 100 | 90.4 | 70-130 |
| Butylcyclohexane | 84.6 | 1.0 | µg/L | 100 | 84.6 | 70-130 |
| Decane | 86.3 | 1.0 | µg/L | 100 | 86.3 | 70-130 |
| Ethylbenzene | 90.7 | 1.0 | µg/L | 100 | 90.7 | 70-130 |
| Methyl tert-Butyl Ether (MTBE) | 98.3 | 1.0 | µg/L | 100 | 98.3 | 70-130 |
| 2-Methylpentane | 115 | 1.0 | µg/L | 100 | 115 | 70-130 |
| Naphthalene | 98.4 | 5.0 | µg/L | 100 | 98.4 | 70-130 |
| Nonane | 82.9 | 1.0 | µg/L | 100 | 82.9 | 30-130 |
| Pentane | 107 | 1.0 | µg/L | 100 | 107 | 70-130 |
| Toluene | 90.2 | 1.0 | µg/L | 100 | 90.2 | 70-130 |
| 1,2,4-Trimethylbenzene | 90.7 | 1.0 | µg/L | 100 | 90.7 | 70-130 |
| 2,2,4-Trimethylpentane | 101 | 1.0 | µg/L | 100 | 101 | 70-130 |
| m+p Xylene | 181 | 2.0 | µg/L | 200 | 90.7 | 70-130 |
| o-Xylene | 90.6 | 1.0 | µg/L | 100 | 90.6 | 70-130 |
| Surrogate: 2,5-Dibromotoluene (FID) | 40.8 | | µg/L | 40.0 | 102 | 70-130 |
| Surrogate: 2,5-Dibromotoluene (PID) | 33.7 | | µg/L | 40.0 | 84.3 | 70-130 |

| | | | | | | |
|--------------------------------|-------------------------------|-----|------|-----|------|--------|
| LCS Dup (B124124-BSD1) | Prepared & Analyzed: 06/15/15 | | | | | |
| Benzene | 84.0 | 1.0 | µg/L | 100 | 84.0 | 70-130 |
| Butylcyclohexane | 83.9 | 1.0 | µg/L | 100 | 83.9 | 70-130 |
| Decane | 82.2 | 1.0 | µg/L | 100 | 82.2 | 70-130 |
| Ethylbenzene | 84.7 | 1.0 | µg/L | 100 | 84.7 | 70-130 |
| Methyl tert-Butyl Ether (MTBE) | 94.3 | 1.0 | µg/L | 100 | 94.3 | 70-130 |
| 2-Methylpentane | 104 | 1.0 | µg/L | 100 | 104 | 70-130 |
| Naphthalene | 95.9 | 5.0 | µg/L | 100 | 95.9 | 70-130 |
| Nonane | 81.1 | 1.0 | µg/L | 100 | 81.1 | 30-130 |
| Pentane | 91.1 | 1.0 | µg/L | 100 | 91.1 | 70-130 |
| Toluene | 84.8 | 1.0 | µg/L | 100 | 84.8 | 70-130 |
| 1,2,4-Trimethylbenzene | 84.3 | 1.0 | µg/L | 100 | 84.3 | 70-130 |

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QUALITY CONTROL

Petroleum Hydrocarbons Analyses - VPH - Quality Control

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|---------|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|---------|-----------|-------|

Batch B124124 - MA VPH

| | | | | | | | | | |
|-------------------------------------|------|-----|------|------|------|--------|------|----|--|
| LCS Dup (B124124-BSD1) | | | | | | | | | |
| Prepared & Analyzed: 06/15/15 | | | | | | | | | |
| 2,2,4-Trimethylpentane | 93.0 | 1.0 | µg/L | 100 | 93.0 | 70-130 | 8.63 | 25 | |
| m+p Xylene | 170 | 2.0 | µg/L | 200 | 85.0 | 70-130 | 6.42 | 25 | |
| o-Xylene | 84.9 | 1.0 | µg/L | 100 | 84.9 | 70-130 | 6.49 | 25 | |
| Surrogate: 2,5-Dibromotoluene (FID) | 43.3 | | µg/L | 40.0 | 108 | 70-130 | | | |
| Surrogate: 2,5-Dibromotoluene (PID) | 36.2 | | µg/L | 40.0 | 90.6 | 70-130 | | | |



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FLAG/QUALIFIER SUMMARY

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

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

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



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CERTIFICATIONS

Certified Analyses included in this Report

| Analyte | Certifications |
|----------------------------------|------------------|
| MADEP-VPH-04-1.1 in Water | |
| Unadjusted C5-C8 Aliphatics | CT,NC,WA,ME,NH-P |
| C5-C8 Aliphatics | CT,NC,WA,ME,NH-P |
| Unadjusted C9-C12 Aliphatics | CT,NC,WA,ME,NH-P |
| C9-C12 Aliphatics | CT,NC,WA,ME,NH-P |
| C9-C10 Aromatics | CT,NC,WA,ME,NH-P |
| Benzene | CT,NC,WA,ME,NH-P |
| Ethylbenzene | CT,NC,WA,ME,NH-P |
| Methyl tert-Butyl Ether (MTBE) | CT,NC,WA,ME,NH-P |
| Naphthalene | CT,NC,WA,ME,NH-P |
| Toluene | CT,NC,WA,ME,NH-P |
| m+p Xylene | CT,NC,WA,ME,NH-P |
| o-Xylene | CT,NC,WA,ME,NH-P |

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

| Code | Description | Number | Expires |
|------|--|---------------|------------|
| AIHA | AIHA-LAP, LLC | 100033 | 02/1/2016 |
| MA | Massachusetts DEP | M-MA100 | 06/30/2015 |
| CT | Connecticut Department of Public Health | PH-0567 | 09/30/2015 |
| NY | New York State Department of Health | 10899 NELAP | 04/1/2016 |
| NH-S | New Hampshire Environmental Lab | 2516 NELAP | 02/5/2016 |
| RI | Rhode Island Department of Health | LAO00112 | 12/30/2015 |
| NC | North Carolina Div. of Water Quality | 652 | 12/31/2015 |
| NJ | New Jersey DEP | MA007 NELAP | 06/30/2015 |
| FL | Florida Department of Health | E871027 NELAP | 06/30/2015 |
| VT | Vermont Department of Health Lead Laboratory | LL015036 | 07/30/2015 |
| WA | State of Washington Department of Ecology | C2065 | 02/23/2016 |
| ME | State of Maine | 2011028 | 06/9/2017 |
| VA | Commonwealth of Virginia | 460217 | 12/14/2015 |
| NH-P | New Hampshire Environmental Lab | 2557 NELAP | 09/6/2015 |



® 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

| | | | | | | | | | |
|---|--|---|---|------------------|--|------|--|---|--|
| Company Name: FCS, Inc. | | Telephone: 413-789-3530 | Project # 91-218371.13 | | ANALYSIS REQUESTED | | # of Containers 10 | Page <u>1</u> of <u>1</u> | |
| Address: 588 Silver Street, Agawam, MA | | Client PO# | Alliance Notes Apply | | | | ** Container Code H.I. | ** Preservation | |
| Attention: Shawn Rising | | O FAX | DATA DELIVERY (check all that apply) | | | | Dissolved Metals | | |
| Project Location: 238 Main St, Townsend, MA | | E-MAIL | OWEB SITE | | | | O Field Filtered | | |
| Sampled By: TM | | Fax# 413-789-2776 | Email: SRising@ecosorb1.t.com | | | | O Lab to Filter | | |
| Project Proposal Provided? (for billing purposes) O yes <u>Alliance</u> proposal date <u>En 2017</u> | | Format: | PDF O EXCEL O GIS O OTHER | | | | *** Cont. Code: A=amber glass G=glass P=plastic S=sterile V=vial I=iced S=summa can T=tedlar bag O=Other | | |
| Con-Test Lab ID | | Client Sample ID / Description (laboratory use only) | Beginning Date/Time | Ending Date/Time | Composite | Grab | Matrix Code | Conc. Code | |
| 01 | | MW-103 | 6-11-15 | | X | GW | V | X | |
| 02 | | MW-104 | 6-11-15 10:50 | | X | GW | V | X | |
| 03 | | MW-105 | 6-11-15 10:10 | | X | GW | V | X | |
| 04 | | Trip Blank | 6-11-15 am | | X | O | C | X | |
| Comments: MA - CAM required | | | | | | | | * Matrix Code: GW = Groundwater WW = wastewater DW = drinking water A = air S = soil/solid SL = sludge O = other <u>OT H2O</u> | |
| Relinquished by: (signature) <u>TAUB</u> | | Date/Time: <u>3/16 8:20</u> | Turnaround Time: <input checked="" type="checkbox"/> 7-Day <input type="checkbox"/> 48-Hr <input type="checkbox"/> Other <u>3 day</u> | | Detection Limit Requirements: <u>GW-2 GW-3</u> | | 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 | | |
| Received by: (signature) <u>TAUB</u> | | Date/Time: <u>6/1/15</u> | <input checked="" type="checkbox"/> RUSH [†] | | Massachusetts: <u>MA-CAM report</u> | | <input checked="" type="checkbox"/> MCP Form Required <input type="checkbox"/> RCP Form Required <input type="checkbox"/> MA State DW Form Required PWSID # _____ | | |
| Relinquished by: (signature) | | Date/Time: | <input type="checkbox"/> 24-Hr <input type="checkbox"/> 48-Hr <input type="checkbox"/> 72-Hr <input type="checkbox"/> 4-Day | | Connecticut: _____ | | <input type="checkbox"/> NELAC & AIHA-LAP, LLC Accredited | | |
| Received by: (signature) | | Date/Time: [†] | Require lab approval <u>Other</u> | | | | WBE/DBE Certified | | |

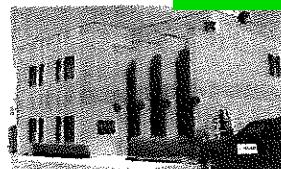
† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

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



Page 1 of 2



Sample Receipt Checklist

CLIENT NAME: ECSRECEIVED BY: MTDATE: 6/11/15

- 1) Was the chain(s) of custody relinquished and signed? Yes No No CoC Included
- 2) Does the chain agree with the samples?
If not, explain:
- 3) Are all the samples in good condition?
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 3.1

- 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:

Permission to subcontract samples? Yes No

(Walk-in clients only) if not already approved

Client Signature:

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

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

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

Containers received at Con-Test

| | # of containers | | # of containers |
|--------------------------------|-----------------|-----------------------|-----------------|
| 1 Liter Amber | | 8 oz amber/clear jar | |
| 500 mL Amber | | 4 oz amber/clear jar | |
| 250 mL Amber (8oz amber) | | 2 oz amber/clear jar | |
| 1 Liter Plastic | | Plastic Bag / Ziploc | |
| 500 mL Plastic | | SOC Kit | |
| 250 mL plastic | | Non-ConTest Container | |
| 40 mL Vial - type listed below | <u>10</u> | Perchlorate Kit | |
| Colisure / bacteria bottle | | Flashpoint bottle | |
| Dissolved Oxygen bottle | | Other glass jar | |
| Encore | | Other | |

Laboratory Comments:

| | | | |
|--------------------|---------------|-------------|-----------------------|
| 40 mL vials: # HCl | <u>10</u> | # Methanol | Time and Date Frozen: |
| Doc# 277 | # Bisulfate | # DI Water | |
| Rev. 4 August 2013 | # Thiosulfate | Unpreserved | |

Page 2 of 2
Login Sample Receipt Checklist
(Rejection Criteria Listing - Using Sample Acceptance Policy)
Any False statement will be brought to the attention of Client

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

Who notified of False statements?

Date/Time:

Doc #277 Rev. 4 August 2013

Log-In Technician Initials:

Date/Time:

MJ 6/11/15

MADEP MCP Analytical Method Report Certification Form

| | | | |
|-------------------|--------------------------------|------------|---------|
| Laboratory Name: | Con-Test Analytical Laboratory | Project #: | 15F0586 |
| Project Location: | 238 Main Street, Townsend, MA | RTN: | |

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

15F0586-01 thru 15F0586-04

Matrices: Water

CAM Protocol (check all that below)

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

Affirmative response to Questions A through F is required for "Presumptive Certainty" status

| | | |
|------------|---|--|
| A | Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
| B | Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
| C | Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
| D | Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
| E a | VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
| E b | APH and TO-15 Methods only: Was the complete analyte list reported for each method? | <input type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
| F | Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Questions A through E)? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |

A response to questions G, H and I below is required for "Presumptive Certainty" status

| | | |
|----------|---|--|
| G | Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
|----------|---|--|

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

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

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

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

Signature:

Position: Manager, Laboratory Reporting

Printed Name: Johanna K. Harrington

Date: 06/17/15

ATTACHMENT III

BORING LOGS – MW-106 & MW-107

| 588 Silver Street Agawam, MA 01001 | | | | SOIL BORING LOG | | | BORING NO.: | MW-106 | | | | | | |
|--|--|--------------------|------------------------------|----------------------------|---------------------|--|-------------------------|-----------|---------------|-------------|-------|--|--|--|
| | | | | | | | DOCUMENT NO.: | | OF | 1 | | | | |
| | | | | | | | SHEET | | | | | | | |
| LOCATION | | | | | | | | | | | | | | |
| DRILLING COMPANY: | Crawford Drilling Services (CDS) | JOB NUMBER: | 91-218371.13 | see site plan | | | | | | | | | | |
| | 25 Theodore Road - Westminster, MA 01473 | PROJECT NAME: | Mr. Mike's Mobil | | | | | | | | | | | |
| DRILLER: | Al, Anthony, Joe | PROJECT ADDRESS: | 238 Main Street Townsend, MA | | | | | | | | | | | |
| ECS INSPECTOR: | Jake Michalski | CLIENT NAME: | Global/Alliance | | | | | | | | | | | |
| GROUNDWATER OBSERVATIONS - BELOW SURFACE GRADE | | | | CASING | SAMPLER | CORE BARREL | | | | | | | | |
| Date | Depth | Stabilization Time | Type | Geoprobe direct push track | | | Casing Elevation (ft.) | | | | | | | |
| 9/10/2015 | 14' | | INSIDE DIAMETER | 2" | | | PVC Elevation (ft.) | | | | | | | |
| | | | HAMMER WEIGHT | | | | Surface Elevation (ft.) | | | | | | | |
| | | | HAMMER FALL | | | | Date Started | 9/10/2015 | | | | | | |
| | | | NOTES: | | | | Date Completed | 9/10/2015 | | | | | | |
| Depth | Sample Number | Sample Depths | Recovery/Penetration | Blows per 6" penetration | Strata Changes | Soil Descriptions | | | Well As Built | PID Results | Notes | | | |
| 0 | | 0-1' | NA (pre-cleared with vactor) | NA | Fine to medium sand | Dry, loose, brown, M-F SAND, trace peastone. | | | BDL | | | | | |
| 1 | | 1-2' | | | | Dry, loose, brown, M-F SAND, trace peastone. | | | | | | | | |
| 2 | | 2-3' | | | | Dry, loose, brown, M-F SAND, trace peastone. | | | | | | | | |
| 3 | | 3-4' | | | | Dry, loose, brown, M-F SAND, trace peastone. | | | | | | | | |
| 4 | | 4-5' | | | | Dry, loose, brown, M-F SAND, trace peastone. | | | | | | | | |
| 5 | | 5-6' | | NA | | Dry, brown, medium to coarse SAND. | | | | | | | | |
| 6 | | 6-7' | NA (pre-cleared with vactor) | | | Dry, brown, medium to coarse SAND. | | | BDL | | | | | |
| 7 | | 7-8' | | | | Dry, brown, medium to coarse SAND. | | | | | | | | |
| 8 | | 8-10' | | 16/24" | | Dry, brown, medium to coarse SAND. | | | | | | | | |
| 9 | | | | | | 15" Dry, brown, M-F SAND, some coarse sand; over 12" Wet (wet at 14') brown, Medium to Coarse SAND, trace fine gravel. | | | | | | | | |
| 10 | | 10-12.5' | 27/60" | NA | | 24" Saturated, brown, Medium to Coarse SAND. | | | BDL | | | | | |
| 11 | | | | | | End of borehole (17 fbg - Probe Refusal) | | | | | | | | |
| 12 | | 12.5-15' | | NA | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | |
| 15 | | 15-17' | 24/24" | NA | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | |
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| 32 | | | | | | | | | | | | | | |
| 33 | | | | | | | | | | | | | | |
| 34 | | | | | | | | | | | | | | |
| 35 | | | | | | | | | | | | | | |

Field testing values represent total volatile organic vapors (referenced to a benzene standard) measured in the headspace of sealed 8oz amber glass jars, with a IonScience Phocheck Tiger PID. Results reported in parts per million by volume (ppmv). Detection limit calibrated to 0.0 ppmv.

