Site Restoration Technologies

Mr. Douglas Lindsay
Environ
20 Custom House St.
Boston, MA 02110

February 28, 2013

Dear Mr. Lindsay:

After reviewing the test data and submittal documents you provided for the soil to be shipped from 941 Grinnell St., Fall River to the Former Portsmouth Landfill Closure Project in Portsmouth, RI we have decided the following.

Soils from areas represented by samples P10, P14, P18, P20 and ENV-23 are approved for shipment to Portsmouth once a final visual check of the soil indicates a suitable physical condition, i.e. not saturated excessively and acceptable as soil cover. Also, final contractual agreements must be completed by our customer, G. Lopes Construction.

Areas represented by other samples have not been approved, however, further testing may possibly reveal acceptable results (if a grid sampling pattern is done to isolate any unacceptable soil etc.). If you decide to perform further testing I am available to assist in describing what is needed.

Yours truly,

David M. Peter

DMP/mtf

18 Shoreline Dr., Foxboro, MA 02035 • (508) 380-1267 • FAX (508) 543-3002
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ENVIRON

February 28, 2013 ENVIRON Project # 33-291188I

Mr. David Peter
Manager
Site Restoration Technologies
18 Shoreline Drive
Foxboro, MA 02035

**Re: Request for Approval of Soils for Reuse at the Portsmouth, RI Municipal Landfill**

**Sending Site: 941 Grinnell Street, Fall River, Massachusetts**

Dear David:

## INTRODUCTION

ENVIRON International Corporation (ENVIRON) has received soil analysis data for peat soils from the above-referenced property in Fall River, Massachusetts (the Site). ENVIRON has prepared this package which includes the laboratory analysis results of 10 soil samples associated with an estimated 9,000 cubic yards (CY) of in-situ peat and soil. Based on the soil analytical data obtained to date, we are requesting that up to 9,000 cy of soil be considered for acceptance at the Portsmouth Municipal Landfill facility. Excavation of the peat soils for off-site disposal is anticipated to commence shortly.

The information in this package includes a description of the site, analytical data sheets, a data summary table, a site sketch, and a draft Material Shipping Record (MSR). All of these items are included in **Attachment A**. Based on the results of the sampling, ENVIRON considers the subject material to be consistent with requirements in the applicable documents specified above for re-use at the Portsmouth, RI Municipal Landfill facility as described below.

## SITE INFORMATION

The following summarizes pertinent information for the Site. Please also refer to pertinent sections of the Soil Profile Package prepared as required and provided in **Attachment A**.

**Site Address:** 941 Grinnell Street, Fall River, Massachusetts

**Consultant Providing Analytical Information:** Mr. Douglas Lindsay, LSP, ENVIRON

**Environmental History at the Site:** The Site was developed as early as 1893 for meat packing operations and cotton mill industry. Prior to Quaker Fabric's occupancy from at least 1980 to 2008, the Site had been occupied by D.H. & W.C. Cornell Wholesale Meat Packers, A.J. Davis & Bros Wholesale Meat Packers, Hargraves Manufacturing Company cotton mill, J.

Lunan & Son Box Factory, Anawan Mills, Inc. cotton waste plant, Lumber & Plumbing Supplies, Berkshire Fine Spinning Associates, Inc. cotton and rayon mill, Berkshire Hathaway, Inc., Anawan Waste & Salvage Corporation, Providence Pile Fabric Corporation (carpets), and Nortex Yarns. All buildings were demolished in approximately 2008-2009.

**Soil Description and Sampling Procedures:** On August 27, 2012, ENVIRON mobilized to the Site to perform soil screening/sampling activities. Test borings were completed within the peat area on the eastern extent of the Site (as shown on **Figure 1**) using a Geoprobe drill rig, from which continuous soil samples were collected to a maximum depth of 15 feet below ground surface (bgs).

Based on information provided by the geotechnical engineering firm working on the project, it is estimated that there is approximately 7,000 CY of in-situ organic peat material present on-site that is not suitable for structural fill beneath a proposed building, and therefore must be removed from the Site for off-site disposal. Photoionization detector (PID) headspace readings of the peat ranged from 0.9 to up to 6.6 ppmv. As no petroleum odors or visual evidence petroleum impact (i.e. staining or a sheen, etc) were observed by ENVIRON during sampling activities, the low-level PID detections are believed to be attributable to peat-related organic vapors or water vapor due to the saturated nature of the soil samples and not from a petroleum release.

Eight discrete soil samples (P4, P5, P10, P13, P14, P18, P20, P24) and one composite soil sample (C-P5-P14) were submitted for laboratory analysis. Laboratory data for an additional soil sample (ENV-23) collected from a previous investigation in the area is also included in this submittal. Locations of soil samples are shown on **Figure 1**.

**Analyses Conducted and Frequency:** Samples (P4, P5, P10, P13, P14, P18, P20, P24, and C-P5-P14) were submitted for laboratory analysis disposal parameters (MassDEP's COMM-97-001 [VOCs, SVOC-Full, PCBs, TPH-DRO, PCBs, Metals (Priority Pollutant 13), and Conductivity], Extractable Petroleum Hydrocarbons (EPH), volatile petroleum hydrocarbons (VPH and Waste Characteristics [pH, Reactivity, Flashpoint]). Sample ENV-23 was analyzed for EPH, PCBs, and Metals (RCRA 8). Lastly, two samples (P4 and P5) were submitted for analysis of TCLP-Pb and one sample (P5) was submitted for analysis of hexavalent chromium. This data is summarized on **Tables 1 and 2**.

**Analytical Profiling Documents:** The analytical testing was provided by TestAmerica of Westfield, MA. Analytical reports are included in **Attachment A**.

**Total Estimated Quantity of Soils Requested to be Re-used:** The total estimated quantity of soil is up to 9,000 CY based on the analytical data received to date. The removal of soil is being conducted as part of site redevelopment activities.

**Evaluation of Constituent Concentrations with Acceptance Criteria and Comments:**

The soil data was compared to the Portsmouth Landfill's Acceptance Criteria which is consistent with the Rhode Island Department of Environmental Management's (RIDEM)

Industrial/Commercial Direct Exposure Criteria (**Table 1**). However, if arsenic concentrations exceeded 7 milligrams per kilogram (mg/kg), the data was also compared to the RIDEM Residential Direct Exposure Criteria (**Table 2**). Because arsenic concentrations exceeded 7 mg/kg in samples P4, P5, and C-P5-P14, the data for these samples were compared to the RIDEM Residential Direct Exposure Criteria (**Table 2**).

Unacceptable Sample Locations:

- **P4** - Beryllium was detected at concentrations above the Acceptance Criteria of 1.5 mg/kg and this sample is considered to be unacceptable for re-use at the Portsmouth facility.
- **P13** - Beryllium was detected at concentrations above the Acceptance Criteria of 1.5 mg/kg and this sample is considered to be unacceptable for re-use at the Portsmouth facility.
- **P24** - A concentration of benzo[a]pyrene above the Acceptance Criteria was detected and is considered to be unacceptable for re-use at the Portsmouth facility.

  **Note**: Sample C-P5-P14 is a composite of samples from P5 and P14. Although beryllium was detected at 1.6 mg/kg in C-P5-P14 (0.1 mg/kg over the Acceptance Criteria), discrete samples collected from P5 and P14 did not exhibit beryllium above the Acceptance Criteria. Therefore, the beryllium detection is likely attributable to the variability of the peat material in the sample and P5 and P14 sample locations are still considered acceptable for re-use as the beryllium detection of 1.6 mg/kg was not reproducible.

Candidate Sample Locations:

For samples P5, P10, P14, P18, P20, and ENV-23, the analytical data supports the following results:

- Arsenic was detected above the RIDEM Acceptance Criteria of 7 mg/kg at P5 at a concentration of 12 mg/kg. However, based upon an average of 10 samples collected from the peat material, the average arsenic concentration is 6.49 mg/kg, below the Acceptance Criteria.
- PCBs were not detected above the method detection limits.
- The detected concentrations of VOCs are below the Acceptance Criteria.
- Because total lead was detected in sample P5 at a concentration of 190 mg/kg, which is above 100 mg/kg, per the RCRA 20x rule, this sample was also analyzed for leachable (TCLP) lead. Laboratory analysis of sample P5 indicated a non-detectable TCLP lead concentration.
- In addition, due to the elevated total chromium concentration of 68 mg/kg detected in sample P5, this sample was also analyzed for hexavalent chromium. Laboratory analysis indicated non-detectable concentrations of hexavalent chromium in sample P5.

- TPH (diesel range organics) was detected at concentrations ranging from non-detect to 2,200 mg/kg and TPH (unknown hydrocarbons) was detected at concentrations ranging from 140 mg/kg to 4,000 mg/kg. In particular, soil sample P5 exhibited TPH (unknown hydrocarbons) at concentration of 4,000 mg/kg which exceeds the 2,500 mg/kg TPH acceptance criteria; however, low concentrations of EPH fractions were detected in the same sample. As such, the elevated TPH concentrations may be attributable to interference from the organic peat material. ENVIRON suggests that the EPH concentrations be reviewed in lieu of the TPH concentrations for these samples.
- The samples were also analyzed for conductivity, flashpoint, pH, and reactive sulfide and cyanide. Specific conductance was detected at concentrations ranging from 250 to 2,000 umhos/cm. Flashpoint was not detected below 200 degrees Fahrenheit and the pH ranged from 5.22 to 6.05 standard units. Reactive sulfide and cyanide were not detected above the method detection limits.

Based on ENVIRON's knowledge of the Site and review of the subject soil data, the soil is considered by ENVIRON to be acceptable for re-use at the Portsmouth Municipal Landfill facility.

**ACKNOWLEDGEMENT AND ACCEPTANCE**

In my opinion, the analyses performed and submitted for review are sufficient to adequately characterize the identity and concentrations of contaminants in the soil proposed for re-use at the Portsmouth Municipal Landfill facility. Based on my review of the attached data, it is my opinion as a Qualified Environmental Professional that the soil is appropriate as pre-capping grading and shaping material for the Portsmouth Municipal Landfill facility. The soil will be shipped utilizing a fully executed MSR by ENVIRON.

Please call us if you have questions regarding the above information.

Very Truly Yours,

Douglas M. Lindsay, PG, LSP
Senior Manager

Jason Wilkinson, PG
Senior Manager

ENVIRON

# ATTACHMENTS

NOTES:

1. THIS BASE MAP WAS DRAWN FROM A PLAN ENTITLED "GRADING AND DRAINAGE PLAN" PREPARED BY BOHLER ENGINEERING OF SOUTHBOROUGH, MA TRANSMITTED ELECTRONICALLY TO SANBORN HEAD ON JULY 26, 2012 WITH AN ORIGINAL SCALE OF 1" = 40'.

2. OWNER'S GEOTECHNICAL ENGINEER SHALL BE RESPONSIBLE FOR FABRICATION AND INSTALLATION OF SETTLEMENT PLATFORMS. OWNER'S CIVIL ENGINEERING CONSULTANT'S (CEC) SURVEYOR SHALL BE RESPONSIBLE FOR COLLECTING SURVEY READINGS OF THE SETTLEMENT PLATFORMS AS SPECIFIED IN SECTION 02300 EARTHWORK. CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING AND COMPACTING RAISE-IN-GRADE FILL AND SURCHARGE FILL. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING INSTRUMENTATION AND FOR REPLACING INSTRUMENTATION AT THEIR COST IF INSTRUMENTATION IS DAMAGED OR DISTURBED. SEE SECTION 02300 EARTHWORK FOR ADDITIONAL SPECIFICATIONS.

3. CONTRACTOR SHALL NOTIFY OWNER'S GEOTECHNICAL ENGINEER AT LEAST 2 WEEKS PRIOR TO FILL PLACEMENT IN INSTRUMENTATION AREA TO ALLOW TIME FOR FABRICATION AND INSTALLATION OF SETTLEMENT PLATFORMS.

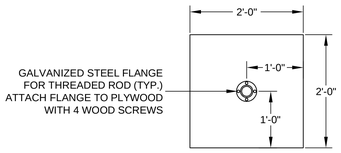
LEGEND:

I-1 APPROXIMATE LOCATION AND DESIGNATION OF SETTLEMENT MONITORING POINTS

APPROXIMATE AREA OF SURCHARGE FILL - AREA "A"

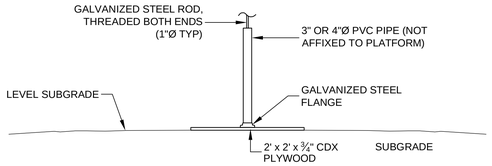
APPROXIMATE AREA FOR SETTLEMENT MONITORING (NO SURCHARGE) - AREA "B"

APPROXIMATE AREA OF BURIED ORGANICS IDENTIFIED BY SANBORN HEAD AND OTHERS



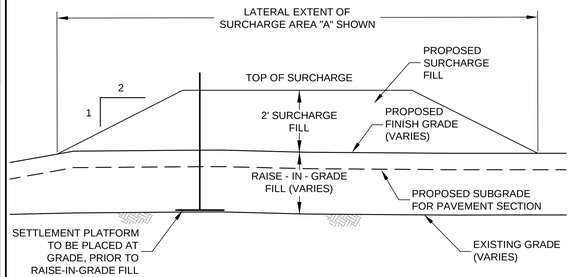

SETTLEMENT PLATFORM - PLAN VIEW

NOT TO SCALE



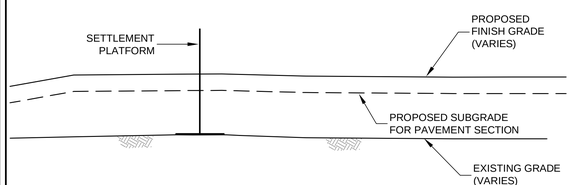

SETTLEMENT PLATFORM - ELEVATION VIEW

NOT TO SCALE



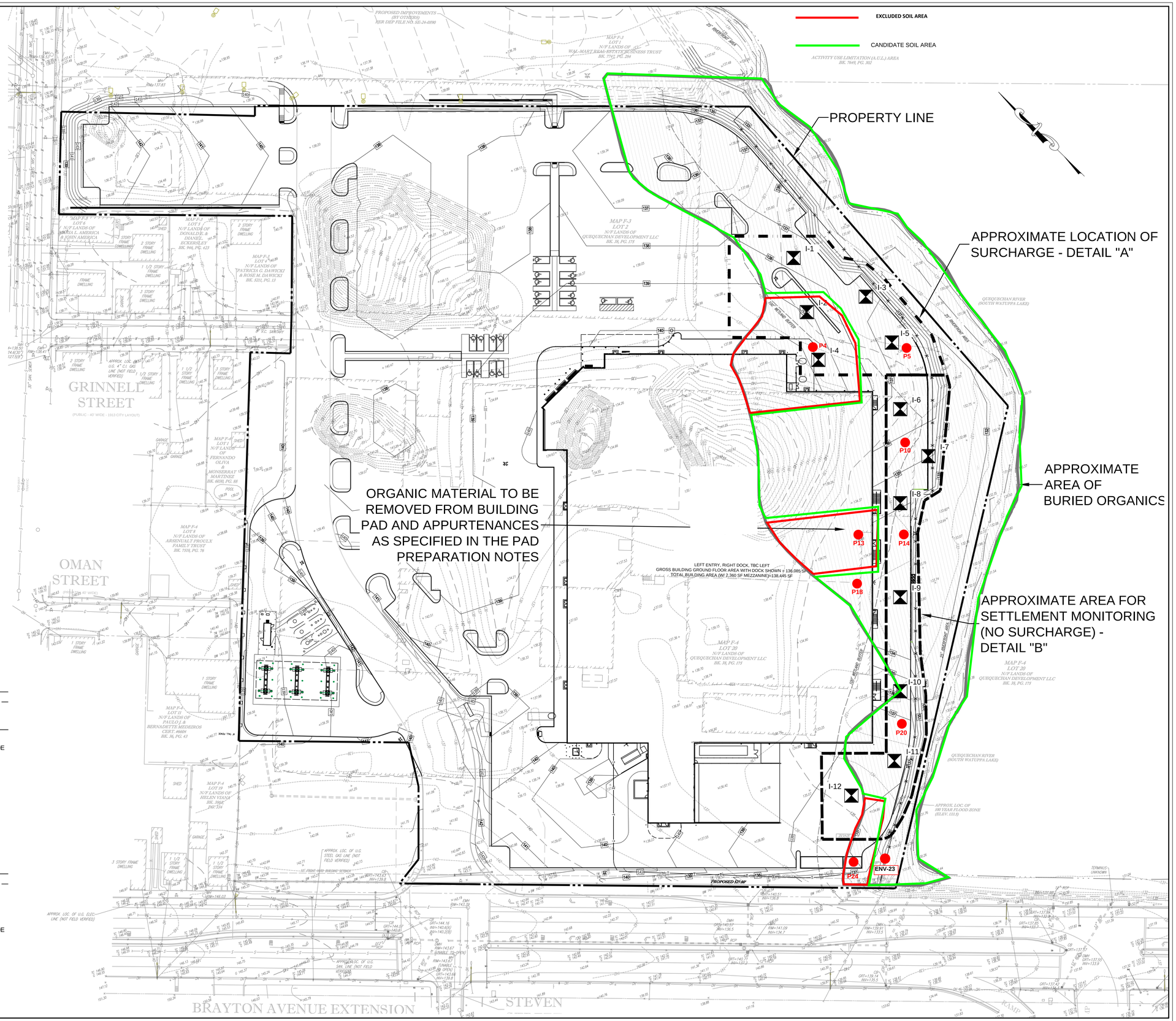

SURCHARGE FILL AND INSTRUMENTATION DETAIL - "A"

NOT TO SCALE




INSTRUMENTATION DETAIL - "B"

NOT TO SCALE




SANBORN HEAD

GRAPHICAL SCALE 0 20 40 80 120 FEET

| NO. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| 1 | 8/1/2012 | ISSUED FOR REVIEW | SH |

DRAWN BY: R.HIRTLE
DESIGNED BY: S.SADKOWSKI
REVIEWED BY: V.KOKOSA
PROJECT MGR: S.SADKOWSKI
PIC: V.KOKOSA
DATE: AUGUST 2012

GEOTECHNICAL ENGINEERING SERVICES

FALL RIVER, MASSACHUSETTS

SURCHARGE AND INSTRUMENTATION PLAN

PROJECT NUMBER: 3308.00

SHEET NUMBER: GT-1

**Table 1: Comparison of Results to RI DEM Industrial/Commercial Criteria**
**941 Grinnell Street**
**Fall River, MA**

| Parameter Analyzed | RIDEM Industrial/Commercial Direct Exposure Criteria | Portsmouth, RI Acceptance Criteria | Sample Locations | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | P4 | P13 | P24 | C-P5-P14 | P5 | P10 | P14 | P18 | P20 | ENV-23 |
| **Sample Collection Date:** | | | 8/27/2012 | 8/7/2012 | 8/7/2012 | 8/7/2012 | 8/27/2012 | 8/27/2012 | 8/7/2012 | 8/7/2012 | 8/7/2012 | 1/25/2012 |
| ***TPH (mg/kg)*** | ~ | 2,500 | 1,300 | 1,600 | 730 | 3,000 | 4,000 | 140 | 2,400 | 790 | 200 | NA |
| ***TPH Diesel Range Organics (mg/kg)*** | ~ | 2,500 | 590 | 430 | 380 | 880 | 2,200 | <46 | 620 | 240 | 87 | NA |
| ***EPH Fractions (mg/kg)*** | | | | | | | | | | | | |
| *C11-C22 Aromatic Hydrocarbons* | ~ | ~ | 93 | 81 | 74 | 120 | 110 | 7.7 | 52 | 41 | 39 | 4.2 |
| *C9-C18 Aliphatic Hydrocarbons* | ~ | ~ | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| *C19-C36 Aliphatic Hydrocarbons* | ~ | ~ | 170 | 59 | 58 | 170 | 150 | 6.9 | 48 | 46 | 4.5 | 4.2 |
| ***Total EPH*** | ~ | ~ | 260 | 140 | 132 | 290 | 260 | 4.6 | 100 | 87 | 43.5 | 8.4 |
| ***Total VOCs (mg/kg)*** | ~ | ~ | ND | 0.26* | ND | ND | 0.29* | ND | 0.3* | 0.32* | 0.03 | ND |
| ***SVOCs - Targets (mg/kg)*** | | | | | | | | | | | | |
| *Acenaphthene* | 10,000 | 10,000 | < 6.5 | < 8.7 | < 1 | <10 | < 6.5 | < 1.2 | <11 | <4.9 | <1 | <0.35 |
| *Acenaphthylene* | 10,000 | 10,000 | < 6.5 | < 8.7 | < 1 | <10 | < 6.5 | < 1.2 | <11 | <4.9 | <1 | <0.35 |
| *Anthracene* | 10,000 | 10,000 | < 6.5 | < 8.7 | 1 | <10 | < 6.5 | < 1.2 | <11 | <4.9 | <1 | <0.35 |
| *Benzo(a)anthracene* | 7.8 | 7.8 | < 6.5 | < 8.7 | 2.6 | <10 | < 6.5 | < 1.2 | <11 | <4.9 | <1 | <0.35 |
| *Benzo(a)pyrene* | 0.8 | 0.8 | < 6.5 | < 8.7 | 2.4 | <10 | < 6.5 | < 1.2 | <11 | <4.9 | <1 | <0.35 |
| *Benzo(b)fluoranthene* | 7.8 | 7.8 | < 6.5 | < 8.7 | 2.7 | <10 | < 6.5 | < 1.2 | <11 | <4.9 | <1 | <0.35 |
| *Benzo (g,h,i)perylene* | 10,000 | 10,000 | < 6.5 | < 8.7 | 1.7 | <10 | < 6.5 | < 1.2 | <11 | <4.9 | <1 | <0.35 |
| *Benzo(k)fluoranthene* | 78 | 78 | < 6.9 | < 9.2 | 1.2 | <11 | < 6.9 | < 1.2 | <12 | <5.2 | < 1.1 | <0.35 |
| *Chrysene* | 780 | 780 | < 6.5 | < 8.7 | 2.9 | <10 | < 6.5 | < 1.2 | <11 | <4.9 | <1 | <0.35 |
| *Dibenzo(a,h)anthracene* | 0.8 | 0.8 | < 6.5 | < 8.7 | < 1 | <10 | < 6.5 | < 1.2 | <11 | <4.9 | <1 | <0.35 |
| *Fluoranthene* | 10,000 | 10,000 | < 6.5 | < 8.7 | 4.8 | <10 | < 6.5 | < 1.2 | <11 | <4.9 | <1 | <0.35 |
| *Fluorene* | 10,000 | 10,000 | < 6.5 | < 8.7 | < 1 | <10 | < 6.5 | < 1.2 | <11 | <4.9 | <1 | <0.35 |
| *Indeno(1,2,3-cd)pyrene* | 7.8 | 7.8 | < 13 | <17 | < 2 | <20 | < 13 | <2.3 | <23 | <9.9 | <2.1 | <0.35 |
| *2-Methylnaphthalene* | 10,000 | 10,000 | < 6.5 | < 8.7 | < 1 | <10 | < 6.5 | < 1.2 | <11 | <4.9 | <1 | <0.35 |
| *Naphthalene* | 10,000 | 10,000 | < 6.5 | < 8.7 | < 1 | <10 | < 6.5 | < 1.2 | <11 | <4.9 | 0.033 | <0.35 |
| *Phenanthrene* | 10,000 | 10,000 | < 6.5 | < 8.7 | 3.9 | <10 | < 6.5 | < 1.2 | <11 | <4.9 | 1.1 | <0.35 |
| *Pyrene* | 10,000 | 10,000 | < 6.5 | < 8.7 | 5.8 | <10 | < 6.5 | < 1.2 | <11 | <4.9 | <1 | <0.35 |
| ***Total SVOCs (mg/kg)*** | ~ | ~ | ND | ND | 29 | ND | ND | ND | ND | ND | 1.133 | ND |
| ***RCRA Metals (mg/kg)*** | | | | | | | | | | | | |
| *Antimony* | 820 | 820 | <1.5 | <2.2 | <0.64 | <2.2 | <1.4 | <0.90 | <3.0 | <1.3 | <0.81 | NA |
| *Arsenic* | 7 | 7 | 12 | 5 | 2.3 | 9.5 | 12 | 5.9 | <6.1 | 3.7 | 3 | 5.4 |
| *Barium* | 10,000 | 10,000 | 77 | 44 | 17 | 91 | 80 | 140 | 36 | 38 | 32 | 24 |
| *Beryllium* | 1.5 | 1.5 | 2.0 | 2.9 | <0.26 | 1.6 | 0.94 | 0.6 | <1.2 | 0.66 | 0.40 | NA |
| *Cadmium* | 1,000 | 1,000 | 0.98 | <0.88 | 0.42 | < 0.89 | 0.83 | 0.42 | <1.2 | < 0.51 | <0.33 | < 0.28 |
| *Chromium* | ~ | ~ | 17 | 12 | 5.5 | 18 | 68 | 17 | 3 | 12 | 8.5 | 11 |
| *Copper* | 10,000 | 10,000 | 36 | 19 | 6.5 | 18 | 53 | 47 | 7.2 | 11 | 10 | NA |
| *Lead* | 500 | 500 | 170 | 9.5 | 22 | 49 | 190 | 89 | <3 | 21 | 7.9 | 7.5 |
| *Mercury* | 610 | 610 | < 0.23 | < 0.30 | 1.9 | <0.39 | 0.4 | <0.15 | 0.46 | 0.21 | <0.12 | <0.091 |
| *Nickel* | 10,000 | 10,000 | 14 | 8.2 | 7.3 | 12 | 8.7 | 16 | <6.1 | 6.8 | 8.3 | NA |
| *Selenium* | 10,000 | 10,000 | 3.9 | 3.4 | < 0.64 | <2.2 | 1.4 | < 0.90 | < 3 | <1.3 | < 0.81 | <0.70 |
| *Silver* | 10,000 | 10,000 | < 1.5 | <2.2 | < 0.64 | <2.2 | < 1.4 | < 0.90 | < 3 | <1.3 | < 0.81 | <070 |
| *Thallium* | 140 | 140 | <3.0 | <4.4 | <1.3 | <4.4 | <2.8 | <1.8 | <6.1 | <2.5 | <1.6 | NA |
| *Zinc* | 10,000 | 10,000 | 140 | 12 | 45 | 96 | 190 | 110 | <15 | 37 | 27 | NA |
| ***Hexavalent Chromium*** | 10,000 | 10,000 | NA | NA | NA | NA | <19 | NA | NA | NA | NA | NA |
| ***TCLP Pb (mg/l)*** | ~ | ~ | 0.085 | NA | NA | NA | <0.025 | NA | NA | NA | NA | NA |
| ***PCBs (mg/kg)*** | 10 | 10 | < 0.26 | < 0.35 | < 0.12 | < 0.4 | < 0.23 | < 0.13 | < 0.43 | < 0.19 | < 0.12 | < 0.1 |
| ***Waste Characteristics*** | | | | | | | | | | | | |
| *Conductivity (umhos/cm)* | ~ | ~ | 2,000 | 770 | 520 | 730 | 710 | 920 | 510 | 2,100 | 250 | NA |

**Notes:**

1. One sample location representative of ~500 cy.
2. ~ = No Industrial/Commercial Direct Exposure Criteria exists for the compound.
3. NA = Not Analyzed.
4. **Bolded** concentrations indicate detections.
5. Highlighted cells exceed criteria.
6. RED shaded samples are unacceptable.

Table 2: Comparison of Results to RIDEM Residential Criteria
941 Grinnell Street
Fall River, MA

| Parameter Analyzed | RIDEM Residential Direct Exposure Criteria | Portsmouth, RI Acceptance Criteria | Sample Locations | | |
|---|---|---|---|---|---|
| | | | P4 | C-P5-P14 | P5 |
| **Sample Collection Date:** | | | 8/27/2012 | 8/7/2012 | 8/27/2012 |
| ***TPH (mg/kg)*** | ~ | **2,500** | **1,300** | **3,000** | **4,000** |
| ***TPH Diesel Range Organics (mg/kg)*** | ~ | **2,500** | **590** | **880** | **2,200** |
| ***EPH Fractions (mg/kg)*** | | | | | |
| *C11-C22 Aromatic Hydrocarbons* | ~ | ~ | **93** | **120** | **110** |
| *C9-C18 Aliphatic Hydrocarbons* | ~ | ~ | ND | ND | ND |
| *C19-C36 Aliphatic Hydrocarbons* | ~ | ~ | **170** | **170** | **150** |
| ***Total EPH*** | ~ | ~ | **260** | **290** | **260** |
| ***Total VOCs (mg/kg)*** | ~ | ~ | ND | ND | **0.29*** |
| ***SVOCs - Targets (mg/kg)*** | | | | | |
| *Acenaphthene* | **43** | **10,000** | < 6.5 | <10 | < 6.5 |
| *Acenaphthylene* | **23** | **10,000** | < 6.5 | <10 | < 6.5 |
| *Anthracene* | **35** | **10,000** | < 6.5 | <10 | < 6.5 |
| *Benzo(a)anthracene* | **0.9** | **7.8** | **< 6.5** | **<10** | **< 6.5** |
| *Benzo(a)pyrene* | **0.4** | **0.8** | < 6.5 | <10 | < 6.5 |
| *Benzo(b)fluoranthene* | **0.9** | **7.8** | < 6.5 | <10 | < 6.5 |
| *Benzo (g,h,i)perylene* | **0.8** | **10,000** | < 6.5 | <10 | < 6.5 |
| *Benzo(k)fluoranthene* | **0.9** | **78** | < 6.9 | <11 | < 6.9 |
| *Chrysene* | **0.4** | **780** | < 6.5 | <10 | < 6.5 |
| *Dibenzo(a,h)anthracene* | **0.4** | **0.8** | < 6.5 | <10 | < 6.5 |
| *Fluoranthene* | **20** | **10,000** | < 6.5 | <10 | < 6.5 |
| *Fluorene* | **28** | **10,000** | < 6.5 | <10 | < 6.5 |
| *Indeno(1,2,3-cd)pyrene* | **0.9** | **7.8** | < 13 | <20 | < 13 |
| *2-Methylnaphthalene* | **123** | **10,000** | < 6.5 | <10 | < 6.5 |
| *Naphthalene* | **54** | **10,000** | < 6.5 | <10 | < 6.5 |
| *Phenanthrene* | **40** | **10,000** | < 6.5 | <10 | < 6.5 |
| *Pyrene* | **13** | **10,000** | < 6.5 | <10 | < 6.5 |
| ***Total SVOCs (mg/kg)*** | ~ | ~ | ND | ND | ND |
| ***RCRA Metals (mg/kg)*** | | | | | |
| *Antimony* | **10** | **820** | NA | <2.2 | NA |
| *Arsenic* | **7** | **7** | **12** | **9.5** | **12** |
| *Barium* | **5,500** | **10,000** | **77** | NA | **80** |
| *Beryllium* | **1.5** | **1.5** | **2.0** | **1.6** | **0.94** |
| *Cadmium* | **39** | **1,000** | **0.98** | < 0.89 | **0.83** |
| *Chromium* | ~ | ~ | **17** | **18** | **68** |
| *Copper* | **3,100** | **10,000** | NA | **18** | NA |
| *Lead* | **150** | **500** | **170** | **49** | **190** |
| *Mercury* | **23** | **610** | < 0.23 | <0.39 | **0.4** |
| *Nickel* | **1,000** | **10,000** | NA | **12** | NA |
| *Selenium* | **390** | **10,000** | **3.9** | <2.2 | **1.4** |
| *Silver* | **200** | **10,000** | < 1.5 | <2.2 | < 1.4 |
| *Thallium* | **5.5** | **140** | NA | <4.4 | NA |
| *Zinc* | **6,000** | **10,000** | NA | **96** | NA |
| ***Hexavalent Chromium*** | **390** | **10,000** | NA | NA | <19 |
| ***TCLP Pb (mg/l)*** | ~ | ~ | **0.085** | NA | <0.025 |
| ***PCBs (mg/kg)*** | **10** | **10** | < 0.26 | < 0.4 | < 0.23 |
| ***Waste Characteristics*** | | | | | |
| *Conductivity (umhos/cm)* | ~ | ~ | **2,000** | **730** | **710** |

**Notes:**

1. One sample location representative of ~500 cy.
2. ~ = No Industrial/Commercial Direct Exposure Criteria exists for the compound.
3. NA = Not Analyzed.
4. **Bolded** concentrations indicate detections.
5. Highlighted cells exceed criteria.
6. RED shaded samples are unacceptable

**Site Restoration Technologies - Foxboro, MA 508-380-1267**

# Material Submittal Request

**Tracking No:** _____

Request to tip soil, urban fill, and other suitable materials for landfill cover, shaping, and final cap of the site known as the Former Portsmouth Landfill Park Avenue Portsmouth, RI

**Contact: David Peter, Manager 508-380-1267 dpeter@siteretech.com**

## Location Information

Provide the following information on the location where the waste was generated:

Former Quaker Fabrics
Location Name

941 Grinnell Street
Full Address - Street, City, State ,Zip

Peter Clement
Contact Name

Sr. Manager - Project Design & Management
Contact Title

(479) 277-6678
Contact Phone & Extension

Contact email address

## Generator Information

Provide the following information on generator of the material:

G. Lopes Construction, Inc.
Name of Organization / Owner

490 Winthrop St, Taunton, MA 02780
Full Address - Street, City, State, Zip

Jason Souza
Contact Name

Contact Title

508-824-4834
Contact Phone & Extension

Contact email address

## Consultant Information

Provide the following information on the primary consultant overseeing the project:

ENVIRON - Douglas Lindsay, PG, LSP
Name

Senior Manager
Title

20 Custom House St, Boston, MA 02110
Full Address - Street, City, State, Zip

(617) 946-6111
Phone & Extension

dlindsay@environcorp.com
Email address

## Estimated Soil Quantity

13,500 **Tons** 9,000 **Cubic Yards**

## Soil Contaminants

Low concentrations of petroleum hydrocarbons and certain PP13 metals

## Analyses Performed

Please check all that apply

- [x] TPH
- [x] Volatile Organics ; EPA 8260
- [x] Semi-volatile Organics; EPA 8270
- [x] 13 Priority Pollutant Metals
- [x] List Other Tests

PCBs, EPH, VPH, conductivity, pH, flashpoint, reactivity

Laboratory performing tests (attach)

Site Restoration Technologies

# Material Submittal Request

## Description / Source of Contaminants

Urban fill and natural peat material

Describe

Not Applicable

Date of Release (if known)

☑ Unknown / Historical

## Soil Description

Peat and sand with some urban fill material

Physical Description (sand, gravel, silt, etc.)

Classification Method (if known)

**Check if the following materials are present:**

- ☐ Clay
- ☐ Coal
- ☐ Ash
- ☐ Construction Debris
- ☐ Vegetative Matter
- ☑ Other Deleterious Material (Please list):

Some Peat Material

## Soil Characterization Methodology

Select the Sampling Method Used

☑ Grab ☑ Composite ☐ Biased samples (e.g, headspace screened, visually contaminated)

Petroleum hydrocarbons and certain PP13 metals

Constituents of Concern

## Site History

☐ Check if extra sheets attached

Construction site

Current Use

Textile Mill

Past Use

I, the generator, having used due diligence, have determined that there is no reason to suspect or believe that the soil has been impacted by any releases of oil or hazardous materials other than those I have identified in the above documentation.

I, the generator, realize that due diligence shall consist of a search of information and records reasonably available to the generator of the proposed soil and sufficient to make the determination. Such records and information may include, but are not limited to, those of the generator, location of generation (i.e., facility if not the generator), the Department of Environmental Management (or other environmental officials), and the municipality (i.e., Board of Health, Fire Department) within which the site is located.

Signature of Generator

Date

**Massachusetts Department of Environmental Protection**
Bureau of Waste Prevention

# Material Shipping Record & Log

**For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000**

Tracking Number

## A. Location Information

**Important:** When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

1. Provide the following information on the location where the waste was generated:

Fmr Quaker Fabrics
Release name (optional)

941 Grinnell Street
Street

Location aid

Fall River
City/Town

MA
State

02721-4005
Zip code

2. Date/Period of generation: February 2013 (From) March 2013 (To)

3. U.S. EPA ID number:

4. 21E release: ☐ Yes ☒ No

5. List additional tracking documents associated with this document:

## B. Generator Information

**Important:** This form is not to be used for the shipment of remediation wastes subject to management under section 310 CMR 40.0035 of the Massachusetts Contingency Plan nor is it to be used in lieu of a hazardous waste manifest for hazardous waste or recyclable materials subject to the Massachusetts Hazardous Waste Regulations 310 CMR 30.000.

1. Provide the following generator information:

G. Lopes Construction, Inc.
Name of organization

Jason Souza
Contact name

Title

490 Winthrop Street
Street address

Taunton
City/Town

MA
State

02780
Zip code

(508) 824-4834
Telephone number(including extension)

## C. Owner and/or Operator Information

1. If the owner and/or operator is different from the generator as indicated in Section B, provide the following information:

Check applicable: ☒ owner ☐ operator

Sam's Real Estate Business Trust
Name of organization

Peter Clement
Contact name

Sr. Manager - Project Design & Management
Title

2001 SE 10th Street #0550
Street address

Bentonville
City/Town

AR
State

72716-0550
Zip code

(479) 277-6678
Telephone number

Ext.

**Massachusetts Department of Environmental Protection**
Bureau of Waste Prevention

# Material Shipping Record & Log

**For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000**

Tracking Number

## D. Transporter/Common Carrier Information

1. Provide the following information:

G. Lopes Construction, Inc.
Transporter/Common carrier name

Hazardous waste license number (if applicable)
Licensing state (if applicable)

Jason Souza
Contact person
Title

490 Winthrop Street
Street

Taunton
City/Town
MA
State
02780
Zip code

(508) 824-4834
Telephone number
Ext.

## E. Receiving Facility Information

1. Provide the following information on the receiving facility:

Portsmouth, RI Municipal Landfill
Operator/Facility name

David Peter
Contact person
Manager
Title

Park Avenue
Street

Portsmouth
City/Town
RI
State
02781
Zip code

(508) 380-1267
Telephone number
Ext.

2. Type of facility:

- ☐ asphalt batch/cold mix
- ☐ asphalt batch/hot mix
- ☒ landfill/disposal
- ☒ landfill/ daily cover
- ☐ thermal processing
- ☐ landfill/structural fill
- ☐ other(specify): _____

3. Permit number: _____

**Massachusetts Department of Environmental Protection**
Bureau of Waste Prevention

# Material Shipping Record & Log

**For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000**

Tracking Number

## F. Description of Material

Check all that apply:

1. a. ☒ soil ☐ dredge material ☐ fill

   b. Description: Peat and Sand with some urban fill material

   c. Classification: ☐ MIT ☐ USDA ☐ USAEC ☐ ASEE

2. ☐ Other(describe):

3. Type of contamination:

   a. ☐ gasoline ☐ diesel fuel ☐ #2 oil ☐ #4 oil
   ☐ #6 oil ☐ waste oil ☐ kerosene ☐ jet fuel

   b. ☐ Debris:

   ☐ demolition ☐ vegetative ☐ inorganic

   c. ☒ Other(describe): Non-MCP regulated detections of petroleum hydrocarbons, PAHs, and PP13 metals

4. Constituents of concern (check all that apply):

   ☒ As ☐ HVOCs
   ☐ Cd ☐ PATH
   ☐ Cr ☐ VOCs
   ☐ Pb ☒ PAHs
   ☐ Hg ☐ BNAs
   ☐ Na ☒ TPH
   ☐ PCBs ☐ Other(describe):

5. Analyses performed (check all that apply):

   ☒ As ☐ PATH
   ☒ Cd ☒ VOCs
   ☒ Cr ☒ PAHs
   ☒ Pb ☐ BNAs
   ☒ Hg ☒ TPH
   ☒ Na ☒ TCLP (inorganic)
   ☒ PCBs ☐ TCLP (organic)
   ☐ HVOCs ☒ Other(describe): specific conductance, pH, reactivity, flashpoint

6. Screening performed:

   Total organic vapors
   Type

   PID
   Instrument used

   TOV concentrations of 0.9 - 6.6 ppmv
   Constituents

**Massachusetts Department of Environmental Protection**
Bureau of Waste Prevention

# Material Shipping Record & Log

**For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000**

Tracking Number

## F. Description of Material (cont.)

7. Estimated volume of materials:

| 9,000 | 13,500 | |
|---|---|---|
| Cubic yards | Tons | Other(specify units) |

8. Contaminant source (check one):

- ☐ transportation accident
- ☐ ust
- ☒ other(describe): historic mill use

9. Indicate which waste characterization support documentation is attached:

- ☐ site history information
- ☒ sampling and analytical methods/procedure
- ☒ laboratory data
- ☒ field screening data

If supporting documentation is not appended, provide an attachment stating the date and in connection with what document such information was previously submitted to the facility.

## G. Qualified Environmental Professional Opinion

"I have personally examined and am familiar with the information contained on and submitted with this form. Based on this information, it is my opinion that the testing and assessment actions undertaken were adequate to characterize the waste, and that the facility or location can accept wastes with the characteristics described in this submittal. I am aware that significant penalties including, but not limited to, possible fines and imprisonment may result if I willfully submit information which I know to be false, inaccurate, or materially incomplete."

ENVIRON International Corporation
Name of organization

Douglas M. Lindsay, PG, LSP
Name of professional

Senior Manager
Title

617-946-6111 Ext.
Telephone number

Signature

2/28/2013
Date

9383
License number

Seal:

**Massachusetts Department of Environmental Protection**
Bureau of Waste Prevention

# Material Shipping Record & Log

**For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000**

Tracking Number

## H. Certification of Generator

"I certify under penalties of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information contained herein is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information."

Signature

Date

Name(print)

## I. Acknowledgment of Receipt by Receiving Facility

Receiving facility

Representative (print)

Title

Signature

Date

**Massachusetts Department of Environmental Protection**
Bureau of Waste Prevention

# Material Shipping Record & Log

**For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000**

_____
Tracking Number

## J. Load Information

**Note:**
Make additional copies of this page as necessary.

Load#: _____

Signature of transporter _____ Receiving facility _____

Date received _____ Time received _____ Date of shipment _____ Time of shipment _____

Truck/Tractor registration _____ Trailer registration _____

Load size (cubic yards/tons) _____

Load#: _____

Signature of transporter _____ Receiving facility _____

Date received _____ Time received _____ Date of shipment _____ Time of shipment _____

Truck/Tractor registration _____ Trailer registration _____

Load size (cubic yards/tons) _____

Load#: _____

Signature of transporter _____ Receiving facility _____

Date received _____ Time received _____ Date of shipment _____ Time of shipment _____

Truck/Tractor registration _____ Trailer registration _____

Load size (cubic yards/tons) _____

## K. Log Sheet Volume Information

Total volume this page (cubic yards/tons) _____

Total carried forward (cubic yards/tons) _____

Total carried forward and this page (cubic yards/tons) _____

Page _____ of _____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Westfield
Westfield Executive Park
53 Southampton Road
Westfield, MA 01085
Tel: (413)572-4000

TestAmerica Job ID: 360-42392-1
Client Project/Site: 941 Grimell St./3329188I
Revision: 1

For:
ENVIRON International Corp.
3 Carlisle Road
Suite 210
Westford, Massachusetts 01886

Attn: Jason Wilkinson

*Authorized for release by:*
*2/27/2013 12:13:38 PM*

Becky Mason
Project Manager II
becky.mason@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

# Table of Contents

Cover Page . . . . . 1
Table of Contents . . . . . 2
Case Narrative . . . . . 3
Detection Summary . . . . . 6
Method Summary . . . . . 11
Sample Summary . . . . . 12
Client Sample Results . . . . . 13
Definitions . . . . . 61
QC Association . . . . . 62
Surrogate Summary . . . . . 71
QC Sample Results . . . . . 74
Chronicle . . . . . 100
Certification Summary . . . . . 107
Receipt Checklists . . . . . 109
Chain of Custody . . . . . 110

# MassDEP Analytical Protocol Certification Form

Laboratory Name: **TestAmerica Westfield** Project #: **360-42392-1**

Project Location: **Fall River, MA** RTN:

**This form provides certifications for the following data set: list Laboratory Sample ID Number(s):**

**360-42392-(1-9)**

Matrices: ☐ Groundwater/Surface Water ☒ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

**CAM Protocols (check all that apply below):**

| | | | | | |
|---|---|---|---|---|---|
| 8260 VOC CAM II A ☒ | 7470/7471 Hg CAM III B ☒ | Mass DEP VPH CAM IV A ☒ | 8081 Pesticides CAM V B ☐ | 7196 Hex Cr CAM VI B ☐ | Mass DEP APH CAM IX A ☐ |
| 8270 SVOC CAM II B ☒ | 7010 Metals CAM III C ☐ | Mass DEP EPH CAM IV B ☒ | 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 Responses to Questions A through F are 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 time. | ☒ Yes ☐ No |
| **B** | Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed? | ☒ Yes ☐ No |
| **C** | Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances? | ☒ Yes ☐ No |
| **D** | Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"? | ☒ Yes ☐ No |
| **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).<br>b. APH and TO-15 Methods only: Was the complete analyte list reported for each method? | ☒ Yes ☐ No<br>☐ Yes ☐ No |
| **F** | Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)? | ☒ Yes ☐ No |

**Responses to Questions G, H and I below are required for "Presumptive Certainty" status**

| | | |
|---|---|---|
| **G** | Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)? | ☐ Yes ☒ 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 WCS-07-350***

| | | |
|---|---|---|
| **H** | Were **all** QC performance standards specified in the CAM protocol(s) achieved? | ☐ Yes ☒ No[1] |
| **I** | Were results reported for the complete analyte list specified in the selected CAM protocol(s) ? | ☐ Yes ☒ No[1] |

[1] All negative responses must be addressed in an attached laboratory 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, is accurate and complete.***

Signature: Position: Laboratory Director

Printed Name: Steven C. Hartmann Date: 9/6/12 14:46

This form has been electronically signed and approved

## Job ID: 360-42392-1

### Laboratory: TestAmerica Westfield

**Narrative**

**Revised report: Per client request now reporting PP13 metals and Barium for all samples.**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

TestAmerica's Reporting Limits (RLs) for this report may not always meet client specified method reporting limits due to various reasons such as methodology, dilutions, matrix or moisture content (soils). TestAmerica's pivot table EDD documents which compound(s) exceed certain regulatory standards. If not included with your deliverables, please contact your Project Manager about the availability of this EDD for your report.

**Receipt**
The samples were received on 8/27/2012 7:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.0º C and 1.2º C.

**GC/MS VOA**
Method 8260C: The calibration curve uses quadratic regressions for Methylene Chloride, 2,2-Dichloropropane, 1,4-Dioxane and Styrene as allowed by the method.

The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 94876 exceeded control limits for one or more compounds. The data is flagged accordingly. Please reference the QC report for details.

The %RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch 94876 exceeded control limits for one or more compounds. The data is flagged accordingly. Please reference the QC report for details.

The following samples were provided to the laboratory with a significantly different initial weight than that required by the reference method: P13 (360-42392-4), P14 (360-42392-5), P18 (360-42392-6), P5 (360-42392-2), C-P5-P14 (360-42392-9). The method requires 1:1 ratio of soil to DI Water. The amount provided was below this range.

The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 94924 exceeded control limits for one or more compounds. The data is flagged accordingly. Please reference the QC report for details.

Internal standard (ISTD) responses for 1,4-Dichlorobenzene-d4 were outside of acceptance limits for the following samples: C-P5-P14 (360-42392-9) (32%), P24 (360-42392-8) (48%). The samples were ND for assoicated compounds: Bromoform, 1,1,2,2-Tetrachloroethane, 1,4-Dichlorobenzene, n-Butylbenzene, 1,2-Dichlorobenzene, 1,2-Dibromo-3-chloropropane, Hexachlorobutadiene, 1,2,4-Trichlorobenzene, Naphthalene and 1,2,3-Trichlorobenzene.

**GC/MS Semi VOA**
Method 8270D: The calibration curve exceeds minimum response factor (RF) criteria for 2-Chlorophenol, however, the RF is above 0.05

The laboratory control sample duplicate (LCSD) for batch 94882 exceeded control limits for one or more compounds. The data is flagged accordingly. Please reference the QC report for details

The following samples were diluted due to color and viscosity: C-P5-P14 (360-42392-9), P10 (360-42392-3), P13 (360-42392-4), P14 (360-42392-5), P18 (360-42392-6), P20 (360-42392-7), P24 (360-42392-8), P4 (360-42392-1), P5 (360-42392-2). Elevated reporting limits (RL) are provided.

**GC VOA**

## Job ID: 360-42392-1 (Continued)

### Laboratory: TestAmerica Westfield (Continued)

Method MAVPH: The calibration curve uses quadratic regressions for C9-C12 Aliphatics as allowed by the method.

The following samples were provided to the laboratory with a significantly different initial weight than that required by the reference method: C-P5-P14 (360-42392-9), P13 (360-42392-4), P14 (360-42392-5), P18 (360-42392-6), P5 (360-42392-2). The method requires 1:1 ratio of soil to methanol. The amount provided was below this range.

Samples P10 (360-42392-3), P20 (360-42392-7), P24 (360-42392-8), P4 (360-42392-1) had a 1:1 ratio of soil to methanol.

At the request of the client, only the carbon ranges are reported for this job.

**GC Semi VOA**
Method 8015B: The following samples were diluted due to color and viscosity: C-P5-P14 (360-42392-9), P10 (360-42392-3), P13 (360-42392-4), P14 (360-42392-5), P18 (360-42392-6), P20 (360-42392-7), P24 (360-42392-8), P4 (360-42392-1), P5 (360-42392-2). Elevated reporting limits (RL) are provided.

The closing continuing calibration verification (CCV) for analytical batch 94820 recovered above 15% but below 25% for the range C9-C36.

Method MA-EPH: The following samples were diluted due to color and viscosity: P24 (360-42392-8), P5 (360-42392-2). Elevated reporting limits (RL) are provided.

At the request of the client, only the carbon ranges are reported for this job.

**Metals**
Method 6010C: At the request of the client, an abbreviated/modified RCP analyte list was reported for this job.

**General Chemistry**
Method 9014: Please note that the Reactive Cyanide method is no longer an approved method and is no longer supported by federal regulation.

Method 9034: Please note that the Reactive Sulfide method is no longer an approved method and is no longer supported by federal regulation.

# Detection Summary

Client: ENVIRON International Corp.
Project/Site: 941 Grimell St./3329188I

TestAmerica Job ID: 360-42392-1

## Client Sample ID: P4 — Lab Sample ID: 360-42392-1

| Analyte | Result | Qualifier | NONE | NONE | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Flashpoint | >200 | | | | Fahrenheit | 1 | | 1010 | Total/NA |

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 12 | | 3.0 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Barium | 77 | | 1.5 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Cadmium | 0.98 | | 0.60 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Chromium | 17 | | 1.5 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Selenium | 3.9 | | 1.5 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Zinc | 140 | | 7.5 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Lead | 170 | | 1.5 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Beryllium | 2.0 | | 0.60 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Nickel | 14 | | 3.0 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Copper | 36 | | 3.0 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |

| Analyte | Result | Qualifier | RL | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons (C9-C36) | 1300 | | 260 | | mg/Kg | 10 | ☼ | 8015B | Total/NA |
| Diesel Range Organics [C10-C28] | 590 | | 260 | | mg/Kg | 10 | ☼ | 8015B | Total/NA |
| C11-C22 Aromatics (unadjusted) | 93 | | 26 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C11-C22 Aromatics (Adjusted) | 93 | | 26 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C19-C36 Aliphatics | 170 | | 26 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| Total EPH | 260 | | 26 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| pH | 5.94 | | 1.00 | | SU | 1 | | 9045C | Soluble |
| Specific Conductance | 2000 | | 4.0 | | umhos/cm | 1 | | SM 2510B | Soluble |

## Client Sample ID: P5 — Lab Sample ID: 360-42392-2

| Analyte | Result | Qualifier | NONE | NONE | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Flashpoint | >200 | | | | Fahrenheit | 1 | | 1010 | Total/NA |

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 2-Butanone (MEK) | 290 | * | 110 | | ug/Kg | 1 | ☼ | 8260C | Total/NA |
| Arsenic | 12 | | 2.8 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Barium | 80 | | 1.4 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Cadmium | 0.83 | | 0.57 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Chromium | 68 | | 1.4 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Selenium | 1.4 | | 1.4 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Zinc | 190 | | 7.1 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Lead | 190 | | 1.4 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Beryllium | 0.94 | | 0.57 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Nickel | 8.7 | | 2.8 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Copper | 53 | | 2.8 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Mercury | 0.40 | | 0.19 | | mg/Kg | 1 | ☼ | 7471B | Total/NA |

| Analyte | Result | Qualifier | RL | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons (C9-C36) | 4000 | | 220 | | mg/Kg | 10 | ☼ | 8015B | Total/NA |
| Diesel Range Organics [C10-C28] | 2200 | | 220 | | mg/Kg | 10 | ☼ | 8015B | Total/NA |
| C11-C22 Aromatics (unadjusted) | 110 | | 110 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| C11-C22 Aromatics (Adjusted) | 110 | | 110 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| C19-C36 Aliphatics | 150 | | 110 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| Total EPH | 260 | | 110 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| pH | 5.84 | | 1.00 | | SU | 1 | | 9045C | Soluble |
| Specific Conductance | 710 | | 4.0 | | umhos/cm | 1 | | SM 2510B | Soluble |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: ENVIRON International Corp.
Project/Site: 941 Grimell St./3329188I

TestAmerica Job ID: 360-42392-1

## Client Sample ID: P10 — Lab Sample ID: 360-42392-3

| Analyte | Result | Qualifier | NONE | NONE | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Flashpoint | >200 | | | | Fahrenheit | 1 | | 1010 | Total/NA |

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 5.9 | | 1.8 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Barium | 140 | | 0.90 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Cadmium | 0.42 | | 0.36 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Chromium | 17 | | 0.90 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Lead | 89 | | 0.90 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Beryllium | 0.60 | | 0.36 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Copper | 47 | | 1.8 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Nickel | 16 | | 1.8 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Zinc | 110 | | 4.5 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |

| Analyte | Result | Qualifier | RL | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons (C9-C36) | 140 | | 46 | | mg/Kg | 10 | ☼ | 8015B | Total/NA |
| C11-C22 Aromatics (unadjusted) | 7.7 | | 4.6 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C11-C22 Aromatics (Adjusted) | 7.7 | | 4.6 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C19-C36 Aliphatics | 6.9 | | 4.6 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| Total EPH | 15 | | 4.6 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| pH | 5.76 | | 1.00 | | SU | 1 | | 9045C | Soluble |
| Specific Conductance | 920 | | 3.9 | | umhos/cm | 1 | | SM 2510B | Soluble |

## Client Sample ID: P13 — Lab Sample ID: 360-42392-4

| Analyte | Result | Qualifier | NONE | NONE | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Flashpoint | >200 | | | | Fahrenheit | 1 | | 1010 | Total/NA |

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 2-Butanone (MEK) | 260 | * | 120 | | ug/Kg | 1 | ☼ | 8260C | Total/NA |
| Arsenic | 5.0 | | 4.4 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Barium | 44 | | 2.2 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Chromium | 12 | | 2.2 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Selenium | 3.4 | | 2.2 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Zinc | 12 | | 11 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Lead | 9.5 | | 2.2 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Beryllium | 2.9 | | 0.88 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Nickel | 8.2 | | 4.4 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Copper | 19 | | 4.4 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |

| Analyte | Result | Qualifier | RL | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons (C9-C36) | 1600 | | 340 | | mg/Kg | 10 | ☼ | 8015B | Total/NA |
| Diesel Range Organics [C10-C28] | 430 | | 340 | | mg/Kg | 10 | ☼ | 8015B | Total/NA |
| C11-C22 Aromatics (unadjusted) | 81 | | 34 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C11-C22 Aromatics (Adjusted) | 81 | | 34 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C19-C36 Aliphatics | 59 | | 34 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| Total EPH | 140 | | 34 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| pH | 5.29 | | 1.00 | | SU | 1 | | 9045C | Soluble |
| Specific Conductance | 770 | | 3.9 | | umhos/cm | 1 | | SM 2510B | Soluble |

## Client Sample ID: P14 — Lab Sample ID: 360-42392-5

This Detection Summary does not include radiochemical test results.

## Client Sample ID: P14 (Continued) — Lab Sample ID: 360-42392-5

| Analyte | Result | Qualifier | NONE | NONE | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Flashpoint | >200 | | | | Fahrenheit | 1 | | 1010 | Total/NA |

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 2-Butanone (MEK) | 300 | * | 200 | | ug/Kg | 1 | ☼ | 8260C | Total/NA |
| Barium | 36 | | 3.0 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Chromium | 3.0 | | 3.0 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Copper | 7.2 | | 6.1 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |

| Analyte | Result | Qualifier | RL | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons (C9-C36) | 2400 | | 450 | | mg/Kg | 10 | ☼ | 8015B | Total/NA |
| Diesel Range Organics [C10-C28] | 620 | | 450 | | mg/Kg | 10 | ☼ | 8015B | Total/NA |
| C11-C22 Aromatics (unadjusted) | 52 | | 15 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C11-C22 Aromatics (Adjusted) | 52 | | 15 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C19-C36 Aliphatics | 48 | | 15 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| Total EPH | 100 | | 15 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| pH | 5.27 | | 1.00 | | SU | 1 | | 9045C | Soluble |
| Specific Conductance | 510 | | 3.9 | | umhos/cm | 1 | | SM 2510B | Soluble |

## Client Sample ID: P18 — Lab Sample ID: 360-42392-6

| Analyte | Result | Qualifier | NONE | NONE | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Flashpoint | >200 | | | | Fahrenheit | 1 | | 1010 | Total/NA |

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 2-Butanone (MEK) | 320 | * | 120 | | ug/Kg | 1 | ☼ | 8260C | Total/NA |
| Arsenic | 3.7 | | 2.5 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Barium | 38 | | 1.3 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Chromium | 12 | | 1.3 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Lead | 21 | | 1.3 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Beryllium | 0.66 | | 0.51 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Copper | 11 | | 2.5 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Nickel | 6.8 | | 2.5 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Zinc | 37 | | 6.3 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Mercury | 0.21 | | 0.14 | | mg/Kg | 1 | ☼ | 7471B | Total/NA |

| Analyte | Result | Qualifier | RL | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons (C9-C36) | 790 | | 200 | | mg/Kg | 10 | ☼ | 8015B | Total/NA |
| Diesel Range Organics [C10-C28] | 240 | | 200 | | mg/Kg | 10 | ☼ | 8015B | Total/NA |
| C11-C22 Aromatics (unadjusted) | 41 | | 19 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C11-C22 Aromatics (Adjusted) | 41 | | 19 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C19-C36 Aliphatics | 46 | | 19 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| Total EPH | 87 | | 19 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| pH | 5.22 | | 1.00 | | SU | 1 | | 9045C | Soluble |
| Specific Conductance | 2100 | | 4.0 | | umhos/cm | 1 | | SM 2510B | Soluble |

## Client Sample ID: P20 — Lab Sample ID: 360-42392-7

| Analyte | Result | Qualifier | NONE | NONE | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Flashpoint | >200 | | | | Fahrenheit | 1 | | 1010 | Total/NA |

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | 33 | | 33 | | ug/Kg | 1 | ☼ | 8260C | Total/NA |
| Phenanthrene | 1100 | | 1000 | | ug/Kg | 5 | ☼ | 8270D | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: P20 (Continued) — Lab Sample ID: 360-42392-7

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 3.0 | | 1.6 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Barium | 32 | | 0.81 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Chromium | 8.5 | | 0.81 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Zinc | 27 | | 4.1 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Lead | 7.9 | | 0.81 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Beryllium | 0.40 | | 0.33 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Nickel | 8.3 | | 1.6 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Copper | 10 | | 1.6 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |

| Analyte | Result | Qualifier | RL | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons (C9-C36) | 200 | | 41 | | mg/Kg | 10 | ☼ | 8015B | Total/NA |
| Diesel Range Organics [C10-C28] | 87 | | 41 | | mg/Kg | 10 | ☼ | 8015B | Total/NA |
| C11-C22 Aromatics (unadjusted) | 55 | | 4.0 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C11-C22 Aromatics (Adjusted) | 39 | | 4.0 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C19-C36 Aliphatics | 4.5 | | 4.0 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| Total EPH | 44 | | 4.0 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| pH | 6.05 | | 1.00 | | SU | 1 | | 9045C | Soluble |
| Specific Conductance | 250 | | 3.9 | | umhos/cm | 1 | | SM 2510B | Soluble |

## Client Sample ID: P24 — Lab Sample ID: 360-42392-8

| Analyte | Result | Qualifier | NONE | NONE | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Flashpoint | >200 | | | | Fahrenheit | 1 | | 1010 | Total/NA |

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 2-Butanone (MEK) | 37 | * | 35 | | ug/Kg | 1 | ☼ | 8260C | Total/NA |
| Anthracene | 1000 | | 1000 | | ug/Kg | 5 | ☼ | 8270D | Total/NA |
| Benzo[a]anthracene | 2600 | | 1000 | | ug/Kg | 5 | ☼ | 8270D | Total/NA |
| Benzo[a]pyrene | 2400 | | 1000 | | ug/Kg | 5 | ☼ | 8270D | Total/NA |
| Benzo[b]fluoranthene | 2700 | | 1000 | | ug/Kg | 5 | ☼ | 8270D | Total/NA |
| Benzo[g,h,i]perylene | 1700 | | 1000 | | ug/Kg | 5 | ☼ | 8270D | Total/NA |
| Benzo[k]fluoranthene | 1200 | | 1100 | | ug/Kg | 5 | ☼ | 8270D | Total/NA |
| Chrysene | 2900 | | 1000 | | ug/Kg | 5 | ☼ | 8270D | Total/NA |
| Fluoranthene | 4800 | | 1000 | | ug/Kg | 5 | ☼ | 8270D | Total/NA |
| Phenanthrene | 3900 | | 1000 | | ug/Kg | 5 | ☼ | 8270D | Total/NA |
| Pyrene | 5800 | | 1000 | | ug/Kg | 5 | ☼ | 8270D | Total/NA |
| Arsenic | 2.3 | | 1.3 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Barium | 17 | | 0.64 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Cadmium | 0.42 | | 0.26 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Chromium | 5.5 | | 0.64 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Zinc | 45 | | 3.2 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Lead | 22 | | 0.64 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Nickel | 7.3 | | 1.3 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Copper | 6.5 | | 1.3 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Mercury | 1.9 | | 0.11 | | mg/Kg | 1 | ☼ | 7471B | Total/NA |

| Analyte | Result | Qualifier | RL | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons (C9-C36) | 730 | | 40 | | mg/Kg | 10 | ☼ | 8015B | Total/NA |
| Diesel Range Organics [C10-C28] | 380 | | 40 | | mg/Kg | 10 | ☼ | 8015B | Total/NA |
| C11-C22 Aromatics (unadjusted) | 93 | | 20 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| C11-C22 Aromatics (Adjusted) | 74 | | 20 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: P24 (Continued) — Lab Sample ID: 360-42392-8

| Analyte | Result | Qualifier | RL | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| C19-C36 Aliphatics | 58 | | 20 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| Total EPH | 130 | | 20 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| pH | 6.02 | | 1.00 | | SU | 1 | | 9045C | Soluble |
| Specific Conductance | 520 | | 3.9 | | umhos/cm | 1 | | SM 2510B | Soluble |

## Client Sample ID: C-P5-P14 — Lab Sample ID: 360-42392-9

| Analyte | Result | Qualifier | NONE | NONE | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Flashpoint | >200 | | | | Fahrenheit | 1 | | 1010 | Total/NA |

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 2-Butanone (MEK) | 270 | * | 160 | | ug/Kg | 1 | ☼ | 8260C | Total/NA |
| Arsenic | 9.5 | | 4.4 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Barium | 91 | | 2.2 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Chromium | 18 | | 2.2 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Lead | 49 | | 2.2 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Beryllium | 1.6 | | 0.89 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Copper | 18 | | 4.4 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Nickel | 12 | | 4.4 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |
| Zinc | 96 | | 11 | | mg/Kg | 1 | ☼ | 6010C | Total/NA |

| Analyte | Result | Qualifier | RL | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons (C9-C36) | 3000 | | 390 | | mg/Kg | 10 | ☼ | 8015B | Total/NA |
| Diesel Range Organics [C10-C28] | 880 | | 390 | | mg/Kg | 10 | ☼ | 8015B | Total/NA |
| C11-C22 Aromatics (unadjusted) | 120 | | 38 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C11-C22 Aromatics (Adjusted) | 120 | | 38 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C19-C36 Aliphatics | 170 | | 38 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| Total EPH | 290 | | 38 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| pH | 5.49 | | 1.00 | | SU | 1 | | 9045C | Soluble |
| Specific Conductance | 730 | | 3.9 | | umhos/cm | 1 | | SM 2510B | Soluble |

This Detection Summary does not include radiochemical test results.

# Method Summary

Client: ENVIRON International Corp.
Project/Site: 941 Grimell St./3329188I

TestAmerica Job ID: 360-42392-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8260C | Volatile Organic Compounds (GC/MS) | MA DEP | TAL WFD |
| 8270D | Semivolatile Organic Compounds (GC/MS) | MA DEP | TAL WFD |
| MAVPH | Massachusetts - Volatile Petroleum Hydrocarbons (GC) | MA DEP | TAL WFD |
| 8015B | Diesel Range Organics (DRO) (GC) | SW846 | TAL WFD |
| 8082 | Polychlorinated Biphenyls (GC/ECD) | MA DEP | TAL WFD |
| MA-EPH | Massachusetts - Extractable Petroleum Hydrocarbons (GC) | MA DEP | TAL WFD |
| 6010C | Metals (ICP) | SW846 | TAL WFD |
| 7471B | Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) | SW846 | TAL WFD |
| 1010 | Ignitability, Pensky-Martens Closed-Cup Method | SW846 | TAL WFD |
| 9014 | Cyanide, Reactive | SW846 | TAL WFD |
| 9034 | Sulfide, Reactive | SW846 | TAL WFD |
| 9045C | pH | SW846 | TAL WFD |
| Moisture | Percent Moisture | EPA | TAL WFD |
| SM 2510B | Conductivity, Specific Conductance | SM | TAL WFD |

**Protocol References:**

EPA = US Environmental Protection Agency

MA DEP = Massachusetts Department Of Environmental Protection

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL WFD = TestAmerica Westfield, Westfield Executive Park, 53 Southampton Road, Westfield, MA 01085, TEL (413)572-4000

# Sample Summary

Client: ENVIRON International Corp.
Project/Site: 941 Grimell St./3329188I

TestAmerica Job ID: 360-42392-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 360-42392-1 | P4 | Solid | 08/27/12 09:40 | 08/27/12 19:25 |
| 360-42392-2 | P5 | Solid | 08/27/12 10:20 | 08/27/12 19:25 |
| 360-42392-3 | P10 | Solid | 08/27/12 12:45 | 08/27/12 19:25 |
| 360-42392-4 | P13 | Solid | 08/27/12 14:05 | 08/27/12 19:25 |
| 360-42392-5 | P14 | Solid | 08/27/12 13:50 | 08/27/12 19:25 |
| 360-42392-6 | P18 | Solid | 08/27/12 15:00 | 08/27/12 19:25 |
| 360-42392-7 | P20 | Solid | 08/27/12 16:05 | 08/27/12 19:25 |
| 360-42392-8 | P24 | Solid | 08/27/12 16:30 | 08/27/12 19:25 |
| 360-42392-9 | C-P5-P14 | Solid | 08/27/12 16:45 | 08/27/12 19:25 |

## Method: 8260C - Volatile Organic Compounds (GC/MS)

**Client Sample ID: P4**
**Date Collected: 08/27/12 09:40**
**Date Received: 08/27/12 19:25**

**Lab Sample ID: 360-42392-1**
**Matrix: Solid**
**Percent Solids: 37.3**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 1,1,1-Trichloroethane | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 1,1,2-Trichloroethane | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 1,1-Dichloroethane | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 1,1-Dichloroethene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 1,1-Dichloropropene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 1,2,3-Trichloropropane | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 63 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 1,2-Dichlorobenzene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 1,2-Dichloroethane | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 1,2-Dichloropropane | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 1,3-Dichlorobenzene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 1,3-Dichloropropane | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 1,4-Dichlorobenzene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 1,4-Dioxane | ND | * | 630 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 2,2-Dichloropropane | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 2-Butanone (MEK) | ND | * | 63 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 2-Chlorotoluene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 2-Hexanone | ND | * | 63 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 4-Chlorotoluene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 4-Isopropyltoluene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 63 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Acetone | ND | * | 630 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Benzene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Bromobenzene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Bromoform | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Bromomethane | ND | | 13 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Carbon disulfide | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Carbon tetrachloride | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Chlorobenzene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Chlorobromomethane | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Chlorodibromomethane | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Chloroethane | ND | * | 13 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Chloroform | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Chloromethane | ND | | 13 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| cis-1,2-Dichloroethene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| cis-1,3-Dichloropropene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Dibromomethane | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Dichlorobromomethane | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Dichlorodifluoromethane | ND | | 13 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Ethyl ether | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Ethylbenzene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Ethylene Dibromide | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Hexachlorobutadiene | ND | * | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: P4** — **Lab Sample ID: 360-42392-1**
**Date Collected: 08/27/12 09:40** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 37.3**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Isopropyl ether | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Isopropylbenzene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| m-Xylene & p-Xylene | ND | | 13 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Methyl tert-butyl ether | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Methylene Chloride | ND | | 25 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| n-Butylbenzene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| N-Propylbenzene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Naphthalene | ND | | 63 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| o-Xylene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| sec-Butylbenzene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Styrene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Tert-amyl methyl ether | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Tert-butyl ethyl ether | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| tert-Butylbenzene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Tetrachloroethene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Tetrahydrofuran | ND | * | 130 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Toluene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| trans-1,2-Dichloroethene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| trans-1,3-Dichloropropene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Trichloroethene | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Trichlorofluoromethane | ND | | 13 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |
| Vinyl chloride | ND | | 6.3 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 01:52 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *84* | | *70 - 130* | *08/30/12 13:58* | *08/31/12 01:52* | *1* |
| *Dibromofluoromethane* | *93* | | *70 - 130* | *08/30/12 13:58* | *08/31/12 01:52* | *1* |
| *Toluene-d8 (Surr)* | *93* | | *70 - 130* | *08/30/12 13:58* | *08/31/12 01:52* | *1* |

**Client Sample ID: P5** — **Lab Sample ID: 360-42392-2**
**Date Collected: 08/27/12 10:20** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 42.9**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| 1,1,1-Trichloroethane | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| 1,1,2-Trichloroethane | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| 1,1-Dichloroethane | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| 1,1-Dichloroethene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| 1,1-Dichloropropene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| 1,2,3-Trichloropropane | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 110 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| 1,2-Dichlorobenzene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| 1,2-Dichloroethane | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| 1,2-Dichloropropane | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| 1,3-Dichlorobenzene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| 1,3-Dichloropropane | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: P5**
**Date Collected: 08/27/12 10:20**
**Date Received: 08/27/12 19:25**

**Lab Sample ID: 360-42392-2**
**Matrix: Solid**
**Percent Solids: 42.9**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| 1,4-Dioxane | ND | * | 1100 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| 2,2-Dichloropropane | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| **2-Butanone (MEK)** | **290** | * | 110 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| 2-Chlorotoluene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| 2-Hexanone | ND | * | 110 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| 4-Chlorotoluene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| 4-Isopropyltoluene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 110 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Acetone | ND | * | 1100 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Benzene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Bromobenzene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Bromoform | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Bromomethane | ND | | 21 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Carbon disulfide | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Carbon tetrachloride | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Chlorobenzene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Chlorobromomethane | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Chlorodibromomethane | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Chloroethane | ND | * | 21 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Chloroform | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Chloromethane | ND | | 21 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| cis-1,2-Dichloroethene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| cis-1,3-Dichloropropene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Dibromomethane | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Dichlorobromomethane | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Dichlorodifluoromethane | ND | | 21 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Ethyl ether | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Ethylbenzene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Ethylene Dibromide | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Hexachlorobutadiene | ND | * | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Isopropyl ether | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Isopropylbenzene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| m-Xylene & p-Xylene | ND | | 21 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Methyl tert-butyl ether | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Methylene Chloride | ND | | 42 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| n-Butylbenzene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| N-Propylbenzene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Naphthalene | ND | | 110 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| o-Xylene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| sec-Butylbenzene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Styrene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Tert-amyl methyl ether | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Tert-butyl ethyl ether | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| tert-Butylbenzene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Tetrachloroethene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Tetrahydrofuran | ND | * | 210 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Toluene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| trans-1,2-Dichloroethene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: P5** — **Lab Sample ID: 360-42392-2**
**Date Collected: 08/27/12 10:20** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 42.9**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,3-Dichloropropene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Trichloroethene | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Trichlorofluoromethane | ND | | 21 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |
| Vinyl chloride | ND | | 11 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:15 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *72* | | *70 - 130* | *08/30/12 13:58* | *08/31/12 02:15* | *1* |
| *Dibromofluoromethane* | *94* | | *70 - 130* | *08/30/12 13:58* | *08/31/12 02:15* | *1* |
| *Toluene-d8 (Surr)* | *89* | | *70 - 130* | *08/30/12 13:58* | *08/31/12 02:15* | *1* |

**Client Sample ID: P10** — **Lab Sample ID: 360-42392-3**
**Date Collected: 08/27/12 12:45** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 71.8**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 1,1,1-Trichloroethane | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 1,1,2-Trichloroethane | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 1,1-Dichloroethane | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 1,1-Dichloroethene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 1,1-Dichloropropene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 1,2,3-Trichloropropane | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 31 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 1,2-Dichlorobenzene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 1,2-Dichloroethane | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 1,2-Dichloropropane | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 1,3-Dichlorobenzene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 1,3-Dichloropropane | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 1,4-Dichlorobenzene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 1,4-Dioxane | ND | * | 310 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 2,2-Dichloropropane | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 2-Butanone (MEK) | ND | * | 31 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 2-Chlorotoluene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 2-Hexanone | ND | * | 31 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 4-Chlorotoluene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 4-Isopropyltoluene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 31 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Acetone | ND | * | 310 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Benzene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Bromobenzene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Bromoform | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Bromomethane | ND | | 6.2 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Carbon disulfide | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Carbon tetrachloride | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Chlorobenzene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Chlorobromomethane | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: P10** — **Lab Sample ID: 360-42392-3**
**Date Collected: 08/27/12 12:45** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 71.8**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chlorodibromomethane | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Chloroethane | ND | * | 6.2 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Chloroform | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Chloromethane | ND | | 6.2 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| cis-1,2-Dichloroethene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| cis-1,3-Dichloropropene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Dibromomethane | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Dichlorobromomethane | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Dichlorodifluoromethane | ND | | 6.2 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Ethyl ether | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Ethylbenzene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Ethylene Dibromide | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Hexachlorobutadiene | ND | * | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Isopropyl ether | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Isopropylbenzene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| m-Xylene & p-Xylene | ND | | 6.2 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Methyl tert-butyl ether | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Methylene Chloride | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| n-Butylbenzene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| N-Propylbenzene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Naphthalene | ND | | 31 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| o-Xylene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| sec-Butylbenzene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Styrene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Tert-amyl methyl ether | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Tert-butyl ethyl ether | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| tert-Butylbenzene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Tetrachloroethene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Tetrahydrofuran | ND | * | 62 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Toluene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| trans-1,2-Dichloroethene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| trans-1,3-Dichloropropene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Trichloroethene | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Trichlorofluoromethane | ND | | 6.2 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |
| Vinyl chloride | ND | | 3.1 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 02:38 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *83* | | *70 - 130* | *08/30/12 13:58* | *08/31/12 02:38* | *1* |
| *Dibromofluoromethane* | *94* | | *70 - 130* | *08/30/12 13:58* | *08/31/12 02:38* | *1* |
| *Toluene-d8 (Surr)* | *94* | | *70 - 130* | *08/30/12 13:58* | *08/31/12 02:38* | *1* |

**Client Sample ID: P13** — **Lab Sample ID: 360-42392-4**
**Date Collected: 08/27/12 14:05** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 28.1**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| 1,1,1-Trichloroethane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| 1,1,2-Trichloroethane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| 1,1-Dichloroethane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: P13**
**Date Collected: 08/27/12 14:05**
**Date Received: 08/27/12 19:25**

**Lab Sample ID: 360-42392-4**
**Matrix: Solid**
**Percent Solids: 28.1**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| 1,1-Dichloropropene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| 1,2,3-Trichloropropane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 120 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| 1,2-Dichlorobenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| 1,2-Dichloroethane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| 1,2-Dichloropropane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| 1,3-Dichlorobenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| 1,3-Dichloropropane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| 1,4-Dichlorobenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| 1,4-Dioxane | ND | * | 1200 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| 2,2-Dichloropropane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| **2-Butanone (MEK)** | **260** | * | 120 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| 2-Chlorotoluene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| 2-Hexanone | ND | * | 120 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| 4-Chlorotoluene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| 4-Isopropyltoluene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 120 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Acetone | ND | * | 1200 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Benzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Bromobenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Bromoform | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Bromomethane | ND | | 25 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Carbon disulfide | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Carbon tetrachloride | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Chlorobenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Chlorobromomethane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Chlorodibromomethane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Chloroethane | ND | * | 25 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Chloroform | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Chloromethane | ND | | 25 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| cis-1,2-Dichloroethene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| cis-1,3-Dichloropropene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Dibromomethane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Dichlorobromomethane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Dichlorodifluoromethane | ND | | 25 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Ethyl ether | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Ethylbenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Ethylene Dibromide | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Hexachlorobutadiene | ND | * | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Isopropyl ether | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Isopropylbenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| m-Xylene & p-Xylene | ND | | 25 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Methyl tert-butyl ether | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Methylene Chloride | ND | | 49 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: P13** — **Lab Sample ID: 360-42392-4**
**Date Collected: 08/27/12 14:05** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 28.1**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| n-Butylbenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| N-Propylbenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Naphthalene | ND | | 120 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| o-Xylene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| sec-Butylbenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Styrene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Tert-amyl methyl ether | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Tert-butyl ethyl ether | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| tert-Butylbenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Tetrachloroethene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Tetrahydrofuran | ND | * | 250 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Toluene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| trans-1,2-Dichloroethene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| trans-1,3-Dichloropropene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Trichloroethene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Trichlorofluoromethane | ND | | 25 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |
| Vinyl chloride | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:01 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *75* | | *70 - 130* | *08/30/12 13:58* | *08/31/12 03:01* | *1* |
| *Dibromofluoromethane* | *97* | | *70 - 130* | *08/30/12 13:58* | *08/31/12 03:01* | *1* |
| *Toluene-d8 (Surr)* | *89* | | *70 - 130* | *08/30/12 13:58* | *08/31/12 03:01* | *1* |

**Client Sample ID: P14** — **Lab Sample ID: 360-42392-5**
**Date Collected: 08/27/12 13:50** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 21.9**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| 1,1,1-Trichloroethane | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| 1,1,2-Trichloroethane | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| 1,1-Dichloroethane | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| 1,1-Dichloroethene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| 1,1-Dichloropropene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| 1,2,3-Trichloropropane | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 200 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| 1,2-Dichlorobenzene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| 1,2-Dichloroethane | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| 1,2-Dichloropropane | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| 1,3-Dichlorobenzene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| 1,3-Dichloropropane | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| 1,4-Dichlorobenzene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| 1,4-Dioxane | ND | * | 2000 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| 2,2-Dichloropropane | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| **2-Butanone (MEK)** | **300** | * | 200 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| 2-Chlorotoluene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: P14**
**Date Collected: 08/27/12 13:50**
**Date Received: 08/27/12 19:25**

**Lab Sample ID: 360-42392-5**
**Matrix: Solid**
**Percent Solids: 21.9**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2-Hexanone | ND | * | 200 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| 4-Chlorotoluene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| 4-Isopropyltoluene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 200 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Acetone | ND | * | 2000 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Benzene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Bromobenzene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Bromoform | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Bromomethane | ND | | 40 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Carbon disulfide | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Carbon tetrachloride | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Chlorobenzene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Chlorobromomethane | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Chlorodibromomethane | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Chloroethane | ND | * | 40 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Chloroform | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Chloromethane | ND | | 40 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| cis-1,2-Dichloroethene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| cis-1,3-Dichloropropene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Dibromomethane | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Dichlorobromomethane | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Dichlorodifluoromethane | ND | | 40 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Ethyl ether | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Ethylbenzene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Ethylene Dibromide | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Hexachlorobutadiene | ND | * | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Isopropyl ether | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Isopropylbenzene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| m-Xylene & p-Xylene | ND | | 40 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Methyl tert-butyl ether | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Methylene Chloride | ND | | 80 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| n-Butylbenzene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| N-Propylbenzene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Naphthalene | ND | | 200 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| o-Xylene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| sec-Butylbenzene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Styrene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Tert-amyl methyl ether | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Tert-butyl ethyl ether | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| tert-Butylbenzene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Tetrachloroethene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Tetrahydrofuran | ND | * | 400 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Toluene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| trans-1,2-Dichloroethene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| trans-1,3-Dichloropropene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Trichloroethene | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Trichlorofluoromethane | ND | | 40 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Vinyl chloride | ND | | 20 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:24 | 1 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 4-Bromofluorobenzene | 75 | | 70 - 130 | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Dibromofluoromethane | 94 | | 70 - 130 | 08/30/12 13:58 | 08/31/12 03:24 | 1 |
| Toluene-d8 (Surr) | 92 | | 70 - 130 | 08/30/12 13:58 | 08/31/12 03:24 | 1 |

**Client Sample ID: P18** — **Lab Sample ID: 360-42392-6**
**Date Collected: 08/27/12 15:00** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 49.4**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| 1,1,1-Trichloroethane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| 1,1,2-Trichloroethane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| 1,1-Dichloroethane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| 1,1-Dichloroethene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| 1,1-Dichloropropene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| 1,2,3-Trichloropropane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 120 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| 1,2-Dichlorobenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| 1,2-Dichloroethane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| 1,2-Dichloropropane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| 1,3-Dichlorobenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| 1,3-Dichloropropane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| 1,4-Dichlorobenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| 1,4-Dioxane | ND | * | 1200 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| 2,2-Dichloropropane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| **2-Butanone (MEK)** | **320** | * | 120 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| 2-Chlorotoluene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| 2-Hexanone | ND | * | 120 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| 4-Chlorotoluene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| 4-Isopropyltoluene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 120 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Acetone | ND | * | 1200 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Benzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Bromobenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Bromoform | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Bromomethane | ND | | 23 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Carbon disulfide | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Carbon tetrachloride | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Chlorobenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Chlorobromomethane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Chlorodibromomethane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Chloroethane | ND | * | 23 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Chloroform | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Chloromethane | ND | | 23 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| cis-1,2-Dichloroethene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| cis-1,3-Dichloropropene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Dibromomethane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Dichlorobromomethane | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: P18** — **Lab Sample ID: 360-42392-6**
**Date Collected: 08/27/12 15:00** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 49.4**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 23 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Ethyl ether | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Ethylbenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Ethylene Dibromide | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Hexachlorobutadiene | ND | * | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Isopropyl ether | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Isopropylbenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| m-Xylene & p-Xylene | ND | | 23 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Methyl tert-butyl ether | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Methylene Chloride | ND | | 46 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| n-Butylbenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| N-Propylbenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Naphthalene | ND | | 120 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| o-Xylene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| sec-Butylbenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Styrene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Tert-amyl methyl ether | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Tert-butyl ethyl ether | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| tert-Butylbenzene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Tetrachloroethene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Tetrahydrofuran | ND | * | 230 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Toluene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| trans-1,2-Dichloroethene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| trans-1,3-Dichloropropene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Trichloroethene | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Trichlorofluoromethane | ND | | 23 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |
| Vinyl chloride | ND | | 12 | | ug/Kg | ☼ | 08/30/12 13:58 | 08/31/12 03:46 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *75* | | *70 - 130* | *08/30/12 13:58* | *08/31/12 03:46* | *1* |
| *Dibromofluoromethane* | *98* | | *70 - 130* | *08/30/12 13:58* | *08/31/12 03:46* | *1* |
| *Toluene-d8 (Surr)* | *88* | | *70 - 130* | *08/30/12 13:58* | *08/31/12 03:46* | *1* |

**Client Sample ID: P20** — **Lab Sample ID: 360-42392-7**
**Date Collected: 08/27/12 16:05** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 80.4**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| 1,1,1-Trichloroethane | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| 1,1,2-Trichloroethane | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| 1,1-Dichloroethane | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| 1,1-Dichloroethene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| 1,1-Dichloropropene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| 1,2,3-Trichloropropane | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 33 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| 1,2-Dichlorobenzene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: P20** | **Lab Sample ID: 360-42392-7**
**Date Collected: 08/27/12 16:05** | **Matrix: Solid**
**Date Received: 08/27/12 19:25** | **Percent Solids: 80.4**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| 1,2-Dichloropropane | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| 1,3-Dichlorobenzene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| 1,3-Dichloropropane | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| 1,4-Dichlorobenzene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| 1,4-Dioxane | ND | * | 330 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| 2,2-Dichloropropane | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| 2-Butanone (MEK) | ND | * | 33 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| 2-Chlorotoluene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| 2-Hexanone | ND | * | 33 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| 4-Chlorotoluene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| 4-Isopropyltoluene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 33 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Acetone | ND | * | 330 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Benzene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Bromobenzene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Bromoform | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Bromomethane | ND | | 6.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Carbon disulfide | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Carbon tetrachloride | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Chlorobenzene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Chlorobromomethane | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Chlorodibromomethane | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Chloroethane | ND | | 6.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Chloroform | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Chloromethane | ND | | 6.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| cis-1,2-Dichloroethene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| cis-1,3-Dichloropropene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Dibromomethane | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Dichlorobromomethane | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Dichlorodifluoromethane | ND | | 6.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Ethyl ether | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Ethylbenzene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Ethylene Dibromide | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Hexachlorobutadiene | ND | * | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Isopropyl ether | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Isopropylbenzene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| m-Xylene & p-Xylene | ND | | 6.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Methyl tert-butyl ether | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Methylene Chloride | ND | | 13 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| n-Butylbenzene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| N-Propylbenzene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| **Naphthalene** | **33** | | 33 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| o-Xylene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| sec-Butylbenzene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Styrene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Tert-amyl methyl ether | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Tert-butyl ethyl ether | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: P20** — **Lab Sample ID: 360-42392-7**
**Date Collected: 08/27/12 16:05** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 80.4**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| tert-Butylbenzene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Tetrachloroethene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Tetrahydrofuran | ND | | 65 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Toluene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| trans-1,2-Dichloroethene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| trans-1,3-Dichloropropene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Trichloroethene | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Trichlorofluoromethane | ND | | 6.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |
| Vinyl chloride | ND | | 3.3 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 16:55 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *86* | | *70 - 130* | *08/31/12 14:08* | *08/31/12 16:55* | *1* |
| *Dibromofluoromethane* | *94* | | *70 - 130* | *08/31/12 14:08* | *08/31/12 16:55* | *1* |
| *Toluene-d8 (Surr)* | *96* | | *70 - 130* | *08/31/12 14:08* | *08/31/12 16:55* | *1* |

**Client Sample ID: P24** — **Lab Sample ID: 360-42392-8**
**Date Collected: 08/27/12 16:30** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 81.7**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| 1,1,1-Trichloroethane | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| 1,1,2-Trichloroethane | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| 1,1-Dichloroethane | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| 1,1-Dichloroethene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| 1,1-Dichloropropene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| 1,2,3-Trichloropropane | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 35 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| 1,2-Dichlorobenzene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| 1,2-Dichloroethane | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| 1,2-Dichloropropane | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| 1,3-Dichlorobenzene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| 1,3-Dichloropropane | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| 1,4-Dichlorobenzene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| 1,4-Dioxane | ND | * | 350 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| 2,2-Dichloropropane | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| **2-Butanone (MEK)** | **37** | * | 35 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| 2-Chlorotoluene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| 2-Hexanone | ND | * | 35 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| 4-Chlorotoluene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| 4-Isopropyltoluene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 35 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Acetone | ND | * | 350 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Benzene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Bromobenzene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Bromoform | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: P24**
**Date Collected: 08/27/12 16:30**
**Date Received: 08/27/12 19:25**

**Lab Sample ID: 360-42392-8**
**Matrix: Solid**
**Percent Solids: 81.7**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromomethane | ND | | 6.9 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Carbon disulfide | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Carbon tetrachloride | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Chlorobenzene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Chlorobromomethane | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Chlorodibromomethane | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Chloroethane | ND | | 6.9 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Chloroform | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Chloromethane | ND | | 6.9 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| cis-1,2-Dichloroethene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| cis-1,3-Dichloropropene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Dibromomethane | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Dichlorobromomethane | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Dichlorodifluoromethane | ND | | 6.9 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Ethyl ether | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Ethylbenzene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Ethylene Dibromide | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Hexachlorobutadiene | ND | * | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Isopropyl ether | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Isopropylbenzene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| m-Xylene & p-Xylene | ND | | 6.9 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Methyl tert-butyl ether | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Methylene Chloride | ND | | 14 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| n-Butylbenzene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| N-Propylbenzene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Naphthalene | ND | | 35 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| o-Xylene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| sec-Butylbenzene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Styrene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Tert-amyl methyl ether | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Tert-butyl ethyl ether | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| tert-Butylbenzene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Tetrachloroethene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Tetrahydrofuran | ND | | 69 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Toluene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| trans-1,2-Dichloroethene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| trans-1,3-Dichloropropene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Trichloroethene | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Trichlorofluoromethane | ND | | 6.9 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |
| Vinyl chloride | ND | | 3.5 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:18 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *87* | | *70 - 130* | *08/31/12 14:08* | *08/31/12 17:18* | *1* |
| *Dibromofluoromethane* | *97* | | *70 - 130* | *08/31/12 14:08* | *08/31/12 17:18* | *1* |
| *Toluene-d8 (Surr)* | *91* | | *70 - 130* | *08/31/12 14:08* | *08/31/12 17:18* | *1* |

## Method: 8260C - Volatile Organic Compounds (GC/MS)

**Client Sample ID: C-P5-P14**
**Date Collected: 08/27/12 16:45**
**Date Received: 08/27/12 19:25**

**Lab Sample ID: 360-42392-9**
**Matrix: Solid**
**Percent Solids: 24.7**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| 1,1,1-Trichloroethane | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| 1,1,2-Trichloroethane | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| 1,1-Dichloroethane | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| 1,1-Dichloroethene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| 1,1-Dichloropropene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| 1,2,3-Trichloropropane | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 160 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| 1,2-Dichlorobenzene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| 1,2-Dichloroethane | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| 1,2-Dichloropropane | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| 1,3-Dichlorobenzene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| 1,3-Dichloropropane | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| 1,4-Dichlorobenzene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| 1,4-Dioxane | ND | * | 1600 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| 2,2-Dichloropropane | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| **2-Butanone (MEK)** | **270** | * | 160 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| 2-Chlorotoluene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| 2-Hexanone | ND | * | 160 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| 4-Chlorotoluene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| 4-Isopropyltoluene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 160 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Acetone | ND | * | 1600 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Benzene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Bromobenzene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Bromoform | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Bromomethane | ND | | 31 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Carbon disulfide | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Carbon tetrachloride | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Chlorobenzene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Chlorobromomethane | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Chlorodibromomethane | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Chloroethane | ND | | 31 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Chloroform | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Chloromethane | ND | | 31 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| cis-1,2-Dichloroethene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| cis-1,3-Dichloropropene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Dibromomethane | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Dichlorobromomethane | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Dichlorodifluoromethane | ND | | 31 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Ethyl ether | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Ethylbenzene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Ethylene Dibromide | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Hexachlorobutadiene | ND | * | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: C-P5-P14**
**Date Collected: 08/27/12 16:45**
**Date Received: 08/27/12 19:25**

**Lab Sample ID: 360-42392-9**
**Matrix: Solid**
**Percent Solids: 24.7**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Isopropyl ether | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Isopropylbenzene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| m-Xylene & p-Xylene | ND | | 31 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Methyl tert-butyl ether | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Methylene Chloride | ND | | 62 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| n-Butylbenzene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| N-Propylbenzene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Naphthalene | ND | | 160 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| o-Xylene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| sec-Butylbenzene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Styrene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Tert-amyl methyl ether | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Tert-butyl ethyl ether | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| tert-Butylbenzene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Tetrachloroethene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Tetrahydrofuran | ND | | 310 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Toluene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| trans-1,2-Dichloroethene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| trans-1,3-Dichloropropene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Trichloroethene | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Trichlorofluoromethane | ND | | 31 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |
| Vinyl chloride | ND | | 16 | | ug/Kg | ☼ | 08/31/12 14:08 | 08/31/12 17:40 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *82* | | *70 - 130* | *08/31/12 14:08* | *08/31/12 17:40* | *1* |
| *Dibromofluoromethane* | *103* | | *70 - 130* | *08/31/12 14:08* | *08/31/12 17:40* | *1* |
| *Toluene-d8 (Surr)* | *88* | | *70 - 130* | *08/31/12 14:08* | *08/31/12 17:40* | *1* |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

**Client Sample ID: P4**
**Date Collected: 08/27/12 09:40**
**Date Received: 08/27/12 19:25**

**Lab Sample ID: 360-42392-1**
**Matrix: Solid**
**Percent Solids: 37.3**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| 1,2-Dichlorobenzene | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| 1,3-Dichlorobenzene | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| 1,4-Dichlorobenzene | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| 2,2'-oxybis[1-chloropropane] | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| 2,4,5-Trichlorophenol | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| 2,4,6-Trichlorophenol | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| 2,4-Dichlorophenol | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| 2,4-Dimethylphenol | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| 2,4-Dinitrophenol | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| 2,4-Dinitrotoluene | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| 2,6-Dinitrotoluene | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| 2-Chloronaphthalene | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| 2-Chlorophenol | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| 2-Methylnaphthalene | ND | | 6500 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| 2-Methylphenol | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| 2-Nitrophenol | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| 3 & 4 Methylphenol | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| 3,3'-Dichlorobenzidine | ND | | 26000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| 4-Bromophenyl phenyl ether | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| 4-Chloroaniline | ND | | 26000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| 4-Nitrophenol | ND | | 65000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Acenaphthene | ND | | 6500 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Acenaphthylene | ND | | 6500 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Acetophenone | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Aniline | ND | * | 65000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Anthracene | ND | | 6500 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Azobenzene | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Benzo[a]anthracene | ND | | 6500 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Benzo[a]pyrene | ND | | 6500 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Benzo[b]fluoranthene | ND | | 6500 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Benzo[g,h,i]perylene | ND | | 6500 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Benzo[k]fluoranthene | ND | | 6900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Bis(2-chloroethoxy)methane | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Bis(2-chloroethyl)ether | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Bis(2-ethylhexyl) phthalate | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Butyl benzyl phthalate | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Chrysene | ND | | 6500 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Di-n-butyl phthalate | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Di-n-octyl phthalate | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Dibenz(a,h)anthracene | ND | | 6500 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Dibenzofuran | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Diethyl phthalate | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Dimethyl phthalate | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Fluoranthene | ND | | 6500 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Fluorene | ND | | 6500 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Hexachlorobenzene | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Hexachlorobutadiene | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Hexachloroethane | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: P4** — **Lab Sample ID: 360-42392-1**
**Date Collected: 08/27/12 09:40** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 37.3**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Indeno[1,2,3-cd]pyrene | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Isophorone | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Naphthalene | ND | | 6500 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Nitrobenzene | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Pentachlorophenol | ND | | 65000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Phenanthrene | ND | | 6500 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Phenol | ND | | 13000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |
| Pyrene | ND | | 6500 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 15:42 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4,6-Tribromophenol* | *86* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 15:42* | *5* |
| *2-Fluorophenol* | *88* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 15:42* | *5* |
| *Nitrobenzene-d5* | *72* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 15:42* | *5* |
| *Phenol-d5* | *89* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 15:42* | *5* |
| *Terphenyl-d14* | *104* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 15:42* | *5* |
| *2-Fluorobiphenyl* | *76* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 15:42* | *5* |

**Client Sample ID: P5** — **Lab Sample ID: 360-42392-2**
**Date Collected: 08/27/12 10:20** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 42.9**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| 1,2-Dichlorobenzene | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| 1,3-Dichlorobenzene | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| 1,4-Dichlorobenzene | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| 2,2'-oxybis[1-chloropropane] | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| 2,4,5-Trichlorophenol | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| 2,4,6-Trichlorophenol | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| 2,4-Dichlorophenol | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| 2,4-Dimethylphenol | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| 2,4-Dinitrophenol | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| 2,4-Dinitrotoluene | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| 2,6-Dinitrotoluene | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| 2-Chloronaphthalene | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| 2-Chlorophenol | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| 2-Methylnaphthalene | ND | | 5800 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| 2-Methylphenol | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| 2-Nitrophenol | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| 3 & 4 Methylphenol | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| 3,3'-Dichlorobenzidine | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| 4-Bromophenyl phenyl ether | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| 4-Chloroaniline | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| 4-Nitrophenol | ND | | 58000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Acenaphthene | ND | | 5800 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Acenaphthylene | ND | | 5800 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Acetophenone | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Aniline | ND | * | 58000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Anthracene | ND | | 5800 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Azobenzene | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Benzo[a]anthracene | ND | | 5800 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: P5** — **Lab Sample ID: 360-42392-2**
**Date Collected: 08/27/12 10:20** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 42.9**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzo[a]pyrene | ND | | 5800 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Benzo[b]fluoranthene | ND | | 5800 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Benzo[g,h,i]perylene | ND | | 5800 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Benzo[k]fluoranthene | ND | | 6200 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Bis(2-chloroethoxy)methane | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Bis(2-chloroethyl)ether | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Bis(2-ethylhexyl) phthalate | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Butyl benzyl phthalate | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Chrysene | ND | | 5800 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Di-n-butyl phthalate | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Di-n-octyl phthalate | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Dibenz(a,h)anthracene | ND | | 5800 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Dibenzofuran | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Diethyl phthalate | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Dimethyl phthalate | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Fluoranthene | ND | | 5800 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Fluorene | ND | | 5800 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Hexachlorobenzene | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Hexachlorobutadiene | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Hexachloroethane | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Indeno[1,2,3-cd]pyrene | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Isophorone | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Naphthalene | ND | | 5800 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Nitrobenzene | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Pentachlorophenol | ND | | 58000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Phenanthrene | ND | | 5800 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Phenol | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |
| Pyrene | ND | | 5800 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:13 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4,6-Tribromophenol* | *87* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 16:13* | *5* |
| *2-Fluorophenol* | *88* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 16:13* | *5* |
| *Nitrobenzene-d5* | *75* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 16:13* | *5* |
| *Phenol-d5* | *86* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 16:13* | *5* |
| *Terphenyl-d14* | *106* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 16:13* | *5* |
| *2-Fluorobiphenyl* | *76* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 16:13* | *5* |

**Client Sample ID: P10** — **Lab Sample ID: 360-42392-3**
**Date Collected: 08/27/12 12:45** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 71.8**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| 1,2-Dichlorobenzene | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| 1,3-Dichlorobenzene | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| 1,4-Dichlorobenzene | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| 2,2'-oxybis[1-chloropropane] | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| 2,4,5-Trichlorophenol | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| 2,4,6-Trichlorophenol | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| 2,4-Dichlorophenol | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| 2,4-Dimethylphenol | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: P10**
**Date Collected: 08/27/12 12:45**
**Date Received: 08/27/12 19:25**

**Lab Sample ID: 360-42392-3**
**Matrix: Solid**
**Percent Solids: 71.8**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4-Dinitrophenol | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| 2,4-Dinitrotoluene | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| 2,6-Dinitrotoluene | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| 2-Chloronaphthalene | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| 2-Chlorophenol | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| 2-Methylnaphthalene | ND | | 1200 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| 2-Methylphenol | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| 2-Nitrophenol | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| 3 & 4 Methylphenol | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| 3,3'-Dichlorobenzidine | ND | | 4600 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| 4-Bromophenyl phenyl ether | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| 4-Chloroaniline | ND | | 4600 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| 4-Nitrophenol | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Acenaphthene | ND | | 1200 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Acenaphthylene | ND | | 1200 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Acetophenone | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Aniline | ND | * | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Anthracene | ND | | 1200 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Azobenzene | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Benzo[a]anthracene | ND | | 1200 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Benzo[a]pyrene | ND | | 1200 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Benzo[b]fluoranthene | ND | | 1200 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Benzo[g,h,i]perylene | ND | | 1200 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Benzo[k]fluoranthene | ND | | 1200 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Bis(2-chloroethoxy)methane | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Bis(2-chloroethyl)ether | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Bis(2-ethylhexyl) phthalate | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Butyl benzyl phthalate | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Chrysene | ND | | 1200 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Di-n-butyl phthalate | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Di-n-octyl phthalate | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Dibenz(a,h)anthracene | ND | | 1200 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Dibenzofuran | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Diethyl phthalate | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Dimethyl phthalate | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Fluoranthene | ND | | 1200 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Fluorene | ND | | 1200 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Hexachlorobenzene | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Hexachlorobutadiene | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Hexachloroethane | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Indeno[1,2,3-cd]pyrene | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Isophorone | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Naphthalene | ND | | 1200 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Nitrobenzene | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Pentachlorophenol | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Phenanthrene | ND | | 1200 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Phenol | ND | | 2300 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Pyrene | ND | | 1200 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 16:43 | 5 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 2,4,6-Tribromophenol | 66 | | 30 - 130 | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| 2-Fluorophenol | 68 | | 30 - 130 | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Nitrobenzene-d5 | 59 | | 30 - 130 | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Phenol-d5 | 69 | | 30 - 130 | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| Terphenyl-d14 | 89 | | 30 - 130 | 08/30/12 16:13 | 08/31/12 16:43 | 5 |
| 2-Fluorobiphenyl | 61 | | 30 - 130 | 08/30/12 16:13 | 08/31/12 16:43 | 5 |

**Client Sample ID: P13** — **Lab Sample ID: 360-42392-4**
**Date Collected: 08/27/12 14:05** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 28.1**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| 1,2-Dichlorobenzene | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| 1,3-Dichlorobenzene | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| 1,4-Dichlorobenzene | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| 2,2'-oxybis[1-chloropropane] | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| 2,4,5-Trichlorophenol | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| 2,4,6-Trichlorophenol | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| 2,4-Dichlorophenol | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| 2,4-Dimethylphenol | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| 2,4-Dinitrophenol | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| 2,4-Dinitrotoluene | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| 2,6-Dinitrotoluene | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| 2-Chloronaphthalene | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| 2-Chlorophenol | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| 2-Methylnaphthalene | ND | | 8700 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| 2-Methylphenol | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| 2-Nitrophenol | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| 3 & 4 Methylphenol | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| 3,3'-Dichlorobenzidine | ND | | 35000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| 4-Bromophenyl phenyl ether | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| 4-Chloroaniline | ND | | 35000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| 4-Nitrophenol | ND | | 87000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Acenaphthene | ND | | 8700 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Acenaphthylene | ND | | 8700 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Acetophenone | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Aniline | ND | * | 87000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Anthracene | ND | | 8700 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Azobenzene | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Benzo[a]anthracene | ND | | 8700 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Benzo[a]pyrene | ND | | 8700 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Benzo[b]fluoranthene | ND | | 8700 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Benzo[g,h,i]perylene | ND | | 8700 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Benzo[k]fluoranthene | ND | | 9200 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Bis(2-chloroethoxy)methane | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Bis(2-chloroethyl)ether | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Bis(2-ethylhexyl) phthalate | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Butyl benzyl phthalate | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Chrysene | ND | | 8700 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Di-n-butyl phthalate | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Di-n-octyl phthalate | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Dibenz(a,h)anthracene | ND | | 8700 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: P13** — **Lab Sample ID: 360-42392-4**
**Date Collected: 08/27/12 14:05** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 28.1**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dibenzofuran | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Diethyl phthalate | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Dimethyl phthalate | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Fluoranthene | ND | | 8700 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Fluorene | ND | | 8700 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Hexachlorobenzene | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Hexachlorobutadiene | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Hexachloroethane | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Indeno[1,2,3-cd]pyrene | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Isophorone | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Naphthalene | ND | | 8700 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Nitrobenzene | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Pentachlorophenol | ND | | 87000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Phenanthrene | ND | | 8700 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Phenol | ND | | 17000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |
| Pyrene | ND | | 8700 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:13 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4,6-Tribromophenol* | *69* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 17:13* | *5* |
| *2-Fluorophenol* | *68* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 17:13* | *5* |
| *Nitrobenzene-d5* | *62* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 17:13* | *5* |
| *Phenol-d5* | *68* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 17:13* | *5* |
| *Terphenyl-d14* | *90* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 17:13* | *5* |
| *2-Fluorobiphenyl* | *63* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 17:13* | *5* |

**Client Sample ID: P14** — **Lab Sample ID: 360-42392-5**
**Date Collected: 08/27/12 13:50** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 21.9**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| 1,2-Dichlorobenzene | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| 1,3-Dichlorobenzene | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| 1,4-Dichlorobenzene | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| 2,2'-oxybis[1-chloropropane] | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| 2,4,5-Trichlorophenol | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| 2,4,6-Trichlorophenol | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| 2,4-Dichlorophenol | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| 2,4-Dimethylphenol | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| 2,4-Dinitrophenol | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| 2,4-Dinitrotoluene | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| 2,6-Dinitrotoluene | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| 2-Chloronaphthalene | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| 2-Chlorophenol | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| 2-Methylnaphthalene | ND | | 11000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| 2-Methylphenol | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| 2-Nitrophenol | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| 3 & 4 Methylphenol | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| 3,3'-Dichlorobenzidine | ND | | 46000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| 4-Bromophenyl phenyl ether | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| 4-Chloroaniline | ND | | 46000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: P14** — **Lab Sample ID: 360-42392-5**
**Date Collected: 08/27/12 13:50** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 21.9**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4-Nitrophenol | ND | | 110000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Acenaphthene | ND | | 11000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Acenaphthylene | ND | | 11000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Acetophenone | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Aniline | ND | * | 110000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Anthracene | ND | | 11000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Azobenzene | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Benzo[a]anthracene | ND | | 11000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Benzo[a]pyrene | ND | | 11000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Benzo[b]fluoranthene | ND | | 11000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Benzo[g,h,i]perylene | ND | | 11000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Benzo[k]fluoranthene | ND | | 12000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Bis(2-chloroethoxy)methane | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Bis(2-chloroethyl)ether | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Bis(2-ethylhexyl) phthalate | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Butyl benzyl phthalate | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Chrysene | ND | | 11000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Di-n-butyl phthalate | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Di-n-octyl phthalate | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Dibenz(a,h)anthracene | ND | | 11000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Dibenzofuran | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Diethyl phthalate | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Dimethyl phthalate | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Fluoranthene | ND | | 11000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Fluorene | ND | | 11000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Hexachlorobenzene | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Hexachlorobutadiene | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Hexachloroethane | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Indeno[1,2,3-cd]pyrene | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Isophorone | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Naphthalene | ND | | 11000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Nitrobenzene | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Pentachlorophenol | ND | | 110000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Phenanthrene | ND | | 11000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Phenol | ND | | 23000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |
| Pyrene | ND | | 11000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 17:44 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4,6-Tribromophenol* | *60* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 17:44* | *5* |
| *2-Fluorophenol* | *59* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 17:44* | *5* |
| *Nitrobenzene-d5* | *53* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 17:44* | *5* |
| *Phenol-d5* | *58* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 17:44* | *5* |
| *Terphenyl-d14* | *81* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 17:44* | *5* |
| *2-Fluorobiphenyl* | *53* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 17:44* | *5* |

**Client Sample ID: P18** — **Lab Sample ID: 360-42392-6**
**Date Collected: 08/27/12 15:00** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 49.4**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: P18**
**Date Collected: 08/27/12 15:00**
**Date Received: 08/27/12 19:25**

**Lab Sample ID: 360-42392-6**
**Matrix: Solid**
**Percent Solids: 49.4**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichlorobenzene | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| 1,3-Dichlorobenzene | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| 1,4-Dichlorobenzene | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| 2,2'-oxybis[1-chloropropane] | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| 2,4,5-Trichlorophenol | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| 2,4,6-Trichlorophenol | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| 2,4-Dichlorophenol | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| 2,4-Dimethylphenol | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| 2,4-Dinitrophenol | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| 2,4-Dinitrotoluene | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| 2,6-Dinitrotoluene | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| 2-Chloronaphthalene | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| 2-Chlorophenol | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| 2-Methylnaphthalene | ND | | 4900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| 2-Methylphenol | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| 2-Nitrophenol | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| 3 & 4 Methylphenol | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| 3,3'-Dichlorobenzidine | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| 4-Bromophenyl phenyl ether | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| 4-Chloroaniline | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| 4-Nitrophenol | ND | | 49000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Acenaphthene | ND | | 4900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Acenaphthylene | ND | | 4900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Acetophenone | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Aniline | ND | * | 49000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Anthracene | ND | | 4900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Azobenzene | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Benzo[a]anthracene | ND | | 4900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Benzo[a]pyrene | ND | | 4900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Benzo[b]fluoranthene | ND | | 4900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Benzo[g,h,i]perylene | ND | | 4900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Benzo[k]fluoranthene | ND | | 5200 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Bis(2-chloroethoxy)methane | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Bis(2-chloroethyl)ether | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Bis(2-ethylhexyl) phthalate | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Butyl benzyl phthalate | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Chrysene | ND | | 4900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Di-n-butyl phthalate | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Di-n-octyl phthalate | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Dibenz(a,h)anthracene | ND | | 4900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Dibenzofuran | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Diethyl phthalate | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Dimethyl phthalate | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Fluoranthene | ND | | 4900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Fluorene | ND | | 4900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Hexachlorobenzene | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Hexachlorobutadiene | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Hexachloroethane | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Indeno[1,2,3-cd]pyrene | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: P18** — **Lab Sample ID: 360-42392-6**
**Date Collected: 08/27/12 15:00** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 49.4**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Isophorone | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Naphthalene | ND | | 4900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Nitrobenzene | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Pentachlorophenol | ND | | 49000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Phenanthrene | ND | | 4900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Phenol | ND | | 9900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |
| Pyrene | ND | | 4900 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:14 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4,6-Tribromophenol* | *74* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 18:14* | *5* |
| *2-Fluorophenol* | *70* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 18:14* | *5* |
| *Nitrobenzene-d5* | *60* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 18:14* | *5* |
| *Phenol-d5* | *73* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 18:14* | *5* |
| *Terphenyl-d14* | *114* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 18:14* | *5* |
| *2-Fluorobiphenyl* | *65* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 18:14* | *5* |

**Client Sample ID: P20** — **Lab Sample ID: 360-42392-7**
**Date Collected: 08/27/12 16:05** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 80.4**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| 1,2-Dichlorobenzene | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| 1,3-Dichlorobenzene | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| 1,4-Dichlorobenzene | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| 2,2'-oxybis[1-chloropropane] | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| 2,4,5-Trichlorophenol | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| 2,4,6-Trichlorophenol | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| 2,4-Dichlorophenol | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| 2,4-Dimethylphenol | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| 2,4-Dinitrophenol | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| 2,4-Dinitrotoluene | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| 2,6-Dinitrotoluene | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| 2-Chloronaphthalene | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| 2-Chlorophenol | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| 2-Methylnaphthalene | ND | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| 2-Methylphenol | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| 2-Nitrophenol | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| 3 & 4 Methylphenol | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| 3,3'-Dichlorobenzidine | ND | | 4100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| 4-Bromophenyl phenyl ether | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| 4-Chloroaniline | ND | | 4100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| 4-Nitrophenol | ND | | 10000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Acenaphthene | ND | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Acenaphthylene | ND | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Acetophenone | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Aniline | ND | * | 10000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Anthracene | ND | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Azobenzene | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Benzo[a]anthracene | ND | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Benzo[a]pyrene | ND | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: P20** — **Lab Sample ID: 360-42392-7**
**Date Collected: 08/27/12 16:05** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 80.4**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzo[b]fluoranthene | ND | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Benzo[g,h,i]perylene | ND | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Benzo[k]fluoranthene | ND | | 1100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Bis(2-chloroethoxy)methane | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Bis(2-chloroethyl)ether | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Bis(2-ethylhexyl) phthalate | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Butyl benzyl phthalate | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Chrysene | ND | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Di-n-butyl phthalate | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Di-n-octyl phthalate | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Dibenz(a,h)anthracene | ND | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Dibenzofuran | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Diethyl phthalate | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Dimethyl phthalate | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Fluoranthene | ND | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Fluorene | ND | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Hexachlorobenzene | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Hexachlorobutadiene | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Hexachloroethane | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Indeno[1,2,3-cd]pyrene | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Isophorone | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Naphthalene | ND | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Nitrobenzene | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Pentachlorophenol | ND | | 10000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| **Phenanthrene** | **1100** | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Phenol | ND | | 2100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |
| Pyrene | ND | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 18:45 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4,6-Tribromophenol* | *86* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 18:45* | *5* |
| *2-Fluorophenol* | *85* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 18:45* | *5* |
| *Nitrobenzene-d5* | *73* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 18:45* | *5* |
| *Phenol-d5* | *85* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 18:45* | *5* |
| *Terphenyl-d14* | *122* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 18:45* | *5* |
| *2-Fluorobiphenyl* | *76* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 18:45* | *5* |

**Client Sample ID: P24** — **Lab Sample ID: 360-42392-8**
**Date Collected: 08/27/12 16:30** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 81.7**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| 1,2-Dichlorobenzene | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| 1,3-Dichlorobenzene | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| 1,4-Dichlorobenzene | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| 2,2'-oxybis[1-chloropropane] | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| 2,4,5-Trichlorophenol | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| 2,4,6-Trichlorophenol | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| 2,4-Dichlorophenol | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| 2,4-Dimethylphenol | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| 2,4-Dinitrophenol | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: P24**
**Date Collected: 08/27/12 16:30**
**Date Received: 08/27/12 19:25**

**Lab Sample ID: 360-42392-8**
**Matrix: Solid**
**Percent Solids: 81.7**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4-Dinitrotoluene | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| 2,6-Dinitrotoluene | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| 2-Chloronaphthalene | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| 2-Chlorophenol | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| 2-Methylnaphthalene | ND | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| 2-Methylphenol | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| 2-Nitrophenol | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| 3 & 4 Methylphenol | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| 3,3'-Dichlorobenzidine | ND | | 4000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| 4-Bromophenyl phenyl ether | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| 4-Chloroaniline | ND | | 4000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| 4-Nitrophenol | ND | | 10000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| Acenaphthene | ND | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| Acenaphthylene | ND | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| Acetophenone | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| Aniline | ND | * | 10000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| **Anthracene** | **1000** | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| Azobenzene | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| **Benzo[a]anthracene** | **2600** | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| **Benzo[a]pyrene** | **2400** | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| **Benzo[b]fluoranthene** | **2700** | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| **Benzo[g,h,i]perylene** | **1700** | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| **Benzo[k]fluoranthene** | **1200** | | 1100 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| Bis(2-chloroethoxy)methane | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| Bis(2-chloroethyl)ether | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| Bis(2-ethylhexyl) phthalate | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| Butyl benzyl phthalate | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| **Chrysene** | **2900** | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| Di-n-butyl phthalate | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| Di-n-octyl phthalate | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| Dibenz(a,h)anthracene | ND | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| Dibenzofuran | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| Diethyl phthalate | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| Dimethyl phthalate | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| **Fluoranthene** | **4800** | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| Fluorene | ND | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| Hexachlorobenzene | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| Hexachlorobutadiene | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| Hexachloroethane | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| Indeno[1,2,3-cd]pyrene | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| Isophorone | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| Naphthalene | ND | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| Nitrobenzene | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| Pentachlorophenol | ND | | 10000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| **Phenanthrene** | **3900** | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| Phenol | ND | | 2000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |
| **Pyrene** | **5800** | | 1000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:15 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4,6-Tribromophenol* | *79* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 19:15* | *5* |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: P24** — **Lab Sample ID: 360-42392-8**
**Date Collected: 08/27/12 16:30** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 81.7**

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol* | *79* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 19:15* | *5* |
| *Nitrobenzene-d5* | *68* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 19:15* | *5* |
| *Phenol-d5* | *78* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 19:15* | *5* |
| *Terphenyl-d14* | *114* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 19:15* | *5* |
| *2-Fluorobiphenyl* | *69* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 19:15* | *5* |

**Client Sample ID: C-P5-P14** — **Lab Sample ID: 360-42392-9**
**Date Collected: 08/27/12 16:45** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 24.7**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| 1,2-Dichlorobenzene | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| 1,3-Dichlorobenzene | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| 1,4-Dichlorobenzene | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| 2,2'-oxybis[1-chloropropane] | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| 2,4,5-Trichlorophenol | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| 2,4,6-Trichlorophenol | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| 2,4-Dichlorophenol | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| 2,4-Dimethylphenol | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| 2,4-Dinitrophenol | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| 2,4-Dinitrotoluene | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| 2,6-Dinitrotoluene | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| 2-Chloronaphthalene | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| 2-Chlorophenol | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| 2-Methylnaphthalene | ND | | 10000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| 2-Methylphenol | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| 2-Nitrophenol | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| 3 & 4 Methylphenol | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| 3,3'-Dichlorobenzidine | ND | | 41000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| 4-Bromophenyl phenyl ether | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| 4-Chloroaniline | ND | | 41000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| 4-Nitrophenol | ND | | 100000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Acenaphthene | ND | | 10000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Acenaphthylene | ND | | 10000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Acetophenone | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Aniline | ND | * | 100000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Anthracene | ND | | 10000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Azobenzene | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Benzo[a]anthracene | ND | | 10000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Benzo[a]pyrene | ND | | 10000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Benzo[b]fluoranthene | ND | | 10000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Benzo[g,h,i]perylene | ND | | 10000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Benzo[k]fluoranthene | ND | | 11000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Bis(2-chloroethoxy)methane | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Bis(2-chloroethyl)ether | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Bis(2-ethylhexyl) phthalate | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Butyl benzyl phthalate | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Chrysene | ND | | 10000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Di-n-butyl phthalate | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: C-P5-P14**
**Date Collected: 08/27/12 16:45**
**Date Received: 08/27/12 19:25**

**Lab Sample ID: 360-42392-9**
**Matrix: Solid**
**Percent Solids: 24.7**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Di-n-octyl phthalate | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Dibenz(a,h)anthracene | ND | | 10000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Dibenzofuran | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Diethyl phthalate | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Dimethyl phthalate | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Fluoranthene | ND | | 10000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Fluorene | ND | | 10000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Hexachlorobenzene | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Hexachlorobutadiene | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Hexachloroethane | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Indeno[1,2,3-cd]pyrene | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Isophorone | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Naphthalene | ND | | 10000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Nitrobenzene | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Pentachlorophenol | ND | | 100000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Phenanthrene | ND | | 10000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Phenol | ND | | 20000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |
| Pyrene | ND | | 10000 | | ug/Kg | ☼ | 08/30/12 16:13 | 08/31/12 19:45 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4,6-Tribromophenol* | *59* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 19:45* | *5* |
| *2-Fluorophenol* | *58* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 19:45* | *5* |
| *Nitrobenzene-d5* | *51* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 19:45* | *5* |
| *Phenol-d5* | *58* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 19:45* | *5* |
| *Terphenyl-d14* | *82* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 19:45* | *5* |
| *2-Fluorobiphenyl* | *55* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 19:45* | *5* |

# Client Sample Results

Client: ENVIRON International Corp.
Project/Site: 941 Grimell St./3329188I

TestAmerica Job ID: 360-42392-1

## Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

**Client Sample ID: P4** — **Lab Sample ID: 360-42392-1**
**Date Collected: 08/27/12 09:40** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 37.3**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C5-C8 Aliphatics (unadjusted) | ND | | 13 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 20:05 | 1 |
| C5-C8 Aliphatics (adjusted) | ND | | 13 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 20:05 | 1 |
| C9-C10 Aromatics | ND | | 13 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 20:05 | 1 |
| C9-C12 Aliphatics (unadjusted) | ND | | 13 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 20:05 | 1 |
| C9-C12 Aliphatics (adjusted) | ND | | 13 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 20:05 | 1 |
| Total VPH | ND | | 13 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 20:05 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,5-Dibromotoluene (fid)* | *99* | | *70 - 130* | *08/29/12 14:13* | *08/29/12 20:05* | *1* |
| *2,5-Dibromotoluene (pid)* | *104* | | *70 - 130* | *08/29/12 14:13* | *08/29/12 20:05* | *1* |

**Client Sample ID: P5** — **Lab Sample ID: 360-42392-2**
**Date Collected: 08/27/12 10:20** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 42.9**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C5-C8 Aliphatics (unadjusted) | ND | | 14 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 20:39 | 1 |
| C5-C8 Aliphatics (adjusted) | ND | | 14 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 20:39 | 1 |
| C9-C10 Aromatics | ND | | 14 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 20:39 | 1 |
| C9-C12 Aliphatics (unadjusted) | ND | | 14 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 20:39 | 1 |
| C9-C12 Aliphatics (adjusted) | ND | | 14 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 20:39 | 1 |
| Total VPH | ND | | 14 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 20:39 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,5-Dibromotoluene (fid)* | *100* | | *70 - 130* | *08/29/12 14:13* | *08/29/12 20:39* | *1* |
| *2,5-Dibromotoluene (pid)* | *105* | | *70 - 130* | *08/29/12 14:13* | *08/29/12 20:39* | *1* |

**Client Sample ID: P10** — **Lab Sample ID: 360-42392-3**
**Date Collected: 08/27/12 12:45** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 71.8**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C5-C8 Aliphatics (unadjusted) | ND | | 4.5 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 21:13 | 1 |
| C5-C8 Aliphatics (adjusted) | ND | | 4.5 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 21:13 | 1 |
| C9-C10 Aromatics | ND | | 4.5 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 21:13 | 1 |
| C9-C12 Aliphatics (unadjusted) | ND | | 4.5 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 21:13 | 1 |
| C9-C12 Aliphatics (adjusted) | ND | | 4.5 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 21:13 | 1 |
| Total VPH | ND | | 4.5 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 21:13 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,5-Dibromotoluene (fid)* | *100* | | *70 - 130* | *08/29/12 14:13* | *08/29/12 21:13* | *1* |
| *2,5-Dibromotoluene (pid)* | *105* | | *70 - 130* | *08/29/12 14:13* | *08/29/12 21:13* | *1* |

**Client Sample ID: P13** — **Lab Sample ID: 360-42392-4**
**Date Collected: 08/27/12 14:05** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 28.1**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C5-C8 Aliphatics (unadjusted) | ND | | 22 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 21:46 | 1 |
| C5-C8 Aliphatics (adjusted) | ND | | 22 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 21:46 | 1 |
| C9-C10 Aromatics | ND | | 22 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 21:46 | 1 |
| C9-C12 Aliphatics (unadjusted) | ND | | 22 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 21:46 | 1 |
| C9-C12 Aliphatics (adjusted) | ND | | 22 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 21:46 | 1 |
| Total VPH | ND | | 22 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 21:46 | 1 |

## Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC) (Continued)

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 2,5-Dibromotoluene (fid) | 98 | | 70 - 130 | 08/29/12 14:13 | 08/29/12 21:46 | 1 |
| 2,5-Dibromotoluene (pid) | 104 | | 70 - 130 | 08/29/12 14:13 | 08/29/12 21:46 | 1 |

**Client Sample ID: P14** — **Lab Sample ID: 360-42392-5**
**Date Collected: 08/27/12 13:50** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 21.9**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C5-C8 Aliphatics (unadjusted) | ND | | 34 | | mg/Kg | ☼ | 08/29/12 16:36 | 08/30/12 00:33 | 1 |
| C5-C8 Aliphatics (adjusted) | ND | | 34 | | mg/Kg | ☼ | 08/29/12 16:36 | 08/30/12 00:33 | 1 |
| C9-C10 Aromatics | ND | | 34 | | mg/Kg | ☼ | 08/29/12 16:36 | 08/30/12 00:33 | 1 |
| C9-C12 Aliphatics (unadjusted) | ND | | 34 | | mg/Kg | ☼ | 08/29/12 16:36 | 08/30/12 00:33 | 1 |
| C9-C12 Aliphatics (adjusted) | ND | | 34 | | mg/Kg | ☼ | 08/29/12 16:36 | 08/30/12 00:33 | 1 |
| Total VPH | ND | | 34 | | mg/Kg | ☼ | 08/29/12 16:36 | 08/30/12 00:33 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 2,5-Dibromotoluene (fid) | 97 | | 70 - 130 | 08/29/12 16:36 | 08/30/12 00:33 | 1 |
| 2,5-Dibromotoluene (pid) | 103 | | 70 - 130 | 08/29/12 16:36 | 08/30/12 00:33 | 1 |

**Client Sample ID: P18** — **Lab Sample ID: 360-42392-6**
**Date Collected: 08/27/12 15:00** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 49.4**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C5-C8 Aliphatics (unadjusted) | ND | | 10 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 22:20 | 1 |
| C5-C8 Aliphatics (adjusted) | ND | | 10 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 22:20 | 1 |
| C9-C10 Aromatics | ND | | 10 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 22:20 | 1 |
| C9-C12 Aliphatics (unadjusted) | ND | | 10 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 22:20 | 1 |
| C9-C12 Aliphatics (adjusted) | ND | | 10 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 22:20 | 1 |
| Total VPH | ND | | 10 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 22:20 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 2,5-Dibromotoluene (fid) | 100 | | 70 - 130 | 08/29/12 14:13 | 08/29/12 22:20 | 1 |
| 2,5-Dibromotoluene (pid) | 104 | | 70 - 130 | 08/29/12 14:13 | 08/29/12 22:20 | 1 |

**Client Sample ID: P20** — **Lab Sample ID: 360-42392-7**
**Date Collected: 08/27/12 16:05** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 80.4**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C5-C8 Aliphatics (unadjusted) | ND | | 4.4 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 22:53 | 1 |
| C5-C8 Aliphatics (adjusted) | ND | | 4.4 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 22:53 | 1 |
| C9-C10 Aromatics | ND | | 4.4 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 22:53 | 1 |
| C9-C12 Aliphatics (unadjusted) | ND | | 4.4 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 22:53 | 1 |
| C9-C12 Aliphatics (adjusted) | ND | | 4.4 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 22:53 | 1 |
| Total VPH | ND | | 4.4 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 22:53 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 2,5-Dibromotoluene (fid) | 99 | | 70 - 130 | 08/29/12 14:13 | 08/29/12 22:53 | 1 |
| 2,5-Dibromotoluene (pid) | 105 | | 70 - 130 | 08/29/12 14:13 | 08/29/12 22:53 | 1 |

**Client Sample ID: P24** — **Lab Sample ID: 360-42392-8**
**Date Collected: 08/27/12 16:30** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 81.7**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C5-C8 Aliphatics (unadjusted) | ND | | 3.5 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 23:26 | 1 |
| C5-C8 Aliphatics (adjusted) | ND | | 3.5 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 23:26 | 1 |

## Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC) (Continued)

**Client Sample ID: P24** — **Lab Sample ID: 360-42392-8**
**Date Collected: 08/27/12 16:30** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 81.7**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C9-C10 Aromatics | ND | | 3.5 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 23:26 | 1 |
| C9-C12 Aliphatics (unadjusted) | ND | | 3.5 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 23:26 | 1 |
| C9-C12 Aliphatics (adjusted) | ND | | 3.5 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 23:26 | 1 |
| Total VPH | ND | | 3.5 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/29/12 23:26 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,5-Dibromotoluene (fid)* | *99* | | *70 - 130* | *08/29/12 14:13* | *08/29/12 23:26* | *1* |
| *2,5-Dibromotoluene (pid)* | *104* | | *70 - 130* | *08/29/12 14:13* | *08/29/12 23:26* | *1* |

**Client Sample ID: C-P5-P14** — **Lab Sample ID: 360-42392-9**
**Date Collected: 08/27/12 16:45** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 24.7**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C5-C8 Aliphatics (unadjusted) | ND | | 29 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/30/12 00:00 | 1 |
| C5-C8 Aliphatics (adjusted) | ND | | 29 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/30/12 00:00 | 1 |
| C9-C10 Aromatics | ND | | 29 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/30/12 00:00 | 1 |
| C9-C12 Aliphatics (unadjusted) | ND | | 29 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/30/12 00:00 | 1 |
| C9-C12 Aliphatics (adjusted) | ND | | 29 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/30/12 00:00 | 1 |
| Total VPH | ND | | 29 | | mg/Kg | ☼ | 08/29/12 14:13 | 08/30/12 00:00 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,5-Dibromotoluene (fid)* | *99* | | *70 - 130* | *08/29/12 14:13* | *08/30/12 00:00* | *1* |
| *2,5-Dibromotoluene (pid)* | *104* | | *70 - 130* | *08/29/12 14:13* | *08/30/12 00:00* | *1* |

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Client Sample ID: P4** — **Lab Sample ID: 360-42392-1**
**Date Collected: 08/27/12 09:40** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 37.3**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons (C9-C36) | 1300 | | 260 | | mg/Kg | ☼ | 08/29/12 16:20 | 08/29/12 18:55 | 10 |
| Diesel Range Organics [C10-C28] | 590 | | 260 | | mg/Kg | ☼ | 08/29/12 16:20 | 08/29/12 18:55 | 10 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *110* | | *40 - 140* | *08/29/12 16:20* | *08/29/12 18:55* | *10* |

**Client Sample ID: P5** — **Lab Sample ID: 360-42392-2**
**Date Collected: 08/27/12 10:20** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 42.9**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons (C9-C36) | 4000 | | 220 | | mg/Kg | ☼ | 08/29/12 16:20 | 08/29/12 19:27 | 10 |
| Diesel Range Organics [C10-C28] | 2200 | | 220 | | mg/Kg | ☼ | 08/29/12 16:20 | 08/29/12 19:27 | 10 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *106* | | *40 - 140* | *08/29/12 16:20* | *08/29/12 19:27* | *10* |

**Client Sample ID: P10** — **Lab Sample ID: 360-42392-3**
**Date Collected: 08/27/12 12:45** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 71.8**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons (C9-C36) | 140 | | 46 | | mg/Kg | ☼ | 08/29/12 16:20 | 08/29/12 19:59 | 10 |
| Diesel Range Organics [C10-C28] | ND | | 46 | | mg/Kg | ☼ | 08/29/12 16:20 | 08/29/12 19:59 | 10 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *90* | | *40 - 140* | *08/29/12 16:20* | *08/29/12 19:59* | *10* |

**Client Sample ID: P13** — **Lab Sample ID: 360-42392-4**
**Date Collected: 08/27/12 14:05** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 28.1**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons (C9-C36) | 1600 | | 340 | | mg/Kg | ☼ | 08/29/12 16:20 | 08/29/12 20:31 | 10 |
| Diesel Range Organics [C10-C28] | 430 | | 340 | | mg/Kg | ☼ | 08/29/12 16:20 | 08/29/12 20:31 | 10 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *86* | | *40 - 140* | *08/29/12 16:20* | *08/29/12 20:31* | *10* |

**Client Sample ID: P14** — **Lab Sample ID: 360-42392-5**
**Date Collected: 08/27/12 13:50** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 21.9**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons (C9-C36) | 2400 | | 450 | | mg/Kg | ☼ | 08/29/12 16:20 | 08/29/12 21:03 | 10 |
| Diesel Range Organics [C10-C28] | 620 | | 450 | | mg/Kg | ☼ | 08/29/12 16:20 | 08/29/12 21:03 | 10 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *80* | | *40 - 140* | *08/29/12 16:20* | *08/29/12 21:03* | *10* |

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Client Sample ID: P18** — **Lab Sample ID: 360-42392-6**
**Date Collected: 08/27/12 15:00** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 49.4**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons (C9-C36) | 790 | | 200 | | mg/Kg | ☼ | 08/29/12 16:20 | 08/29/12 21:35 | 10 |
| Diesel Range Organics [C10-C28] | 240 | | 200 | | mg/Kg | ☼ | 08/29/12 16:20 | 08/29/12 21:35 | 10 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *103* | | *40 - 140* | *08/29/12 16:20* | *08/29/12 21:35* | *10* |

**Client Sample ID: P20** — **Lab Sample ID: 360-42392-7**
**Date Collected: 08/27/12 16:05** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 80.4**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons (C9-C36) | 200 | | 41 | | mg/Kg | ☼ | 08/29/12 16:20 | 08/29/12 22:07 | 10 |
| Diesel Range Organics [C10-C28] | 87 | | 41 | | mg/Kg | ☼ | 08/29/12 16:20 | 08/29/12 22:07 | 10 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *116* | | *40 - 140* | *08/29/12 16:20* | *08/29/12 22:07* | *10* |

**Client Sample ID: P24** — **Lab Sample ID: 360-42392-8**
**Date Collected: 08/27/12 16:30** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 81.7**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons (C9-C36) | 730 | | 40 | | mg/Kg | ☼ | 08/29/12 16:20 | 08/29/12 22:39 | 10 |
| Diesel Range Organics [C10-C28] | 380 | | 40 | | mg/Kg | ☼ | 08/29/12 16:20 | 08/29/12 22:39 | 10 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *102* | | *40 - 140* | *08/29/12 16:20* | *08/29/12 22:39* | *10* |

**Client Sample ID: C-P5-P14** — **Lab Sample ID: 360-42392-9**
**Date Collected: 08/27/12 16:45** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 24.7**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons (C9-C36) | 3000 | | 390 | | mg/Kg | ☼ | 08/29/12 16:20 | 08/29/12 23:11 | 10 |
| Diesel Range Organics [C10-C28] | 880 | | 390 | | mg/Kg | ☼ | 08/29/12 16:20 | 08/29/12 23:11 | 10 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *102* | | *40 - 140* | *08/29/12 16:20* | *08/29/12 23:11* | *10* |

## Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

**Client Sample ID: P4** — **Lab Sample ID: 360-42392-1**
**Date Collected: 08/27/12 09:40** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 37.3**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | | 260 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 18:20 | 1 |
| PCB-1221 | ND | | 260 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 18:20 | 1 |
| PCB-1232 | ND | | 260 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 18:20 | 1 |
| PCB-1242 | ND | | 260 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 18:20 | 1 |
| PCB-1248 | ND | | 260 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 18:20 | 1 |
| PCB-1254 | ND | | 260 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 18:20 | 1 |
| PCB-1260 | ND | | 260 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 18:20 | 1 |
| PCB-1262 | ND | | 260 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 18:20 | 1 |
| PCB-1268 | ND | | 260 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 18:20 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *88* | | *30 - 150* | *08/29/12 16:17* | *08/30/12 18:20* | *1* |
| *Tetrachloro-m-xylene* | *79* | | *30 - 150* | *08/29/12 16:17* | *08/30/12 18:20* | *1* |
| *DCB Decachlorobiphenyl* | *58* | | *30 - 150* | *08/29/12 16:17* | *08/30/12 18:20* | *1* |
| *DCB Decachlorobiphenyl* | *57* | | *30 - 150* | *08/29/12 16:17* | *08/30/12 18:20* | *1* |

**Client Sample ID: P5** — **Lab Sample ID: 360-42392-2**
**Date Collected: 08/27/12 10:20** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 42.9**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | | 230 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 18:42 | 1 |
| PCB-1221 | ND | | 230 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 18:42 | 1 |
| PCB-1232 | ND | | 230 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 18:42 | 1 |
| PCB-1242 | ND | | 230 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 18:42 | 1 |
| PCB-1248 | ND | | 230 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 18:42 | 1 |
| PCB-1254 | ND | | 230 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 18:42 | 1 |
| PCB-1260 | ND | | 230 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 18:42 | 1 |
| PCB-1262 | ND | | 230 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 18:42 | 1 |
| PCB-1268 | ND | | 230 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 18:42 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *82* | | *30 - 150* | *08/29/12 16:17* | *08/30/12 18:42* | *1* |
| *Tetrachloro-m-xylene* | *73* | | *30 - 150* | *08/29/12 16:17* | *08/30/12 18:42* | *1* |
| *DCB Decachlorobiphenyl* | *53* | | *30 - 150* | *08/29/12 16:17* | *08/30/12 18:42* | *1* |
| *DCB Decachlorobiphenyl* | *59* | | *30 - 150* | *08/29/12 16:17* | *08/30/12 18:42* | *1* |

**Client Sample ID: P10** — **Lab Sample ID: 360-42392-3**
**Date Collected: 08/27/12 12:45** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 71.8**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | | 130 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:04 | 1 |
| PCB-1221 | ND | | 130 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:04 | 1 |
| PCB-1232 | ND | | 130 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:04 | 1 |
| PCB-1242 | ND | | 130 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:04 | 1 |
| PCB-1248 | ND | | 130 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:04 | 1 |
| PCB-1254 | ND | | 130 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:04 | 1 |
| PCB-1260 | ND | | 130 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:04 | 1 |
| PCB-1262 | ND | | 130 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:04 | 1 |
| PCB-1268 | ND | | 130 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:04 | 1 |

## Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Tetrachloro-m-xylene | 95 | | 30 - 150 | 08/29/12 16:17 | 08/30/12 19:04 | 1 |
| Tetrachloro-m-xylene | 85 | | 30 - 150 | 08/29/12 16:17 | 08/30/12 19:04 | 1 |
| DCB Decachlorobiphenyl | 71 | | 30 - 150 | 08/29/12 16:17 | 08/30/12 19:04 | 1 |
| DCB Decachlorobiphenyl | 70 | | 30 - 150 | 08/29/12 16:17 | 08/30/12 19:04 | 1 |

**Client Sample ID: P13** — **Lab Sample ID: 360-42392-4**
**Date Collected: 08/27/12 14:05** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 28.1**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | | 350 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:26 | 1 |
| PCB-1221 | ND | | 350 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:26 | 1 |
| PCB-1232 | ND | | 350 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:26 | 1 |
| PCB-1242 | ND | | 350 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:26 | 1 |
| PCB-1248 | ND | | 350 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:26 | 1 |
| PCB-1254 | ND | | 350 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:26 | 1 |
| PCB-1260 | ND | | 350 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:26 | 1 |
| PCB-1262 | ND | | 350 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:26 | 1 |
| PCB-1268 | ND | | 350 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:26 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Tetrachloro-m-xylene | 95 | | 30 - 150 | 08/29/12 16:17 | 08/30/12 19:26 | 1 |
| Tetrachloro-m-xylene | 83 | | 30 - 150 | 08/29/12 16:17 | 08/30/12 19:26 | 1 |
| DCB Decachlorobiphenyl | 69 | | 30 - 150 | 08/29/12 16:17 | 08/30/12 19:26 | 1 |
| DCB Decachlorobiphenyl | 68 | | 30 - 150 | 08/29/12 16:17 | 08/30/12 19:26 | 1 |

**Client Sample ID: P14** — **Lab Sample ID: 360-42392-5**
**Date Collected: 08/27/12 13:50** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 21.9**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | | 430 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:47 | 1 |
| PCB-1221 | ND | | 430 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:47 | 1 |
| PCB-1232 | ND | | 430 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:47 | 1 |
| PCB-1242 | ND | | 430 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:47 | 1 |
| PCB-1248 | ND | | 430 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:47 | 1 |
| PCB-1254 | ND | | 430 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:47 | 1 |
| PCB-1260 | ND | | 430 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:47 | 1 |
| PCB-1262 | ND | | 430 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:47 | 1 |
| PCB-1268 | ND | | 430 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 19:47 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Tetrachloro-m-xylene | 100 | | 30 - 150 | 08/29/12 16:17 | 08/30/12 19:47 | 1 |
| Tetrachloro-m-xylene | 84 | | 30 - 150 | 08/29/12 16:17 | 08/30/12 19:47 | 1 |
| DCB Decachlorobiphenyl | 72 | | 30 - 150 | 08/29/12 16:17 | 08/30/12 19:47 | 1 |
| DCB Decachlorobiphenyl | 69 | | 30 - 150 | 08/29/12 16:17 | 08/30/12 19:47 | 1 |

**Client Sample ID: P18** — **Lab Sample ID: 360-42392-6**
**Date Collected: 08/27/12 15:00** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 49.4**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | | 190 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:09 | 1 |
| PCB-1221 | ND | | 190 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:09 | 1 |
| PCB-1232 | ND | | 190 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:09 | 1 |
| PCB-1242 | ND | | 190 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:09 | 1 |

## Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

**Client Sample ID: P18** — **Lab Sample ID: 360-42392-6**
**Date Collected: 08/27/12 15:00** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 49.4**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1248 | ND | | 190 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:09 | 1 |
| PCB-1254 | ND | | 190 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:09 | 1 |
| PCB-1260 | ND | | 190 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:09 | 1 |
| PCB-1262 | ND | | 190 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:09 | 1 |
| PCB-1268 | ND | | 190 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:09 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *91* | | *30 - 150* | *08/29/12 16:17* | *08/30/12 20:09* | *1* |
| *Tetrachloro-m-xylene* | *82* | | *30 - 150* | *08/29/12 16:17* | *08/30/12 20:09* | *1* |
| *DCB Decachlorobiphenyl* | *61* | | *30 - 150* | *08/29/12 16:17* | *08/30/12 20:09* | *1* |
| *DCB Decachlorobiphenyl* | *60* | | *30 - 150* | *08/29/12 16:17* | *08/30/12 20:09* | *1* |

**Client Sample ID: P20** — **Lab Sample ID: 360-42392-7**
**Date Collected: 08/27/12 16:05** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 80.4**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | | 120 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:31 | 1 |
| PCB-1221 | ND | | 120 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:31 | 1 |
| PCB-1232 | ND | | 120 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:31 | 1 |
| PCB-1242 | ND | | 120 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:31 | 1 |
| PCB-1248 | ND | | 120 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:31 | 1 |
| PCB-1254 | ND | | 120 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:31 | 1 |
| PCB-1260 | ND | | 120 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:31 | 1 |
| PCB-1262 | ND | | 120 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:31 | 1 |
| PCB-1268 | ND | | 120 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:31 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *95* | | *30 - 150* | *08/29/12 16:17* | *08/30/12 20:31* | *1* |
| *Tetrachloro-m-xylene* | *78* | | *30 - 150* | *08/29/12 16:17* | *08/30/12 20:31* | *1* |
| *DCB Decachlorobiphenyl* | *78* | | *30 - 150* | *08/29/12 16:17* | *08/30/12 20:31* | *1* |
| *DCB Decachlorobiphenyl* | *81* | | *30 - 150* | *08/29/12 16:17* | *08/30/12 20:31* | *1* |

**Client Sample ID: P24** — **Lab Sample ID: 360-42392-8**
**Date Collected: 08/27/12 16:30** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 81.7**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | | 120 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:53 | 1 |
| PCB-1221 | ND | | 120 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:53 | 1 |
| PCB-1232 | ND | | 120 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:53 | 1 |
| PCB-1242 | ND | | 120 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:53 | 1 |
| PCB-1248 | ND | | 120 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:53 | 1 |
| PCB-1254 | ND | | 120 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:53 | 1 |
| PCB-1260 | ND | | 120 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:53 | 1 |
| PCB-1262 | ND | | 120 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:53 | 1 |
| PCB-1268 | ND | | 120 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 20:53 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *92* | | *30 - 150* | *08/29/12 16:17* | *08/30/12 20:53* | *1* |
| *Tetrachloro-m-xylene* | *79* | | *30 - 150* | *08/29/12 16:17* | *08/30/12 20:53* | *1* |
| *DCB Decachlorobiphenyl* | *81* | | *30 - 150* | *08/29/12 16:17* | *08/30/12 20:53* | *1* |
| *DCB Decachlorobiphenyl* | *92* | | *30 - 150* | *08/29/12 16:17* | *08/30/12 20:53* | *1* |

# Client Sample Results

Client: ENVIRON International Corp.
Project/Site: 941 Grimell St./3329188I

TestAmerica Job ID: 360-42392-1

## Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

**Client Sample ID: C-P5-P14**
**Date Collected: 08/27/12 16:45**
**Date Received: 08/27/12 19:25**

**Lab Sample ID: 360-42392-9**
**Matrix: Solid**
**Percent Solids: 24.7**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | | 400 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 21:15 | 1 |
| PCB-1221 | ND | | 400 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 21:15 | 1 |
| PCB-1232 | ND | | 400 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 21:15 | 1 |
| PCB-1242 | ND | | 400 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 21:15 | 1 |
| PCB-1248 | ND | | 400 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 21:15 | 1 |
| PCB-1254 | ND | | 400 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 21:15 | 1 |
| PCB-1260 | ND | | 400 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 21:15 | 1 |
| PCB-1262 | ND | | 400 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 21:15 | 1 |
| PCB-1268 | ND | | 400 | | ug/Kg | ☼ | 08/29/12 16:17 | 08/30/12 21:15 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *92* | | *30 - 150* | *08/29/12 16:17* | *08/30/12 21:15* | *1* |
| *Tetrachloro-m-xylene* | *79* | | *30 - 150* | *08/29/12 16:17* | *08/30/12 21:15* | *1* |
| *DCB Decachlorobiphenyl* | *65* | | *30 - 150* | *08/29/12 16:17* | *08/30/12 21:15* | *1* |
| *DCB Decachlorobiphenyl* | *63* | | *30 - 150* | *08/29/12 16:17* | *08/30/12 21:15* | *1* |

## Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

**Client Sample ID: P4** — **Lab Sample ID: 360-42392-1**
**Date Collected: 08/27/12 09:40** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 37.3**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C11-C22 Aromatics (unadjusted) | 93 | | 26 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 13:46 | 1 |
| C11-C22 Aromatics (Adjusted) | 93 | | 26 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 13:46 | 1 |
| C19-C36 Aliphatics | 170 | | 26 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 13:46 | 1 |
| C9-C18 Aliphatics | ND | | 26 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 13:46 | 1 |
| Total EPH | 260 | | 26 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 13:46 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *64* | | *40 - 140* | *08/30/12 14:47* | *08/31/12 13:46* | *1* |
| *2-Fluorobiphenyl* | *59* | | *40 - 140* | *08/30/12 14:47* | *08/31/12 13:46* | *1* |
| *2-Bromonaphthalene* | *68* | | *40 - 140* | *08/30/12 14:47* | *08/31/12 13:46* | *1* |
| *1-Chlorooctadecane* | *60* | | *40 - 140* | *08/30/12 14:47* | *08/31/12 13:46* | *1* |

**Client Sample ID: P5** — **Lab Sample ID: 360-42392-2**
**Date Collected: 08/27/12 10:20** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 42.9**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C11-C22 Aromatics (unadjusted) | 110 | | 110 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 14:20 | 5 |
| C11-C22 Aromatics (Adjusted) | 110 | | 110 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 14:20 | 5 |
| C19-C36 Aliphatics | 150 | | 110 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 14:20 | 5 |
| C9-C18 Aliphatics | ND | | 110 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 14:20 | 5 |
| Total EPH | 260 | | 110 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 14:20 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *51* | | *40 - 140* | *08/30/12 14:47* | *08/31/12 14:20* | *5* |
| *2-Fluorobiphenyl* | *64* | | *40 - 140* | *08/30/12 14:47* | *08/31/12 14:20* | *5* |
| *2-Bromonaphthalene* | *74* | | *40 - 140* | *08/30/12 14:47* | *08/31/12 14:20* | *5* |
| *1-Chlorooctadecane* | *48* | | *40 - 140* | *08/30/12 14:47* | *08/31/12 14:20* | *5* |

**Client Sample ID: P10** — **Lab Sample ID: 360-42392-3**
**Date Collected: 08/27/12 12:45** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 71.8**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C11-C22 Aromatics (unadjusted) | 7.7 | | 4.6 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 14:54 | 1 |
| C11-C22 Aromatics (Adjusted) | 7.7 | | 4.6 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 14:54 | 1 |
| C19-C36 Aliphatics | 6.9 | | 4.6 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 14:54 | 1 |
| C9-C18 Aliphatics | ND | | 4.6 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 14:54 | 1 |
| Total EPH | 15 | | 4.6 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 14:54 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *60* | | *40 - 140* | *08/30/12 14:47* | *08/31/12 14:54* | *1* |
| *2-Fluorobiphenyl* | *64* | | *40 - 140* | *08/30/12 14:47* | *08/31/12 14:54* | *1* |
| *2-Bromonaphthalene* | *74* | | *40 - 140* | *08/30/12 14:47* | *08/31/12 14:54* | *1* |
| *1-Chlorooctadecane* | *54* | | *40 - 140* | *08/30/12 14:47* | *08/31/12 14:54* | *1* |

**Client Sample ID: P13** — **Lab Sample ID: 360-42392-4**
**Date Collected: 08/27/12 14:05** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 28.1**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C11-C22 Aromatics (unadjusted) | 81 | | 34 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 15:29 | 1 |
| C11-C22 Aromatics (Adjusted) | 81 | | 34 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 15:29 | 1 |
| C19-C36 Aliphatics | 59 | | 34 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 15:29 | 1 |

## Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

**Client Sample ID: P13** — **Lab Sample ID: 360-42392-4**
**Date Collected: 08/27/12 14:05** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 28.1**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C9-C18 Aliphatics | ND | | 34 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 15:29 | 1 |
| **Total EPH** | **140** | | 34 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 15:29 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *60* | | *40 - 140* | *08/30/12 14:47* | *08/31/12 15:29* | *1* |
| *2-Fluorobiphenyl* | *69* | | *40 - 140* | *08/30/12 14:47* | *08/31/12 15:29* | *1* |
| *2-Bromonaphthalene* | *82* | | *40 - 140* | *08/30/12 14:47* | *08/31/12 15:29* | *1* |
| *1-Chlorooctadecane* | *43* | | *40 - 140* | *08/30/12 14:47* | *08/31/12 15:29* | *1* |

**Client Sample ID: P14** — **Lab Sample ID: 360-42392-5**
**Date Collected: 08/27/12 13:50** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 21.9**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **C11-C22 Aromatics (unadjusted)** | **52** | | 15 | | mg/Kg | ☼ | 09/05/12 10:17 | 09/05/12 13:28 | 1 |
| **C11-C22 Aromatics (Adjusted)** | **52** | | 15 | | mg/Kg | ☼ | 09/05/12 10:17 | 09/05/12 13:28 | 1 |
| **C19-C36 Aliphatics** | **48** | | 15 | | mg/Kg | ☼ | 09/05/12 10:17 | 09/05/12 13:28 | 1 |
| C9-C18 Aliphatics | ND | | 15 | | mg/Kg | ☼ | 09/05/12 10:17 | 09/05/12 13:28 | 1 |
| **Total EPH** | **100** | | 15 | | mg/Kg | ☼ | 09/05/12 10:17 | 09/05/12 13:28 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *71* | | *40 - 140* | *09/05/12 10:17* | *09/05/12 13:28* | *1* |
| *2-Fluorobiphenyl* | *49* | | *40 - 140* | *09/05/12 10:17* | *09/05/12 13:28* | *1* |
| *2-Bromonaphthalene* | *58* | | *40 - 140* | *09/05/12 10:17* | *09/05/12 13:28* | *1* |
| *1-Chlorooctadecane* | *61* | | *40 - 140* | *09/05/12 10:17* | *09/05/12 13:28* | *1* |