Boring completed as 2-inch diameter monitoring well set at 17 fbg with 10' screen and 7' solid PVC riser, finished with flush-mount road box.

Depth of Groundwater

| | |
|---------------|-----------------|
| Natural Fill. | Well sand. |
| Well screen. | Bentonite seal. |

| 588 Silver Street Agawam, MA 01001 | | | | SOIL BORING LOG | | | BORING NO.: | MW-107 | | | | | |
|--|--|--------------------|------------------------------|----------------------------|---------------------|---|-------------------------|---------------|---------------|-------|--|--|--|
| | | | | | | | DOCUMENT NO.: | | | | | | |
| | | | | | | | SHEET | 1 | OF | 1 | | | |
| | | | | | | | LOCATION | | | | | | |
| DRILLING COMPANY: | Crawford Drilling Services (CDS) 25 Theodore Road - Westminster, MA 01473 | JOB NUMBER: | 91-218371.13 | PROJECT NAME: | Mr. Mike's Mobil | | | | see site plan | | | | |
| DRILLER: | Al, Anthony, Joe | PROJECT ADDRESS: | 238 Main Street Townsend, MA | CLIENT NAME: | Global/Alliance | | | | | | | | |
| ECS INSPECTOR: | Jake Michalski | NOTES: | | | | | | | | | | | |
| GROUNDWATER OBSERVATIONS - BELOW SURFACE GRADE | | | | CASING | SAMPLER | CORE BARREL | Casing Elevation (ft.) | | | | | | |
| Date | Depth | Stabilization Time | Type | Geoprobe direct push track | | | PVC Elevation (ft.) | | | | | | |
| 9/10/2015 | 14.50' | | INSIDE DIAMETER | 2" | | | Surface Elevation (ft.) | | | | | | |
| | | | HAMMER WEIGHT | | | | Date Started | 9/10/2015 | | | | | |
| | | | HAMMER FALL | | | | Date Completed | 9/10/2015 | | | | | |
| Depth | Sample Number | Sample Depths | Recovery/Penetration | Blows per 6" penetration | Strata Changes | Soil Descriptions | | Well As Built | PID Results | Notes | | | |
| 0 | | 0-1' | NA (pre-cleaned with vactor) | NA | Fine to medium sand | Dry, loose, brown M-F SAND. | | BDL | | | | | |
| 1 | | 1-2' | | | | Dry, loose, brown M-F SAND. | | | | | | | |
| 2 | | 2-3' | | | | Dry, loose, brown M-F SAND. | | | | | | | |
| 3 | | 3-4' | | | | Dry, loose, brown M-F SAND. | | | | | | | |
| 4 | | 4-5' | | | | Dry, loose, brown M-F SAND. | | | | | | | |
| 5 | | 5-6' | | NA | | Dry, brown, Fine SAND. | | BDL | | | | | |
| 6 | | 6-7' | NA (pre-cleaned with vactor) | | | Dry, brown, Fine SAND. | | | | | | | |
| 7 | | 7-8' | | 20/36 | NA | Dry, brown, Fine SAND. | | BDL | | | | | |
| 8 | | 8-10' | | | NA | Dry, brown, Fine SAND. | | | | | | | |
| 9 | | | | | | Dry, brown, Medium to Coarse SAND. | | BDL | | | | | |
| 10 | | 10-12.5' | | 38/60 | NA | (Wet at 14.5') Brown, M-F SAND, some coarse sand. | | | | | | | |
| 11 | | | | | | | | 0.1 | | | | | |
| 12 | | 12.5-15' | | | NA | Wet, brown, medium to coarse SAND | | | | | | | |
| 13 | | | | | | Saturated, brown, medium to coarse SAND. | | 1.2 | | | | | |
| 14 | | | | | | End of borehole (20 fbg) | | | | | | | |
| 15 | | 15-17.5' | | 44/60 | NA | | | | | | | | |
| 16 | | | | | | | | | | | | | |
| 17 | | 17.5-20' | | | NA | | | | | | | | |
| 18 | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | |
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| 28 | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | | |
| 31 | | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | | |
| 33 | | | | | | | | | | | | | |
| 34 | | | | | | | | | | | | | |
| 35 | | | | | | | | | | | | | |

Field testing values represent total volatile organic vapors (referenced to a benzene standard) measured in the headspace of sealed 8oz amber glass jars, with a IonScience Phocheck Tiger PID. Results reported in parts per million by volume (ppmv). Detection limit calibrated to 0.0 ppmv.

Boring completed as 2-inch diameter monitoring well set at 19 fbg with 10' screen and 9' solid PVC riser, finished with flush-mount road box.

▼ Depth of Groundwater

| | |
|---------------|-----------------|
| Natural Fill. | Well sand. |
| Well screen. | Bentonite seal. |

ATTACHMENT IV

LABORATORY ANALYTICAL REPORT – SOIL SEPTEMBER 2015



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

September 17, 2015

Shawn Rising
ECS
588 Silver Street
Agawam, MA 01001

Project Location: 238 Main St, Townsend, MA

Client Job Number:

Project Number: 91-218371

Laboratory Work Order Number: 15I0435

Enclosed are results of analyses for samples received by the laboratory on September 10, 2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Lisa A. Worthington". The signature is fluid and cursive, with "Lisa" on the first line and "A. Worthington" on the second line.

Lisa A. Worthington
Project Manager

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

ECS
588 Silver Street
Agawam, MA 01001
ATTN: Shawn Rising

REPORT DATE: 9/17/2015

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 91-218371

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 15I0435

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

PROJECT LOCATION: 238 Main St, Townsend, MA

| FIELD SAMPLE # | LAB ID: | MATRIX | SAMPLE DESCRIPTION | TEST | SUB LAB |
|------------------|------------|-----------------|--------------------|--|---------|
| MW-106 15'-17.5' | 15I0435-01 | Soil | | MADEP-VPH-04-1.1 SM 2540G SW-846 8260C | |
| MW-107 15'-17.5' | 15I0435-02 | Soil | | MADEP-VPH-04-1.1 SM 2540G SW-846 8260C | |
| Trip Blank | 15I0435-03 | Trip Blank Soil | | MADEP-VPH-04-1.1 | |



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

CASE NARRATIVE SUMMARY

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

SW-846 8260C

Qualifications:

S-26

Surrogate outside of control limits.

Analyte & Samples(s) Qualified:

4-Bromofluorobenzene

15I0435-01[MW-106 15'-17.5'], B130588-BLK1

V-16

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

Analyte & Samples(s) Qualified:

Ethanol

15I0435-01[MW-106 15'-17.5'], 15I0435-02[MW-107 15'-17.5']

MADEP-VPH-04-1.1

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

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.

Johanna K. Harrington

Manager, Laboratory Reporting



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

Project Location: 238 Main St, Townsend, MA

Sample Description:

Work Order: 15I0435

Date Received: 9/10/2015

Field Sample #: MW-106 15'-17.5'

Sampled: 9/10/2015 10:00

Sample ID: 15I0435-01

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time Analyzed | Analyst |
|-----------------------------|-------------|-----|-----------|----------|-----------|--------------|---------------|--------------------|---------|
| Ethanol | ND | 14 | mg/Kg dry | 1 | V-16 | SW-846 8260C | 9/14/15 | 9/16/15 7:53 | MFF |
| Surrogates | | | | | | | | | |
| 1,2-Dichloroethane-d4 | | 104 | 70-130 | | | | | 9/16/15 7:53 | |
| Toluene-d8 | | 103 | 70-130 | | | | | 9/16/15 7:53 | |
| 4-Bromofluorobenzene | 62.5 | * | 70-130 | | | S-26 | | 9/16/15 7:53 | |



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

Project Location: 238 Main St, Townsend, MA

Sample Description:

Work Order: 15I0435

Date Received: 9/10/2015

Field Sample #: MW-106 15'-17.5'

Sampled: 9/10/2015 10:00

Sample ID: 15I0435-01

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.23

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------|------------|-----------------|-----------|-----------|-----------|------------------|---------------|--------------------|---------|
| Unadjusted C5-C8 Aliphatics | ND | 12 | mg/Kg dry | 1 | | MADEP-VPH-04-1.1 | 9/11/15 | 9/11/15 22:23 | EEH |
| C5-C8 Aliphatics | ND | 12 | mg/Kg dry | 1 | | MADEP-VPH-04-1.1 | 9/11/15 | 9/11/15 22:23 | EEH |
| Unadjusted C9-C12 Aliphatics | ND | 12 | mg/Kg dry | 1 | | MADEP-VPH-04-1.1 | 9/11/15 | 9/11/15 22:23 | EEH |
| C9-C12 Aliphatics | ND | 12 | mg/Kg dry | 1 | | MADEP-VPH-04-1.1 | 9/11/15 | 9/11/15 22:23 | EEH |
| C9-C10 Aromatics | ND | 12 | mg/Kg dry | 1 | | MADEP-VPH-04-1.1 | 9/11/15 | 9/11/15 22:23 | EEH |
| Benzene | ND | 0.060 | mg/Kg dry | 1 | | MADEP-VPH-04-1.1 | 9/11/15 | 9/11/15 22:23 | EEH |
| Ethylbenzene | ND | 0.060 | mg/Kg dry | 1 | | MADEP-VPH-04-1.1 | 9/11/15 | 9/11/15 22:23 | EEH |
| Methyl tert-Butyl Ether (MTBE) | ND | 0.060 | mg/Kg dry | 1 | | MADEP-VPH-04-1.1 | 9/11/15 | 9/11/15 22:23 | EEH |
| Naphthalene | ND | 0.30 | mg/Kg dry | 1 | | MADEP-VPH-04-1.1 | 9/11/15 | 9/11/15 22:23 | EEH |
| Toluene | ND | 0.060 | mg/Kg dry | 1 | | MADEP-VPH-04-1.1 | 9/11/15 | 9/11/15 22:23 | EEH |
| m+p Xylene | ND | 0.12 | mg/Kg dry | 1 | | MADEP-VPH-04-1.1 | 9/11/15 | 9/11/15 22:23 | EEH |
| o-Xylene | ND | 0.060 | mg/Kg dry | 1 | | MADEP-VPH-04-1.1 | 9/11/15 | 9/11/15 22:23 | EEH |
| Surrogates | % Recovery | Recovery Limits | | Flag/Qual | | | | | |
| 2,5-Dibromotoluene (FID) | 118 | 70-130 | | | | | | 9/11/15 22:23 | |
| 2,5-Dibromotoluene (PID) | 108 | 70-130 | | | | | | 9/11/15 22:23 | |



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

Project Location: 238 Main St, Townsend, MA

Sample Description:

Work Order: 15I0435

Date Received: 9/10/2015

Field Sample #: MW-106 15'-17.5'

Sampled: 9/10/2015 10:00

Sample ID: 15I0435-01

Sample Matrix: Soil

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

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time Analyzed | Analyst |
|----------|---------|----|-------|----------|-----------|----------|---------------|--------------------|---------|
| % Solids | 83.0 | | % Wt | 1 | | SM 2540G | 9/10/15 | 9/11/15 11:42 | MRL |



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

Project Location: 238 Main St, Townsend, MA

Sample Description:

Work Order: 15I0435

Date Received: 9/10/2015

Field Sample #: MW-107 15'-17.5'

Sampled: 9/10/2015 11:00

Sample ID: 15I0435-02

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time Analyzed | Analyst |
|-----------------------|---------|-----|-----------|----------|-----------|--------------|---------------|--------------------|---------|
| Ethanol | ND | 13 | mg/Kg dry | 1 | V-16 | SW-846 8260C | 9/14/15 | 9/16/15 8:24 | MFF |
| Surrogates | | | | | | | | | |
| 1,2-Dichloroethane-d4 | | 121 | 70-130 | | | | | 9/16/15 8:24 | |
| Toluene-d8 | | 103 | 70-130 | | | | | 9/16/15 8:24 | |
| 4-Bromofluorobenzene | | 102 | 70-130 | | | | | 9/16/15 8:24 | |



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

Project Location: 238 Main St, Townsend, MA

Sample Description:

Work Order: 15I0435

Date Received: 9/10/2015

Field Sample #: MW-107 15'-17.5'

Sampled: 9/10/2015 11:00

Sample ID: 15I0435-02

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.02

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------|------------|-----------------|-----------|-----------|-----------|------------------|---------------|--------------------|---------|
| Unadjusted C5-C8 Aliphatics | ND | 13 | mg/Kg dry | 1 | | MADEP-VPH-04-1.1 | 9/11/15 | 9/11/15 22:59 | EEH |
| C5-C8 Aliphatics | ND | 13 | mg/Kg dry | 1 | | MADEP-VPH-04-1.1 | 9/11/15 | 9/11/15 22:59 | EEH |
| Unadjusted C9-C12 Aliphatics | 49 | 13 | mg/Kg dry | 1 | | MADEP-VPH-04-1.1 | 9/11/15 | 9/11/15 22:59 | EEH |
| C9-C12 Aliphatics | ND | 13 | mg/Kg dry | 1 | | MADEP-VPH-04-1.1 | 9/11/15 | 9/11/15 22:59 | EEH |
| C9-C10 Aromatics | 45 | 13 | mg/Kg dry | 1 | | MADEP-VPH-04-1.1 | 9/11/15 | 9/11/15 22:59 | EEH |
| Benzene | ND | 0.064 | mg/Kg dry | 1 | | MADEP-VPH-04-1.1 | 9/11/15 | 9/11/15 22:59 | EEH |
| Ethylbenzene | ND | 0.064 | mg/Kg dry | 1 | | MADEP-VPH-04-1.1 | 9/11/15 | 9/11/15 22:59 | EEH |
| Methyl tert-Butyl Ether (MTBE) | ND | 0.064 | mg/Kg dry | 1 | | MADEP-VPH-04-1.1 | 9/11/15 | 9/11/15 22:59 | EEH |
| Naphthalene | ND | 0.32 | mg/Kg dry | 1 | | MADEP-VPH-04-1.1 | 9/11/15 | 9/11/15 22:59 | EEH |
| Toluene | ND | 0.064 | mg/Kg dry | 1 | | MADEP-VPH-04-1.1 | 9/11/15 | 9/11/15 22:59 | EEH |
| m+p Xylene | ND | 0.13 | mg/Kg dry | 1 | | MADEP-VPH-04-1.1 | 9/11/15 | 9/11/15 22:59 | EEH |
| o-Xylene | ND | 0.064 | mg/Kg dry | 1 | | MADEP-VPH-04-1.1 | 9/11/15 | 9/11/15 22:59 | EEH |
| Surrogates | % Recovery | Recovery Limits | | Flag/Qual | | | | | |
| 2,5-Dibromotoluene (FID) | 109 | 70-130 | | | | | | 9/11/15 22:59 | |
| 2,5-Dibromotoluene (PID) | 104 | 70-130 | | | | | | 9/11/15 22:59 | |



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

Project Location: 238 Main St, Townsend, MA

Sample Description:

Work Order: 15I0435

Date Received: 9/10/2015

Field Sample #: MW-107 15'-17.5'

Sampled: 9/10/2015 11:00

Sample ID: 15I0435-02

Sample Matrix: Soil

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

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time Analyzed | Analyst |
|----------|---------|----|-------|----------|-----------|----------|---------------|--------------------|---------|
| % Solids | 87.3 | | % Wt | 1 | | SM 2540G | 9/10/15 | 9/11/15 11:42 | MRL |



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

Project Location: 238 Main St, Townsend, MA

Sample Description:

Work Order: 15I0435

Date Received: 9/10/2015

Sampled: 9/10/2015 00:00

Field Sample #: Trip Blank

Sample ID: 15I0435-03

Sample Matrix: Trip Blank Soil

Petroleum Hydrocarbons Analyses - VPH

Soil/Methanol Preservation Ratio: 1.00

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------|------------|-----------------|-----------|-----------|-----------|------------------|---------------|--------------------|---------|
| Unadjusted C5-C8 Aliphatics | ND | 10 | mg/Kg wet | 1 | | MADEP-VPH-04-1.1 | 9/14/15 | 9/14/15 18:43 | EEH |
| C5-C8 Aliphatics | ND | 10 | mg/Kg wet | 1 | | MADEP-VPH-04-1.1 | 9/14/15 | 9/14/15 18:43 | EEH |
| Unadjusted C9-C12 Aliphatics | ND | 10 | mg/Kg wet | 1 | | MADEP-VPH-04-1.1 | 9/14/15 | 9/14/15 18:43 | EEH |
| C9-C12 Aliphatics | ND | 10 | mg/Kg wet | 1 | | MADEP-VPH-04-1.1 | 9/14/15 | 9/14/15 18:43 | EEH |
| C9-C10 Aromatics | ND | 10 | mg/Kg wet | 1 | | MADEP-VPH-04-1.1 | 9/14/15 | 9/14/15 18:43 | EEH |
| Benzene | ND | 0.050 | mg/Kg wet | 1 | | MADEP-VPH-04-1.1 | 9/14/15 | 9/14/15 18:43 | EEH |
| Ethylbenzene | ND | 0.050 | mg/Kg wet | 1 | | MADEP-VPH-04-1.1 | 9/14/15 | 9/14/15 18:43 | EEH |
| Methyl tert-Butyl Ether (MTBE) | ND | 0.050 | mg/Kg wet | 1 | | MADEP-VPH-04-1.1 | 9/14/15 | 9/14/15 18:43 | EEH |
| Naphthalene | ND | 0.25 | mg/Kg wet | 1 | | MADEP-VPH-04-1.1 | 9/14/15 | 9/14/15 18:43 | EEH |
| Toluene | ND | 0.050 | mg/Kg wet | 1 | | MADEP-VPH-04-1.1 | 9/14/15 | 9/14/15 18:43 | EEH |
| m+p Xylene | ND | 0.10 | mg/Kg wet | 1 | | MADEP-VPH-04-1.1 | 9/14/15 | 9/14/15 18:43 | EEH |
| o-Xylene | ND | 0.050 | mg/Kg wet | 1 | | MADEP-VPH-04-1.1 | 9/14/15 | 9/14/15 18:43 | EEH |
| Surrogates | % Recovery | Recovery Limits | | Flag/Qual | | | | | |
| 2,5-Dibromotoluene (FID) | 91.3 | 70-130 | | | | | | 9/14/15 18:43 | |
| 2,5-Dibromotoluene (PID) | 84.9 | 70-130 | | | | | | 9/14/15 18:43 | |



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

Sample Extraction Data

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

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
|-------------------------------|---------|-------------|------------|----------|
| 15I0435-01 [MW-106 15'-17.5'] | B130503 | 18.4 | 18.2 | 09/11/15 |
| 15I0435-02 [MW-107 15'-17.5'] | B130503 | 15.3 | 17.0 | 09/11/15 |

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

| Lab Number [Field ID] | Batch | Initial [g] | Final [mL] | Date |
|-------------------------|---------|-------------|------------|----------|
| 15I0435-03 [Trip Blank] | B130638 | 15.0 | 15.1 | 09/14/15 |

Prep Method: % Solids-SM 2540G

| Lab Number [Field ID] | Batch | Date |
|-------------------------------|---------|----------|
| 15I0435-01 [MW-106 15'-17.5'] | B130447 | 09/10/15 |
| 15I0435-02 [MW-107 15'-17.5'] | B130447 | 09/10/15 |

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

| Lab Number [Field ID] | Batch | Sample Amount(g) | Methanol Volume(mL) | Methanol Aliquot(mL) | Final Volume(mL) | Date |
|-------------------------------|---------|------------------|---------------------|----------------------|------------------|----------|
| 15I0435-01 [MW-106 15'-17.5'] | B130588 | 15.6 | 17.6 | 1 | 50 | 09/14/15 |
| 15I0435-02 [MW-107 15'-17.5'] | B130588 | 14.7 | 16.9 | 1 | 50 | 09/14/15 |

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

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 B130588 - SW-846 5030B

| | | | | | | | | | |
|---|---------------|------|-----------|--------|---------------|--------|--------|------|------|
| Blank (B130588-BLK1) Prepared: 09/14/15 Analyzed: 09/16/15 | | | | | | | | | |
| Ethanol | ND | 0.20 | mg/Kg wet | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.0269 | | mg/Kg wet | 0.0250 | | 107 | 70-130 | | |
| Surrogate: Toluene-d8 | 0.0210 | | mg/Kg wet | 0.0250 | | 84.1 | 70-130 | | |
| Surrogate: 4-Bromofluorobenzene | 0.0173 | | mg/Kg wet | 0.0250 | 69.3 * | 70-130 | | | S-26 |
| LCS (B130588-BS1) Prepared: 09/14/15 Analyzed: 09/16/15 | | | | | | | | | |
| Ethanol | 0.108 | 0.23 | mg/Kg wet | 0.113 | | 95.7 | 40-160 | | |
| Surrogate: 1,2-Dichloroethane-d4 | 0.0256 | | mg/Kg wet | 0.0283 | | 90.2 | 70-130 | | |
| Surrogate: Toluene-d8 | 0.0290 | | mg/Kg wet | 0.0283 | | 102 | 70-130 | | |
| Surrogate: 4-Bromofluorobenzene | 0.0332 | | mg/Kg wet | 0.0283 | | 117 | 70-130 | | |
| LCS Dup (B130588-BSD1) Prepared: 09/14/15 Analyzed: 09/16/15 | | | | | | | | | |
| Ethanol | 0.130 | 0.23 | mg/Kg wet | 0.113 | | 115 | 40-160 | 18.4 | 25 |
| Surrogate: 1,2-Dichloroethane-d4 | 0.0290 | | mg/Kg wet | 0.0283 | | 102 | 70-130 | | |
| Surrogate: Toluene-d8 | 0.0294 | | mg/Kg wet | 0.0283 | | 104 | 70-130 | | |
| Surrogate: 4-Bromofluorobenzene | 0.0330 | | mg/Kg wet | 0.0283 | | 116 | 70-130 | | |

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

QUALITY CONTROL**Petroleum Hydrocarbons Analyses - VPH - Quality Control**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

Batch B130503 - MA VPH

| | | | | | | |
|-------------------------------------|-------------------------------|-------|-----------|------|------|--------|
| Blank (B130503-BLK1) | Prepared & Analyzed: 09/11/15 | | | | | |
| Unadjusted C5-C8 Aliphatics | ND | 10 | mg/Kg wet | | | |
| C5-C8 Aliphatics | ND | 10 | mg/Kg wet | | | |
| Unadjusted C9-C12 Aliphatics | ND | 10 | mg/Kg wet | | | |
| C9-C12 Aliphatics | ND | 10 | mg/Kg wet | | | |
| C9-C10 Aromatics | ND | 10 | mg/Kg wet | | | |
| Benzene | ND | 0.050 | mg/Kg wet | | | |
| Butylcyclohexane | ND | 0.050 | mg/Kg wet | | | |
| Decane | ND | 0.050 | mg/Kg wet | | | |
| Ethylbenzene | ND | 0.050 | mg/Kg wet | | | |
| Methyl tert-Butyl Ether (MTBE) | ND | 0.050 | mg/Kg wet | | | |
| 2-Methylpentane | ND | 0.050 | mg/Kg wet | | | |
| Naphthalene | ND | 0.25 | mg/Kg wet | | | |
| Nonane | ND | 0.050 | mg/Kg wet | | | |
| Pentane | ND | 0.050 | mg/Kg wet | | | |
| Toluene | ND | 0.050 | mg/Kg wet | | | |
| 1,2,4-Trimethylbenzene | ND | 0.050 | mg/Kg wet | | | |
| 2,2,4-Trimethylpentane | ND | 0.050 | mg/Kg wet | | | |
| m+p Xylene | ND | 0.10 | mg/Kg wet | | | |
| o-Xylene | ND | 0.050 | mg/Kg wet | | | |
| Surrogate: 2,5-Dibromotoluene (FID) | 3.55 | | mg/Kg wet | 3.33 | 106 | 70-130 |
| Surrogate: 2,5-Dibromotoluene (PID) | 3.32 | | mg/Kg wet | 3.33 | 99.7 | 70-130 |

| | | | | | | |
|-------------------------------------|-------------------------------|--------|-----------|--------|------|--------|
| LCS (B130503-BS1) | Prepared & Analyzed: 09/11/15 | | | | | |
| Benzene | 0.0908 | 0.0010 | mg/Kg wet | 0.100 | 90.8 | 70-130 |
| Butylcyclohexane | 0.0825 | 0.0010 | mg/Kg wet | 0.100 | 82.5 | 70-130 |
| Decane | 0.0912 | 0.0010 | mg/Kg wet | 0.100 | 91.2 | 70-130 |
| Ethylbenzene | 0.0884 | 0.0010 | mg/Kg wet | 0.100 | 88.4 | 70-130 |
| Methyl tert-Butyl Ether (MTBE) | 0.0976 | 0.0010 | mg/Kg wet | 0.100 | 97.6 | 70-130 |
| 2-Methylpentane | 0.0909 | 0.0010 | mg/Kg wet | 0.100 | 90.9 | 70-130 |
| Naphthalene | 0.106 | 0.0050 | mg/Kg wet | 0.100 | 106 | 70-130 |
| Nonane | 0.0847 | 0.0010 | mg/Kg wet | 0.100 | 84.7 | 30-130 |
| Pentane | 0.0913 | 0.0010 | mg/Kg wet | 0.100 | 91.3 | 70-130 |
| Toluene | 0.0888 | 0.0010 | mg/Kg wet | 0.100 | 88.8 | 70-130 |
| 1,2,4-Trimethylbenzene | 0.0977 | 0.0010 | mg/Kg wet | 0.100 | 97.7 | 70-130 |
| 2,2,4-Trimethylpentane | 0.102 | 0.0010 | mg/Kg wet | 0.100 | 102 | 70-130 |
| m+p Xylene | 0.181 | 0.0020 | mg/Kg wet | 0.200 | 90.4 | 70-130 |
| o-Xylene | 0.0913 | 0.0010 | mg/Kg wet | 0.100 | 91.3 | 70-130 |
| Surrogate: 2,5-Dibromotoluene (FID) | 0.0331 | | mg/Kg wet | 0.0400 | 82.9 | 70-130 |
| Surrogate: 2,5-Dibromotoluene (PID) | 0.0326 | | mg/Kg wet | 0.0400 | 81.6 | 70-130 |

| | | | | | | |
|--------------------------------|-------------------------------|--------|-----------|-------|------|--------|
| LCS Dup (B130503-BSD1) | Prepared & Analyzed: 09/11/15 | | | | | |
| Benzene | 0.0900 | 0.0010 | mg/Kg wet | 0.100 | 90.0 | 70-130 |
| Butylcyclohexane | 0.0835 | 0.0010 | mg/Kg wet | 0.100 | 83.5 | 70-130 |
| Decane | 0.0922 | 0.0010 | mg/Kg wet | 0.100 | 92.2 | 70-130 |
| Ethylbenzene | 0.0876 | 0.0010 | mg/Kg wet | 0.100 | 87.6 | 70-130 |
| Methyl tert-Butyl Ether (MTBE) | 0.0975 | 0.0010 | mg/Kg wet | 0.100 | 97.5 | 70-130 |
| 2-Methylpentane | 0.0888 | 0.0010 | mg/Kg wet | 0.100 | 88.8 | 70-130 |
| Naphthalene | 0.109 | 0.0050 | mg/Kg wet | 0.100 | 109 | 70-130 |
| Nonane | 0.0875 | 0.0010 | mg/Kg wet | 0.100 | 87.5 | 30-130 |
| Pentane | 0.0866 | 0.0010 | mg/Kg wet | 0.100 | 86.6 | 70-130 |
| Toluene | 0.0881 | 0.0010 | mg/Kg wet | 0.100 | 88.1 | 70-130 |
| 1,2,4-Trimethylbenzene | 0.0974 | 0.0010 | mg/Kg wet | 0.100 | 97.4 | 70-130 |



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QUALITY CONTROL**Petroleum Hydrocarbons Analyses - VPH - Quality Control**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD RPD | Limit Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|---------|-------------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|---------|-------------|

Batch B130503 - MA VPH

| | | | | | | | | |
|-------------------------------------|-------------------------------|--------|-----------|--------|------|--------|-------|----|
| LCS Dup (B130503-BS1) | Prepared & Analyzed: 09/11/15 | | | | | | | |
| 2,2,4-Trimethylpentane | 0.103 | 0.0010 | mg/Kg wet | 0.100 | 103 | 70-130 | 1.15 | 25 |
| m+p Xylene | 0.180 | 0.0020 | mg/Kg wet | 0.200 | 89.8 | 70-130 | 0.673 | 25 |
| o-Xylene | 0.0906 | 0.0010 | mg/Kg wet | 0.100 | 90.6 | 70-130 | 0.668 | 25 |
| Surrogate: 2,5-Dibromotoluene (FID) | 0.0352 | | mg/Kg wet | 0.0400 | 88.1 | 70-130 | | |
| Surrogate: 2,5-Dibromotoluene (PID) | 0.0324 | | mg/Kg wet | 0.0400 | 81.0 | 70-130 | | |

Batch B130638 - MA VPH

| | | | | | | | | |
|-------------------------------------|-------------------------------|-------|-----------|------|------|--------|--|--|
| Blank (B130638-BLK1) | Prepared & Analyzed: 09/14/15 | | | | | | | |
| Unadjusted C5-C8 Aliphatics | ND | 10 | mg/Kg wet | | | | | |
| C5-C8 Aliphatics | ND | 10 | mg/Kg wet | | | | | |
| Unadjusted C9-C12 Aliphatics | ND | 10 | mg/Kg wet | | | | | |
| C9-C12 Aliphatics | ND | 10 | mg/Kg wet | | | | | |
| C9-C10 Aromatics | ND | 10 | mg/Kg wet | | | | | |
| Benzene | ND | 0.050 | mg/Kg wet | | | | | |
| Butylcyclohexane | ND | 0.050 | mg/Kg wet | | | | | |
| Decane | ND | 0.050 | mg/Kg wet | | | | | |
| Ethylbenzene | ND | 0.050 | mg/Kg wet | | | | | |
| Methyl tert-Butyl Ether (MTBE) | ND | 0.050 | mg/Kg wet | | | | | |
| 2-Methylpentane | ND | 0.050 | mg/Kg wet | | | | | |
| Naphthalene | ND | 0.25 | mg/Kg wet | | | | | |
| Nonane | ND | 0.050 | mg/Kg wet | | | | | |
| Pentane | ND | 0.050 | mg/Kg wet | | | | | |
| Toluene | ND | 0.050 | mg/Kg wet | | | | | |
| 1,2,4-Trimethylbenzene | ND | 0.050 | mg/Kg wet | | | | | |
| 2,2,4-Trimethylpentane | ND | 0.050 | mg/Kg wet | | | | | |
| m+p Xylene | ND | 0.10 | mg/Kg wet | | | | | |
| o-Xylene | ND | 0.050 | mg/Kg wet | | | | | |
| Surrogate: 2,5-Dibromotoluene (FID) | 2.64 | | mg/Kg wet | 3.33 | 79.2 | 70-130 | | |
| Surrogate: 2,5-Dibromotoluene (PID) | 2.53 | | mg/Kg wet | 3.33 | 75.9 | 70-130 | | |

| | | | | | | | | |
|-------------------------------------|-------------------------------|--------|-----------|--------|------|--------|--|--|
| LCS (B130638-BS1) | Prepared & Analyzed: 09/14/15 | | | | | | | |
| Benzene | 0.0918 | 0.0010 | mg/Kg wet | 0.100 | 91.8 | 70-130 | | |
| Butylcyclohexane | 0.0832 | 0.0010 | mg/Kg wet | 0.100 | 83.2 | 70-130 | | |
| Decane | 0.0916 | 0.0010 | mg/Kg wet | 0.100 | 91.6 | 70-130 | | |
| Ethylbenzene | 0.0910 | 0.0010 | mg/Kg wet | 0.100 | 91.0 | 70-130 | | |
| Methyl tert-Butyl Ether (MTBE) | 0.0959 | 0.0010 | mg/Kg wet | 0.100 | 95.9 | 70-130 | | |
| 2-Methylpentane | 0.0930 | 0.0010 | mg/Kg wet | 0.100 | 93.0 | 70-130 | | |
| Naphthalene | 0.0950 | 0.0050 | mg/Kg wet | 0.100 | 95.0 | 70-130 | | |
| Nonane | 0.0858 | 0.0010 | mg/Kg wet | 0.100 | 85.8 | 30-130 | | |
| Pentane | 0.0916 | 0.0010 | mg/Kg wet | 0.100 | 91.6 | 70-130 | | |
| Toluene | 0.0905 | 0.0010 | mg/Kg wet | 0.100 | 90.5 | 70-130 | | |
| 1,2,4-Trimethylbenzene | 0.0986 | 0.0010 | mg/Kg wet | 0.100 | 98.6 | 70-130 | | |
| 2,2,4-Trimethylpentane | 0.101 | 0.0010 | mg/Kg wet | 0.100 | 101 | 70-130 | | |
| m+p Xylene | 0.186 | 0.0020 | mg/Kg wet | 0.200 | 92.8 | 70-130 | | |
| o-Xylene | 0.0932 | 0.0010 | mg/Kg wet | 0.100 | 93.2 | 70-130 | | |
| Surrogate: 2,5-Dibromotoluene (FID) | 0.0321 | | mg/Kg wet | 0.0400 | 80.2 | 70-130 | | |
| Surrogate: 2,5-Dibromotoluene (PID) | 0.0281 | | mg/Kg wet | 0.0400 | 70.2 | 70-130 | | |