**Client Sample ID: P18** — **Lab Sample ID: 360-42392-6**
**Date Collected: 08/27/12 15:00** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 49.4**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **C11-C22 Aromatics (unadjusted)** | **41** | | 19 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 16:37 | 1 |
| **C11-C22 Aromatics (Adjusted)** | **41** | | 19 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 16:37 | 1 |
| **C19-C36 Aliphatics** | **46** | | 19 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 16:37 | 1 |
| C9-C18 Aliphatics | ND | | 19 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 16:37 | 1 |
| **Total EPH** | **87** | | 19 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 16:37 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *59* | | *40 - 140* | *08/30/12 14:47* | *08/31/12 16:37* | *1* |
| *2-Fluorobiphenyl* | *71* | | *40 - 140* | *08/30/12 14:47* | *08/31/12 16:37* | *1* |
| *2-Bromonaphthalene* | *82* | | *40 - 140* | *08/30/12 14:47* | *08/31/12 16:37* | *1* |
| *1-Chlorooctadecane* | *55* | | *40 - 140* | *08/30/12 14:47* | *08/31/12 16:37* | *1* |

**Client Sample ID: P20** — **Lab Sample ID: 360-42392-7**
**Date Collected: 08/27/12 16:05** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 80.4**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **C11-C22 Aromatics (unadjusted)** | **55** | | 4.0 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 17:11 | 1 |
| **C11-C22 Aromatics (Adjusted)** | **39** | | 4.0 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 17:11 | 1 |
| **C19-C36 Aliphatics** | **4.5** | | 4.0 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 17:11 | 1 |
| C9-C18 Aliphatics | ND | | 4.0 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 17:11 | 1 |
| **Total EPH** | **44** | | 4.0 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 17:11 | 1 |

## Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| o-Terphenyl | 70 | | 40 - 140 | 08/30/12 14:47 | 08/31/12 17:11 | 1 |
| 2-Fluorobiphenyl | 66 | | 40 - 140 | 08/30/12 14:47 | 08/31/12 17:11 | 1 |
| 2-Bromonaphthalene | 77 | | 40 - 140 | 08/30/12 14:47 | 08/31/12 17:11 | 1 |
| 1-Chlorooctadecane | 56 | | 40 - 140 | 08/30/12 14:47 | 08/31/12 17:11 | 1 |

**Client Sample ID: P24** — **Lab Sample ID: 360-42392-8**
**Date Collected: 08/27/12 16:30** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 81.7**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C11-C22 Aromatics (unadjusted) | 93 | | 20 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 17:45 | 5 |
| C11-C22 Aromatics (Adjusted) | 74 | | 20 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 17:45 | 5 |
| C19-C36 Aliphatics | 58 | | 20 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 17:45 | 5 |
| C9-C18 Aliphatics | ND | | 20 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 17:45 | 5 |
| Total EPH | 130 | | 20 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 17:45 | 5 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| o-Terphenyl | 49 | | 40 - 140 | 08/30/12 14:47 | 08/31/12 17:45 | 5 |
| 2-Fluorobiphenyl | 59 | | 40 - 140 | 08/30/12 14:47 | 08/31/12 17:45 | 5 |
| 2-Bromonaphthalene | 68 | | 40 - 140 | 08/30/12 14:47 | 08/31/12 17:45 | 5 |
| 1-Chlorooctadecane | 41 | | 40 - 140 | 08/30/12 14:47 | 08/31/12 17:45 | 5 |

**Client Sample ID: C-P5-P14** — **Lab Sample ID: 360-42392-9**
**Date Collected: 08/27/12 16:45** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 24.7**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C11-C22 Aromatics (unadjusted) | 120 | | 38 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 18:20 | 1 |
| C11-C22 Aromatics (Adjusted) | 120 | | 38 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 18:20 | 1 |
| C19-C36 Aliphatics | 170 | | 38 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 18:20 | 1 |
| C9-C18 Aliphatics | ND | | 38 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 18:20 | 1 |
| Total EPH | 290 | | 38 | | mg/Kg | ☼ | 08/30/12 14:47 | 08/31/12 18:20 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| o-Terphenyl | 52 | | 40 - 140 | 08/30/12 14:47 | 08/31/12 18:20 | 1 |
| 2-Fluorobiphenyl | 65 | | 40 - 140 | 08/30/12 14:47 | 08/31/12 18:20 | 1 |
| 2-Bromonaphthalene | 77 | | 40 - 140 | 08/30/12 14:47 | 08/31/12 18:20 | 1 |
| 1-Chlorooctadecane | 44 | | 40 - 140 | 08/30/12 14:47 | 08/31/12 18:20 | 1 |

# Client Sample Results

Client: ENVIRON International Corp.
Project/Site: 941 Grimell St./3329188I

TestAmerica Job ID: 360-42392-1

## Method: 6010C - Metals (ICP)

**Client Sample ID: P4** — **Lab Sample ID: 360-42392-1**
**Date Collected: 08/27/12 09:40** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 37.3**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 12 | | 3.0 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:44 | 1 |
| Barium | 77 | | 1.5 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:44 | 1 |
| Cadmium | 0.98 | | 0.60 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:44 | 1 |
| Chromium | 17 | | 1.5 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:44 | 1 |
| Silver | ND | | 1.5 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:44 | 1 |
| Selenium | 3.9 | | 1.5 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:44 | 1 |
| Zinc | 140 | | 7.5 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:44 | 1 |
| Lead | 170 | | 1.5 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:44 | 1 |
| Antimony | ND | | 1.5 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:44 | 1 |
| Beryllium | 2.0 | | 0.60 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:44 | 1 |
| Thallium | ND | | 3.0 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:44 | 1 |
| Nickel | 14 | | 3.0 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:44 | 1 |
| Copper | 36 | | 3.0 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:44 | 1 |

**Client Sample ID: P5** — **Lab Sample ID: 360-42392-2**
**Date Collected: 08/27/12 10:20** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 42.9**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 12 | | 2.8 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:47 | 1 |
| Barium | 80 | | 1.4 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:47 | 1 |
| Cadmium | 0.83 | | 0.57 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:47 | 1 |
| Chromium | 68 | | 1.4 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:47 | 1 |
| Silver | ND | | 1.4 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:47 | 1 |
| Selenium | 1.4 | | 1.4 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:47 | 1 |
| Zinc | 190 | | 7.1 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:47 | 1 |
| Lead | 190 | | 1.4 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:47 | 1 |
| Antimony | ND | | 1.4 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:47 | 1 |
| Beryllium | 0.94 | | 0.57 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:47 | 1 |
| Thallium | ND | | 2.8 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:47 | 1 |
| Nickel | 8.7 | | 2.8 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:47 | 1 |
| Copper | 53 | | 2.8 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:47 | 1 |

**Client Sample ID: P10** — **Lab Sample ID: 360-42392-3**
**Date Collected: 08/27/12 12:45** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 71.8**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 5.9 | | 1.8 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:50 | 1 |
| Barium | 140 | | 0.90 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:50 | 1 |
| Cadmium | 0.42 | | 0.36 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:50 | 1 |
| Chromium | 17 | | 0.90 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:50 | 1 |
| Silver | ND | | 0.90 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:50 | 1 |
| Lead | 89 | | 0.90 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:50 | 1 |
| Selenium | ND | | 0.90 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:50 | 1 |
| Antimony | ND | | 0.90 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:50 | 1 |
| Beryllium | 0.60 | | 0.36 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:50 | 1 |
| Copper | 47 | | 1.8 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:50 | 1 |
| Thallium | ND | | 1.8 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:50 | 1 |
| Nickel | 16 | | 1.8 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:50 | 1 |
| Zinc | 110 | | 4.5 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:50 | 1 |

# Client Sample Results

Client: ENVIRON International Corp.
Project/Site: 941 Grimell St./3329188I

TestAmerica Job ID: 360-42392-1

## Method: 6010C - Metals (ICP)

**Client Sample ID: P13** — **Lab Sample ID: 360-42392-4**
**Date Collected: 08/27/12 14:05** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 28.1**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Arsenic** | **5.0** | | 4.4 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:53 | 1 |
| **Barium** | **44** | | 2.2 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:53 | 1 |
| Cadmium | ND | | 0.88 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:53 | 1 |
| **Chromium** | **12** | | 2.2 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:53 | 1 |
| Silver | ND | | 2.2 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:53 | 1 |
| **Selenium** | **3.4** | | 2.2 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:53 | 1 |
| **Zinc** | **12** | | 11 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:53 | 1 |
| **Lead** | **9.5** | | 2.2 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:53 | 1 |
| Antimony | ND | | 2.2 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:53 | 1 |
| **Beryllium** | **2.9** | | 0.88 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:53 | 1 |
| Thallium | ND | | 4.4 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:53 | 1 |
| **Nickel** | **8.2** | | 4.4 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:53 | 1 |
| **Copper** | **19** | | 4.4 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:53 | 1 |

**Client Sample ID: P14** — **Lab Sample ID: 360-42392-5**
**Date Collected: 08/27/12 13:50** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 21.9**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | | 6.1 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:56 | 1 |
| **Barium** | **36** | | 3.0 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:56 | 1 |
| Cadmium | ND | | 1.2 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:56 | 1 |
| **Chromium** | **3.0** | | 3.0 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:56 | 1 |
| Silver | ND | | 3.0 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:56 | 1 |
| Selenium | ND | | 3.0 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:56 | 1 |
| Zinc | ND | | 15 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:56 | 1 |
| Lead | ND | | 3.0 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:56 | 1 |
| Antimony | ND | | 3.0 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:56 | 1 |
| Beryllium | ND | | 1.2 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:56 | 1 |
| Thallium | ND | | 6.1 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:56 | 1 |
| Nickel | ND | | 6.1 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:56 | 1 |
| **Copper** | **7.2** | | 6.1 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:56 | 1 |

**Client Sample ID: P18** — **Lab Sample ID: 360-42392-6**
**Date Collected: 08/27/12 15:00** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 49.4**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Arsenic** | **3.7** | | 2.5 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:59 | 1 |
| **Barium** | **38** | | 1.3 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:59 | 1 |
| Cadmium | ND | | 0.51 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:59 | 1 |
| **Chromium** | **12** | | 1.3 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:59 | 1 |
| Silver | ND | | 1.3 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:59 | 1 |
| **Lead** | **21** | | 1.3 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:59 | 1 |
| Selenium | ND | | 1.3 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:59 | 1 |
| Antimony | ND | | 1.3 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:59 | 1 |
| **Beryllium** | **0.66** | | 0.51 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:59 | 1 |
| **Copper** | **11** | | 2.5 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:59 | 1 |
| Thallium | ND | | 2.5 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:59 | 1 |
| **Nickel** | **6.8** | | 2.5 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:59 | 1 |
| **Zinc** | **37** | | 6.3 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 16:59 | 1 |

# Client Sample Results

Client: ENVIRON International Corp.
Project/Site: 941 Grimell St./3329188I

TestAmerica Job ID: 360-42392-1

## Method: 6010C - Metals (ICP)

**Client Sample ID: P20** — **Lab Sample ID: 360-42392-7**
**Date Collected: 08/27/12 16:05** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 80.4**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 3.0 | | 1.6 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:02 | 1 |
| Barium | 32 | | 0.81 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:02 | 1 |
| Cadmium | ND | | 0.33 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:02 | 1 |
| Chromium | 8.5 | | 0.81 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:02 | 1 |
| Silver | ND | | 0.81 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:02 | 1 |
| Selenium | ND | | 0.81 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:02 | 1 |
| Zinc | 27 | | 4.1 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:02 | 1 |
| Lead | 7.9 | | 0.81 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:02 | 1 |
| Antimony | ND | | 0.81 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:02 | 1 |
| Beryllium | 0.40 | | 0.33 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:02 | 1 |
| Thallium | ND | | 1.6 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:02 | 1 |
| Nickel | 8.3 | | 1.6 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:02 | 1 |
| Copper | 10 | | 1.6 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:02 | 1 |

**Client Sample ID: P24** — **Lab Sample ID: 360-42392-8**
**Date Collected: 08/27/12 16:30** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 81.7**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 2.3 | | 1.3 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:10 | 1 |
| Barium | 17 | | 0.64 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:10 | 1 |
| Cadmium | 0.42 | | 0.26 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:10 | 1 |
| Chromium | 5.5 | | 0.64 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:10 | 1 |
| Silver | ND | | 0.64 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:10 | 1 |
| Selenium | ND | | 0.64 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:10 | 1 |
| Zinc | 45 | | 3.2 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:10 | 1 |
| Lead | 22 | | 0.64 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:10 | 1 |
| Antimony | ND | | 0.64 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:10 | 1 |
| Beryllium | ND | | 0.26 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:10 | 1 |
| Thallium | ND | | 1.3 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:10 | 1 |
| Nickel | 7.3 | | 1.3 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:10 | 1 |
| Copper | 6.5 | | 1.3 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:10 | 1 |

**Client Sample ID: C-P5-P14** — **Lab Sample ID: 360-42392-9**
**Date Collected: 08/27/12 16:45** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 24.7**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 9.5 | | 4.4 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:13 | 1 |
| Barium | 91 | | 2.2 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:13 | 1 |
| Cadmium | ND | | 0.89 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:13 | 1 |
| Chromium | 18 | | 2.2 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:13 | 1 |
| Silver | ND | | 2.2 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:13 | 1 |
| Lead | 49 | | 2.2 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:13 | 1 |
| Selenium | ND | | 2.2 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:13 | 1 |
| Antimony | ND | | 2.2 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:13 | 1 |
| Beryllium | 1.6 | | 0.89 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:13 | 1 |
| Copper | 18 | | 4.4 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:13 | 1 |
| Thallium | ND | | 4.4 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:13 | 1 |
| Nickel | 12 | | 4.4 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:13 | 1 |
| Zinc | 96 | | 11 | | mg/Kg | ☼ | 08/28/12 10:52 | 08/28/12 17:13 | 1 |

## Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

**Client Sample ID: P4** — **Lab Sample ID: 360-42392-1**
**Date Collected: 08/27/12 09:40** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 37.3**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.23 | | mg/Kg | ☼ | 08/30/12 09:40 | 08/30/12 12:36 | 1 |

**Client Sample ID: P5** — **Lab Sample ID: 360-42392-2**
**Date Collected: 08/27/12 10:20** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 42.9**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Mercury** | **0.40** | | 0.19 | | mg/Kg | ☼ | 08/30/12 09:40 | 08/30/12 12:37 | 1 |

**Client Sample ID: P10** — **Lab Sample ID: 360-42392-3**
**Date Collected: 08/27/12 12:45** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 71.8**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.15 | | mg/Kg | ☼ | 08/30/12 09:40 | 08/30/12 12:39 | 1 |

**Client Sample ID: P13** — **Lab Sample ID: 360-42392-4**
**Date Collected: 08/27/12 14:05** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 28.1**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.30 | | mg/Kg | ☼ | 08/30/12 09:40 | 08/30/12 12:41 | 1 |

**Client Sample ID: P14** — **Lab Sample ID: 360-42392-5**
**Date Collected: 08/27/12 13:50** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 21.9**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.46 | | mg/Kg | ☼ | 08/30/12 09:40 | 08/30/12 12:43 | 1 |

**Client Sample ID: P18** — **Lab Sample ID: 360-42392-6**
**Date Collected: 08/27/12 15:00** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 49.4**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Mercury** | **0.21** | | 0.14 | | mg/Kg | ☼ | 08/30/12 09:40 | 08/30/12 12:48 | 1 |

**Client Sample ID: P20** — **Lab Sample ID: 360-42392-7**
**Date Collected: 08/27/12 16:05** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 80.4**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.12 | | mg/Kg | ☼ | 08/30/12 09:40 | 08/30/12 12:50 | 1 |

**Client Sample ID: P24** — **Lab Sample ID: 360-42392-8**
**Date Collected: 08/27/12 16:30** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 81.7**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Mercury** | **1.9** | | 0.11 | | mg/Kg | ☼ | 08/30/12 09:40 | 08/30/12 12:52 | 1 |

**Client Sample ID: C-P5-P14** — **Lab Sample ID: 360-42392-9**
**Date Collected: 08/27/12 16:45** — **Matrix: Solid**
**Date Received: 08/27/12 19:25** — **Percent Solids: 24.7**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.39 | | mg/Kg | ☼ | 08/30/12 09:40 | 08/30/12 12:54 | 1 |

## General Chemistry

**Client Sample ID: P4** — **Lab Sample ID: 360-42392-1**
**Date Collected: 08/27/12 09:40** — **Matrix: Solid**
**Date Received: 08/27/12 19:25**

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Flashpoint** | **>200** | | | | Fahrenheit | | | 08/28/12 08:36 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Reactive | ND | | 45 | | mg/Kg | | 08/30/12 07:49 | 08/31/12 16:19 | 1 |
| Sulfide, Reactive | ND | | 100 | | mg/Kg | | 08/30/12 07:50 | 08/31/12 16:21 | 1 |
| **Percent Moisture** | **63** | | 1.0 | | % | | | 08/29/12 15:56 | 1 |
| **Percent Solids** | **37** | | 1.0 | | % | | | 08/29/12 15:56 | 1 |

**Client Sample ID: P5** — **Lab Sample ID: 360-42392-2**
**Date Collected: 08/27/12 10:20** — **Matrix: Solid**
**Date Received: 08/27/12 19:25**

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Flashpoint** | **>200** | | | | Fahrenheit | | | 08/28/12 08:36 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Reactive | ND | | 45 | | mg/Kg | | 08/30/12 07:49 | 08/31/12 16:19 | 1 |
| Sulfide, Reactive | ND | | 100 | | mg/Kg | | 08/30/12 07:50 | 08/31/12 16:21 | 1 |
| **Percent Moisture** | **57** | | 1.0 | | % | | | 08/29/12 15:56 | 1 |
| **Percent Solids** | **43** | | 1.0 | | % | | | 08/29/12 15:56 | 1 |

**Client Sample ID: P10** — **Lab Sample ID: 360-42392-3**
**Date Collected: 08/27/12 12:45** — **Matrix: Solid**
**Date Received: 08/27/12 19:25**

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Flashpoint** | **>200** | | | | Fahrenheit | | | 08/28/12 08:36 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Reactive | ND | | 45 | | mg/Kg | | 08/30/12 07:49 | 08/31/12 16:19 | 1 |
| Sulfide, Reactive | ND | | 100 | | mg/Kg | | 08/30/12 07:50 | 08/31/12 16:21 | 1 |
| **Percent Moisture** | **28** | | 1.0 | | % | | | 08/29/12 15:56 | 1 |
| **Percent Solids** | **72** | | 1.0 | | % | | | 08/29/12 15:56 | 1 |

**Client Sample ID: P13** — **Lab Sample ID: 360-42392-4**
**Date Collected: 08/27/12 14:05** — **Matrix: Solid**
**Date Received: 08/27/12 19:25**

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Flashpoint** | **>200** | | | | Fahrenheit | | | 08/30/12 08:17 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Reactive | ND | | 45 | | mg/Kg | | 08/30/12 07:49 | 08/31/12 16:19 | 1 |
| Sulfide, Reactive | ND | | 100 | | mg/Kg | | 08/30/12 07:50 | 08/31/12 16:21 | 1 |
| **Percent Moisture** | **72** | | 1.0 | | % | | | 08/29/12 15:56 | 1 |
| **Percent Solids** | **28** | | 1.0 | | % | | | 08/29/12 15:56 | 1 |

**Client Sample ID: P14** — **Lab Sample ID: 360-42392-5**
**Date Collected: 08/27/12 13:50** — **Matrix: Solid**
**Date Received: 08/27/12 19:25**

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Flashpoint** | **>200** | | | | Fahrenheit | | | 08/30/12 08:17 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Reactive | ND | | 45 | | mg/Kg | | 08/30/12 07:49 | 08/31/12 16:19 | 1 |
| Sulfide, Reactive | ND | | 100 | | mg/Kg | | 08/30/12 07:50 | 08/31/12 16:21 | 1 |
| **Percent Moisture** | **78** | | 1.0 | | % | | | 08/29/12 15:56 | 1 |

## General Chemistry (Continued)

**Client Sample ID: P14** — **Lab Sample ID: 360-42392-5**
**Date Collected: 08/27/12 13:50** — **Matrix: Solid**
**Date Received: 08/27/12 19:25**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Percent Solids | 22 | | 1.0 | | % | | | 08/29/12 15:56 | 1 |

**Client Sample ID: P18** — **Lab Sample ID: 360-42392-6**
**Date Collected: 08/27/12 15:00** — **Matrix: Solid**
**Date Received: 08/27/12 19:25**

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Flashpoint | >200 | | | | Fahrenheit | | | 08/30/12 08:17 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Reactive | ND | | 45 | | mg/Kg | | 08/30/12 07:49 | 08/31/12 16:19 | 1 |
| Sulfide, Reactive | ND | | 100 | | mg/Kg | | 08/30/12 07:50 | 08/31/12 16:21 | 1 |
| Percent Moisture | 51 | | 1.0 | | % | | | 08/29/12 16:38 | 1 |
| Percent Solids | 49 | | 1.0 | | % | | | 08/29/12 16:38 | 1 |

**Client Sample ID: P20** — **Lab Sample ID: 360-42392-7**
**Date Collected: 08/27/12 16:05** — **Matrix: Solid**
**Date Received: 08/27/12 19:25**

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Flashpoint | >200 | | | | Fahrenheit | | | 08/30/12 08:17 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Reactive | ND | | 45 | | mg/Kg | | 08/30/12 07:49 | 08/31/12 16:19 | 1 |
| Sulfide, Reactive | ND | | 100 | | mg/Kg | | 08/30/12 07:50 | 08/31/12 16:21 | 1 |
| Percent Moisture | 20 | | 1.0 | | % | | | 08/29/12 15:56 | 1 |
| Percent Solids | 80 | | 1.0 | | % | | | 08/29/12 15:56 | 1 |

**Client Sample ID: P24** — **Lab Sample ID: 360-42392-8**
**Date Collected: 08/27/12 16:30** — **Matrix: Solid**
**Date Received: 08/27/12 19:25**

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Flashpoint | >200 | | | | Fahrenheit | | | 08/31/12 08:47 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Reactive | ND | | 45 | | mg/Kg | | 08/30/12 07:49 | 08/31/12 16:19 | 1 |
| Sulfide, Reactive | ND | | 100 | | mg/Kg | | 08/30/12 07:50 | 08/31/12 16:21 | 1 |
| Percent Moisture | 18 | | 1.0 | | % | | | 08/29/12 15:56 | 1 |
| Percent Solids | 82 | | 1.0 | | % | | | 08/29/12 15:56 | 1 |

**Client Sample ID: C-P5-P14** — **Lab Sample ID: 360-42392-9**
**Date Collected: 08/27/12 16:45** — **Matrix: Solid**
**Date Received: 08/27/12 19:25**

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Flashpoint | >200 | | | | Fahrenheit | | | 08/31/12 08:47 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Reactive | ND | | 45 | | mg/Kg | | 08/30/12 07:49 | 08/31/12 16:19 | 1 |
| Sulfide, Reactive | ND | | 100 | | mg/Kg | | 08/30/12 07:50 | 08/31/12 16:21 | 1 |
| Percent Moisture | 75 | | 1.0 | | % | | | 08/29/12 15:56 | 1 |
| Percent Solids | 25 | | 1.0 | | % | | | 08/29/12 15:56 | 1 |

## General Chemistry - Soluble

**Client Sample ID: P4** — **Lab Sample ID: 360-42392-1**
**Date Collected: 08/27/12 09:40** — **Matrix: Solid**
**Date Received: 08/27/12 19:25**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| pH | 5.94 | | 1.00 | | SU | | | 08/30/12 17:54 | 1 |
| Specific Conductance | 2000 | | 4.0 | | umhos/cm | | | 08/30/12 10:16 | 1 |

**Client Sample ID: P5** — **Lab Sample ID: 360-42392-2**
**Date Collected: 08/27/12 10:20** — **Matrix: Solid**
**Date Received: 08/27/12 19:25**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| pH | 5.84 | | 1.00 | | SU | | | 08/30/12 17:57 | 1 |
| Specific Conductance | 710 | | 4.0 | | umhos/cm | | | 08/30/12 10:19 | 1 |

**Client Sample ID: P10** — **Lab Sample ID: 360-42392-3**
**Date Collected: 08/27/12 12:45** — **Matrix: Solid**
**Date Received: 08/27/12 19:25**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| pH | 5.76 | | 1.00 | | SU | | | 08/30/12 18:00 | 1 |
| Specific Conductance | 920 | | 3.9 | | umhos/cm | | | 08/30/12 10:20 | 1 |

**Client Sample ID: P13** — **Lab Sample ID: 360-42392-4**
**Date Collected: 08/27/12 14:05** — **Matrix: Solid**
**Date Received: 08/27/12 19:25**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| pH | 5.29 | | 1.00 | | SU | | | 08/30/12 18:03 | 1 |
| Specific Conductance | 770 | | 3.9 | | umhos/cm | | | 08/30/12 10:21 | 1 |

**Client Sample ID: P14** — **Lab Sample ID: 360-42392-5**
**Date Collected: 08/27/12 13:50** — **Matrix: Solid**
**Date Received: 08/27/12 19:25**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| pH | 5.27 | | 1.00 | | SU | | | 08/30/12 18:09 | 1 |
| Specific Conductance | 510 | | 3.9 | | umhos/cm | | | 08/30/12 10:23 | 1 |

**Client Sample ID: P18** — **Lab Sample ID: 360-42392-6**
**Date Collected: 08/27/12 15:00** — **Matrix: Solid**
**Date Received: 08/27/12 19:25**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| pH | 5.22 | | 1.00 | | SU | | | 08/30/12 18:12 | 1 |
| Specific Conductance | 2100 | | 4.0 | | umhos/cm | | | 08/30/12 10:24 | 1 |

**Client Sample ID: P20** — **Lab Sample ID: 360-42392-7**
**Date Collected: 08/27/12 16:05** — **Matrix: Solid**
**Date Received: 08/27/12 19:25**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| pH | 6.05 | | 1.00 | | SU | | | 08/30/12 18:15 | 1 |
| Specific Conductance | 250 | | 3.9 | | umhos/cm | | | 08/30/12 10:26 | 1 |

**Client Sample ID: P24** — **Lab Sample ID: 360-42392-8**
**Date Collected: 08/27/12 16:30** — **Matrix: Solid**
**Date Received: 08/27/12 19:25**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| pH | 6.02 | | 1.00 | | SU | | | 08/30/12 18:18 | 1 |
| Specific Conductance | 520 | | 3.9 | | umhos/cm | | | 08/30/12 10:27 | 1 |

# Client Sample Results

Client: ENVIRON International Corp.
Project/Site: 941 Grimell St./3329188I

TestAmerica Job ID: 360-42392-1

## General Chemistry - Soluble

**Client Sample ID: C-P5-P14**
**Date Collected: 08/27/12 16:45**
**Date Received: 08/27/12 19:25**

**Lab Sample ID: 360-42392-9**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| pH | 5.49 | | 1.00 | | SU | | | 08/30/12 18:21 | 1 |
| Specific Conductance | 730 | | 3.9 | | umhos/cm | | | 08/30/12 10:29 | 1 |

## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description |
|---|---|
| * | LCS or LCSD exceeds the control limits |
| * | RPD of the LCS and LCSD exceeds the control limits |

### GC/MS Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| * | LCS or LCSD exceeds the control limits |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# QC Association Summary

Client: ENVIRON International Corp.
Project/Site: 941 Grimell St./3329188I

TestAmerica Job ID: 360-42392-1

## GC/MS VOA

### Prep Batch: 94873

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Total/NA | Solid | 5035 | |
| 360-42392-2 | P5 | Total/NA | Solid | 5035 | |
| 360-42392-3 | P10 | Total/NA | Solid | 5035 | |
| 360-42392-4 | P13 | Total/NA | Solid | 5035 | |
| 360-42392-5 | P14 | Total/NA | Solid | 5035 | |
| 360-42392-6 | P18 | Total/NA | Solid | 5035 | |
| LCS 360-94873/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 360-94873/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| MB 360-94873/3-A | Method Blank | Total/NA | Solid | 5035 | |

### Analysis Batch: 94876

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Total/NA | Solid | 8260C | 94873 |
| 360-42392-2 | P5 | Total/NA | Solid | 8260C | 94873 |
| 360-42392-3 | P10 | Total/NA | Solid | 8260C | 94873 |
| 360-42392-4 | P13 | Total/NA | Solid | 8260C | 94873 |
| 360-42392-5 | P14 | Total/NA | Solid | 8260C | 94873 |
| 360-42392-6 | P18 | Total/NA | Solid | 8260C | 94873 |
| LCS 360-94873/1-A | Lab Control Sample | Total/NA | Solid | 8260C | 94873 |
| LCSD 360-94873/2-A | Lab Control Sample Dup | Total/NA | Solid | 8260C | 94873 |
| MB 360-94873/3-A | Method Blank | Total/NA | Solid | 8260C | 94873 |

### Prep Batch: 94923

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-7 | P20 | Total/NA | Solid | 5035 | |
| 360-42392-8 | P24 | Total/NA | Solid | 5035 | |
| 360-42392-9 | C-P5-P14 | Total/NA | Solid | 5035 | |
| LCS 360-94923/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 360-94923/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| MB 360-94923/3-A | Method Blank | Total/NA | Solid | 5035 | |

### Analysis Batch: 94924

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-7 | P20 | Total/NA | Solid | 8260C | 94923 |
| 360-42392-8 | P24 | Total/NA | Solid | 8260C | 94923 |
| 360-42392-9 | C-P5-P14 | Total/NA | Solid | 8260C | 94923 |
| LCS 360-94923/1-A | Lab Control Sample | Total/NA | Solid | 8260C | 94923 |
| LCSD 360-94923/2-A | Lab Control Sample Dup | Total/NA | Solid | 8260C | 94923 |
| MB 360-94923/3-A | Method Blank | Total/NA | Solid | 8260C | 94923 |

## GC/MS Semi VOA

### Prep Batch: 94882

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Total/NA | Solid | 3546 | |
| 360-42392-2 | P5 | Total/NA | Solid | 3546 | |
| 360-42392-3 | P10 | Total/NA | Solid | 3546 | |
| 360-42392-4 | P13 | Total/NA | Solid | 3546 | |
| 360-42392-5 | P14 | Total/NA | Solid | 3546 | |
| 360-42392-6 | P18 | Total/NA | Solid | 3546 | |

## GC/MS Semi VOA (Continued)

### Prep Batch: 94882 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-7 | P20 | Total/NA | Solid | 3546 | |
| 360-42392-8 | P24 | Total/NA | Solid | 3546 | |
| 360-42392-9 | C-P5-P14 | Total/NA | Solid | 3546 | |
| LCS 360-94882/2-A | Lab Control Sample | Total/NA | Solid | 3546 | |
| LCSD 360-94882/3-A | Lab Control Sample Dup | Total/NA | Solid | 3546 | |
| MB 360-94882/1-A | Method Blank | Total/NA | Solid | 3546 | |

### Analysis Batch: 94921

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Total/NA | Solid | 8270D | 94882 |
| 360-42392-2 | P5 | Total/NA | Solid | 8270D | 94882 |
| 360-42392-3 | P10 | Total/NA | Solid | 8270D | 94882 |
| 360-42392-4 | P13 | Total/NA | Solid | 8270D | 94882 |
| 360-42392-5 | P14 | Total/NA | Solid | 8270D | 94882 |
| 360-42392-6 | P18 | Total/NA | Solid | 8270D | 94882 |
| 360-42392-7 | P20 | Total/NA | Solid | 8270D | 94882 |
| 360-42392-8 | P24 | Total/NA | Solid | 8270D | 94882 |
| 360-42392-9 | C-P5-P14 | Total/NA | Solid | 8270D | 94882 |
| LCS 360-94882/2-A | Lab Control Sample | Total/NA | Solid | 8270D | 94882 |
| LCSD 360-94882/3-A | Lab Control Sample Dup | Total/NA | Solid | 8270D | 94882 |
| MB 360-94882/1-A | Method Blank | Total/NA | Solid | 8270D | 94882 |

## GC VOA

### Prep Batch: 94835

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Total/NA | Solid | 5035 | |
| 360-42392-2 | P5 | Total/NA | Solid | 5035 | |
| 360-42392-3 | P10 | Total/NA | Solid | 5035 | |
| 360-42392-4 | P13 | Total/NA | Solid | 5035 | |
| 360-42392-5 | P14 | Total/NA | Solid | 5035 | |
| 360-42392-6 | P18 | Total/NA | Solid | 5035 | |
| 360-42392-7 | P20 | Total/NA | Solid | 5035 | |
| 360-42392-8 | P24 | Total/NA | Solid | 5035 | |
| 360-42392-9 | C-P5-P14 | Total/NA | Solid | 5035 | |
| LCS 360-94835/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 360-94835/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| MB 360-94835/3-A | Method Blank | Total/NA | Solid | 5035 | |

### Analysis Batch: 94841

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Total/NA | Solid | MAVPH | 94835 |
| 360-42392-2 | P5 | Total/NA | Solid | MAVPH | 94835 |
| 360-42392-3 | P10 | Total/NA | Solid | MAVPH | 94835 |
| 360-42392-4 | P13 | Total/NA | Solid | MAVPH | 94835 |
| 360-42392-5 | P14 | Total/NA | Solid | MAVPH | 94835 |
| 360-42392-6 | P18 | Total/NA | Solid | MAVPH | 94835 |
| 360-42392-7 | P20 | Total/NA | Solid | MAVPH | 94835 |
| 360-42392-8 | P24 | Total/NA | Solid | MAVPH | 94835 |
| 360-42392-9 | C-P5-P14 | Total/NA | Solid | MAVPH | 94835 |

## GC VOA (Continued)

### Analysis Batch: 94841 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| LCS 360-94835/1-A | Lab Control Sample | Total/NA | Solid | MAVPH | 94835 |
| LCSD 360-94835/2-A | Lab Control Sample Dup | Total/NA | Solid | MAVPH | 94835 |
| MB 360-94835/3-A | Method Blank | Total/NA | Solid | MAVPH | 94835 |

## GC Semi VOA

### Prep Batch: 94818

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Total/NA | Solid | 3546 | |
| 360-42392-2 | P5 | Total/NA | Solid | 3546 | |
| 360-42392-3 | P10 | Total/NA | Solid | 3546 | |
| 360-42392-4 | P13 | Total/NA | Solid | 3546 | |
| 360-42392-5 | P14 | Total/NA | Solid | 3546 | |
| 360-42392-6 | P18 | Total/NA | Solid | 3546 | |
| 360-42392-7 | P20 | Total/NA | Solid | 3546 | |
| 360-42392-8 | P24 | Total/NA | Solid | 3546 | |
| 360-42392-9 | C-P5-P14 | Total/NA | Solid | 3546 | |
| LCS 360-94818/2-A | Lab Control Sample | Total/NA | Solid | 3546 | |
| LCSD 360-94818/3-A | Lab Control Sample Dup | Total/NA | Solid | 3546 | |
| MB 360-94818/1-A | Method Blank | Total/NA | Solid | 3546 | |

### Prep Batch: 94819

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Total/NA | Solid | 3546 | |
| 360-42392-2 | P5 | Total/NA | Solid | 3546 | |
| 360-42392-3 | P10 | Total/NA | Solid | 3546 | |
| 360-42392-4 | P13 | Total/NA | Solid | 3546 | |
| 360-42392-5 | P14 | Total/NA | Solid | 3546 | |
| 360-42392-6 | P18 | Total/NA | Solid | 3546 | |
| 360-42392-7 | P20 | Total/NA | Solid | 3546 | |
| 360-42392-8 | P24 | Total/NA | Solid | 3546 | |
| 360-42392-9 | C-P5-P14 | Total/NA | Solid | 3546 | |
| LCS 360-94819/2-A | Lab Control Sample | Total/NA | Solid | 3546 | |
| LCSD 360-94819/3-A | Lab Control Sample Dup | Total/NA | Solid | 3546 | |
| MB 360-94819/1-A | Method Blank | Total/NA | Solid | 3546 | |

### Analysis Batch: 94820

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Total/NA | Solid | 8015B | 94819 |
| 360-42392-2 | P5 | Total/NA | Solid | 8015B | 94819 |
| 360-42392-3 | P10 | Total/NA | Solid | 8015B | 94819 |
| 360-42392-4 | P13 | Total/NA | Solid | 8015B | 94819 |
| 360-42392-5 | P14 | Total/NA | Solid | 8015B | 94819 |
| 360-42392-6 | P18 | Total/NA | Solid | 8015B | 94819 |
| 360-42392-7 | P20 | Total/NA | Solid | 8015B | 94819 |
| 360-42392-8 | P24 | Total/NA | Solid | 8015B | 94819 |
| 360-42392-9 | C-P5-P14 | Total/NA | Solid | 8015B | 94819 |
| LCS 360-94819/2-A | Lab Control Sample | Total/NA | Solid | 8015B | 94819 |
| LCSD 360-94819/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B | 94819 |
| MB 360-94819/1-A | Method Blank | Total/NA | Solid | 8015B | 94819 |

## GC Semi VOA (Continued)

### Analysis Batch: 94872

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Total/NA | Solid | 8082 | 94818 |
| 360-42392-2 | P5 | Total/NA | Solid | 8082 | 94818 |
| 360-42392-3 | P10 | Total/NA | Solid | 8082 | 94818 |
| 360-42392-4 | P13 | Total/NA | Solid | 8082 | 94818 |
| 360-42392-5 | P14 | Total/NA | Solid | 8082 | 94818 |
| 360-42392-6 | P18 | Total/NA | Solid | 8082 | 94818 |
| 360-42392-7 | P20 | Total/NA | Solid | 8082 | 94818 |
| 360-42392-8 | P24 | Total/NA | Solid | 8082 | 94818 |
| 360-42392-9 | C-P5-P14 | Total/NA | Solid | 8082 | 94818 |
| LCS 360-94818/2-A | Lab Control Sample | Total/NA | Solid | 8082 | 94818 |
| LCSD 360-94818/3-A | Lab Control Sample Dup | Total/NA | Solid | 8082 | 94818 |
| MB 360-94818/1-A | Method Blank | Total/NA | Solid | 8082 | 94818 |

### Prep Batch: 94877

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Total/NA | Solid | 3546 | |
| 360-42392-2 | P5 | Total/NA | Solid | 3546 | |
| 360-42392-3 | P10 | Total/NA | Solid | 3546 | |
| 360-42392-4 | P13 | Total/NA | Solid | 3546 | |
| 360-42392-6 | P18 | Total/NA | Solid | 3546 | |
| 360-42392-7 | P20 | Total/NA | Solid | 3546 | |
| 360-42392-8 | P24 | Total/NA | Solid | 3546 | |
| 360-42392-9 | C-P5-P14 | Total/NA | Solid | 3546 | |
| LCS 360-94877/2-A | Lab Control Sample | Total/NA | Solid | 3546 | |
| LCSD 360-94877/3-A | Lab Control Sample Dup | Total/NA | Solid | 3546 | |
| MB 360-94877/1-A | Method Blank | Total/NA | Solid | 3546 | |

### Analysis Batch: 94905

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Total/NA | Solid | MA-EPH | 94877 |
| 360-42392-2 | P5 | Total/NA | Solid | MA-EPH | 94877 |
| 360-42392-3 | P10 | Total/NA | Solid | MA-EPH | 94877 |
| 360-42392-4 | P13 | Total/NA | Solid | MA-EPH | 94877 |
| 360-42392-6 | P18 | Total/NA | Solid | MA-EPH | 94877 |
| 360-42392-7 | P20 | Total/NA | Solid | MA-EPH | 94877 |
| 360-42392-8 | P24 | Total/NA | Solid | MA-EPH | 94877 |
| 360-42392-9 | C-P5-P14 | Total/NA | Solid | MA-EPH | 94877 |
| LCS 360-94877/2-A | Lab Control Sample | Total/NA | Solid | MA-EPH | 94877 |
| LCSD 360-94877/3-A | Lab Control Sample Dup | Total/NA | Solid | MA-EPH | 94877 |
| MB 360-94877/1-A | Method Blank | Total/NA | Solid | MA-EPH | 94877 |

### Analysis Batch: 95036

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-5 | P14 | Total/NA | Solid | MA-EPH | 95037 |
| LCS 360-95037/2-A | Lab Control Sample | Total/NA | Solid | MA-EPH | 95037 |
| LCSD 360-95037/3-A | Lab Control Sample Dup | Total/NA | Solid | MA-EPH | 95037 |
| MB 360-95037/1-A | Method Blank | Total/NA | Solid | MA-EPH | 95037 |

### Prep Batch: 95037

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-5 | P14 | Total/NA | Solid | 3546 | |

## GC Semi VOA (Continued)

### Prep Batch: 95037 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| LCS 360-95037/2-A | Lab Control Sample | Total/NA | Solid | 3546 | |
| LCSD 360-95037/3-A | Lab Control Sample Dup | Total/NA | Solid | 3546 | |
| MB 360-95037/1-A | Method Blank | Total/NA | Solid | 3546 | |

## Metals

### Prep Batch: 94738

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Total/NA | Solid | 3050B | |
| 360-42392-2 | P5 | Total/NA | Solid | 3050B | |
| 360-42392-3 | P10 | Total/NA | Solid | 3050B | |
| 360-42392-4 | P13 | Total/NA | Solid | 3050B | |
| 360-42392-5 | P14 | Total/NA | Solid | 3050B | |
| 360-42392-6 | P18 | Total/NA | Solid | 3050B | |
| 360-42392-7 | P20 | Total/NA | Solid | 3050B | |
| 360-42392-8 | P24 | Total/NA | Solid | 3050B | |
| 360-42392-9 | C-P5-P14 | Total/NA | Solid | 3050B | |
| LCDSRM 360-94738/3-A LCDSF | Lab Control Sample Dup | Total/NA | Solid | 3050B | |
| LCSSRM 360-94738/2-A | Lab Control Sample | Total/NA | Solid | 3050B | |
| MB 360-94738/1-A | Method Blank | Total/NA | Solid | 3050B | |

### Analysis Batch: 94781

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Total/NA | Solid | 6010C | 94738 |
| 360-42392-2 | P5 | Total/NA | Solid | 6010C | 94738 |
| 360-42392-3 | P10 | Total/NA | Solid | 6010C | 94738 |
| 360-42392-4 | P13 | Total/NA | Solid | 6010C | 94738 |
| 360-42392-5 | P14 | Total/NA | Solid | 6010C | 94738 |
| 360-42392-6 | P18 | Total/NA | Solid | 6010C | 94738 |
| 360-42392-7 | P20 | Total/NA | Solid | 6010C | 94738 |
| 360-42392-8 | P24 | Total/NA | Solid | 6010C | 94738 |
| 360-42392-9 | C-P5-P14 | Total/NA | Solid | 6010C | 94738 |
| LCDSRM 360-94738/3-A LCDSF | Lab Control Sample Dup | Total/NA | Solid | 6010C | 94738 |
| LCSSRM 360-94738/2-A | Lab Control Sample | Total/NA | Solid | 6010C | 94738 |
| MB 360-94738/1-A | Method Blank | Total/NA | Solid | 6010C | 94738 |

### Prep Batch: 94848

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Total/NA | Solid | 7471B | |
| 360-42392-2 | P5 | Total/NA | Solid | 7471B | |
| 360-42392-3 | P10 | Total/NA | Solid | 7471B | |
| 360-42392-4 | P13 | Total/NA | Solid | 7471B | |
| 360-42392-5 | P14 | Total/NA | Solid | 7471B | |
| 360-42392-6 | P18 | Total/NA | Solid | 7471B | |
| 360-42392-7 | P20 | Total/NA | Solid | 7471B | |
| 360-42392-8 | P24 | Total/NA | Solid | 7471B | |
| 360-42392-9 | C-P5-P14 | Total/NA | Solid | 7471B | |
| LCDSRM 360-94848/3-A LCDSF | Lab Control Sample Dup | Total/NA | Solid | 7471B | |
| LCSSRM 360-94848/2-A | Lab Control Sample | Total/NA | Solid | 7471B | |
| MB 360-94848/1-A | Method Blank | Total/NA | Solid | 7471B | |

## Metals (Continued)

### Analysis Batch: 94871

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Total/NA | Solid | 7471B | 94848 |
| 360-42392-2 | P5 | Total/NA | Solid | 7471B | 94848 |
| 360-42392-3 | P10 | Total/NA | Solid | 7471B | 94848 |
| 360-42392-4 | P13 | Total/NA | Solid | 7471B | 94848 |
| 360-42392-5 | P14 | Total/NA | Solid | 7471B | 94848 |
| 360-42392-6 | P18 | Total/NA | Solid | 7471B | 94848 |
| 360-42392-7 | P20 | Total/NA | Solid | 7471B | 94848 |
| 360-42392-8 | P24 | Total/NA | Solid | 7471B | 94848 |
| 360-42392-9 | C-P5-P14 | Total/NA | Solid | 7471B | 94848 |
| LCDSRM 360-94848/3-A LCDSF | Lab Control Sample Dup | Total/NA | Solid | 7471B | 94848 |
| LCSSRM 360-94848/2-A | Lab Control Sample | Total/NA | Solid | 7471B | 94848 |
| MB 360-94848/1-A | Method Blank | Total/NA | Solid | 7471B | 94848 |

## General Chemistry

### Leach Batch: 94751

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Soluble | Solid | DI Leach | |
| 360-42392-1 DU | P4 | Soluble | Solid | DI Leach | |
| 360-42392-2 | P5 | Soluble | Solid | DI Leach | |
| 360-42392-3 | P10 | Soluble | Solid | DI Leach | |
| 360-42392-4 | P13 | Soluble | Solid | DI Leach | |
| 360-42392-5 | P14 | Soluble | Solid | DI Leach | |
| 360-42392-6 | P18 | Soluble | Solid | DI Leach | |
| 360-42392-7 | P20 | Soluble | Solid | DI Leach | |
| 360-42392-8 | P24 | Soluble | Solid | DI Leach | |
| 360-42392-9 | C-P5-P14 | Soluble | Solid | DI Leach | |
| LCS 360-94751/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| MB 360-94751/1-A | Method Blank | Soluble | Solid | DI Leach | |

### Analysis Batch: 94776

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Total/NA | Solid | 1010 | |
| 360-42392-2 | P5 | Total/NA | Solid | 1010 | |
| 360-42392-3 | P10 | Total/NA | Solid | 1010 | |
| 360-42392-3 DU | P10 | Total/NA | Solid | 1010 | |
| LCS 360-94776/2 | Lab Control Sample | Total/NA | Solid | 1010 | |
| MB 360-94776/1 | Method Blank | Total/NA | Solid | 1010 | |

### Analysis Batch: 94812

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Total/NA | Solid | Moisture | |
| 360-42392-2 | P5 | Total/NA | Solid | Moisture | |
| 360-42392-3 | P10 | Total/NA | Solid | Moisture | |
| 360-42392-4 | P13 | Total/NA | Solid | Moisture | |
| 360-42392-5 | P14 | Total/NA | Solid | Moisture | |
| 360-42392-6 | P18 | Total/NA | Solid | Moisture | |
| 360-42392-7 | P20 | Total/NA | Solid | Moisture | |
| 360-42392-8 | P24 | Total/NA | Solid | Moisture | |
| 360-42392-9 | C-P5-P14 | Total/NA | Solid | Moisture | |

## General Chemistry (Continued)

### Prep Batch: 94828

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Total/NA | Solid | 7.3.3 | |
| 360-42392-1 DU | P4 | Total/NA | Solid | 7.3.3 | |
| 360-42392-2 | P5 | Total/NA | Solid | 7.3.3 | |
| 360-42392-3 | P10 | Total/NA | Solid | 7.3.3 | |
| 360-42392-4 | P13 | Total/NA | Solid | 7.3.3 | |
| 360-42392-5 | P14 | Total/NA | Solid | 7.3.3 | |
| 360-42392-6 | P18 | Total/NA | Solid | 7.3.3 | |
| 360-42392-7 | P20 | Total/NA | Solid | 7.3.3 | |
| 360-42392-8 | P24 | Total/NA | Solid | 7.3.3 | |
| 360-42392-9 | C-P5-P14 | Total/NA | Solid | 7.3.3 | |
| LCS 360-94828/2-A | Lab Control Sample | Total/NA | Solid | 7.3.3 | |
| MB 360-94828/1-A | Method Blank | Total/NA | Solid | 7.3.3 | |

### Prep Batch: 94829

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Total/NA | Solid | 7.3.4 | |
| 360-42392-1 DU | P4 | Total/NA | Solid | 7.3.4 | |
| 360-42392-2 | P5 | Total/NA | Solid | 7.3.4 | |
| 360-42392-3 | P10 | Total/NA | Solid | 7.3.4 | |
| 360-42392-4 | P13 | Total/NA | Solid | 7.3.4 | |
| 360-42392-5 | P14 | Total/NA | Solid | 7.3.4 | |
| 360-42392-6 | P18 | Total/NA | Solid | 7.3.4 | |
| 360-42392-7 | P20 | Total/NA | Solid | 7.3.4 | |
| 360-42392-8 | P24 | Total/NA | Solid | 7.3.4 | |
| 360-42392-9 | C-P5-P14 | Total/NA | Solid | 7.3.4 | |
| LCS 360-94829/2-A | Lab Control Sample | Total/NA | Solid | 7.3.4 | |
| MB 360-94829/1-A | Method Blank | Total/NA | Solid | 7.3.4 | |

### Analysis Batch: 94868

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Soluble | Solid | SM 2510B | 94751 |
| 360-42392-1 DU | P4 | Soluble | Solid | SM 2510B | 94751 |
| 360-42392-2 | P5 | Soluble | Solid | SM 2510B | 94751 |
| 360-42392-3 | P10 | Soluble | Solid | SM 2510B | 94751 |
| 360-42392-4 | P13 | Soluble | Solid | SM 2510B | 94751 |
| 360-42392-5 | P14 | Soluble | Solid | SM 2510B | 94751 |
| 360-42392-6 | P18 | Soluble | Solid | SM 2510B | 94751 |
| 360-42392-7 | P20 | Soluble | Solid | SM 2510B | 94751 |
| 360-42392-8 | P24 | Soluble | Solid | SM 2510B | 94751 |
| 360-42392-9 | C-P5-P14 | Soluble | Solid | SM 2510B | 94751 |
| LCS 360-94751/2-A | Lab Control Sample | Soluble | Solid | SM 2510B | 94751 |
| MB 360-94751/1-A | Method Blank | Soluble | Solid | SM 2510B | 94751 |

### Analysis Batch: 94892

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-4 | P13 | Total/NA | Solid | 1010 | |
| 360-42392-5 | P14 | Total/NA | Solid | 1010 | |
| 360-42392-6 | P18 | Total/NA | Solid | 1010 | |
| 360-42392-7 | P20 | Total/NA | Solid | 1010 | |
| 360-42392-7 DU | P20 | Total/NA | Solid | 1010 | |
| LCS 360-94892/2 | Lab Control Sample | Total/NA | Solid | 1010 | |

## General Chemistry (Continued)

### Analysis Batch: 94892 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| MB 360-94892/1 | Method Blank | Total/NA | Solid | 1010 | |

### Leach Batch: 94897

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Soluble | Solid | DI Leach | |
| 360-42392-2 | P5 | Soluble | Solid | DI Leach | |
| 360-42392-3 | P10 | Soluble | Solid | DI Leach | |
| 360-42392-4 | P13 | Soluble | Solid | DI Leach | |
| 360-42392-5 | P14 | Soluble | Solid | DI Leach | |
| 360-42392-6 | P18 | Soluble | Solid | DI Leach | |
| 360-42392-7 | P20 | Soluble | Solid | DI Leach | |
| 360-42392-8 | P24 | Soluble | Solid | DI Leach | |
| 360-42392-9 | C-P5-P14 | Soluble | Solid | DI Leach | |
| LCS 360-94897/1-A | Lab Control Sample | Soluble | Solid | DI Leach | |

### Analysis Batch: 94915

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Soluble | Solid | 9045C | 94897 |
| 360-42392-2 | P5 | Soluble | Solid | 9045C | 94897 |
| 360-42392-3 | P10 | Soluble | Solid | 9045C | 94897 |
| 360-42392-4 | P13 | Soluble | Solid | 9045C | 94897 |
| 360-42392-5 | P14 | Soluble | Solid | 9045C | 94897 |
| 360-42392-6 | P18 | Soluble | Solid | 9045C | 94897 |
| 360-42392-7 | P20 | Soluble | Solid | 9045C | 94897 |
| 360-42392-8 | P24 | Soluble | Solid | 9045C | 94897 |
| 360-42392-9 | C-P5-P14 | Soluble | Solid | 9045C | 94897 |
| LCS 360-94897/1-A | Lab Control Sample | Soluble | Solid | 9045C | 94897 |

### Analysis Batch: 94935

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-8 | P24 | Total/NA | Solid | 1010 | |
| 360-42392-9 | C-P5-P14 | Total/NA | Solid | 1010 | |
| LCS 360-94935/2 | Lab Control Sample | Total/NA | Solid | 1010 | |
| MB 360-94935/1 | Method Blank | Total/NA | Solid | 1010 | |

### Analysis Batch: 94937

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Total/NA | Solid | 9014 | 94828 |
| 360-42392-1 DU | P4 | Total/NA | Solid | 9014 | 94828 |
| 360-42392-2 | P5 | Total/NA | Solid | 9014 | 94828 |
| 360-42392-3 | P10 | Total/NA | Solid | 9014 | 94828 |
| 360-42392-4 | P13 | Total/NA | Solid | 9014 | 94828 |
| 360-42392-5 | P14 | Total/NA | Solid | 9014 | 94828 |
| 360-42392-6 | P18 | Total/NA | Solid | 9014 | 94828 |
| 360-42392-7 | P20 | Total/NA | Solid | 9014 | 94828 |
| 360-42392-8 | P24 | Total/NA | Solid | 9014 | 94828 |
| 360-42392-9 | C-P5-P14 | Total/NA | Solid | 9014 | 94828 |
| LCS 360-94828/2-A | Lab Control Sample | Total/NA | Solid | 9014 | 94828 |
| MB 360-94828/1-A | Method Blank | Total/NA | Solid | 9014 | 94828 |

## General Chemistry (Continued)

### Analysis Batch: 94942

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-42392-1 | P4 | Total/NA | Solid | 9034 | 94829 |
| 360-42392-1 DU | P4 | Total/NA | Solid | 9034 | 94829 |
| 360-42392-2 | P5 | Total/NA | Solid | 9034 | 94829 |
| 360-42392-3 | P10 | Total/NA | Solid | 9034 | 94829 |
| 360-42392-4 | P13 | Total/NA | Solid | 9034 | 94829 |
| 360-42392-5 | P14 | Total/NA | Solid | 9034 | 94829 |
| 360-42392-6 | P18 | Total/NA | Solid | 9034 | 94829 |
| 360-42392-7 | P20 | Total/NA | Solid | 9034 | 94829 |
| 360-42392-8 | P24 | Total/NA | Solid | 9034 | 94829 |
| 360-42392-9 | C-P5-P14 | Total/NA | Solid | 9034 | 94829 |
| LCS 360-94829/2-A | Lab Control Sample | Total/NA | Solid | 9034 | 94829 |
| MB 360-94829/1-A | Method Blank | Total/NA | Solid | 9034 | 94829 |

# Surrogate Summary

Client: ENVIRON International Corp.
Project/Site: 941 Grimell St./3329188I

TestAmerica Job ID: 360-42392-1

## Method: 8260C - Volatile Organic Compounds (GC/MS)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | |
|---|---|---|---|---|
| | | BFB | DBFM | TOL |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) | (70-130) |
| 360-42392-1 | P4 | 84 | 93 | 93 |
| 360-42392-2 | P5 | 72 | 94 | 89 |
| 360-42392-3 | P10 | 83 | 94 | 94 |
| 360-42392-4 | P13 | 75 | 97 | 89 |
| 360-42392-5 | P14 | 75 | 94 | 92 |
| 360-42392-6 | P18 | 75 | 98 | 88 |
| 360-42392-7 | P20 | 86 | 94 | 96 |
| 360-42392-8 | P24 | 87 | 97 | 91 |
| 360-42392-9 | C-P5-P14 | 82 | 103 | 88 |
| LCS 360-94873/1-A | Lab Control Sample | 100 | 94 | 104 |
| LCS 360-94923/1-A | Lab Control Sample | 98 | 94 | 101 |
| LCSD 360-94873/2-A | Lab Control Sample Dup | 97 | 92 | 102 |
| LCSD 360-94923/2-A | Lab Control Sample Dup | 98 | 95 | 102 |
| MB 360-94873/3-A | Method Blank | 104 | 92 | 100 |
| MB 360-94923/3-A | Method Blank | 101 | 92 | 99 |

**Surrogate Legend**

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | |
|---|---|---|---|---|---|---|---|
| | | TBP | 2FP | NBZ | PHL | TPH | FBP |
| Lab Sample ID | Client Sample ID | (30-130) | (30-130) | (30-130) | (30-130) | (30-130) | (30-130) |
| 360-42392-1 | P4 | 86 | 88 | 72 | 89 | 104 | 76 |
| 360-42392-2 | P5 | 87 | 88 | 75 | 86 | 106 | 76 |
| 360-42392-3 | P10 | 66 | 68 | 59 | 69 | 89 | 61 |
| 360-42392-4 | P13 | 69 | 68 | 62 | 68 | 90 | 63 |
| 360-42392-5 | P14 | 60 | 59 | 53 | 58 | 81 | 53 |
| 360-42392-6 | P18 | 74 | 70 | 60 | 73 | 114 | 65 |
| 360-42392-7 | P20 | 86 | 85 | 73 | 85 | 122 | 76 |
| 360-42392-8 | P24 | 79 | 79 | 68 | 78 | 114 | 69 |
| 360-42392-9 | C-P5-P14 | 59 | 58 | 51 | 58 | 82 | 55 |
| LCS 360-94882/2-A | Lab Control Sample | 94 | 83 | 79 | 82 | 89 | 77 |
| LCSD 360-94882/3-A | Lab Control Sample Dup | 86 | 77 | 72 | 76 | 78 | 72 |
| MB 360-94882/1-A | Method Blank | 94 | 87 | 75 | 85 | 90 | 76 |

**Surrogate Legend**

TBP = 2,4,6-Tribromophenol
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPH = Terphenyl-d14
FBP = 2-Fluorobiphenyl

# Surrogate Summary

Client: ENVIRON International Corp.
Project/Site: 941 Grimell St./3329188I

TestAmerica Job ID: 360-42392-1

## Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| | | 25DBT2 | 25DBT1 |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) |
| 360-42392-1 | P4 | 99 | 104 |
| 360-42392-2 | P5 | 100 | 105 |
| 360-42392-3 | P10 | 100 | 105 |
| 360-42392-4 | P13 | 98 | 104 |
| 360-42392-5 | P14 | 97 | 103 |
| 360-42392-6 | P18 | 100 | 104 |
| 360-42392-7 | P20 | 99 | 105 |
| 360-42392-8 | P24 | 99 | 104 |
| 360-42392-9 | C-P5-P14 | 99 | 104 |
| LCS 360-94835/1-A | Lab Control Sample | 101 | 80 |
| LCSD 360-94835/2-A | Lab Control Sample Dup | 100 | 77 |
| MB 360-94835/3-A | Method Blank | 99 | 103 |

**Surrogate Legend**

25DBT = 2,5-Dibromotoluene (fid)

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) |
|---|---|---|
| | | OTPH1 |
| Lab Sample ID | Client Sample ID | (40-140) |
| 360-42392-1 | P4 | 110 |
| 360-42392-2 | P5 | 106 |
| 360-42392-3 | P10 | 90 |
| 360-42392-4 | P13 | 86 |
| 360-42392-5 | P14 | 80 |
| 360-42392-6 | P18 | 103 |
| 360-42392-7 | P20 | 116 |
| 360-42392-8 | P24 | 102 |
| 360-42392-9 | C-P5-P14 | 102 |
| LCS 360-94819/2-A | Lab Control Sample | 72 |
| LCSD 360-94819/3-A | Lab Control Sample Dup | 75 |
| MB 360-94819/1-A | Method Blank | 83 |

**Surrogate Legend**

OTPH = o-Terphenyl

## Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | |
|---|---|---|---|---|---|
| | | TCX1 | TCX2 | DCB1 | DCB2 |
| Lab Sample ID | Client Sample ID | (30-150) | (30-150) | (30-150) | (30-150) |
| 360-42392-1 | P4 | 88 | 79 | 58 | 57 |
| 360-42392-2 | P5 | 82 | 73 | 53 | 59 |
| 360-42392-3 | P10 | 95 | 85 | 71 | 70 |
| 360-42392-4 | P13 | 95 | 83 | 69 | 68 |
| 360-42392-5 | P14 | 100 | 84 | 72 | 69 |
| 360-42392-6 | P18 | 91 | 82 | 61 | 60 |

## Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | |
|---|---|---|---|---|---|
| | | TCX1 | TCX2 | DCB1 | DCB2 |
| Lab Sample ID | Client Sample ID | (30-150) | (30-150) | (30-150) | (30-150) |
| 360-42392-7 | P20 | 95 | 78 | 78 | 81 |
| 360-42392-8 | P24 | 92 | 79 | 81 | 92 |
| 360-42392-9 | C-P5-P14 | 92 | 79 | 65 | 63 |
| LCS 360-94818/2-A | Lab Control Sample | 99 | 90 | 85 | 90 |
| LCSD 360-94818/3-A | Lab Control Sample Dup | 97 | 88 | 88 | 91 |
| MB 360-94818/1-A | Method Blank | 94 | 96 | 68 | 76 |

**Surrogate Legend**

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

## Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | |
|---|---|---|---|---|---|
| | | OTPH1 | FBP1 | 2BN1 | 1COD2 |
| Lab Sample ID | Client Sample ID | (40-140) | (40-140) | (40-140) | (40-140) |
| 360-42392-1 | P4 | 64 | 59 | 68 | 60 |
| 360-42392-2 | P5 | 51 | 64 | 74 | 48 |
| 360-42392-3 | P10 | 60 | 64 | 74 | 54 |
| 360-42392-4 | P13 | 60 | 69 | 82 | 43 |
| 360-42392-5 | P14 | 71 | 49 | 58 | 61 |
| 360-42392-6 | P18 | 59 | 71 | 82 | 55 |
| 360-42392-7 | P20 | 70 | 66 | 77 | 56 |
| 360-42392-8 | P24 | 49 | 59 | 68 | 41 |
| 360-42392-9 | C-P5-P14 | 52 | 65 | 77 | 44 |
| LCS 360-94877/2-A | Lab Control Sample | 76 | 67 | 78 | 64 |
| LCS 360-95037/2-A | Lab Control Sample | 76 | 59 | 66 | 72 |
| LCSD 360-94877/3-A | Lab Control Sample Dup | 77 | 70 | 81 | 59 |
| LCSD 360-95037/3-A | Lab Control Sample Dup | 88 | 55 | 65 | 73 |
| MB 360-94877/1-A | Method Blank | 83 | 72 | 84 | 74 |
| MB 360-95037/1-A | Method Blank | 89 | 64 | 75 | 75 |

**Surrogate Legend**

OTPH = o-Terphenyl

FBP = 2-Fluorobiphenyl

2BN = 2-Bromonaphthalene

1COD = 1-Chlorooctadecane

## Method: 8260C - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 360-94873/3-A**
**Matrix: Solid**
**Analysis Batch: 94876**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 94873**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 1,1,1-Trichloroethane | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 1,1,2-Trichloroethane | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 1,1-Dichloroethane | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 1,1-Dichloroethene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 1,1-Dichloropropene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 1,2,3-Trichloropropane | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 25 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 1,2-Dichlorobenzene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 1,2-Dichloroethane | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 1,2-Dichloropropane | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 1,3-Dichlorobenzene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 1,3-Dichloropropane | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 1,4-Dichlorobenzene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 1,4-Dioxane | ND | | 250 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 2,2-Dichloropropane | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 2-Butanone (MEK) | ND | | 25 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 2-Chlorotoluene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 2-Hexanone | ND | | 25 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 4-Chlorotoluene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 4-Isopropyltoluene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 25 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Acetone | ND | | 250 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Benzene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Bromobenzene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Bromoform | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Bromomethane | ND | | 5.0 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Carbon disulfide | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Carbon tetrachloride | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Chlorobenzene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Chlorobromomethane | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Chlorodibromomethane | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Chloroethane | ND | | 5.0 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Chloroform | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Chloromethane | ND | | 5.0 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| cis-1,2-Dichloroethene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| cis-1,3-Dichloropropene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Dibromomethane | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Dichlorobromomethane | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Dichlorodifluoromethane | ND | | 5.0 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Ethyl ether | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Ethylbenzene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Ethylene Dibromide | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 360-94873/3-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94876** — **Prep Batch: 94873**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Hexachlorobutadiene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Isopropyl ether | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Isopropylbenzene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Methyl tert-butyl ether | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Methylene Chloride | ND | | 10 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| n-Butylbenzene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| N-Propylbenzene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Naphthalene | ND | | 25 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| o-Xylene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| sec-Butylbenzene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Styrene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Tert-amyl methyl ether | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Tert-butyl ethyl ether | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| tert-Butylbenzene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Tetrachloroethene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Tetrahydrofuran | ND | | 50 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Toluene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| trans-1,2-Dichloroethene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| trans-1,3-Dichloropropene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Trichloroethene | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |
| Vinyl chloride | ND | | 2.5 | | ug/Kg | | 08/30/12 13:58 | 08/30/12 20:55 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *104* | | *70 - 130* | *08/30/12 13:58* | *08/30/12 20:55* | *1* |
| *Dibromofluoromethane* | *92* | | *70 - 130* | *08/30/12 13:58* | *08/30/12 20:55* | *1* |
| *Toluene-d8 (Surr)* | *100* | | *70 - 130* | *08/30/12 13:58* | *08/30/12 20:55* | *1* |

**Lab Sample ID: LCS 360-94873/1-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94876** — **Prep Batch: 94873**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 100 | 100 | | ug/Kg | | 100 | 70 - 130 |
| 1,1,1-Trichloroethane | 100 | 92.5 | | ug/Kg | | 93 | 70 - 130 |
| 1,1,2,2-Tetrachloroethane | 100 | 91.6 | | ug/Kg | | 92 | 70 - 130 |
| 1,1,2-Trichloroethane | 100 | 95.6 | | ug/Kg | | 96 | 70 - 130 |
| 1,1-Dichloroethane | 100 | 95.2 | | ug/Kg | | 95 | 70 - 130 |
| 1,1-Dichloroethene | 100 | 95.0 | | ug/Kg | | 95 | 70 - 130 |
| 1,1-Dichloropropene | 100 | 88.2 | | ug/Kg | | 88 | 70 - 130 |
| 1,2,3-Trichlorobenzene | 100 | 81.3 | | ug/Kg | | 81 | 70 - 130 |
| 1,2,3-Trichloropropane | 100 | 99.9 | | ug/Kg | | 100 | 70 - 130 |
| 1,2,4-Trichlorobenzene | 100 | 96.5 | | ug/Kg | | 96 | 70 - 130 |
| 1,2,4-Trimethylbenzene | 100 | 99.9 | | ug/Kg | | 100 | 70 - 130 |
| 1,2-Dibromo-3-Chloropropane | 100 | 97.4 | | ug/Kg | | 97 | 70 - 130 |
| 1,2-Dichlorobenzene | 100 | 100 | | ug/Kg | | 100 | 70 - 130 |
| 1,2-Dichloroethane | 100 | 93.1 | | ug/Kg | | 93 | 70 - 130 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 360-94873/1-A**
**Matrix: Solid**
**Analysis Batch: 94876**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 94873**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,2-Dichloropropane | 100 | 99.5 | | ug/Kg | | 99 | 70 - 130 |
| 1,3,5-Trimethylbenzene | 100 | 99.7 | | ug/Kg | | 100 | 70 - 130 |
| 1,3-Dichlorobenzene | 100 | 102 | | ug/Kg | | 102 | 70 - 130 |
| 1,3-Dichloropropane | 100 | 96.8 | | ug/Kg | | 97 | 70 - 130 |
| 1,4-Dichlorobenzene | 100 | 101 | | ug/Kg | | 101 | 70 - 130 |
| 1,4-Dioxane | 1000 | 1340 | * | ug/Kg | | 134 | 70 - 130 |
| 2,2-Dichloropropane | 100 | 91.6 | | ug/Kg | | 92 | 70 - 130 |
| 2-Butanone (MEK) | 1000 | 744 | | ug/Kg | | 74 | 70 - 130 |
| 2-Chlorotoluene | 100 | 101 | | ug/Kg | | 101 | 70 - 130 |
| 2-Hexanone | 1000 | 771 | | ug/Kg | | 77 | 70 - 130 |
| 4-Chlorotoluene | 100 | 102 | | ug/Kg | | 102 | 70 - 130 |
| 4-Isopropyltoluene | 100 | 103 | | ug/Kg | | 103 | 70 - 130 |
| 4-Methyl-2-pentanone (MIBK) | 1000 | 993 | | ug/Kg | | 99 | 70 - 130 |
| Acetone | 1000 | 545 | * | ug/Kg | | 55 | 70 - 130 |
| Benzene | 100 | 95.4 | | ug/Kg | | 95 | 70 - 130 |
| Bromobenzene | 100 | 98.4 | | ug/Kg | | 98 | 70 - 130 |
| Bromoform | 100 | 91.7 | | ug/Kg | | 92 | 70 - 130 |
| Bromomethane | 100 | 104 | | ug/Kg | | 104 | 70 - 130 |
| Carbon disulfide | 100 | 121 | | ug/Kg | | 121 | 70 - 130 |
| Carbon tetrachloride | 100 | 80.0 | | ug/Kg | | 80 | 70 - 130 |
| Chlorobenzene | 100 | 104 | | ug/Kg | | 104 | 70 - 130 |
| Chlorobromomethane | 100 | 90.0 | | ug/Kg | | 90 | 70 - 130 |
| Chlorodibromomethane | 100 | 87.2 | | ug/Kg | | 87 | 70 - 130 |
| Chloroethane | 100 | 95.7 | | ug/Kg | | 96 | 70 - 130 |
| Chloroform | 100 | 91.9 | | ug/Kg | | 92 | 70 - 130 |
| Chloromethane | 100 | 94.2 | | ug/Kg | | 94 | 70 - 130 |
| cis-1,2-Dichloroethene | 100 | 96.8 | | ug/Kg | | 97 | 70 - 130 |
| cis-1,3-Dichloropropene | 100 | 92.1 | | ug/Kg | | 92 | 70 - 130 |
| Dibromomethane | 100 | 97.1 | | ug/Kg | | 97 | 70 - 130 |
| Dichlorobromomethane | 100 | 94.1 | | ug/Kg | | 94 | 70 - 130 |
| Dichlorodifluoromethane | 100 | 79.1 | | ug/Kg | | 79 | 70 - 130 |
| Ethyl ether | 100 | 121 | | ug/Kg | | 121 | 70 - 130 |
| Ethylbenzene | 100 | 100 | | ug/Kg | | 100 | 70 - 130 |
| Ethylene Dibromide | 100 | 98.0 | | ug/Kg | | 98 | 70 - 130 |
| Hexachlorobutadiene | 100 | 64.4 | * | ug/Kg | | 64 | 70 - 130 |
| Isopropyl ether | 100 | 98.8 | | ug/Kg | | 99 | 70 - 130 |
| Isopropylbenzene | 100 | 98.9 | | ug/Kg | | 99 | 70 - 130 |
| m-Xylene & p-Xylene | 200 | 200 | | ug/Kg | | 100 | 70 - 130 |
| Methyl tert-butyl ether | 100 | 91.1 | | ug/Kg | | 91 | 70 - 130 |
| Methylene Chloride | 100 | 97.0 | | ug/Kg | | 97 | 70 - 130 |
| n-Butylbenzene | 100 | 103 | | ug/Kg | | 103 | 70 - 130 |
| N-Propylbenzene | 100 | 103 | | ug/Kg | | 103 | 70 - 130 |
| Naphthalene | 100 | 99.6 | | ug/Kg | | 100 | 70 - 130 |
| o-Xylene | 100 | 100 | | ug/Kg | | 100 | 70 - 130 |
| sec-Butylbenzene | 100 | 101 | | ug/Kg | | 101 | 70 - 130 |
| Styrene | 100 | 98.8 | | ug/Kg | | 99 | 70 - 130 |
| Tert-amyl methyl ether | 100 | 92.2 | | ug/Kg | | 92 | 70 - 130 |
| Tert-butyl ethyl ether | 100 | 96.0 | | ug/Kg | | 96 | 70 - 130 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 360-94873/1-A**
**Matrix: Solid**
**Analysis Batch: 94876**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 94873**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| tert-Butylbenzene | 100 | 101 | | ug/Kg | | 101 | 70 - 130 |
| Tetrachloroethene | 100 | 92.6 | | ug/Kg | | 93 | 70 - 130 |
| Tetrahydrofuran | 1000 | 999 | | ug/Kg | | 100 | 70 - 130 |
| Toluene | 100 | 95.9 | | ug/Kg | | 96 | 70 - 130 |
| trans-1,2-Dichloroethene | 100 | 93.9 | | ug/Kg | | 94 | 70 - 130 |
| trans-1,3-Dichloropropene | 100 | 92.5 | | ug/Kg | | 93 | 70 - 130 |
| Trichloroethene | 100 | 99.6 | | ug/Kg | | 100 | 70 - 130 |
| Trichlorofluoromethane | 100 | 100 | | ug/Kg | | 100 | 70 - 130 |
| Vinyl chloride | 100 | 97.6 | | ug/Kg | | 98 | 70 - 130 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene* | *100* | | *70 - 130* |
| *Dibromofluoromethane* | *94* | | *70 - 130* |
| *Toluene-d8 (Surr)* | *104* | | *70 - 130* |

**Lab Sample ID: LCSD 360-94873/2-A**
**Matrix: Solid**
**Analysis Batch: 94876**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 94873**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 100 | 89.9 | | ug/Kg | | 90 | 70 - 130 | 11 | 20 |
| 1,1,1-Trichloroethane | 100 | 85.0 | | ug/Kg | | 85 | 70 - 130 | 8 | 20 |
| 1,1,2,2-Tetrachloroethane | 100 | 79.5 | | ug/Kg | | 79 | 70 - 130 | 14 | 20 |
| 1,1,2-Trichloroethane | 100 | 80.8 | | ug/Kg | | 81 | 70 - 130 | 17 | 20 |
| 1,1-Dichloroethane | 100 | 101 | | ug/Kg | | 101 | 70 - 130 | 6 | 20 |
| 1,1-Dichloroethene | 100 | 94.5 | | ug/Kg | | 95 | 70 - 130 | 1 | 20 |
| 1,1-Dichloropropene | 100 | 81.3 | | ug/Kg | | 81 | 70 - 130 | 8 | 20 |
| 1,2,3-Trichlorobenzene | 100 | 72.7 | | ug/Kg | | 73 | 70 - 130 | 11 | 20 |
| 1,2,3-Trichloropropane | 100 | 82.2 | | ug/Kg | | 82 | 70 - 130 | 19 | 20 |
| 1,2,4-Trichlorobenzene | 100 | 86.9 | | ug/Kg | | 87 | 70 - 130 | 10 | 20 |
| 1,2,4-Trimethylbenzene | 100 | 88.5 | | ug/Kg | | 88 | 70 - 130 | 12 | 20 |
| 1,2-Dibromo-3-Chloropropane | 100 | 85.7 | | ug/Kg | | 86 | 70 - 130 | 13 | 20 |
| 1,2-Dichlorobenzene | 100 | 92.7 | | ug/Kg | | 93 | 70 - 130 | 7 | 20 |
| 1,2-Dichloroethane | 100 | 80.2 | | ug/Kg | | 80 | 70 - 130 | 15 | 20 |
| 1,2-Dichloropropane | 100 | 89.7 | | ug/Kg | | 90 | 70 - 130 | 10 | 20 |
| 1,3,5-Trimethylbenzene | 100 | 91.0 | | ug/Kg | | 91 | 70 - 130 | 9 | 20 |
| 1,3-Dichlorobenzene | 100 | 89.9 | | ug/Kg | | 90 | 70 - 130 | 12 | 20 |
| 1,3-Dichloropropane | 100 | 80.8 | | ug/Kg | | 81 | 70 - 130 | 18 | 20 |
| 1,4-Dichlorobenzene | 100 | 93.4 | | ug/Kg | | 93 | 70 - 130 | 7 | 20 |
| 1,4-Dioxane | 1000 | 1260 | | ug/Kg | | 126 | 70 - 130 | 6 | 20 |
| 2,2-Dichloropropane | 100 | 82.3 | | ug/Kg | | 82 | 70 - 130 | 11 | 20 |
| 2-Butanone (MEK) | 1000 | 659 | * | ug/Kg | | 66 | 70 - 130 | 12 | 20 |
| 2-Chlorotoluene | 100 | 90.8 | | ug/Kg | | 91 | 70 - 130 | 11 | 20 |
| 2-Hexanone | 1000 | 645 | * | ug/Kg | | 64 | 70 - 130 | 18 | 20 |
| 4-Chlorotoluene | 100 | 90.7 | | ug/Kg | | 91 | 70 - 130 | 12 | 20 |
| 4-Isopropyltoluene | 100 | 93.7 | | ug/Kg | | 94 | 70 - 130 | 9 | 20 |
| 4-Methyl-2-pentanone (MIBK) | 1000 | 839 | | ug/Kg | | 84 | 70 - 130 | 17 | 20 |
| Acetone | 1000 | 598 | * | ug/Kg | | 60 | 70 - 130 | 9 | 20 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 360-94873/2-A**
**Matrix: Solid**
**Analysis Batch: 94876**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 94873**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 100 | 87.7 | | ug/Kg | | 88 | 70 - 130 | 8 | 20 |
| Bromobenzene | 100 | 87.0 | | ug/Kg | | 87 | 70 - 130 | 12 | 20 |
| Bromoform | 100 | 78.5 | | ug/Kg | | 78 | 70 - 130 | 16 | 20 |
| Bromomethane | 100 | 96.0 | | ug/Kg | | 96 | 70 - 130 | 8 | 20 |
| Carbon disulfide | 100 | 114 | | ug/Kg | | 114 | 70 - 130 | 6 | 20 |
| Carbon tetrachloride | 100 | 74.6 | | ug/Kg | | 75 | 70 - 130 | 7 | 20 |
| Chlorobenzene | 100 | 93.9 | | ug/Kg | | 94 | 70 - 130 | 11 | 20 |
| Chlorobromomethane | 100 | 79.0 | | ug/Kg | | 79 | 70 - 130 | 13 | 20 |
| Chlorodibromomethane | 100 | 75.4 | | ug/Kg | | 75 | 70 - 130 | 15 | 20 |
| Chloroethane | 100 | 118 | * | ug/Kg | | 118 | 70 - 130 | 21 | 20 |
| Chloroform | 100 | 83.8 | | ug/Kg | | 84 | 70 - 130 | 9 | 20 |
| Chloromethane | 100 | 90.2 | | ug/Kg | | 90 | 70 - 130 | 4 | 20 |
| cis-1,2-Dichloroethene | 100 | 98.9 | | ug/Kg | | 99 | 70 - 130 | 2 | 20 |
| cis-1,3-Dichloropropene | 100 | 80.0 | | ug/Kg | | 80 | 70 - 130 | 14 | 20 |
| Dibromomethane | 100 | 83.7 | | ug/Kg | | 84 | 70 - 130 | 15 | 20 |
| Dichlorobromomethane | 100 | 84.1 | | ug/Kg | | 84 | 70 - 130 | 11 | 20 |
| Dichlorodifluoromethane | 100 | 76.5 | | ug/Kg | | 77 | 70 - 130 | 3 | 20 |
| Ethyl ether | 100 | 101 | | ug/Kg | | 101 | 70 - 130 | 18 | 20 |
| Ethylbenzene | 100 | 91.5 | | ug/Kg | | 92 | 70 - 130 | 9 | 20 |
| Ethylene Dibromide | 100 | 80.8 | | ug/Kg | | 81 | 70 - 130 | 19 | 20 |
| Hexachlorobutadiene | 100 | 59.7 | * | ug/Kg | | 60 | 70 - 130 | 8 | 20 |
| Isopropyl ether | 100 | 111 | | ug/Kg | | 111 | 70 - 130 | 11 | 20 |
| Isopropylbenzene | 100 | 92.7 | | ug/Kg | | 93 | 70 - 130 | 6 | 20 |
| m-Xylene & p-Xylene | 200 | 183 | | ug/Kg | | 91 | 70 - 130 | 9 | 20 |
| Methyl tert-butyl ether | 100 | 82.2 | | ug/Kg | | 82 | 70 - 130 | 10 | 20 |
| Methylene Chloride | 100 | 92.0 | | ug/Kg | | 92 | 70 - 130 | 5 | 20 |
| n-Butylbenzene | 100 | 98.2 | | ug/Kg | | 98 | 70 - 130 | 5 | 20 |
| N-Propylbenzene | 100 | 93.4 | | ug/Kg | | 93 | 70 - 130 | 9 | 20 |
| Naphthalene | 100 | 86.2 | | ug/Kg | | 86 | 70 - 130 | 14 | 20 |
| o-Xylene | 100 | 92.3 | | ug/Kg | | 92 | 70 - 130 | 8 | 20 |
| sec-Butylbenzene | 100 | 91.8 | | ug/Kg | | 92 | 70 - 130 | 10 | 20 |
| Styrene | 100 | 88.9 | | ug/Kg | | 89 | 70 - 130 | 11 | 20 |
| Tert-amyl methyl ether | 100 | 75.2 | | ug/Kg | | 75 | 70 - 130 | 20 | 20 |
| Tert-butyl ethyl ether | 100 | 97.1 | | ug/Kg | | 97 | 70 - 130 | 1 | 20 |
| tert-Butylbenzene | 100 | 90.7 | | ug/Kg | | 91 | 70 - 130 | 10 | 20 |
| Tetrachloroethene | 100 | 85.7 | | ug/Kg | | 86 | 70 - 130 | 8 | 20 |
| Tetrahydrofuran | 1000 | 790 | * | ug/Kg | | 79 | 70 - 130 | 23 | 20 |
| Toluene | 100 | 86.8 | | ug/Kg | | 87 | 70 - 130 | 10 | 20 |
| trans-1,2-Dichloroethene | 100 | 98.6 | | ug/Kg | | 99 | 70 - 130 | 5 | 20 |
| trans-1,3-Dichloropropene | 100 | 79.1 | | ug/Kg | | 79 | 70 - 130 | 16 | 20 |
| Trichloroethene | 100 | 89.7 | | ug/Kg | | 90 | 70 - 130 | 10 | 20 |
| Trichlorofluoromethane | 100 | 95.1 | | ug/Kg | | 95 | 70 - 130 | 5 | 20 |
| Vinyl chloride | 100 | 90.5 | | ug/Kg | | 90 | 70 - 130 | 8 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene* | *97* | | *70 - 130* |
| *Dibromofluoromethane* | *92* | | *70 - 130* |
| *Toluene-d8 (Surr)* | *102* | | *70 - 130* |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 360-94923/3-A**
**Matrix: Solid**
**Analysis Batch: 94924**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 94923**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 1,1,1-Trichloroethane | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 1,1,2-Trichloroethane | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 1,1-Dichloroethane | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 1,1-Dichloroethene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 1,1-Dichloropropene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 1,2,3-Trichloropropane | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 25 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 1,2-Dichlorobenzene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 1,2-Dichloroethane | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 1,2-Dichloropropane | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 1,3-Dichlorobenzene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 1,3-Dichloropropane | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 1,4-Dichlorobenzene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 1,4-Dioxane | ND | | 250 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 2,2-Dichloropropane | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 2-Butanone (MEK) | ND | | 25 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 2-Chlorotoluene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 2-Hexanone | ND | | 25 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 4-Chlorotoluene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 4-Isopropyltoluene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 25 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Acetone | ND | | 250 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Benzene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Bromobenzene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Bromoform | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Bromomethane | ND | | 5.0 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Carbon disulfide | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Carbon tetrachloride | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Chlorobenzene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Chlorobromomethane | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Chlorodibromomethane | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Chloroethane | ND | | 5.0 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Chloroform | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Chloromethane | ND | | 5.0 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| cis-1,2-Dichloroethene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| cis-1,3-Dichloropropene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Dibromomethane | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Dichlorobromomethane | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Dichlorodifluoromethane | ND | | 5.0 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Ethyl ether | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Ethylbenzene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Ethylene Dibromide | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 360-94923/3-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94924** — **Prep Batch: 94923**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Hexachlorobutadiene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Isopropyl ether | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Isopropylbenzene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Methyl tert-butyl ether | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Methylene Chloride | ND | | 10 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| n-Butylbenzene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| N-Propylbenzene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Naphthalene | ND | | 25 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| o-Xylene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| sec-Butylbenzene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Styrene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Tert-amyl methyl ether | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Tert-butyl ethyl ether | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| tert-Butylbenzene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Tetrachloroethene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Tetrahydrofuran | ND | | 50 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Toluene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| trans-1,2-Dichloroethene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| trans-1,3-Dichloropropene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Trichloroethene | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |
| Vinyl chloride | ND | | 2.5 | | ug/Kg | | 08/31/12 14:08 | 08/31/12 16:32 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *101* | | *70 - 130* | *08/31/12 14:08* | *08/31/12 16:32* | *1* |
| *Dibromofluoromethane* | *92* | | *70 - 130* | *08/31/12 14:08* | *08/31/12 16:32* | *1* |
| *Toluene-d8 (Surr)* | *99* | | *70 - 130* | *08/31/12 14:08* | *08/31/12 16:32* | *1* |

**Lab Sample ID: LCS 360-94923/1-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94924** — **Prep Batch: 94923**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 100 | 88.8 | | ug/Kg | | 89 | 70 - 130 |
| 1,1,1-Trichloroethane | 100 | 83.9 | | ug/Kg | | 84 | 70 - 130 |
| 1,1,2,2-Tetrachloroethane | 100 | 87.8 | | ug/Kg | | 88 | 70 - 130 |
| 1,1,2-Trichloroethane | 100 | 81.8 | | ug/Kg | | 82 | 70 - 130 |
| 1,1-Dichloroethane | 100 | 84.3 | | ug/Kg | | 84 | 70 - 130 |
| 1,1-Dichloroethene | 100 | 97.2 | | ug/Kg | | 97 | 70 - 130 |
| 1,1-Dichloropropene | 100 | 84.9 | | ug/Kg | | 85 | 70 - 130 |
| 1,2,3-Trichlorobenzene | 100 | 72.9 | | ug/Kg | | 73 | 70 - 130 |
| 1,2,3-Trichloropropane | 100 | 88.5 | | ug/Kg | | 89 | 70 - 130 |
| 1,2,4-Trichlorobenzene | 100 | 89.0 | | ug/Kg | | 89 | 70 - 130 |
| 1,2,4-Trimethylbenzene | 100 | 91.9 | | ug/Kg | | 92 | 70 - 130 |
| 1,2-Dibromo-3-Chloropropane | 100 | 87.2 | | ug/Kg | | 87 | 70 - 130 |
| 1,2-Dichlorobenzene | 100 | 94.5 | | ug/Kg | | 95 | 70 - 130 |
| 1,2-Dichloroethane | 100 | 79.5 | | ug/Kg | | 79 | 70 - 130 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 360-94923/1-A**
**Matrix: Solid**
**Analysis Batch: 94924**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 94923**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,2-Dichloropropane | 100 | 88.2 | | ug/Kg | | 88 | 70 - 130 |
| 1,3,5-Trimethylbenzene | 100 | 93.4 | | ug/Kg | | 93 | 70 - 130 |
| 1,3-Dichlorobenzene | 100 | 92.1 | | ug/Kg | | 92 | 70 - 130 |
| 1,3-Dichloropropane | 100 | 83.1 | | ug/Kg | | 83 | 70 - 130 |
| 1,4-Dichlorobenzene | 100 | 95.4 | | ug/Kg | | 95 | 70 - 130 |
| 1,4-Dioxane | 1000 | 1340 | * | ug/Kg | | 134 | 70 - 130 |
| 2,2-Dichloropropane | 100 | 85.9 | | ug/Kg | | 86 | 70 - 130 |
| 2-Butanone (MEK) | 1000 | 643 | * | ug/Kg | | 64 | 70 - 130 |
| 2-Chlorotoluene | 100 | 90.9 | | ug/Kg | | 91 | 70 - 130 |
| 2-Hexanone | 1000 | 641 | * | ug/Kg | | 64 | 70 - 130 |
| 4-Chlorotoluene | 100 | 92.8 | | ug/Kg | | 93 | 70 - 130 |
| 4-Isopropyltoluene | 100 | 97.2 | | ug/Kg | | 97 | 70 - 130 |
| 4-Methyl-2-pentanone (MIBK) | 1000 | 830 | | ug/Kg | | 83 | 70 - 130 |
| Acetone | 1000 | 466 | * | ug/Kg | | 47 | 70 - 130 |
| Benzene | 100 | 86.1 | | ug/Kg | | 86 | 70 - 130 |
| Bromobenzene | 100 | 87.7 | | ug/Kg | | 88 | 70 - 130 |
| Bromoform | 100 | 84.6 | | ug/Kg | | 85 | 70 - 130 |
| Bromomethane | 100 | 96.5 | | ug/Kg | | 96 | 70 - 130 |
| Carbon disulfide | 100 | 111 | | ug/Kg | | 111 | 70 - 130 |
| Carbon tetrachloride | 100 | 75.7 | | ug/Kg | | 76 | 70 - 130 |
| Chlorobenzene | 100 | 95.8 | | ug/Kg | | 96 | 70 - 130 |
| Chlorobromomethane | 100 | 81.7 | | ug/Kg | | 82 | 70 - 130 |
| Chlorodibromomethane | 100 | 77.0 | | ug/Kg | | 77 | 70 - 130 |
| Chloroethane | 100 | 117 | | ug/Kg | | 117 | 70 - 130 |
| Chloroform | 100 | 82.9 | | ug/Kg | | 83 | 70 - 130 |
| Chloromethane | 100 | 90.8 | | ug/Kg | | 91 | 70 - 130 |
| cis-1,2-Dichloroethene | 100 | 85.7 | | ug/Kg | | 86 | 70 - 130 |
| cis-1,3-Dichloropropene | 100 | 82.3 | | ug/Kg | | 82 | 70 - 130 |
| Dibromomethane | 100 | 84.4 | | ug/Kg | | 84 | 70 - 130 |
| Dichlorobromomethane | 100 | 84.4 | | ug/Kg | | 84 | 70 - 130 |
| Dichlorodifluoromethane | 100 | 80.4 | | ug/Kg | | 80 | 70 - 130 |
| Ethyl ether | 100 | 98.3 | | ug/Kg | | 98 | 70 - 130 |
| Ethylbenzene | 100 | 92.5 | | ug/Kg | | 92 | 70 - 130 |
| Ethylene Dibromide | 100 | 83.6 | | ug/Kg | | 84 | 70 - 130 |
| Hexachlorobutadiene | 100 | 62.1 | * | ug/Kg | | 62 | 70 - 130 |
| Isopropyl ether | 100 | 84.2 | | ug/Kg | | 84 | 70 - 130 |
| Isopropylbenzene | 100 | 94.0 | | ug/Kg | | 94 | 70 - 130 |
| m-Xylene & p-Xylene | 200 | 183 | | ug/Kg | | 92 | 70 - 130 |
| Methyl tert-butyl ether | 100 | 75.1 | | ug/Kg | | 75 | 70 - 130 |
| Methylene Chloride | 100 | 87.3 | | ug/Kg | | 87 | 70 - 130 |
| n-Butylbenzene | 100 | 101 | | ug/Kg | | 101 | 70 - 130 |
| N-Propylbenzene | 100 | 96.4 | | ug/Kg | | 96 | 70 - 130 |
| Naphthalene | 100 | 84.9 | | ug/Kg | | 85 | 70 - 130 |
| o-Xylene | 100 | 91.0 | | ug/Kg | | 91 | 70 - 130 |
| sec-Butylbenzene | 100 | 97.1 | | ug/Kg | | 97 | 70 - 130 |
| Styrene | 100 | 91.0 | | ug/Kg | | 91 | 70 - 130 |
| Tert-amyl methyl ether | 100 | 76.5 | | ug/Kg | | 76 | 70 - 130 |
| Tert-butyl ethyl ether | 100 | 80.3 | | ug/Kg | | 80 | 70 - 130 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 360-94923/1-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94924** — **Prep Batch: 94923**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| tert-Butylbenzene | 100 | 94.0 | | ug/Kg | | 94 | 70 - 130 |
| Tetrachloroethene | 100 | 88.1 | | ug/Kg | | 88 | 70 - 130 |
| Tetrahydrofuran | 1000 | 830 | | ug/Kg | | 83 | 70 - 130 |
| Toluene | 100 | 86.1 | | ug/Kg | | 86 | 70 - 130 |
| trans-1,2-Dichloroethene | 100 | 82.0 | | ug/Kg | | 82 | 70 - 130 |
| trans-1,3-Dichloropropene | 100 | 80.6 | | ug/Kg | | 81 | 70 - 130 |
| Trichloroethene | 100 | 90.5 | | ug/Kg | | 90 | 70 - 130 |
| Trichlorofluoromethane | 100 | 105 | | ug/Kg | | 105 | 70 - 130 |
| Vinyl chloride | 100 | 95.3 | | ug/Kg | | 95 | 70 - 130 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene* | *98* | | *70 - 130* |
| *Dibromofluoromethane* | *94* | | *70 - 130* |
| *Toluene-d8 (Surr)* | *101* | | *70 - 130* |

**Lab Sample ID: LCSD 360-94923/2-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94924** — **Prep Batch: 94923**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 100 | 91.9 | | ug/Kg | | 92 | 70 - 130 | 3 | 20 |
| 1,1,1-Trichloroethane | 100 | 86.8 | | ug/Kg | | 87 | 70 - 130 | 3 | 20 |
| 1,1,2,2-Tetrachloroethane | 100 | 89.7 | | ug/Kg | | 90 | 70 - 130 | 2 | 20 |
| 1,1,2-Trichloroethane | 100 | 86.8 | | ug/Kg | | 87 | 70 - 130 | 6 | 20 |
| 1,1-Dichloroethane | 100 | 87.3 | | ug/Kg | | 87 | 70 - 130 | 4 | 20 |
| 1,1-Dichloroethene | 100 | 92.4 | | ug/Kg | | 92 | 70 - 130 | 5 | 20 |
| 1,1-Dichloropropene | 100 | 84.9 | | ug/Kg | | 85 | 70 - 130 | 0 | 20 |
| 1,2,3-Trichlorobenzene | 100 | 77.3 | | ug/Kg | | 77 | 70 - 130 | 6 | 20 |
| 1,2,3-Trichloropropane | 100 | 90.3 | | ug/Kg | | 90 | 70 - 130 | 2 | 20 |
| 1,2,4-Trichlorobenzene | 100 | 93.3 | | ug/Kg | | 93 | 70 - 130 | 5 | 20 |
| 1,2,4-Trimethylbenzene | 100 | 93.5 | | ug/Kg | | 94 | 70 - 130 | 2 | 20 |
| 1,2-Dibromo-3-Chloropropane | 100 | 96.1 | | ug/Kg | | 96 | 70 - 130 | 10 | 20 |
| 1,2-Dichlorobenzene | 100 | 97.6 | | ug/Kg | | 98 | 70 - 130 | 3 | 20 |
| 1,2-Dichloroethane | 100 | 83.3 | | ug/Kg | | 83 | 70 - 130 | 5 | 20 |
| 1,2-Dichloropropane | 100 | 89.8 | | ug/Kg | | 90 | 70 - 130 | 2 | 20 |
| 1,3,5-Trimethylbenzene | 100 | 94.2 | | ug/Kg | | 94 | 70 - 130 | 1 | 20 |
| 1,3-Dichlorobenzene | 100 | 95.7 | | ug/Kg | | 96 | 70 - 130 | 4 | 20 |
| 1,3-Dichloropropane | 100 | 86.6 | | ug/Kg | | 87 | 70 - 130 | 4 | 20 |
| 1,4-Dichlorobenzene | 100 | 98.0 | | ug/Kg | | 98 | 70 - 130 | 3 | 20 |
| 1,4-Dioxane | 1000 | 1240 | | ug/Kg | | 124 | 70 - 130 | 8 | 20 |
| 2,2-Dichloropropane | 100 | 86.4 | | ug/Kg | | 86 | 70 - 130 | 1 | 20 |
| 2-Butanone (MEK) | 1000 | 651 | * | ug/Kg | | 65 | 70 - 130 | 1 | 20 |
| 2-Chlorotoluene | 100 | 93.8 | | ug/Kg | | 94 | 70 - 130 | 3 | 20 |
| 2-Hexanone | 1000 | 654 | * | ug/Kg | | 65 | 70 - 130 | 2 | 20 |
| 4-Chlorotoluene | 100 | 93.7 | | ug/Kg | | 94 | 70 - 130 | 1 | 20 |
| 4-Isopropyltoluene | 100 | 99.5 | | ug/Kg | | 99 | 70 - 130 | 2 | 20 |
| 4-Methyl-2-pentanone (MIBK) | 1000 | 855 | | ug/Kg | | 86 | 70 - 130 | 3 | 20 |
| Acetone | 1000 | 456 | * | ug/Kg | | 46 | 70 - 130 | 2 | 20 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 360-94923/2-A**
**Matrix: Solid**
**Analysis Batch: 94924**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 94923**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 100 | 87.6 | | ug/Kg | | 88 | 70 - 130 | 2 | 20 |
| Bromobenzene | 100 | 89.1 | | ug/Kg | | 89 | 70 - 130 | 2 | 20 |
| Bromoform | 100 | 88.2 | | ug/Kg | | 88 | 70 - 130 | 4 | 20 |
| Bromomethane | 100 | 115 | | ug/Kg | | 115 | 70 - 130 | 18 | 20 |
| Carbon disulfide | 100 | 109 | | ug/Kg | | 109 | 70 - 130 | 2 | 20 |
| Carbon tetrachloride | 100 | 77.3 | | ug/Kg | | 77 | 70 - 130 | 2 | 20 |
| Chlorobenzene | 100 | 96.0 | | ug/Kg | | 96 | 70 - 130 | 0 | 20 |
| Chlorobromomethane | 100 | 82.5 | | ug/Kg | | 82 | 70 - 130 | 1 | 20 |
| Chlorodibromomethane | 100 | 80.9 | | ug/Kg | | 81 | 70 - 130 | 5 | 20 |
| Chloroethane | 100 | 119 | | ug/Kg | | 119 | 70 - 130 | 2 | 20 |
| Chloroform | 100 | 84.6 | | ug/Kg | | 85 | 70 - 130 | 2 | 20 |
| Chloromethane | 100 | 90.2 | | ug/Kg | | 90 | 70 - 130 | 1 | 20 |
| cis-1,2-Dichloroethene | 100 | 87.4 | | ug/Kg | | 87 | 70 - 130 | 2 | 20 |
| cis-1,3-Dichloropropene | 100 | 84.0 | | ug/Kg | | 84 | 70 - 130 | 2 | 20 |
| Dibromomethane | 100 | 88.4 | | ug/Kg | | 88 | 70 - 130 | 5 | 20 |
| Dichlorobromomethane | 100 | 87.1 | | ug/Kg | | 87 | 70 - 130 | 3 | 20 |
| Dichlorodifluoromethane | 100 | 81.7 | | ug/Kg | | 82 | 70 - 130 | 2 | 20 |
| Ethyl ether | 100 | 104 | | ug/Kg | | 104 | 70 - 130 | 6 | 20 |
| Ethylbenzene | 100 | 92.7 | | ug/Kg | | 93 | 70 - 130 | 0 | 20 |
| Ethylene Dibromide | 100 | 86.6 | | ug/Kg | | 87 | 70 - 130 | 4 | 20 |
| Hexachlorobutadiene | 100 | 64.2 | * | ug/Kg | | 64 | 70 - 130 | 3 | 20 |
| Isopropyl ether | 100 | 87.8 | | ug/Kg | | 88 | 70 - 130 | 4 | 20 |
| Isopropylbenzene | 100 | 95.4 | | ug/Kg | | 95 | 70 - 130 | 1 | 20 |
| m-Xylene & p-Xylene | 200 | 185 | | ug/Kg | | 92 | 70 - 130 | 1 | 20 |
| Methyl tert-butyl ether | 100 | 80.6 | | ug/Kg | | 81 | 70 - 130 | 7 | 20 |
| Methylene Chloride | 100 | 89.7 | | ug/Kg | | 90 | 70 - 130 | 3 | 20 |
| n-Butylbenzene | 100 | 103 | | ug/Kg | | 103 | 70 - 130 | 2 | 20 |
| N-Propylbenzene | 100 | 96.2 | | ug/Kg | | 96 | 70 - 130 | 0 | 20 |
| Naphthalene | 100 | 90.6 | | ug/Kg | | 91 | 70 - 130 | 7 | 20 |
| o-Xylene | 100 | 91.4 | | ug/Kg | | 91 | 70 - 130 | 0 | 20 |
| sec-Butylbenzene | 100 | 98.0 | | ug/Kg | | 98 | 70 - 130 | 1 | 20 |
| Styrene | 100 | 91.0 | | ug/Kg | | 91 | 70 - 130 | 0 | 20 |
| Tert-amyl methyl ether | 100 | 80.2 | | ug/Kg | | 80 | 70 - 130 | 5 | 20 |
| Tert-butyl ethyl ether | 100 | 85.9 | | ug/Kg | | 86 | 70 - 130 | 7 | 20 |
| tert-Butylbenzene | 100 | 95.6 | | ug/Kg | | 96 | 70 - 130 | 2 | 20 |
| Tetrachloroethene | 100 | 88.8 | | ug/Kg | | 89 | 70 - 130 | 1 | 20 |
| Tetrahydrofuran | 1000 | 899 | | ug/Kg | | 90 | 70 - 130 | 8 | 20 |
| Toluene | 100 | 87.9 | | ug/Kg | | 88 | 70 - 130 | 2 | 20 |
| trans-1,2-Dichloroethene | 100 | 85.7 | | ug/Kg | | 86 | 70 - 130 | 4 | 20 |
| trans-1,3-Dichloropropene | 100 | 84.2 | | ug/Kg | | 84 | 70 - 130 | 4 | 20 |
| Trichloroethene | 100 | 91.3 | | ug/Kg | | 91 | 70 - 130 | 1 | 20 |
| Trichlorofluoromethane | 100 | 104 | | ug/Kg | | 104 | 70 - 130 | 1 | 20 |
| Vinyl chloride | 100 | 94.5 | | ug/Kg | | 94 | 70 - 130 | 1 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene* | *98* | | *70 - 130* |
| *Dibromofluoromethane* | *95* | | *70 - 130* |
| *Toluene-d8 (Surr)* | *102* | | *70 - 130* |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 360-94882/1-A**
**Matrix: Solid**
**Analysis Batch: 94921**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 94882**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| 1,2-Dichlorobenzene | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| 1,3-Dichlorobenzene | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| 1,4-Dichlorobenzene | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| 2,2'-oxybis[1-chloropropane] | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| 2,4,5-Trichlorophenol | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| 2,4,6-Trichlorophenol | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| 2,4-Dichlorophenol | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| 2,4-Dimethylphenol | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| 2,4-Dinitrophenol | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| 2,4-Dinitrotoluene | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| 2,6-Dinitrotoluene | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| 2-Chloronaphthalene | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| 2-Chlorophenol | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| 2-Methylnaphthalene | ND | | 170 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| 2-Methylphenol | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| 2-Nitrophenol | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| 3 & 4 Methylphenol | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 670 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| 4-Chloroaniline | ND | | 670 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| 4-Nitrophenol | ND | | 1700 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Acenaphthene | ND | | 170 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Acenaphthylene | ND | | 170 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Acetophenone | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Aniline | ND | | 1700 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Anthracene | ND | | 170 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Azobenzene | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Benzo[a]anthracene | ND | | 170 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Benzo[a]pyrene | ND | | 170 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Benzo[b]fluoranthene | ND | | 170 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Benzo[g,h,i]perylene | ND | | 170 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Benzo[k]fluoranthene | ND | | 180 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Bis(2-chloroethyl)ether | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Butyl benzyl phthalate | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Chrysene | ND | | 170 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Di-n-butyl phthalate | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Di-n-octyl phthalate | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Dibenz(a,h)anthracene | ND | | 170 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Dibenzofuran | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Diethyl phthalate | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Dimethyl phthalate | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Fluoranthene | ND | | 170 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Fluorene | ND | | 170 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Hexachlorobenzene | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Hexachlorobutadiene | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 360-94882/1-A**
**Matrix: Solid**
**Analysis Batch: 94921**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 94882**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Hexachloroethane | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Isophorone | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Naphthalene | ND | | 170 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Nitrobenzene | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Pentachlorophenol | ND | | 1700 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Phenanthrene | ND | | 170 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Phenol | ND | | 330 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |
| Pyrene | ND | | 170 | | ug/Kg | | 08/30/12 16:13 | 08/31/12 14:11 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4,6-Tribromophenol* | *94* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 14:11* | *1* |
| *2-Fluorophenol* | *87* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 14:11* | *1* |
| *Nitrobenzene-d5* | *75* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 14:11* | *1* |
| *Phenol-d5* | *85* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 14:11* | *1* |
| *Terphenyl-d14* | *90* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 14:11* | *1* |
| *2-Fluorobiphenyl* | *76* | | *30 - 130* | *08/30/12 16:13* | *08/31/12 14:11* | *1* |

**Lab Sample ID: LCS 360-94882/2-A**
**Matrix: Solid**
**Analysis Batch: 94921**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 94882**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | 1200 | 1060 | | ug/Kg | | 88 | 40 - 140 |
| 1,2-Dichlorobenzene | 1200 | 1040 | | ug/Kg | | 86 | 40 - 140 |
| 1,3-Dichlorobenzene | 1200 | 985 | | ug/Kg | | 82 | 40 - 140 |
| 1,4-Dichlorobenzene | 1200 | 1010 | | ug/Kg | | 84 | 40 - 140 |
| 2,2'-oxybis[1-chloropropane] | 1200 | 1080 | | ug/Kg | | 90 | 40 - 140 |
| 2,4,5-Trichlorophenol | 1200 | 1290 | | ug/Kg | | 108 | 30 - 130 |
| 2,4,6-Trichlorophenol | 1200 | 1390 | | ug/Kg | | 116 | 30 - 130 |
| 2,4-Dichlorophenol | 1200 | 1270 | | ug/Kg | | 106 | 30 - 130 |
| 2,4-Dimethylphenol | 1200 | 1230 | | ug/Kg | | 102 | 30 - 130 |
| 2,4-Dinitrophenol | 1200 | 907 | | ug/Kg | | 76 | 30 - 130 |
| 2,4-Dinitrotoluene | 1200 | 1300 | | ug/Kg | | 108 | 40 - 140 |
| 2,6-Dinitrotoluene | 1200 | 1280 | | ug/Kg | | 106 | 40 - 140 |
| 2-Chloronaphthalene | 1200 | 1050 | | ug/Kg | | 88 | 40 - 140 |
| 2-Chlorophenol | 1200 | 1200 | | ug/Kg | | 100 | 30 - 130 |
| 2-Methylnaphthalene | 1200 | 1140 | | ug/Kg | | 95 | 40 - 140 |
| 2-Methylphenol | 1200 | 1230 | | ug/Kg | | 102 | 30 - 130 |
| 2-Nitrophenol | 1200 | 1160 | | ug/Kg | | 97 | 30 - 130 |
| 3 & 4 Methylphenol | 1200 | 1260 | | ug/Kg | | 105 | 30 - 130 |
| 3,3'-Dichlorobenzidine | 1330 | 1290 | | ug/Kg | | 97 | 40 - 140 |
| 4-Bromophenyl phenyl ether | 1200 | 1180 | | ug/Kg | | 98 | 40 - 140 |
| 4-Chloroaniline | 1200 | 811 | | ug/Kg | | 68 | 40 - 140 |
| 4-Nitrophenol | 1200 | ND | | ug/Kg | | 117 | 30 - 130 |
| Acenaphthene | 1200 | 1140 | | ug/Kg | | 95 | 40 - 140 |
| Acenaphthylene | 1200 | 1050 | | ug/Kg | | 87 | 40 - 140 |
| Acetophenone | 1330 | 1120 | | ug/Kg | | 84 | 40 - 140 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 360-94882/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94921** — **Prep Batch: 94882**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Aniline | 1330 | ND | | ug/Kg | | 40 | 40 - 140 |
| Anthracene | 1200 | 1210 | | ug/Kg | | 101 | 40 - 140 |
| Azobenzene | 1200 | 847 | | ug/Kg | | 71 | 40 - 140 |
| Benzo[a]anthracene | 1200 | 1260 | | ug/Kg | | 105 | 40 - 140 |
| Benzo[a]pyrene | 1200 | 1160 | | ug/Kg | | 96 | 40 - 140 |
| Benzo[b]fluoranthene | 1200 | 1280 | | ug/Kg | | 107 | 40 - 140 |
| Benzo[g,h,i]perylene | 1200 | 1050 | | ug/Kg | | 88 | 40 - 140 |
| Benzo[k]fluoranthene | 1200 | 1190 | | ug/Kg | | 99 | 40 - 140 |
| Bis(2-chloroethoxy)methane | 1200 | 1130 | | ug/Kg | | 94 | 40 - 140 |
| Bis(2-chloroethyl)ether | 1200 | 1040 | | ug/Kg | | 86 | 40 - 140 |
| Bis(2-ethylhexyl) phthalate | 1200 | 1230 | | ug/Kg | | 102 | 40 - 140 |
| Butyl benzyl phthalate | 1200 | 1130 | | ug/Kg | | 94 | 40 - 140 |
| Chrysene | 1200 | 1200 | | ug/Kg | | 100 | 40 - 140 |
| Di-n-butyl phthalate | 1200 | 1280 | | ug/Kg | | 106 | 40 - 140 |
| Di-n-octyl phthalate | 1200 | 1320 | | ug/Kg | | 110 | 40 - 140 |
| Dibenz(a,h)anthracene | 1200 | 1080 | | ug/Kg | | 90 | 40 - 140 |
| Dibenzofuran | 1200 | 1210 | | ug/Kg | | 101 | 40 - 140 |
| Diethyl phthalate | 1200 | 1240 | | ug/Kg | | 103 | 40 - 140 |
| Dimethyl phthalate | 1200 | 1210 | | ug/Kg | | 100 | 40 - 140 |
| Fluoranthene | 1200 | 1450 | | ug/Kg | | 120 | 40 - 140 |
| Fluorene | 1200 | 1150 | | ug/Kg | | 96 | 40 - 140 |
| Hexachlorobenzene | 1200 | 1280 | | ug/Kg | | 106 | 40 - 140 |
| Hexachlorobutadiene | 1200 | 1040 | | ug/Kg | | 87 | 40 - 140 |
| Hexachloroethane | 1200 | 1100 | | ug/Kg | | 92 | 40 - 140 |
| Indeno[1,2,3-cd]pyrene | 1200 | 1120 | | ug/Kg | | 93 | 40 - 140 |
| Isophorone | 1200 | 937 | | ug/Kg | | 78 | 40 - 140 |
| Naphthalene | 1200 | 1010 | | ug/Kg | | 84 | 40 - 140 |
| Nitrobenzene | 1200 | 1150 | | ug/Kg | | 96 | 40 - 140 |
| Pentachlorophenol | 1200 | ND | | ug/Kg | | 130 | 30 - 130 |
| Phenanthrene | 1200 | 1220 | | ug/Kg | | 102 | 40 - 140 |
| Phenol | 1200 | 1250 | | ug/Kg | | 104 | 30 - 130 |
| Pyrene | 1200 | 997 | | ug/Kg | | 83 | 40 - 140 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *2,4,6-Tribromophenol* | *94* | | *30 - 130* |
| *2-Fluorophenol* | *83* | | *30 - 130* |
| *Nitrobenzene-d5* | *79* | | *30 - 130* |
| *Phenol-d5* | *82* | | *30 - 130* |
| *Terphenyl-d14* | *89* | | *30 - 130* |
| *2-Fluorobiphenyl* | *77* | | *30 - 130* |

**Lab Sample ID: LCSD 360-94882/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94921** — **Prep Batch: 94882**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | 1200 | 1000 | | ug/Kg | | 84 | 40 - 140 | 5 | 30 |
| 1,2-Dichlorobenzene | 1200 | 991 | | ug/Kg | | 83 | 40 - 140 | 4 | 30 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 360-94882/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94921** — **Prep Batch: 94882**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 1200 | 950 | | ug/Kg | | 79 | 40 - 140 | 4 | 30 |
| 1,4-Dichlorobenzene | 1200 | 982 | | ug/Kg | | 82 | 40 - 140 | 3 | 30 |
| 2,2'-oxybis[1-chloropropane] | 1200 | 1030 | | ug/Kg | | 86 | 40 - 140 | 4 | 30 |
| 2,4,5-Trichlorophenol | 1200 | 1220 | | ug/Kg | | 102 | 30 - 130 | 5 | 30 |
| 2,4,6-Trichlorophenol | 1200 | 1400 | | ug/Kg | | 116 | 30 - 130 | 1 | 30 |
| 2,4-Dichlorophenol | 1200 | 1220 | | ug/Kg | | 101 | 30 - 130 | 5 | 30 |
| 2,4-Dimethylphenol | 1200 | 1170 | | ug/Kg | | 97 | 30 - 130 | 5 | 30 |
| 2,4-Dinitrophenol | 1200 | 983 | | ug/Kg | | 82 | 30 - 130 | 8 | 30 |
| 2,4-Dinitrotoluene | 1200 | 1230 | | ug/Kg | | 102 | 40 - 140 | 5 | 30 |
| 2,6-Dinitrotoluene | 1200 | 1220 | | ug/Kg | | 102 | 40 - 140 | 4 | 30 |
| 2-Chloronaphthalene | 1200 | 999 | | ug/Kg | | 83 | 40 - 140 | 5 | 30 |
| 2-Chlorophenol | 1200 | 1170 | | ug/Kg | | 97 | 30 - 130 | 3 | 30 |
| 2-Methylnaphthalene | 1200 | 1090 | | ug/Kg | | 91 | 40 - 140 | 4 | 30 |
| 2-Methylphenol | 1200 | 1190 | | ug/Kg | | 99 | 30 - 130 | 3 | 30 |
| 2-Nitrophenol | 1200 | 1100 | | ug/Kg | | 92 | 30 - 130 | 5 | 30 |
| 3 & 4 Methylphenol | 1200 | 1200 | | ug/Kg | | 100 | 30 - 130 | 5 | 30 |
| 3,3'-Dichlorobenzidine | 1330 | 1290 | | ug/Kg | | 97 | 40 - 140 | 0 | 30 |
| 4-Bromophenyl phenyl ether | 1200 | 1110 | | ug/Kg | | 93 | 40 - 140 | 6 | 30 |
| 4-Chloroaniline | 1200 | 762 | | ug/Kg | | 63 | 40 - 140 | 6 | 30 |
| 4-Nitrophenol | 1200 | ND | | ug/Kg | | 119 | 30 - 130 | 2 | 30 |
| Acenaphthene | 1200 | 1100 | | ug/Kg | | 92 | 40 - 140 | 3 | 30 |
| Acenaphthylene | 1200 | 1020 | | ug/Kg | | 85 | 40 - 140 | 2 | 30 |
| Acetophenone | 1330 | 1090 | | ug/Kg | | 81 | 40 - 140 | 3 | 30 |
| Aniline | 1330 | ND | * | ug/Kg | | 38 | 40 - 140 | 4 | 30 |
| Anthracene | 1200 | 1160 | | ug/Kg | | 97 | 40 - 140 | 5 | 30 |
| Azobenzene | 1200 | 834 | | ug/Kg | | 70 | 40 - 140 | 2 | 30 |
| Benzo[a]anthracene | 1200 | 1190 | | ug/Kg | | 99 | 40 - 140 | 6 | 30 |
| Benzo[a]pyrene | 1200 | 1080 | | ug/Kg | | 90 | 40 - 140 | 7 | 30 |
| Benzo[b]fluoranthene | 1200 | 1120 | | ug/Kg | | 93 | 40 - 140 | 13 | 30 |
| Benzo[g,h,i]perylene | 1200 | 975 | | ug/Kg | | 81 | 40 - 140 | 8 | 30 |
| Benzo[k]fluoranthene | 1200 | 1190 | | ug/Kg | | 99 | 40 - 140 | 0 | 30 |
| Bis(2-chloroethoxy)methane | 1200 | 1080 | | ug/Kg | | 90 | 40 - 140 | 4 | 30 |
| Bis(2-chloroethyl)ether | 1200 | 1010 | | ug/Kg | | 84 | 40 - 140 | 2 | 30 |
| Bis(2-ethylhexyl) phthalate | 1200 | 1150 | | ug/Kg | | 95 | 40 - 140 | 7 | 30 |
| Butyl benzyl phthalate | 1200 | 1060 | | ug/Kg | | 88 | 40 - 140 | 6 | 30 |
| Chrysene | 1200 | 1160 | | ug/Kg | | 97 | 40 - 140 | 3 | 30 |
| Di-n-butyl phthalate | 1200 | 1220 | | ug/Kg | | 101 | 40 - 140 | 5 | 30 |
| Di-n-octyl phthalate | 1200 | 1200 | | ug/Kg | | 100 | 40 - 140 | 9 | 30 |
| Dibenz(a,h)anthracene | 1200 | 1030 | | ug/Kg | | 86 | 40 - 140 | 5 | 30 |
| Dibenzofuran | 1200 | 1170 | | ug/Kg | | 97 | 40 - 140 | 4 | 30 |
| Diethyl phthalate | 1200 | 1180 | | ug/Kg | | 99 | 40 - 140 | 5 | 30 |
| Dimethyl phthalate | 1200 | 1150 | | ug/Kg | | 96 | 40 - 140 | 5 | 30 |
| Fluoranthene | 1200 | 1400 | | ug/Kg | | 117 | 40 - 140 | 3 | 30 |
| Fluorene | 1200 | 1100 | | ug/Kg | | 92 | 40 - 140 | 4 | 30 |
| Hexachlorobenzene | 1200 | 1220 | | ug/Kg | | 102 | 40 - 140 | 5 | 30 |
| Hexachlorobutadiene | 1200 | 986 | | ug/Kg | | 82 | 40 - 140 | 6 | 30 |
| Hexachloroethane | 1200 | 1060 | | ug/Kg | | 88 | 40 - 140 | 4 | 30 |
| Indeno[1,2,3-cd]pyrene | 1200 | 1070 | | ug/Kg | | 89 | 40 - 140 | 5 | 30 |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 360-94882/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94921** — **Prep Batch: 94882**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Isophorone | 1200 | 902 | | ug/Kg | | 75 | 40 - 140 | 4 | 30 |
| Naphthalene | 1200 | 965 | | ug/Kg | | 80 | 40 - 140 | 4 | 30 |
| Nitrobenzene | 1200 | 1090 | | ug/Kg | | 91 | 40 - 140 | 5 | 30 |
| Pentachlorophenol | 1200 | ND | | ug/Kg | | 128 | 30 - 130 | 1 | 30 |
| Phenanthrene | 1200 | 1200 | | ug/Kg | | 100 | 40 - 140 | 2 | 30 |
| Phenol | 1200 | 1200 | | ug/Kg | | 100 | 30 - 130 | 5 | 30 |
| Pyrene | 1200 | 918 | | ug/Kg | | 76 | 40 - 140 | 8 | 30 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *2,4,6-Tribromophenol* | *86* | | *30 - 130* |
| *2-Fluorophenol* | *77* | | *30 - 130* |
| *Nitrobenzene-d5* | *72* | | *30 - 130* |
| *Phenol-d5* | *76* | | *30 - 130* |
| *Terphenyl-d14* | *78* | | *30 - 130* |
| *2-Fluorobiphenyl* | *72* | | *30 - 130* |

## Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

**Lab Sample ID: MB 360-94835/3-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94841** — **Prep Batch: 94835**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C5-C8 Aliphatics (unadjusted) | ND | | 2.5 | | mg/Kg | | 08/29/12 14:13 | 08/29/12 19:32 | 1 |
| C5-C8 Aliphatics (adjusted) | ND | | 2.5 | | mg/Kg | | 08/29/12 14:13 | 08/29/12 19:32 | 1 |
| C9-C10 Aromatics | ND | | 2.5 | | mg/Kg | | 08/29/12 14:13 | 08/29/12 19:32 | 1 |
| C9-C12 Aliphatics (unadjusted) | ND | | 2.5 | | mg/Kg | | 08/29/12 14:13 | 08/29/12 19:32 | 1 |
| C9-C12 Aliphatics (adjusted) | ND | | 2.5 | | mg/Kg | | 08/29/12 14:13 | 08/29/12 19:32 | 1 |
| Total VPH | ND | | 2.5 | | mg/Kg | | 08/29/12 14:13 | 08/29/12 19:32 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,5-Dibromotoluene (fid)* | *99* | | *70 - 130* | *08/29/12 14:13* | *08/29/12 19:32* | *1* |
| *2,5-Dibromotoluene (pid)* | *103* | | *70 - 130* | *08/29/12 14:13* | *08/29/12 19:32* | *1* |

**Lab Sample ID: LCS 360-94835/1-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94841** — **Prep Batch: 94835**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| C5-C8 Aliphatics (unadjusted) | 15.0 | 14.0 | | mg/Kg | | 93 | 70 - 130 |
| C9-C10 Aromatics | 5.00 | 5.01 | | mg/Kg | | 100 | 70 - 130 |
| C9-C12 Aliphatics (unadjusted) | 15.0 | 14.1 | | mg/Kg | | 94 | 70 - 130 |
| Butylcyclohexane | 5.00 | 4.32 | | mg/Kg | | 86 | 70 - 130 |
| 1,2,4-Trimethylbenzene | 5.00 | 4.46 | | mg/Kg | | 89 | 70 - 130 |
| 2-Methylpentane | 5.00 | 4.67 | | mg/Kg | | 93 | 70 - 130 |
| Pentane | 5.00 | 4.74 | | mg/Kg | | 95 | 70 - 130 |
| n-Nonane | 5.00 | 4.20 | | mg/Kg | | 84 | 30 - 130 |

## Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC) (Continued)

**Lab Sample ID: LCS 360-94835/1-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94841** — **Prep Batch: 94835**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| n-Decane | 5.00 | 4.33 | | mg/Kg | | 87 | 70 - 130 |
| Isooctane | 5.00 | 4.53 | | mg/Kg | | 91 | 70 - 130 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *2,5-Dibromotoluene (fid)* | *101* | | *70 - 130* |
| *2,5-Dibromotoluene (pid)* | *80* | | *70 - 130* |

**Lab Sample ID: LCSD 360-94835/2-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94841** — **Prep Batch: 94835**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| C5-C8 Aliphatics (unadjusted) | 15.0 | 14.5 | | mg/Kg | | 97 | 70 - 130 | 3 | 25 |
| C9-C10 Aromatics | 5.00 | 5.02 | | mg/Kg | | 100 | 70 - 130 | 0 | 25 |
| C9-C12 Aliphatics (unadjusted) | 15.0 | 14.8 | | mg/Kg | | 99 | 70 - 130 | 5 | 25 |
| Butylcyclohexane | 5.00 | 4.53 | | mg/Kg | | 91 | 70 - 130 | 5 | 25 |
| 1,2,4-Trimethylbenzene | 5.00 | 4.47 | | mg/Kg | | 89 | 70 - 130 | 0 | 25 |
| 2-Methylpentane | 5.00 | 4.86 | | mg/Kg | | 97 | 70 - 130 | 4 | 25 |
| Pentane | 5.00 | 4.94 | | mg/Kg | | 99 | 70 - 130 | 4 | 25 |
| n-Nonane | 5.00 | 4.40 | | mg/Kg | | 88 | 30 - 130 | 5 | 25 |
| n-Decane | 5.00 | 4.52 | | mg/Kg | | 90 | 70 - 130 | 4 | 25 |
| Isooctane | 5.00 | 4.73 | | mg/Kg | | 95 | 70 - 130 | 4 | 25 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *2,5-Dibromotoluene (fid)* | *100* | | *70 - 130* |
| *2,5-Dibromotoluene (pid)* | *77* | | *70 - 130* |

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Lab Sample ID: MB 360-94819/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94820** — **Prep Batch: 94819**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons (C9-C36) | ND | | 3.3 | | mg/Kg | | 08/29/12 16:20 | 08/29/12 16:48 | 1 |
| Diesel Range Organics [C10-C28] | ND | | 3.3 | | mg/Kg | | 08/29/12 16:20 | 08/29/12 16:48 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *83* | | *40 - 140* | *08/29/12 16:20* | *08/29/12 16:48* | *1* |

**Lab Sample ID: LCS 360-94819/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94820** — **Prep Batch: 94819**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons (C9-C36) | 167 | 117 | | mg/Kg | | 70 | 60 - 140 |

## Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID: LCS 360-94819/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94820** — **Prep Batch: 94819**

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| o-Terphenyl | 72 | | 40 - 140 |

**Lab Sample ID: LCSD 360-94819/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94820** — **Prep Batch: 94819**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons (C9-C36) | | | 167 | 125 | | mg/Kg | | 75 | 60 - 140 | 7 | 50 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| o-Terphenyl | 75 | | 40 - 140 |

## Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

**Lab Sample ID: MB 360-94818/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94872** — **Prep Batch: 94818**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | | 100 | | ug/Kg | | 08/29/12 16:17 | 08/30/12 17:14 | 1 |
| PCB-1221 | ND | | 100 | | ug/Kg | | 08/29/12 16:17 | 08/30/12 17:14 | 1 |
| PCB-1232 | ND | | 100 | | ug/Kg | | 08/29/12 16:17 | 08/30/12 17:14 | 1 |
| PCB-1242 | ND | | 100 | | ug/Kg | | 08/29/12 16:17 | 08/30/12 17:14 | 1 |
| PCB-1248 | ND | | 100 | | ug/Kg | | 08/29/12 16:17 | 08/30/12 17:14 | 1 |
| PCB-1254 | ND | | 100 | | ug/Kg | | 08/29/12 16:17 | 08/30/12 17:14 | 1 |
| PCB-1260 | ND | | 100 | | ug/Kg | | 08/29/12 16:17 | 08/30/12 17:14 | 1 |
| PCB-1262 | ND | | 100 | | ug/Kg | | 08/29/12 16:17 | 08/30/12 17:14 | 1 |
| PCB-1268 | ND | | 100 | | ug/Kg | | 08/29/12 16:17 | 08/30/12 17:14 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Tetrachloro-m-xylene | 94 | | 30 - 150 | 08/29/12 16:17 | 08/30/12 17:14 | 1 |
| Tetrachloro-m-xylene | 96 | | 30 - 150 | 08/29/12 16:17 | 08/30/12 17:14 | 1 |
| DCB Decachlorobiphenyl | 68 | | 30 - 150 | 08/29/12 16:17 | 08/30/12 17:14 | 1 |
| DCB Decachlorobiphenyl | 76 | | 30 - 150 | 08/29/12 16:17 | 08/30/12 17:14 | 1 |

**Lab Sample ID: LCS 360-94818/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94872** — **Prep Batch: 94818**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | | | 500 | 375 | | ug/Kg | | 75 | 40 - 140 | | |
| PCB-1260 | | | 500 | 459 | | ug/Kg | | 92 | 40 - 140 | | |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| Tetrachloro-m-xylene | 99 | | 30 - 150 |
| Tetrachloro-m-xylene | 90 | | 30 - 150 |

## Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

**Lab Sample ID: LCS 360-94818/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94872** — **Prep Batch: 94818**

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *DCB Decachlorobiphenyl* | *85* | | *30 - 150* |
| *DCB Decachlorobiphenyl* | *90* | | *30 - 150* |

**Lab Sample ID: LCSD 360-94818/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94872** — **Prep Batch: 94818**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | 500 | 375 | | ug/Kg | | 75 | 40 - 140 | 0 | 30 |
| PCB-1260 | 500 | 465 | | ug/Kg | | 93 | 40 - 140 | 1 | 30 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *Tetrachloro-m-xylene* | *97* | | *30 - 150* |
| *Tetrachloro-m-xylene* | *88* | | *30 - 150* |
| *DCB Decachlorobiphenyl* | *88* | | *30 - 150* |
| *DCB Decachlorobiphenyl* | *91* | | *30 - 150* |

## Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

**Lab Sample ID: MB 360-94877/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94905** — **Prep Batch: 94877**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C11-C22 Aromatics (unadjusted) | ND | | 3.3 | | mg/Kg | | 08/30/12 14:47 | 08/31/12 12:33 | 1 |
| C11-C22 Aromatics (Adjusted) | ND | | 3.3 | | mg/Kg | | 08/30/12 14:47 | 08/31/12 12:33 | 1 |
| C19-C36 Aliphatics | ND | | 3.3 | | mg/Kg | | 08/30/12 14:47 | 08/31/12 12:33 | 1 |
| C9-C18 Aliphatics | ND | | 3.3 | | mg/Kg | | 08/30/12 14:47 | 08/31/12 12:33 | 1 |
| Total EPH | ND | | 3.3 | | mg/Kg | | 08/30/12 14:47 | 08/31/12 12:33 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *83* | | *40 - 140* | *08/30/12 14:47* | *08/31/12 12:33* | *1* |
| *2-Fluorobiphenyl* | *72* | | *40 - 140* | *08/30/12 14:47* | *08/31/12 12:33* | *1* |
| *2-Bromonaphthalene* | *84* | | *40 - 140* | *08/30/12 14:47* | *08/31/12 12:33* | *1* |
| *1-Chlorooctadecane* | *74* | | *40 - 140* | *08/30/12 14:47* | *08/31/12 12:33* | *1* |

**Lab Sample ID: LCS 360-94877/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94905** — **Prep Batch: 94877**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| C11-C22 Aromatics (unadjusted) | 56.7 | 39.1 | | mg/Kg | | 69 | 40 - 140 |
| C19-C36 Aliphatics | 26.7 | 17.6 | | mg/Kg | | 66 | 40 - 140 |
| C9-C18 Aliphatics | 20.0 | 9.85 | | mg/Kg | | 49 | 40 - 140 |
| C19 | 3.33 | 2.25 | | mg/Kg | | 68 | 40 - 140 |
| Dodecane | 3.33 | 1.83 | | mg/Kg | | 55 | 40 - 140 |
| Hexadecane | 3.33 | 2.17 | | mg/Kg | | 65 | 40 - 140 |

## Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

**Lab Sample ID: LCS 360-94877/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94905** — **Prep Batch: 94877**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| icosane | 3.33 | 2.32 | | mg/Kg | | 70 | 40 - 140 |
| n-Decane | 3.33 | 1.52 | | mg/Kg | | 46 | 40 - 140 |
| n-Docosane | 3.33 | 2.22 | | mg/Kg | | 67 | 40 - 140 |
| n-Hexacosane | 3.33 | 2.12 | | mg/Kg | | 64 | 40 - 140 |
| n-Hexatriacontane | 3.33 | 1.82 | | mg/Kg | | 55 | 40 - 140 |
| n-Nonane | 3.33 | 1.13 | | mg/Kg | | 34 | 30 - 140 |
| n-Octacosane | 3.33 | 2.09 | | mg/Kg | | 63 | 40 - 140 |
| n-Octadecane | 3.33 | 2.23 | | mg/Kg | | 67 | 40 - 140 |
| n-Tetracosane | 3.33 | 2.21 | | mg/Kg | | 66 | 40 - 140 |
| n-Tetradecane | 3.33 | 1.99 | | mg/Kg | | 60 | 40 - 140 |
| Triacontane | 3.33 | 2.27 | | mg/Kg | | 68 | 40 - 140 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *76* | | *40 - 140* |
| *2-Fluorobiphenyl* | *67* | | *40 - 140* |
| *2-Bromonaphthalene* | *78* | | *40 - 140* |
| *1-Chlorooctadecane* | *64* | | *40 - 140* |

**Lab Sample ID: LCSD 360-94877/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94905** — **Prep Batch: 94877**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| C11-C22 Aromatics (unadjusted) | 56.7 | 42.9 | | mg/Kg | | 76 | 40 - 140 | 9 | 25 |
| C19-C36 Aliphatics | 26.7 | 18.1 | | mg/Kg | | 68 | 40 - 140 | 3 | 25 |
| C9-C18 Aliphatics | 20.0 | 10.8 | | mg/Kg | | 54 | 40 - 140 | 9 | 25 |
| C19 | 3.33 | 2.52 | | mg/Kg | | 76 | 40 - 140 | 11 | 25 |
| Dodecane | 3.33 | 2.00 | | mg/Kg | | 60 | 40 - 140 | 9 | 25 |
| Hexadecane | 3.33 | 2.41 | | mg/Kg | | 72 | 40 - 140 | 11 | 25 |
| icosane | 3.33 | 2.60 | | mg/Kg | | 78 | 40 - 140 | 11 | 25 |
| n-Decane | 3.33 | 1.64 | | mg/Kg | | 49 | 40 - 140 | 7 | 25 |
| n-Docosane | 3.33 | 2.45 | | mg/Kg | | 74 | 40 - 140 | 10 | 25 |
| n-Hexacosane | 3.33 | 2.35 | | mg/Kg | | 70 | 40 - 140 | 10 | 25 |
| n-Hexatriacontane | 3.33 | 1.79 | | mg/Kg | | 54 | 40 - 140 | 2 | 25 |
| n-Nonane | 3.33 | 1.22 | | mg/Kg | | 37 | 30 - 140 | 7 | 25 |
| n-Octacosane | 3.33 | 2.30 | | mg/Kg | | 69 | 40 - 140 | 10 | 25 |
| n-Octadecane | 3.33 | 2.49 | | mg/Kg | | 75 | 40 - 140 | 11 | 25 |
| n-Tetracosane | 3.33 | 2.47 | | mg/Kg | | 74 | 40 - 140 | 11 | 25 |
| n-Tetradecane | 3.33 | 2.19 | | mg/Kg | | 66 | 40 - 140 | 10 | 25 |
| Triacontane | 3.33 | 2.48 | | mg/Kg | | 74 | 40 - 140 | 9 | 25 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *77* | | *40 - 140* |
| *2-Fluorobiphenyl* | *70* | | *40 - 140* |
| *2-Bromonaphthalene* | *81* | | *40 - 140* |
| *1-Chlorooctadecane* | *59* | | *40 - 140* |

## Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

**Lab Sample ID: MB 360-95037/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 95036** — **Prep Batch: 95037**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C11-C22 Aromatics (unadjusted) | ND | | 3.3 | | mg/Kg | | 09/05/12 10:17 | 09/05/12 12:53 | 1 |
| C11-C22 Aromatics (Adjusted) | ND | | 3.3 | | mg/Kg | | 09/05/12 10:17 | 09/05/12 12:53 | 1 |
| C19-C36 Aliphatics | ND | | 3.3 | | mg/Kg | | 09/05/12 10:17 | 09/05/12 12:53 | 1 |
| C9-C18 Aliphatics | ND | | 3.3 | | mg/Kg | | 09/05/12 10:17 | 09/05/12 12:53 | 1 |
| Total EPH | ND | | 3.3 | | mg/Kg | | 09/05/12 10:17 | 09/05/12 12:53 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *89* | | *40 - 140* | *09/05/12 10:17* | *09/05/12 12:53* | *1* |
| *2-Fluorobiphenyl* | *64* | | *40 - 140* | *09/05/12 10:17* | *09/05/12 12:53* | *1* |
| *2-Bromonaphthalene* | *75* | | *40 - 140* | *09/05/12 10:17* | *09/05/12 12:53* | *1* |
| *1-Chlorooctadecane* | *75* | | *40 - 140* | *09/05/12 10:17* | *09/05/12 12:53* | *1* |

**Lab Sample ID: LCS 360-95037/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 95036** — **Prep Batch: 95037**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| C11-C22 Aromatics (unadjusted) | 56.7 | 42.4 | | mg/Kg | | 75 | 40 - 140 |
| C19-C36 Aliphatics | 26.7 | 19.9 | | mg/Kg | | 75 | 40 - 140 |
| C9-C18 Aliphatics | 20.0 | 12.1 | | mg/Kg | | 61 | 40 - 140 |
| C19 | 3.33 | 2.64 | | mg/Kg | | 79 | 40 - 140 |
| Dodecane | 3.33 | 2.05 | | mg/Kg | | 61 | 40 - 140 |
| Hexadecane | 3.33 | 2.50 | | mg/Kg | | 75 | 40 - 140 |
| icosane | 3.33 | 2.73 | | mg/Kg | | 82 | 40 - 140 |
| n-Decane | 3.33 | 1.69 | | mg/Kg | | 51 | 40 - 140 |
| n-Docosane | 3.33 | 2.61 | | mg/Kg | | 78 | 40 - 140 |
| n-Hexacosane | 3.33 | 2.52 | | mg/Kg | | 76 | 40 - 140 |
| n-Hexatriacontane | 3.33 | 1.58 | | mg/Kg | | 47 | 40 - 140 |
| n-Nonane | 3.33 | 1.27 | | mg/Kg | | 38 | 30 - 140 |
| n-Octacosane | 3.33 | 2.47 | | mg/Kg | | 74 | 40 - 140 |
| n-Octadecane | 3.33 | 2.59 | | mg/Kg | | 78 | 40 - 140 |
| n-Tetracosane | 3.33 | 2.63 | | mg/Kg | | 79 | 40 - 140 |
| n-Tetradecane | 3.33 | 2.26 | | mg/Kg | | 68 | 40 - 140 |
| Triacontane | 3.33 | 2.62 | | mg/Kg | | 79 | 40 - 140 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *76* | | *40 - 140* |
| *2-Fluorobiphenyl* | *59* | | *40 - 140* |
| *2-Bromonaphthalene* | *66* | | *40 - 140* |
| *1-Chlorooctadecane* | *72* | | *40 - 140* |

**Lab Sample ID: LCSD 360-95037/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 95036** — **Prep Batch: 95037**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| C11-C22 Aromatics (unadjusted) | 56.7 | 48.9 | | mg/Kg | | 86 | 40 - 140 | 14 | 25 |

## Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

**Lab Sample ID: LCSD 360-95037/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 95036** — **Prep Batch: 95037**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| C19-C36 Aliphatics | 26.7 | 19.9 | | mg/Kg | | 74 | 40 - 140 | 0 | 25 |
| C9-C18 Aliphatics | 20.0 | 12.6 | | mg/Kg | | 63 | 40 - 140 | 4 | 25 |
| C19 | 3.33 | 2.68 | | mg/Kg | | 81 | 40 - 140 | 2 | 25 |
| Dodecane | 3.33 | 2.10 | | mg/Kg | | 63 | 40 - 140 | 3 | 25 |
| Hexadecane | 3.33 | 2.55 | | mg/Kg | | 77 | 40 - 140 | 2 | 25 |
| icosane | 3.33 | 2.74 | | mg/Kg | | 82 | 40 - 140 | 0 | 25 |
| n-Decane | 3.33 | 1.75 | | mg/Kg | | 52 | 40 - 140 | 4 | 25 |
| n-Docosane | 3.33 | 2.65 | | mg/Kg | | 79 | 40 - 140 | 1 | 25 |
| n-Hexacosane | 3.33 | 2.53 | | mg/Kg | | 76 | 40 - 140 | 0 | 25 |
| n-Hexatriacontane | 3.33 | 1.63 | | mg/Kg | | 49 | 40 - 140 | 3 | 25 |
| n-Nonane | 3.33 | 1.34 | | mg/Kg | | 40 | 30 - 140 | 5 | 25 |
| n-Octacosane | 3.33 | 2.48 | | mg/Kg | | 74 | 40 - 140 | 1 | 25 |
| n-Octadecane | 3.33 | 2.65 | | mg/Kg | | 80 | 40 - 140 | 2 | 25 |
| n-Tetracosane | 3.33 | 2.65 | | mg/Kg | | 80 | 40 - 140 | 1 | 25 |
| n-Tetradecane | 3.33 | 2.31 | | mg/Kg | | 69 | 40 - 140 | 2 | 25 |
| Triacontane | 3.33 | 2.65 | | mg/Kg | | 79 | 40 - 140 | 1 | 25 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *o-Terphenyl* | *88* | | *40 - 140* |
| *2-Fluorobiphenyl* | *55* | | *40 - 140* |
| *2-Bromonaphthalene* | *65* | | *40 - 140* |
| *1-Chlorooctadecane* | *73* | | *40 - 140* |

## Method: 6010C - Metals (ICP)

**Lab Sample ID: MB 360-94738/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94781** — **Prep Batch: 94738**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | | 1.0 | | mg/Kg | | 08/28/12 10:52 | 08/28/12 15:45 | 1 |
| Barium | ND | | 0.50 | | mg/Kg | | 08/28/12 10:52 | 08/28/12 15:45 | 1 |
| Cadmium | ND | | 0.20 | | mg/Kg | | 08/28/12 10:52 | 08/28/12 15:45 | 1 |
| Chromium | ND | | 0.50 | | mg/Kg | | 08/28/12 10:52 | 08/28/12 15:45 | 1 |
| Silver | ND | | 0.50 | | mg/Kg | | 08/28/12 10:52 | 08/28/12 15:45 | 1 |
| Selenium | ND | | 0.50 | | mg/Kg | | 08/28/12 10:52 | 08/28/12 15:45 | 1 |
| Lead | ND | | 0.50 | | mg/Kg | | 08/28/12 10:52 | 08/28/12 15:45 | 1 |
| Antimony | ND | | 0.50 | | mg/Kg | | 08/28/12 10:52 | 08/28/12 15:45 | 1 |
| Beryllium | ND | | 0.20 | | mg/Kg | | 08/28/12 10:52 | 08/28/12 15:45 | 1 |
| Copper | ND | | 1.0 | | mg/Kg | | 08/28/12 10:52 | 08/28/12 15:45 | 1 |
| Thallium | ND | | 1.0 | | mg/Kg | | 08/28/12 10:52 | 08/28/12 15:45 | 1 |
| Nickel | ND | | 1.0 | | mg/Kg | | 08/28/12 10:52 | 08/28/12 15:45 | 1 |
| Zinc | ND | | 2.5 | | mg/Kg | | 08/28/12 10:52 | 08/28/12 15:45 | 1 |

## Method: 6010C - Metals (ICP) (Continued)

**Lab Sample ID: LCDSRM 360-94738/3-A LCDSRM**
**Matrix: Solid**
**Analysis Batch: 94781**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 94738**

| Analyte | Spike Added | LCDSRM Result | LCDSRM Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 135 | 122 | | mg/Kg | | 90.3 | 62.9 - 117.0 | 2 | 30 |
| Barium | 503 | 447 | | mg/Kg | | 88.9 | 70.6 - 119.1 | 1 | 30 |
| Cadmium | 183 | 163 | | mg/Kg | | 89.3 | 66.1 - 113.7 | 2 | 30 |
| Chromium | 261 | 235 | | mg/Kg | | 90.2 | 65.5 - 119.5 | 2 | 30 |
| Silver | 77.7 | 73.1 | | mg/Kg | | 94.1 | 62.0 - 122.7 | 0 | 30 |
| Selenium | 160 | 142 | | mg/Kg | | 88.6 | 60.8 - 120.0 | 4 | 30 |
| Lead | 149 | 132 | | mg/Kg | | 88.7 | 66.8 - 116.1 | 1 | 30 |
| Antimony | 272 | 103 | | mg/Kg | | 38.0 | 10.0 - 109.9 | 3 | 30 |
| Beryllium | 215 | 181 | | mg/Kg | | 84.3 | 69.8 - 114.4 | 4 | 30 |
| Copper | 91.8 | 85.3 | | mg/Kg | | 92.9 | 69.3 - 117.6 | 3 | 30 |
| Thallium | 158 | 122 | | mg/Kg | | 77.1 | 52.8 - 110.1 | 1 | 30 |
| Nickel | 259 | 241 | | mg/Kg | | 92.9 | 68.0 - 115.4 | 1 | 30 |
| Zinc | 721 | 648 | | mg/Kg | | 89.9 | 67.7 - 116.2 | 1 | 30 |

**Lab Sample ID: LCSSRM 360-94738/2-A**
**Matrix: Solid**
**Analysis Batch: 94781**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 94738**

| Analyte | Spike Added | LCSSRM Result | LCSSRM Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Arsenic | 135 | 124 | | mg/Kg | | 92.0 | 62.9 - 117.0 |
| Barium | 503 | 451 | | mg/Kg | | 89.7 | 70.6 - 119.1 |
| Cadmium | 183 | 167 | | mg/Kg | | 91.4 | 66.1 - 113.7 |
| Chromium | 261 | 240 | | mg/Kg | | 92.1 | 65.5 - 119.5 |
| Silver | 77.7 | 73.2 | | mg/Kg | | 94.2 | 62.0 - 122.7 |
| Selenium | 160 | 147 | | mg/Kg | | 91.9 | 60.8 - 120.0 |
| Lead | 149 | 134 | | mg/Kg | | 89.8 | 66.8 - 116.1 |
| Antimony | 272 | 101 | | mg/Kg | | 37.0 | 10.0 - 109.9 |
| Beryllium | 215 | 188 | | mg/Kg | | 87.6 | 69.8 - 114.4 |
| Copper | 91.8 | 87.8 | | mg/Kg | | 95.6 | 69.3 - 117.6 |
| Thallium | 158 | 121 | | mg/Kg | | 76.6 | 52.8 - 110.1 |

## Method: 6010C - Metals (ICP) (Continued)

**Lab Sample ID: LCSSRM 360-94738/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94781** — **Prep Batch: 94738**

| Analyte | Spike Added | LCSSRM Result | LCSSRM Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Nickel | 259 | 244 | | mg/Kg | | 94.0 | 68.0 - 115.4 |
| Zinc | 721 | 658 | | mg/Kg | | 91.2 | 67.7 - 116.2 |

## Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

**Lab Sample ID: MB 360-94848/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94871** — **Prep Batch: 94848**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.10 | | mg/Kg | | 08/30/12 09:40 | 08/30/12 12:04 | 1 |

**Lab Sample ID: LCDSRM 360-94848/3-A LCDSRM** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94871** — **Prep Batch: 94848**

| Analyte | Spike Added | LCDSRM Result | LCDSRM Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 16.2 | 15.2 | | mg/Kg | | 93.5 | 43.3 - 125.3 | 8 | 30 |

**Lab Sample ID: LCSSRM 360-94848/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94871** — **Prep Batch: 94848**

| Analyte | Spike Added | LCSSRM Result | LCSSRM Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Mercury | 16.2 | 13.9 | | mg/Kg | | 86.0 | 43.3 - 125.3 |

## Method: 1010 - Ignitability, Pensky-Martens Closed-Cup Method

**Lab Sample ID: MB 360-94776/1** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94776**

| Analyte | MB Result | MB Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Flashpoint | >200 | | | | Fahrenheit | | | 08/28/12 08:36 | 1 |

**Lab Sample ID: LCS 360-94776/2** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94776**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Flashpoint | 81.0 | 81.8 | | Fahrenheit | | 101 | 93.8 - 106 |

## Method: 1010 - Ignitability, Pensky-Martens Closed-Cup Method (Continued)

**Lab Sample ID: 360-42392-3 DU** — **Client Sample ID: P10**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94776**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flashpoint | >200 | | | >200 | | Fahrenheit | | | | NC | 20.0 |

**Lab Sample ID: MB 360-94892/1** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94892**

| Analyte | MB Result | MB Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Flashpoint | >200 | | | | Fahrenheit | | | 08/30/12 08:17 | 1 |

**Lab Sample ID: LCS 360-94892/2** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94892**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flashpoint | | | 81.0 | 80.4 | | Fahrenheit | | 99 | 93.8 - 106 | | |

**Lab Sample ID: 360-42392-7 DU** — **Client Sample ID: P20**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94892**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flashpoint | >200 | | | >200 | | Fahrenheit | | | | NC | 20.0 |

**Lab Sample ID: MB 360-94935/1** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94935**

| Analyte | MB Result | MB Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Flashpoint | >200 | | | | Fahrenheit | | | 08/31/12 08:47 | 1 |

**Lab Sample ID: LCS 360-94935/2** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94935**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flashpoint | | | 81.0 | 79.5 | | Fahrenheit | | 98 | 93.8 - 106 | | |

## Method: 9014 - Cyanide, Reactive

**Lab Sample ID: MB 360-94828/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94937** — **Prep Batch: 94828**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Reactive | ND | | 45 | | mg/Kg | | 08/30/12 07:49 | 08/31/12 16:19 | 1 |

## Method: 9014 - Cyanide, Reactive (Continued)

**Lab Sample ID: LCS 360-94828/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94937** — **Prep Batch: 94828**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Reactive | | | 1000 | 108 | | mg/Kg | | 11 | 10 - 31 | | |

**Lab Sample ID: 360-42392-1 DU** — **Client Sample ID: P4**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94937** — **Prep Batch: 94828**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Reactive | ND | | | ND | | mg/Kg | | | | NC | 20 |

## Method: 9034 - Sulfide, Reactive

**Lab Sample ID: MB 360-94829/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94942** — **Prep Batch: 94829**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Sulfide, Reactive | ND | | 100 | | mg/Kg | | 08/30/12 07:50 | 08/31/12 16:21 | 1 |

**Lab Sample ID: LCS 360-94829/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94942** — **Prep Batch: 94829**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfide, Reactive | | | 393 | ND | | mg/Kg | | 10 | 10 - 65 | | |

**Lab Sample ID: 360-42392-1 DU** — **Client Sample ID: P4**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 94942** — **Prep Batch: 94829**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfide, Reactive | ND | | | ND | | mg/Kg | | | | NC | 20 |

## Method: 9045C - pH

**Lab Sample ID: LCS 360-94897/1-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Soluble**
**Analysis Batch: 94915**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| pH | | | 6.00 | 5.910 | | SU | | 99 | 90 - 110 | | |