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QUALITY CONTROL
Petroleum Hydrocarbons Analyses - VPH - Quality Control

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

Batch B130638 - MA VPH

| LCS Dup (B130638-BSD1) Prepared & Analyzed: 09/14/15 | | | | | | | | | | |
|--|--------|--------|-----------|--------|------|--------|--------|----|--|--|
| Benzene | 0.0892 | 0.0010 | mg/Kg wet | 0.100 | 89.2 | 70-130 | 2.82 | 25 | | |
| Butylcyclohexane | 0.0823 | 0.0010 | mg/Kg wet | 0.100 | 82.3 | 70-130 | 1.08 | 25 | | |
| Decane | 0.0902 | 0.0010 | mg/Kg wet | 0.100 | 90.2 | 70-130 | 1.63 | 25 | | |
| Ethylbenzene | 0.0888 | 0.0010 | mg/Kg wet | 0.100 | 88.8 | 70-130 | 2.46 | 25 | | |
| Methyl tert-Butyl Ether (MTBE) | 0.0949 | 0.0010 | mg/Kg wet | 0.100 | 94.9 | 70-130 | 0.988 | 25 | | |
| 2-Methylpentane | 0.0899 | 0.0010 | mg/Kg wet | 0.100 | 89.9 | 70-130 | 3.37 | 25 | | |
| Naphthalene | 0.101 | 0.0050 | mg/Kg wet | 0.100 | 101 | 70-130 | 6.49 | 25 | | |
| Nonane | 0.0845 | 0.0010 | mg/Kg wet | 0.100 | 84.5 | 30-130 | 1.46 | 25 | | |
| Pentane | 0.0888 | 0.0010 | mg/Kg wet | 0.100 | 88.8 | 70-130 | 3.09 | 25 | | |
| Toluene | 0.0882 | 0.0010 | mg/Kg wet | 0.100 | 88.2 | 70-130 | 2.54 | 25 | | |
| 1,2,4-Trimethylbenzene | 0.0977 | 0.0010 | mg/Kg wet | 0.100 | 97.7 | 70-130 | 0.889 | 25 | | |
| 2,2,4-Trimethylpentane | 0.100 | 0.0010 | mg/Kg wet | 0.100 | 100 | 70-130 | 0.0726 | 25 | | |
| m+p Xylene | 0.181 | 0.0020 | mg/Kg wet | 0.200 | 90.5 | 70-130 | 2.45 | 25 | | |
| o-Xylene | 0.0914 | 0.0010 | mg/Kg wet | 0.100 | 91.4 | 70-130 | 1.97 | 25 | | |
| Surrogate: 2,5-Dibromotoluene (FID) | 0.0321 | | mg/Kg wet | 0.0400 | 80.3 | 70-130 | | | | |
| Surrogate: 2,5-Dibromotoluene (PID) | 0.0286 | | mg/Kg wet | 0.0400 | 71.5 | 70-130 | | | | |



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FLAG/QUALIFIER SUMMARY

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

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

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

S-26 Surrogate outside of control limits.

V-16 Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.



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CERTIFICATIONS

Certified Analyses included in this Report

| Analyte | Certifications |
|--|-------------------|
| <i>MADEP-VPH-04-1.1 in Soil</i> | |
| Unadjusted C5-C8 Aliphatics | CT,NC,WA,ME,NH-P |
| C5-C8 Aliphatics | CT,NC,WA,ME,NH-P |
| Unadjusted C9-C12 Aliphatics | CT,NC,WA,ME,NH-P |
| C9-C12 Aliphatics | CT,NC,WA,ME,NH-P |
| C9-C10 Aromatics | CT,NC,WA,ME,NH-P |
| Benzene | CT,NC,WA,ME,NH-P |
| Ethylbenzene | CT,NC,WA,ME,NH-P |
| Methyl tert-Butyl Ether (MTBE) | CT,NC,WA,ME,NH-P |
| Naphthalene | CT,NC,WA,ME,NH-P |
| Toluene | CT,NC,WA,ME,NH-P |
| m+p Xylene | CT,NC,WA,ME,NH-P |
| o-Xylene | CT,NC,WA,ME,NH-P |
| <i>SW-846 8260C in Soil</i> | |
| Benzene | CT,NH,NY,ME,VA,NJ |
| Ethylbenzene | CT,NH,NY,ME,VA,NJ |
| Methyl tert-Butyl Ether (MTBE) | NY,VA,NJ |
| Naphthalene | NH,NY,ME,VA,NJ |
| Toluene | CT,NH,NY,ME,VA,NJ |
| m+p Xylene | CT,NH,NY,ME,VA |
| o-Xylene | CT,NH,NY,ME,VA |

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

| Code | Description | Number | Expires |
|------|--|---------------|------------|
| AIHA | AIHA-LAP, LLC | 100033 | 02/1/2016 |
| MA | Massachusetts DEP | M-MA100 | 06/30/2016 |
| CT | Connecticut Department of Public Health | PH-0567 | 09/30/2015 |
| NY | New York State Department of Health | 10899 NELAP | 04/1/2016 |
| NH-S | New Hampshire Environmental Lab | 2516 NELAP | 02/5/2016 |
| RI | Rhode Island Department of Health | LAO00112 | 12/30/2015 |
| NC | North Carolina Div. of Water Quality | 652 | 12/31/2015 |
| NJ | New Jersey DEP | MA007 NELAP | 09/30/2015 |
| FL | Florida Department of Health | E871027 NELAP | 06/30/2016 |
| VT | Vermont Department of Health Lead Laboratory | LL015036 | 07/30/2016 |
| WA | State of Washington Department of Ecology | C2065 | 02/23/2016 |
| ME | State of Maine | 2011028 | 06/9/2017 |
| VA | Commonwealth of Virginia | 460217 | 12/14/2015 |
| NH-P | New Hampshire Environmental Lab | 2557 NELAP | 09/6/2016 |



CHAIN OF CUSTODY RECORD

® Phone: 413-525-2332

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www.contestlabs.com

1510435

Rev 04.05.12

| | | | | | | | | | | | | | | | |
|---|------------|--------------------------------------|--|-----------|---|--------------|--|--|--|--|--|--|--|--|--|
| Company Name: ECS Inc | | Telephone: 413-789-3530 | ANALYSIS REQUESTED | | | | | | | | | | | | |
| Address: 588 Silver Street + Agawam MA | | Project # 91-218371 | | | | | | | | | | | | | |
| Attention: Shawn Rising | | Client PO# Global Alliance Rates | | | | | | | | | | | | | |
| Project Location: 238 Main St, Townsend, MA | | DATA DELIVERY (check all that apply) | | | | | | | | | | | | | |
| Sampled By: Jake M. - ECS | | Fax # | <input checked="" type="checkbox"/> FAX <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> WEBSITE | | | | | | | | | | | | |
| Project Proposal Provided? (for billing purposes) O yes | | Email: | <i>+ Ethanol +</i> <i>MA DEP VPH</i> <i>+ Ethanol +</i> <i>Ethylen +</i> | | | | | | | | | | | | |
| Bill to Alliance Energy | | Format: | <input checked="" type="checkbox"/> PDF <input type="checkbox"/> EXCEL <input type="checkbox"/> GIS <input type="checkbox"/> OTHER <input type="checkbox"/> "Enhanced Data Package" | | | | | | | | | | | | |
| Collection | | Beginning Date/Time | Ending Date/Time | Composite | Grab | *Matrix Code | Conc. Code | | | | | | | | |
| 01 | MW-106 | 15-17.5 | 9-10-15 10:00 | X | S | X | X | | | | | | | | |
| 02 | MW-107 | 15-17.5 | 9-10-15 11:00 | X | S | X | X | | | | | | | | |
| 03 | Trip Blank | 9-10-15 | am | X | O | X | | | | | | | | | |
| Comments: | | | | | | | | | | | | | | | |
| Relinquished by: <i>J. M. Rising</i> | | Date/Time: | Turnaround ^{††} | | Detection Limit Requirements | | Is your project MCP or RCP? | | | | | | | | |
| Received by: (signature) <i>J. M. Rising</i> | | Date/Time: 2.8°C 9/10/15 | <input type="checkbox"/> 7-Day <input checked="" type="checkbox"/> 10-Day <input checked="" type="checkbox"/> Other <u>5 day</u> <input checked="" type="checkbox"/> RUSH [†] | | <input checked="" type="checkbox"/> Massachusetts: <u>5-1/5-2/S-3</u> <u>6-w-1/6-w-2/w-3</u> | | <input checked="" type="checkbox"/> MCP Form Required <input checked="" type="checkbox"/> RCP Form Required <input type="checkbox"/> MA State DW Form Required <input type="checkbox"/> PWSID # _____ | | | | | | | | |
| Relinquished by: (signature) | | Date/Time: | <input type="checkbox"/> 124-Hr <input type="checkbox"/> 148-Hr | | Connecticut: _____ | | <input type="checkbox"/> NELAC & AIHA-LAP, LLC Accredited | | | | | | | | |
| Received by: (signature) | | Date/Time: | <input type="checkbox"/> 172-Hr <input type="checkbox"/> 14-Day | | Other: _____ | | <input type="checkbox"/> WBE/DBE Certified | | | | | | | | |
| ^{††} TURNAROUND TIME 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 BY OUR CLIENT. PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT | | | | | | | | | | | | | | | |

Page 2 of 2

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

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

Who notified of False statements?

Date/Time:

Doc #277 Rev. 4 August 2013

Log-In Technician Initials: PJS

Date/Time: 9.10.15

13:15

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
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Page 1 of 2



Sample Receipt Checklist

CLIENT NAME: ECS

RECEIVED BY: PB

DATE: 9.10.15

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

2.8

5) Are there Dissolved samples for the lab to filter?

 Yes No

Who was notified _____ Date _____ Time _____

6) Are there any RUSH or SHORT HOLDING TIME samples?

 Yes No

Who was notified _____ Date _____ Time _____

Permission to subcontract samples? Yes No

(Walk-in clients only) if not already approved

Client Signature:

7) Location where samples are stored:

Log in

8) Do all samples have the proper Acid pH: Yes No N/A9) Do all samples have the proper Base pH: Yes No N/A10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes No N/A

Containers received at Con-Test

| | # of containers | | # of containers |
|--------------------------------|-----------------|-----------------------|--------------------|
| 1 Liter Amber | | 8 oz amber/clear jar | |
| 500 mL Amber | | 4 oz amber/clear jar | |
| 250 mL Amber (8oz amber) | | 2 oz amber/clear jar | |
| 1 Liter Plastic | | Plastic Bag / Ziploc | |
| 500 mL Plastic | | SOC Kit | |
| 250 mL plastic | | Non-ConTest Container | |
| 40 mL Vial - type listed below | 5 | Perchlorate Kit | |
| Colisure / bacteria bottle | | Flashpoint bottle | |
| Dissolved Oxygen bottle | | Other glass jar | |
| Encore | | Other | 2 clear glass jars |

Laboratory Comments:

40 mL vials: # HCl _____ # Methanol _____ 5

Time and Date Frozen:

Doc# 277

Bisulfate _____ # DI Water _____

Rev. 4 August 2013

Thiosulfate _____ Unpreserved _____

MADEP MCP Analytical Method Report Certification Form

| | | | |
|-------------------|--------------------------------|------------|---------|
| Laboratory Name: | Con-Test Analytical Laboratory | Project #: | 15I0435 |
| Project Location: | 238 Main St, Townsend, MA | RTN: | |

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

15I0435-01 thru 15I0435-03

Matrices: Soil

CAM Protocol (check all that below)

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

Affirmative response to Questions A through F is required for "Presumptive Certainty" status

| | | |
|------------|---|--|
| A | Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
| B | Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
| C | Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
| D | Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
| E a | VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
| E b | APH and TO-15 Methods only: Was the complete analyte list reported for each method? | <input type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
| F | Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Questions A through E)? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |

A response to questions G, H and I below is required for "Presumptive Certainty" status

| | | |
|----------|---|--|
| G | Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
|----------|---|--|

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

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

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

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

Signature:

Position: Manager, Laboratory Reporting

Printed Name: Johanna K. Harrington

Date: 09/17/15

ATTACHMENT V

GROUNDWATER SAMPLING LOGS – SEPTEMBER 2015



Environmental Compliance Services, Inc.
588 Silver Street, Agawam, Massachusetts 01001
MA: (413) 789-3530 FAX: (413) 789-2776

LOW-FLOW GROUNDWATER SAMPLING LOG

MW-103

| Client: | Alliance Energy | | | Job Number: | 218371 | WELL I.D. | | | |
|---|--|-------------------------------|--------------------------------|--|------------------------------|---------------------------------|-----------------------------|------------------------------|-----------------------------|
| Location: | 238 Main Street, Townsend MA | | | Date: | 9-25-15 | MW-103 | | | |
| Personnel: | Jake | | | Weather: | | | | | |
| Stickup? Y / N | Distance From Rim to PVC | Total Depth of Well Rim / PVC | Depth to Product Rim / PVC | Depth to Water Rim / PVC | Standing Water Column (feet) | Middle of Saturated Zone (feet) | Depth to Sample Tube (feet) | TOV @ Well Head (ppmv) | Pump Peristaltic or Bladder |
| | | 17.09 | ND | 14.24 | 2.85 | 15.66 | 15.50 | — | |
| Turbidity at collection (NTU): | | 1 | (Less than 5 NTU is desirable) | | Duplicate Collected? Y / N | | | Filtered Sample Y / N | |
| Stabilization Parameters | | +/- 0.5 deg C. | +/- 0.1 Unit | +/- 10 umhos/cm or within 3% if >300umho | 1 ppm | +/- 10 mV | No Limit | <0.3 feet drawdown desirable | No Limit |
| Volume Purged (gallons) | Time (actual Time) 5 minute intervals | TEMP. (Deg. C) | pH | Specific Conductivity uS/cm | Dissolved Oxygen (mg/L) | ORP mV millivolts | Turbidity NTUs | DTW (feet) | Odors Y/N |
| 0.0 | 10:55 | 16.67 | 6.54 | 3683 | 5.21 | -241.7 | — | 14.24 | Y |
| | 11:00 | 16.51 | 6.31 | 3640 | 2.67 | -250.1 | — | | |
| | 11:05 | 16.46 | 6.20 | 3633 | 2.20 | -254.7 | — | | |
| | 11:10 | 16.34 | 6.07 | 3632 | 2.06 | -258.0 | — | | |
| | 11:15 | 16.31 | 6.03 | 3631 | 2.03 | -260.1 | — | | |
| 1.25 | 11:20 | 16.29 | 6.01 | 3631 | 2.01 | -261.7 | 1 | 14.39 | Y |
| | | | | | | | | | |
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| Well Condition Summary | | | | | | | | | |
| Cover: Y / N | Bolts Y / N | | Conc Pad OK Y / N | | Gripper Y / N | | | | |
| Sample Collection Information | | | | | | | | | |
| Sample Time | Appearance | Filtered Sample Turbidity: | | | | OTHER | | | |
| Desired purge flow rate < 100mL/min (slow drip) & turbidity <10 if possible. If turbidity > 10 collect filtered and unfiltered samples. Notify PM of high turbidity and collection of filtered samples prior to lab submittal. Minimum 20 minute purge to establish stabilization. Notes/Calculations: Volume/ Linear Ft of well casing; 1"= 0.041 gal 2" = 0.163 gal 4" = 0.653 gal | | | | | | | | | |



Environmental Compliance Services, Inc.
588 Silver Street, Agawam, Massachusetts 01001
MA: (413) 789-3530 FAX: (413) 789-2776

LOW-FLOW GROUNDWATER SAMPLING LOG

| | | | | | | | | | |
|--|--|---|--|-----------------------------|--|---------------------------------|------------------------------|------------------------|-----------------------------|
| Client: <u>Alliance Energy</u> | Job Number: <u>218371</u> | WELL I.D. | | | | | | | |
| Location: <u>238 Main Street, Townsend, MA</u> | Date: <u>9-25-15</u> | | | | | | | | |
| Personnel: <u>Jake</u> | Weather: <u>Sunny 70</u> | | | | | | | | |
| Stickup? Y / N Distance ground to Stickup Rim / PVC | Distance From Rim to PVC | Total Depth of Well Rim / PVC | Depth to Product Rim / PVC | Depth to Water Rim / PVC | Standing Water Column (feet) | Middle of Saturated Zone (feet) | Depth to Sample Tube (feet) | TOV @ Well Head (ppmv) | Pump Peristaltic or Bladder |
| ✓ | ✓ | 16.28 | ND | 13.70 | 2.58 | 14.99 | 15- | — | |
| Turbidity at collection (NTU): | (Less than 5 NTU is desirable) | Duplicate Collected? Y / <input checked="" type="radio"/> N | | | Filtered Sample Y / <input checked="" type="radio"/> N | | | | |
| Stabilization Parameters | +/- 0.5 deg C. | +/- 0.1 Unit | +/- 10 umhos/cm or within 3% if >300umho | 1 ppm | +/- 10 mV | No Limit | <0.3 feet drawdown desirable | No Limit | |
| Volume Purged (gallons) | Time (actual Time) 5 minute intervals | TEMP. (Deg. C) | pH | Specific Conductivity uS/cm | Dissolved Oxygen (mg/L) | ORP mV millivolts | Turbidity NTUs | DTW (feet) | Odors Y/N |
| 0.0 | 10:00 | 16.67 | 6.54 | 2679 | 8.74 | -56.9 | — | 13.70 | N |
| | 10:05 | 15.26 | 6.17 | 2642 | 6.17 | -107.1 | — | | |
| | 10:10 | 15.41 | 6.18 | 2640 | 6.10 | -134.0 | — | | |
| | 10:15 | 15.43 | 6.18 | 2640 | 6.09 | -137.6 | — | | |
| Q1.0 | 10:20 | 15.77 | 6.17 | 2641 | 6.07 | -140.1 | 2 | 13.87 | N |
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| Well Condition Summary | | | | | | | | | |
| Cover: Y / N | Bolts Y / N | Conc Pad OK Y / N | Gripper Y / N | | | | | | |
| Sample Collection Information | | | | | | | | | |
| Sample Time | Appearance | Filtered Sample Turbidity: | | | OTHER | | | | |
| Desired purge flow rate < 100mL/min (slow drip) & turbidity <10 if possible. If turbidity > 10 collect filtered and unfiltered samples. Notify PM of high turbidity and collection of filtered samples prior to lab submittal. | | | | | | | | | |
| Minimum 20 minute purge to establish stabilization. | | | | | | | | | |
| Notes/Calculations: | | | | | | | | | |
| Volume/ Linear Ft of well casing; 1"= 0.041 gal 2" = 0.163 gal 4" = 0.653 gal | | | | | | | | | |



Environmental Compliance Services, Inc.
588 Silver Street, Agawam, Massachusetts 01001
MA: (413) 789-3530 FAX: (413) 789-2776

LOW-FLOW GROUNDWATER SAMPLING LOG



Environmental Compliance Services, Inc.
588 Silver Street, Agawam, Massachusetts 01001
MA: (413) 789-3530 FAX: (413) 789-2776

LOW-FLOW GROUNDWATER SAMPLING LOG

| | | | | | | | | | |
|--|---|-------------------------------------|----------------------------------|---|------------------------------------|---------------------------------------|-----------------------------------|------------------------------------|--------------------------------------|
| Client: Location: Personnel: | Alliance Energy 238 Main St, Townsend MA | | Job Number: Date: Weather: | 218371 9-25-15 | WELL I.D. MW-106 | | | | |
| Stickup? Y / N Distance ground to Stickup Rim / PVC | Distance From Rim to PVC | Total Depth of Well Rim / PVC | Depth to Product Rim / PVC | Depth to Water Rim / PVC | Standing Water Column (feet) | Middle of Saturated Zone (feet) | Depth to Sample Tube (feet) | TOV @ Well Head (ppmv) | Pump Peristaltic or Bladder |
| | | 16.27 | ND | 13.40 | 2.87 | 14.84 | 15- | < | > |
| Turbidity at collection (NTU): | | 2 | (Less than 5 NTU is desirable) | | Duplicate Collected? Y / N | | | Filtered Sample | Y / N |
| Stabilization Parameters | | +/- 0.5 deg C. | +/- 0.1 Unit | +/- 10 umhos/cm or with in 3% if >300umho | 1 ppm | +/- 10 mV | No Limit | <0.3 feet drawdown desirable | No Limit |
| Volume Purged (gallons) | Time (actual Time) 5 minute intervals | TEMP. (Deg. C) | pH | Specific Conductivity uS/cm | Dissolved Oxygen (mg/L) | ORP mV millivolts | Turbidity NTUs | DTW (feet) | Odors Y/N |
| 0.0 | 1:00 | 16.74 | 6.41 | 3199 | 5.76 | -74.1 | - | 13.40 | N |
| | 1:05 | 15.91 | 6.17 | 3189 | 5.24 | -86.1 | - | | |
| | 1:10 | 15.43 | 6.06 | 3174 | 5.09 | -97.6 | - | | |
| | 1:15 | 15.41 | 6.03 | 3171 | 4.99 | -99.1 | - | | |
| 1.0 | 1:20 | 15.35 | 6.01 | 3169 | 4.97 | -101.7 | 2 | 13.52 | N |
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| Well Condition Summary | | | | | | | | | |
| Cover: Y / N | Bolts Y / N | Conc Pad OK Y / N | Gripper Y / N | | | | | | |
| Sample Collection Information | | | | | | | | | |
| Sample Time | Appearance | Filtered Sample Turbidity: | | | OTHER | | | | |
| Desired purge flow rate < 100mL/min (slow drip) & turbidity <10 if possible. If turbidity > 10 collect filtered and unfiltered samples. Notify PM of high turbidity and collection of filtered samples prior to lab submittal. | | | | | | | | | |
| Minimum 20 minute purge to establish stabilization. | | | | | | | | | |
| Notes/Calculations: | | | | | | | | | |
| Volume/ Linear Ft of well casing; 1"= 0.041 gal 2" = 0.163 gal 4" = 0.653 gal | | | | | | | | | |



Environmental Compliance Services, Inc.
588 Silver Street, Agawam, Massachusetts 01001
MA: (413) 789-3530 FAX: (413) 789-2776

LOW-FLOW GROUNDWATER SAMPLING LOG

| Client: | Alliance Energy | | | Job Number: | 218371 | WELL I.D. | | | |
|---|--|-------------------------------|--------------------------------|---|------------------------------|---------------------------------|-----------------------------|------------------------------|-----------------------------|
| Location: | 238 Main Street, Townsend MA | | | Date: | 9-25-15 | Weather: | MW-107 | | |
| Personnel: | Jake | | | | | | | | |
| Stickup? Y / N | Distance From Rim to PVC | Total Depth of Well Rim / PVC | Depth to Product Rim / PVC | Depth to Water Rim / PVC | Standing Water Column (feet) | Middle of Saturated Zone (feet) | Depth to Sample Tube (feet) | TOV @ Well Head (ppmv) | Pump Peristaltic or Bladder |
| | | 18.85 | 11 | 14.50 | 4.35 | 16.68 | 16.50 | — | |
| Turbidity at collection (NTU): | | 2 | (Less than 5 NTU is desirable) | | | Duplicate Collected? Y / N | Filtered Sample | Y / N | |
| Stabilization Parameters | | +/- 0.5 deg C. | +/- 0.1 Unit | +/- 10 umhos/cm or with in 3% if >300umho | 1 ppm | +/- 10 mV | No Limit | <0.3 feet drawdown desirable | No Limit |
| Volume Purged (gallons) | Time (actual Time) 5 minute intervals | TEMP. (Deg. C) | pH | Specific Conductivity uS/cm | Dissolved Oxygen (mg/L) | ORP mV millivolts | Turbidity NTUs | DTW (feet) | Odors Y/N |
| 0.0 | 11:45 | 16.91 | 6.27 | 3879 | 6.71 | -166.1 | — | 14.50 | N |
| | 11:50 | 15.63 | 5.97 | 3829 | 5.91 | -157.1 | — | | |
| | 11:55 | 15.27 | 5.83 | 3817 | 5.78 | -145.1 | — | | |
| | 12:00 | 15.19 | 5.80 | 3816 | 5.76 | -143.1 | — | | |
| 0.75 | 12:05 | 15.13 | 5.78 | 3814 | 5.74 | -141.7 | 2 | 14.67 | N |
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| Well Condition Summary | | | | | | | | | |
| Cover Y / N | Bolts Y / N | | Conc Pad OK Y / N | | Gripper Y / N | | | | |
| Sample Collection Information | | | | | | | | | |
| Sample Time | Appearance | Filtered Sample Turbidity: | | | | OTHER | | | |
| Desired purge flow rate < 100mL/min (slow drip) & turbidity <10 if possible. If turbidity > 10 collect filtered and unfiltered samples. Notify PM of high turbidity and collection of filtered samples prior to lab submittal. Minimum 20 minute purge to establish stabilization. Notes/Calculations: Volume/ Linear Ft of well casing; 1"= 0.041 gal 2" = 0.163 gal 4" = 0.653 gal | | | | | | | | | |

ATTACHMENT VI

LABORATORY ANALYTICAL REPORT – GROUNDWATER SEPTEMBER
2015



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

October 1, 2015

Shawn Rising
ECS
588 Silver Street
Agawam, MA 01001

Project Location: Alliance - Townsend 91-218371

Client Job Number:

Project Number: 91-218371.13

Laboratory Work Order Number: 15I1123

Enclosed are results of analyses for samples received by the laboratory on September 25, 2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Lisa A. Worthington". The signature is fluid and cursive, with "Lisa" on top and "A. Worthington" stacked below it.

Lisa A. Worthington
Project Manager

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

ECS
588 Silver Street
Agawam, MA 01001
ATTN: Shawn Rising

REPORT DATE: 10/1/2015

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 91-218371.13

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 15I1123

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

PROJECT LOCATION: Alliance - Townsend 91-218371

| FIELD SAMPLE # | LAB ID: | MATRIX | SAMPLE DESCRIPTION | TEST | SUB LAB |
|----------------|------------|------------------|--------------------|------------------|---------|
| MW-103 | 15I1123-01 | Ground Water | | MADEP-VPH-04-1.1 | |
| MW-104 | 15I1123-02 | Ground Water | | MADEP-VPH-04-1.1 | |
| MW-105 | 15I1123-03 | Ground Water | | MADEP-VPH-04-1.1 | |
| MW-106 | 15I1123-04 | Ground Water | | MADEP-VPH-04-1.1 | |
| MW-107 | 15I1123-05 | Ground Water | | MADEP-VPH-04-1.1 | |
| Trip Blank | 15I1123-06 | Trip Blank Water | | MADEP-VPH-04-1.1 | |



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

CASE NARRATIVE SUMMARY

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

MADEP-VPH-04-1.1

No significant modifications were made to the method. All VPH samples were received preserved properly at pH <2 in the proper containers as specified on the chain-of-custody form unless specified 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.

A handwritten signature in black ink, appearing to read "Johanna K. Harrington".

Johanna K. Harrington
Manager, Laboratory Reporting



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

Project Location: Alliance - Townsend 91-218371

Sample Description:

Work Order: 15I1123

Date Received: 9/25/2015

Field Sample #: MW-103

Sampled: 9/25/2015 11:20

Sample ID: 15I1123-01Sample Matrix: Ground Water**Petroleum Hydrocarbons Analyses - VPH**

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------|------------|-----------------|-------|-----------|-----------|------------------|---------------|--------------------|---------|
| Unadjusted C5-C8 Aliphatics | 5400 | 1000 | µg/L | 10 | | MADEP-VPH-04-1.1 | 9/30/15 | 10/1/15 0:41 | EEH |
| C5-C8 Aliphatics | 4100 | 1000 | µg/L | 10 | | MADEP-VPH-04-1.1 | 9/30/15 | 10/1/15 0:41 | EEH |
| Unadjusted C9-C12 Aliphatics | 3500 | 1000 | µg/L | 10 | | MADEP-VPH-04-1.1 | 9/30/15 | 10/1/15 0:41 | EEH |
| C9-C12 Aliphatics | ND | 1000 | µg/L | 10 | | MADEP-VPH-04-1.1 | 9/30/15 | 10/1/15 0:41 | EEH |
| C9-C10 Aromatics | 2500 | 1000 | µg/L | 10 | | MADEP-VPH-04-1.1 | 9/30/15 | 10/1/15 0:41 | EEH |
| Benzene | 550 | 10 | µg/L | 10 | | MADEP-VPH-04-1.1 | 9/30/15 | 10/1/15 0:41 | EEH |
| Ethylbenzene | 230 | 10 | µg/L | 10 | | MADEP-VPH-04-1.1 | 9/30/15 | 10/1/15 0:41 | EEH |
| Methyl tert-Butyl Ether (MTBE) | 320 | 10 | µg/L | 10 | | MADEP-VPH-04-1.1 | 9/30/15 | 10/1/15 0:41 | EEH |
| Naphthalene | 110 | 50 | µg/L | 10 | | MADEP-VPH-04-1.1 | 9/30/15 | 10/1/15 0:41 | EEH |
| Toluene | 440 | 10 | µg/L | 10 | | MADEP-VPH-04-1.1 | 9/30/15 | 10/1/15 0:41 | EEH |
| m+p Xylene | 880 | 20 | µg/L | 10 | | MADEP-VPH-04-1.1 | 9/30/15 | 10/1/15 0:41 | EEH |
| o-Xylene | 130 | 10 | µg/L | 10 | | MADEP-VPH-04-1.1 | 9/30/15 | 10/1/15 0:41 | EEH |
| Surrogates | % Recovery | Recovery Limits | | Flag/Qual | | | | | |
| 2,5-Dibromotoluene (FID) | 98.0 | 70-130 | | | | | | 10/1/15 0:41 | |
| 2,5-Dibromotoluene (PID) | 95.4 | 70-130 | | | | | | 10/1/15 0:41 | |