# QC Sample Results

Client: ENVIRON International Corp.
Project/Site: 941 Grimell St./3329188I

TestAmerica Job ID: 360-42392-1

## Method: SM 2510B - Conductivity, Specific Conductance

**Lab Sample ID: MB 360-94751/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Soluble**
**Analysis Batch: 94868**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance | ND | | 4.0 | | umhos/cm | | | 08/30/12 10:14 | 1 |

**Lab Sample ID: LCS 360-94751/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Soluble**
**Analysis Batch: 94868**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance | | | 5650 | 5650 | | umhos/cm | | 100 | 85 - 115 | | |

**Lab Sample ID: 360-42392-1 DU** — **Client Sample ID: P4**
**Matrix: Solid** — **Prep Type: Soluble**
**Analysis Batch: 94868**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance | 2000 | | | 2390 | | umhos/cm | | | | 15 | 20 |

# Lab Chronicle

Client: ENVIRON International Corp.
Project/Site: 941 Grimell St./3329188I

TestAmerica Job ID: 360-42392-1

## Client Sample ID: P4

**Lab Sample ID: 360-42392-1**

**Date Collected: 08/27/12 09:40**
**Matrix: Solid**
**Date Received: 08/27/12 19:25**
**Percent Solids: 37.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 94873 | 08/30/12 13:58 | CMR | TAL WFD |
| Total/NA | Analysis | 8260C | | 1 | 94876 | 08/31/12 01:52 | CMR | TAL WFD |
| Total/NA | Prep | 3546 | | | 94882 | 08/30/12 16:13 | BRB | TAL WFD |
| Total/NA | Analysis | 8270D | | 5 | 94921 | 08/31/12 15:42 | JLG | TAL WFD |
| Total/NA | Prep | 5035 | | | 94835 | 08/29/12 14:13 | CMR | TAL WFD |
| Total/NA | Analysis | MAVPH | | 1 | 94841 | 08/29/12 20:05 | CMR | TAL WFD |
| Total/NA | Prep | 3546 | | | 94819 | 08/29/12 16:20 | BRB | TAL WFD |
| Total/NA | Analysis | 8015B | | 10 | 94820 | 08/29/12 18:55 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 94818 | 08/29/12 16:17 | BRB | TAL WFD |
| Total/NA | Analysis | 8082 | | 1 | 94872 | 08/30/12 18:20 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 94877 | 08/30/12 14:47 | BRB | TAL WFD |
| Total/NA | Analysis | MA-EPH | | 1 | 94905 | 08/31/12 13:46 | JLG | TAL WFD |
| Total/NA | Prep | 3050B | | | 94738 | 08/28/12 10:52 | BH | TAL WFD |
| Total/NA | Analysis | 6010C | | 1 | 94781 | 08/28/12 16:44 | TJS | TAL WFD |
| Total/NA | Prep | 7471B | | | 94848 | 08/30/12 09:40 | BH | TAL WFD |
| Total/NA | Analysis | 7471B | | 1 | 94871 | 08/30/12 12:36 | TJS | TAL WFD |
| Total/NA | Analysis | 1010 | | 1 | 94776 | 08/28/12 08:36 | GRB | TAL WFD |
| Total/NA | Analysis | Moisture | | 1 | 94812 | 08/29/12 15:56 | BH | TAL WFD |
| Soluble | Leach | DI Leach | | | 94751 | 08/30/12 09:00 | AMS | TAL WFD |
| Soluble | Analysis | SM 2510B | | 1 | 94868 | 08/30/12 10:16 | AMS | TAL WFD |
| Soluble | Leach | DI Leach | | | 94897 | 08/30/12 16:15 | EE | TAL WFD |
| Soluble | Analysis | 9045C | | 1 | 94915 | 08/30/12 17:54 | EE | TAL WFD |
| Total/NA | Prep | 7.3.3 | | | 94828 | 08/30/12 07:49 | AMS | TAL WFD |
| Total/NA | Analysis | 9014 | | 1 | 94937 | 08/31/12 16:19 | AMS | TAL WFD |
| Total/NA | Prep | 7.3.4 | | | 94829 | 08/30/12 07:50 | AMS | TAL WFD |
| Total/NA | Analysis | 9034 | | 1 | 94942 | 08/31/12 16:21 | AMS | TAL WFD |

## Client Sample ID: P5

**Lab Sample ID: 360-42392-2**

**Date Collected: 08/27/12 10:20**
**Matrix: Solid**
**Date Received: 08/27/12 19:25**
**Percent Solids: 42.9**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 94873 | 08/30/12 13:58 | CMR | TAL WFD |
| Total/NA | Analysis | 8260C | | 1 | 94876 | 08/31/12 02:15 | CMR | TAL WFD |
| Total/NA | Prep | 3546 | | | 94882 | 08/30/12 16:13 | BRB | TAL WFD |
| Total/NA | Analysis | 8270D | | 5 | 94921 | 08/31/12 16:13 | JLG | TAL WFD |
| Total/NA | Prep | 5035 | | | 94835 | 08/29/12 14:13 | CMR | TAL WFD |
| Total/NA | Analysis | MAVPH | | 1 | 94841 | 08/29/12 20:39 | CMR | TAL WFD |
| Total/NA | Prep | 3546 | | | 94819 | 08/29/12 16:20 | BRB | TAL WFD |
| Total/NA | Analysis | 8015B | | 10 | 94820 | 08/29/12 19:27 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 94818 | 08/29/12 16:17 | BRB | TAL WFD |
| Total/NA | Analysis | 8082 | | 1 | 94872 | 08/30/12 18:42 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 94877 | 08/30/12 14:47 | BRB | TAL WFD |

# Lab Chronicle

Client: ENVIRON International Corp.
Project/Site: 941 Grimell St./3329188I

TestAmerica Job ID: 360-42392-1

## Client Sample ID: P5

**Lab Sample ID: 360-42392-2**

**Date Collected: 08/27/12 10:20**
**Date Received: 08/27/12 19:25**

**Matrix: Solid**
**Percent Solids: 42.9**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | MA-EPH | | 5 | 94905 | 08/31/12 14:20 | JLG | TAL WFD |
| Total/NA | Prep | 3050B | | | 94738 | 08/28/12 10:52 | BH | TAL WFD |
| Total/NA | Analysis | 6010C | | 1 | 94781 | 08/28/12 16:47 | TJS | TAL WFD |
| Total/NA | Prep | 7471B | | | 94848 | 08/30/12 09:40 | BH | TAL WFD |
| Total/NA | Analysis | 7471B | | 1 | 94871 | 08/30/12 12:37 | TJS | TAL WFD |
| Total/NA | Analysis | 1010 | | 1 | 94776 | 08/28/12 08:36 | GRB | TAL WFD |
| Total/NA | Analysis | Moisture | | 1 | 94812 | 08/29/12 15:56 | BH | TAL WFD |
| Soluble | Leach | DI Leach | | | 94751 | 08/30/12 09:00 | AMS | TAL WFD |
| Soluble | Analysis | SM 2510B | | 1 | 94868 | 08/30/12 10:19 | AMS | TAL WFD |
| Soluble | Leach | DI Leach | | | 94897 | 08/30/12 16:15 | EE | TAL WFD |
| Soluble | Analysis | 9045C | | 1 | 94915 | 08/30/12 17:57 | EE | TAL WFD |
| Total/NA | Prep | 7.3.3 | | | 94828 | 08/30/12 07:49 | AMS | TAL WFD |
| Total/NA | Analysis | 9014 | | 1 | 94937 | 08/31/12 16:19 | AMS | TAL WFD |
| Total/NA | Prep | 7.3.4 | | | 94829 | 08/30/12 07:50 | AMS | TAL WFD |
| Total/NA | Analysis | 9034 | | 1 | 94942 | 08/31/12 16:21 | AMS | TAL WFD |

## Client Sample ID: P10

**Lab Sample ID: 360-42392-3**

**Date Collected: 08/27/12 12:45**
**Date Received: 08/27/12 19:25**

**Matrix: Solid**
**Percent Solids: 71.8**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 94873 | 08/30/12 13:58 | CMR | TAL WFD |
| Total/NA | Analysis | 8260C | | 1 | 94876 | 08/31/12 02:38 | CMR | TAL WFD |
| Total/NA | Prep | 3546 | | | 94882 | 08/30/12 16:13 | BRB | TAL WFD |
| Total/NA | Analysis | 8270D | | 5 | 94921 | 08/31/12 16:43 | JLG | TAL WFD |
| Total/NA | Prep | 5035 | | | 94835 | 08/29/12 14:13 | CMR | TAL WFD |
| Total/NA | Analysis | MAVPH | | 1 | 94841 | 08/29/12 21:13 | CMR | TAL WFD |
| Total/NA | Prep | 3546 | | | 94819 | 08/29/12 16:20 | BRB | TAL WFD |
| Total/NA | Analysis | 8015B | | 10 | 94820 | 08/29/12 19:59 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 94818 | 08/29/12 16:17 | BRB | TAL WFD |
| Total/NA | Analysis | 8082 | | 1 | 94872 | 08/30/12 19:04 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 94877 | 08/30/12 14:47 | BRB | TAL WFD |
| Total/NA | Analysis | MA-EPH | | 1 | 94905 | 08/31/12 14:54 | JLG | TAL WFD |
| Total/NA | Prep | 3050B | | | 94738 | 08/28/12 10:52 | BH | TAL WFD |
| Total/NA | Analysis | 6010C | | 1 | 94781 | 08/28/12 16:50 | TJS | TAL WFD |
| Total/NA | Prep | 7471B | | | 94848 | 08/30/12 09:40 | BH | TAL WFD |
| Total/NA | Analysis | 7471B | | 1 | 94871 | 08/30/12 12:39 | TJS | TAL WFD |
| Total/NA | Analysis | 1010 | | 1 | 94776 | 08/28/12 08:36 | GRB | TAL WFD |
| Total/NA | Analysis | Moisture | | 1 | 94812 | 08/29/12 15:56 | BH | TAL WFD |
| Soluble | Leach | DI Leach | | | 94751 | 08/30/12 09:00 | AMS | TAL WFD |
| Soluble | Analysis | SM 2510B | | 1 | 94868 | 08/30/12 10:20 | AMS | TAL WFD |
| Soluble | Leach | DI Leach | | | 94897 | 08/30/12 16:15 | EE | TAL WFD |
| Soluble | Analysis | 9045C | | 1 | 94915 | 08/30/12 18:00 | EE | TAL WFD |

# Lab Chronicle

Client: ENVIRON International Corp.
Project/Site: 941 Grimell St./3329188I

TestAmerica Job ID: 360-42392-1

## Client Sample ID: P10

**Lab Sample ID: 360-42392-3**
**Date Collected: 08/27/12 12:45**
**Matrix: Solid**
**Date Received: 08/27/12 19:25**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 7.3.3 | | | 94828 | 08/30/12 07:49 | AMS | TAL WFD |
| Total/NA | Analysis | 9014 | | 1 | 94937 | 08/31/12 16:19 | AMS | TAL WFD |
| Total/NA | Prep | 7.3.4 | | | 94829 | 08/30/12 07:50 | AMS | TAL WFD |
| Total/NA | Analysis | 9034 | | 1 | 94942 | 08/31/12 16:21 | AMS | TAL WFD |

## Client Sample ID: P13

**Lab Sample ID: 360-42392-4**
**Date Collected: 08/27/12 14:05**
**Matrix: Solid**
**Date Received: 08/27/12 19:25**
**Percent Solids: 28.1**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 94873 | 08/30/12 13:58 | CMR | TAL WFD |
| Total/NA | Analysis | 8260C | | 1 | 94876 | 08/31/12 03:01 | CMR | TAL WFD |
| Total/NA | Prep | 3546 | | | 94882 | 08/30/12 16:13 | BRB | TAL WFD |
| Total/NA | Analysis | 8270D | | 5 | 94921 | 08/31/12 17:13 | JLG | TAL WFD |
| Total/NA | Prep | 5035 | | | 94835 | 08/29/12 14:13 | CMR | TAL WFD |
| Total/NA | Analysis | MAVPH | | 1 | 94841 | 08/29/12 21:46 | CMR | TAL WFD |
| Total/NA | Prep | 3546 | | | 94819 | 08/29/12 16:20 | BRB | TAL WFD |
| Total/NA | Analysis | 8015B | | 10 | 94820 | 08/29/12 20:31 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 94818 | 08/29/12 16:17 | BRB | TAL WFD |
| Total/NA | Analysis | 8082 | | 1 | 94872 | 08/30/12 19:26 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 94877 | 08/30/12 14:47 | BRB | TAL WFD |
| Total/NA | Analysis | MA-EPH | | 1 | 94905 | 08/31/12 15:29 | JLG | TAL WFD |
| Total/NA | Prep | 3050B | | | 94738 | 08/28/12 10:52 | BH | TAL WFD |
| Total/NA | Analysis | 6010C | | 1 | 94781 | 08/28/12 16:53 | TJS | TAL WFD |
| Total/NA | Prep | 7471B | | | 94848 | 08/30/12 09:40 | BH | TAL WFD |
| Total/NA | Analysis | 7471B | | 1 | 94871 | 08/30/12 12:41 | TJS | TAL WFD |
| Total/NA | Analysis | Moisture | | 1 | 94812 | 08/29/12 15:56 | BH | TAL WFD |
| Soluble | Leach | DI Leach | | | 94751 | 08/30/12 09:00 | AMS | TAL WFD |
| Soluble | Analysis | SM 2510B | | 1 | 94868 | 08/30/12 10:21 | AMS | TAL WFD |
| Total/NA | Analysis | 1010 | | 1 | 94892 | 08/30/12 08:17 | GRB | TAL WFD |
| Soluble | Leach | DI Leach | | | 94897 | 08/30/12 16:15 | EE | TAL WFD |
| Soluble | Analysis | 9045C | | 1 | 94915 | 08/30/12 18:03 | EE | TAL WFD |
| Total/NA | Prep | 7.3.3 | | | 94828 | 08/30/12 07:49 | AMS | TAL WFD |
| Total/NA | Analysis | 9014 | | 1 | 94937 | 08/31/12 16:19 | AMS | TAL WFD |
| Total/NA | Prep | 7.3.4 | | | 94829 | 08/30/12 07:50 | AMS | TAL WFD |
| Total/NA | Analysis | 9034 | | 1 | 94942 | 08/31/12 16:21 | AMS | TAL WFD |

## Client Sample ID: P14

**Lab Sample ID: 360-42392-5**
**Date Collected: 08/27/12 13:50**
**Matrix: Solid**
**Date Received: 08/27/12 19:25**
**Percent Solids: 21.9**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 94873 | 08/30/12 13:58 | CMR | TAL WFD |

# Lab Chronicle

Client: ENVIRON International Corp.
Project/Site: 941 Grimell St./3329188I

TestAmerica Job ID: 360-42392-1

## Client Sample ID: P14

**Lab Sample ID: 360-42392-5**

**Date Collected: 08/27/12 13:50**
**Date Received: 08/27/12 19:25**

**Matrix: Solid**
**Percent Solids: 21.9**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 94876 | 08/31/12 03:24 | CMR | TAL WFD |
| Total/NA | Prep | 3546 | | | 94882 | 08/30/12 16:13 | BRB | TAL WFD |
| Total/NA | Analysis | 8270D | | 5 | 94921 | 08/31/12 17:44 | JLG | TAL WFD |
| Total/NA | Prep | 5035 | | | 94835 | 08/29/12 16:36 | CMR | TAL WFD |
| Total/NA | Analysis | MAVPH | | 1 | 94841 | 08/30/12 00:33 | CMR | TAL WFD |
| Total/NA | Prep | 3546 | | | 94819 | 08/29/12 16:20 | BRB | TAL WFD |
| Total/NA | Analysis | 8015B | | 10 | 94820 | 08/29/12 21:03 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 94818 | 08/29/12 16:17 | BRB | TAL WFD |
| Total/NA | Analysis | 8082 | | 1 | 94872 | 08/30/12 19:47 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 95037 | 09/05/12 10:17 | BRB | TAL WFD |
| Total/NA | Analysis | MA-EPH | | 1 | 95036 | 09/05/12 13:28 | JLG | TAL WFD |
| Total/NA | Prep | 3050B | | | 94738 | 08/28/12 10:52 | BH | TAL WFD |
| Total/NA | Analysis | 6010C | | 1 | 94781 | 08/28/12 16:56 | TJS | TAL WFD |
| Total/NA | Prep | 7471B | | | 94848 | 08/30/12 09:40 | BH | TAL WFD |
| Total/NA | Analysis | 7471B | | 1 | 94871 | 08/30/12 12:43 | TJS | TAL WFD |
| Total/NA | Analysis | Moisture | | 1 | 94812 | 08/29/12 15:56 | BH | TAL WFD |
| Soluble | Leach | DI Leach | | | 94751 | 08/30/12 09:00 | AMS | TAL WFD |
| Soluble | Analysis | SM 2510B | | 1 | 94868 | 08/30/12 10:23 | AMS | TAL WFD |
| Total/NA | Analysis | 1010 | | 1 | 94892 | 08/30/12 08:17 | GRB | TAL WFD |
| Soluble | Leach | DI Leach | | | 94897 | 08/30/12 16:15 | EE | TAL WFD |
| Soluble | Analysis | 9045C | | 1 | 94915 | 08/30/12 18:09 | EE | TAL WFD |
| Total/NA | Prep | 7.3.3 | | | 94828 | 08/30/12 07:49 | AMS | TAL WFD |
| Total/NA | Analysis | 9014 | | 1 | 94937 | 08/31/12 16:19 | AMS | TAL WFD |
| Total/NA | Prep | 7.3.4 | | | 94829 | 08/30/12 07:50 | AMS | TAL WFD |
| Total/NA | Analysis | 9034 | | 1 | 94942 | 08/31/12 16:21 | AMS | TAL WFD |

## Client Sample ID: P18

**Lab Sample ID: 360-42392-6**

**Date Collected: 08/27/12 15:00**
**Date Received: 08/27/12 19:25**

**Matrix: Solid**
**Percent Solids: 49.4**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 94873 | 08/30/12 13:58 | CMR | TAL WFD |
| Total/NA | Analysis | 8260C | | 1 | 94876 | 08/31/12 03:46 | CMR | TAL WFD |
| Total/NA | Prep | 3546 | | | 94882 | 08/30/12 16:13 | BRB | TAL WFD |
| Total/NA | Analysis | 8270D | | 5 | 94921 | 08/31/12 18:14 | JLG | TAL WFD |
| Total/NA | Prep | 5035 | | | 94835 | 08/29/12 14:13 | CMR | TAL WFD |
| Total/NA | Analysis | MAVPH | | 1 | 94841 | 08/29/12 22:20 | CMR | TAL WFD |
| Total/NA | Prep | 3546 | | | 94819 | 08/29/12 16:20 | BRB | TAL WFD |
| Total/NA | Analysis | 8015B | | 10 | 94820 | 08/29/12 21:35 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 94818 | 08/29/12 16:17 | BRB | TAL WFD |
| Total/NA | Analysis | 8082 | | 1 | 94872 | 08/30/12 20:09 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 94877 | 08/30/12 14:47 | BRB | TAL WFD |
| Total/NA | Analysis | MA-EPH | | 1 | 94905 | 08/31/12 16:37 | JLG | TAL WFD |

# Lab Chronicle

Client: ENVIRON International Corp.
Project/Site: 941 Grimell St./3329188I

TestAmerica Job ID: 360-42392-1

## Client Sample ID: P18

**Lab Sample ID: 360-42392-6**
**Date Collected: 08/27/12 15:00**
**Matrix: Solid**
**Date Received: 08/27/12 19:25**
**Percent Solids: 49.4**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3050B | | | 94738 | 08/28/12 10:52 | BH | TAL WFD |
| Total/NA | Analysis | 6010C | | 1 | 94781 | 08/28/12 16:59 | TJS | TAL WFD |
| Total/NA | Prep | 7471B | | | 94848 | 08/30/12 09:40 | BH | TAL WFD |
| Total/NA | Analysis | 7471B | | 1 | 94871 | 08/30/12 12:48 | TJS | TAL WFD |
| Total/NA | Analysis | Moisture | | 1 | 94812 | 08/29/12 16:38 | BH | TAL WFD |
| Soluble | Leach | DI Leach | | | 94751 | 08/30/12 09:00 | AMS | TAL WFD |
| Soluble | Analysis | SM 2510B | | 1 | 94868 | 08/30/12 10:24 | AMS | TAL WFD |
| Total/NA | Analysis | 1010 | | 1 | 94892 | 08/30/12 08:17 | GRB | TAL WFD |
| Soluble | Leach | DI Leach | | | 94897 | 08/30/12 16:15 | EE | TAL WFD |
| Soluble | Analysis | 9045C | | 1 | 94915 | 08/30/12 18:12 | EE | TAL WFD |
| Total/NA | Prep | 7.3.3 | | | 94828 | 08/30/12 07:49 | AMS | TAL WFD |
| Total/NA | Analysis | 9014 | | 1 | 94937 | 08/31/12 16:19 | AMS | TAL WFD |
| Total/NA | Prep | 7.3.4 | | | 94829 | 08/30/12 07:50 | AMS | TAL WFD |
| Total/NA | Analysis | 9034 | | 1 | 94942 | 08/31/12 16:21 | AMS | TAL WFD |

## Client Sample ID: P20

**Lab Sample ID: 360-42392-7**
**Date Collected: 08/27/12 16:05**
**Matrix: Solid**
**Date Received: 08/27/12 19:25**
**Percent Solids: 80.4**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 94923 | 08/31/12 14:08 | CMR | TAL WFD |
| Total/NA | Analysis | 8260C | | 1 | 94924 | 08/31/12 16:55 | CMR | TAL WFD |
| Total/NA | Prep | 3546 | | | 94882 | 08/30/12 16:13 | BRB | TAL WFD |
| Total/NA | Analysis | 8270D | | 5 | 94921 | 08/31/12 18:45 | JLG | TAL WFD |
| Total/NA | Prep | 5035 | | | 94835 | 08/29/12 14:13 | CMR | TAL WFD |
| Total/NA | Analysis | MAVPH | | 1 | 94841 | 08/29/12 22:53 | CMR | TAL WFD |
| Total/NA | Prep | 3546 | | | 94819 | 08/29/12 16:20 | BRB | TAL WFD |
| Total/NA | Analysis | 8015B | | 10 | 94820 | 08/29/12 22:07 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 94818 | 08/29/12 16:17 | BRB | TAL WFD |
| Total/NA | Analysis | 8082 | | 1 | 94872 | 08/30/12 20:31 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 94877 | 08/30/12 14:47 | BRB | TAL WFD |
| Total/NA | Analysis | MA-EPH | | 1 | 94905 | 08/31/12 17:11 | JLG | TAL WFD |
| Total/NA | Prep | 3050B | | | 94738 | 08/28/12 10:52 | BH | TAL WFD |
| Total/NA | Analysis | 6010C | | 1 | 94781 | 08/28/12 17:02 | TJS | TAL WFD |
| Total/NA | Prep | 7471B | | | 94848 | 08/30/12 09:40 | BH | TAL WFD |
| Total/NA | Analysis | 7471B | | 1 | 94871 | 08/30/12 12:50 | TJS | TAL WFD |
| Total/NA | Analysis | Moisture | | 1 | 94812 | 08/29/12 15:56 | BH | TAL WFD |
| Soluble | Leach | DI Leach | | | 94751 | 08/30/12 09:00 | AMS | TAL WFD |
| Soluble | Analysis | SM 2510B | | 1 | 94868 | 08/30/12 10:26 | AMS | TAL WFD |
| Total/NA | Analysis | 1010 | | 1 | 94892 | 08/30/12 08:17 | GRB | TAL WFD |
| Soluble | Leach | DI Leach | | | 94897 | 08/30/12 16:15 | EE | TAL WFD |
| Soluble | Analysis | 9045C | | 1 | 94915 | 08/30/12 18:15 | EE | TAL WFD |
| Total/NA | Prep | 7.3.3 | | | 94828 | 08/30/12 07:49 | AMS | TAL WFD |

# Lab Chronicle

Client: ENVIRON International Corp.
Project/Site: 941 Grimell St./3329188I

TestAmerica Job ID: 360-42392-1

## Client Sample ID: P20

**Lab Sample ID: 360-42392-7**

**Date Collected: 08/27/12 16:05**
**Matrix: Solid**
**Date Received: 08/27/12 19:25**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 9014 | | 1 | 94937 | 08/31/12 16:19 | AMS | TAL WFD |
| Total/NA | Prep | 7.3.4 | | | 94829 | 08/30/12 07:50 | AMS | TAL WFD |
| Total/NA | Analysis | 9034 | | 1 | 94942 | 08/31/12 16:21 | AMS | TAL WFD |

## Client Sample ID: P24

**Lab Sample ID: 360-42392-8**

**Date Collected: 08/27/12 16:30**
**Matrix: Solid**
**Date Received: 08/27/12 19:25**
**Percent Solids: 81.7**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 94923 | 08/31/12 14:08 | CMR | TAL WFD |
| Total/NA | Analysis | 8260C | | 1 | 94924 | 08/31/12 17:18 | CMR | TAL WFD |
| Total/NA | Prep | 3546 | | | 94882 | 08/30/12 16:13 | BRB | TAL WFD |
| Total/NA | Analysis | 8270D | | 5 | 94921 | 08/31/12 19:15 | JLG | TAL WFD |
| Total/NA | Prep | 5035 | | | 94835 | 08/29/12 14:13 | CMR | TAL WFD |
| Total/NA | Analysis | MAVPH | | 1 | 94841 | 08/29/12 23:26 | CMR | TAL WFD |
| Total/NA | Prep | 3546 | | | 94819 | 08/29/12 16:20 | BRB | TAL WFD |
| Total/NA | Analysis | 8015B | | 10 | 94820 | 08/29/12 22:39 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 94818 | 08/29/12 16:17 | BRB | TAL WFD |
| Total/NA | Analysis | 8082 | | 1 | 94872 | 08/30/12 20:53 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 94877 | 08/30/12 14:47 | BRB | TAL WFD |
| Total/NA | Analysis | MA-EPH | | 5 | 94905 | 08/31/12 17:45 | JLG | TAL WFD |
| Total/NA | Prep | 3050B | | | 94738 | 08/28/12 10:52 | BH | TAL WFD |
| Total/NA | Analysis | 6010C | | 1 | 94781 | 08/28/12 17:10 | TJS | TAL WFD |
| Total/NA | Prep | 7471B | | | 94848 | 08/30/12 09:40 | BH | TAL WFD |
| Total/NA | Analysis | 7471B | | 1 | 94871 | 08/30/12 12:52 | TJS | TAL WFD |
| Total/NA | Analysis | Moisture | | 1 | 94812 | 08/29/12 15:56 | BH | TAL WFD |
| Soluble | Leach | DI Leach | | | 94751 | 08/30/12 09:00 | AMS | TAL WFD |
| Soluble | Analysis | SM 2510B | | 1 | 94868 | 08/30/12 10:27 | AMS | TAL WFD |
| Soluble | Leach | DI Leach | | | 94897 | 08/30/12 16:15 | EE | TAL WFD |
| Soluble | Analysis | 9045C | | 1 | 94915 | 08/30/12 18:18 | EE | TAL WFD |
| Total/NA | Analysis | 1010 | | 1 | 94935 | 08/31/12 08:47 | GRB | TAL WFD |
| Total/NA | Prep | 7.3.3 | | | 94828 | 08/30/12 07:49 | AMS | TAL WFD |
| Total/NA | Analysis | 9014 | | 1 | 94937 | 08/31/12 16:19 | AMS | TAL WFD |
| Total/NA | Prep | 7.3.4 | | | 94829 | 08/30/12 07:50 | AMS | TAL WFD |
| Total/NA | Analysis | 9034 | | 1 | 94942 | 08/31/12 16:21 | AMS | TAL WFD |

## Client Sample ID: C-P5-P14

**Lab Sample ID: 360-42392-9**

**Date Collected: 08/27/12 16:45**
**Matrix: Solid**
**Date Received: 08/27/12 19:25**
**Percent Solids: 24.7**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 94923 | 08/31/12 14:08 | CMR | TAL WFD |
| Total/NA | Analysis | 8260C | | 1 | 94924 | 08/31/12 17:40 | CMR | TAL WFD |

# Lab Chronicle

Client: ENVIRON International Corp.
Project/Site: 941 Grimell St./3329188I

TestAmerica Job ID: 360-42392-1

## Client Sample ID: C-P5-P14

**Date Collected: 08/27/12 16:45**
**Date Received: 08/27/12 19:25**

## Lab Sample ID: 360-42392-9

**Matrix: Solid**
**Percent Solids: 24.7**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3546 | | | 94882 | 08/30/12 16:13 | BRB | TAL WFD |
| Total/NA | Analysis | 8270D | | 5 | 94921 | 08/31/12 19:45 | JLG | TAL WFD |
| Total/NA | Prep | 5035 | | | 94835 | 08/29/12 14:13 | CMR | TAL WFD |
| Total/NA | Analysis | MAVPH | | 1 | 94841 | 08/30/12 00:00 | CMR | TAL WFD |
| Total/NA | Prep | 3546 | | | 94819 | 08/29/12 16:20 | BRB | TAL WFD |
| Total/NA | Analysis | 8015B | | 10 | 94820 | 08/29/12 23:11 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 94818 | 08/29/12 16:17 | BRB | TAL WFD |
| Total/NA | Analysis | 8082 | | 1 | 94872 | 08/30/12 21:15 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 94877 | 08/30/12 14:47 | BRB | TAL WFD |
| Total/NA | Analysis | MA-EPH | | 1 | 94905 | 08/31/12 18:20 | JLG | TAL WFD |
| Total/NA | Prep | 3050B | | | 94738 | 08/28/12 10:52 | BH | TAL WFD |
| Total/NA | Analysis | 6010C | | 1 | 94781 | 08/28/12 17:13 | TJS | TAL WFD |
| Total/NA | Prep | 7471B | | | 94848 | 08/30/12 09:40 | BH | TAL WFD |
| Total/NA | Analysis | 7471B | | 1 | 94871 | 08/30/12 12:54 | TJS | TAL WFD |
| Total/NA | Analysis | Moisture | | 1 | 94812 | 08/29/12 15:56 | BH | TAL WFD |
| Soluble | Leach | DI Leach | | | 94751 | 08/30/12 09:00 | AMS | TAL WFD |
| Soluble | Analysis | SM 2510B | | 1 | 94868 | 08/30/12 10:29 | AMS | TAL WFD |
| Soluble | Leach | DI Leach | | | 94897 | 08/30/12 16:15 | EE | TAL WFD |
| Soluble | Analysis | 9045C | | 1 | 94915 | 08/30/12 18:21 | EE | TAL WFD |
| Total/NA | Analysis | 1010 | | 1 | 94935 | 08/31/12 08:47 | GRB | TAL WFD |
| Total/NA | Prep | 7.3.3 | | | 94828 | 08/30/12 07:49 | AMS | TAL WFD |
| Total/NA | Analysis | 9014 | | 1 | 94937 | 08/31/12 16:19 | AMS | TAL WFD |
| Total/NA | Prep | 7.3.4 | | | 94829 | 08/30/12 07:50 | AMS | TAL WFD |
| Total/NA | Analysis | 9034 | | 1 | 94942 | 08/31/12 16:21 | AMS | TAL WFD |

**Laboratory References:**

TAL WFD = TestAmerica Westfield, Westfield Executive Park, 53 Southampton Road, Westfield, MA 01085, TEL (413)572-4000

# Certification Summary

Client: ENVIRON International Corp.
Project/Site: 941 Grimell St./3329188I

TestAmerica Job ID: 360-42392-1

## Laboratory: TestAmerica Westfield

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Connecticut | State Program | 1 | PH-0494 | 09-30-14 |
| Massachusetts | State Program | 1 | M-MA014 | 06-30-13 |
| New Hampshire | NELAP | 1 | 2539 | 08-08-13 |

# State Accreditation Matrix

| Method Name | Description | Primary Accreditation | |
|---|---|---|---|
| | | New Hampshire (NELAC) | Mass |
| 180.1 | Turbidity, Nephelometric | P | P |
| 245.1 | Mercury (CVAA) | NP/P | NP |
| 300 | Anions, Ion Chromatography | NP/P | NP/P |
| 410.4 | COD | NP | NP |
| 524.2 | Volatile Org Comp (GC/MS)(list upon request) | P | P |
| 524.2 | Trihalomethane compounds | P | P |
| 608 | Organochlorine Pest/PCBs (list upon request) | NP | NP |
| 624 | Volatile Org Comp (GC/MS)(list upon request) | NP | NP |
| 625 | Semivolatile Org Comp (GC/MS)(list upon request) | NP | NP |
| 1010 | Ignitability, Pensky-Martens Closed-Cup Method | SW | |
| 1103.1 | E.coli | | ambient/source |
| 3546 | Microwave Extraction | SW | |
| 5035 | Closed System Purge and Trap | SW | |
| 6020 | Metals (ICP/MS) (list upon request) | NP | |
| 10-107-06-2 | Nitrogen, Total Kjeldahl | NP | NP |
| 200.7 Rev 4.4 | Metals (ICP)(list upon request) | NP/P | NP/P |
| 200.8 Rev 5.4 | Metals (ICP/MS) (list upon request) | NP/P | NP/P |
| 3005A | Preparation, Total Recoverable or Dissolved Metals | NP/P | |
| 3010A | Preparation, Total Metals | NP/P | |
| 3020A | Preparation, Total Metals | NP/P | |
| 3050B | Preparation, Metals | SW | |
| 3510C | Liquid-Liquid Extraction (Separatory Funnel) | NP | |
| 5030B | Purge and Trap | NP | |
| 6010C | Metals (ICP)(list upon request) | NP/SW | |
| 7196A | Chromium, Hexavalent | NP/SW | |
| 7470A | Mercury (CVAA) | NP | |
| 7471A | Mercury (CVAA) | SW | |
| 8081B | Organochlorine Pesticides (GC)(list upon request) | NP/SW | |
| 8082A | PCBs by Gas Chromatography(list upon request) | NP/SW | |
| 8260C | Volatile Org Comp. (GC/MS)(list upon request) | NP/SW | |
| 8270D | Semivolatile Comp.(GC/MS)(list upon request) | NP/SW | |
| 9012A | Cyanide, Total and/or Amenable | NP/SW | |
| 9030B | Sulfide, Distillation (Acid Soluble and Insoluble) | NP | |
| 9045C | pH | SW | |
| CT ETPH | Conn - Ext. Total petroleum Hydrocarbons (GC) | NP/SW | |
| Enterolert | Enterococcus | | ambient/source |
| L107041C | Nitrogen, Nitrate | NP | |
| L107-06-1B | Nitrogen Ammonia | NP | NP |
| L204001A CN | Cyanide, Total | P | NP/P |
| L210-001A | Phenolics, Total Recoverable | NP | NP |
| MA-EPH | Mass - Extractable Petroleum Hydrocarbons (GC) | NP/SW | |
| MAVPH | Mass - Volatile Petroleum Hydrocarbons (GC) | NP/SW | |
| SM 2320B | Alkalinity | NP/P | NP/P |
| SM 2340B | Total Hardness (as CaCO3) by calculation | NP/P | NP |
| SM 2510B | Conductivity, Specific Conductance | NP/P | NP/P |
| SM 2540C | Solids, Total Dissolved (TDS) | NP/P | NP/P |
| SM 2540D | Solids, Total Suspended (TSS) | NP | NP |
| SM 3500 CR D | Chromium, Hexavalent | NP | |
| SM 4500 Cl F | Chlorine, Residual | | NP |
| SM 4500 H+ B | pH | NP/P | NP/P |
| SM 4500 NO2 B | Nitrogen, Nitrite | NP | P |
| SM 4500 P E | Phosphorus, Orthophosphate | NP/P | NP |
| SM 4500 P E | Phosphorus, Total | NP | NP |
| SM 4500 S2 D | Sulfide, Total | NP | |
| SM 5210B | BOD, 5-Day | NP | NP |
| SM 5310B | Organic Carbon, Total (TOC) | NP/P | NP |
| SM 9215E | Heterotrophic Plate Count (SimPlate) | | P |
| SM 9222D | Coliforms, Fecal (Membrane Filter) | | NP |
| SM 9223 | Coliforms, Total, and E.Coli (Colilert-P/A) | | P |
| SM 9223 | Coliforms, Total, and E.Coli (Enumeration) | | P |

Not all organic compounds are accreditied under YNI
For methods with multiple compounds all compounds may not meet TNI criteria, a listing should be obtained from the laboratory

The lab carries additional accreditations with several states. This is the laboratories typcial listing but is subject to change based on the laboratories current certification standing.

# Login Sample Receipt Checklist

Client: ENVIRON International Corp.

Job Number: 360-42392-1

**Login Number: 42392**
**List Number: 1**
**Creator: Kolb, Chris M**

**List Source: TestAmerica Westfield**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | N/A | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

**TestAmerica Westfield**
Westfield Executive Park 53 Southampton Road
Westfield, MA 01085
Phone (413) 572-4000 Fax (413) 572-3707

**Boston Service Center**
240 Bear Hill Rd. Suite 104
Waltham, MA 02451
Phone (781) 466-6900 Fax (781) 466-6901

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

| Client Information | Sampler: Michael Chomik | Lab PM: Becky Nash | Carrier Tracking No(s): | COC No: |
|---|---|---|---|---|
| Client Contact: Jason Wilkinson | Phone: 315-404-1779 | E-Mail: mchomik@environcorp.com | | Page: 1 of |
| Company: ENVIRON | | | | Job #: 360-42392 |
| Address: 8 Hollis Street | Due Date Requested: 9/4/12 | | | |
| City: Groton | TAT Requested (days): 5-Day (Standard) | | | |
| State, Zip: MA, 01450 | Quote #: | | | |
| Phone: 978-449-0339 | PO #: | | | |
| Email: jwilkinson@environcorp.com | WO #: | | | |
| Project Name/number: 941 Grinnell St. / 3329188 I | SSOW#: | | | |
| Site: Fall River, MA | | | | |

**Analysis Requested**

**Preservation Codes:**
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; H - Ascorbic Acid; I - Ice; J - DI Water; M - Hexane; N - None; P - Na2O4S; Q - Na2SO3; R - Na2S2SO3; S - H2SO4; Z - other (specify)

**Regulatory programs:**
MCP ☐ GW1/S1 ☐
RCP ☐ CT RSR ☐
DEP Form ☐ EDD Required ☐

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Sampler's Initials | Field Filtered Sample? | Perform MS/MSD? | VOCs 8260B | SVOCs 8270C | TPH-DRO | PCBs | RCRA 8 Metals | Priority Pollutant 13 Metals | EPH (carbon range only) | VPH (carbon range only) | Cyanide/Sulfide Reactivity | pH/Ignitability | Specific Conductance | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | | | | | | | | | | |
| P4 | 8/27/12 | 0940 | C | S | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | 7 | |
| P5 | 8/27/12 | 1020 | C | S | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | 7 | |
| P10 | 8/27/12 | 1245 | C | S | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 7 | |
| P13 | 8/27/12 | 1405 | C | S | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | 7 | |
| P14 | 8/27/12 | 1350 | C | S | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | 7 | |
| P18 | 8/27/12 | 1500 | C | S | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 7 | |
| P26 | 8/27/12 | 1605 | C | S | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | 7 | |
| P24 | 8/27/12 | 1630 | C | S | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | 7 | |
| C-P5-P14 | 8/27/12 | 1645 | C | S | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 7 | |
| | ~~8/27/12~~ | | | ~~S~~ | ✓ | | F/T | I | I | I | I | I | I | I | F | I | I | I | | |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| [signature] | 8/27/12 1700 | | [signature] | 8-27-12 1700 | |
| [signature] | 8-27-12 1925 | TA | [signature] | 8/27/12 1925 | TA |
| | | | | | |

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 1.2 Lo ICE

TAL-8245-360 1111

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Westfield
Westfield Executive Park
53 Southampton Road
Westfield, MA 01085
Tel: (413)572-4000

TestAmerica Job ID: 360-38847-1
Client Project/Site: Brayton Ave

For:
ENVIRON International Corp.
8 Hollis Street
PO BOX 1220
Groton, Massachusetts 01450

Attn: Donald Cederquist

*Authorized for release by:*
*2/3/2012 5:53:00 PM*
James Wickham
Technology Manager
jamie.wickham@testamericainc.com

Designee for

Becky Mason
Project Manager II
becky.mason@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

# Table of Contents

Cover Page . . . . . 1
Table of Contents . . . . . 2
Case Narrative . . . . . 3
Detection Summary . . . . . 7
Method Summary . . . . . 10
Sample Summary . . . . . 11
Client Sample Results . . . . . 12
Definitions . . . . . 35
QC Association . . . . . 36
Surrogate Summary . . . . . 41
QC Sample Results . . . . . 43
Chronicle . . . . . 64
Certification Summary . . . . . 68
Receipt Checklists . . . . . 70
Chain of Custody . . . . . 71

# MassDEP Analytical Protocol Certification Form

Laboratory Name: **TestAmerica Westfield** Project #: **360-38847-1**

Project Location: **Brayton Ave** RTN:

**This form provides certifications for the following data set: list Laboratory Sample ID Number(s):**

**360-38847-(1-11)**

Matrices: ☐ Groundwater/Surface Water ☒ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

**CAM Protocols (check all that apply below):**

| | | | | | |
|---|---|---|---|---|---|
| 8260 VOC CAM II A ☒ | 7470/7471 Hg CAM III B ☒ | Mass DEP VPH CAM IV A ☒ | 8081 Pesticides CAM V B ☐ | 7196 Hex Cr CAM VI B ☐ | Mass DEP APH CAM IX A ☐ |
| 8270 SVOC CAM II B ☐ | 7010 Metals CAM III C ☐ | Mass DEP EPH CAM IV B ☒ | 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 Responses to Questions A through F are 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 time. | ☒ Yes ☐ No |
| **B** | Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed? | ☒ Yes ☐ No |
| **C** | Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances? | ☒ Yes ☐ No |
| **D** | Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"? | ☒ Yes ☐ No |
| **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).<br>b. APH and TO-15 Methods only: Was the complete analyte list reported for each method? | ☒ Yes ☐ No<br>☐ Yes ☐ No |
| **F** | Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)? | ☒ Yes ☐ No |

**Responses to Questions G, H and I below are required for "Presumptive Certainty" status**

| | | |
|---|---|---|
| **G** | Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)? | ☐ Yes ☒ 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 WCS-07-350***

| | | |
|---|---|---|
| **H** | Were **all** QC performance standards specified in the CAM protocol(s) achieved? | ☐ Yes ☒ No[1] |
| **I** | Were results reported for the complete analyte list specified in the selected CAM protocol(s) ? | ☐ Yes ☒ No[1] |

[1] All negative responses must be addressed in an attached laboratory 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, is accurate and complete.***

Signature: Position: Technical Manager

Printed Name: James Wickham Date: 2/3/12 17:37

This form has been electronically signed and approved

## Job ID: 360-38847-1

### Laboratory: TestAmerica Westfield

**Narrative**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

**RECEIPT**

The samples were received on 01/26/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 5.2 C.

Note: All samples that require thermal preservation are considered acceptable if the arrival temperature is within the method's specified temperature range or for general analysis, ranging from 6°C to just above the freezing temperature of water. Samples that are hand delivered, immediately following collection, may not meet these criteria; however, they will be considered acceptable according to NELAC and State standards, if there is evidence that the chilling process has begun, such as stored and transported to the laboratory on ice.

**VOLATILE ORGANIC COMPOUNDS (GC-MS)**

Samples ENV-9 (0.5-2.5) (360-38847-2) and TB 012512 (360-38847-11) were analyzed for volatile organic compounds (GC-MS) in accordance with SW846 8260C. The samples were prepared and analyzed on 01/30/2012.

Carbon disulfide failed the recovery criteria high for LCS 360-86709/1-A. Refer to the QC report for details.

For batch 86665, the calibration curve dated 1-13-12 uses quadratic regressions for m,p-Xylene.

No other difficulties were encountered during the VOC analyses.

All other quality control parameters were within the acceptance limits.

**VOLATILE PETROLEUM HYDROCARBONS**

Samples ENV-9 (0.5-2.5) (360-38847-2) and TB 012512 (360-38847-11) were analyzed for Volatile Petroleum Hydrocarbons in accordance with MA DEP MAVPH. The samples were prepared on 01/27/2012 and analyzed on 01/30/2012.

For batch 86611 and 86664 the calibration the curve dated 1-19-12 uses quadratic regressions for Butylcyclohexane (non-target marker) and C9-C12 Aliphatics.

At the request of the client, only the carbon ranges are reported for this job.

No other difficulties were encountered during the VPH analyses.

All other quality control parameters were within the acceptance limits.

**POLYCHLORINATED BIPHENYLS (PCBS)**

Samples ENV-19 (4-5) (360-38847-1), ENV-9 (0.5-2.5) (360-38847-2), ENV-21 (0.5-1.3) (360-38847-4), ENV-20 (3.5-4.5) (360-38847-5), ENV-16 (0.5-1.5) (360-38847-6), ENV-17 (5-6) (360-38847-7), ENV-23 (6.0-6.7) (360-38847-8), ENV-22 (10-10.5) (360-38847-9) and DUP-012512 (360-38847-10) were analyzed for polychlorinated biphenyls (PCBs) in accordance with SW846 8082A. The samples were prepared on 01/27/2012 and analyzed on 01/30/2012 and 01/31/2012.

PCB-1016 exceeded the rpd limit for LCSD 360-86565/3-A. Refer to the QC report for details.

For samples 360-38847-(6-10), the closing continuing calibration verification (CCV) for analytical batch 86673 failed low for PCB 1260 and

## Job ID: 360-38847-1 (Continued)

### Laboratory: TestAmerica Westfield (Continued)

DCB on both the primary and secondary columns due to matrix interference from the samples run in the batch. The samples were run twice with the same results; therefore both sets of data have been reported. For samples 360-38847-(6-10) RA - re-analysis, the closing continuing calibration verification (CCV) for analytical batch 86735 failed low for PCB 1260 and DCB on both the primary and secondary columns due to matrix interference from the samples run in the batch.

No other difficulties were encountered during the PCBs analyses.

All other quality control parameters were within the acceptance limits.

**EXTRACTABLE PETROLEUM HYDROCARBONS**

Samples ENV-19 (4-5) (360-38847-1), ENV-9 (0.5-2.5) (360-38847-2), ENV-15B (5.5-6.5) (360-38847-3), ENV-21 (0.5-1.3) (360-38847-4), ENV-20 (3.5-4.5) (360-38847-5), ENV-16 (0.5-1.5) (360-38847-6), ENV-17 (5-6) (360-38847-7), ENV-23 (6.0-6.7) (360-38847-8), ENV-22 (10-10.5) (360-38847-9) and DUP-012512 (360-38847-10) were analyzed for extractable petroleum hydrocarbons in accordance with MA DEP MA-EPH. The samples were prepared on 01/30/2012 and 02/01/2012 and analyzed on 01/31/2012, 02/01/2012 and 02/02/2012.

According to EPH method reference 11.2.6.2, using GC/MS, the laboratory has identified a single component contaminant that appears at the same retention time in all laboratory and field samples. This contaminant is derived from the method's SPE cartridge and is not included in the calculation of the C11-C22 Aromatics range.

1-Chlorooctadecane and o-Terphenyl failed the surrogate recovery criteria low for ENV-19 (4-5) (360-38847-1). o-Terphenyl failed the surrogate recovery criteria low for ENV-9 (0.5-2.5) (360-38847-2). The samples show evidence of matrix interference; therefore, re-extraction and/or re-analysis was not performed. Chromatograms have been provided as supporting documentation. Refer to the QC report for details.

For samples 360-38847-(1-10), the opening continuing calibration verification (CCV) for analytical batch 86677 exceeded control criteria (high) for non-target marker compound n-Hexatriacontane.

For sample 360-38847-(4), the closing continuing calibration verification (CCV) for analytical batch 86789 exceeded control criteria (low) for Benzo(g,h,i)perylene.

Samples ENV-19 (4-5) (360-38847-1)[5X], ENV-9 (0.5-2.5) (360-38847-2)[2X] and ENV-21 (0.5-1.3) (360-38847-4)[5X] required dilution prior to analysis due to the abundance of target analytes. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the EPH analyses.

All other quality control parameters were within the acceptance limits.

**TOTAL METALS (ICP)**

Samples ENV-9 (0.5-2.5) (360-38847-2), ENV-15B (5.5-6.5) (360-38847-3), ENV-21 (0.5-1.3) (360-38847-4), ENV-20 (3.5-4.5) (360-38847-5), ENV-23 (6.0-6.7) (360-38847-8), ENV-22 (10-10.5) (360-38847-9) and DUP-012512 (360-38847-10) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared and analyzed on 02/01/2012.

Samples ENV-9 (0.5-2.5) (360-38847-2)[5X] and ENV-21 (0.5-1.3) (360-38847-4)[5X] required dilution prior to analysis due to the abundance of non-target analytes. The reporting limits have been adjusted accordingly.

At the request of the client, an abbreviated MCP analyte list (EPA RCRA 8 vs. WSC CAM III-A) was reported for this job.

No other difficulties were encountered during the metals analyses.

All quality control parameters were within the acceptance limits.

**TOTAL MERCURY**

Samples ENV-9 (0.5-2.5) (360-38847-2), ENV-15B (5.5-6.5) (360-38847-3), ENV-21 (0.5-1.3) (360-38847-4), ENV-20 (3.5-4.5) (360-38847-5), ENV-23 (6.0-6.7) (360-38847-8), ENV-22 (10-10.5) (360-38847-9) and DUP-012512 (360-38847-10) were analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The samples were prepared on 01/30/2012 and analyzed on 01/30/2012 and

## Job ID: 360-38847-1 (Continued)

### Laboratory: TestAmerica Westfield (Continued)

01/31/2012.

No difficulties were encountered during the mercury analyses.

All quality control parameters were within the acceptance limits.

**PERCENT SOLIDS**

Samples ENV-19 (4-5) (360-38847-1), ENV-9 (0.5-2.5) (360-38847-2), ENV-15B (5.5-6.5) (360-38847-3), ENV-21 (0.5-1.3) (360-38847-4), ENV-20 (3.5-4.5) (360-38847-5), ENV-16 (0.5-1.5) (360-38847-6), ENV-17 (5-6) (360-38847-7), ENV-23 (6.0-6.7) (360-38847-8), ENV-22 (10-10.5) (360-38847-9) and DUP-012512 (360-38847-10) were analyzed for percent solids in accordance with EPA Moisture. The samples were analyzed on 01/30/2012.

No difficulties were encountered during the % solids analyses.

All quality control parameters were within the acceptance limits.

# Detection Summary

Client: ENVIRON International Corp.
Project/Site: Brayton Ave

TestAmerica Job ID: 360-38847-1

## Client Sample ID: ENV-19 (4-5) — Lab Sample ID: 360-38847-1

| Analyte | Result | Qualifier | RL | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 11 | | 2.1 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| Anthracene | 15 | | 2.1 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| Benzo[a]anthracene | 31 | | 2.1 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| Benzo[a]pyrene | 19 | | 2.1 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| Benzo[b]fluoranthene | 22 | | 2.1 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| Benzo[g,h,i]perylene | 4.2 | | 2.1 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| Benzo[k]fluoranthene | 20 | | 2.1 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| Chrysene | 38 | | 2.1 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| Dibenz(a,h)anthracene | 3.1 | | 2.1 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| Fluoranthene | 55 | | 2.1 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| Fluorene | 10 | | 2.1 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| Indeno[1,2,3-cd]pyrene | 7.8 | | 2.1 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| 2-Methylnaphthalene | 3.8 | | 2.1 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| Naphthalene | 9.0 | | 2.1 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| Phenanthrene | 80 | | 2.1 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| Pyrene | 76 | | 2.1 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| C11-C22 Aromatics (unadjusted) | 1100 | | 21 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| C11-C22 Aromatics (Adjusted) | 680 | | 21 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| C19-C36 Aliphatics | 130 | | 21 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| Total EPH | 810 | | 21 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |

## Client Sample ID: ENV-9 (0.5-2.5) — Lab Sample ID: 360-38847-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 6.8 | | 6.3 | | mg/Kg | 5 | ☼ | 6010B | Total/NA |
| Barium | 140 | | 3.2 | | mg/Kg | 5 | ☼ | 6010B | Total/NA |
| Chromium | 11 | | 3.2 | | mg/Kg | 5 | ☼ | 6010B | Total/NA |
| Lead | 80 | | 3.2 | | mg/Kg | 5 | ☼ | 6010B | Total/NA |

| Analyte | Result | Qualifier | RL | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Anthracene | 1.2 | | 0.75 | | mg/Kg | 2 | ☼ | MA-EPH | Total/NA |
| Benzo[a]anthracene | 5.2 | | 0.75 | | mg/Kg | 2 | ☼ | MA-EPH | Total/NA |
| Benzo[a]pyrene | 2.6 | | 0.75 | | mg/Kg | 2 | ☼ | MA-EPH | Total/NA |
| Benzo[b]fluoranthene | 2.3 | | 0.75 | | mg/Kg | 2 | ☼ | MA-EPH | Total/NA |
| Benzo[k]fluoranthene | 3.7 | | 0.75 | | mg/Kg | 2 | ☼ | MA-EPH | Total/NA |
| Chrysene | 5.4 | | 0.75 | | mg/Kg | 2 | ☼ | MA-EPH | Total/NA |
| Fluoranthene | 9.9 | | 0.75 | | mg/Kg | 2 | ☼ | MA-EPH | Total/NA |
| Indeno[1,2,3-cd]pyrene | 1.2 | | 0.75 | | mg/Kg | 2 | ☼ | MA-EPH | Total/NA |
| Phenanthrene | 4.8 | | 0.75 | | mg/Kg | 2 | ☼ | MA-EPH | Total/NA |
| Pyrene | 9.9 | | 0.75 | | mg/Kg | 2 | ☼ | MA-EPH | Total/NA |
| C11-C22 Aromatics (unadjusted) | 240 | | 7.5 | | mg/Kg | 2 | ☼ | MA-EPH | Total/NA |
| C11-C22 Aromatics (Adjusted) | 190 | | 7.5 | | mg/Kg | 2 | ☼ | MA-EPH | Total/NA |
| C19-C36 Aliphatics | 630 | | 7.5 | | mg/Kg | 2 | ☼ | MA-EPH | Total/NA |
| C9-C18 Aliphatics | 10 | | 7.5 | | mg/Kg | 2 | ☼ | MA-EPH | Total/NA |
| Total EPH | 830 | | 7.5 | | mg/Kg | 2 | ☼ | MA-EPH | Total/NA |

## Client Sample ID: ENV-15B (5.5-6.5) — Lab Sample ID: 360-38847-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 4.4 | | 1.5 | | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 14 | | 0.73 | | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 6.7 | | 0.73 | | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 7.3 | | 0.73 | | mg/Kg | 1 | ☼ | 6010B | Total/NA |

# Detection Summary

Client: ENVIRON International Corp.
Project/Site: Brayton Ave

TestAmerica Job ID: 360-38847-1

## Client Sample ID: ENV-15B (5.5-6.5) (Continued) — Lab Sample ID: 360-38847-3

| Analyte | Result | Qualifier | RL | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| C11-C22 Aromatics (unadjusted) | 6.9 | | 3.7 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C11-C22 Aromatics (Adjusted) | 6.9 | | 3.7 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C19-C36 Aliphatics | 16 | | 3.7 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| Total EPH | 23 | | 3.7 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |

## Client Sample ID: ENV-21 (0.5-1.3) — Lab Sample ID: 360-38847-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 18 | | 6.8 | | mg/Kg | 5 | ☼ | 6010B | Total/NA |
| Barium | 30 | | 3.4 | | mg/Kg | 5 | ☼ | 6010B | Total/NA |
| Cadmium | 16 | | 1.4 | | mg/Kg | 5 | ☼ | 6010B | Total/NA |
| Chromium | 31 | | 3.4 | | mg/Kg | 5 | ☼ | 6010B | Total/NA |
| Lead | 58 | | 3.4 | | mg/Kg | 5 | ☼ | 6010B | Total/NA |
| Mercury | 0.39 | | 0.10 | | mg/Kg | 1 | ☼ | 7471A | Total/NA |

| Analyte | Result | Qualifier | RL | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Fluoranthene | 2.1 | | 1.9 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| C11-C22 Aromatics (unadjusted) | 200 | | 19 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| C11-C22 Aromatics (Adjusted) | 200 | | 19 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| C19-C36 Aliphatics | 110 | | 19 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |
| Total EPH | 310 | | 19 | | mg/Kg | 5 | ☼ | MA-EPH | Total/NA |

## Client Sample ID: ENV-20 (3.5-4.5) — Lab Sample ID: 360-38847-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 3.8 | | 1.3 | | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 22 | | 0.66 | | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 8.0 | | 0.66 | | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 24 | | 0.66 | | mg/Kg | 1 | ☼ | 6010B | Total/NA |

| Analyte | Result | Qualifier | RL | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| C19-C36 Aliphatics | 4.4 | | 3.7 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| Total EPH | 4.4 | | 3.7 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |

## Client Sample ID: ENV-16 (0.5-1.5) — Lab Sample ID: 360-38847-6

| Analyte | Result | Qualifier | RL | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| C11-C22 Aromatics (unadjusted) | 16 | | 3.7 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C11-C22 Aromatics (Adjusted) | 16 | | 3.7 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C19-C36 Aliphatics | 20 | | 3.7 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C9-C18 Aliphatics | 6.0 | | 3.7 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| Total EPH | 42 | | 3.7 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |

## Client Sample ID: ENV-17 (5-6) — Lab Sample ID: 360-38847-7

| Analyte | Result | Qualifier | RL | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Benzo[a]anthracene | 0.94 | | 0.35 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| Benzo[a]pyrene | 0.87 | | 0.35 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| Benzo[b]fluoranthene | 0.95 | | 0.35 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| Benzo[k]fluoranthene | 0.89 | | 0.35 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| Chrysene | 1.1 | | 0.35 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| Fluoranthene | 1.9 | | 0.35 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.65 | | 0.35 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| Phenanthrene | 1.4 | | 0.35 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| Pyrene | 1.6 | | 0.35 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |

# Detection Summary

Client: ENVIRON International Corp.
Project/Site: Brayton Ave

TestAmerica Job ID: 360-38847-1

## Client Sample ID: ENV-17 (5-6) (Continued) — Lab Sample ID: 360-38847-7

| Analyte | Result | Qualifier | RL | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| C11-C22 Aromatics (unadjusted) | 37 | | 3.5 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C11-C22 Aromatics (Adjusted) | 27 | | 3.5 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C19-C36 Aliphatics | 12 | | 3.5 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| Total EPH | 39 | | 3.5 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |

## Client Sample ID: ENV-23 (6.0-6.7) — Lab Sample ID: 360-38847-8

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 5.4 | | 1.4 | | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 24 | | 0.70 | | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 11 | | 0.70 | | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 7.5 | | 0.70 | | mg/Kg | 1 | ☼ | 6010B | Total/NA |

| Analyte | Result | Qualifier | RL | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| C11-C22 Aromatics (unadjusted) | 4.2 | | 3.5 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C11-C22 Aromatics (Adjusted) | 4.2 | | 3.5 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C19-C36 Aliphatics | 4.2 | | 3.5 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| Total EPH | 8.4 | | 3.5 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |

## Client Sample ID: ENV-22 (10-10.5) — Lab Sample ID: 360-38847-9

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 3.8 | | 1.2 | | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 20 | | 0.60 | | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 24 | | 0.60 | | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 6.4 | | 0.60 | | mg/Kg | 1 | ☼ | 6010B | Total/NA |

| Analyte | Result | Qualifier | RL | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| C11-C22 Aromatics (unadjusted) | 55 | | 3.5 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C11-C22 Aromatics (Adjusted) | 55 | | 3.5 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C19-C36 Aliphatics | 110 | | 3.5 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| Total EPH | 170 | | 3.5 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |

## Client Sample ID: DUP-012512 — Lab Sample ID: 360-38847-10

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 3.2 | | 1.4 | | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Barium | 21 | | 0.72 | | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Chromium | 15 | | 0.72 | | mg/Kg | 1 | ☼ | 6010B | Total/NA |
| Lead | 6.5 | | 0.72 | | mg/Kg | 1 | ☼ | 6010B | Total/NA |

| Analyte | Result | Qualifier | RL | RL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| C11-C22 Aromatics (unadjusted) | 64 | | 3.5 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C11-C22 Aromatics (Adjusted) | 64 | | 3.5 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| C19-C36 Aliphatics | 160 | | 3.5 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |
| Total EPH | 220 | | 3.5 | | mg/Kg | 1 | ☼ | MA-EPH | Total/NA |

## Client Sample ID: TB 012512 — Lab Sample ID: 360-38847-11

No Detections

# Method Summary

Client: ENVIRON International Corp.
Project/Site: Brayton Ave

TestAmerica Job ID: 360-38847-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8260C | Volatile Organic Compounds (GC/MS) | MA DEP | TAL WFD |
| MAVPH | Massachusetts - Volatile Petroleum Hydrocarbons (GC) | MA DEP | TAL WFD |
| 8082A | Polychlorinated Biphenyls (GC/ECD) | MA DEP | TAL WFD |
| MA-EPH | Massachusetts - Extractable Petroleum Hydrocarbons (GC) | MA DEP | TAL WFD |
| 6010B | Metals (ICP) | SW846 | TAL WFD |
| 7471A | Mercury (CVAA) | SW846 | TAL WFD |
| Moisture | Percent Moisture | EPA | TAL WFD |

**Protocol References:**

EPA = US Environmental Protection Agency

MA DEP = Massachusetts Department Of Environmental Protection

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL WFD = TestAmerica Westfield, Westfield Executive Park, 53 Southampton Road, Westfield, MA 01085, TEL (413)572-4000

# Sample Summary

Client: ENVIRON International Corp.
Project/Site: Brayton Ave

TestAmerica Job ID: 360-38847-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 360-38847-1 | ENV-19 (4-5) | Solid | 01/25/12 09:45 | 01/26/12 14:50 |
| 360-38847-2 | ENV-9 (0.5-2.5) | Solid | 01/25/12 10:45 | 01/26/12 14:50 |
| 360-38847-3 | ENV-15B (5.5-6.5) | Solid | 01/25/12 11:00 | 01/26/12 14:50 |
| 360-38847-4 | ENV-21 (0.5-1.3) | Solid | 01/25/12 11:35 | 01/26/12 14:50 |
| 360-38847-5 | ENV-20 (3.5-4.5) | Solid | 01/25/12 11:45 | 01/26/12 14:50 |
| 360-38847-6 | ENV-16 (0.5-1.5) | Solid | 01/25/12 12:05 | 01/26/12 14:50 |
| 360-38847-7 | ENV-17 (5-6) | Solid | 01/25/12 12:35 | 01/26/12 14:50 |
| 360-38847-8 | ENV-23 (6.0-6.7) | Solid | 01/25/12 13:10 | 01/26/12 14:50 |
| 360-38847-9 | ENV-22 (10-10.5) | Solid | 01/25/12 13:25 | 01/26/12 14:50 |
| 360-38847-10 | DUP-012512 | Solid | 01/25/12 13:25 | 01/26/12 14:50 |
| 360-38847-11 | TB 012512 | Solid | 01/25/12 14:45 | 01/26/12 14:50 |

## Method: 8260C - Volatile Organic Compounds (GC/MS)

**Client Sample ID: ENV-9 (0.5-2.5)**
**Date Collected: 01/25/12 10:45**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-2**
**Matrix: Solid**
**Percent Solids: 87.6**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 1,1,1-Trichloroethane | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 1,1,2-Trichloroethane | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 1,1-Dichloroethane | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 1,1-Dichloroethene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 1,1-Dichloropropene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 1,2,3-Trichloropropane | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 28 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 1,2-Dichlorobenzene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 1,2-Dichloroethane | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 1,2-Dichloropropane | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 1,3-Dichlorobenzene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 1,3-Dichloropropane | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 1,4-Dichlorobenzene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 1,4-Dioxane | ND | | 280 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 2,2-Dichloropropane | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 2-Butanone (MEK) | ND | | 28 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 2-Chlorotoluene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 2-Hexanone | ND | | 28 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 4-Chlorotoluene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 4-Isopropyltoluene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 28 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Acetone | ND | | 280 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Benzene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Bromobenzene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Bromoform | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Bromomethane | ND | | 5.7 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Carbon disulfide | ND | * | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Carbon tetrachloride | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Chlorobenzene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Chlorobromomethane | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Chlorodibromomethane | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Chloroethane | ND | | 5.7 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Chloroform | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Chloromethane | ND | | 5.7 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| cis-1,2-Dichloroethene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| cis-1,3-Dichloropropene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Dibromomethane | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Dichlorobromomethane | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Dichlorodifluoromethane | ND | | 5.7 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Ethyl ether | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Ethylbenzene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Ethylene Dibromide | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Hexachlorobutadiene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: ENV-9 (0.5-2.5)**
**Date Collected: 01/25/12 10:45**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-2**
**Matrix: Solid**
**Percent Solids: 87.6**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Isopropyl ether | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Isopropylbenzene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| m-Xylene & p-Xylene | ND | | 5.7 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Methyl tert-butyl ether | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Methylene Chloride | ND | | 11 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| n-Butylbenzene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| N-Propylbenzene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Naphthalene | ND | | 28 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| o-Xylene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| sec-Butylbenzene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Styrene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Tert-amyl methyl ether | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Tert-butyl ethyl ether | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| tert-Butylbenzene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Tetrachloroethene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Tetrahydrofuran | ND | | 57 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Toluene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| trans-1,2-Dichloroethene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| trans-1,3-Dichloropropene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Trichloroethene | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Trichlorofluoromethane | ND | | 5.7 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |
| Vinyl chloride | ND | | 2.8 | | ug/Kg | ☼ | 01/30/12 16:00 | 01/30/12 20:04 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *90* | | *70 - 130* | *01/30/12 16:00* | *01/30/12 20:04* | *1* |
| *Dibromofluoromethane* | *75* | | *70 - 130* | *01/30/12 16:00* | *01/30/12 20:04* | *1* |
| *Toluene-d8 (Surr)* | *98* | | *70 - 130* | *01/30/12 16:00* | *01/30/12 20:04* | *1* |

**Client Sample ID: TB 012512**
**Date Collected: 01/25/12 14:45**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-11**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| 1,1,1-Trichloroethane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| 1,1,2-Trichloroethane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| 1,1-Dichloroethane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| 1,1-Dichloroethene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| 1,1-Dichloropropene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| 1,2,3-Trichloropropane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 25 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| 1,2-Dichlorobenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| 1,2-Dichloroethane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| 1,2-Dichloropropane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| 1,3-Dichlorobenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: TB 012512**
**Date Collected: 01/25/12 14:45**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-11**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichloropropane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| 1,4-Dichlorobenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| 1,4-Dioxane | ND | | 250 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| 2,2-Dichloropropane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| 2-Butanone (MEK) | ND | | 25 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| 2-Chlorotoluene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| 2-Hexanone | ND | | 25 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| 4-Chlorotoluene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| 4-Isopropyltoluene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 25 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Acetone | ND | | 250 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Benzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Bromobenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Bromoform | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Bromomethane | ND | | 5.0 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Carbon disulfide | ND | * | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Carbon tetrachloride | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Chlorobenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Chlorobromomethane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Chlorodibromomethane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Chloroethane | ND | | 5.0 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Chloroform | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Chloromethane | ND | | 5.0 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| cis-1,2-Dichloroethene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| cis-1,3-Dichloropropene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Dibromomethane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Dichlorobromomethane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Dichlorodifluoromethane | ND | | 5.0 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Ethyl ether | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Ethylbenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Ethylene Dibromide | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Hexachlorobutadiene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Isopropyl ether | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Isopropylbenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Methyl tert-butyl ether | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Methylene Chloride | ND | | 10 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| n-Butylbenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| N-Propylbenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Naphthalene | ND | | 25 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| o-Xylene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| sec-Butylbenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Styrene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Tert-amyl methyl ether | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Tert-butyl ethyl ether | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| tert-Butylbenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Tetrachloroethene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Tetrahydrofuran | ND | | 50 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Toluene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: TB 012512**
**Date Collected: 01/25/12 14:45**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-11**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| trans-1,3-Dichloropropene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Trichloroethene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |
| Vinyl chloride | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 20:28 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *92* | | *70 - 130* | *01/30/12 16:00* | *01/30/12 20:28* | *1* |
| *Dibromofluoromethane* | *99* | | *70 - 130* | *01/30/12 16:00* | *01/30/12 20:28* | *1* |
| *Toluene-d8 (Surr)* | *100* | | *70 - 130* | *01/30/12 16:00* | *01/30/12 20:28* | *1* |

# Client Sample Results

Client: ENVIRON International Corp.
Project/Site: Brayton Ave

TestAmerica Job ID: 360-38847-1

## Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

**Client Sample ID: ENV-9 (0.5-2.5)**
**Date Collected: 01/25/12 10:45**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-2**
**Matrix: Solid**
**Percent Solids: 87.6**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C5-C8 Aliphatics (unadjusted) | ND | | 2.7 | | mg/Kg | ☼ | 01/27/12 14:12 | 01/30/12 21:41 | 1 |
| C9-C12 Aliphatics (unadjusted) | ND | | 2.7 | | mg/Kg | ☼ | 01/27/12 14:12 | 01/30/12 21:41 | 1 |
| C5-C8 Aliphatics (adjusted) | ND | | 2.7 | | mg/Kg | ☼ | 01/27/12 14:12 | 01/30/12 21:41 | 1 |
| C9-C12 Aliphatics (adjusted) | ND | | 2.7 | | mg/Kg | ☼ | 01/27/12 14:12 | 01/30/12 21:41 | 1 |
| C9-C10 Aromatics | ND | | 2.7 | | mg/Kg | ☼ | 01/27/12 14:12 | 01/30/12 21:41 | 1 |
| Total VPH | ND | | 2.7 | | mg/Kg | ☼ | 01/27/12 14:12 | 01/30/12 21:41 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,5-Dibromotoluene (fid)* | *92* | | *70 - 130* | *01/27/12 14:12* | *01/30/12 21:41* | *1* |
| *2,5-Dibromotoluene (pid)* | *105* | | *70 - 130* | *01/27/12 14:12* | *01/30/12 21:41* | *1* |

**Client Sample ID: TB 012512**
**Date Collected: 01/25/12 14:45**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-11**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C5-C8 Aliphatics (unadjusted) | ND | | 2.5 | | mg/Kg | | 01/27/12 14:12 | 01/30/12 22:15 | 1 |
| C9-C12 Aliphatics (unadjusted) | ND | | 2.5 | | mg/Kg | | 01/27/12 14:12 | 01/30/12 22:15 | 1 |
| C5-C8 Aliphatics (adjusted) | ND | | 2.5 | | mg/Kg | | 01/27/12 14:12 | 01/30/12 22:15 | 1 |
| C9-C12 Aliphatics (adjusted) | ND | | 2.5 | | mg/Kg | | 01/27/12 14:12 | 01/30/12 22:15 | 1 |
| C9-C10 Aromatics | ND | | 2.5 | | mg/Kg | | 01/27/12 14:12 | 01/30/12 22:15 | 1 |
| Total VPH | ND | | 2.5 | | mg/Kg | | 01/27/12 14:12 | 01/30/12 22:15 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,5-Dibromotoluene (fid)* | *89* | | *70 - 130* | *01/27/12 14:12* | *01/30/12 22:15* | *1* |
| *2,5-Dibromotoluene (pid)* | *103* | | *70 - 130* | *01/27/12 14:12* | *01/30/12 22:15* | *1* |

## Method: 8082A - Polychlorinated Biphenyls (GC/ECD)

**Client Sample ID: ENV-19 (4-5)**
**Date Collected: 01/25/12 09:45**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-1**
**Matrix: Solid**
**Percent Solids: 78.5**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | * | 120 | | ug/Kg | ☼ | 01/27/12 14:14 | 01/30/12 19:24 | 1 |
| PCB-1221 | ND | | 120 | | ug/Kg | ☼ | 01/27/12 14:14 | 01/30/12 19:24 | 1 |
| PCB-1232 | ND | | 120 | | ug/Kg | ☼ | 01/27/12 14:14 | 01/30/12 19:24 | 1 |
| PCB-1242 | ND | | 120 | | ug/Kg | ☼ | 01/27/12 14:14 | 01/30/12 19:24 | 1 |
| PCB-1248 | ND | | 120 | | ug/Kg | ☼ | 01/27/12 14:14 | 01/30/12 19:24 | 1 |
| PCB-1254 | ND | | 120 | | ug/Kg | ☼ | 01/27/12 14:14 | 01/30/12 19:24 | 1 |
| PCB-1260 | ND | | 120 | | ug/Kg | ☼ | 01/27/12 14:14 | 01/30/12 19:24 | 1 |
| PCB-1262 | ND | | 120 | | ug/Kg | ☼ | 01/27/12 14:14 | 01/30/12 19:24 | 1 |
| PCB-1268 | ND | | 120 | | ug/Kg | ☼ | 01/27/12 14:14 | 01/30/12 19:24 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *75* | | *30 - 150* | *01/27/12 14:14* | *01/30/12 19:24* | *1* |
| *Tetrachloro-m-xylene* | *62* | | *30 - 150* | *01/27/12 14:14* | *01/30/12 19:24* | *1* |
| *DCB Decachlorobiphenyl* | *59* | | *30 - 150* | *01/27/12 14:14* | *01/30/12 19:24* | *1* |
| *DCB Decachlorobiphenyl* | *83* | | *30 - 150* | *01/27/12 14:14* | *01/30/12 19:24* | *1* |

**Client Sample ID: ENV-9 (0.5-2.5)**
**Date Collected: 01/25/12 10:45**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-2**
**Matrix: Solid**
**Percent Solids: 87.6**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | * | 110 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 19:45 | 1 |
| PCB-1221 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 19:45 | 1 |
| PCB-1232 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 19:45 | 1 |
| PCB-1242 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 19:45 | 1 |
| PCB-1248 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 19:45 | 1 |
| PCB-1254 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 19:45 | 1 |
| PCB-1260 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 19:45 | 1 |
| PCB-1262 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 19:45 | 1 |
| PCB-1268 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 19:45 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *64* | | *30 - 150* | *01/27/12 14:16* | *01/30/12 19:45* | *1* |
| *Tetrachloro-m-xylene* | *67* | | *30 - 150* | *01/27/12 14:16* | *01/30/12 19:45* | *1* |
| *DCB Decachlorobiphenyl* | *55* | | *30 - 150* | *01/27/12 14:16* | *01/30/12 19:45* | *1* |
| *DCB Decachlorobiphenyl* | *156* | *X* | *30 - 150* | *01/27/12 14:16* | *01/30/12 19:45* | *1* |

**Client Sample ID: ENV-21 (0.5-1.3)**
**Date Collected: 01/25/12 11:35**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-4**
**Matrix: Solid**
**Percent Solids: 83.4**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | * | 120 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 20:06 | 1 |
| PCB-1221 | ND | | 120 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 20:06 | 1 |
| PCB-1232 | ND | | 120 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 20:06 | 1 |
| PCB-1242 | ND | | 120 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 20:06 | 1 |
| PCB-1248 | ND | | 120 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 20:06 | 1 |
| PCB-1254 | ND | | 120 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 20:06 | 1 |
| PCB-1260 | ND | | 120 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 20:06 | 1 |
| PCB-1262 | ND | | 120 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 20:06 | 1 |

## Method: 8082A - Polychlorinated Biphenyls (GC/ECD) (Continued)

**Client Sample ID: ENV-21 (0.5-1.3)**
**Date Collected: 01/25/12 11:35**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-4**
**Matrix: Solid**
**Percent Solids: 83.4**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1268 | ND | | 120 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 20:06 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *64* | | *30 - 150* | *01/27/12 14:16* | *01/30/12 20:06* | *1* |
| *Tetrachloro-m-xylene* | *72* | | *30 - 150* | *01/27/12 14:16* | *01/30/12 20:06* | *1* |
| *DCB Decachlorobiphenyl* | *57* | | *30 - 150* | *01/27/12 14:16* | *01/30/12 20:06* | *1* |
| *DCB Decachlorobiphenyl* | *67* | | *30 - 150* | *01/27/12 14:16* | *01/30/12 20:06* | *1* |

**Client Sample ID: ENV-20 (3.5-4.5)**
**Date Collected: 01/25/12 11:45**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-5**
**Matrix: Solid**
**Percent Solids: 88.1**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | * | 110 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 20:28 | 1 |
| PCB-1221 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 20:28 | 1 |
| PCB-1232 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 20:28 | 1 |
| PCB-1242 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 20:28 | 1 |
| PCB-1248 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 20:28 | 1 |
| PCB-1254 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 20:28 | 1 |
| PCB-1260 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 20:28 | 1 |
| PCB-1262 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 20:28 | 1 |
| PCB-1268 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:16 | 01/30/12 20:28 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *89* | | *30 - 150* | *01/27/12 14:16* | *01/30/12 20:28* | *1* |
| *Tetrachloro-m-xylene* | *98* | | *30 - 150* | *01/27/12 14:16* | *01/30/12 20:28* | *1* |
| *DCB Decachlorobiphenyl* | *59* | | *30 - 150* | *01/27/12 14:16* | *01/30/12 20:28* | *1* |
| *DCB Decachlorobiphenyl* | *61* | | *30 - 150* | *01/27/12 14:16* | *01/30/12 20:28* | *1* |

**Client Sample ID: ENV-16 (0.5-1.5)**
**Date Collected: 01/25/12 12:05**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-6**
**Matrix: Solid**
**Percent Solids: 86.3**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 07:47 | 1 |
| PCB-1221 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 07:47 | 1 |
| PCB-1232 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 07:47 | 1 |
| PCB-1242 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 07:47 | 1 |
| PCB-1248 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 07:47 | 1 |
| PCB-1254 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 07:47 | 1 |
| PCB-1260 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 07:47 | 1 |
| PCB-1262 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 07:47 | 1 |
| PCB-1268 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 07:47 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *86* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 07:47* | *1* |
| *Tetrachloro-m-xylene* | *101* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 07:47* | *1* |
| *DCB Decachlorobiphenyl* | *81* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 07:47* | *1* |
| *DCB Decachlorobiphenyl* | *83* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 07:47* | *1* |

## Method: 8082A - Polychlorinated Biphenyls (GC/ECD)

**Client Sample ID: ENV-17 (5-6)**
**Date Collected: 01/25/12 12:35**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-7**
**Matrix: Solid**
**Percent Solids: 92.3**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:08 | 1 |
| PCB-1221 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:08 | 1 |
| PCB-1232 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:08 | 1 |
| PCB-1242 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:08 | 1 |
| PCB-1248 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:08 | 1 |
| PCB-1254 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:08 | 1 |
| PCB-1260 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:08 | 1 |
| PCB-1262 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:08 | 1 |
| PCB-1268 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:08 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *60* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 08:08* | *1* |
| *Tetrachloro-m-xylene* | *81* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 08:08* | *1* |
| *DCB Decachlorobiphenyl* | *87* | *p* | *30 - 150* | *01/27/12 14:28* | *01/31/12 08:08* | *1* |
| *DCB Decachlorobiphenyl* | *159* | *X* | *30 - 150* | *01/27/12 14:28* | *01/31/12 08:08* | *1* |

**Client Sample ID: ENV-23 (6.0-6.7)**
**Date Collected: 01/25/12 13:10**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-8**
**Matrix: Solid**
**Percent Solids: 91.3**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:29 | 1 |
| PCB-1221 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:29 | 1 |
| PCB-1232 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:29 | 1 |
| PCB-1242 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:29 | 1 |
| PCB-1248 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:29 | 1 |
| PCB-1254 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:29 | 1 |
| PCB-1260 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:29 | 1 |
| PCB-1262 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:29 | 1 |
| PCB-1268 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:29 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *72* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 08:29* | *1* |
| *Tetrachloro-m-xylene* | *87* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 08:29* | *1* |
| *DCB Decachlorobiphenyl* | *71* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 08:29* | *1* |
| *DCB Decachlorobiphenyl* | *71* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 08:29* | *1* |

**Client Sample ID: ENV-22 (10-10.5)**
**Date Collected: 01/25/12 13:25**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-9**
**Matrix: Solid**
**Percent Solids: 92.7**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:50 | 1 |
| PCB-1221 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:50 | 1 |
| PCB-1232 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:50 | 1 |
| PCB-1242 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:50 | 1 |
| PCB-1248 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:50 | 1 |
| PCB-1254 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:50 | 1 |
| PCB-1260 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:50 | 1 |
| PCB-1262 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:50 | 1 |

## Method: 8082A - Polychlorinated Biphenyls (GC/ECD) (Continued)

**Client Sample ID: ENV-22 (10-10.5)**
**Date Collected: 01/25/12 13:25**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-9**
**Matrix: Solid**
**Percent Solids: 92.7**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1268 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 08:50 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *65* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 08:50* | *1* |
| *Tetrachloro-m-xylene* | *87* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 08:50* | *1* |
| *DCB Decachlorobiphenyl* | *57* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 08:50* | *1* |
| *DCB Decachlorobiphenyl* | *57* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 08:50* | *1* |

**Client Sample ID: DUP-012512**
**Date Collected: 01/25/12 13:25**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-10**
**Matrix: Solid**
**Percent Solids: 92.1**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 09:12 | 1 |
| PCB-1221 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 09:12 | 1 |
| PCB-1232 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 09:12 | 1 |
| PCB-1242 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 09:12 | 1 |
| PCB-1248 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 09:12 | 1 |
| PCB-1254 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 09:12 | 1 |
| PCB-1260 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 09:12 | 1 |
| PCB-1262 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 09:12 | 1 |
| PCB-1268 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 09:12 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *59* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 09:12* | *1* |
| *Tetrachloro-m-xylene* | *81* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 09:12* | *1* |
| *DCB Decachlorobiphenyl* | *48* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 09:12* | *1* |
| *DCB Decachlorobiphenyl* | *51* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 09:12* | *1* |

## Method: 8082A - Polychlorinated Biphenyls (GC/ECD) - RA

**Client Sample ID: ENV-16 (0.5-1.5)**
**Date Collected: 01/25/12 12:05**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-6**
**Matrix: Solid**
**Percent Solids: 86.3**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 16:49 | 1 |
| PCB-1221 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 16:49 | 1 |
| PCB-1232 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 16:49 | 1 |
| PCB-1242 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 16:49 | 1 |
| PCB-1248 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 16:49 | 1 |
| PCB-1254 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 16:49 | 1 |
| PCB-1260 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 16:49 | 1 |
| PCB-1262 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 16:49 | 1 |
| PCB-1268 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 16:49 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *103* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 16:49* | *1* |
| *Tetrachloro-m-xylene* | *97* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 16:49* | *1* |
| *DCB Decachlorobiphenyl* | *87* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 16:49* | *1* |
| *DCB Decachlorobiphenyl* | *86* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 16:49* | *1* |

**Client Sample ID: ENV-17 (5-6)**
**Date Collected: 01/25/12 12:35**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-7**
**Matrix: Solid**
**Percent Solids: 92.3**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:10 | 1 |
| PCB-1221 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:10 | 1 |
| PCB-1232 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:10 | 1 |
| PCB-1242 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:10 | 1 |
| PCB-1248 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:10 | 1 |
| PCB-1254 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:10 | 1 |
| PCB-1260 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:10 | 1 |
| PCB-1262 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:10 | 1 |
| PCB-1268 | ND | | 110 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:10 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *66* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 17:10* | *1* |
| *Tetrachloro-m-xylene* | *83* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 17:10* | *1* |
| *DCB Decachlorobiphenyl* | *95* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 17:10* | *1* |
| *DCB Decachlorobiphenyl* | *162* | *X* | *30 - 150* | *01/27/12 14:28* | *01/31/12 17:10* | *1* |

**Client Sample ID: ENV-23 (6.0-6.7)**
**Date Collected: 01/25/12 13:10**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-8**
**Matrix: Solid**
**Percent Solids: 91.3**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:31 | 1 |
| PCB-1221 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:31 | 1 |
| PCB-1232 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:31 | 1 |
| PCB-1242 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:31 | 1 |
| PCB-1248 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:31 | 1 |
| PCB-1254 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:31 | 1 |
| PCB-1260 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:31 | 1 |
| PCB-1262 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:31 | 1 |

## Method: 8082A - Polychlorinated Biphenyls (GC/ECD) - RA (Continued)

**Client Sample ID: ENV-23 (6.0-6.7)**
**Date Collected: 01/25/12 13:10**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-8**
**Matrix: Solid**
**Percent Solids: 91.3**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1268 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:31 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *74* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 17:31* | *1* |
| *Tetrachloro-m-xylene* | *90* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 17:31* | *1* |
| *DCB Decachlorobiphenyl* | *76* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 17:31* | *1* |
| *DCB Decachlorobiphenyl* | *73* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 17:31* | *1* |

**Client Sample ID: ENV-22 (10-10.5)**
**Date Collected: 01/25/12 13:25**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-9**
**Matrix: Solid**
**Percent Solids: 92.7**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:53 | 1 |
| PCB-1221 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:53 | 1 |
| PCB-1232 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:53 | 1 |
| PCB-1242 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:53 | 1 |
| PCB-1248 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:53 | 1 |
| PCB-1254 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:53 | 1 |
| PCB-1260 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:53 | 1 |
| PCB-1262 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:53 | 1 |
| PCB-1268 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 17:53 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *70* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 17:53* | *1* |
| *Tetrachloro-m-xylene* | *89* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 17:53* | *1* |
| *DCB Decachlorobiphenyl* | *60* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 17:53* | *1* |
| *DCB Decachlorobiphenyl* | *58* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 17:53* | *1* |

**Client Sample ID: DUP-012512**
**Date Collected: 01/25/12 13:25**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-10**
**Matrix: Solid**
**Percent Solids: 92.1**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 18:14 | 1 |
| PCB-1221 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 18:14 | 1 |
| PCB-1232 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 18:14 | 1 |
| PCB-1242 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 18:14 | 1 |
| PCB-1248 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 18:14 | 1 |
| PCB-1254 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 18:14 | 1 |
| PCB-1260 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 18:14 | 1 |
| PCB-1262 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 18:14 | 1 |
| PCB-1268 | ND | | 100 | | ug/Kg | ☼ | 01/27/12 14:28 | 01/31/12 18:14 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *63* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 18:14* | *1* |
| *Tetrachloro-m-xylene* | *85* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 18:14* | *1* |
| *DCB Decachlorobiphenyl* | *49* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 18:14* | *1* |
| *DCB Decachlorobiphenyl* | *52* | | *30 - 150* | *01/27/12 14:28* | *01/31/12 18:14* | *1* |

## Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

**Client Sample ID: ENV-19 (4-5)**
**Date Collected: 01/25/12 09:45**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-1**
**Matrix: Solid**
**Percent Solids: 78.5**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Acenaphthene** | **11** | | 2.1 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:19 | 5 |
| Acenaphthylene | ND | | 2.1 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:19 | 5 |
| **Anthracene** | **15** | | 2.1 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:19 | 5 |
| **Benzo[a]anthracene** | **31** | | 2.1 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:19 | 5 |
| **Benzo[a]pyrene** | **19** | | 2.1 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:19 | 5 |
| **Benzo[b]fluoranthene** | **22** | | 2.1 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:19 | 5 |
| **Benzo[g,h,i]perylene** | **4.2** | | 2.1 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:19 | 5 |
| **Benzo[k]fluoranthene** | **20** | | 2.1 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:19 | 5 |
| **Chrysene** | **38** | | 2.1 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:19 | 5 |
| **Dibenz(a,h)anthracene** | **3.1** | | 2.1 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:19 | 5 |
| **Fluoranthene** | **55** | | 2.1 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:19 | 5 |
| **Fluorene** | **10** | | 2.1 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:19 | 5 |
| **Indeno[1,2,3-cd]pyrene** | **7.8** | | 2.1 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:19 | 5 |
| **2-Methylnaphthalene** | **3.8** | | 2.1 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:19 | 5 |
| **Naphthalene** | **9.0** | | 2.1 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:19 | 5 |
| **Phenanthrene** | **80** | | 2.1 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:19 | 5 |
| **Pyrene** | **76** | | 2.1 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:19 | 5 |
| **C11-C22 Aromatics (unadjusted)** | **1100** | | 21 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:19 | 5 |
| **C11-C22 Aromatics (Adjusted)** | **680** | | 21 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:19 | 5 |
| **C19-C36 Aliphatics** | **130** | | 21 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:19 | 5 |
| C9-C18 Aliphatics | ND | | 21 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:19 | 5 |
| **Total EPH** | **810** | | 21 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:19 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Bromonaphthalene* | *65* | | *40 - 140* | *01/30/12 16:42* | *02/01/12 08:19* | *5* |
| *2-Fluorobiphenyl* | *68* | | *40 - 140* | *01/30/12 16:42* | *02/01/12 08:19* | *5* |
| *o-Terphenyl* | *20* | *X* | *40 - 140* | *01/30/12 16:42* | *02/01/12 08:19* | *5* |
| *1-Chlorooctadecane* | *24* | *X* | *40 - 140* | *01/30/12 16:42* | *02/01/12 08:19* | *5* |

**Client Sample ID: ENV-9 (0.5-2.5)**
**Date Collected: 01/25/12 10:45**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-2**
**Matrix: Solid**
**Percent Solids: 87.6**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.75 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:53 | 2 |
| Acenaphthylene | ND | | 0.75 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:53 | 2 |
| **Anthracene** | **1.2** | | 0.75 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:53 | 2 |
| **Benzo[a]anthracene** | **5.2** | | 0.75 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:53 | 2 |
| **Benzo[a]pyrene** | **2.6** | | 0.75 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:53 | 2 |
| **Benzo[b]fluoranthene** | **2.3** | | 0.75 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:53 | 2 |
| Benzo[g,h,i]perylene | ND | | 0.75 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:53 | 2 |
| **Benzo[k]fluoranthene** | **3.7** | | 0.75 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:53 | 2 |
| **Chrysene** | **5.4** | | 0.75 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:53 | 2 |
| Dibenz(a,h)anthracene | ND | | 0.75 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:53 | 2 |
| **Fluoranthene** | **9.9** | | 0.75 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:53 | 2 |
| Fluorene | ND | | 0.75 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:53 | 2 |
| **Indeno[1,2,3-cd]pyrene** | **1.2** | | 0.75 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:53 | 2 |
| 2-Methylnaphthalene | ND | | 0.75 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:53 | 2 |
| Naphthalene | ND | | 0.75 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:53 | 2 |

## Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

**Client Sample ID: ENV-9 (0.5-2.5)**
**Date Collected: 01/25/12 10:45**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-2**
**Matrix: Solid**
**Percent Solids: 87.6**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Phenanthrene** | **4.8** | | 0.75 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:53 | 2 |
| **Pyrene** | **9.9** | | 0.75 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:53 | 2 |
| **C11-C22 Aromatics (unadjusted)** | **240** | | 7.5 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:53 | 2 |
| **C11-C22 Aromatics (Adjusted)** | **190** | | 7.5 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:53 | 2 |
| **C19-C36 Aliphatics** | **630** | | 7.5 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:53 | 2 |
| **C9-C18 Aliphatics** | **10** | | 7.5 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:53 | 2 |
| **Total EPH** | **830** | | 7.5 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 08:53 | 2 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Bromonaphthalene* | *66* | | *40 - 140* | *01/30/12 16:42* | *02/01/12 08:53* | *2* |
| *2-Fluorobiphenyl* | *69* | | *40 - 140* | *01/30/12 16:42* | *02/01/12 08:53* | *2* |
| *o-Terphenyl* | *37* | *X* | *40 - 140* | *01/30/12 16:42* | *02/01/12 08:53* | *2* |
| *1-Chlorooctadecane* | *43* | | *40 - 140* | *01/30/12 16:42* | *02/01/12 08:53* | *2* |

**Client Sample ID: ENV-15B (5.5-6.5)**
**Date Collected: 01/25/12 11:00**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-3**
**Matrix: Solid**
**Percent Solids: 88.7**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 15:45 | 1 |
| Acenaphthylene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 15:45 | 1 |
| Anthracene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 15:45 | 1 |
| Benzo[a]anthracene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 15:45 | 1 |
| Benzo[a]pyrene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 15:45 | 1 |
| Benzo[b]fluoranthene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 15:45 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 15:45 | 1 |
| Benzo[k]fluoranthene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 15:45 | 1 |
| Chrysene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 15:45 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 15:45 | 1 |
| Fluoranthene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 15:45 | 1 |
| Fluorene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 15:45 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 15:45 | 1 |
| 2-Methylnaphthalene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 15:45 | 1 |
| Naphthalene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 15:45 | 1 |
| Phenanthrene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 15:45 | 1 |
| Pyrene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 15:45 | 1 |
| **C11-C22 Aromatics (unadjusted)** | **6.9** | | 3.7 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 15:45 | 1 |
| **C11-C22 Aromatics (Adjusted)** | **6.9** | | 3.7 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 15:45 | 1 |
| **C19-C36 Aliphatics** | **16** | | 3.7 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 15:45 | 1 |
| C9-C18 Aliphatics | ND | | 3.7 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 15:45 | 1 |
| **Total EPH** | **23** | | 3.7 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 15:45 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Bromonaphthalene* | *77* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 15:45* | *1* |
| *2-Fluorobiphenyl* | *80* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 15:45* | *1* |
| *o-Terphenyl* | *64* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 15:45* | *1* |
| *1-Chlorooctadecane* | *68* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 15:45* | *1* |

## Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

**Client Sample ID: ENV-21 (0.5-1.3)**
**Date Collected: 01/25/12 11:35**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-4**
**Matrix: Solid**
**Percent Solids: 83.4**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 1.9 | | mg/Kg | ☼ | 02/01/12 10:00 | 02/02/12 18:35 | 5 |
| Acenaphthylene | ND | | 1.9 | | mg/Kg | ☼ | 02/01/12 10:00 | 02/02/12 18:35 | 5 |
| Anthracene | ND | | 1.9 | | mg/Kg | ☼ | 02/01/12 10:00 | 02/02/12 18:35 | 5 |
| Benzo[a]anthracene | ND | | 1.9 | | mg/Kg | ☼ | 02/01/12 10:00 | 02/02/12 18:35 | 5 |
| Benzo[a]pyrene | ND | | 1.9 | | mg/Kg | ☼ | 02/01/12 10:00 | 02/02/12 18:35 | 5 |
| Benzo[b]fluoranthene | ND | | 1.9 | | mg/Kg | ☼ | 02/01/12 10:00 | 02/02/12 18:35 | 5 |
| Benzo[g,h,i]perylene | ND | | 1.9 | | mg/Kg | ☼ | 02/01/12 10:00 | 02/02/12 18:35 | 5 |
| Benzo[k]fluoranthene | ND | | 1.9 | | mg/Kg | ☼ | 02/01/12 10:00 | 02/02/12 18:35 | 5 |
| Chrysene | ND | | 1.9 | | mg/Kg | ☼ | 02/01/12 10:00 | 02/02/12 18:35 | 5 |
| Dibenz(a,h)anthracene | ND | | 1.9 | | mg/Kg | ☼ | 02/01/12 10:00 | 02/02/12 18:35 | 5 |
| **Fluoranthene** | **2.1** | | 1.9 | | mg/Kg | ☼ | 02/01/12 10:00 | 02/02/12 18:35 | 5 |
| Fluorene | ND | | 1.9 | | mg/Kg | ☼ | 02/01/12 10:00 | 02/02/12 18:35 | 5 |
| Indeno[1,2,3-cd]pyrene | ND | | 1.9 | | mg/Kg | ☼ | 02/01/12 10:00 | 02/02/12 18:35 | 5 |
| 2-Methylnaphthalene | ND | | 1.9 | | mg/Kg | ☼ | 02/01/12 10:00 | 02/02/12 18:35 | 5 |
| Naphthalene | ND | | 1.9 | | mg/Kg | ☼ | 02/01/12 10:00 | 02/02/12 18:35 | 5 |
| Phenanthrene | ND | | 1.9 | | mg/Kg | ☼ | 02/01/12 10:00 | 02/02/12 18:35 | 5 |
| Pyrene | ND | | 1.9 | | mg/Kg | ☼ | 02/01/12 10:00 | 02/02/12 18:35 | 5 |
| **C11-C22 Aromatics (unadjusted)** | **200** | | 19 | | mg/Kg | ☼ | 02/01/12 10:00 | 02/02/12 18:35 | 5 |
| **C11-C22 Aromatics (Adjusted)** | **200** | | 19 | | mg/Kg | ☼ | 02/01/12 10:00 | 02/02/12 18:35 | 5 |
| **C19-C36 Aliphatics** | **110** | | 19 | | mg/Kg | ☼ | 02/01/12 10:00 | 02/02/12 18:35 | 5 |
| C9-C18 Aliphatics | ND | | 19 | | mg/Kg | ☼ | 02/01/12 10:00 | 02/02/12 18:35 | 5 |
| **Total EPH** | **310** | | 19 | | mg/Kg | ☼ | 02/01/12 10:00 | 02/02/12 18:35 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Bromonaphthalene* | *82* | | *40 - 140* | *02/01/12 10:00* | *02/02/12 18:35* | *5* |
| *2-Fluorobiphenyl* | *85* | | *40 - 140* | *02/01/12 10:00* | *02/02/12 18:35* | *5* |
| *o-Terphenyl* | *42* | | *40 - 140* | *02/01/12 10:00* | *02/02/12 18:35* | *5* |
| *1-Chlorooctadecane* | *43* | | *40 - 140* | *02/01/12 10:00* | *02/02/12 18:35* | *5* |

**Client Sample ID: ENV-20 (3.5-4.5)**
**Date Collected: 01/25/12 11:45**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-5**
**Matrix: Solid**
**Percent Solids: 88.1**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 10:36 | 1 |
| Acenaphthylene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 10:36 | 1 |
| Anthracene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 10:36 | 1 |
| Benzo[a]anthracene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 10:36 | 1 |
| Benzo[a]pyrene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 10:36 | 1 |
| Benzo[b]fluoranthene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 10:36 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 10:36 | 1 |
| Benzo[k]fluoranthene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 10:36 | 1 |
| Chrysene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 10:36 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 10:36 | 1 |
| Fluoranthene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 10:36 | 1 |
| Fluorene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 10:36 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 10:36 | 1 |
| 2-Methylnaphthalene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 10:36 | 1 |
| Naphthalene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 10:36 | 1 |
| Phenanthrene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 10:36 | 1 |

## Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

**Client Sample ID: ENV-20 (3.5-4.5)**
**Date Collected: 01/25/12 11:45**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-5**
**Matrix: Solid**
**Percent Solids: 88.1**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Pyrene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 10:36 | 1 |
| C11-C22 Aromatics (unadjusted) | ND | | 3.7 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 10:36 | 1 |
| C11-C22 Aromatics (Adjusted) | ND | | 3.7 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 10:36 | 1 |
| **C19-C36 Aliphatics** | **4.4** | | 3.7 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 10:36 | 1 |
| C9-C18 Aliphatics | ND | | 3.7 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 10:36 | 1 |
| **Total EPH** | **4.4** | | 3.7 | | mg/Kg | ☼ | 01/30/12 16:42 | 02/01/12 10:36 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Bromonaphthalene* | *73* | | *40 - 140* | *01/30/12 16:42* | *02/01/12 10:36* | *1* |
| *2-Fluorobiphenyl* | *76* | | *40 - 140* | *01/30/12 16:42* | *02/01/12 10:36* | *1* |
| *o-Terphenyl* | *56* | | *40 - 140* | *01/30/12 16:42* | *02/01/12 10:36* | *1* |
| *1-Chlorooctadecane* | *65* | | *40 - 140* | *01/30/12 16:42* | *02/01/12 10:36* | *1* |

**Client Sample ID: ENV-16 (0.5-1.5)**
**Date Collected: 01/25/12 12:05**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-6**
**Matrix: Solid**
**Percent Solids: 86.3**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 17:27 | 1 |
| Acenaphthylene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 17:27 | 1 |
| Anthracene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 17:27 | 1 |
| Benzo[a]anthracene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 17:27 | 1 |
| Benzo[a]pyrene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 17:27 | 1 |
| Benzo[b]fluoranthene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 17:27 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 17:27 | 1 |
| Benzo[k]fluoranthene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 17:27 | 1 |
| Chrysene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 17:27 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 17:27 | 1 |
| Fluoranthene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 17:27 | 1 |
| Fluorene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 17:27 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 17:27 | 1 |
| 2-Methylnaphthalene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 17:27 | 1 |
| Naphthalene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 17:27 | 1 |
| Phenanthrene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 17:27 | 1 |
| Pyrene | ND | | 0.37 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 17:27 | 1 |
| **C11-C22 Aromatics (unadjusted)** | **16** | | 3.7 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 17:27 | 1 |
| **C11-C22 Aromatics (Adjusted)** | **16** | | 3.7 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 17:27 | 1 |
| **C19-C36 Aliphatics** | **20** | | 3.7 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 17:27 | 1 |
| **C9-C18 Aliphatics** | **6.0** | | 3.7 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 17:27 | 1 |
| **Total EPH** | **42** | | 3.7 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 17:27 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Bromonaphthalene* | *82* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 17:27* | *1* |
| *2-Fluorobiphenyl* | *88* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 17:27* | *1* |
| *o-Terphenyl* | *66* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 17:27* | *1* |
| *1-Chlorooctadecane* | *66* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 17:27* | *1* |

## Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

**Client Sample ID: ENV-17 (5-6)**
**Date Collected: 01/25/12 12:35**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-7**
**Matrix: Solid**
**Percent Solids: 92.3**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:01 | 1 |
| Acenaphthylene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:01 | 1 |
| Anthracene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:01 | 1 |
| **Benzo[a]anthracene** | **0.94** | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:01 | 1 |
| **Benzo[a]pyrene** | **0.87** | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:01 | 1 |
| **Benzo[b]fluoranthene** | **0.95** | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:01 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:01 | 1 |
| **Benzo[k]fluoranthene** | **0.89** | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:01 | 1 |
| **Chrysene** | **1.1** | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:01 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:01 | 1 |
| **Fluoranthene** | **1.9** | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:01 | 1 |
| Fluorene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:01 | 1 |
| **Indeno[1,2,3-cd]pyrene** | **0.65** | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:01 | 1 |
| 2-Methylnaphthalene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:01 | 1 |
| Naphthalene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:01 | 1 |
| **Phenanthrene** | **1.4** | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:01 | 1 |
| **Pyrene** | **1.6** | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:01 | 1 |
| **C11-C22 Aromatics (unadjusted)** | **37** | | 3.5 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:01 | 1 |
| **C11-C22 Aromatics (Adjusted)** | **27** | | 3.5 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:01 | 1 |
| **C19-C36 Aliphatics** | **12** | | 3.5 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:01 | 1 |
| C9-C18 Aliphatics | ND | | 3.5 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:01 | 1 |
| **Total EPH** | **39** | | 3.5 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:01 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Bromonaphthalene* | *74* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 18:01* | *1* |
| *2-Fluorobiphenyl* | *78* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 18:01* | *1* |
| *o-Terphenyl* | *60* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 18:01* | *1* |
| *1-Chlorooctadecane* | *61* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 18:01* | *1* |

**Client Sample ID: ENV-23 (6.0-6.7)**
**Date Collected: 01/25/12 13:10**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-8**
**Matrix: Solid**
**Percent Solids: 91.3**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:35 | 1 |
| Acenaphthylene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:35 | 1 |
| Anthracene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:35 | 1 |
| Benzo[a]anthracene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:35 | 1 |
| Benzo[a]pyrene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:35 | 1 |
| Benzo[b]fluoranthene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:35 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:35 | 1 |
| Benzo[k]fluoranthene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:35 | 1 |
| Chrysene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:35 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:35 | 1 |
| Fluoranthene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:35 | 1 |
| Fluorene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:35 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:35 | 1 |
| 2-Methylnaphthalene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:35 | 1 |
| Naphthalene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:35 | 1 |
| Phenanthrene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:35 | 1 |

## Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

**Client Sample ID: ENV-23 (6.0-6.7)**
**Date Collected: 01/25/12 13:10**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-8**
**Matrix: Solid**
**Percent Solids: 91.3**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Pyrene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:35 | 1 |
| **C11-C22 Aromatics (unadjusted)** | **4.2** | | 3.5 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:35 | 1 |
| **C11-C22 Aromatics (Adjusted)** | **4.2** | | 3.5 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:35 | 1 |
| **C19-C36 Aliphatics** | **4.2** | | 3.5 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:35 | 1 |
| C9-C18 Aliphatics | ND | | 3.5 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:35 | 1 |
| **Total EPH** | **8.4** | | 3.5 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 18:35 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Bromonaphthalene* | *79* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 18:35* | *1* |
| *2-Fluorobiphenyl* | *82* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 18:35* | *1* |
| *o-Terphenyl* | *66* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 18:35* | *1* |
| *1-Chlorooctadecane* | *69* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 18:35* | *1* |

**Client Sample ID: ENV-22 (10-10.5)**
**Date Collected: 01/25/12 13:25**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-9**
**Matrix: Solid**
**Percent Solids: 92.7**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:09 | 1 |
| Acenaphthylene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:09 | 1 |
| Anthracene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:09 | 1 |
| Benzo[a]anthracene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:09 | 1 |
| Benzo[a]pyrene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:09 | 1 |
| Benzo[b]fluoranthene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:09 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:09 | 1 |
| Benzo[k]fluoranthene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:09 | 1 |
| Chrysene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:09 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:09 | 1 |
| Fluoranthene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:09 | 1 |
| Fluorene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:09 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:09 | 1 |
| 2-Methylnaphthalene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:09 | 1 |
| Naphthalene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:09 | 1 |
| Phenanthrene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:09 | 1 |
| Pyrene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:09 | 1 |
| **C11-C22 Aromatics (unadjusted)** | **55** | | 3.5 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:09 | 1 |
| **C11-C22 Aromatics (Adjusted)** | **55** | | 3.5 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:09 | 1 |
| **C19-C36 Aliphatics** | **110** | | 3.5 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:09 | 1 |
| C9-C18 Aliphatics | ND | | 3.5 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:09 | 1 |
| **Total EPH** | **170** | | 3.5 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:09 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Bromonaphthalene* | *79* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 19:09* | *1* |
| *2-Fluorobiphenyl* | *83* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 19:09* | *1* |
| *o-Terphenyl* | *50* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 19:09* | *1* |
| *1-Chlorooctadecane* | *52* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 19:09* | *1* |

# Client Sample Results

Client: ENVIRON International Corp.
Project/Site: Brayton Ave

TestAmerica Job ID: 360-38847-1

## Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

**Client Sample ID: DUP-012512**
**Date Collected: 01/25/12 13:25**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-10**
**Matrix: Solid**
**Percent Solids: 92.1**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:44 | 1 |
| Acenaphthylene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:44 | 1 |
| Anthracene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:44 | 1 |
| Benzo[a]anthracene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:44 | 1 |
| Benzo[a]pyrene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:44 | 1 |
| Benzo[b]fluoranthene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:44 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:44 | 1 |
| Benzo[k]fluoranthene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:44 | 1 |
| Chrysene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:44 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:44 | 1 |
| Fluoranthene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:44 | 1 |
| Fluorene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:44 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:44 | 1 |
| 2-Methylnaphthalene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:44 | 1 |
| Naphthalene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:44 | 1 |
| Phenanthrene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:44 | 1 |
| Pyrene | ND | | 0.35 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:44 | 1 |
| **C11-C22 Aromatics (unadjusted)** | **64** | | 3.5 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:44 | 1 |
| **C11-C22 Aromatics (Adjusted)** | **64** | | 3.5 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:44 | 1 |
| **C19-C36 Aliphatics** | **160** | | 3.5 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:44 | 1 |
| C9-C18 Aliphatics | ND | | 3.5 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:44 | 1 |
| **Total EPH** | **220** | | 3.5 | | mg/Kg | ☼ | 01/30/12 16:42 | 01/31/12 19:44 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Bromonaphthalene* | *81* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 19:44* | *1* |
| *2-Fluorobiphenyl* | *85* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 19:44* | *1* |
| *o-Terphenyl* | *52* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 19:44* | *1* |
| *1-Chlorooctadecane* | *50* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 19:44* | *1* |

## Method: 6010B - Metals (ICP)

**Client Sample ID: ENV-9 (0.5-2.5)**
**Date Collected: 01/25/12 10:45**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-2**
**Matrix: Solid**
**Percent Solids: 87.6**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 6.8 | | 6.3 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 15:36 | 5 |
| Barium | 140 | | 3.2 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 15:36 | 5 |
| Cadmium | ND | | 1.3 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 15:36 | 5 |
| Chromium | 11 | | 3.2 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 15:36 | 5 |
| Silver | ND | | 3.2 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 15:36 | 5 |
| Lead | 80 | | 3.2 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 15:36 | 5 |
| Selenium | ND | | 3.2 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 15:36 | 5 |

**Client Sample ID: ENV-15B (5.5-6.5)**
**Date Collected: 01/25/12 11:00**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-3**
**Matrix: Solid**
**Percent Solids: 88.7**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 4.4 | | 1.5 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:23 | 1 |
| Barium | 14 | | 0.73 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:23 | 1 |
| Cadmium | ND | | 0.29 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:23 | 1 |
| Chromium | 6.7 | | 0.73 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:23 | 1 |
| Silver | ND | | 0.73 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:23 | 1 |
| Lead | 7.3 | | 0.73 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:23 | 1 |
| Selenium | ND | | 0.73 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:23 | 1 |

**Client Sample ID: ENV-21 (0.5-1.3)**
**Date Collected: 01/25/12 11:35**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-4**
**Matrix: Solid**
**Percent Solids: 83.4**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 18 | | 6.8 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:35 | 5 |
| Barium | 30 | | 3.4 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:35 | 5 |
| Cadmium | 16 | | 1.4 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:35 | 5 |
| Chromium | 31 | | 3.4 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:35 | 5 |
| Silver | ND | | 3.4 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:35 | 5 |
| Lead | 58 | | 3.4 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:35 | 5 |
| Selenium | ND | | 3.4 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:35 | 5 |

**Client Sample ID: ENV-20 (3.5-4.5)**
**Date Collected: 01/25/12 11:45**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-5**
**Matrix: Solid**
**Percent Solids: 88.1**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 3.8 | | 1.3 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:38 | 1 |
| Barium | 22 | | 0.66 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:38 | 1 |
| Cadmium | ND | | 0.27 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:38 | 1 |
| Chromium | 8.0 | | 0.66 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:38 | 1 |
| Silver | ND | | 0.66 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:38 | 1 |
| Lead | 24 | | 0.66 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:38 | 1 |
| Selenium | ND | | 0.66 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:38 | 1 |

# Client Sample Results

Client: ENVIRON International Corp.
Project/Site: Brayton Ave

TestAmerica Job ID: 360-38847-1

## Method: 6010B - Metals (ICP)

**Client Sample ID: ENV-23 (6.0-6.7)**
**Date Collected: 01/25/12 13:10**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-8**
**Matrix: Solid**
**Percent Solids: 91.3**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Arsenic** | **5.4** | | 1.4 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:41 | 1 |
| **Barium** | **24** | | 0.70 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:41 | 1 |
| Cadmium | ND | | 0.28 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:41 | 1 |
| **Chromium** | **11** | | 0.70 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:41 | 1 |
| Silver | ND | | 0.70 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:41 | 1 |
| **Lead** | **7.5** | | 0.70 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:41 | 1 |
| Selenium | ND | | 0.70 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:41 | 1 |

**Client Sample ID: ENV-22 (10-10.5)**
**Date Collected: 01/25/12 13:25**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-9**
**Matrix: Solid**
**Percent Solids: 92.7**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Arsenic** | **3.8** | | 1.2 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:44 | 1 |
| **Barium** | **20** | | 0.60 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:44 | 1 |
| Cadmium | ND | | 0.24 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:44 | 1 |
| **Chromium** | **24** | | 0.60 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:44 | 1 |
| Silver | ND | | 0.60 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:44 | 1 |
| **Lead** | **6.4** | | 0.60 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:44 | 1 |
| Selenium | ND | | 0.60 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:44 | 1 |

**Client Sample ID: DUP-012512**
**Date Collected: 01/25/12 13:25**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-10**
**Matrix: Solid**
**Percent Solids: 92.1**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Arsenic** | **3.2** | | 1.4 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:47 | 1 |
| **Barium** | **21** | | 0.72 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:47 | 1 |
| Cadmium | ND | | 0.29 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:47 | 1 |
| **Chromium** | **15** | | 0.72 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:47 | 1 |
| Silver | ND | | 0.72 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:47 | 1 |
| **Lead** | **6.5** | | 0.72 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:47 | 1 |
| Selenium | ND | | 0.72 | | mg/Kg | ☼ | 02/01/12 08:39 | 02/01/12 14:47 | 1 |

## Method: 7471A - Mercury (CVAA)

**Client Sample ID: ENV-9 (0.5-2.5)**
**Date Collected: 01/25/12 10:45**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-2**
**Matrix: Solid**
**Percent Solids: 87.6**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.11 | | mg/Kg | ☼ | 01/30/12 09:55 | 01/30/12 16:50 | 1 |

**Client Sample ID: ENV-15B (5.5-6.5)**
**Date Collected: 01/25/12 11:00**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-3**
**Matrix: Solid**
**Percent Solids: 88.7**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.10 | | mg/Kg | ☼ | 01/30/12 09:55 | 01/30/12 16:53 | 1 |

**Client Sample ID: ENV-21 (0.5-1.3)**
**Date Collected: 01/25/12 11:35**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-4**
**Matrix: Solid**
**Percent Solids: 83.4**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Mercury** | **0.39** | | 0.10 | | mg/Kg | ☼ | 01/30/12 09:55 | 01/30/12 16:54 | 1 |

**Client Sample ID: ENV-20 (3.5-4.5)**
**Date Collected: 01/25/12 11:45**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-5**
**Matrix: Solid**
**Percent Solids: 88.1**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.11 | | mg/Kg | ☼ | 01/30/12 09:55 | 01/30/12 16:56 | 1 |

**Client Sample ID: ENV-23 (6.0-6.7)**
**Date Collected: 01/25/12 13:10**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-8**
**Matrix: Solid**
**Percent Solids: 91.3**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.091 | | mg/Kg | ☼ | 01/30/12 09:55 | 01/30/12 16:58 | 1 |

**Client Sample ID: ENV-22 (10-10.5)**
**Date Collected: 01/25/12 13:25**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-9**
**Matrix: Solid**
**Percent Solids: 92.7**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.083 | | mg/Kg | ☼ | 01/30/12 10:01 | 01/31/12 15:21 | 1 |

**Client Sample ID: DUP-012512**
**Date Collected: 01/25/12 13:25**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-10**
**Matrix: Solid**
**Percent Solids: 92.1**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.10 | | mg/Kg | ☼ | 01/30/12 10:01 | 01/31/12 14:53 | 1 |

## General Chemistry

**Client Sample ID: ENV-19 (4-5)** **Lab Sample ID: 360-38847-1**
**Date Collected: 01/25/12 09:45** **Matrix: Solid**
**Date Received: 01/26/12 14:50**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Percent Moisture | 21 | | 1.0 | | % | | | 01/30/12 16:58 | 1 |
| Percent Solids | 79 | | 1.0 | | % | | | 01/30/12 16:58 | 1 |

**Client Sample ID: ENV-9 (0.5-2.5)** **Lab Sample ID: 360-38847-2**
**Date Collected: 01/25/12 10:45** **Matrix: Solid**
**Date Received: 01/26/12 14:50**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Percent Moisture | 12 | | 1.0 | | % | | | 01/30/12 16:58 | 1 |
| Percent Solids | 88 | | 1.0 | | % | | | 01/30/12 16:58 | 1 |

**Client Sample ID: ENV-15B (5.5-6.5)** **Lab Sample ID: 360-38847-3**
**Date Collected: 01/25/12 11:00** **Matrix: Solid**
**Date Received: 01/26/12 14:50**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Percent Moisture | 11 | | 1.0 | | % | | | 01/30/12 16:58 | 1 |
| Percent Solids | 89 | | 1.0 | | % | | | 01/30/12 16:58 | 1 |

**Client Sample ID: ENV-21 (0.5-1.3)** **Lab Sample ID: 360-38847-4**
**Date Collected: 01/25/12 11:35** **Matrix: Solid**
**Date Received: 01/26/12 14:50**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Percent Moisture | 17 | | 1.0 | | % | | | 01/30/12 16:58 | 1 |
| Percent Solids | 83 | | 1.0 | | % | | | 01/30/12 16:58 | 1 |

**Client Sample ID: ENV-20 (3.5-4.5)** **Lab Sample ID: 360-38847-5**
**Date Collected: 01/25/12 11:45** **Matrix: Solid**
**Date Received: 01/26/12 14:50**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Percent Moisture | 12 | | 1.0 | | % | | | 01/30/12 16:58 | 1 |
| Percent Solids | 88 | | 1.0 | | % | | | 01/30/12 16:58 | 1 |

**Client Sample ID: ENV-16 (0.5-1.5)** **Lab Sample ID: 360-38847-6**
**Date Collected: 01/25/12 12:05** **Matrix: Solid**
**Date Received: 01/26/12 14:50**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Percent Moisture | 14 | | 1.0 | | % | | | 01/30/12 16:58 | 1 |
| Percent Solids | 86 | | 1.0 | | % | | | 01/30/12 16:58 | 1 |

**Client Sample ID: ENV-17 (5-6)** **Lab Sample ID: 360-38847-7**
**Date Collected: 01/25/12 12:35** **Matrix: Solid**
**Date Received: 01/26/12 14:50**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Percent Moisture | 7.7 | | 1.0 | | % | | | 01/30/12 16:58 | 1 |

## General Chemistry (Continued)

**Client Sample ID: ENV-17 (5-6)**
**Date Collected: 01/25/12 12:35**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-7**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Percent Solids | 92 | | 1.0 | | % | | | 01/30/12 16:58 | 1 |

**Client Sample ID: ENV-23 (6.0-6.7)**
**Date Collected: 01/25/12 13:10**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-8**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Percent Moisture | 8.7 | | 1.0 | | % | | | 01/30/12 16:58 | 1 |
| Percent Solids | 91 | | 1.0 | | % | | | 01/30/12 16:58 | 1 |

**Client Sample ID: ENV-22 (10-10.5)**
**Date Collected: 01/25/12 13:25**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-9**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Percent Moisture | 7.3 | | 1.0 | | % | | | 01/30/12 16:58 | 1 |
| Percent Solids | 93 | | 1.0 | | % | | | 01/30/12 16:58 | 1 |

**Client Sample ID: DUP-012512**
**Date Collected: 01/25/12 13:25**
**Date Received: 01/26/12 14:50**

**Lab Sample ID: 360-38847-10**
**Matrix: Solid**

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Percent Moisture | 7.9 | | 1.0 | | % | | | 01/30/12 16:58 | 1 |
| Percent Solids | 92 | | 1.0 | | % | | | 01/30/12 16:58 | 1 |

## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description |
|---|---|
| * | LCS or LCSD exceeds the control limits |

### GC Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| * | RPD of the LCS and LCSD exceeds the control limits |
| X | Surrogate is outside control limits |
| p | The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported. |

### Metals

| Qualifier | Qualifier Description |
|---|---|
| ^ | ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ☼ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CNF | Contains no Free Liquid |
| DL, RA, RE, IN | Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| EDL | Estimated Detection Limit |
| EPA | United States Environmental Protection Agency |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RL | Reporting Limit |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# QC Association Summary

Client: ENVIRON International Corp.
Project/Site: Brayton Ave

TestAmerica Job ID: 360-38847-1

## GC/MS VOA

### Analysis Batch: 86665

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-38847-2 | ENV-9 (0.5-2.5) | Total/NA | Solid | 8260C | 86709 |
| 360-38847-11 | TB 012512 | Total/NA | Solid | 8260C | 86709 |
| LCS 360-86709/1-A | Lab Control Sample | Total/NA | Solid | 8260C | 86709 |
| LCSD 360-86709/2-A | Lab Control Sample Dup | Total/NA | Solid | 8260C | 86709 |
| MB 360-86709/3-A | Method Blank | Total/NA | Solid | 8260C | 86709 |

### Prep Batch: 86709

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-38847-2 | ENV-9 (0.5-2.5) | Total/NA | Solid | 5035 | |
| 360-38847-11 | TB 012512 | Total/NA | Solid | 5035 | |
| LCS 360-86709/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 360-86709/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| MB 360-86709/3-A | Method Blank | Total/NA | Solid | 5035 | |

## GC VOA

### Analysis Batch: 86664

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-38847-2 | ENV-9 (0.5-2.5) | Total/NA | Solid | MAVPH | 86721 |
| 360-38847-11 | TB 012512 | Total/NA | Solid | MAVPH | 86721 |
| LCS 360-86721/1-A | Lab Control Sample | Total/NA | Solid | MAVPH | 86721 |
| LCSD 360-86721/2-A | Lab Control Sample Dup | Total/NA | Solid | MAVPH | 86721 |
| MB 360-86721/3-A | Method Blank | Total/NA | Solid | MAVPH | 86721 |

### Prep Batch: 86721

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-38847-2 | ENV-9 (0.5-2.5) | Total/NA | Solid | 5035 | |
| 360-38847-11 | TB 012512 | Total/NA | Solid | 5035 | |
| LCS 360-86721/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 360-86721/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| MB 360-86721/3-A | Method Blank | Total/NA | Solid | 5035 | |

## GC Semi VOA

### Prep Batch: 86565

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-38847-1 | ENV-19 (4-5) | Total/NA | Solid | 3546 | |
| 360-38847-2 | ENV-9 (0.5-2.5) | Total/NA | Solid | 3546 | |
| 360-38847-4 | ENV-21 (0.5-1.3) | Total/NA | Solid | 3546 | |
| 360-38847-5 | ENV-20 (3.5-4.5) | Total/NA | Solid | 3546 | |
| LCS 360-86565/2-A | Lab Control Sample | Total/NA | Solid | 3546 | |
| LCSD 360-86565/3-A | Lab Control Sample Dup | Total/NA | Solid | 3546 | |
| MB 360-86565/1-A | Method Blank | Total/NA | Solid | 3546 | |

### Prep Batch: 86567

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-38847-6 | ENV-16 (0.5-1.5) | Total/NA | Solid | 3546 | |
| 360-38847-6 - RA | ENV-16 (0.5-1.5) | Total/NA | Solid | 3546 | |
| 360-38847-7 | ENV-17 (5-6) | Total/NA | Solid | 3546 | |
| 360-38847-7 - RA | ENV-17 (5-6) | Total/NA | Solid | 3546 | |
| 360-38847-8 | ENV-23 (6.0-6.7) | Total/NA | Solid | 3546 | |
| 360-38847-8 - RA | ENV-23 (6.0-6.7) | Total/NA | Solid | 3546 | |

## GC Semi VOA (Continued)

### Prep Batch: 86567 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-38847-9 | ENV-22 (10-10.5) | Total/NA | Solid | 3546 | |
| 360-38847-9 - RA | ENV-22 (10-10.5) | Total/NA | Solid | 3546 | |
| 360-38847-10 | DUP-012512 | Total/NA | Solid | 3546 | |
| 360-38847-10 - RA | DUP-012512 | Total/NA | Solid | 3546 | |
| LCS 360-86567/2-A | Lab Control Sample | Total/NA | Solid | 3546 | |
| LCSD 360-86567/3-A | Lab Control Sample Dup | Total/NA | Solid | 3546 | |
| MB 360-86567/1-A | Method Blank | Total/NA | Solid | 3546 | |

### Analysis Batch: 86639

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-38847-1 | ENV-19 (4-5) | Total/NA | Solid | 8082A | 86565 |
| 360-38847-2 | ENV-9 (0.5-2.5) | Total/NA | Solid | 8082A | 86565 |
| 360-38847-4 | ENV-21 (0.5-1.3) | Total/NA | Solid | 8082A | 86565 |
| 360-38847-5 | ENV-20 (3.5-4.5) | Total/NA | Solid | 8082A | 86565 |
| LCS 360-86565/2-A | Lab Control Sample | Total/NA | Solid | 8082A | 86565 |
| LCS 360-86567/2-A | Lab Control Sample | Total/NA | Solid | 8082A | 86567 |
| LCSD 360-86565/3-A | Lab Control Sample Dup | Total/NA | Solid | 8082A | 86565 |
| LCSD 360-86567/3-A | Lab Control Sample Dup | Total/NA | Solid | 8082A | 86567 |
| MB 360-86565/1-A | Method Blank | Total/NA | Solid | 8082A | 86565 |
| MB 360-86567/1-A | Method Blank | Total/NA | Solid | 8082A | 86567 |

### Prep Batch: 86668

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-38847-1 | ENV-19 (4-5) | Total/NA | Solid | 3546 | |
| 360-38847-2 | ENV-9 (0.5-2.5) | Total/NA | Solid | 3546 | |
| 360-38847-3 | ENV-15B (5.5-6.5) | Total/NA | Solid | 3546 | |
| 360-38847-5 | ENV-20 (3.5-4.5) | Total/NA | Solid | 3546 | |
| 360-38847-6 | ENV-16 (0.5-1.5) | Total/NA | Solid | 3546 | |
| 360-38847-7 | ENV-17 (5-6) | Total/NA | Solid | 3546 | |
| 360-38847-8 | ENV-23 (6.0-6.7) | Total/NA | Solid | 3546 | |
| 360-38847-9 | ENV-22 (10-10.5) | Total/NA | Solid | 3546 | |
| 360-38847-10 | DUP-012512 | Total/NA | Solid | 3546 | |
| LCS 360-86668/2-A | Lab Control Sample | Total/NA | Solid | 3546 | |
| LCSD 360-86668/3-A | Lab Control Sample Dup | Total/NA | Solid | 3546 | |
| MB 360-86668/1-A | Method Blank | Total/NA | Solid | 3546 | |

### Analysis Batch: 86673

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-38847-6 | ENV-16 (0.5-1.5) | Total/NA | Solid | 8082A | 86567 |
| 360-38847-7 | ENV-17 (5-6) | Total/NA | Solid | 8082A | 86567 |
| 360-38847-8 | ENV-23 (6.0-6.7) | Total/NA | Solid | 8082A | 86567 |
| 360-38847-9 | ENV-22 (10-10.5) | Total/NA | Solid | 8082A | 86567 |
| 360-38847-10 | DUP-012512 | Total/NA | Solid | 8082A | 86567 |

### Analysis Batch: 86677

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-38847-1 | ENV-19 (4-5) | Total/NA | Solid | MA-EPH | 86668 |
| 360-38847-2 | ENV-9 (0.5-2.5) | Total/NA | Solid | MA-EPH | 86668 |
| 360-38847-3 | ENV-15B (5.5-6.5) | Total/NA | Solid | MA-EPH | 86668 |
| 360-38847-5 | ENV-20 (3.5-4.5) | Total/NA | Solid | MA-EPH | 86668 |
| 360-38847-6 | ENV-16 (0.5-1.5) | Total/NA | Solid | MA-EPH | 86668 |
| 360-38847-7 | ENV-17 (5-6) | Total/NA | Solid | MA-EPH | 86668 |

## GC Semi VOA (Continued)

### Analysis Batch: 86677 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-38847-8 | ENV-23 (6.0-6.7) | Total/NA | Solid | MA-EPH | 86668 |
| 360-38847-9 | ENV-22 (10-10.5) | Total/NA | Solid | MA-EPH | 86668 |
| 360-38847-10 | DUP-012512 | Total/NA | Solid | MA-EPH | 86668 |
| LCS 360-86668/2-A | Lab Control Sample | Total/NA | Solid | MA-EPH | 86668 |
| LCSD 360-86668/3-A | Lab Control Sample Dup | Total/NA | Solid | MA-EPH | 86668 |
| MB 360-86668/1-A | Method Blank | Total/NA | Solid | MA-EPH | 86668 |

### Analysis Batch: 86735

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-38847-6 - RA | ENV-16 (0.5-1.5) | Total/NA | Solid | 8082A | 86567 |
| 360-38847-7 - RA | ENV-17 (5-6) | Total/NA | Solid | 8082A | 86567 |
| 360-38847-8 - RA | ENV-23 (6.0-6.7) | Total/NA | Solid | 8082A | 86567 |
| 360-38847-9 - RA | ENV-22 (10-10.5) | Total/NA | Solid | 8082A | 86567 |
| 360-38847-10 - RA | DUP-012512 | Total/NA | Solid | 8082A | 86567 |

### Prep Batch: 86787

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-38847-4 | ENV-21 (0.5-1.3) | Total/NA | Solid | 3546 | |
| LCS 360-86787/2-A | Lab Control Sample | Total/NA | Solid | 3546 | |
| LCSD 360-86787/3-A | Lab Control Sample Dup | Total/NA | Solid | 3546 | |
| MB 360-86787/1-A | Method Blank | Total/NA | Solid | 3546 | |

### Analysis Batch: 86789

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-38847-4 | ENV-21 (0.5-1.3) | Total/NA | Solid | MA-EPH | 86787 |
| LCS 360-86787/2-A | Lab Control Sample | Total/NA | Solid | MA-EPH | 86787 |
| LCSD 360-86787/3-A | Lab Control Sample Dup | Total/NA | Solid | MA-EPH | 86787 |
| MB 360-86787/1-A | Method Blank | Total/NA | Solid | MA-EPH | 86787 |

## Metals

### Prep Batch: 86643

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-38847-2 | ENV-9 (0.5-2.5) | Total/NA | Solid | 7471A | |
| 360-38847-3 | ENV-15B (5.5-6.5) | Total/NA | Solid | 7471A | |
| 360-38847-4 | ENV-21 (0.5-1.3) | Total/NA | Solid | 7471A | |
| 360-38847-5 | ENV-20 (3.5-4.5) | Total/NA | Solid | 7471A | |
| 360-38847-8 | ENV-23 (6.0-6.7) | Total/NA | Solid | 7471A | |
| LCDSRM 360-86643/3-A LCDSF | Lab Control Sample Dup | Total/NA | Solid | 7471A | |
| LCSSRM 360-86643/2-A | Lab Control Sample | Total/NA | Solid | 7471A | |
| MB 360-86643/1-A | Method Blank | Total/NA | Solid | 7471A | |

### Prep Batch: 86645

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-38847-9 | ENV-22 (10-10.5) | Total/NA | Solid | 7471A | |
| 360-38847-10 | DUP-012512 | Total/NA | Solid | 7471A | |
| 360-38847-10 DU | DUP-012512 | Total/NA | Solid | 7471A | |
| 360-38847-10 MS | DUP-012512 | Total/NA | Solid | 7471A | |
| LCDSRM 360-86645/3-A LCDSF | Lab Control Sample Dup | Total/NA | Solid | 7471A | |
| LCSSRM 360-86645/2-A | Lab Control Sample | Total/NA | Solid | 7471A | |
| MB 360-86645/1-A | Method Blank | Total/NA | Solid | 7471A | |

## Metals (Continued)

### Analysis Batch: 86670

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-38847-2 | ENV-9 (0.5-2.5) | Total/NA | Solid | 7471A | 86643 |
| 360-38847-3 | ENV-15B (5.5-6.5) | Total/NA | Solid | 7471A | 86643 |
| 360-38847-4 | ENV-21 (0.5-1.3) | Total/NA | Solid | 7471A | 86643 |
| 360-38847-5 | ENV-20 (3.5-4.5) | Total/NA | Solid | 7471A | 86643 |
| 360-38847-8 | ENV-23 (6.0-6.7) | Total/NA | Solid | 7471A | 86643 |
| LCDSRM 360-86643/3-A LCDSF | Lab Control Sample Dup | Total/NA | Solid | 7471A | 86643 |
| LCSSRM 360-86643/2-A | Lab Control Sample | Total/NA | Solid | 7471A | 86643 |
| MB 360-86643/1-A | Method Blank | Total/NA | Solid | 7471A | 86643 |

### Analysis Batch: 86732

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-38847-9 | ENV-22 (10-10.5) | Total/NA | Solid | 7471A | 86645 |
| 360-38847-10 | DUP-012512 | Total/NA | Solid | 7471A | 86645 |
| 360-38847-10 DU | DUP-012512 | Total/NA | Solid | 7471A | 86645 |
| 360-38847-10 MS | DUP-012512 | Total/NA | Solid | 7471A | 86645 |
| LCDSRM 360-86645/3-A LCDSF | Lab Control Sample Dup | Total/NA | Solid | 7471A | 86645 |
| LCSSRM 360-86645/2-A | Lab Control Sample | Total/NA | Solid | 7471A | 86645 |
| MB 360-86645/1-A | Method Blank | Total/NA | Solid | 7471A | 86645 |

### Prep Batch: 86758

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-38847-2 | ENV-9 (0.5-2.5) | Total/NA | Solid | 3050B | |
| 360-38847-2 DU | ENV-9 (0.5-2.5) | Total/NA | Solid | 3050B | |
| 360-38847-2 MS | ENV-9 (0.5-2.5) | Total/NA | Solid | 3050B | |
| 360-38847-3 | ENV-15B (5.5-6.5) | Total/NA | Solid | 3050B | |
| 360-38847-4 | ENV-21 (0.5-1.3) | Total/NA | Solid | 3050B | |
| 360-38847-5 | ENV-20 (3.5-4.5) | Total/NA | Solid | 3050B | |
| 360-38847-8 | ENV-23 (6.0-6.7) | Total/NA | Solid | 3050B | |
| 360-38847-9 | ENV-22 (10-10.5) | Total/NA | Solid | 3050B | |
| 360-38847-10 | DUP-012512 | Total/NA | Solid | 3050B | |
| LCDSRM 360-86758/3-A LCDSF | Lab Control Sample Dup | Total/NA | Solid | 3050B | |
| LCSSRM 360-86758/2-A | Lab Control Sample | Total/NA | Solid | 3050B | |
| MB 360-86758/1-A | Method Blank | Total/NA | Solid | 3050B | |

### Analysis Batch: 86824

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-38847-2 | ENV-9 (0.5-2.5) | Total/NA | Solid | 6010B | 86758 |
| 360-38847-2 DU | ENV-9 (0.5-2.5) | Total/NA | Solid | 6010B | 86758 |
| 360-38847-2 MS | ENV-9 (0.5-2.5) | Total/NA | Solid | 6010B | 86758 |
| 360-38847-3 | ENV-15B (5.5-6.5) | Total/NA | Solid | 6010B | 86758 |
| 360-38847-4 | ENV-21 (0.5-1.3) | Total/NA | Solid | 6010B | 86758 |
| 360-38847-5 | ENV-20 (3.5-4.5) | Total/NA | Solid | 6010B | 86758 |
| 360-38847-8 | ENV-23 (6.0-6.7) | Total/NA | Solid | 6010B | 86758 |
| 360-38847-9 | ENV-22 (10-10.5) | Total/NA | Solid | 6010B | 86758 |
| 360-38847-10 | DUP-012512 | Total/NA | Solid | 6010B | 86758 |
| LCDSRM 360-86758/3-A LCDSF | Lab Control Sample Dup | Total/NA | Solid | 6010B | 86758 |
| LCSSRM 360-86758/2-A | Lab Control Sample | Total/NA | Solid | 6010B | 86758 |
| MB 360-86758/1-A | Method Blank | Total/NA | Solid | 6010B | 86758 |

# QC Association Summary

Client: ENVIRON International Corp.
Project/Site: Brayton Ave

TestAmerica Job ID: 360-38847-1

## General Chemistry

### Analysis Batch: 86669

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 360-38847-1 | ENV-19 (4-5) | Total/NA | Solid | Moisture | |
| 360-38847-2 | ENV-9 (0.5-2.5) | Total/NA | Solid | Moisture | |
| 360-38847-3 | ENV-15B (5.5-6.5) | Total/NA | Solid | Moisture | |
| 360-38847-4 | ENV-21 (0.5-1.3) | Total/NA | Solid | Moisture | |
| 360-38847-5 | ENV-20 (3.5-4.5) | Total/NA | Solid | Moisture | |
| 360-38847-6 | ENV-16 (0.5-1.5) | Total/NA | Solid | Moisture | |
| 360-38847-7 | ENV-17 (5-6) | Total/NA | Solid | Moisture | |
| 360-38847-8 | ENV-23 (6.0-6.7) | Total/NA | Solid | Moisture | |
| 360-38847-9 | ENV-22 (10-10.5) | Total/NA | Solid | Moisture | |
| 360-38847-10 | DUP-012512 | Total/NA | Solid | Moisture | |

# Surrogate Summary

Client: ENVIRON International Corp.
Project/Site: Brayton Ave

TestAmerica Job ID: 360-38847-1

## Method: 8260C - Volatile Organic Compounds (GC/MS)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | |
|---|---|---|---|---|
| | | BFB | DBFM | TOL |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) | (70-130) |
| 360-38847-2 | ENV-9 (0.5-2.5) | 90 | 75 | 98 |
| 360-38847-11 | TB 012512 | 92 | 99 | 100 |
| LCS 360-86709/1-A | Lab Control Sample | 93 | 99 | 101 |
| LCSD 360-86709/2-A | Lab Control Sample Dup | 91 | 99 | 98 |
| MB 360-86709/3-A | Method Blank | 96 | 98 | 102 |

**Surrogate Legend**

BFB = 4-Bromofluorobenzene

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

## Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| | | 25DBT2 | 25DBT1 |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) |
| 360-38847-2 | ENV-9 (0.5-2.5) | 92 | 105 |
| 360-38847-11 | TB 012512 | 89 | 103 |
| LCS 360-86721/1-A | Lab Control Sample | 107 | 99 |
| LCSD 360-86721/2-A | Lab Control Sample Dup | 106 | 94 |
| MB 360-86721/3-A | Method Blank | 109 | 119 |

**Surrogate Legend**

25DBT = 2,5-Dibromotoluene (fid)

## Method: 8082A - Polychlorinated Biphenyls (GC/ECD)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | |
|---|---|---|---|---|---|
| | | TCX1 | TCX2 | DCB1 | DCB2 |
| Lab Sample ID | Client Sample ID | (30-150) | (30-150) | (30-150) | (30-150) |
| 360-38847-1 | ENV-19 (4-5) | 75 | 62 | 59 | 83 |
| 360-38847-2 | ENV-9 (0.5-2.5) | 64 | 67 | 55 | 156 X |
| 360-38847-4 | ENV-21 (0.5-1.3) | 64 | 72 | 57 | 67 |
| 360-38847-5 | ENV-20 (3.5-4.5) | 89 | 98 | 59 | 61 |
| 360-38847-6 | ENV-16 (0.5-1.5) | 86 | 101 | 81 | 83 |
| 360-38847-6 - RA | ENV-16 (0.5-1.5) | 103 | 97 | 87 | 86 |
| 360-38847-7 | ENV-17 (5-6) | 60 | 81 | 87 p | 159 X |
| 360-38847-7 - RA | ENV-17 (5-6) | 66 | 83 | 95 | 162 X |
| 360-38847-8 | ENV-23 (6.0-6.7) | 72 | 87 | 71 | 71 |
| 360-38847-8 - RA | ENV-23 (6.0-6.7) | 74 | 90 | 76 | 73 |
| 360-38847-9 | ENV-22 (10-10.5) | 65 | 87 | 57 | 57 |
| 360-38847-9 - RA | ENV-22 (10-10.5) | 70 | 89 | 60 | 58 |
| 360-38847-10 | DUP-012512 | 59 | 81 | 48 | 51 |
| 360-38847-10 - RA | DUP-012512 | 63 | 85 | 49 | 52 |
| LCS 360-86565/2-A | Lab Control Sample | 60 | 59 | 92 | 94 |
| LCS 360-86567/2-A | Lab Control Sample | 85 | 97 | 67 | 70 |
| LCSD 360-86565/3-A | Lab Control Sample Dup | 96 | 92 | 97 | 96 |
| LCSD 360-86567/3-A | Lab Control Sample Dup | 84 | 98 | 73 | 76 |
| MB 360-86565/1-A | Method Blank | 93 | 93 | 86 | 84 |

# Surrogate Summary

Client: ENVIRON International Corp.
Project/Site: Brayton Ave

TestAmerica Job ID: 360-38847-1

## Method: 8082A - Polychlorinated Biphenyls (GC/ECD) (Continued)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | |
|---|---|---|---|---|---|
| | | TCX1 | TCX2 | DCB1 | DCB2 |
| Lab Sample ID | Client Sample ID | (30-150) | (30-150) | (30-150) | (30-150) |
| MB 360-86567/1-A | Method Blank | 102 | 101 | 67 | 72 |

**Surrogate Legend**

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

## Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | |
|---|---|---|---|---|---|
| | | 2BN1 | FBP1 | OTPH1 | 1COD2 |
| Lab Sample ID | Client Sample ID | (40-140) | (40-140) | (40-140) | (40-140) |
| 360-38847-1 | ENV-19 (4-5) | 65 | 68 | 20 X | 24 X |
| 360-38847-2 | ENV-9 (0.5-2.5) | 66 | 69 | 37 X | 43 |
| 360-38847-3 | ENV-15B (5.5-6.5) | 77 | 80 | 64 | 68 |
| 360-38847-4 | ENV-21 (0.5-1.3) | 82 | 85 | 42 | 43 |
| 360-38847-5 | ENV-20 (3.5-4.5) | 73 | 76 | 56 | 65 |
| 360-38847-6 | ENV-16 (0.5-1.5) | 82 | 88 | 66 | 66 |
| 360-38847-7 | ENV-17 (5-6) | 74 | 78 | 60 | 61 |
| 360-38847-8 | ENV-23 (6.0-6.7) | 79 | 82 | 66 | 69 |
| 360-38847-9 | ENV-22 (10-10.5) | 79 | 83 | 50 | 52 |
| 360-38847-10 | DUP-012512 | 81 | 85 | 52 | 50 |
| LCS 360-86668/2-A | Lab Control Sample | 85 | 88 | 73 | 73 |
| LCS 360-86787/2-A | Lab Control Sample | 78 | 81 | 64 | 72 |
| LCSD 360-86668/3-A | Lab Control Sample Dup | 71 | 74 | 68 | 72 |
| LCSD 360-86787/3-A | Lab Control Sample Dup | 89 | 92 | 74 | 71 |
| MB 360-86668/1-A | Method Blank | 72 | 74 | 54 | 59 |
| MB 360-86787/1-A | Method Blank | 76 | 78 | 61 | 74 |

**Surrogate Legend**

2BN = 2-Bromonaphthalene

FBP = 2-Fluorobiphenyl

OTPH = o-Terphenyl

1COD = 1-Chlorooctadecane

## Method: 8260C - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 360-86709/3-A**
**Matrix: Solid**
**Analysis Batch: 86665**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 86709**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 1,1,1-Trichloroethane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 1,1,2-Trichloroethane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 1,1-Dichloroethane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 1,1-Dichloroethene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 1,1-Dichloropropene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 1,2,3-Trichloropropane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 25 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 1,2-Dichlorobenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 1,2-Dichloroethane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 1,2-Dichloropropane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 1,3-Dichlorobenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 1,3-Dichloropropane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 1,4-Dichlorobenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 1,4-Dioxane | ND | | 250 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 2,2-Dichloropropane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 2-Butanone (MEK) | ND | | 25 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 2-Chlorotoluene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 2-Hexanone | ND | | 25 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 4-Chlorotoluene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 4-Isopropyltoluene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 25 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Acetone | ND | | 250 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Benzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Bromobenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Bromoform | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Bromomethane | ND | | 5.0 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Carbon disulfide | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Carbon tetrachloride | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Chlorobenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Chlorobromomethane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Chlorodibromomethane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Chloroethane | ND | | 5.0 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Chloroform | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Chloromethane | ND | | 5.0 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| cis-1,2-Dichloroethene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| cis-1,3-Dichloropropene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Dibromomethane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Dichlorobromomethane | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Dichlorodifluoromethane | ND | | 5.0 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Ethyl ether | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Ethylbenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Ethylene Dibromide | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Hexachlorobutadiene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 360-86709/3-A**
**Matrix: Solid**
**Analysis Batch: 86665**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 86709**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Isopropyl ether | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Isopropylbenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| m-Xylene & p-Xylene | ND | | 5.0 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Methyl tert-butyl ether | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Methylene Chloride | ND | | 10 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| n-Butylbenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| N-Propylbenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Naphthalene | ND | | 25 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| o-Xylene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| sec-Butylbenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Styrene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Tert-amyl methyl ether | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Tert-butyl ethyl ether | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| tert-Butylbenzene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Tetrachloroethene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Tetrahydrofuran | ND | | 50 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Toluene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| trans-1,2-Dichloroethene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| trans-1,3-Dichloropropene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Trichloroethene | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |
| Vinyl chloride | ND | | 2.5 | | ug/Kg | | 01/30/12 16:00 | 01/30/12 18:55 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *96* | | *70 - 130* | *01/30/12 16:00* | *01/30/12 18:55* | *1* |
| *Dibromofluoromethane* | *98* | | *70 - 130* | *01/30/12 16:00* | *01/30/12 18:55* | *1* |
| *Toluene-d8 (Surr)* | *102* | | *70 - 130* | *01/30/12 16:00* | *01/30/12 18:55* | *1* |

**Lab Sample ID: LCS 360-86709/1-A**
**Matrix: Solid**
**Analysis Batch: 86665**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 86709**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 100 | 95.0 | | ug/Kg | | 95 | 70 - 130 |
| 1,1,1-Trichloroethane | 100 | 99.0 | | ug/Kg | | 99 | 70 - 130 |
| 1,1,2,2-Tetrachloroethane | 100 | 99.5 | | ug/Kg | | 100 | 70 - 130 |
| 1,1,2-Trichloroethane | 100 | 93.5 | | ug/Kg | | 94 | 70 - 130 |
| 1,1-Dichloroethane | 100 | 103 | | ug/Kg | | 103 | 70 - 130 |
| 1,1-Dichloroethene | 100 | 110 | | ug/Kg | | 110 | 70 - 130 |
| 1,1-Dichloropropene | 100 | 110 | | ug/Kg | | 110 | 70 - 130 |
| 1,2,3-Trichlorobenzene | 100 | 93.5 | | ug/Kg | | 94 | 70 - 130 |
| 1,2,3-Trichloropropane | 100 | 101 | | ug/Kg | | 101 | 70 - 130 |
| 1,2,4-Trichlorobenzene | 100 | 102 | | ug/Kg | | 102 | 70 - 130 |
| 1,2,4-Trimethylbenzene | 100 | 102 | | ug/Kg | | 102 | 70 - 130 |
| 1,2-Dibromo-3-Chloropropane | 100 | 87.5 | | ug/Kg | | 88 | 70 - 130 |
| 1,2-Dichlorobenzene | 100 | 97.5 | | ug/Kg | | 98 | 70 - 130 |
| 1,2-Dichloroethane | 100 | 94.5 | | ug/Kg | | 95 | 70 - 130 |
| 1,2-Dichloropropane | 100 | 104 | | ug/Kg | | 104 | 70 - 130 |
| 1,3,5-Trimethylbenzene | 100 | 103 | | ug/Kg | | 103 | 70 - 130 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 360-86709/1-A**
**Matrix: Solid**
**Analysis Batch: 86665**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 86709**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 100 | 98.5 | | ug/Kg | | 99 | 70 - 130 |
| 1,3-Dichloropropane | 100 | 101 | | ug/Kg | | 101 | 70 - 130 |
| 1,4-Dichlorobenzene | 100 | 99.0 | | ug/Kg | | 99 | 70 - 130 |
| 1,4-Dioxane | 1000 | 926 | | ug/Kg | | 93 | 70 - 130 |
| 2,2-Dichloropropane | 100 | 117 | | ug/Kg | | 117 | 70 - 130 |
| 2-Butanone (MEK) | 1000 | 1040 | | ug/Kg | | 104 | 70 - 130 |
| 2-Chlorotoluene | 100 | 99.0 | | ug/Kg | | 99 | 70 - 130 |
| 2-Hexanone | 1000 | 1070 | | ug/Kg | | 107 | 70 - 130 |
| 4-Chlorotoluene | 100 | 103 | | ug/Kg | | 103 | 70 - 130 |
| 4-Isopropyltoluene | 100 | 107 | | ug/Kg | | 107 | 70 - 130 |
| 4-Methyl-2-pentanone (MIBK) | 1000 | 1070 | | ug/Kg | | 107 | 70 - 130 |
| Acetone | 1000 | 1040 | | ug/Kg | | 104 | 70 - 130 |
| Benzene | 100 | 102 | | ug/Kg | | 102 | 70 - 130 |
| Bromobenzene | 100 | 98.5 | | ug/Kg | | 99 | 70 - 130 |
| Bromoform | 100 | 89.5 | | ug/Kg | | 90 | 70 - 130 |
| Bromomethane | 100 | 118 | | ug/Kg | | 118 | 70 - 130 |
| Carbon disulfide | 100 | 140 | * | ug/Kg | | 140 | 70 - 130 |
| Carbon tetrachloride | 100 | 103 | | ug/Kg | | 103 | 70 - 130 |
| Chlorobenzene | 100 | 102 | | ug/Kg | | 102 | 70 - 130 |
| Chlorobromomethane | 100 | 102 | | ug/Kg | | 102 | 70 - 130 |
| Chlorodibromomethane | 100 | 96.0 | | ug/Kg | | 96 | 70 - 130 |
| Chloroethane | 100 | 119 | | ug/Kg | | 119 | 70 - 130 |
| Chloroform | 100 | 99.0 | | ug/Kg | | 99 | 70 - 130 |
| Chloromethane | 100 | 105 | | ug/Kg | | 105 | 70 - 130 |
| cis-1,2-Dichloroethene | 100 | 100 | | ug/Kg | | 100 | 70 - 130 |
| cis-1,3-Dichloropropene | 100 | 97.0 | | ug/Kg | | 97 | 70 - 130 |
| Dibromomethane | 100 | 98.5 | | ug/Kg | | 99 | 70 - 130 |
| Dichlorobromomethane | 100 | 98.0 | | ug/Kg | | 98 | 70 - 130 |
| Dichlorodifluoromethane | 100 | 124 | | ug/Kg | | 124 | 70 - 130 |
| Ethyl ether | 100 | 102 | | ug/Kg | | 102 | 70 - 130 |
| Ethylbenzene | 100 | 102 | | ug/Kg | | 102 | 70 - 130 |
| Ethylene Dibromide | 100 | 94.0 | | ug/Kg | | 94 | 70 - 130 |
| Hexachlorobutadiene | 100 | 95.5 | | ug/Kg | | 96 | 70 - 130 |
| Isopropyl ether | 100 | 97.0 | | ug/Kg | | 97 | 70 - 130 |
| Isopropylbenzene | 100 | 104 | | ug/Kg | | 104 | 70 - 130 |
| m-Xylene & p-Xylene | 200 | 205 | | ug/Kg | | 103 | 70 - 130 |
| Methyl tert-butyl ether | 100 | 92.0 | | ug/Kg | | 92 | 70 - 130 |
| Methylene Chloride | 100 | 103 | | ug/Kg | | 103 | 70 - 130 |
| n-Butylbenzene | 100 | 111 | | ug/Kg | | 111 | 70 - 130 |
| N-Propylbenzene | 100 | 110 | | ug/Kg | | 110 | 70 - 130 |
| Naphthalene | 100 | 92.5 | | ug/Kg | | 93 | 70 - 130 |
| o-Xylene | 100 | 98.0 | | ug/Kg | | 98 | 70 - 130 |
| sec-Butylbenzene | 100 | 108 | | ug/Kg | | 108 | 70 - 130 |
| Styrene | 100 | 99.0 | | ug/Kg | | 99 | 70 - 130 |
| Tert-amyl methyl ether | 100 | 88.0 | | ug/Kg | | 88 | 70 - 130 |
| Tert-butyl ethyl ether | 100 | 93.5 | | ug/Kg | | 94 | 70 - 130 |
| tert-Butylbenzene | 100 | 97.5 | | ug/Kg | | 98 | 70 - 130 |
| Tetrachloroethene | 100 | 109 | | ug/Kg | | 109 | 70 - 130 |
| Tetrahydrofuran | 1000 | 928 | | ug/Kg | | 93 | 70 - 130 |
| Toluene | 100 | 99.0 | | ug/Kg | | 99 | 70 - 130 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 360-86709/1-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86665** — **Prep Batch: 86709**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | 100 | 101 | | ug/Kg | | 101 | 70 - 130 |
| trans-1,3-Dichloropropene | 100 | 94.5 | | ug/Kg | | 95 | 70 - 130 |
| Trichloroethene | 100 | 102 | | ug/Kg | | 102 | 70 - 130 |
| Trichlorofluoromethane | 100 | 116 | | ug/Kg | | 116 | 70 - 130 |
| Vinyl chloride | 100 | 115 | | ug/Kg | | 115 | 70 - 130 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene* | *93* | | *70 - 130* |
| *Dibromofluoromethane* | *99* | | *70 - 130* |
| *Toluene-d8 (Surr)* | *101* | | *70 - 130* |