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

Project Location: Alliance - Townsend 91-218371

Sample Description:

Work Order: 15I1123

Date Received: 9/25/2015

Field Sample #: MW-104

Sampled: 9/25/2015 10:20

Sample ID: 15I1123-02Sample Matrix: Ground Water**Petroleum Hydrocarbons Analyses - VPH**

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------|------------|-----------------|-------|-----------|-----------|------------------|---------------|--------------------|---------|
| Unadjusted C5-C8 Aliphatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 16:17 | EEH |
| C5-C8 Aliphatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 16:17 | EEH |
| Unadjusted C9-C12 Aliphatics | 280 | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 16:17 | EEH |
| C9-C12 Aliphatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 16:17 | EEH |
| C9-C10 Aromatics | 250 | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 16:17 | EEH |
| Benzene | 3.8 | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 16:17 | EEH |
| Ethylbenzene | 8.0 | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 16:17 | EEH |
| Methyl tert-Butyl Ether (MTBE) | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 16:17 | EEH |
| Naphthalene | 6.6 | 5.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 16:17 | EEH |
| Toluene | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 16:17 | EEH |
| m+p Xylene | ND | 2.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 16:17 | EEH |
| o-Xylene | 2.6 | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 16:17 | EEH |
| Surrogates | % Recovery | Recovery Limits | | Flag/Qual | | | | | |
| 2,5-Dibromotoluene (FID) | 95.3 | 70-130 | | | | | | 9/30/15 16:17 | |
| 2,5-Dibromotoluene (PID) | 94.4 | 70-130 | | | | | | 9/30/15 16:17 | |



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

Project Location: Alliance - Townsend 91-218371

Sample Description:

Work Order: 15I1123

Date Received: 9/25/2015

Field Sample #: MW-105

Sampled: 9/25/2015 09:30

Sample ID: 15I1123-03Sample Matrix: Ground Water**Petroleum Hydrocarbons Analyses - VPH**

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------|------------|-----------------|-------|-----------|-----------|------------------|---------------|--------------------|---------|
| Unadjusted C5-C8 Aliphatics | 180 | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 16:53 | EEH |
| C5-C8 Aliphatics | 180 | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 16:53 | EEH |
| Unadjusted C9-C12 Aliphatics | 220 | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 16:53 | EEH |
| C9-C12 Aliphatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 16:53 | EEH |
| C9-C10 Aromatics | 190 | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 16:53 | EEH |
| Benzene | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 16:53 | EEH |
| Ethylbenzene | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 16:53 | EEH |
| Methyl tert-Butyl Ether (MTBE) | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 16:53 | EEH |
| Naphthalene | ND | 5.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 16:53 | EEH |
| Toluene | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 16:53 | EEH |
| m+p Xylene | ND | 2.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 16:53 | EEH |
| o-Xylene | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 16:53 | EEH |
| Surrogates | % Recovery | Recovery Limits | | Flag/Qual | | | | | |
| 2,5-Dibromotoluene (FID) | 105 | 70-130 | | | | | | 9/30/15 16:53 | |
| 2,5-Dibromotoluene (PID) | 98.9 | 70-130 | | | | | | 9/30/15 16:53 | |



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

Project Location: Alliance - Townsend 91-218371

Sample Description:

Work Order: 15I1123

Date Received: 9/25/2015

Field Sample #: MW-106

Sampled: 9/25/2015 13:20

Sample ID: 15I1123-04Sample Matrix: Ground Water**Petroleum Hydrocarbons Analyses - VPH**

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------|------------|-----------------|-------|-----------|-----------|------------------|---------------|--------------------|---------|
| Unadjusted C5-C8 Aliphatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 17:29 | EEH |
| C5-C8 Aliphatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 17:29 | EEH |
| Unadjusted C9-C12 Aliphatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 17:29 | EEH |
| C9-C12 Aliphatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 17:29 | EEH |
| C9-C10 Aromatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 17:29 | EEH |
| Benzene | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 17:29 | EEH |
| Ethylbenzene | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 17:29 | EEH |
| Methyl tert-Butyl Ether (MTBE) | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 17:29 | EEH |
| Naphthalene | ND | 5.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 17:29 | EEH |
| Toluene | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 17:29 | EEH |
| m+p Xylene | ND | 2.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 17:29 | EEH |
| o-Xylene | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 17:29 | EEH |
| Surrogates | % Recovery | Recovery Limits | | Flag/Qual | | | | | |
| 2,5-Dibromotoluene (FID) | 97.8 | 70-130 | | | | | 9/30/15 17:29 | | |
| 2,5-Dibromotoluene (PID) | 92.7 | 70-130 | | | | | 9/30/15 17:29 | | |



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

Project Location: Alliance - Townsend 91-218371

Sample Description:

Work Order: 15I1123

Date Received: 9/25/2015

Field Sample #: MW-107

Sampled: 9/25/2015 12:05

Sample ID: 15I1123-05

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------|------------|-----------------|-------|-----------|-----------|------------------|---------------|--------------------|---------|
| Unadjusted C5-C8 Aliphatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 18:05 | EEH |
| C5-C8 Aliphatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 18:05 | EEH |
| Unadjusted C9-C12 Aliphatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 18:05 | EEH |
| C9-C12 Aliphatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 18:05 | EEH |
| C9-C10 Aromatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 18:05 | EEH |
| Benzene | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 18:05 | EEH |
| Ethylbenzene | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 18:05 | EEH |
| Methyl tert-Butyl Ether (MTBE) | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 18:05 | EEH |
| Naphthalene | ND | 5.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 18:05 | EEH |
| Toluene | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 18:05 | EEH |
| m+p Xylene | ND | 2.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 18:05 | EEH |
| o-Xylene | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 18:05 | EEH |
| Surrogates | % Recovery | Recovery Limits | | Flag/Qual | | | | | |
| 2,5-Dibromotoluene (FID) | 98.9 | 70-130 | | | | | 9/30/15 18:05 | | |
| 2,5-Dibromotoluene (PID) | 90.6 | 70-130 | | | | | 9/30/15 18:05 | | |



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

Project Location: Alliance - Townsend 91-218371

Sample Description:

Work Order: 15I1123

Date Received: 9/25/2015

Field Sample #: Trip Blank

Sampled: 9/25/2015 00:00

Sample ID: 15I1123-06

Sample Matrix: Trip Blank Water

Petroleum Hydrocarbons Analyses - VPH

| Analyte | Results | RL | Units | Dilution | Flag/Qual | Method | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------|------------|-----------------|-------|-----------|-----------|------------------|---------------|--------------------|---------|
| Unadjusted C5-C8 Aliphatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 15:04 | EEH |
| C5-C8 Aliphatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 15:04 | EEH |
| Unadjusted C9-C12 Aliphatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 15:04 | EEH |
| C9-C12 Aliphatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 15:04 | EEH |
| C9-C10 Aromatics | ND | 100 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 15:04 | EEH |
| Benzene | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 15:04 | EEH |
| Ethylbenzene | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 15:04 | EEH |
| Methyl tert-Butyl Ether (MTBE) | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 15:04 | EEH |
| Naphthalene | ND | 5.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 15:04 | EEH |
| Toluene | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 15:04 | EEH |
| m+p Xylene | ND | 2.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 15:04 | EEH |
| o-Xylene | ND | 1.0 | µg/L | 1 | | MADEP-VPH-04-1.1 | 9/30/15 | 9/30/15 15:04 | EEH |
| Surrogates | % Recovery | Recovery Limits | | Flag/Qual | | | | | |
| 2,5-Dibromotoluene (FID) | 104 | 70-130 | | | | | | 9/30/15 15:04 | |
| 2,5-Dibromotoluene (PID) | 91.3 | 70-130 | | | | | | 9/30/15 15:04 | |



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

Sample Extraction Data

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

| Lab Number [Field ID] | Batch | Initial [mL] | Final [mL] | Date |
|-------------------------|---------|--------------|------------|----------|
| 15I1123-01 [MW-103] | B131743 | 0.5 | 5.00 | 09/30/15 |
| 15I1123-02 [MW-104] | B131743 | 5 | 5.00 | 09/30/15 |
| 15I1123-03 [MW-105] | B131743 | 5 | 5.00 | 09/30/15 |
| 15I1123-04 [MW-106] | B131743 | 5 | 5.00 | 09/30/15 |
| 15I1123-05 [MW-107] | B131743 | 5 | 5.00 | 09/30/15 |
| 15I1123-06 [Trip Blank] | B131743 | 5 | 5.00 | 09/30/15 |



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

QUALITY CONTROL**Petroleum Hydrocarbons Analyses - VPH - Quality Control**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|---------|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|---------|-----------|-------|

Batch B131743 - MA VPH

| | | | | | | | | | | |
|-------------------------------------|------|-----|------|------|---------------------------------------|-----|--------|--|--|--|
| Blank (B131743-BLK1) | | | | | Prepared: 09/29/15 Analyzed: 09/30/15 | | | | | |
| Unadjusted C5-C8 Aliphatics | ND | 100 | µg/L | | | | | | | |
| C5-C8 Aliphatics | ND | 100 | µg/L | | | | | | | |
| Unadjusted C9-C12 Aliphatics | ND | 100 | µg/L | | | | | | | |
| C9-C12 Aliphatics | ND | 100 | µg/L | | | | | | | |
| C9-C10 Aromatics | ND | 100 | µg/L | | | | | | | |
| Benzene | ND | 1.0 | µg/L | | | | | | | |
| Butylcyclohexane | ND | 1.0 | µg/L | | | | | | | |
| Decane | ND | 1.0 | µg/L | | | | | | | |
| Ethylbenzene | ND | 1.0 | µg/L | | | | | | | |
| Methyl tert-Butyl Ether (MTBE) | ND | 1.0 | µg/L | | | | | | | |
| 2-Methylpentane | ND | 1.0 | µg/L | | | | | | | |
| Naphthalene | ND | 5.0 | µg/L | | | | | | | |
| Nonane | ND | 1.0 | µg/L | | | | | | | |
| Pentane | ND | 1.0 | µg/L | | | | | | | |
| Toluene | ND | 1.0 | µg/L | | | | | | | |
| 1,2,4-Trimethylbenzene | ND | 1.0 | µg/L | | | | | | | |
| 2,2,4-Trimethylpentane | ND | 1.0 | µg/L | | | | | | | |
| m+p Xylene | ND | 2.0 | µg/L | | | | | | | |
| o-Xylene | ND | 1.0 | µg/L | | | | | | | |
| Surrogate: 2,5-Dibromotoluene (FID) | 42.6 | | µg/L | 40.0 | | 106 | 70-130 | | | |
| Surrogate: 2,5-Dibromotoluene (PID) | 40.8 | | µg/L | 40.0 | | 102 | 70-130 | | | |

| | | | | | | | | | | |
|-------------------------------------|------|-----|------|------|---------------------------------------|------|--------|--|--|--|
| LCS (B131743-BS1) | | | | | Prepared: 09/29/15 Analyzed: 09/30/15 | | | | | |
| Benzene | 86.7 | 1.0 | µg/L | 100 | | 86.7 | 70-130 | | | |
| Butylcyclohexane | 85.8 | 1.0 | µg/L | 100 | | 85.8 | 70-130 | | | |
| Decane | 95.7 | 1.0 | µg/L | 100 | | 95.7 | 70-130 | | | |
| Ethylbenzene | 86.5 | 1.0 | µg/L | 100 | | 86.5 | 70-130 | | | |
| Methyl tert-Butyl Ether (MTBE) | 93.0 | 1.0 | µg/L | 100 | | 93.0 | 70-130 | | | |
| 2-Methylpentane | 86.1 | 1.0 | µg/L | 100 | | 86.1 | 70-130 | | | |
| Naphthalene | 111 | 5.0 | µg/L | 100 | | 111 | 70-130 | | | |
| Nonane | 86.6 | 1.0 | µg/L | 100 | | 86.6 | 30-130 | | | |
| Pentane | 80.0 | 1.0 | µg/L | 100 | | 80.0 | 70-130 | | | |
| Toluene | 86.4 | 1.0 | µg/L | 100 | | 86.4 | 70-130 | | | |
| 1,2,4-Trimethylbenzene | 94.2 | 1.0 | µg/L | 100 | | 94.2 | 70-130 | | | |
| 2,2,4-Trimethylpentane | 102 | 1.0 | µg/L | 100 | | 102 | 70-130 | | | |
| m+p Xylene | 176 | 2.0 | µg/L | 200 | | 88.2 | 70-130 | | | |
| o-Xylene | 89.2 | 1.0 | µg/L | 100 | | 89.2 | 70-130 | | | |
| Surrogate: 2,5-Dibromotoluene (FID) | 47.1 | | µg/L | 40.0 | | 118 | 70-130 | | | |
| Surrogate: 2,5-Dibromotoluene (PID) | 46.7 | | µg/L | 40.0 | | 117 | 70-130 | | | |

| | | | | | | | | | | |
|--------------------------------|------|-----|------|-----|---------------------------------------|------|--------|-------|----|--|
| LCS Dup (B131743-BSD1) | | | | | Prepared: 09/29/15 Analyzed: 09/30/15 | | | | | |
| Benzene | 83.8 | 1.0 | µg/L | 100 | | 83.8 | 70-130 | 3.50 | 25 | |
| Butylcyclohexane | 83.8 | 1.0 | µg/L | 100 | | 83.8 | 70-130 | 2.37 | 25 | |
| Decane | 93.8 | 1.0 | µg/L | 100 | | 93.8 | 70-130 | 1.97 | 25 | |
| Ethylbenzene | 83.6 | 1.0 | µg/L | 100 | | 83.6 | 70-130 | 3.50 | 25 | |
| Methyl tert-Butyl Ether (MTBE) | 91.7 | 1.0 | µg/L | 100 | | 91.7 | 70-130 | 1.38 | 25 | |
| 2-Methylpentane | 82.7 | 1.0 | µg/L | 100 | | 82.7 | 70-130 | 3.99 | 25 | |
| Naphthalene | 114 | 5.0 | µg/L | 100 | | 114 | 70-130 | 2.71 | 25 | |
| Nonane | 86.7 | 1.0 | µg/L | 100 | | 86.7 | 30-130 | 0.135 | 25 | |
| Pentane | 76.5 | 1.0 | µg/L | 100 | | 76.5 | 70-130 | 4.42 | 25 | |
| Toluene | 83.2 | 1.0 | µg/L | 100 | | 83.2 | 70-130 | 3.67 | 25 | |
| 1,2,4-Trimethylbenzene | 91.6 | 1.0 | µg/L | 100 | | 91.6 | 70-130 | 2.81 | 25 | |



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

QUALITY CONTROL

Petroleum Hydrocarbons Analyses - VPH - Quality Control

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|---------|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|---------|-----------|-------|

Batch B131743 - MA VPH

| | | | | | | | | | |
|---------------------------------------|------|-----|------|------|------|--------|-------|----|--|
| LCS Dup (B131743-BSD1) | | | | | | | | | |
| Prepared: 09/29/15 Analyzed: 09/30/15 | | | | | | | | | |
| 2,2,4-Trimethylpentane | 101 | 1.0 | µg/L | 100 | 101 | 70-130 | 0.629 | 25 | |
| m+p Xylene | 171 | 2.0 | µg/L | 200 | 85.3 | 70-130 | 3.39 | 25 | |
| o-Xylene | 86.3 | 1.0 | µg/L | 100 | 86.3 | 70-130 | 3.24 | 25 | |
| Surrogate: 2,5-Dibromotoluene (FID) | 50.5 | | µg/L | 40.0 | 126 | 70-130 | | | |
| Surrogate: 2,5-Dibromotoluene (PID) | 45.0 | | µg/L | 40.0 | 113 | 70-130 | | | |