**Lab Sample ID: LCSD 360-86709/2-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86665** — **Prep Batch: 86709**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 100 | 91.0 | | ug/Kg | | 91 | 70 - 130 | 4 | 20 |
| 1,1,1-Trichloroethane | 100 | 92.5 | | ug/Kg | | 93 | 70 - 130 | 7 | 20 |
| 1,1,2,2-Tetrachloroethane | 100 | 102 | | ug/Kg | | 102 | 70 - 130 | 2 | 20 |
| 1,1,2-Trichloroethane | 100 | 93.5 | | ug/Kg | | 94 | 70 - 130 | 0 | 20 |
| 1,1-Dichloroethane | 100 | 95.5 | | ug/Kg | | 96 | 70 - 130 | 8 | 20 |
| 1,1-Dichloroethene | 100 | 102 | | ug/Kg | | 102 | 70 - 130 | 7 | 20 |
| 1,1-Dichloropropene | 100 | 105 | | ug/Kg | | 105 | 70 - 130 | 5 | 20 |
| 1,2,3-Trichlorobenzene | 100 | 96.5 | | ug/Kg | | 97 | 70 - 130 | 3 | 20 |
| 1,2,3-Trichloropropane | 100 | 93.5 | | ug/Kg | | 94 | 70 - 130 | 8 | 20 |
| 1,2,4-Trichlorobenzene | 100 | 103 | | ug/Kg | | 103 | 70 - 130 | 1 | 20 |
| 1,2,4-Trimethylbenzene | 100 | 94.5 | | ug/Kg | | 95 | 70 - 130 | 7 | 20 |
| 1,2-Dibromo-3-Chloropropane | 100 | 90.0 | | ug/Kg | | 90 | 70 - 130 | 3 | 20 |
| 1,2-Dichlorobenzene | 100 | 96.5 | | ug/Kg | | 97 | 70 - 130 | 1 | 20 |
| 1,2-Dichloroethane | 100 | 93.0 | | ug/Kg | | 93 | 70 - 130 | 2 | 20 |
| 1,2-Dichloropropane | 100 | 103 | | ug/Kg | | 103 | 70 - 130 | 1 | 20 |
| 1,3,5-Trimethylbenzene | 100 | 93.0 | | ug/Kg | | 93 | 70 - 130 | 10 | 20 |
| 1,3-Dichlorobenzene | 100 | 98.0 | | ug/Kg | | 98 | 70 - 130 | 1 | 20 |
| 1,3-Dichloropropane | 100 | 101 | | ug/Kg | | 101 | 70 - 130 | 0 | 20 |
| 1,4-Dichlorobenzene | 100 | 98.0 | | ug/Kg | | 98 | 70 - 130 | 1 | 20 |
| 1,4-Dioxane | 1000 | 985 | | ug/Kg | | 98 | 70 - 130 | 6 | 20 |
| 2,2-Dichloropropane | 100 | 107 | | ug/Kg | | 107 | 70 - 130 | 9 | 20 |
| 2-Butanone (MEK) | 1000 | 1010 | | ug/Kg | | 101 | 70 - 130 | 3 | 20 |
| 2-Chlorotoluene | 100 | 95.0 | | ug/Kg | | 95 | 70 - 130 | 4 | 20 |
| 2-Hexanone | 1000 | 1000 | | ug/Kg | | 100 | 70 - 130 | 6 | 20 |
| 4-Chlorotoluene | 100 | 95.5 | | ug/Kg | | 96 | 70 - 130 | 7 | 20 |
| 4-Isopropyltoluene | 100 | 103 | | ug/Kg | | 103 | 70 - 130 | 3 | 20 |
| 4-Methyl-2-pentanone (MIBK) | 1000 | 1030 | | ug/Kg | | 103 | 70 - 130 | 3 | 20 |
| Acetone | 1000 | 979 | | ug/Kg | | 98 | 70 - 130 | 6 | 20 |
| Benzene | 100 | 100 | | ug/Kg | | 100 | 70 - 130 | 2 | 20 |
| Bromobenzene | 100 | 90.5 | | ug/Kg | | 91 | 70 - 130 | 8 | 20 |
| Bromoform | 100 | 93.0 | | ug/Kg | | 93 | 70 - 130 | 4 | 20 |
| Bromomethane | 100 | 115 | | ug/Kg | | 115 | 70 - 130 | 2 | 20 |
| Carbon disulfide | 100 | 129 | | ug/Kg | | 129 | 70 - 130 | 8 | 20 |

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 360-86709/2-A**
**Matrix: Solid**
**Analysis Batch: 86665**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 86709**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Carbon tetrachloride | 100 | 96.5 | | ug/Kg | | 97 | 70 - 130 | 7 | 20 |
| Chlorobenzene | 100 | 101 | | ug/Kg | | 101 | 70 - 130 | 1 | 20 |
| Chlorobromomethane | 100 | 98.5 | | ug/Kg | | 99 | 70 - 130 | 3 | 20 |
| Chlorodibromomethane | 100 | 92.5 | | ug/Kg | | 93 | 70 - 130 | 4 | 20 |
| Chloroethane | 100 | 111 | | ug/Kg | | 111 | 70 - 130 | 7 | 20 |
| Chloroform | 100 | 93.0 | | ug/Kg | | 93 | 70 - 130 | 6 | 20 |
| Chloromethane | 100 | 99.0 | | ug/Kg | | 99 | 70 - 130 | 6 | 20 |
| cis-1,2-Dichloroethene | 100 | 96.5 | | ug/Kg | | 97 | 70 - 130 | 4 | 20 |
| cis-1,3-Dichloropropene | 100 | 98.0 | | ug/Kg | | 98 | 70 - 130 | 1 | 20 |
| Dibromomethane | 100 | 99.5 | | ug/Kg | | 100 | 70 - 130 | 1 | 20 |
| Dichlorobromomethane | 100 | 96.0 | | ug/Kg | | 96 | 70 - 130 | 2 | 20 |
| Dichlorodifluoromethane | 100 | 117 | | ug/Kg | | 117 | 70 - 130 | 6 | 20 |
| Ethyl ether | 100 | 102 | | ug/Kg | | 102 | 70 - 130 | 0 | 20 |
| Ethylbenzene | 100 | 97.0 | | ug/Kg | | 97 | 70 - 130 | 5 | 20 |
| Ethylene Dibromide | 100 | 94.0 | | ug/Kg | | 94 | 70 - 130 | 0 | 20 |
| Hexachlorobutadiene | 100 | 92.5 | | ug/Kg | | 93 | 70 - 130 | 3 | 20 |
| Isopropyl ether | 100 | 94.0 | | ug/Kg | | 94 | 70 - 130 | 3 | 20 |
| Isopropylbenzene | 100 | 95.0 | | ug/Kg | | 95 | 70 - 130 | 9 | 20 |
| m-Xylene & p-Xylene | 200 | 195 | | ug/Kg | | 98 | 70 - 130 | 5 | 20 |
| Methyl tert-butyl ether | 100 | 91.0 | | ug/Kg | | 91 | 70 - 130 | 1 | 20 |
| Methylene Chloride | 100 | 97.5 | | ug/Kg | | 98 | 70 - 130 | 5 | 20 |
| n-Butylbenzene | 100 | 110 | | ug/Kg | | 110 | 70 - 130 | 0 | 20 |
| N-Propylbenzene | 100 | 97.5 | | ug/Kg | | 98 | 70 - 130 | 12 | 20 |
| Naphthalene | 100 | 93.5 | | ug/Kg | | 94 | 70 - 130 | 1 | 20 |
| o-Xylene | 100 | 93.5 | | ug/Kg | | 94 | 70 - 130 | 5 | 20 |
| sec-Butylbenzene | 100 | 99.0 | | ug/Kg | | 99 | 70 - 130 | 8 | 20 |
| Styrene | 100 | 96.0 | | ug/Kg | | 96 | 70 - 130 | 3 | 20 |
| Tert-amyl methyl ether | 100 | 86.0 | | ug/Kg | | 86 | 70 - 130 | 2 | 20 |
| Tert-butyl ethyl ether | 100 | 91.0 | | ug/Kg | | 91 | 70 - 130 | 3 | 20 |
| tert-Butylbenzene | 100 | 92.5 | | ug/Kg | | 93 | 70 - 130 | 5 | 20 |
| Tetrachloroethene | 100 | 106 | | ug/Kg | | 106 | 70 - 130 | 3 | 20 |
| Tetrahydrofuran | 1000 | 940 | | ug/Kg | | 94 | 70 - 130 | 1 | 20 |
| Toluene | 100 | 95.5 | | ug/Kg | | 96 | 70 - 130 | 4 | 20 |
| trans-1,2-Dichloroethene | 100 | 97.5 | | ug/Kg | | 98 | 70 - 130 | 4 | 20 |
| trans-1,3-Dichloropropene | 100 | 96.0 | | ug/Kg | | 96 | 70 - 130 | 2 | 20 |
| Trichloroethene | 100 | 97.5 | | ug/Kg | | 98 | 70 - 130 | 5 | 20 |
| Trichlorofluoromethane | 100 | 109 | | ug/Kg | | 109 | 70 - 130 | 7 | 20 |
| Vinyl chloride | 100 | 108 | | ug/Kg | | 108 | 70 - 130 | 6 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene* | *91* | | *70 - 130* |
| *Dibromofluoromethane* | *99* | | *70 - 130* |
| *Toluene-d8 (Surr)* | *98* | | *70 - 130* |

# QC Sample Results

Client: ENVIRON International Corp.
Project/Site: Brayton Ave

TestAmerica Job ID: 360-38847-1

## Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

**Lab Sample ID: MB 360-86721/3-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86664** — **Prep Batch: 86721**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| C5-C8 Aliphatics (unadjusted) | ND | | 2.5 | | mg/Kg | | 01/30/12 14:12 | 01/30/12 18:23 | 1 |
| C9-C12 Aliphatics (unadjusted) | ND | | 2.5 | | mg/Kg | | 01/30/12 14:12 | 01/30/12 18:23 | 1 |
| C5-C8 Aliphatics (adjusted) | ND | | 2.5 | | mg/Kg | | 01/30/12 14:12 | 01/30/12 18:23 | 1 |
| C9-C12 Aliphatics (adjusted) | ND | | 2.5 | | mg/Kg | | 01/30/12 14:12 | 01/30/12 18:23 | 1 |
| C9-C10 Aromatics | ND | | 2.5 | | mg/Kg | | 01/30/12 14:12 | 01/30/12 18:23 | 1 |
| Total VPH | ND | | 2.5 | | mg/Kg | | 01/30/12 14:12 | 01/30/12 18:23 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,5-Dibromotoluene (fid)* | *109* | | *70 - 130* | *01/30/12 14:12* | *01/30/12 18:23* | *1* |
| *2,5-Dibromotoluene (pid)* | *119* | | *70 - 130* | *01/30/12 14:12* | *01/30/12 18:23* | *1* |

**Lab Sample ID: LCS 360-86721/1-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86664** — **Prep Batch: 86721**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| C5-C8 Aliphatics (unadjusted) | 15.0 | 15.0 | | mg/Kg | | 100 | 70 - 130 |
| C9-C12 Aliphatics (unadjusted) | 15.0 | 14.4 | | mg/Kg | | 96 | 70 - 130 |
| C9-C10 Aromatics | 5.00 | 5.11 | | mg/Kg | | 102 | 70 - 130 |
| Butylcyclohexane | 5.00 | 4.88 | | mg/Kg | | 98 | 70 - 130 |
| 1,2,4-Trimethylbenzene | 5.00 | 5.33 | | mg/Kg | | 107 | 70 - 130 |
| 2-Methylpentane | 5.00 | 4.81 | | mg/Kg | | 96 | 70 - 130 |
| Pentane | 5.00 | 4.47 | | mg/Kg | | 89 | 70 - 130 |
| n-Nonane | 5.00 | 4.13 | | mg/Kg | | 83 | 30 - 130 |
| n-Decane | 5.00 | 4.70 | | mg/Kg | | 94 | 70 - 130 |
| Isooctane | 5.00 | 4.88 | | mg/Kg | | 98 | 70 - 130 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *2,5-Dibromotoluene (fid)* | *107* | | *70 - 130* |
| *2,5-Dibromotoluene (pid)* | *99* | | *70 - 130* |

**Lab Sample ID: LCSD 360-86721/2-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86664** — **Prep Batch: 86721**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| C5-C8 Aliphatics (unadjusted) | 15.0 | 15.1 | | mg/Kg | | 101 | 70 - 130 | 0 | 25 |
| C9-C12 Aliphatics (unadjusted) | 15.0 | 14.4 | | mg/Kg | | 96 | 70 - 130 | 0 | 25 |
| C9-C10 Aromatics | 5.00 | 5.02 | | mg/Kg | | 100 | 70 - 130 | 2 | 25 |
| Butylcyclohexane | 5.00 | 4.85 | | mg/Kg | | 97 | 70 - 130 | 1 | 25 |
| 1,2,4-Trimethylbenzene | 5.00 | 5.26 | | mg/Kg | | 105 | 70 - 130 | 1 | 25 |
| 2-Methylpentane | 5.00 | 4.84 | | mg/Kg | | 97 | 70 - 130 | 1 | 25 |
| Pentane | 5.00 | 4.48 | | mg/Kg | | 90 | 70 - 130 | 0 | 25 |
| n-Nonane | 5.00 | 4.12 | | mg/Kg | | 82 | 30 - 130 | 0 | 25 |
| n-Decane | 5.00 | 4.65 | | mg/Kg | | 93 | 70 - 130 | 1 | 25 |
| Isooctane | 5.00 | 4.92 | | mg/Kg | | 98 | 70 - 130 | 1 | 25 |

## Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC) (Continued)

**Lab Sample ID: LCSD 360-86721/2-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86664** — **Prep Batch: 86721**

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| 2,5-Dibromotoluene (fid) | 106 | | 70 - 130 |
| 2,5-Dibromotoluene (pid) | 94 | | 70 - 130 |

## Method: 8082A - Polychlorinated Biphenyls (GC/ECD)

**Lab Sample ID: MB 360-86565/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86639** — **Prep Batch: 86565**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | | 100 | | ug/Kg | | 01/27/12 14:14 | 01/30/12 10:59 | 1 |
| PCB-1221 | ND | | 100 | | ug/Kg | | 01/27/12 14:14 | 01/30/12 10:59 | 1 |
| PCB-1232 | ND | | 100 | | ug/Kg | | 01/27/12 14:14 | 01/30/12 10:59 | 1 |
| PCB-1242 | ND | | 100 | | ug/Kg | | 01/27/12 14:14 | 01/30/12 10:59 | 1 |
| PCB-1248 | ND | | 100 | | ug/Kg | | 01/27/12 14:14 | 01/30/12 10:59 | 1 |
| PCB-1254 | ND | | 100 | | ug/Kg | | 01/27/12 14:14 | 01/30/12 10:59 | 1 |
| PCB-1260 | ND | | 100 | | ug/Kg | | 01/27/12 14:14 | 01/30/12 10:59 | 1 |
| PCB-1262 | ND | | 100 | | ug/Kg | | 01/27/12 14:14 | 01/30/12 10:59 | 1 |
| PCB-1268 | ND | | 100 | | ug/Kg | | 01/27/12 14:14 | 01/30/12 10:59 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Tetrachloro-m-xylene | 93 | | 30 - 150 | 01/27/12 14:14 | 01/30/12 10:59 | 1 |
| Tetrachloro-m-xylene | 93 | | 30 - 150 | 01/27/12 14:14 | 01/30/12 10:59 | 1 |
| DCB Decachlorobiphenyl | 86 | | 30 - 150 | 01/27/12 14:14 | 01/30/12 10:59 | 1 |
| DCB Decachlorobiphenyl | 84 | | 30 - 150 | 01/27/12 14:14 | 01/30/12 10:59 | 1 |

**Lab Sample ID: LCS 360-86565/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86639** — **Prep Batch: 86565**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | | | 500 | 414 | | ug/Kg | | 83 | 40 - 140 | | |
| PCB-1260 | | | 500 | 502 | | ug/Kg | | 100 | 40 - 140 | | |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| Tetrachloro-m-xylene | 60 | | 30 - 150 |
| Tetrachloro-m-xylene | 59 | | 30 - 150 |
| DCB Decachlorobiphenyl | 92 | | 30 - 150 |
| DCB Decachlorobiphenyl | 94 | | 30 - 150 |

**Lab Sample ID: LCSD 360-86565/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86639** — **Prep Batch: 86565**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | | | 500 | 587 | * | ug/Kg | | 117 | 40 - 140 | 35 | 30 |
| PCB-1260 | | | 500 | 556 | | ug/Kg | | 111 | 40 - 140 | 10 | 30 |

## Method: 8082A - Polychlorinated Biphenyls (GC/ECD) (Continued)

**Lab Sample ID: LCSD 360-86565/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86639** — **Prep Batch: 86565**

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| Tetrachloro-m-xylene | 96 | | 30 - 150 |
| Tetrachloro-m-xylene | 92 | | 30 - 150 |
| DCB Decachlorobiphenyl | 97 | | 30 - 150 |
| DCB Decachlorobiphenyl | 96 | | 30 - 150 |

**Lab Sample ID: MB 360-86567/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86639** — **Prep Batch: 86567**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | ND | | 100 | | ug/Kg | | 01/27/12 14:28 | 01/30/12 20:49 | 1 |
| PCB-1221 | ND | | 100 | | ug/Kg | | 01/27/12 14:28 | 01/30/12 20:49 | 1 |
| PCB-1232 | ND | | 100 | | ug/Kg | | 01/27/12 14:28 | 01/30/12 20:49 | 1 |
| PCB-1242 | ND | | 100 | | ug/Kg | | 01/27/12 14:28 | 01/30/12 20:49 | 1 |
| PCB-1248 | ND | | 100 | | ug/Kg | | 01/27/12 14:28 | 01/30/12 20:49 | 1 |
| PCB-1254 | ND | | 100 | | ug/Kg | | 01/27/12 14:28 | 01/30/12 20:49 | 1 |
| PCB-1260 | ND | | 100 | | ug/Kg | | 01/27/12 14:28 | 01/30/12 20:49 | 1 |
| PCB-1262 | ND | | 100 | | ug/Kg | | 01/27/12 14:28 | 01/30/12 20:49 | 1 |
| PCB-1268 | ND | | 100 | | ug/Kg | | 01/27/12 14:28 | 01/30/12 20:49 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Tetrachloro-m-xylene | 102 | | 30 - 150 | 01/27/12 14:28 | 01/30/12 20:49 | 1 |
| Tetrachloro-m-xylene | 101 | | 30 - 150 | 01/27/12 14:28 | 01/30/12 20:49 | 1 |
| DCB Decachlorobiphenyl | 67 | | 30 - 150 | 01/27/12 14:28 | 01/30/12 20:49 | 1 |
| DCB Decachlorobiphenyl | 72 | | 30 - 150 | 01/27/12 14:28 | 01/30/12 20:49 | 1 |

**Lab Sample ID: LCS 360-86567/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86639** — **Prep Batch: 86567**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | | | 500 | 576 | | ug/Kg | | 115 | 40 - 140 | | |
| PCB-1260 | | | 500 | 415 | | ug/Kg | | 83 | 40 - 140 | | |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| Tetrachloro-m-xylene | 85 | | 30 - 150 |
| Tetrachloro-m-xylene | 97 | | 30 - 150 |
| DCB Decachlorobiphenyl | 67 | | 30 - 150 |
| DCB Decachlorobiphenyl | 70 | | 30 - 150 |

**Lab Sample ID: LCSD 360-86567/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86639** — **Prep Batch: 86567**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | | | 500 | 595 | | ug/Kg | | 119 | 40 - 140 | 3 | 30 |
| PCB-1260 | | | 500 | 476 | | ug/Kg | | 95 | 40 - 140 | 14 | 30 |

## Method: 8082A - Polychlorinated Biphenyls (GC/ECD) (Continued)

**Lab Sample ID: LCSD 360-86567/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86639** — **Prep Batch: 86567**

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|---|---|---|---|
| *Tetrachloro-m-xylene* | *84* | | *30 - 150* |
| *Tetrachloro-m-xylene* | *98* | | *30 - 150* |
| *DCB Decachlorobiphenyl* | *73* | | *30 - 150* |
| *DCB Decachlorobiphenyl* | *76* | | *30 - 150* |

## Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

**Lab Sample ID: MB 360-86668/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86677** — **Prep Batch: 86668**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.33 | | mg/Kg | | 01/30/12 16:42 | 01/31/12 10:58 | 1 |
| Acenaphthylene | ND | | 0.33 | | mg/Kg | | 01/30/12 16:42 | 01/31/12 10:58 | 1 |
| Anthracene | ND | | 0.33 | | mg/Kg | | 01/30/12 16:42 | 01/31/12 10:58 | 1 |
| Benzo[a]anthracene | ND | | 0.33 | | mg/Kg | | 01/30/12 16:42 | 01/31/12 10:58 | 1 |
| Benzo[a]pyrene | ND | | 0.33 | | mg/Kg | | 01/30/12 16:42 | 01/31/12 10:58 | 1 |
| Benzo[b]fluoranthene | ND | | 0.33 | | mg/Kg | | 01/30/12 16:42 | 01/31/12 10:58 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.33 | | mg/Kg | | 01/30/12 16:42 | 01/31/12 10:58 | 1 |
| Benzo[k]fluoranthene | ND | | 0.33 | | mg/Kg | | 01/30/12 16:42 | 01/31/12 10:58 | 1 |
| Chrysene | ND | | 0.33 | | mg/Kg | | 01/30/12 16:42 | 01/31/12 10:58 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.33 | | mg/Kg | | 01/30/12 16:42 | 01/31/12 10:58 | 1 |
| Fluoranthene | ND | | 0.33 | | mg/Kg | | 01/30/12 16:42 | 01/31/12 10:58 | 1 |
| Fluorene | ND | | 0.33 | | mg/Kg | | 01/30/12 16:42 | 01/31/12 10:58 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.33 | | mg/Kg | | 01/30/12 16:42 | 01/31/12 10:58 | 1 |
| 2-Methylnaphthalene | ND | | 0.33 | | mg/Kg | | 01/30/12 16:42 | 01/31/12 10:58 | 1 |
| Naphthalene | ND | | 0.33 | | mg/Kg | | 01/30/12 16:42 | 01/31/12 10:58 | 1 |
| Phenanthrene | ND | | 0.33 | | mg/Kg | | 01/30/12 16:42 | 01/31/12 10:58 | 1 |
| Pyrene | ND | | 0.33 | | mg/Kg | | 01/30/12 16:42 | 01/31/12 10:58 | 1 |
| C11-C22 Aromatics (unadjusted) | ND | | 3.3 | | mg/Kg | | 01/30/12 16:42 | 01/31/12 10:58 | 1 |
| C11-C22 Aromatics (Adjusted) | ND | | 3.3 | | mg/Kg | | 01/30/12 16:42 | 01/31/12 10:58 | 1 |
| C19-C36 Aliphatics | ND | | 3.3 | | mg/Kg | | 01/30/12 16:42 | 01/31/12 10:58 | 1 |
| C9-C18 Aliphatics | ND | | 3.3 | | mg/Kg | | 01/30/12 16:42 | 01/31/12 10:58 | 1 |
| Total EPH | ND | | 3.3 | | mg/Kg | | 01/30/12 16:42 | 01/31/12 10:58 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *2-Bromonaphthalene* | *72* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 10:58* | *1* |
| *2-Fluorobiphenyl* | *74* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 10:58* | *1* |
| *o-Terphenyl* | *54* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 10:58* | *1* |
| *1-Chlorooctadecane* | *59* | | *40 - 140* | *01/30/12 16:42* | *01/31/12 10:58* | *1* |

**Lab Sample ID: LCS 360-86668/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86677** — **Prep Batch: 86668**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Acenaphthene | 3.33 | 2.42 | | mg/Kg | | 73 | 40 - 140 |
| Acenaphthylene | 3.33 | 2.45 | | mg/Kg | | 73 | 40 - 140 |
| Anthracene | 3.33 | 2.78 | | mg/Kg | | 83 | 40 - 140 |

## Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

**Lab Sample ID: LCS 360-86668/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86677** — **Prep Batch: 86668**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Benzo[a]anthracene | 3.33 | 3.02 | | mg/Kg | | 91 | 40 - 140 |
| Benzo[a]pyrene | 3.33 | 2.97 | | mg/Kg | | 89 | 40 - 140 |
| Benzo[b]fluoranthene | 3.33 | 3.05 | | mg/Kg | | 91 | 40 - 140 |
| Benzo[g,h,i]perylene | 3.33 | 3.01 | | mg/Kg | | 90 | 40 - 140 |
| Benzo[k]fluoranthene | 3.33 | 3.21 | | mg/Kg | | 96 | 40 - 140 |
| Chrysene | 3.33 | 2.95 | | mg/Kg | | 89 | 40 - 140 |
| Dibenz(a,h)anthracene | 3.33 | 3.10 | | mg/Kg | | 93 | 40 - 140 |
| Fluoranthene | 3.33 | 3.51 | | mg/Kg | | 105 | 40 - 140 |
| Fluorene | 3.33 | 2.71 | | mg/Kg | | 81 | 40 - 140 |
| Indeno[1,2,3-cd]pyrene | 3.33 | 3.34 | | mg/Kg | | 100 | 40 - 140 |
| 2-Methylnaphthalene | 3.33 | 2.21 | | mg/Kg | | 66 | 40 - 140 |
| Naphthalene | 3.33 | 1.99 | | mg/Kg | | 60 | 40 - 140 |
| Phenanthrene | 3.33 | 2.70 | | mg/Kg | | 81 | 40 - 140 |
| Pyrene | 3.33 | 2.81 | | mg/Kg | | 84 | 40 - 140 |
| C11-C22 Aromatics (unadjusted) | 56.7 | 51.3 | | mg/Kg | | 91 | 40 - 140 |
| C19-C36 Aliphatics | 26.7 | 21.2 | | mg/Kg | | 80 | 40 - 140 |
| C9-C18 Aliphatics | 20.0 | 11.6 | | mg/Kg | | 58 | 40 - 140 |
| C19 | 3.33 | 2.57 | | mg/Kg | | 77 | 40 - 140 |
| Dodecane | 3.33 | 2.05 | | mg/Kg | | 62 | 40 - 140 |
| Hexadecane | 3.33 | 2.39 | | mg/Kg | | 72 | 40 - 140 |
| icosane | 3.33 | 2.61 | | mg/Kg | | 78 | 40 - 140 |
| n-Decane | 3.33 | 1.60 | | mg/Kg | | 48 | 40 - 140 |
| n-Docosane | 3.33 | 2.60 | | mg/Kg | | 78 | 40 - 140 |
| n-Hexacosane | 3.33 | 2.74 | | mg/Kg | | 82 | 40 - 140 |
| n-Hexatriacontane | 3.33 | 3.00 | | mg/Kg | | 90 | 40 - 140 |
| n-Nonane | 3.33 | 1.12 | | mg/Kg | | 34 | 30 - 140 |
| n-Octacosane | 3.33 | 2.77 | | mg/Kg | | 83 | 40 - 140 |
| n-Octadecane | 3.33 | 2.53 | | mg/Kg | | 76 | 40 - 140 |
| n-Tetracosane | 3.33 | 2.65 | | mg/Kg | | 79 | 40 - 140 |
| n-Tetradecane | 3.33 | 2.21 | | mg/Kg | | 66 | 40 - 140 |
| Triacontane | 3.33 | 2.93 | | mg/Kg | | 88 | 40 - 140 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *2-Bromonaphthalene* | *85* | | *40 - 140* |
| *2-Fluorobiphenyl* | *88* | | *40 - 140* |
| *o-Terphenyl* | *73* | | *40 - 140* |
| *1-Chlorooctadecane* | *73* | | *40 - 140* |

**Lab Sample ID: LCSD 360-86668/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86677** — **Prep Batch: 86668**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 3.33 | 2.30 | | mg/Kg | | 69 | 40 - 140 | 5 | 25 |
| Acenaphthylene | 3.33 | 2.30 | | mg/Kg | | 69 | 40 - 140 | 6 | 25 |
| Anthracene | 3.33 | 2.56 | | mg/Kg | | 77 | 40 - 140 | 8 | 25 |
| Benzo[a]anthracene | 3.33 | 2.79 | | mg/Kg | | 84 | 40 - 140 | 8 | 25 |
| Benzo[a]pyrene | 3.33 | 2.75 | | mg/Kg | | 83 | 40 - 140 | 8 | 25 |
| Benzo[b]fluoranthene | 3.33 | 2.94 | | mg/Kg | | 88 | 40 - 140 | 4 | 25 |

## Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

**Lab Sample ID: LCSD 360-86668/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86677** — **Prep Batch: 86668**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Benzo[g,h,i]perylene | 3.33 | 2.78 | | mg/Kg | | 83 | 40 - 140 | 8 | 25 |
| Benzo[k]fluoranthene | 3.33 | 2.86 | | mg/Kg | | 86 | 40 - 140 | 12 | 25 |
| Chrysene | 3.33 | 2.71 | | mg/Kg | | 81 | 40 - 140 | 8 | 25 |
| Dibenz(a,h)anthracene | 3.33 | 2.91 | | mg/Kg | | 87 | 40 - 140 | 6 | 25 |
| Fluoranthene | 3.33 | 2.83 | | mg/Kg | | 85 | 40 - 140 | 22 | 25 |
| Fluorene | 3.33 | 2.52 | | mg/Kg | | 76 | 40 - 140 | 7 | 25 |
| Indeno[1,2,3-cd]pyrene | 3.33 | 3.14 | | mg/Kg | | 94 | 40 - 140 | 6 | 25 |
| 2-Methylnaphthalene | 3.33 | 2.15 | | mg/Kg | | 65 | 40 - 140 | 3 | 25 |
| Naphthalene | 3.33 | 1.93 | | mg/Kg | | 58 | 40 - 140 | 3 | 25 |
| Phenanthrene | 3.33 | 2.49 | | mg/Kg | | 75 | 40 - 140 | 8 | 25 |
| Pyrene | 3.33 | 2.59 | | mg/Kg | | 78 | 40 - 140 | 8 | 25 |
| C11-C22 Aromatics (unadjusted) | 56.7 | 47.8 | | mg/Kg | | 84 | 40 - 140 | 7 | 25 |
| C19-C36 Aliphatics | 26.7 | 20.2 | | mg/Kg | | 76 | 40 - 140 | 5 | 25 |
| C9-C18 Aliphatics | 20.0 | 11.5 | | mg/Kg | | 57 | 40 - 140 | 1 | 25 |
| C19 | 3.33 | 2.50 | | mg/Kg | | 75 | 40 - 140 | 3 | 25 |
| Dodecane | 3.33 | 2.01 | | mg/Kg | | 60 | 40 - 140 | 2 | 25 |
| Hexadecane | 3.33 | 2.32 | | mg/Kg | | 70 | 40 - 140 | 3 | 25 |
| icosane | 3.33 | 2.52 | | mg/Kg | | 76 | 40 - 140 | 4 | 25 |
| n-Decane | 3.33 | 1.66 | | mg/Kg | | 50 | 40 - 140 | 4 | 25 |
| n-Docosane | 3.33 | 2.56 | | mg/Kg | | 77 | 40 - 140 | 2 | 25 |
| n-Hexacosane | 3.33 | 2.67 | | mg/Kg | | 80 | 40 - 140 | 2 | 25 |
| n-Hexatriacontane | 3.33 | 3.03 | | mg/Kg | | 91 | 40 - 140 | 1 | 25 |
| n-Nonane | 3.33 | 1.25 | | mg/Kg | | 38 | 30 - 140 | 11 | 25 |
| n-Octacosane | 3.33 | 2.69 | | mg/Kg | | 81 | 40 - 140 | 3 | 25 |
| n-Octadecane | 3.33 | 2.45 | | mg/Kg | | 73 | 40 - 140 | 3 | 25 |
| n-Tetracosane | 3.33 | 2.57 | | mg/Kg | | 77 | 40 - 140 | 3 | 25 |
| n-Tetradecane | 3.33 | 2.17 | | mg/Kg | | 65 | 40 - 140 | 2 | 25 |
| Triacontane | 3.33 | 2.84 | | mg/Kg | | 85 | 40 - 140 | 3 | 25 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *2-Bromonaphthalene* | *71* | | *40 - 140* |
| *2-Fluorobiphenyl* | *74* | | *40 - 140* |
| *o-Terphenyl* | *68* | | *40 - 140* |
| *1-Chlorooctadecane* | *72* | | *40 - 140* |

**Lab Sample ID: MB 360-86787/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86789** — **Prep Batch: 86787**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.33 | | mg/Kg | | 02/01/12 10:00 | 02/01/12 14:25 | 1 |
| Acenaphthylene | ND | | 0.33 | | mg/Kg | | 02/01/12 10:00 | 02/01/12 14:25 | 1 |
| Anthracene | ND | | 0.33 | | mg/Kg | | 02/01/12 10:00 | 02/01/12 14:25 | 1 |
| Benzo[a]anthracene | ND | | 0.33 | | mg/Kg | | 02/01/12 10:00 | 02/01/12 14:25 | 1 |
| Benzo[a]pyrene | ND | | 0.33 | | mg/Kg | | 02/01/12 10:00 | 02/01/12 14:25 | 1 |
| Benzo[b]fluoranthene | ND | | 0.33 | | mg/Kg | | 02/01/12 10:00 | 02/01/12 14:25 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.33 | | mg/Kg | | 02/01/12 10:00 | 02/01/12 14:25 | 1 |
| Benzo[k]fluoranthene | ND | | 0.33 | | mg/Kg | | 02/01/12 10:00 | 02/01/12 14:25 | 1 |
| Chrysene | ND | | 0.33 | | mg/Kg | | 02/01/12 10:00 | 02/01/12 14:25 | 1 |

## Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

**Lab Sample ID: MB 360-86787/1-A**
**Matrix: Solid**
**Analysis Batch: 86789**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 86787**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dibenz(a,h)anthracene | ND | | 0.33 | | mg/Kg | | 02/01/12 10:00 | 02/01/12 14:25 | 1 |
| Fluoranthene | ND | | 0.33 | | mg/Kg | | 02/01/12 10:00 | 02/01/12 14:25 | 1 |
| Fluorene | ND | | 0.33 | | mg/Kg | | 02/01/12 10:00 | 02/01/12 14:25 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.33 | | mg/Kg | | 02/01/12 10:00 | 02/01/12 14:25 | 1 |
| 2-Methylnaphthalene | ND | | 0.33 | | mg/Kg | | 02/01/12 10:00 | 02/01/12 14:25 | 1 |
| Naphthalene | ND | | 0.33 | | mg/Kg | | 02/01/12 10:00 | 02/01/12 14:25 | 1 |
| Phenanthrene | ND | | 0.33 | | mg/Kg | | 02/01/12 10:00 | 02/01/12 14:25 | 1 |
| Pyrene | ND | | 0.33 | | mg/Kg | | 02/01/12 10:00 | 02/01/12 14:25 | 1 |
| C11-C22 Aromatics (unadjusted) | ND | | 3.3 | | mg/Kg | | 02/01/12 10:00 | 02/01/12 14:25 | 1 |
| C11-C22 Aromatics (Adjusted) | ND | | 3.3 | | mg/Kg | | 02/01/12 10:00 | 02/01/12 14:25 | 1 |
| C19-C36 Aliphatics | ND | | 3.3 | | mg/Kg | | 02/01/12 10:00 | 02/01/12 14:25 | 1 |
| C9-C18 Aliphatics | ND | | 3.3 | | mg/Kg | | 02/01/12 10:00 | 02/01/12 14:25 | 1 |
| Total EPH | ND | | 3.3 | | mg/Kg | | 02/01/12 10:00 | 02/01/12 14:25 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Bromonaphthalene* | *76* | | *40 - 140* | *02/01/12 10:00* | *02/01/12 14:25* | *1* |
| *2-Fluorobiphenyl* | *78* | | *40 - 140* | *02/01/12 10:00* | *02/01/12 14:25* | *1* |
| *o-Terphenyl* | *61* | | *40 - 140* | *02/01/12 10:00* | *02/01/12 14:25* | *1* |
| *1-Chlorooctadecane* | *74* | | *40 - 140* | *02/01/12 10:00* | *02/01/12 14:25* | *1* |

**Lab Sample ID: LCS 360-86787/2-A**
**Matrix: Solid**
**Analysis Batch: 86789**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 86787**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Acenaphthene | 3.33 | 2.02 | | mg/Kg | | 61 | 40 - 140 |
| Acenaphthylene | 3.33 | 2.04 | | mg/Kg | | 61 | 40 - 140 |
| Anthracene | 3.33 | 2.31 | | mg/Kg | | 69 | 40 - 140 |
| Benzo[a]anthracene | 3.33 | 2.37 | | mg/Kg | | 71 | 40 - 140 |
| Benzo[a]pyrene | 3.33 | 2.29 | | mg/Kg | | 69 | 40 - 140 |
| Benzo[b]fluoranthene | 3.33 | 2.41 | | mg/Kg | | 72 | 40 - 140 |
| Benzo[g,h,i]perylene | 3.33 | 2.47 | | mg/Kg | | 74 | 40 - 140 |
| Benzo[k]fluoranthene | 3.33 | 2.48 | | mg/Kg | | 74 | 40 - 140 |
| Chrysene | 3.33 | 2.23 | | mg/Kg | | 67 | 40 - 140 |
| Dibenz(a,h)anthracene | 3.33 | 2.61 | | mg/Kg | | 78 | 40 - 140 |
| Fluoranthene | 3.33 | 2.35 | | mg/Kg | | 70 | 40 - 140 |
| Fluorene | 3.33 | 2.25 | | mg/Kg | | 67 | 40 - 140 |
| Indeno[1,2,3-cd]pyrene | 3.33 | 2.84 | | mg/Kg | | 85 | 40 - 140 |
| 2-Methylnaphthalene | 3.33 | 1.85 | | mg/Kg | | 56 | 40 - 140 |
| Naphthalene | 3.33 | 1.66 | | mg/Kg | | 50 | 40 - 140 |
| Phenanthrene | 3.33 | 2.23 | | mg/Kg | | 67 | 40 - 140 |
| Pyrene | 3.33 | 2.29 | | mg/Kg | | 69 | 40 - 140 |
| C11-C22 Aromatics (unadjusted) | 56.7 | 40.5 | | mg/Kg | | 72 | 40 - 140 |
| C19-C36 Aliphatics | 26.7 | 21.1 | | mg/Kg | | 79 | 40 - 140 |
| C9-C18 Aliphatics | 20.0 | 11.1 | | mg/Kg | | 55 | 40 - 140 |
| C19 | 3.33 | 2.45 | | mg/Kg | | 73 | 40 - 140 |
| Dodecane | 3.33 | 1.97 | | mg/Kg | | 59 | 40 - 140 |
| Hexadecane | 3.33 | 2.27 | | mg/Kg | | 68 | 40 - 140 |
| icosane | 3.33 | 2.44 | | mg/Kg | | 73 | 40 - 140 |

## Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

**Lab Sample ID: LCS 360-86787/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86789** — **Prep Batch: 86787**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| n-Decane | 3.33 | 1.54 | | mg/Kg | | 46 | 40 - 140 |
| n-Docosane | 3.33 | 2.47 | | mg/Kg | | 74 | 40 - 140 |
| n-Hexacosane | 3.33 | 2.66 | | mg/Kg | | 80 | 40 - 140 |
| n-Hexatriacontane | 3.33 | 2.43 | | mg/Kg | | 73 | 40 - 140 |
| n-Nonane | 3.33 | 1.07 | | mg/Kg | | 32 | 30 - 140 |
| n-Octacosane | 3.33 | 2.75 | | mg/Kg | | 83 | 40 - 140 |
| n-Octadecane | 3.33 | 2.39 | | mg/Kg | | 72 | 40 - 140 |
| n-Tetracosane | 3.33 | 2.52 | | mg/Kg | | 76 | 40 - 140 |
| n-Tetradecane | 3.33 | 2.11 | | mg/Kg | | 63 | 40 - 140 |
| Triacontane | 3.33 | 2.96 | | mg/Kg | | 89 | 40 - 140 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *2-Bromonaphthalene* | *78* | | *40 - 140* |
| *2-Fluorobiphenyl* | *81* | | *40 - 140* |
| *o-Terphenyl* | *64* | | *40 - 140* |
| *1-Chlorooctadecane* | *72* | | *40 - 140* |

**Lab Sample ID: LCSD 360-86787/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86789** — **Prep Batch: 86787**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 3.33 | 2.30 | | mg/Kg | | 69 | 40 - 140 | 13 | 25 |
| Acenaphthylene | 3.33 | 2.32 | | mg/Kg | | 70 | 40 - 140 | 13 | 25 |
| Anthracene | 3.33 | 2.63 | | mg/Kg | | 79 | 40 - 140 | 13 | 25 |
| Benzo[a]anthracene | 3.33 | 2.78 | | mg/Kg | | 83 | 40 - 140 | 16 | 25 |
| Benzo[a]pyrene | 3.33 | 2.67 | | mg/Kg | | 80 | 40 - 140 | 15 | 25 |
| Benzo[b]fluoranthene | 3.33 | 2.85 | | mg/Kg | | 86 | 40 - 140 | 17 | 25 |
| Benzo[g,h,i]perylene | 3.33 | 2.85 | | mg/Kg | | 86 | 40 - 140 | 14 | 25 |
| Benzo[k]fluoranthene | 3.33 | 2.85 | | mg/Kg | | 86 | 40 - 140 | 14 | 25 |
| Chrysene | 3.33 | 2.61 | | mg/Kg | | 78 | 40 - 140 | 16 | 25 |
| Dibenz(a,h)anthracene | 3.33 | 3.03 | | mg/Kg | | 91 | 40 - 140 | 15 | 25 |
| Fluoranthene | 3.33 | 2.71 | | mg/Kg | | 81 | 40 - 140 | 14 | 25 |
| Fluorene | 3.33 | 2.56 | | mg/Kg | | 77 | 40 - 140 | 13 | 25 |
| Indeno[1,2,3-cd]pyrene | 3.33 | 3.13 | | mg/Kg | | 94 | 40 - 140 | 10 | 25 |
| 2-Methylnaphthalene | 3.33 | 2.14 | | mg/Kg | | 64 | 40 - 140 | 14 | 25 |
| Naphthalene | 3.33 | 1.93 | | mg/Kg | | 58 | 40 - 140 | 15 | 25 |
| Phenanthrene | 3.33 | 2.55 | | mg/Kg | | 76 | 40 - 140 | 13 | 25 |
| Pyrene | 3.33 | 2.64 | | mg/Kg | | 79 | 40 - 140 | 14 | 25 |
| C11-C22 Aromatics (unadjusted) | 56.7 | 46.7 | | mg/Kg | | 82 | 40 - 140 | 14 | 25 |
| C19-C36 Aliphatics | 26.7 | 21.8 | | mg/Kg | | 82 | 40 - 140 | 3 | 25 |
| C9-C18 Aliphatics | 20.0 | 11.5 | | mg/Kg | | 58 | 40 - 140 | 4 | 25 |
| C19 | 3.33 | 2.50 | | mg/Kg | | 75 | 40 - 140 | 2 | 25 |
| Dodecane | 3.33 | 2.07 | | mg/Kg | | 62 | 40 - 140 | 5 | 25 |
| Hexadecane | 3.33 | 2.34 | | mg/Kg | | 70 | 40 - 140 | 3 | 25 |
| icosane | 3.33 | 2.49 | | mg/Kg | | 75 | 40 - 140 | 2 | 25 |
| n-Decane | 3.33 | 1.65 | | mg/Kg | | 49 | 40 - 140 | 7 | 25 |
| n-Docosane | 3.33 | 2.47 | | mg/Kg | | 74 | 40 - 140 | 0 | 25 |
| n-Hexacosane | 3.33 | 2.72 | | mg/Kg | | 82 | 40 - 140 | 2 | 25 |

## Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

**Lab Sample ID: LCSD 360-86787/3-A** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86789** — **Prep Batch: 86787**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| n-Hexatriacontane | 3.33 | 2.79 | | mg/Kg | | 84 | 40 - 140 | 14 | 25 |
| n-Nonane | 3.33 | 1.17 | | mg/Kg | | 35 | 30 - 140 | 9 | 25 |
| n-Octacosane | 3.33 | 2.84 | | mg/Kg | | 85 | 40 - 140 | 3 | 25 |
| n-Octadecane | 3.33 | 2.46 | | mg/Kg | | 74 | 40 - 140 | 3 | 25 |
| n-Tetracosane | 3.33 | 2.57 | | mg/Kg | | 77 | 40 - 140 | 2 | 25 |
| n-Tetradecane | 3.33 | 2.19 | | mg/Kg | | 66 | 40 - 140 | 4 | 25 |
| Triacontane | 3.33 | 3.09 | | mg/Kg | | 93 | 40 - 140 | 4 | 25 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *2-Bromonaphthalene* | *89* | | *40 - 140* |
| *2-Fluorobiphenyl* | *92* | | *40 - 140* |
| *o-Terphenyl* | *74* | | *40 - 140* |
| *1-Chlorooctadecane* | *71* | | *40 - 140* |

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 360-86758/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86824** — **Prep Batch: 86758**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | | 1.0 | | mg/Kg | | 02/01/12 08:39 | 02/01/12 14:00 | 1 |
| Barium | ND | | 0.50 | | mg/Kg | | 02/01/12 08:39 | 02/01/12 14:00 | 1 |
| Cadmium | ND | | 0.20 | | mg/Kg | | 02/01/12 08:39 | 02/01/12 14:00 | 1 |
| Chromium | ND | | 0.50 | | mg/Kg | | 02/01/12 08:39 | 02/01/12 14:00 | 1 |
| Silver | ND | | 0.50 | | mg/Kg | | 02/01/12 08:39 | 02/01/12 14:00 | 1 |
| Lead | ND | | 0.50 | | mg/Kg | | 02/01/12 08:39 | 02/01/12 14:00 | 1 |
| Selenium | ND | | 0.50 | | mg/Kg | | 02/01/12 08:39 | 02/01/12 14:00 | 1 |

**Lab Sample ID: LCDSRM 360-86758/3-A LCDSRM** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86824** — **Prep Batch: 86758**

| Analyte | Spike Added | LCDSRM Result | LCDSRM Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 135 | 125 | | mg/Kg | | 93 | 61 - 117 | 1 | 30 |
| Barium | 503 | 447 | | mg/Kg | | 89 | 71.1 - 119 | 0 | 30 |
| Cadmium | 183 | 168 | | mg/Kg | | 92 | 65.6 - 113 | 1 | 30 |
| Chromium | 261 | 262 | | mg/Kg | | 100 | 68.0 - 124 | 10 | 30 |
| Silver | 77.7 | 78.1 | | mg/Kg | | 101 | 56.9 - 113 | 3 | 30 |
| Lead | 149 | 136 | | mg/Kg | | 91 | 64.8 - 110 | 2 | 30 |
| Selenium | 160 | 146 | | mg/Kg | | 92 | 53.1 - 110 | 0 | 30 |

**Lab Sample ID: LCSSRM 360-86758/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86824** — **Prep Batch: 86758**

| Analyte | Spike Added | LCSSRM Result | LCSSRM Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Arsenic | 135 | 124 | | mg/Kg | | 92 | 61 - 117 |
| Barium | 503 | 445 | | mg/Kg | | 89 | 71.1 - 119 |
| Cadmium | 183 | 166 | | mg/Kg | | 91 | 65.6 - 113 |

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: LCSSRM 360-86758/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86824** — **Prep Batch: 86758**

| Analyte | Spike Added | LCSSRM Result | LCSSRM Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Chromium | 261 | 237 | | mg/Kg | | 91 | 68.0 - 124 |
| Silver | 77.7 | 76.0 | | mg/Kg | | 98 | 56.9 - 113 |
| Lead | 149 | 134 | | mg/Kg | | 90 | 64.8 - 110 |
| Selenium | 160 | 146 | | mg/Kg | | 91 | 53.1 - 110 |

**Lab Sample ID: 360-38847-2 MS** — **Client Sample ID: ENV-9 (0.5-2.5)**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86824** — **Prep Batch: 86758**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 6.8 | | 63.4 | 67.8 | | mg/Kg | ☼ | 96 | 75 - 125 |
| Barium | 140 | | 63.4 | 213 | | mg/Kg | ☼ | 115 | 75 - 125 |
| Cadmium | ND | | 63.4 | 62.0 | | mg/Kg | ☼ | 97 | 75 - 125 |
| Chromium | 11 | | 63.4 | 73.2 | | mg/Kg | ☼ | 98 | 75 - 125 |
| Silver | ND | | 63.4 | 61.3 | | mg/Kg | ☼ | 96 | 75 - 125 |
| Lead | 80 | | 63.4 | 141 | | mg/Kg | ☼ | 96 | 75 - 125 |
| Selenium | ND | | 63.4 | 61.2 | | mg/Kg | ☼ | 97 | 75 - 125 |

**Lab Sample ID: 360-38847-2 DU** — **Client Sample ID: ENV-9 (0.5-2.5)**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86824** — **Prep Batch: 86758**

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Arsenic | 6.8 | | ND | | mg/Kg | ☼ | NC | 35 |
| Barium | 140 | | 149 | | mg/Kg | ☼ | 6 | 35 |
| Cadmium | ND | | ND | | mg/Kg | ☼ | NC | 35 |
| Chromium | 11 | | 11.2 | | mg/Kg | ☼ | 0.04 | 35 |
| Silver | ND | | ND | | mg/Kg | ☼ | NC | 35 |
| Lead | 80 | | 79.7 | | mg/Kg | ☼ | 0.5 | 35 |
| Selenium | ND | | ND | | mg/Kg | ☼ | NC | 35 |

## Method: 7471A - Mercury (CVAA)

**Lab Sample ID: MB 360-86643/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86670** — **Prep Batch: 86643**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.10 | | mg/Kg | | 01/30/12 09:55 | 01/30/12 16:00 | 1 |

**Lab Sample ID: LCDSRM 360-86643/3-A LCDSRM** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86670** — **Prep Batch: 86643**

| Analyte | Spike Added | LCDSRM Result | LCDSRM Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 16.2 | 13.4 | | mg/Kg | | 83 | 46.5 - 135 | 6 | 30 |

## Method: 7471A - Mercury (CVAA) (Continued)

**Lab Sample ID: LCSSRM 360-86643/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86670** — **Prep Batch: 86643**

| Analyte | Spike Added | LCSSRM Result | LCSSRM Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Mercury | 16.2 | 12.6 | | mg/Kg | | 78 | 46.5 - 135 |

**Lab Sample ID: MB 360-86645/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86732** — **Prep Batch: 86645**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.10 | | mg/Kg | | 01/30/12 10:01 | 01/31/12 14:47 | 1 |

**Lab Sample ID: LCDSRM 360-86645/3-A LCDSRM** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86732** — **Prep Batch: 86645**

| Analyte | Spike Added | LCDSRM Result | LCDSRM Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 16.2 | 12.1 | | mg/Kg | | 75 | 46.5 - 135 | 16 | 30 |

**Lab Sample ID: LCSSRM 360-86645/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86732** — **Prep Batch: 86645**

| Analyte | Spike Added | LCSSRM Result | LCSSRM Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Mercury | 16.2 | 10.3 | | mg/Kg | | 64 | 46.5 - 135 |

**Lab Sample ID: 360-38847-10 MS** — **Client Sample ID: DUP-012512**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86732** — **Prep Batch: 86645**

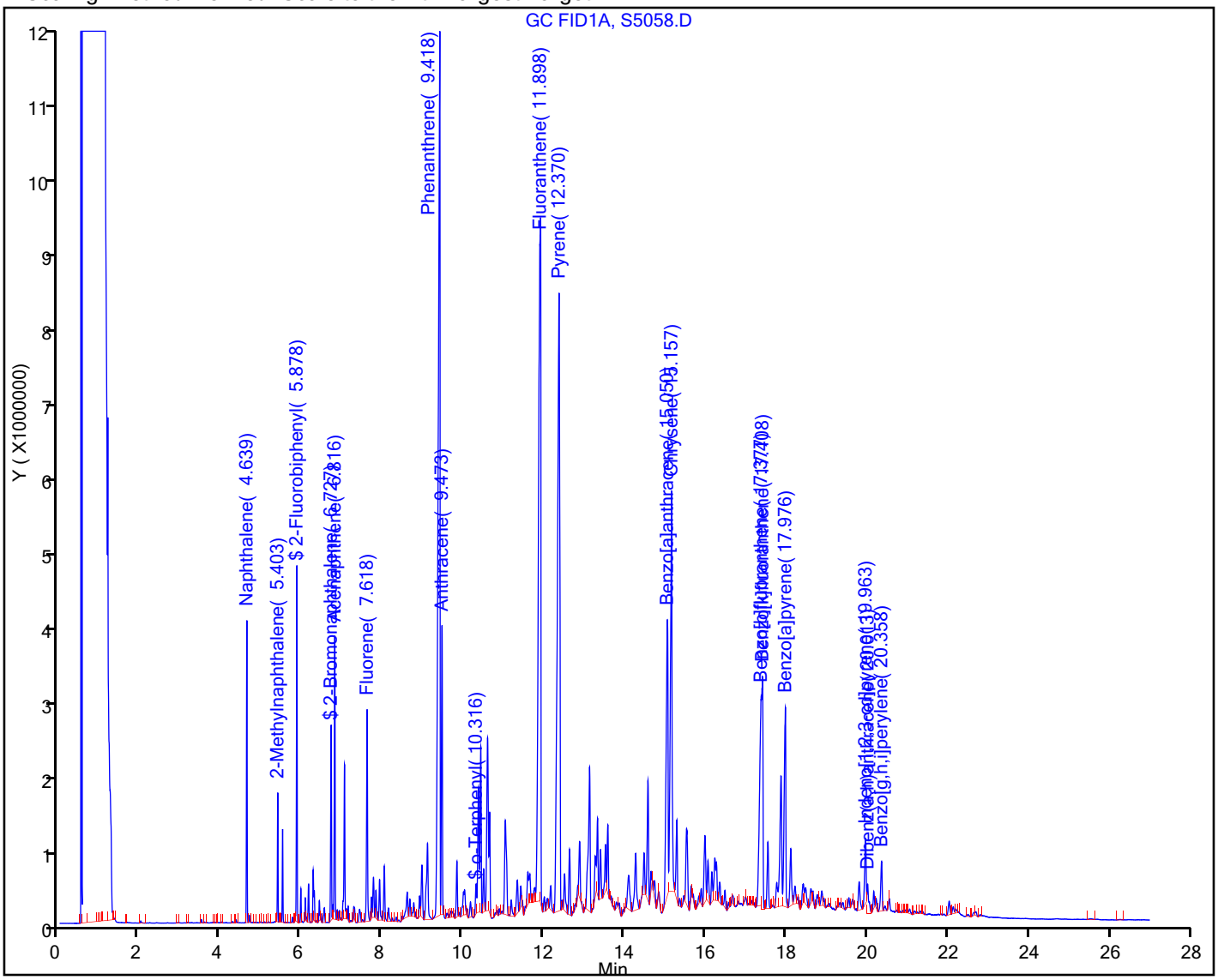
| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 1.29 | 1.15 | | mg/Kg | ☼ | 89 | 75 - 125 |

**Lab Sample ID: 360-38847-10 DU** — **Client Sample ID: DUP-012512**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 86732** — **Prep Batch: 86645**

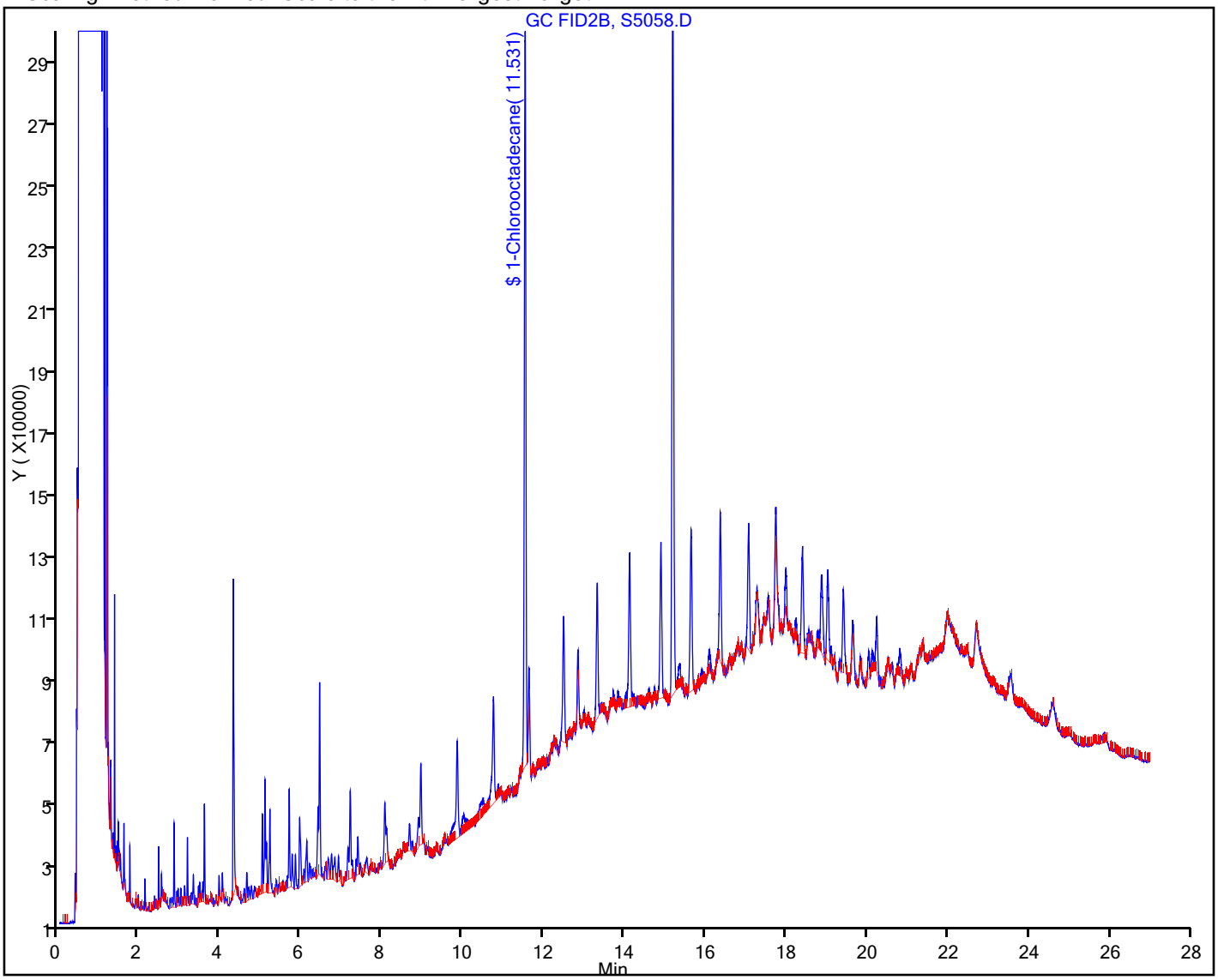
| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | ND | | mg/Kg | ☼ | NC | 35 |

# CHROMATOGRAMS

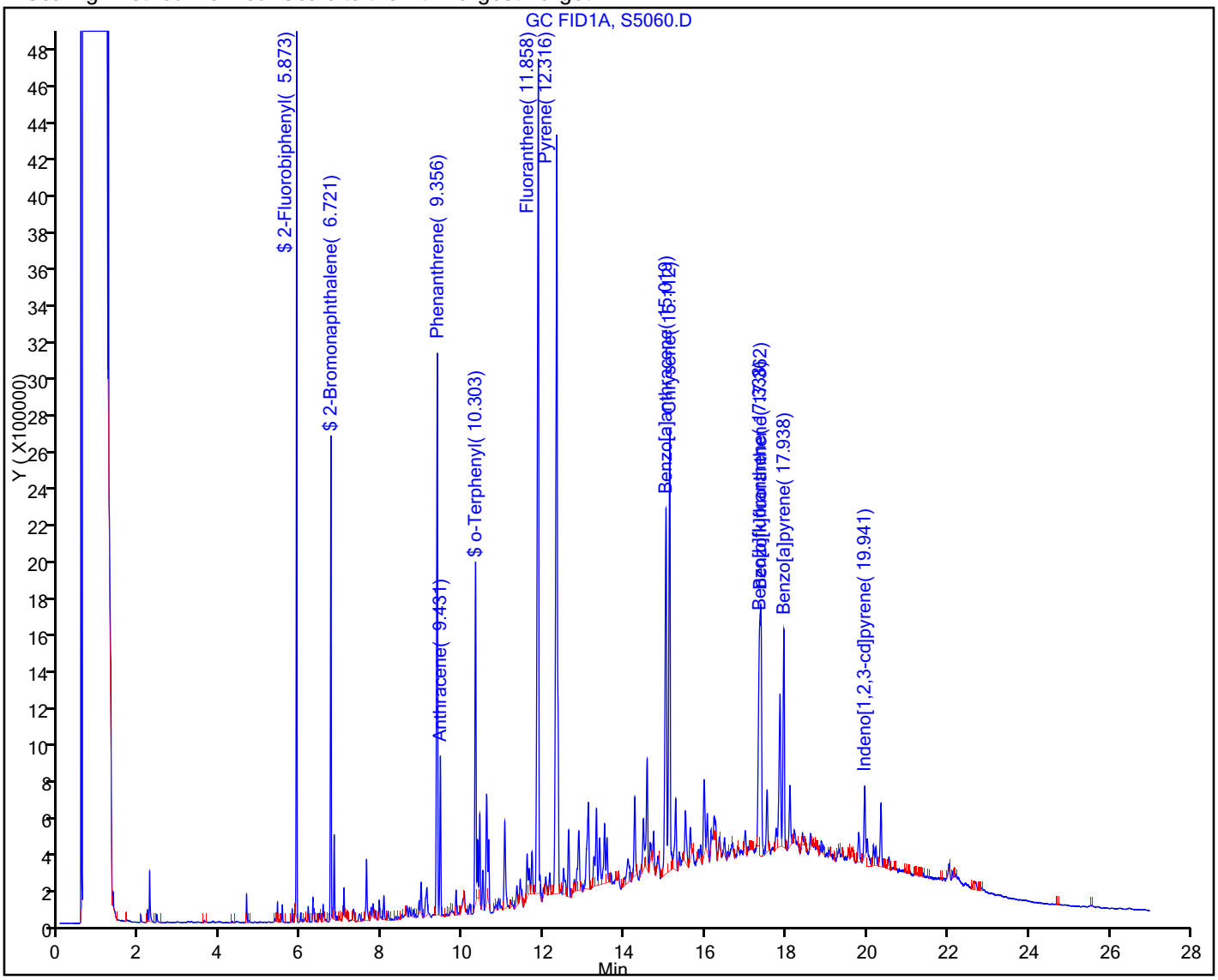
Report Date: 01-Feb-2012 12:41:01 Chrom Revision: 2.0 29-Sep-2011 09:38:02
Data File: \\wessvr06\chromdata\INSTS.i\20120131-7740.b\S5058.D
Injection Date: 01-Feb-2012 08:19:45 Limit Group: GC MA EPH
Client ID: ENV-19 (4-5) Instrument ID: INST S
Lims Batch ID: 86677 Lims Sample ID: 23
Operator ID: VM Injection Vol: 1.00 ul
Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



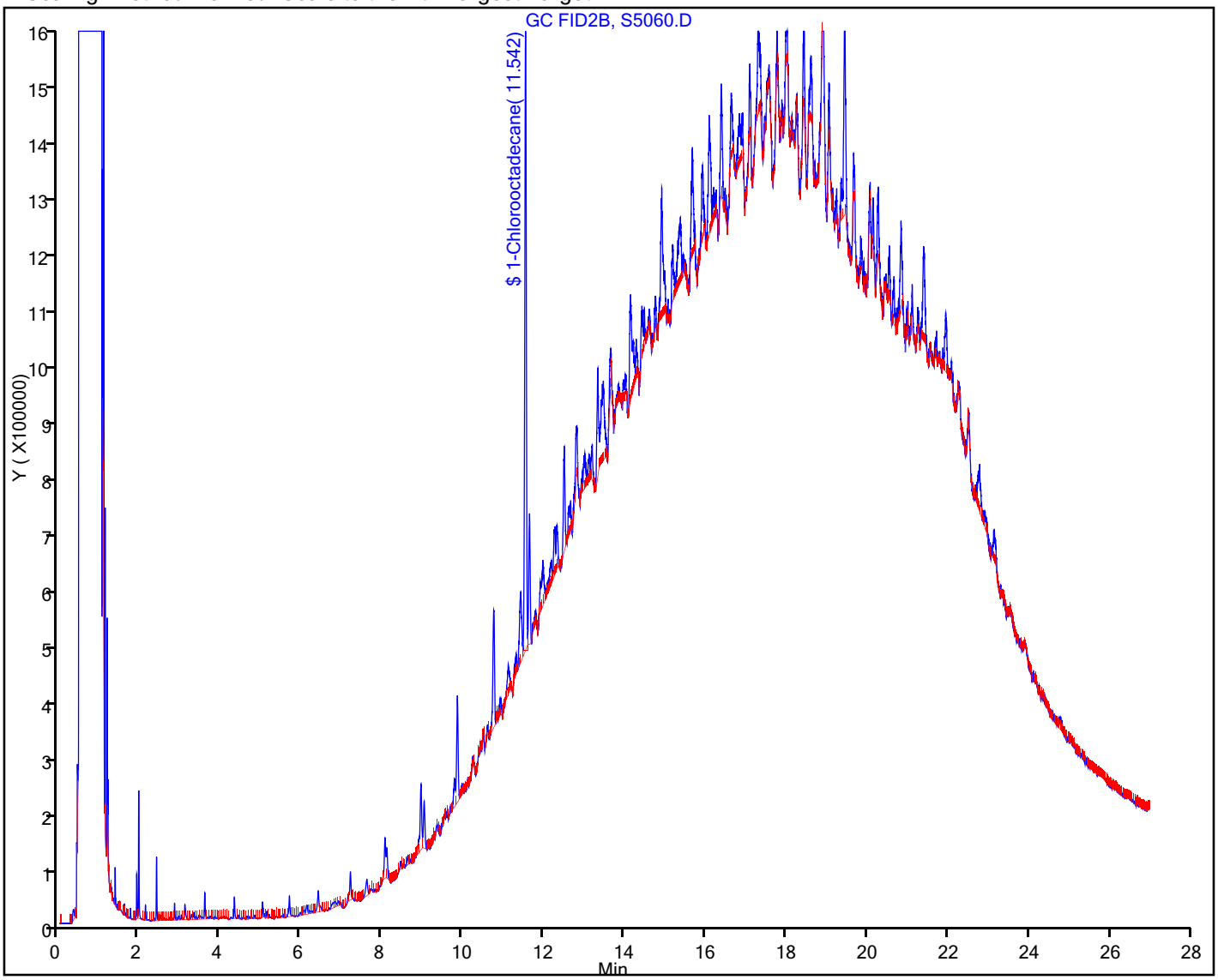
Report Date: 01-Feb-2012 12:41:01 Chrom Revision: 2.0 29-Sep-2011 09:38:02
Data File: \\wessvr06\chromdata\INSTS.i\20120131-7740.b\S5058.D
Injection Date: 01-Feb-2012 08:19:45 Limit Group: GC MA EPH
Client ID: ENV-19 (4-5) Instrument ID: INST S
Lims Batch ID: 86677 Lims Sample ID: 23
Operator ID: VM Injection Vol: 1.00 ul
Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 01-Feb-2012 12:41:03 Chrom Revision: 2.0 29-Sep-2011 09:38:02
Data File: \\wessvr06\chromdata\INSTS.i\20120131-7740.b\S5060.D
Injection Date: 01-Feb-2012 08:53:53 Limit Group: GC MA EPH
Client ID: ENV-9 (0.5-2.5) Instrument ID: INST S
Lims Batch ID: 86677 Lims Sample ID: 24
Operator ID: VM Injection Vol: 1.00 ul
Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 01-Feb-2012 12:41:03 Chrom Revision: 2.0 29-Sep-2011 09:38:02
Data File: \\wessvr06\chromdata\INSTS.i\20120131-7740.b\S5060.D
Injection Date: 01-Feb-2012 08:53:53 Limit Group: GC MA EPH
Client ID: ENV-9 (0.5-2.5) Instrument ID: INST S
Lims Batch ID: 86677 Lims Sample ID: 24
Operator ID: VM Injection Vol: 1.00 ul
Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



# Lab Chronicle

Client: ENVIRON International Corp.
Project/Site: Brayton Ave

TestAmerica Job ID: 360-38847-1

## Client Sample ID: ENV-19 (4-5)

**Lab Sample ID: 360-38847-1**
**Date Collected: 01/25/12 09:45**
**Matrix: Solid**
**Date Received: 01/26/12 14:50**
**Percent Solids: 78.5**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3546 | | | 86565 | 01/27/12 14:14 | MJM | TAL WFD |
| Total/NA | Analysis | 8082A | | 1 | 86639 | 01/30/12 19:24 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 86668 | 01/30/12 16:42 | TLV | TAL WFD |
| Total/NA | Analysis | MA-EPH | | 5 | 86677 | 02/01/12 08:19 | VMM | TAL WFD |
| Total/NA | Analysis | Moisture | | 1 | 86669 | 01/30/12 16:58 | BRB | TAL WFD |

## Client Sample ID: ENV-9 (0.5-2.5)

**Lab Sample ID: 360-38847-2**
**Date Collected: 01/25/12 10:45**
**Matrix: Solid**
**Date Received: 01/26/12 14:50**
**Percent Solids: 87.6**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 86709 | 01/30/12 16:00 | CMR | TAL WFD |
| Total/NA | Analysis | 8260C | | 1 | 86665 | 01/30/12 20:04 | CMR | TAL WFD |
| Total/NA | Prep | 5035 | | | 86721 | 01/27/12 14:12 | CMR | TAL WFD |
| Total/NA | Analysis | MAVPH | | 1 | 86664 | 01/30/12 21:41 | CMR | TAL WFD |
| Total/NA | Prep | 3546 | | | 86565 | 01/27/12 14:16 | MJM | TAL WFD |
| Total/NA | Analysis | 8082A | | 1 | 86639 | 01/30/12 19:45 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 86668 | 01/30/12 16:42 | TLV | TAL WFD |
| Total/NA | Analysis | MA-EPH | | 2 | 86677 | 02/01/12 08:53 | VMM | TAL WFD |
| Total/NA | Prep | 7471A | | | 86643 | 01/30/12 09:55 | BRB | TAL WFD |
| Total/NA | Analysis | 7471A | | 1 | 86670 | 01/30/12 16:50 | TJS | TAL WFD |
| Total/NA | Prep | 3050B | | | 86758 | 02/01/12 08:39 | OG | TAL WFD |
| Total/NA | Analysis | 6010B | | 5 | 86824 | 02/01/12 15:36 | TJS | TAL WFD |
| Total/NA | Analysis | Moisture | | 1 | 86669 | 01/30/12 16:58 | BRB | TAL WFD |

## Client Sample ID: ENV-15B (5.5-6.5)

**Lab Sample ID: 360-38847-3**
**Date Collected: 01/25/12 11:00**
**Matrix: Solid**
**Date Received: 01/26/12 14:50**
**Percent Solids: 88.7**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3546 | | | 86668 | 01/30/12 16:42 | TLV | TAL WFD |
| Total/NA | Analysis | MA-EPH | | 1 | 86677 | 01/31/12 15:45 | VMM | TAL WFD |
| Total/NA | Prep | 7471A | | | 86643 | 01/30/12 09:55 | BRB | TAL WFD |
| Total/NA | Analysis | 7471A | | 1 | 86670 | 01/30/12 16:53 | TJS | TAL WFD |
| Total/NA | Prep | 3050B | | | 86758 | 02/01/12 08:39 | OG | TAL WFD |
| Total/NA | Analysis | 6010B | | 1 | 86824 | 02/01/12 14:23 | TJS | TAL WFD |
| Total/NA | Analysis | Moisture | | 1 | 86669 | 01/30/12 16:58 | BRB | TAL WFD |

## Client Sample ID: ENV-21 (0.5-1.3)

**Lab Sample ID: 360-38847-4**
**Date Collected: 01/25/12 11:35**
**Matrix: Solid**
**Date Received: 01/26/12 14:50**
**Percent Solids: 83.4**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3546 | | | 86565 | 01/27/12 14:16 | MJM | TAL WFD |

# Lab Chronicle

Client: ENVIRON International Corp.
Project/Site: Brayton Ave

TestAmerica Job ID: 360-38847-1

## Client Sample ID: ENV-21 (0.5-1.3)

**Lab Sample ID: 360-38847-4**

**Date Collected: 01/25/12 11:35**
**Matrix: Solid**
**Date Received: 01/26/12 14:50**
**Percent Solids: 83.4**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8082A | | 1 | 86639 | 01/30/12 20:06 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 86787 | 02/01/12 10:00 | MJM | TAL WFD |
| Total/NA | Analysis | MA-EPH | | 5 | 86789 | 02/02/12 18:35 | VMM | TAL WFD |
| Total/NA | Prep | 7471A | | | 86643 | 01/30/12 09:55 | BRB | TAL WFD |
| Total/NA | Analysis | 7471A | | 1 | 86670 | 01/30/12 16:54 | TJS | TAL WFD |
| Total/NA | Prep | 3050B | | | 86758 | 02/01/12 08:39 | OG | TAL WFD |
| Total/NA | Analysis | 6010B | | 5 | 86824 | 02/01/12 14:35 | TJS | TAL WFD |
| Total/NA | Analysis | Moisture | | 1 | 86669 | 01/30/12 16:58 | BRB | TAL WFD |

## Client Sample ID: ENV-20 (3.5-4.5)

**Lab Sample ID: 360-38847-5**

**Date Collected: 01/25/12 11:45**
**Matrix: Solid**
**Date Received: 01/26/12 14:50**
**Percent Solids: 88.1**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3546 | | | 86565 | 01/27/12 14:16 | MJM | TAL WFD |
| Total/NA | Analysis | 8082A | | 1 | 86639 | 01/30/12 20:28 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 86668 | 01/30/12 16:42 | TLV | TAL WFD |
| Total/NA | Analysis | MA-EPH | | 1 | 86677 | 02/01/12 10:36 | VMM | TAL WFD |
| Total/NA | Prep | 7471A | | | 86643 | 01/30/12 09:55 | BRB | TAL WFD |
| Total/NA | Analysis | 7471A | | 1 | 86670 | 01/30/12 16:56 | TJS | TAL WFD |
| Total/NA | Prep | 3050B | | | 86758 | 02/01/12 08:39 | OG | TAL WFD |
| Total/NA | Analysis | 6010B | | 1 | 86824 | 02/01/12 14:38 | TJS | TAL WFD |
| Total/NA | Analysis | Moisture | | 1 | 86669 | 01/30/12 16:58 | BRB | TAL WFD |

## Client Sample ID: ENV-16 (0.5-1.5)

**Lab Sample ID: 360-38847-6**

**Date Collected: 01/25/12 12:05**
**Matrix: Solid**
**Date Received: 01/26/12 14:50**
**Percent Solids: 86.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3546 | | | 86567 | 01/27/12 14:28 | MJM | TAL WFD |
| Total/NA | Analysis | 8082A | | 1 | 86673 | 01/31/12 07:47 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 86668 | 01/30/12 16:42 | TLV | TAL WFD |
| Total/NA | Analysis | MA-EPH | | 1 | 86677 | 01/31/12 17:27 | VMM | TAL WFD |
| Total/NA | Prep | 3546 | RA | | 86567 | 01/27/12 14:28 | MJM | TAL WFD |
| Total/NA | Analysis | 8082A | RA | 1 | 86735 | 01/31/12 16:49 | BRB | TAL WFD |
| Total/NA | Analysis | Moisture | | 1 | 86669 | 01/30/12 16:58 | BRB | TAL WFD |

## Client Sample ID: ENV-17 (5-6)

**Lab Sample ID: 360-38847-7**

**Date Collected: 01/25/12 12:35**
**Matrix: Solid**
**Date Received: 01/26/12 14:50**
**Percent Solids: 92.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3546 | | | 86567 | 01/27/12 14:28 | MJM | TAL WFD |
| Total/NA | Analysis | 8082A | | 1 | 86673 | 01/31/12 08:08 | BRB | TAL WFD |

# Lab Chronicle

Client: ENVIRON International Corp.
Project/Site: Brayton Ave

TestAmerica Job ID: 360-38847-1

## Client Sample ID: ENV-17 (5-6)

**Lab Sample ID: 360-38847-7**

**Date Collected: 01/25/12 12:35**
**Matrix: Solid**
**Date Received: 01/26/12 14:50**
**Percent Solids: 92.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3546 | | | 86668 | 01/30/12 16:42 | TLV | TAL WFD |
| Total/NA | Analysis | MA-EPH | | 1 | 86677 | 01/31/12 18:01 | VMM | TAL WFD |
| Total/NA | Prep | 3546 | RA | | 86567 | 01/27/12 14:28 | MJM | TAL WFD |
| Total/NA | Analysis | 8082A | RA | 1 | 86735 | 01/31/12 17:10 | BRB | TAL WFD |
| Total/NA | Analysis | Moisture | | 1 | 86669 | 01/30/12 16:58 | BRB | TAL WFD |

## Client Sample ID: ENV-23 (6.0-6.7)

**Lab Sample ID: 360-38847-8**

**Date Collected: 01/25/12 13:10**
**Matrix: Solid**
**Date Received: 01/26/12 14:50**
**Percent Solids: 91.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3546 | | | 86567 | 01/27/12 14:28 | MJM | TAL WFD |
| Total/NA | Analysis | 8082A | | 1 | 86673 | 01/31/12 08:29 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 86668 | 01/30/12 16:42 | TLV | TAL WFD |
| Total/NA | Analysis | MA-EPH | | 1 | 86677 | 01/31/12 18:35 | VMM | TAL WFD |
| Total/NA | Prep | 3546 | RA | | 86567 | 01/27/12 14:28 | MJM | TAL WFD |
| Total/NA | Analysis | 8082A | RA | 1 | 86735 | 01/31/12 17:31 | BRB | TAL WFD |
| Total/NA | Prep | 7471A | | | 86643 | 01/30/12 09:55 | BRB | TAL WFD |
| Total/NA | Analysis | 7471A | | 1 | 86670 | 01/30/12 16:58 | TJS | TAL WFD |
| Total/NA | Prep | 3050B | | | 86758 | 02/01/12 08:39 | OG | TAL WFD |
| Total/NA | Analysis | 6010B | | 1 | 86824 | 02/01/12 14:41 | TJS | TAL WFD |
| Total/NA | Analysis | Moisture | | 1 | 86669 | 01/30/12 16:58 | BRB | TAL WFD |

## Client Sample ID: ENV-22 (10-10.5)

**Lab Sample ID: 360-38847-9**

**Date Collected: 01/25/12 13:25**
**Matrix: Solid**
**Date Received: 01/26/12 14:50**
**Percent Solids: 92.7**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3546 | | | 86567 | 01/27/12 14:28 | MJM | TAL WFD |
| Total/NA | Analysis | 8082A | | 1 | 86673 | 01/31/12 08:50 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 86668 | 01/30/12 16:42 | TLV | TAL WFD |
| Total/NA | Analysis | MA-EPH | | 1 | 86677 | 01/31/12 19:09 | VMM | TAL WFD |
| Total/NA | Prep | 3546 | RA | | 86567 | 01/27/12 14:28 | MJM | TAL WFD |
| Total/NA | Analysis | 8082A | RA | 1 | 86735 | 01/31/12 17:53 | BRB | TAL WFD |
| Total/NA | Prep | 7471A | | | 86645 | 01/30/12 10:01 | BRB | TAL WFD |
| Total/NA | Analysis | 7471A | | 1 | 86732 | 01/31/12 15:21 | RWE | TAL WFD |
| Total/NA | Prep | 3050B | | | 86758 | 02/01/12 08:39 | OG | TAL WFD |
| Total/NA | Analysis | 6010B | | 1 | 86824 | 02/01/12 14:44 | TJS | TAL WFD |
| Total/NA | Analysis | Moisture | | 1 | 86669 | 01/30/12 16:58 | BRB | TAL WFD |

# Lab Chronicle

Client: ENVIRON International Corp.
Project/Site: Brayton Ave

TestAmerica Job ID: 360-38847-1

## Client Sample ID: DUP-012512

**Lab Sample ID: 360-38847-10**

**Date Collected: 01/25/12 13:25**
**Date Received: 01/26/12 14:50**

**Matrix: Solid**
**Percent Solids: 92.1**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3546 | | | 86567 | 01/27/12 14:28 | MJM | TAL WFD |
| Total/NA | Analysis | 8082A | | 1 | 86673 | 01/31/12 09:12 | BRB | TAL WFD |
| Total/NA | Prep | 3546 | | | 86668 | 01/30/12 16:42 | TLV | TAL WFD |
| Total/NA | Analysis | MA-EPH | | 1 | 86677 | 01/31/12 19:44 | VMM | TAL WFD |
| Total/NA | Prep | 3546 | RA | | 86567 | 01/27/12 14:28 | MJM | TAL WFD |
| Total/NA | Analysis | 8082A | RA | 1 | 86735 | 01/31/12 18:14 | BRB | TAL WFD |
| Total/NA | Prep | 7471A | | | 86645 | 01/30/12 10:01 | BRB | TAL WFD |
| Total/NA | Analysis | 7471A | | 1 | 86732 | 01/31/12 14:53 | RWE | TAL WFD |
| Total/NA | Prep | 3050B | | | 86758 | 02/01/12 08:39 | OG | TAL WFD |
| Total/NA | Analysis | 6010B | | 1 | 86824 | 02/01/12 14:47 | TJS | TAL WFD |
| Total/NA | Analysis | Moisture | | 1 | 86669 | 01/30/12 16:58 | BRB | TAL WFD |

## Client Sample ID: TB 012512

**Lab Sample ID: 360-38847-11**

**Date Collected: 01/25/12 14:45**
**Date Received: 01/26/12 14:50**

**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 86709 | 01/30/12 16:00 | CMR | TAL WFD |
| Total/NA | Analysis | 8260C | | 1 | 86665 | 01/30/12 20:28 | CMR | TAL WFD |
| Total/NA | Prep | 5035 | | | 86721 | 01/27/12 14:12 | CMR | TAL WFD |
| Total/NA | Analysis | MAVPH | | 1 | 86664 | 01/30/12 22:15 | CMR | TAL WFD |

**Laboratory References:**

TAL WFD = TestAmerica Westfield, Westfield Executive Park, 53 Southampton Road, Westfield, MA 01085, TEL (413)572-4000

# Certification Summary

Client: ENVIRON International Corp.
Project/Site: Brayton Ave

TestAmerica Job ID: 360-38847-1

| Laboratory | Authority | Program | EPA Region | Certification ID |
|---|---|---|---|---|
| TestAmerica Westfield | Connecticut | State Program | 1 | PH-0494 |
| TestAmerica Westfield | Maine | State Program | 1 | MA00014 |
| TestAmerica Westfield | Massachusetts | State Program | 1 | M-MA014 |
| TestAmerica Westfield | New Hampshire | NELAC | 1 | 2539 |
| TestAmerica Westfield | New York | NELAC | 2 | 10843 |
| TestAmerica Westfield | Rhode Island | State Program | 1 | LAO00057 |
| TestAmerica Westfield | Vermont | State Program | 1 | VT-10843 |

Accreditation may not be offered or required for all methods and analytes reported in this package . Please contact your project manager for the laboratory's current list of certified methods and analytes.