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

FLAG/QUALIFIER SUMMARY

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

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

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



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

CERTIFICATIONS

Certified Analyses included in this Report

| Analyte | Certifications |
|----------------------------------|------------------|
| MADEP-VPH-04-1.1 in Water | |
| Unadjusted C5-C8 Aliphatics | CT,NC,WA,ME,NH-P |
| C5-C8 Aliphatics | CT,NC,WA,ME,NH-P |
| Unadjusted C9-C12 Aliphatics | CT,NC,WA,ME,NH-P |
| C9-C12 Aliphatics | CT,NC,WA,ME,NH-P |
| C9-C10 Aromatics | CT,NC,WA,ME,NH-P |
| Benzene | CT,NC,WA,ME,NH-P |
| Ethylbenzene | CT,NC,WA,ME,NH-P |
| Methyl tert-Butyl Ether (MTBE) | CT,NC,WA,ME,NH-P |
| Naphthalene | CT,NC,WA,ME,NH-P |
| Toluene | CT,NC,WA,ME,NH-P |
| m+p Xylene | CT,NC,WA,ME,NH-P |
| o-Xylene | CT,NC,WA,ME,NH-P |

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

| Code | Description | Number | Expires |
|------|--|---------------|------------|
| AIHA | AIHA-LAP, LLC | 100033 | 02/1/2016 |
| MA | Massachusetts DEP | M-MA100 | 06/30/2016 |
| CT | Connecticut Department of Public Health | PH-0567 | 09/30/2015 |
| NY | New York State Department of Health | 10899 NELAP | 04/1/2016 |
| NH-S | New Hampshire Environmental Lab | 2516 NELAP | 02/5/2016 |
| RI | Rhode Island Department of Health | LAO00112 | 12/30/2015 |
| NC | North Carolina Div. of Water Quality | 652 | 12/31/2015 |
| NJ | New Jersey DEP | MA007 NELAP | 10/30/2015 |
| FL | Florida Department of Health | E871027 NELAP | 06/30/2016 |
| VT | Vermont Department of Health Lead Laboratory | LL015036 | 07/30/2016 |
| WA | State of Washington Department of Ecology | C2065 | 02/23/2016 |
| ME | State of Maine | 2011028 | 06/9/2017 |
| VA | Commonwealth of Virginia | 460217 | 12/14/2015 |
| NH-P | New Hampshire Environmental Lab | 2557 NELAP | 09/6/2016 |

**CHAIN OF CUSTODY RECORD**Phone: 413-525-2332
Fax: 413-525-6405Email: info@contestlabs.com
www.contestlabs.com15T1B33
Rev 01/05/1239 Spruce Street
East Longmeadow, MA 01028

Page _____ of _____

| | | | | | | |
|--|--------------------------------|---|---|------------------------------|---------|-------------|
| Company Name: <u>ECS Inc</u> | | Telephone: <u>413-789-3570</u> | ANALYSIS REQUESTED | | | |
| Address: <u>588 Silver Street</u> <u>Aquarium MA</u> | | Project #: <u>91-218371</u> | | | | |
| Attention: <u>Shawn Rising</u> | | Client PO# <u>Alliance Rates</u> | | | | |
| Project Location: <u>Alliance-Tunsend 91-218371</u> | | DATA DELIVERY (check all that apply) <input type="checkbox"/> FAX <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> WEBSITE | | | | |
| Sampled By: <u>T.M.</u> | | Email: <u>SKSinger@ECSConsult.com</u> | | | | |
| Project Proposal Provided? (for billing purposes) <input type="checkbox"/> yes <input checked="" type="checkbox"/> Alliance proposal date | | Format: <input checked="" type="checkbox"/> PDF <input type="checkbox"/> EXCEL <input type="checkbox"/> OGIS <input type="checkbox"/> OTHER | | | | |
| | | Collection: <input type="checkbox"/> Enhanced Data Package | | | | |
| Con-Test Lab ID (Laboratory use only) | Client Sample ID / Description | Beginning Date/Time | Ending Date/Time | Composite | Grab | Matrix Code |
| 01 | MW-103 | 9-25-15 11:20 | | X | 6w N | X |
| 02 | MW-104 | 10:20 | | X | 6w L | X |
| 03 | MW-105 | 9:30 | | X | 6w L | X |
| 04 | MW-106 | 13:20 | | X | 6w L, C | X |
| 05 | MW-107 | 12:05 | | X | 6w L, C | X |
| 06 | Tripl Blunk | am | | X | 0 | C X |
| Comments: | | | | | | |
| Relinquished by: (signature) <u>John</u> | | Date/Time: <u>9-25-15/</u> | Turnaround [†] | Detection Limit Requirements | | |
| Received by: (signature) <u>John</u> | | Date/Time: <u>9-25-15/1500</u> | <input type="checkbox"/> 7-Day | Massachusetts: <u>G-W-3</u> | | |
| Inquired by: (signature) <u>John</u> | | Date/Time: | <input type="checkbox"/> 10-Day | | | |
| Received by: (signature) <u>John</u> | | Date/Time: | <input checked="" type="checkbox"/> Other 5 day | | | |
| | | | <input checked="" type="checkbox"/> RUSH [†] | | | |
| | | | <input type="checkbox"/> 24-Hr <input type="checkbox"/> 48-Hr | | | |
| | | | <input type="checkbox"/> 72-Hr <input type="checkbox"/> 4-Day | | | |
| | | | [†] Require lab approval | Other: | | |

| | |
|------------------|---|
| Dissolved Metals | <input type="checkbox"/> Field Filtered |
| | <input type="checkbox"/> Lab to Filter |
| | <input type="checkbox"/> Lab to Filter |
| ***Cont. Code: | |
| A=Amber glass | |
| G=glass | |
| P=plastic | |
| ST=sterile | |
| V=vial | |
| S=summer can | |
| T=tederal bag | |
| O=Other | |

*Preservation
R=HCl

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

*Matrix Code:
G-W

G=groundwater
W=wastewater

DW=drinking water

A=air

S=soln/solid

SL=sludge

O=other

D/H₂O

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

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

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

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

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

Is your project MCP or RCP?

MCP Form Required

RCP Form Required

MA State DW Form Required

PWSID # _____

WBE/DBE Certified

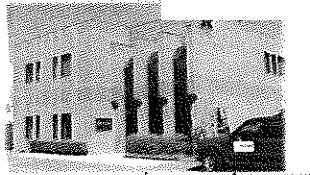
NEAC & AIHA-LAP, LLC
Accredited

TURNAROUND TIME 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 INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.
PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

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



Page 1 of 2



9/25/15

Sample Receipt ChecklistCLIENT NAME: ECSRECEIVED BY: KKMDATE: 9/25/15

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/ATemperature °C by Temp blank _____ Temperature °C by Temp gun 3.1

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:

Permission to subcontract samples? Yes No

(Walk-in clients only) if not already approved

Client Signature: _____

8) Do all samples have the proper Acid pH: Yes No N/A _____9) Do all samples have the proper Base pH: Yes No N/A _____10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes No N/A _____**Containers received at Con-Test**

| | # of containers | | # of containers |
|--------------------------------|-----------------|-----------------------|-----------------|
| 1 Liter Amber | | 8 oz amber/clear jar | |
| 500 mL Amber | | 4 oz amber/clear jar | |
| 250 mL Amber (8oz amber) | | 2 oz amber/clear jar | |
| 1 Liter Plastic | | Plastic Bag / Ziploc | |
| 500 mL Plastic | | SOC Kit | |
| 250 mL plastic | | Non-ConTest Container | |
| 40 mL Vial - type listed below | <u>16</u> | Perchlorate Kit | |
| Colisure / bacteria bottle | | Flashpoint bottle | |
| Dissolved Oxygen bottle | | Other glass jar | |
| Encore | | Other | |

Laboratory Comments:

| | | | |
|--------------------|---------------|-------------|-----------------------|
| 40 mL vials: # HCl | <u>16</u> | # Methanol | Time and Date Frozen: |
| Doc# 277 | # Bisulfate | # DI Water | |
| Rev. 4 August 2013 | # Thiosulfate | Unpreserved | |

Page 2 of 2

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

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

Who notified of False statements?

Date/Time:

Doc #277 Rev. 4 August 2013

Log-In Technician Initials:

KKM

Date/Time:

9/25/15
1500

MADEP MCP Analytical Method Report Certification Form

| | | | |
|-------------------|--------------------------------|------------|---------|
| Laboratory Name: | Con-Test Analytical Laboratory | Project #: | 15I1123 |
| Project Location: | Alliance - Townsend 91-218371 | RTN: | |

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

15I1123-01 thru 15I1123-06

Matrices: Water

CAM Protocol (check all that below)

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

Affirmative response to Questions A through F is required for "Presumptive Certainty" status

| | | |
|------------|---|--|
| A | Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
| B | Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
| C | Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
| D | Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
| E a | VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
| E b | APH and TO-15 Methods only: Was the complete analyte list reported for each method? | <input type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
| F | Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Questions A through E)? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |

A response to questions G, H and I below is required for "Presumptive Certainty" status

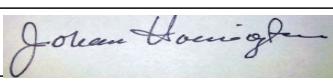
| | | |
|----------|---|--|
| G | Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
|----------|---|--|

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

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

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

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

| | | | |
|---------------|---|-----------|-------------------------------|
| Signature: |  | Position: | Manager, Laboratory Reporting |
| Printed Name: | Johanna K. Harrington | Date: | 10/01/15 |

ATTACHMENT VII

LABORATORY ANALYTICAL REPORT – SOIL GAS SEPTEMBER 2015



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

October 1, 2015

Shawn Rising
ECS
588 Silver Street
Agawam, MA 01001

Project Location: 238 Main St., Townsend, MA

Client Job Number:

Project Number: 91-218371

Laboratory Work Order Number: 15I1132

Enclosed are results of analyses for samples received by the laboratory on September 25, 2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Lisa A. Worthington". The signature is fluid and cursive, with "Lisa" on the first line and "A. Worthington" on the second line.

Lisa A. Worthington
Project Manager

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

ECS
588 Silver Street
Agawam, MA 01001
ATTN: Shawn Rising

REPORT DATE: 10/1/2015

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 91-218371

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 15I1132

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

PROJECT LOCATION: 238 Main St., Townsend, MA

| FIELD SAMPLE # | LAB ID: | MATRIX | SAMPLE DESCRIPTION | TEST | SUB LAB |
|----------------|------------|----------|--------------------|-----------------|---------|
| SG-1 | 15I1132-01 | Soil Gas | | MADEP APH rev 1 | |
| SG-2 | 15I1132-02 | Soil Gas | | MADEP APH rev 1 | |



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CASE NARRATIVE SUMMARY

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

MADEP APH rev 1

Qualifications:

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.

Analyte & Samples(s) Qualified:

Naphthalene

15I1132-01[SG-1], 15I1132-02[SG-2], B131774-BLK1, B131774-BS1, S009668-CCV1

MADEP APH rev 1

No significant modifications were made to the APH method.

All performance/acceptance standards for required QA/QC procedures were achieved unless otherwise indicated in this case 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.

A handwritten signature in black ink, appearing to read "Johanna K. Harrington".

Johanna K. Harrington

Manager, Laboratory Reporting



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

ANALYTICAL RESULTS

Project Location: 238 Main St., Townsend, MA

Date Received: 9/25/2015

Field Sample #: SG-1

Sample ID: 15I1132-01

Sample Matrix: Soil Gas

Sampled: 9/25/2015 11:24

Sample Description/Location:

Sub Description/Location:

Canister ID: 2224

Canister Size: 6 liter

Flow Controller ID: 4167

Sample Type: 1 hr

Work Order: 15I1132

Initial Vacuum(in Hg): -28

Final Vacuum(in Hg): -4

Receipt Vacuum(in Hg): -3.9

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling: <20%

MADEP APH rev 1

| Analyte | ppbv | | | ug/m3 | | | Dilution | Date/Time Analyzed | Analyst |
|--------------------------------|---------|------|-----------|---------|------|--|----------|--------------------|---------|
| | Results | RL | Flag/Qual | Results | RL | | | | |
| Benzene | ND | 0.38 | | ND | 1.2 | | 2 | 9/28/15 11:27 | TPH |
| 1,3-Butadiene | ND | 0.38 | | ND | 0.83 | | 2 | 9/28/15 11:27 | TPH |
| Ethylbenzene | ND | 0.38 | | ND | 1.6 | | 2 | 9/28/15 11:27 | TPH |
| Methyl tert-Butyl Ether (MTBE) | ND | 0.38 | | ND | 1.4 | | 2 | 9/28/15 11:27 | TPH |
| Toluene | 1.4 | 0.38 | | 5.3 | 1.4 | | 2 | 9/28/15 11:27 | TPH |
| Naphthalene | ND | 0.33 | V-05 | ND | 1.8 | | 2 | 9/28/15 11:27 | TPH |
| m&p-Xylene | 1.3 | 0.38 | | 5.6 | 1.6 | | 2 | 9/28/15 11:27 | TPH |
| o-Xylene | ND | 0.38 | | ND | 1.6 | | 2 | 9/28/15 11:27 | TPH |
| C5-C8 Aliphatics | | | | 220 | 17 | | 2 | 9/28/15 11:27 | TPH |
| C9-C10 Aromatics | | | | ND | 19 | | 2 | 9/28/15 11:27 | TPH |
| C9-C12 Aliphatics | | | | ND | 27 | | 2 | 9/28/15 11:27 | TPH |

| Surrogates | % Recovery | % REC Limits | |
|--------------------------|------------|--------------|---------------|
| 4-Bromofluorobenzene (4) | 112 | 70-130 | 9/28/15 11:27 |



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ANALYTICAL RESULTS

Project Location: 238 Main St., Townsend, MA

Date Received: 9/25/2015

Field Sample #: SG-2

Sample ID: 15I1132-02

Sample Matrix: Soil Gas

Sampled: 9/25/2015 11:33

Sample Description/Location:

Sub Description/Location:

Canister ID: 2163

Canister Size: 6 liter

Flow Controller ID: 4166

Sample Type: 1 hr

Work Order: 15I1132

Initial Vacuum(in Hg): -30

Final Vacuum(in Hg): -5

Receipt Vacuum(in Hg): -2.9

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling: <20%

MADEP APH rev 1

| Analyte | ppbv | | ug/m3 | | Dilution | Date/Time Analyzed | Analyst | |
|--------------------------------|---------|------|-----------|---------|----------|--------------------|---------------|-----|
| | Results | RL | Flag/Qual | Results | RL | | | |
| Benzene | 0.40 | 0.38 | | 1.3 | 1.2 | 2 | 9/28/15 12:07 | TPH |
| 1,3-Butadiene | ND | 0.38 | | ND | 0.83 | 2 | 9/28/15 12:07 | TPH |
| Ethylbenzene | 0.41 | 0.38 | | 1.8 | 1.6 | 2 | 9/28/15 12:07 | TPH |
| Methyl tert-Butyl Ether (MTBE) | ND | 0.38 | | ND | 1.4 | 2 | 9/28/15 12:07 | TPH |
| Toluene | 1.6 | 0.38 | | 6.0 | 1.4 | 2 | 9/28/15 12:07 | TPH |
| Naphthalene | ND | 0.33 | V-05 | ND | 1.8 | 2 | 9/28/15 12:07 | TPH |
| m&p-Xylene | 1.6 | 0.38 | | 7.0 | 1.6 | 2 | 9/28/15 12:07 | TPH |
| o-Xylene | 0.42 | 0.38 | | 1.8 | 1.6 | 2 | 9/28/15 12:07 | TPH |
| C5-C8 Aliphatics | | | | 490 | 17 | 2 | 9/28/15 12:07 | TPH |
| C9-C10 Aromatics | | | | ND | 19 | 2 | 9/28/15 12:07 | TPH |
| C9-C12 Aliphatics | | | | 32 | 27 | 2 | 9/28/15 12:07 | TPH |

| Surrogates | % Recovery | % REC Limits | |
|--------------------------|------------|--------------|---------------|
| 4-Bromofluorobenzene (4) | 112 | 70-130 | 9/28/15 12:07 |



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Sample Extraction Data

Prep Method: APH Prep-MADEP APH rev 1

| Lab Number [Field ID] | Batch | Pressure Dilution | Pre Dilution | Pre-Dil Initial mL | Pre-Dil Final mL | Default Injection mL | Actual Injection mL | Date |
|-----------------------|---------|-------------------|--------------|--------------------|------------------|----------------------|---------------------|----------|
| 15I1132-01 [SG-1] | B131774 | 1.5 | 1 | N/A | 1000 | 400 | 300 | 09/27/15 |
| 15I1132-02 [SG-2] | B131774 | 1.5 | 1 | N/A | 1000 | 400 | 300 | 09/27/15 |



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QUALITY CONTROL

Air Petroleum Hydrocarbons Analyses - Quality Control

| Analyte | ppbv Results | RL | ug/m3 Results | RL | Spike Level ppbv | Source Result | %REC %REC | RPD Limits | RPD RPD | RPD Limit | Flag/Qual |
|---------|-----------------|----|------------------|----|---------------------|------------------|--------------|---------------|------------|--------------|-----------|
|---------|-----------------|----|------------------|----|---------------------|------------------|--------------|---------------|------------|--------------|-----------|

Batch B131774 - APH Prep

| | | | | | | | | | | | |
|--|-------------------------------|------|-------------|--|------------|--|---------------|--|--|--|------|
| Blank (B131774-BLK1) | Prepared & Analyzed: 09/27/15 | | | | | | | | | | |
| Benzene | ND | 0.13 | | | | | | | | | |
| 1,3-Butadiene | ND | 0.13 | | | | | | | | | |
| Ethylbenzene | ND | 0.13 | | | | | | | | | |
| Methyl tert-Butyl Ether (MTBE) | ND | 0.13 | | | | | | | | | |
| Toluene | ND | 0.13 | | | | | | | | | |
| Naphthalene | ND | 0.11 | | | | | | | | | V-05 |
| m&p-Xylene | ND | 0.13 | | | | | | | | | |
| o-Xylene | ND | 0.13 | | | | | | | | | |
| C5-C8 Aliphatics | | ND | | | | | | | | | |
| C9-C10 Aromatics | | ND | | | | | | | | | |
| C9-C12 Aliphatics | | ND | | | | | | | | | |
| <i>Surrogate: 4-Bromofluorobenzene (4)</i> | <i>8.64</i> | | <i>8.00</i> | | <i>108</i> | | <i>70-130</i> | | | | |

| | | | | | | | |
|--|-------------------------------|--|-------------|--|------------|--|---------------|
| LCS (B131774-BS1) | Prepared & Analyzed: 09/27/15 | | | | | | |
| Benzene | 9.25 | | 9.38 | | 98.6 | | 70-130 |
| 1,3-Butadiene | 8.24 | | 9.38 | | 87.8 | | 70-130 |
| Decane | 9.29 | | 9.38 | | 99.1 | | 70-130 |
| Ethylbenzene | 9.62 | | 9.38 | | 103 | | 70-130 |
| Heptane | 10.2 | | 9.38 | | 109 | | 70-130 |
| Methyl tert-Butyl Ether (MTBE) | 11.1 | | 9.38 | | 119 | | 70-130 |
| Toluene | 9.84 | | 9.38 | | 105 | | 70-130 |
| 1,3,5-Trimethylbenzene | 8.96 | | 9.38 | | 95.5 | | 70-130 |
| Naphthalene | 9.83 | | 9.38 | | 105 | | 50-150 |
| m&p-Xylene | 9.27 | | 9.38 | | 98.9 | | 70-130 |
| o-Xylene | 9.32 | | 9.38 | | 99.4 | | 70-130 |
| <i>Surrogate: 4-Bromofluorobenzene (4)</i> | <i>8.77</i> | | <i>8.00</i> | | <i>110</i> | | <i>70-130</i> |



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FLAG/QUALIFIER SUMMARY

* QC result is outside of established limits.

† Wide recovery limits established for difficult compound.

‡ Wide RPD limits established for difficult compound.

Data exceeded client recommended or regulatory level

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

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

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.



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INTERNAL STANDARD AREA AND RT SUMMARY

MADEP APH rev 1

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|--|----------|------------------------|--------------------|--------------|--------|--------------------------|---------|---------------|---|
| Calibration Check (S009668-CCV1) | | Lab File ID: B092705.D | | | | Analyzed: 09/27/15 21:05 | | | |
| Bromochloromethane (4) | 311120 | 8.259 | 252616 | 8.28 | 123 | 50 - 200 | -0.0210 | +/-0.50 | |
| 1,4-Difluorobenzene (4) | 615983 | 10.14 | 437111 | 10.173 | 141 | 50 - 200 | -0.0330 | +/-0.50 | |
| Chlorobenzene-d5 (4) | 538552 | 14.905 | 374963 | 14.954 | 144 | 50 - 200 | -0.0490 | +/-0.50 | |
| LCS (B131774-BS1) | | Lab File ID: B092706.D | | | | Analyzed: 09/27/15 21:43 | | | |
| Bromochloromethane (4) | 306663 | 8.25 | 311120 | 8.259 | 99 | 50 - 200 | -0.0090 | +/-0.50 | |
| 1,4-Difluorobenzene (4) | 613683 | 10.136 | 615983 | 10.14 | 100 | 50 - 200 | -0.0040 | +/-0.50 | |
| Chlorobenzene-d5 (4) | 544959 | 14.901 | 538552 | 14.905 | 101 | 50 - 200 | -0.0040 | +/-0.50 | |
| Blank (B131774-BLK1) | | Lab File ID: B092708.D | | | | Analyzed: 09/27/15 23:07 | | | |
| Bromochloromethane (4) | 297051 | 8.249 | 311120 | 8.259 | 95 | 50 - 200 | -0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (4) | 549535 | 10.135 | 615983 | 10.14 | 89 | 50 - 200 | -0.0050 | +/-0.50 | |
| Chlorobenzene-d5 (4) | 479838 | 14.9 | 538552 | 14.905 | 89 | 50 - 200 | -0.0050 | +/-0.50 | |
| SG-1 (15I1132-01) | | Lab File ID: B092725.D | | | | Analyzed: 09/28/15 11:27 | | | |
| Bromochloromethane (4) | 310024 | 8.249 | 311120 | 8.259 | 100 | 50 - 200 | -0.0100 | +/-0.50 | |
| 1,4-Difluorobenzene (4) | 590296 | 10.135 | 615983 | 10.14 | 96 | 50 - 200 | -0.0050 | +/-0.50 | |
| Chlorobenzene-d5 (4) | 534653 | 14.9 | 538552 | 14.905 | 99 | 50 - 200 | -0.0050 | +/-0.50 | |
| SG-2 (15I1132-02) | | Lab File ID: B092726.D | | | | Analyzed: 09/28/15 12:07 | | | |
| Bromochloromethane (4) | 333844 | 8.251 | 311120 | 8.259 | 107 | 50 - 200 | -0.0080 | +/-0.50 | |
| 1,4-Difluorobenzene (4) | 651116 | 10.137 | 615983 | 10.14 | 106 | 50 - 200 | -0.0030 | +/-0.50 | |
| Chlorobenzene-d5 (4) | 578407 | 14.902 | 538552 | 14.905 | 107 | 50 - 200 | -0.0030 | +/-0.50 | |



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CONTINUING CALIBRATION CHECK

MADEP APH rev 1

S009668-CCV1

| COMPOUND | TYPE | CONC. (ppbv) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|--|------|--------------|------|-----------------|--------------|---------|----------------|-----------|
| | | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Benzene | A | 9.38 | 9.40 | 0.788663 | 0.790186 | 0.05 | 0.2 | 30 |
| 1,3-Butadiene | A | 9.38 | 11.8 | 0.3156076 | 0.396748 | 0.05 | 25.7 | 30 |
| Ethylbenzene | A | 9.38 | 9.47 | 1.194193 | 1.205673 | 0.05 | 1.0 | 30 |
| Methyl tert-Butyl Ether (MTBE) | A | 9.38 | 10.9 | 1.141456 | 1.331471 | 0.05 | 16.6 | 30 |
| Toluene | A | 9.38 | 9.88 | 0.7724277 | 0.8140368 | 0.05 | 5.4 | 30 |
| Naphthalene | A | 9.38 | 6.38 | 0.937891 | 0.6382795 | 0.05 | -31.9 | 30 * |
| m&p-Xylene | A | 9.38 | 9.19 | 0.9464494 | 0.9277456 | 0.05 | -2.0 | 30 |
| o-Xylene | A | 9.38 | 9.21 | 0.9181589 | 0.9017879 | 0.05 | -1.8 | 30 |
| C5-C8 Aliphatics ($\mu\text{g}/\text{m}^3$) | A | 214 | 229 | 0.518912 | 0.5554311 | 0.05 | 7.0 | 30 |
| C9-C10 Aromatics ($\mu\text{g}/\text{m}^3$) | A | 236 | 200 | 7.769163E-02 | 6.579155E-02 | 0.05 | -15.3 | 30 |
| C9-C12 Aliphatics ($\mu\text{g}/\text{m}^3$) | A | 333 | 312 | 0.6254355 | 0.5864842 | 0.05 | -6.2 | 30 |

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits



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

CERTIFICATIONS

Certified Analyses included in this Report

| Analyte | Certifications |
|--------------------------------|----------------|
| MADEP APH rev 1 in Air | |
| Benzene | ME |
| 1,3-Butadiene | ME |
| Ethylbenzene | ME |
| Methyl tert-Butyl Ether (MTBE) | ME |
| Toluene | ME |
| Naphthalene | ME |
| m&p-Xylene | ME |
| o-Xylene | ME |
| C5-C8 Aliphatics | ME |
| C9-C10 Aromatics | ME |
| C9-C12 Aliphatics | ME |

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

| Code | Description | Number | Expires |
|------|--|---------------|------------|
| AIHA | AIHA-LAP, LLC | 100033 | 02/1/2016 |
| MA | Massachusetts DEP | M-MA100 | 06/30/2016 |
| CT | Connecticut Department of Public Health | PH-0567 | 09/30/2015 |
| NY | New York State Department of Health | 10899 NELAP | 04/1/2016 |
| NH-S | New Hampshire Environmental Lab | 2516 NELAP | 02/5/2016 |
| RI | Rhode Island Department of Health | LAO00112 | 12/30/2015 |
| NC | North Carolina Div. of Water Quality | 652 | 12/31/2015 |
| NJ | New Jersey DEP | MA007 NELAP | 10/30/2015 |
| FL | Florida Department of Health | E871027 NELAP | 06/30/2016 |
| VT | Vermont Department of Health Lead Laboratory | LL015036 | 07/30/2016 |
| WA | State of Washington Department of Ecology | C2065 | 02/23/2016 |
| ME | State of Maine | 2011028 | 06/9/2017 |
| VA | Commonwealth of Virginia | 460217 | 12/14/2015 |
| NH-P | New Hampshire Environmental Lab | 2557 NELAP | 09/6/2016 |



AIR Only Receipt Checklist

CLIENT NAME: ECS

RECEIVED BY: JPL

DATE: 9/25/15

1) Was the chain(s) of custody relinquished and signed?

Yes No

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) Are there any samples "On Hold"?

Yes No Stored where: _____

5) Are there any RUSH or SHORT HOLDING TIME samples?

Yes No

Who was notified _____ Date _____ Time _____

6) Location where samples are stored:

Air

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

7) Number of cans Individually Certified or Batch Certified? _____

Containers received at Con-Test

| | # of Containers | Types (Size, Duration) |
|--|-----------------|------------------------|
| Summa Cans (TO-14/TO-15/APH) | 2 | 6L |
| Tedlar Bags | | |
| TO-17 Tubes | | |
| Regulators | 2 | 1 hr |
| Restrictors | | |
| Hg/Hopcalite Tube (NIOSH 6009) (TO-4A/ TO-10A/TO-13) PUFs | | |
| PCB Florisil Tubes (NIOSH 5503) | | |
| Air cassette | | |
| PM 2.5/PM 10 | | |
| TO-11A Cartridges | | |
| Other | | |

Unused Summas/PUF Media:

Unused Regulators:

1) Was all media (used & unused) checked into the WASP?

2) Were all returned summa cans, Restrictors & Regulators and PUF's documented as returned in the Air Lab Inbound/Outbound Excel Spreadsheet?

Laboratory Comments:

Summa #'s: 2224
2163

Reg #'s: 4167
4166

Page 2 of 2

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

| <u>Question</u> | <u>Answer (True/False)</u> | <u>Comment</u> |
|---|----------------------------|----------------|
| | T/F/NA | |
| 1) The coolers'/boxes' custody seal, if present, is intact. | NA | |
| 2) The cooler or samples do not appear to have been compromised or tampered with. | T | |
| 3) Samples were received on ice. | NA | |
| 4) Cooler Temperature is acceptable. | NA | |
| 5) Cooler Temperature is recorded. | NA | |
| 6) COC is filled out in ink and legible. | T | |
| 7) COC is filled out with all pertinent information. | T | |
| 8) Field Sampler's name present on COC. | T | |
| 9) Samples are received within Holding Time. | T | |
| 10) Sample containers have legible labels. | T | |
| 11) Containers/media are not broken or leaking and valves and caps are closed tightly. | T | |
| 12) Sample collection date/times are provided. | T | |
| 13) Appropriate sample/media containers are used. | T | |
| 14) There is sufficient volume for all requested analyses, including any requested MS/MSDs. | T | |
| 15) Trip blanks provided if applicable. | NA | |

Doc #278 Rev. 5 October 2014

Who notified of False statements?
Log-In Technician Initials:

JDL

Date/Time:

Date/Time:

9/25/15 (500)



Air Sampling Media Certificate of Analysis

Date Analyzed: 9/1/2015 **Batch #:** 15CC396

Certification Type: *Batch Certified* *Individual Certified*

Media Type: *Summa Canister* *Flow Controllers*

| | | | |
|-------------------|---------------|---------------|-------|
| Media IDs: | <u>BC2224</u> | <u>BC2163</u> | |
| | _____ | _____ | _____ |
| | _____ | _____ | _____ |
| | _____ | _____ | _____ |
| | _____ | _____ | _____ |

Note: Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

| Units: | PPBv | Ug/M3 |
|---------------|-------------|--------------------------|
| | RL | RL |
| | <0.08 | 1,3-Butadiene |
| | <0.08 | Methyl tert-butyl Ether |
| | <0.08 | Benzene |
| | <0.08 | Toluene |
| | <0.08 | Ethylbenzene |
| | <0.08 | m,p-Xylenes |
| | <0.08 | o-Xylene |
| | <0.07 | Naphthalene |
| | | <0.17 |
| | | 1,3-Butadiene |
| | | <0.27 |
| | | Methyl tert-butyl Ether |
| | | <0.24 |
| | | Benzene |
| | | <0.28 |
| | | Toluene |
| | | <0.33 |
| | | Ethylbenzene |
| | | <0.33 |
| | | m,p-Xylenes |
| | | <0.33 |
| | | o-Xylene |
| | | <0.39 |
| | | Naphthalene |
| | | <3.4 |
| | | C5 - C8 Aliphatic Range |
| | | <5.3 |
| | | C9 - C12 Aliphatic Range |
| | | <3.8 |
| | | C9 - C10 Aromatic Range |

Special Notes: _____

Analyst Initials/Date: TPH 9/29/15

MADEP MCP Analytical Method Report Certification Form

| | | | |
|-------------------|--------------------------------|------------|---------|
| Laboratory Name: | Con-Test Analytical Laboratory | Project #: | 15I1132 |
| Project Location: | 238 Main St., Townsend, MA | RTN: | |

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

15I1132-01 thru 15I1132-02

Matrices: Air

CAM Protocol (check all that below)

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

Affirmative response to Questions A through F is required for "Presumptive Certainty" status

| | | |
|------------|---|--|
| A | Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
| B | Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
| C | Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
| D | Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
| E a | VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
| E b | APH and TO-15 Methods only: Was the complete analyte list reported for each method? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
| F | Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Questions A through E)? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |

A response to questions G, H and I below is required for "Presumptive Certainty" status

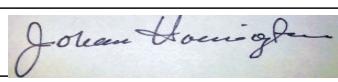
| | | |
|----------|---|--|
| G | Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹ |
|----------|---|--|

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

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

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

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

| | | | |
|---------------|---|-----------|-------------------------------|
| Signature: |  | Position: | Manager, Laboratory Reporting |
| Printed Name: | Johanna K. Harrington | Date: | 10/01/15 |