# State Accreditation Matrix

| Method Name | Description | State where **Primary** Accreditation is Carried | | |
|---|---|---|---|---|
| | | New Hampshire (NELAC) | Mass | Conn |
| 821-R-02-012 | Toxicity, Acute (48-Hour)(list upon request) | NP | | |
| SM 4500 Cl F | Chlorine, Residual | | NP | |
| SM 9215E | Heterotrophic Plate Count (SimPlate) | | P | |
| SM 9222D | Coliforms, Fecal (Membrane Filter) | | P/NP | |
| SM 9223 | Coliforms, Total, and E.Coli (Colilert-P/A) | | P | |
| SM 9224 | Coliforms, Total, and E.Coli (Enumeration) | | P | |
| 1103.1 | E.coli | | ambient/ source | |
| Enterolert | Enterococcus | | | |
| 200.8 Rev 5.4 | Metals (ICP/MS) (list upon request) | NP/P | NP/P | |
| 200.7 Rev 4.4 | Metals (ICP)(list upon request) | NP/P | NP/P | |
| 6010B/C | Metals (ICP)(list upon request) | NP/SW | | |
| 245.1 | Mercury (CVAA) | NP/P | NP | |
| 7470A | Mercury (CVAA) | NP | | |
| 7471A | Mercury (CVAA) | SW | | |
| SM 2340B | Total Hardness (as CaCO3) by calculation | NP/P | NP | |
| 3005A | Preparation, Total Recoverable or Dissolved Metals | NP/P | | |
| 3010A | Preparation, Total Metals | NP/P | | |
| 3020A | Preparation, Total Metals | NP/P/SW | | |
| 3050B | Preparation, Metals | SW | | |
| 504.1 | EDB, DBCP and 1,2,3-TCP (GC) | P | P | |
| 608 | Organochlorine Pest/PCBs (list upon request) | NP | NP | |
| 625 | Semivolatile Org Comp (GC/MS)(list upon request) | NP | NP | |
| 3546 | Microwave Extraction | SW | | |
| 3510C | Liquid-Liquid Extraction (Separatory Funnel) | NP | | |
| 3550B | Ultrasonic Extraction | SW | | |
| 8081AB | Organochlorine Pesticides (GC)(list upon request) | NP/SW | | |
| 8082/A | PCBs by Gas Chromatography(list upon request) | NP/SW | | |
| 8270C/D | Semivolatile Comp.(GC/MS)(list upon request) | NP/SW | | |
| CT ETPH | Conn - Ext. Total petroleum Hydrocarbons (GC) | NP/SW | | NP/SW |
| MA-EPH | Mass - Extractable Petroleum Hydrocarbons (GC) | NP/SW | | |
| 524.2 | Volatile Org Comp (GC/MS)(list upon request) | P | P | |
| 524.2 | Trihalomethane compounds | P | P | |
| 624 | Volatile Org Comp (GC/MS)(list upon request) | NP | NP | |
| 5035 | Closed System Purge and Trap | SW | | |
| 5030B | Purge and Trap | NP | | |
| 8260B/C | Volatile Org Comp. (GC/MS)(list upon request) | NP/SW | | |
| MAVPH | Mass - Volatile Petroleum Hydrocarbons (GC) | | | |
| 180.1 | Turbidity, Nephelometric | P | P | |
| 300 | Anions, Ion Chromatography | NP/P | NP/P | |
| 410.4 | COD | NP | NP | |
| 1010 | Ignitability, Pensky-Martens Closed-Cup Method | SW | | |
| 10-107-06-2 | Nitrogen, Total Kjeldahl | NP | NP | |
| 7196A | Chromium, Hexavalent | NP/SW | | |
| 9012A | Cyanide, Total and/or Amenable | NP/SW | | |
| 9030B | Sulfide, Distillation (Acid Soluble and Insoluble) | NP | | |
| 9045C | pH | SW | | |
| L107041C | Nitrogen, Nitrate | NP | P | |
| L107-06-1B | Nitrogen Ammonia | NP | NP | |
| L204001A CN | Cyanide, Total | P | NP/P | |
| L210-001A | Phenolics, Total Recoverable | NP | NP | |
| SM 2320B | Alkalinity | NP/P | NP/P | |
| SM 2510B | Conductivity, Specific Conductance | NP/P | NP/P | |
| SM 2540C | Solids, Total Dissolved (TDS) | NP/P | NP/P | |
| SM 2540D | Solids, Total Suspended (TSS) | NP | NP | |
| SM 3500 CR D | Chromium, Hexavalent | NP | | |
| SM 4500 H+ B | pH | NP/P | NP/P | |
| SM 4500 NO2 B | Nitrogen, Nitrite | NP | P | |
| SM 4500 P E | Phosphorus, Orthophosphate | NP/P | NP | |
| SM 4500 P E | Phosphorus, Total | NP | NP | |
| SM 4500 S2 D | Sulfide, Total | NP | | |
| SM 5210B | BOD, 5-Day | NP | NP | |
| SM 5310B | Organic Carbon, Total (TOC) | NP/P | NP | |

Not all organic compounds are accreditied under NELAC
For methods with multiple compounds all compounds may not meet NELAC criteria, listing should be obtained from the laboratory
The lab carries additional accreditations with several states. This is the laboratories typcial listing but is subject to change based on the laboratories current certification standing.

# Login Sample Receipt Checklist

Client: ENVIRON International Corp.

Job Number: 360-38847-1

**Login Number: 38847**

**List Source: TestAmerica Westfield**

**List Number: 1**

**Creator: Ard, Vanessa L**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | N/A | |
| The cooler's custody seal, if present, is intact. | N/A | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

**TestAmerica Westfield**
Westfield Executive Park 53 Southampton Road
Westfield, MA 01085
Phone (413) 572-4000 Fax (413) 572-3707

**Boston Service Center**
240 Bear Hill Rd. Suite 104
Waltham, MA 02451
Phone (781) 466-6900 Fax (781) 466-6901

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

| Client Information | | | | |
|---|---|---|---|---|
| Client Contact: DON CEDERQUIST | Sampler: MEAGAN VERDEYEN | Lab PM: | Carrier Tracking No(s): | COC No: 21144 |
| | Phone: 508. 637-9549 | E-Mail: | | Page: 2 of 2 |
| Company: ENVIRON | | | | Job #: |
| Address: 8 HOLMS ST | Due Date Requested: | | | |
| City: GROTON | TAT Requested (days): | | | |
| State, Zip: MA 01450 | | | | |
| Phone: 978.449.0350 | Quote #: | | | |
| Email: dcederquist@environcorp.com | PO #: 33-29188B | | | |
| Project Name/number: BOHLER Fall River 33-29188B | WO #: | | | |
| Site: Brayton Ave | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, H - Ascorbic Acid, I - Ice, J - DI Water, M - Hexane, N - None, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, Z - other (specify)

**Regulatory programs:**
MCP ☐ GW1/S1 ☒
RCP ☐ CT RSR ☐
DEP Form ☐ EDD Required ☐

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Sampler's Initials | Field Filtered Sample? | Perform MS/MSD? | MA EPH | PCB 8082 | RCRA 8 METALS | VOC 8260 | VPH (carbon ranges) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | N/E | F | | |
| ENV-19(4-5) | 1-26-12 | 0945 | G | S | MV | | | X | X | | | | 1 | * Please hold any remaining sample for additional analyses. * |
| ENV-9(0.5-2.5) | | 1045 | | | MV | | | X | X | X | X | X | 5 | |
| ENV-15B(5.5-6.5) | | 1100 | | | MV | | | X | | X | | | 1 | |
| ENV-21(0.5-1.3) | | 1135 | | | MV | | | X | X | X | | | 1 | |
| ENV-20(3.5-4.5) | | 1145 | | | MV | | | X | X | X | | | 1 | |
| ENV-16(0.5-1.5) | | 1205 | | | MV | | | X | X | | | | 1 | |
| ENV-17(5-6) | | 1235 | | | MV | | | X | X | | | | 1 | |
| ENV-23(6.0-6.7) | | 1310 | | | MV | | | X | X | X | | | 1 | |
| ENV-22(10-10.5) | | 1325 | | | MV | | | X | X | X | | | 1 | |
| DUP-012512 | | 1325 | | | MV | | | X | X | X | | | 1 | |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

**Sample Disposal** (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|
| M. VERDEYEN | 1-26-11 / 1255 | ENVIRON | | 1-26-11 1255 | |
| | 1-26-12 14:50 | | | 1/26/11 1450 | |
| | | | | | |

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 5.2/1.2

TAL-8245-360 1111

Page 17 of 32

**TestAmerica Westfield**
Westfield Executive Park 53 Southampton Road
Westfield, MA 01085
Phone (413) 572-4000 Fax (413) 572-3707

**Boston Service Center**
240 Bear Hill Rd. Suite 104
Waltham, MA 02451
Phone (781) 466-6900 Fax (781) 466-6901

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

| Client Information | | | |
|---|---|---|---|
| Client Contact: DON CEDERQUIST | Sampler: MEAGAN VERDEYEN | Lab PM: | Carrier Tracking No(s): |
| Company: ENVIRON | Phone: 510-637-9549 | E-Mail: | |
| Address: 8 HOLLIS ST | Due Date Requested: | | |
| City: GROTON | TAT Requested (days): 5-7 days | | |
| State, Zip: MA 01450 | | | |
| Phone: 978.449.0350 | Quote #: | | |
| Email: dcederquist@environcorp.com | PO #: 33-291888 | | |
| Project Name/number: BOHLER Fall River 33-291888 | WO #: | | |
| Site: Brayton Ave | SSOW#: | | |

COC No: 21145
Page: 2 of 2
Job #:

**Analysis Requested**

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Sampler's Initials | Field Filtered Sample? | Perform MS/MSD? | VOC 8260 | VPH CARBON RANGES | MA EPH | PCBs 8082 | RCRA 8 METALS | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | X | X | X | N/F | F | | | | | |
| TB012512 | 1-25-12 | 1415 | — | — | | | | X | X | | | | 3 | |
| ~~ENV-14 (6-7)~~ | ~~1-25-12~~ | ~~0930~~ | ~~G~~ | ~~S~~ | | | | ~~X~~ | | X | X | X | 1 | ~~no~~ |

**Preservation Codes:**
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; H - Ascorbic Acid; I - Ice; J - DI Water; M - Hexane; N - None; P - Na2O4S; Q - Na2SO3; R - Na2S2SO3; S - H2SO4; Z - other (specify)

**Regulatory programs:**
MCP ☐ GW1/S1 ☒
RCP ☐ CT RSR ☐
DEP Form ☐ EDD Required ☐

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| MEAGAN VERDEYEN | 1-26-11 1255 | ENVIRON | | 1-26-11 12:55 | |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| | 1-26-12 14:50 | | | 1/26/11 14:50 | |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| | | | | | |

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 5.2/ICE

TAL-8245-360 1111

McPHAIL ASSOCIATES, LLC

March 4, 2013

Portsmouth, RI Municipal Landfill Closure Project
c/o Site Restoration Technologies
18 Shoreline Drive
Foxboro, MA 02035

Reference: Request for Approval of Soil Reuse at Portsmouth, RI Municipal Landfill Closure Project; Portsmouth, Rhode Island
Boylston West Development; Boston, Massachusetts

Ladies and Gentlemen:

The purpose of this letter is to request approval for the reuse at the Portsmouth, Rhode Island Municipal Landfill Closure Project of soil generated from the construction of the Boylston West project located at 1345 Boylston Street, 1325 Boylston Street and 80-90 Van Ness Street in Boston, Massachusetts. The quantities of fill and organic soil material currently estimated to be reused off-site at are approximately 9,000 cubic yards and 5,000 cubic yards, respectively.

The material for which approval is requested consists of fill material that exhibited the presence of the compounds analyzed for concentrations that meet the requirements for off-site re-use at a Massachusetts Unlined Landfill as well as meeting the requirements of the Rhode Island Department of Environmental Management (RI DEM) Direct Exposure Criteria (DEC) Industrial/Commercial Standards.

In general, the material consists of a mixture of very loose to dense, brown to black, sand and gravel with a trace to some silt containing variable amounts of ash, cinders, concrete, glass, wood and brick. The organic material for which approval is requested consists of very soft to firm, grey to brown, organic silt and peat. Soil descriptions are based on the MIT Soil Classification System.

Approximately 14,000 cubic yards (22,400 tons) of fill and organic material meeting the RI DEM DEC Industrial/Commercial standards would be delivered to the Portsmouth, RI Municipal Landfill Closure Project from the subject project under the attached Bill of Lading.

The proposed development at the subject site includes the construction of a multi-story mixed-use commercial, residential and retail building with three (3) levels of below-grade parking.

The Boylston West site is associated with five previously identified Massachusetts Contingency Plan 310 CMR 40.0000 (MCP) release sites, four of which remain open under the MCP. The sites are identified as follows:

(i) Release Tracking Number (RTN) 3-27805 is associated with the former Fenway Mutual gasoline service station at 1325 Boylston Street. Contaminants of concern include extractable petroleum hydrocarbons (EPH) and volatile petroleum hydrocarbons (VPH) in soil and groundwater. On July 2, 2012, a Phase IV Remedy Implementation Plan Report was submitted to the DEP for the RTN 3-27805 site by McPhail on behalf of Boylston West LLC;

(ii) RTNs 3-28104, 3-29376 (closed) and 3-30283 (linked to 3-28104) are associated with the 1345 Boylston Street property. Contaminants of concern include EPH and VPH in soil. On August 31, 2011, a Phase II Comprehensive Site Assessment and Phase III Remedial Action Plan Report was submitted to the DEP for the RTN 3-28104 site by McPhail on behalf of Fenway Enterprises 1345 Boylston Street LLC;

GEOTECHNICAL AND GEOENVIRONMENTAL ENGINEERS
2269 Massachusetts Avenue
Cambridge, Massachusetts 02140
617 / 868-1420

(iii) RTN 3-18864 is associated with the 80-90 Van Ness Street property. Contaminants of concern include petroleum hydrocarbons (TPH and EPH/VPH constituents) in soil. A Phase II Comprehensive Site Assessment, Phase III Selection of Remedial Action, and Class C Response Action Outcome Report was submitted to the DEP for the RTN 3-18864 site during October 2003 by others. A Periodic Review of Temporary Solution Report prepared by McPhail for this RTN was submitted to the DEP on October 21, 2008; and

(iv) During February and March 2012, during soil pre-characterization in anticipation of site redevelopment, analytical results of soil samples identified Reportable Concentrations of total metals (arsenic, barium, cadmium, and lead), VOCs, SVOCs, and PCBs at localized areas across the subject property. Groundwater was not affected by a reportable release of the above-identified compounds. On June 28, 2012, the DEP was notified of these releases in soil as a 120-day reporting condition to which RTN 3-30918 was assigned.

The four open MCP sites (RTNs 3-30918, 3-27805, 3-28104, and 3-18864), are all in compliance with the regulatory provisions of the MCP. Each of the above four RTNs is associated with a release of petroleum hydrocarbons to the subsurface resulting from either the historical use of the site and/or the former presence of underground storage tanks (USTs), or to the nature of the urban fill present at the subject site as a result of the historic filling and reclaiming of land in Boston's Back Bay. A RAM Plan was submitted to the DEP on July 23, 2012 under RTN 3-30918 which addresses planned construction and associated remediation activities for the remaining open RTNs (including RTNs 3-30918, 3-27805, 3-28104, and 3-18864).

Historical research indicated that the 1325 Boylston Street portion of the subject site had been occupied by a filling station from approximately 1937 to 2008. In August 2008, two (2) gasoline underground storage tanks (USTs) were removed as part of decommissioning the former filling station by Fenway Enterprises 1325 Boylston Street LLC after it obtained ownership of the property. No evidence of a spill or release of petroleum was encountered upon removal of the USTs. The 1345 Boylston Street portion of the subject site had been occupied by a tire repair and auto service building with six (6) USTs present on the site since 1937. The six (6) USTs were removed from the site on September 7, 2011 in accordance with a Release Abatement Measure Plan (RAM) that was submitted to the DEP on August 30, 2011 and verbal communications with the DEP on September 6, 2011. The 90 Van Ness Street portion of the subject site had been occupied by vacant land or a parking lot since at least the early 1900's.

The following presents supporting information, including a summary of analytical testing performed on 25 composite samples, including 18 fill samples and 7 organic samples, representative of the material that will require off-site reuse or disposal as part of the construction of the proposed development site and which is proposed for reuse at the Portsmouth, RI Municipal Landfill Closure Project.

Headspace screening for the presence of total volatile organic compounds (TVOCs) was performed on each of the samples collected during our subsurface exploration program. In general, the soil samples did not exhibit elevated levels of TVOC or visual or olfactory indications of the presence of OHM. In the absence of visual or olfactory indications of the presence of OHM, TVOC results below 10 ppm are not considered likely to indicate the presence of a release of OHM. Generally, samples exhibiting elevated levels of TVOC were obtained from within the organic deposit underlying the fill material at the site. We note that the majority of these samples did not exhibit visual or olfactory evidence of contamination. It is our opinion that the elevated headspace readings that were detected in the majority of the organic samples screened is attributable to the degradation of the organic matter in the samples causing some

interference with the PID instrument, rather than to a release of OHM. In addition, we note that for each composite sample of organics tested, the discrete sample with the highest PID headspace result was submitted for VOC testing. Based on the results of analytical testing, these samples meet the RI DEM DEC Industrial/Commercial acceptance criteria.

A total of 25 composite samples were submitted for laboratory analyses in accordance with the requirements contained in DEP policy COMM-97-001 for the presence of total petroleum hydrocarbons (TPH), semivolatile organics (SVOC's), volatile organics (VOC's), total RCRA-8 metals, TCLP lead, TCLP mercury, PCB's, pH, reactive sulfide, reactive cyanide, and flashpoint. A total of six (6) of these samples were also analyzed for the presence of PP-13 metals. The composite samples were made up of discrete samples obtained from soil borings across the subject site. The discrete sample with the highest headspace result within each composite was preserved for VOC analysis.

A total of seven (7) of the 25 soil samples exhibited concentrations of total lead greater than 100 mg/kg and thus were analyzed for the presence of TCLP lead. The results indicated the presence of TCLP lead in the samples analyzed at concentrations ranging from below the laboratory method detection limits up to 0.85 milligrams per liter (mg/l). In consideration of off-site disposal of soils, material that exhibits a TCLP lead level greater than 5.0 mg/l is considered hazardous waste for off-site disposal. Hence, the material represented herewith is not considered hazardous waste and is acceptable for off-site disposal and/or reuse at an in-state unlined landfill facility. A summary of the test results is provided on the attached **Tables 1** and **2**.

Please note that only soil represented by the data samples identified on **Tables 1** and **2** of this submnittal is proposed for reuse at the Portsmouth, RI Municipal Landfill Closure Project.

Localized areas at the subject site have been affected by TCLP lead in grid cell GP-123A S5-S6 (10 to 13 feet), GP-107 S4A-S7 (7 to 14 feet), GP-113 S1-S4 (0.5 to 8 feet), B-214 0-8 Composite, B-215 S5 (8 to 9 feet) and B-229 (10 to 13 feet). This material is not represented by the enclosed data and is being prepared for in-situ treatment. However, supplemental data has been obtained to delineate the extent of the identified TCLP lead contamination. Additional soil samples were submitted for testing for the presence of total lead and TCLP lead. The results of this sample testing are summarized on the enclosed **Table 8**, and analytical data is enclosed herewith. Based upon the results of our delineation testing, the extent of the TCLP lead affected soil has been defined. Soil subject to this disposal package has not been affected by TCLP lead.

Due diligence, as described in DEP Policy HW93-01 has been used in characterizing the soil that is the subject of this letter. Analytical testing of the soil samples did not indicate the presence of a listed hazardous waste. Furthermore, the soil that is the subject of this letter did not exhibit a characteristic hazardous waste.

McPhail Associates, LLC is engaged by the developer of the subject property to provide full-time on-site monitoring during excavation for the proposed redevelopment of the Boylston West development property. The scope of monitoring includes observation of the fill and natural materials during excavation, and the use of headspace screening of soil samples utilizing a photo-ionization detector as needed. If evidence of a release of oil and/or hazardous material becomes evident during the excavation, appropriate actions will be taken.

McPHAIL ASSOCIATES, LLC



The material represented by this disposal package is to be transported to an unlined landfill under a Bill of Lading (BOL).

Based on the results of the above described analytical testing, the above-referenced composite samples are considered to meet the requirements for off-site re-use at the Portsmouth, RI Municipal Landfill Closure Project. Therefore, this letter provides information to characterize a total of 14,000 cubic yards (22,400 tons) of fill and organic materials for off-site reuse. Due diligence, as described in DEP Policy HW93-01 has been used in characterizing the soil.

A comparison of the test results with the current regulations contained in RI DEM DEC Regulations for off-site reuse indicates that 14,000 cubic yards of fill and organic material as represented by the tested samples described herein are suitable for re-use at the Portsmouth, RI Municipal Landfill Closure Project in Portsmouth, Rhode Island.

We trust the above and the attached information are sufficient for your present requirements. Should you have any questions concerning this information, please call us.

Very truly yours,

McPHAIL ASSOCIATES, LLC

Joseph G. Lombardo, Jr., L.S.P.

Enclosure
F:\WP5\JOBS\4532\Soil Disposal\Reg A Unlined\Portsmouth\LSP Ltr-Portsmouth .wpd
JGL/ald

# Certification of Environmental Professional

I, Joseph G Lombardo Jr, L.S.P., hereby certify that I am an environmental professional[1] in the Commonwealth of Massachusetts. I have reviewed the permits for the proposed closure of the former Portsmouth Town Landfill in Portsmouth, Rhode Island. ("Project") located on Park Avenue (AP 20, Lots 1, 2 and 13 and AP 25, lot 2) (the "Site"), including the September 20, 2010 Beneficial Use Determination Approval and September 28, 2010 Remedial Approval Letter as well as the Rhode Island Department of Environmental Management ("RIDEM") Direct Exposure Criteria ("DEC"). I have further reviewed the test results dated February and March 2012 for the proposed fill material from the Boylston West Development site located at 1325 Boylston Street in Boston, Massachustts (the "Material"), which results include tests for Total Petroleum Hydrocarbons ("TPH"), Volatile Organic Compounds (EPA 8260), Semi-Volatile Organic Compounds (EPA 8270) and 13 priority pollutant metals.

Based on my review of the above, it is my professional opinion that the above-referenced testing is sufficient to adequately characterize and identify the concentrations of contaminants in the Material that is proposed to be used in the cap at the Site. It is further my professional opinion that, based on the requirements of the permits and the applicable RIDEM DECs, the Material is appropriate for use as grading and shaping at the Site.

Signed: _____

Company: McPhail Associates, LLC

Title: Project Manager

Dated: 3/4/13

License#: 3188

*550224_1.doc*

[1] The term "environmental professional" shall have the meaning ascribed to it pursuant to ASTM Standard E1527-05 and 40 CFR §312.10(b).

**Site Restoration Technologies - Foxboro, MA** 508-380-1267

# Material Submittal Request

**Tracking No:** _____

Request to tip soil, urban fill, and other suitable materials for landfill cover, shaping, and final cap of the site known as the Former Portsmouth Landfill Park Avenue Portsmouth, RI

**Contact: David Peter, Manager 508-380-1267 dpeter@siteretech.com**

## Location Information

Provide the following information on the location where the waste was generated:

Boylston West Development
Location Name

1325 Boylston Street, Boston, MA 02215
Full Address - Street, City, State ,Zip

Finn O'Sullivan — Contact Name
Project Manager — Contact Title

617-719-9813 — Contact Phone & Extension
fosullivan@jm-a.com — Contact email address

## Generator Information

Provide the following information on generator of the material:

Boylston West LLC
Name of Organization / Owner

333 Newbury Street Boston, MA 02115
Full Address - Street, City, State, Zip

Charles Rollins — Contact Name
as Construction Manager and not individually — Contact Title

617-247-3434 — Contact Phone & Extension
crollins@samuelsre.com — Contact email address

## Consultant Information

Provide the following information on the primary consultant overseeing the project:

McPhail Associates, LLC - Joseph G Lombardo, Jr., L.S.P. — Name
Project Manager — Title

2269 Massachusetts Avenue, Cambridge, MA 02140
Full Address - Street, City, State, Zip

617-868-1420 x344 — Phone & Extension
jgl@mcphailgeo.com — Email address

## Estimated Soil Quantity

[ ] Tons [9,000] Cubic Yards

## Soil Contaminants

See LSP Opinion Letter

## Analyses Performed

Please check all that apply

- [x] TPH
- [x] Volatile Organics; EPA 8260
- [x] Semi-volatile Organics; EPA 8270
- [x] 13 Priority Pollutant Metals
- [x] List Other Tests pH, reactivity, ignitability, conductivity, TCLP metals (when required), PCBs, EPH/VPH

Alpha Analytical Laboratories, Westborough, MA
Laboratory performing tests (attach)

Site Restoration Technologies

# Material Submittal Request

## Description / Source of Contaminants

Describe

Date of Release (if known)

☒ Unknown / Historical See LSP Opinion Letter

## Soil Description

See LSP Opinion Letter

Physical Description (sand, gravel, silt, etc.)

MIT

Classification Method (if known)

**Check if the following materials are present:**

- ☐ Clay
- ☒ Coal
- ☒ Ash
- ☐ Construction Debris
- ☐ Vegetative Matter
- ☒ Other Deleterious Material (Please list): trace brick, glass, concrete (urban fill)

## Soil Characterization Methodology

Select the Sampling Method Used

☒ Grab ☒ Composite ☒ Biased samples (e.g, headspace screened, visually contaminated)

See LSP Opinion Letter

Constituents of Concern

## Site History

☒ Check if extra sheets attached

Current Use

Past Use

I, the generator, having used due diligence, have determined that there is no reason to suspect or believe that the soil has been impacted by any releases of oil or hazardous materials other than those I have identified in the above documentation.

I, the generator, realize that due diligence shall consist of a search of information and records reasonably available to the generator of the proposed soil and sufficient to make the determination. Such records and information may include, but are not limited to, those of the generator, location of generation (i.e., facility if not the generator), the Department of Environmental Management (or other environmental officials), and the municipality (i.e., Board of Health, Fire Department) within which the site is located.

Charles Rollins *

Signature of Generator

3/4/13

Date

Charles Rollins * As Construction Manager and not individually

Site Restoration Technologies

# Material Submittal Request

## Site Diagram

A site diagram is required indicating any major structures or roads, excavation areaas, and stockpile locations. All sampling locations must be noted.

☒ Check if diagram is attached

Name of Person preparing diagram: _____

**TABLE 1**

**ANALYTICAL TEST RESULTS - FILL MATERIAL**
**UNLINED LANDFILL- SITE DISP. PKG**
Boylston West, Boston Project No: 4532

| LOCATION | Reuse Levels Portsmouth, RI Landfill | Reportable Concentrations RCS-1 | Method 1 S-1 GW-2 | Method 1 S-1 GW-3 | GP-106 S5 8'-10' | GP-106 S4-S6 6'-12' COMP | GP-107 S3 4-6 | GP-107 S1-S4 0.5-7 COMPOSITE | GP-107 S1-S4 0.5-7 COMPOSITE | GP-108 S4 8'-10' | GP-108 S1-S4 2.0-10.0 COMPOSITE | GP-108 S7 | GP-108 S5-S7 10-15 COMPOSITE | GP-109 S5 10'-12' | GP-109 S5-S7 10'-15' COMPOSITE | GP-110 S5' 10'-12' | COMP GP110 (10'-14') GP111(10'-12) | GP-124 S2 2'-4' | GP-124 S1-S4 5'-8' | GP-128 S7 12-14 | GP-128 S5-S9 8-16.5 COMP | GP-130 S3 6'-8' | GP-130 S1-S4 1.5'-9' COMP | GP-132 S3 6'-8' | GP-132 S1-S3 2'-8' COMP | GP-132 S4 8'-10' | GP-132 S4-S6 8'-14' COMP | (GP-135) G103 S2 2-4 | (GP-135) G103 S1-S4 0.5-8 COMPOSITE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLING DATE | Industrial/Commercial RIDEM DECs | | | | 2/22/2012 | 2/22/2012 | 3/2/2012 | 3/2/2012 | 3/2/2012 | 2/20/2012 | 2/20/2012 | 2/20/2012 | 2/20/2012 | 2/21/2012 | 2/21/2012 | 2/27/2012 | 2/27/2012 | 3/9/2012 | 3/9/2012 | 2/23/2012 | 2/23/2012 | 2/23/2012 | 2/23/2012 | 2/23/2012 | 2/23/2012 | 2/23/2012 | 2/23/2012 | 2/20/2012 | 2/20/2012 |
| LAB SAMPLE ID | | | | | L1203067-13 | L1203067-14 L1203164-06 | L1203627-25 | L1203627-26 | L1203627-26 R1 | L1202921-07 | L1202921-08 L1303484-02 | L1202921-09 | L1202921-10 L1203037-01 | L1202981-09 | L1202981-10 L1303484-03 | L1203347-13 | L1203347-14 L1203606-02 | L1204082-05 | L1204082-06 L1205038-01 | L1203128-35 | L1203128-36 | L1203128-01 | L1203128-02 L1203241-02 R1 | L1203128-17 | L1203128-18 L1203241-04 R1 | L1203128-31 | L1203128-32 L1203128-32 R1 | L1202921-01 | L1202921-02 |
| SAMPLE TYPE | | | | | Fill | Fill | Fill | Fill | | Fill | Fill | Fill | Fill | Fill | Fill | Fill | Fill | Fill | Fill | Fill | Fill | Fill | Fill | Fill | Fill | Fill | Fill | Fill | Fill |
| SAMPLE DEPTH (ft.) | | | | | 8-10' | 6-12' | 4-6' | 0.5-7' | | 8-10' | 2-10' | 14-15' | 10-15' | 10-12' | 10-15' | 10-12' | 10-14' | 2-4' | 5-8' | 12-14' | 8-16.5' | 6-8' | 1.5-9' | 6-8' | 2-8' | 8-10' | 8-14' | 2-4' | 0.5-8' |
| **General Chemistry** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Specific Conductance (umhos/cm) | | | | | - | 300 | - | 62 | - | - | 280 | - | 330 | - | 210 | - | 93 | - | 1000 | - | 39 | - | 110 | - | 180 | - | 130 | - | 72 |
| Total Solids (%) | | | | | 77 | 77 | 92 | 92 | - | 91 | 91 | 81 | 81 | 77 | 77 | 90 | 90 | 86 | 86 | 91 | 91 | 85 | 85 | 85 | 85 | 82 | 82 | 92 | 92 |
| pH (SU) | | | | | - | 7.8 | - | 8.9 | - | - | 8.4 | - | 7.8 | - | 7.6 | - | 7.2 | - | 7.9 | - | 8 | - | 7.2 | - | 7.9 | - | 7.9 | - | 9.2 |
| Cyanide, Reactive (mg/kg) | | | | | - | ND(10) | - | ND(10) | - | - | ND(10) | - | ND(10) | - | ND(10) | - | ND(10) | - | ND(10) | - | ND(10) | - | ND(10) | - | ND(10) | - | ND(10) | - | ND(10) |
| Sulfide, Reactive (mg/kg) | | | | | - | ND(10) | - | ND(10) | - | - | ND(10) | - | ND(10) | - | 48 | - | ND(10) | - | ND(10) | - | ND(10) | - | ND(10) | - | ND(10) | - | ND(10) | - | ND(10) |
| Oxidation/Reduction Potential (mv) | | | | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 160 | - | - | - | 84 | - | - |
| Ignitability | | | | | - | NI | - | NI | - | - | NI | - | NI | - | NI | - | NI | - | NI | - | NI | - | NI | - | NI | - | NI | - | NI |
| Chromium, Hexavalent | 10,000 | 30 | 30 | 30 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | ND(0.94) | - | - | - | ND(0.98) | - | - |
| **PCBs (mg/kg)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aroclor 1248 | | 2 | 2 | 2 | - | ND(0.0423) | - | ND(0.0353) | - | - | ND(0.0356) | - | ND(0.0402) | - | ND(0.0414) | | ND(0.0432) | - | ND(0.0369) | - | ND(0.036) | - | ND(0.0376) | - | ND(0.0392) | - | ND(0.0385) | - | ND(0.0352) |
| Aroclor 1254 | | 2 | 2 | 2 | - | ND(0.0423) | - | ND(0.0353) | - | - | ND(0.0356) | - | ND(0.0402) | - | ND(0.0414) | | ND(0.0432) | - | ND(0.0369) | - | ND(0.036) | - | ND(0.0376) | - | ND(0.0392) | - | ND(0.0385) | - | ND(0.0352) |
| Aroclor 1260 | | 2 | 2 | 2 | - | ND(0.0423) | - | ND(0.0353) | - | - | ND(0.0356) | - | ND(0.0402) | - | ND(0.0414) | | ND(0.0432) | - | ND(0.0369) | - | ND(0.036) | - | ND(0.0376) | - | ND(0.0392) | - | ND(0.0385) | - | ND(0.0352) |
| **SUM** | **10** | **2** | **2** | **2** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| **MCP Semivolatile Organics (mg/kg)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | 10,000 | 4 | 1000 | 1000 | - | ND(0.33) | - | ND(0.28) | - | - | ND(0.56) | - | ND(0.64) | - | ND(0.34) | | ND(0.29) | - | ND(0.29) | - | ND(0.28) | - | ND(0.3) | - | ND(0.3) | - | ND(0.32) | - | ND(1.4) |
| Fluoranthene | 10,000 | 1000 | 1000 | 1000 | - | 0.36 | - | 1.5 | - | - | 1.4 | - | 0.48 | - | 0.76 | | 0.46 | - | 1.3 | - | ND(0.21) | - | 0.35 | - | 1.6 | - | 1.3 | - | 1.3 |
| Naphthalene | 10,000 | 4 | 40 | 500 | - | ND(0.41) | - | ND(0.35) | - | - | ND(0.69) | - | ND(0.8) | - | ND(0.43) | | ND(0.36) | - | ND(0.36) | - | ND(0.35) | - | ND(0.37) | - | ND(0.37) | - | ND(0.4) | - | ND(1.7) |
| Bis(2-Ethylhexyl)phthalate | 410 | 200 | 200 | 200 | - | ND(0.41) | - | ND(0.35) | - | - | ND(0.69) | - | ND(0.8) | - | ND(0.43) | | ND(0.41) | - | 2.9 | - | ND(0.35) | - | ND(0.37) | - | ND(0.37) | - | ND(0.4) | - | ND(1.7) |
| Benzo(a)anthracene | 7.8 | 7 | 7 | 7 | - | ND(0.25) | - | 0.8 | - | - | 0.72 | - | ND(0.48) | - | 0.39 | | ND(0.22) | - | 0.66 | - | ND(0.21) | - | ND(0.22) | - | 0.6 | - | 0.62 | - | ND(1) |
| Benzo(a)pyrene | 0.8 | 2 | 2 | 2 | - | ND(0.33) | - | 0.75 | - | - | 0.72 | - | ND(0.64) | - | ND(0.34) | | ND(0.22) | - | 0.63 | - | ND(0.28) | - | ND(0.3) | - | 0.57 | - | 0.66 | - | ND(1.4) |
| Benzo(b)fluoranthene | 7.8 | 7 | 7 | 7 | - | ND(0.25) | - | 1 | - | - | 0.87 | - | ND(0.48) | - | 0.38 | | 0.32 | - | 0.76 | - | ND(0.21) | - | 0.27 | - | 0.71 | - | 0.51 | - | ND(1) |
| Benzo(k)fluoranthene | 78 | 70 | 70 | 70 | - | ND(0.25) | - | 0.37 | - | - | ND(0.42) | - | ND(0.48) | - | 0.28 | | ND (0.25) | - | 0.35 | - | ND(0.21) | - | ND(0.22) | - | 0.28 | - | 0.61 | - | ND(1) |
| Chrysene | 780 | 70 | 70 | 70 | - | ND(0.25) | - | 0.84 | - | - | 0.75 | - | ND(0.48) | - | 0.39 | | 0.26 | - | 0.68 | - | ND(0.21) | - | ND(0.22) | - | 0.61 | - | 0.75 | - | ND(1) |
| Acenaphthylene | 10,000 | 1 | 600 | 10 | - | ND(0.33) | - | ND(0.28) | - | - | ND(0.56) | - | ND(0.64) | - | ND(0.34) | | ND(0.22) | - | ND(0.29) | - | ND(0.28) | - | ND(0.3) | - | ND(0.3) | - | ND(0.32) | - | ND(1.4) |
| Anthracene | 10,000 | 1000 | 1000 | 1000 | - | ND(0.25) | - | 0.32 | - | - | ND(0.42) | - | ND(0.48) | - | ND(0.26) | | ND(0.22) | - | ND(0.22) | - | ND(0.21) | - | ND(0.22) | - | 0.34 | - | ND(0.24) | - | ND(1) |
| Benzo(ghi)perylene | 10,000 | 1000 | 1000 | 1000 | - | ND(0.33) | - | 0.41 | - | - | ND(0.56) | - | ND(0.64) | - | ND(0.34) | | ND(0.22) | - | 0.4 | - | ND(0.28) | - | ND(0.3) | - | 0.31 | - | 0.36 | - | ND(1.4) |
| Fluorene | 10,000 | 1000 | 1000 | 1000 | - | ND(0.41) | - | ND(0.35) | - | - | ND(0.69) | - | ND(0.8) | - | ND(0.43) | | ND(0.22) | - | ND(0.36) | - | ND(0.35) | - | ND(0.37) | - | ND(0.37) | - | ND(0.4) | - | ND(1.7) |
| Phenanthrene | 10,000 | 10 | 500 | 500 | - | ND(0.25) | - | 1.1 | - | - | 0.98 | - | ND(0.48) | - | 0.4 | | 0.31 | - | 0.56 | - | ND(0.21) | - | ND(0.22) | - | 0.93 | - | 0.68 | - | ND(1) |
| Dibenzo(a,h)anthracene | 0.8 | 0.7 | 0.7 | 0.7 | - | ND(0.25) | - | ND(0.21) | - | - | ND(0.42) | - | ND(0.48) | - | ND(0.26) | | ND(0.25) | - | ND(0.22) | - | ND(0.21) | - | ND(0.22) | - | ND(0.22) | - | ND(0.24) | - | ND(1) |
| Indeno(1,2,3-cd)Pyrene | 7.8 | 7 | 7 | 7 | - | ND(0.33) | - | 0.38 | - | - | ND(0.56) | - | ND(0.64) | - | ND(0.34) | | ND (0.33) | - | 0.34 | - | ND(0.28) | - | ND(0.3) | - | 0.39 | - | 0.34 | - | ND(1.4) |
| Pyrene | 10,000 | 1000 | 1000 | 1000 | - | 0.33 | - | 1.3 | - | - | 1.3 | - | ND(0.48) | - | 0.7 | | 0.42 | - | 1.1 | - | ND(0.21) | - | 0.34 | - | 1.4 | - | 1.4 | - | 1.1 |
| Dibenzofuran | | 100 | | | - | ND(0.41) | - | ND(0.35) | - | - | ND(0.69) | - | ND(0.8) | - | ND(0.43) | | ND(0.36) | - | ND(0.36) | - | ND(0.35) | - | ND(0.37) | - | ND(0.37) | - | ND(0.4) | - | ND(1.7) |
| 2-Methylnaphthalene | 10,000 | 0.7 | 80 | 300 | - | ND(0.49) | - | ND(0.42) | - | - | ND(0.83) | - | ND(0.96) | - | ND(0.51) | | ND(0.43) | - | ND(0.44) | - | ND(0.42) | - | ND(0.44) | - | ND(0.45) | - | ND(0.48) | - | ND(2.1) |
| Phenol | 10,000 | 1 | 50 | 20 | - | ND(0.41) | - | ND(0.35) | - | - | ND(0.69) | - | ND(0.8) | - | ND(0.43) | | ND(0.41) | - | ND(0.36) | - | ND(0.35) | - | ND(0.37) | - | ND(0.37) | - | ND(0.4) | - | ND(1.7) |
| **SUM** | **100** | | | | **-** | **0.69** | **-** | **8.77** | **-** | **-** | **6.74** | **-** | **0.48** | **-** | **3.3** | | **6.5** | **-** | **9.68** | **-** | **-** | **-** | **0.96** | **-** | **7.74** | **-** | **7.23** | **-** | **2.4** |
| **MCP Total Metals (mg/kg)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Antimony | 820 | | | | | | | | | | ND (2.1) | | | | ND (2.5) | | | | | | | | | | | | | | |
| Total Arsenic | 7 | 20 | 20 | 20 | - | 5.4 | - | 3 | - | - | 3.8 | - | 5.3 | - | 6.8 | | 6.2 | - | 6.4 | - | 2.1 | - | 6.5 | - | 6.5 | - | 6.1 | - | 5.8 |
| Total Barium | 10,000 | 1000 | 1000 | 1000 | - | 97 | - | 67 | - | - | 31 | - | 110 | - | 76 | | 83 | - | 620 | - | 13 | - | 89 | - | 68 | - | 60 | - | 50 |
| Total Beryllium | 1 | | | | | | | | | | 0.27 | | | | 0.41 | | | | | | | | | | | | | | |
| Total Cadmium | 1,000 | 2 | 2 | 2 | - | ND(0.49) | - | ND(0.42) | - | - | ND(0.41) | - | ND(0.47) | - | ND(0.49) | | ND(0.5) | - | ND(0.44) | - | ND(0.41) | - | ND(0.44) | - | ND(0.44) | - | ND(0.46) | - | ND(0.42) |
| Total Chromium | 10,000 | 30 | 30 | 30 | - | 12 | - | 8.5 | - | - | 16 | - | 19 | - | 15 | | 17 | - | 25 | - | 12 | - | 21 | - | **55** | - | 18 | - | 23 |
| Total Copper | 10,000 | | | | | | | | | | 28 | | | | 40 | | | | | | | | | | | | | | |
| Total Lead | 500 | 300 | 300 | 300 | - | **420** | - | 85 | - | - | 46 | - | 250 | - | 70 | | 140 | - | 140 | - | 3.8 | - | 170 | - | 110 | - | 75 | - | 35 |
| Total Mercury | 610 | 20 | 20 | 20 | - | 0.36 | - | 1.7 | 1.8 | - | 0.16 | - | 0.11 | - | 0.17 | | 0.25 | - | 0.13 | - | ND(0.08) | - | 0.32 | - | 0.67 | - | ND(0.1) | - | 0.46 |
| Total Nickel | 10,000 | | | | | | | | | | 30 | | | | 15 | | | | | | | | | | | | | | |
| Total Selenium | 10,000 | 400 | 400 | 400 | - | ND(2.4) | - | ND(2.1) | - | - | ND(2.1) | - | ND(2.3) | - | ND(2.5) | | ND(2.5) | - | ND(2.2) | - | ND(2.1) | - | ND(2.2) | - | ND(2.2) | - | ND(2.3) | - | ND(2.1) |
| Total Silver | 10,000 | 100 | 100 | 100 | - | ND(0.49) | - | - | ND(0.42) | - | ND(0.41) | - | ND(0.47) | - | ND(0.49) | | ND(0.5) | - | ND(0.44) | - | ND(0.41) | - | ND(0.44) | - | ND(0.44) | - | ND(0.46) | - | ND(0.42) |
| Total Thallium | 140 | | | | | | | | | | ND(2.1) | | | | ND(2.5) | | | | | | | | | | | | | | |
| Total Zinc | 10000 | | | | | | | | | | 63 | | | | 92 | | | | | | | | | | | | | | |
| **TCLP Metals by EPA 1311 (mg/l)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lead, TCLP | 5 | | | | | ND(0.5) | - | - | - | | | | ND(0.5) | | | | ND (0.5) | | ND(0.5) | | | | ND(0.5) | | ND(0.5) | | | | |
| Mercury, TCLP | 0.2 | | | | | | - | - | - | | | | | | | | | | | | | | | | | | | | |
| **MCP Volatile Organics by 5035 High (mg/kg)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | 110 | 1 | 10 | 30 | ND(0.088) | - | ND(0.11) | - | - | ND(0.073) | - | ND(0.11) | - | ND(0.11) | - | ND(0.087) | | ND(0.085) | - | ND(0.057) | - | ND(0.096) | - | ND(0.088) | - | ND(0.097) | - | ND(0.062) | - |
| Benzene | 200 | 2 | 30 | 30 | ND(0.088) | - | ND(0.11) | - | - | ND(0.073) | - | ND(0.11) | - | ND(0.11) | - | ND(0.087) | | ND(0.085) | - | ND(0.057) | - | ND(0.096) | - | ND(0.088) | - | ND(0.097) | - | ND(0.062) | - |
| Toluene | 10,000.00 | 30 | 500 | 500 | ND(0.13) | - | ND(0.17) | - | - | ND(0.11) | - | ND(0.16) | - | ND(0.16) | - | ND(0.13) | | ND(0.13) | - | ND(0.085) | - | ND(0.14) | - | ND(0.13) | - | ND(0.14) | - | ND(0.094) | - |
| Ethylbenzene | 10,000 | 40 | 500 | 500 | ND(0.088) | - | ND(0.11) | - | - | ND(0.073) | - | ND(0.11) | - | ND(0.11) | - | ND(0.087) | | ND(0.085) | - | ND(0.057) | - | ND(0.096) | - | ND(0.088) | - | ND(0.097) | - | ND(0.062) | - |
| Trichloroethene | 520 | 0.3 | 2 | 90 | 0.09 | - | ND(0.11) | - | - | ND(0.073) | - | ND(0.11) | - | ND(0.11) | - | ND(0.087) | | ND(0.085) | - | ND(0.057) | - | ND(0.096) | - | ND(0.088) | - | ND(0.097) | - | ND(0.062) | - |
| Methyl tert butyl ether | 10,000 | 0.1 | 100 | 100 | ND(0.18) | - | ND(0.23) | - | - | ND(0.15) | - | ND(0.22) | - | ND(0.22) | - | ND(0.17) | | ND(0.17) | - | ND(0.11) | - | ND(0.19) | - | ND(0.18) | - | ND(0.19) | - | ND(0.12) | - |
| p/m-Xylene | Total | 300 | 300 | 500 | ND(0.18) | - | ND(0.23) | - | - | ND(0.15) | - | ND(0.22) | - | ND(0.22) | - | ND(0.17) | | ND(0.17) | - | ND(0.11) | - | ND(0.19) | - | ND(0.18) | - | ND(0.19) | - | ND(0.12) | - |
| o-Xylene | 10,000 | 300 | 300 | 500 | ND(0.18) | - | ND(0.23) | - | - | ND(0.15) | - | ND(0.22) | - | ND(0.22) | - | ND(0.17) | | ND(0.17) | - | ND(0.11) | - | ND(0.19) | - | ND(0.18) | - | ND(0.19) | - | ND(0.12) | - |
| cis-1,2-Dichloroethene | 10,000 | 0.3 | 0.4 | 100 | ND(0.088) | - | ND(0.11) | - | - | ND(0.073) | - | ND(0.11) | - | ND(0.11) | - | ND(0.087) | | ND(0.085) | - | ND(0.057) | - | ND(0.096) | - | ND(0.088) | - | ND(0.097) | - | ND(0.062) | - |
| n-Butylbenzene | | | | | ND(0.088) | - | ND(0.11) | - | - | ND(0.073) | - | ND(0.11) | - | ND(0.11) | - | ND(0.087) | | ND(0.085) | - | ND(0.057) | - | ND(0.096) | - | ND(0.088) | - | ND(0.097) | - | ND(0.062) | - |
| sec-Butylbenzene | | | | | ND(0.088) | - | ND(0.11) | - | - | ND(0.073) | - | ND(0.11) | - | ND(0.11) | - | ND(0.087) | | ND(0.085) | - | ND(0.057) | - | ND(0.096) | - | ND(0.088) | - | ND(0.097) | - | ND(0.062) | - |
| Naphthalene | 10,000 | 4 | 40 | 500 | ND(0.35) | - | ND(0.45) | - | - | ND(0.29) | - | ND(0.43) | - | ND(0.44) | - | ND(0.35) | | ND(0.34) | - | ND(0.23) | - | ND(0.38) | - | ND(0.35) | - | ND(0.39) | - | ND(0.25) | - |
| n-Propylbenzene | | 100 | | | ND(0.088) | - | ND(0.11) | - | - | ND(0.073) | - | ND(0.11) | - | ND(0.11) | - | ND(0.087) | | ND(0.085) | - | ND(0.057) | - | ND(0.096) | - | ND(0.088) | - | ND(0.097) | - | ND(0.062) | - |
| **SUM** | | | | | **0.09** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| **Petroleum Hydrocarbon Quantitation (mg/kg)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TPH | 2500 | 1000 | 1000 | 1000 | - | 71 | - | 173 | - | - | 457 | - | 316 | - | 717 | | 428 | - | 151 | - | 99.8 | - | 52.9 | - | 120 | - | 65 | - | 389 |
| **Volatile Petroleum Hydrocarbons (mg/kg)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C9-C10 Aromatics | | 100 | 100 | 100 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| C5-C8 Aliphatics | | 100 | 100 | 100 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| C9-C12 Aliphatics | | 1000 | 1000 | 1000 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **Extractable Petroleum Hydrocarbons (mg/kg)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C9-C18 Aliphatics | | 1000 | 1000 | 1000 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| C19-C36 Aliphatics | | 3000 | 3000 | 3000 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| C11-C22 Aromatics | | 1000 | 1000 | 1000 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **Soil Disposal Recommendations** | | | | | **UNLINED LANDFILL** | | **UNLINED LANDFILL** | | | **UNLINED LANDFILL** | | **UNLINED LANDFILL** | | **UNLINED LANDFILL** | | **UNLINED LANDFILL** | | **UNLINED LANDFILL** | | **UNLINED LANDFILL** | | **UNLINED LANDFILL** | | **UNLINED LANDFILL** | | **UNLINED LANDFILL** | | **UNLINED LANDFILL** | |

ND(1.0)- none detected lab detection limit is shown
Blank- compound not analyzed
Shading-concentration exceeds applicable RCS-1 reportable concentration

**TABLE 1**

**ANALYTICAL TEST RESULTS - FILL MATERIAL**
**UNLINED LANDFILL- SITE DISP. PKG**
Boylston West, Boston Project No: 4532

| LOCATION | Reuse Levels Portsmouth, RI Landfill | Reportable Concentrations RCS-1 | Method 1 S-1 GW-2 | Method 1 S-1 GW-3 | (GP-135) G-103 S8 14-15 | (GP-135) G-103 S5-S8 8-15 COMPOSITE | GP-136 S3 4'-6' | GP-136 S1-S4 0.5'-8' | GP-136 S6 10'-12' | GP-136 S5-S7 8'-14' | GP-139 S8 14'-15' | GP-139 S5-S8 8'-15' | GP-140 S6 10'-12' | GP-140 S5-S7 8'-13' | GP-142 S3 4'-6' | GP-142 S1-S5 .5'-10' COMP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLING DATE | | | | | 2/20/2012 | 2/20/2012 | 3/2/2012 | 3/5/2012 | 3/2/2012 | 3/5/2012 | 2/28/2012 | 2/28/2012 | 2/29/2012 | 2/29/2012 | 2/22/2012 | 2/22/2012 |
| LAB SAMPLE ID | Industrial/Commercial RIDEM DECs | | | | L1202921-03 | L1202921-04 L1303484-01 | L1203725-01 | L1203725-02 L1205275-01 | L1203725-03 | L1203725-04 | L1203347-17 | L1203347-18 L1303484-04 | L1203429-17 | L1203429-18 L1203429-18 R2 L1203429-18 R3 | L1203128-09 | L1203128-10 |
| SAMPLE TYPE | | | | | Fill | Fill | Fill | Fill | Fill | Fill | Fill | Fill | Fill | Fill | Fill | Fill |
| SAMPLE DEPTH (ft.) | | | | | 14-15 | 8-15' | 4-6' | 0.5-8' | 10-12' | 8-14' | 14-15' | 8-15' | 10-12' | 8-13' | 4-6' | 0.5-10' |
| **General Chemistry** | | | | | | | | | | | | | | | | |
| Specific Conductance (umhos/cm) | | | | | - | 49 | - | 280 | - | 140 | - | 23 | - | 31 | - | 240 |
| Total Solids (%) | | | | | 84 | 84 | 83 | 83 | 75 | 75 | 87 | 87 | 84 | 84 | 80 | 80 |
| pH (SU) | | | | | - | 7.8 | - | 7.9 | - | 7.5 | - | 7.8 | - | 8 | - | 8.4 |
| Cyanide, Reactive (mg/kg) | | | | | - | ND(10) | - | ND(10) | - | ND(10) | - | ND(10) | - | ND(10) | - | ND(10) |
| Sulfide, Reactive (mg/kg) | | | | | - | ND(10) | - | ND(10) | - | ND(10) | - | ND(10) | - | ND(10) | - | ND(10) |
| Oxidation/Reduction Potential (mv) | | | | | - | - | - | - | - | - | - | - | - | - | - | - |
| Ignitability | | | | | - | NI | - | NI | - | NI | - | NI | - | NI | - | NI |
| Chromium, Hexavalent | 10,000 | 30 | 30 | 30 | - | - | - | - | - | - | - | - | - | - | - | - |
| **PCBs (mg/kg)** | | | | | | | | | | | | | | | | |
| Aroclor 1248 | | 2 | 2 | 2 | - | ND(0.0375) | - | ND(0.0381) | - | ND(0.0436) | - | ND(0.0374) | - | ND(0.0383) | - | ND(0.0391) |
| Aroclor 1254 | | 2 | 2 | 2 | - | ND(0.0375) | - | ND(0.0381) | - | ND(0.0436) | - | ND(0.0374) | - | ND(0.0383) | - | ND(0.0391) |
| Aroclor 1260 | | 2 | 2 | 2 | - | ND(0.0375) | - | ND(0.0381) | - | ND(0.0436) | - | ND(0.0374) | - | ND(0.0383) | - | ND(0.0391) |
| **SUM** | **10** | **2** | **2** | **2** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| **MCP Semivolatile Organics (mg/kg)** | | | | | | | | | | | | | | | | |
| Acenaphthene | 10,000 | 4 | 1000 | 1000 | - | ND(0.31) | - | ND(0.31) | - | ND(0.34) | - | ND(0.3) | - | ND(0.3) | - | ND(0.32) |
| Fluoranthene | 10,000 | 1000 | 1000 | 1000 | - | 1.4 | - | 0.25 | - | 0.75 | - | ND(0.23) | - | 0.27 | - | 1.5 |
| Naphthalene | 10,000 | 4 | 40 | 500 | - | ND(0.39) | - | ND(0.39) | - | ND(0.43) | - | ND(0.38) | - | ND(0.38) | - | ND(0.41) |
| Bis(2-Ethylhexyl)phthalate | 410 | 200 | 200 | 200 | - | 1.1 | - | ND(0.39) | - | ND(0.43) | - | ND(0.38) | - | ND(0.38) | - | ND(0.41) |
| Benzo(a)anthracene | 7.8 | 7 | 7 | 7 | - | 0.62 | - | ND(0.24) | - | 0.42 | - | ND(0.23) | - | ND(0.22) | - | 0.7 |
| Benzo(a)pyrene | 0.8 | 2 | 2 | 2 | - | 0.62 | - | ND(0.31) | - | 0.43 | - | ND(0.3) | - | ND(0.3) | - | 0.65 |
| Benzo(b)fluoranthene | 7.8 | 7 | 7 | 7 | - | 0.76 | - | 0.24 | - | 0.52 | - | ND(0.23) | - | ND(0.22) | - | 0.64 |
| Benzo(k)fluoranthene | 78 | 70 | 70 | 70 | - | 0.3 | - | ND(0.24) | - | ND(0.26) | - | ND(0.23) | - | ND(0.22) | - | 0.52 |
| Chrysene | 780 | 70 | 70 | 70 | - | 0.67 | - | ND(0.24) | - | 0.41 | - | ND(0.23) | - | ND(0.22) | - | 0.72 |
| Acenaphthylene | 10,000 | 1 | 600 | 10 | - | ND(0.31) | - | ND(0.31) | - | ND(0.34) | - | ND(0.3) | - | ND(0.3) | - | ND(0.32) |
| Anthracene | 10,000 | 1000 | 1000 | 1000 | - | 0.3 | - | ND(0.24) | - | ND(0.26) | - | ND(0.23) | - | ND(0.22) | - | 0.32 |
| Benzo(ghi)perylene | 10,000 | 1000 | 1000 | 1000 | - | 0.35 | - | ND(0.31) | - | ND(0.34) | - | ND(0.3) | - | ND(0.3) | - | 0.39 |
| Fluorene | 10,000 | 1000 | 1000 | 1000 | - | ND(0.39) | - | ND(0.39) | - | ND(0.43) | - | ND(0.38) | - | ND(0.38) | - | ND(0.41) |
| Phenanthrene | 10,000 | 10 | 500 | 500 | - | 1.2 | - | ND(0.24) | - | 0.3 | - | ND(0.23) | - | ND(0.22) | - | 1.1 |
| Dibenzo(a,h)anthracene | 0.8 | 0.7 | 0.7 | 0.7 | - | ND(0.23) | - | ND(0.24) | - | ND(0.26) | - | ND(0.23) | - | ND(0.22) | - | ND(0.24) |
| Indeno(1,2,3-cd)Pyrene | 7.8 | 7 | 7 | 7 | - | 0.4 | - | ND(0.31) | - | ND(0.34) | - | ND(0.3) | - | ND(0.3) | - | 0.34 |
| Pyrene | 10,000 | 1000 | 1000 | 1000 | - | 1.3 | - | 0.24 | - | 0.65 | - | ND(0.23) | - | 0.23 | - | 1.3 |
| Dibenzofuran | | 100 | | | - | ND(0.39) | - | ND(0.39) | - | ND(0.43) | - | ND(0.38) | - | ND(0.38) | - | ND(0.41) |
| 2-Methylnaphthalene | 10,000 | 0.7 | 80 | 300 | - | ND(0.47) | - | ND(0.47) | - | ND(0.51) | - | ND(0.45) | - | ND(0.45) | - | ND(0.49) |
| Phenol | 10,000 | 1 | 50 | 20 | - | ND(0.39) | - | ND(0.39) | - | ND(0.43) | - | ND(0.38) | - | ND(0.38) | - | ND(0.41) |
| **SUM** | **100** | | | | **-** | **9.02** | **-** | **0.73** | **-** | **3.48** | **-** | **-** | **-** | **0.5** | **-** | **8.18** |
| **MCP Total Metals (mg/kg)** | | | | | | | | | | | | | | | | |
| Total Antimony | 820 | | | | | ND (2.3) | | | | | | ND (2.2) | | | | |
| Total Arsenic | 7 | 20 | 20 | 20 | - | 4.2 | - | 4.6 | - | 5.3 | - | 2 | - | 2.3 | - | 5.8 |
| Total Barium | 10,000 | 1000 | 1000 | 1000 | - | 55 | - | 61 | - | 75 | - | 26 | - | 18 | - | 64 |
| Total Beryllium | 1 | | | | | 0.29 | | | | | | ND (0.22) | | | | |
| Total Cadmium | 1,000 | 2 | 2 | 2 | - | ND(0.46) | - | ND(0.46) | - | ND(0.51) | - | ND(0.44) | - | ND(0.46) | - | ND(0.47) |
| Total Chromium | 10,000 | 30 | 30 | 30 | - | 13 | - | 12 | - | 12 | - | 17 | - | 11 | - | 13 |
| Total Copper | 10,000 | | | | | 35 | | | | | | 19 | | | | |
| Total Lead | 500 | 300 | 300 | 300 | - | 92 | - | 110 | - | 60 | - | 2.6 | - | 11 | - | 99 |
| Total Mercury | 610 | 20 | 20 | 20 | - | 0.63 | - | ND(0.09) | - | 0.26 | - | ND(0.09) | - | ND(0.07) | - | 0.34 |
| Total Nickel | 10,000 | | | | | 10 | | | | | | ND(11) | | | | |
| Total Selenium | 10,000 | 400 | 400 | 400 | - | ND(2.3) | - | ND(2.3) | - | ND(2.6) | - | ND(2.2) | - | ND(2.3) | - | ND(2.4) |
| Total Silver | 10,000 | 100 | 100 | 100 | - | ND(0.46) | - | ND(0.46) | - | ND(0.51) | - | ND(0.44) | - | ND(0.45) | - | ND(0.47) |
| Total Thallium | 140 | | | | | ND(2.3) | | | | | | ND(2.7) | | | | |
| Total Zinc | 10000 | | | | | 97 | | | | | | 29 | | | | |
| **TCLP Metals by EPA 1311 (mg/l)** | | | | | | | | | | | | | | | | |
| Lead, TCLP | 5 | | | | | | | 0.85 | | | - | - | - | - | | |
| Mercury, TCLP | 0.2 | | | | | | | | | | | | | | | |
| **MCP Volatile Organics by 5035 High (mg/kg)** | | | | | | | | | | | | | | | | |
| Tetrachloroethene | 110 | 1 | 10 | 30 | ND(0.11) | - | ND(0.072) | - | ND(0.085) | - | ND(0.074) | - | ND(0.06) | - | ND(0.062) | - |
| Benzene | 200 | 2 | 30 | 30 | ND(0.11) | - | ND(0.072) | - | ND(0.085) | - | ND(0.074) | - | ND(0.06) | - | ND(0.062) | - |
| Toluene | 10,000.00 | 30 | 500 | 500 | ND(0.17) | - | ND(0.11) | - | ND(0.13) | - | ND(0.11) | - | ND(0.09) | - | ND(0.092) | - |
| Ethylbenzene | 10,000 | 40 | 500 | 500 | ND(0.11) | - | ND(0.072) | - | ND(0.085) | - | ND(0.074) | - | ND(0.06) | - | ND(0.062) | - |
| Trichloroethene | 520 | 0.3 | 2 | 90 | ND(0.11) | - | ND(0.072) | - | ND(0.085) | - | ND(0.074) | - | ND(0.06) | - | ND(0.062) | - |
| Methyl tert butyl ether | 10,000 | 0.1 | 100 | 100 | ND(0.23) | - | ND(0.14) | - | ND(0.17) | - | ND(0.15) | - | ND(0.12) | - | ND(0.12) | - |
| p/m-Xylene | Total | 300 | 300 | 500 | ND(0.23) | - | ND(0.14) | - | ND(0.17) | - | ND(0.15) | - | ND(0.12) | - | ND(0.12) | - |
| o-Xylene | 10,000 | 300 | 300 | 500 | ND(0.23) | - | ND(0.14) | - | ND(0.17) | - | ND(0.15) | - | ND(0.12) | - | ND(0.12) | - |
| cis-1,2-Dichloroethene | 10,000 | 0.3 | 0.4 | 100 | ND(0.11) | - | ND(0.072) | - | ND(0.085) | - | ND(0.074) | - | ND(0.06) | - | ND(0.062) | - |
| n-Butylbenzene | | | | | ND(0.11) | - | ND(0.072) | - | ND(0.085) | - | ND(0.074) | - | ND(0.06) | - | ND(0.062) | - |
| sec-Butylbenzene | | | | | ND(0.11) | - | ND(0.072) | - | ND(0.085) | - | ND(0.074) | - | ND(0.06) | - | ND(0.062) | - |
| Naphthalene | 10,000 | 4 | 40 | 500 | ND(0.46) | - | ND(0.29) | - | ND(0.34) | - | ND(0.3) | - | ND(0.24) | - | ND(0.25) | - |
| n-Propylbenzene | | 100 | | | ND(0.11) | - | ND(0.072) | - | ND(0.085) | - | ND(0.074) | - | ND(0.06) | - | ND(0.062) | - |
| **SUM** | | | | | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| **Petroleum Hydrocarbon Quantitation (mg/kg)** | | | | | | | | | | | | | | | | |
| TPH | 2500 | 1000 | 1000 | 1000 | - | 154 | - | 235 | - | ND(41.8) | - | ND(36) | - | ND(37.7) | - | 257 |
| **Volatile Petroleum Hydrocarbons (mg/kg)** | | | | | | | | | | | | | | | | |
| C9-C10 Aromatics | | 100 | 100 | 100 | 26.9 | - | - | - | - | - | - | - | - | - | - | - |
| C5-C8 Aliphatics | | 100 | 100 | 100 | 40.8 | - | - | - | - | - | - | - | - | - | - | - |
| C9-C12 Aliphatics | | 1000 | 1000 | 1000 | 19.7 | - | - | - | - | - | - | - | - | - | - | - |
| **Extractable Petroleum Hydrocarbons (mg/kg)** | | | | | | | | | | | | | | | | |
| C9-C18 Aliphatics | | 1000 | 1000 | 1000 | - | ND(7.68) | - | - | - | - | - | - | - | - | - | - |
| C19-C36 Aliphatics | | 3000 | 3000 | 3000 | - | 27.5 | - | - | - | - | - | - | - | - | - | - |
| C11-C22 Aromatics | | 1000 | 1000 | 1000 | - | 25.3 | - | - | - | - | - | - | - | - | - | - |
| **Soil Disposal Recommendations** | | | | | **UNLINED LANDFILL** | | **UNLINED LANDFILL** | | **UNLINED LANDFILL** | | **UNLINED LANDFILL** | | **UNLINED LANDFILL** | | **UNLINED LANDFILL** | |

ND(1.0)- none detected lab detection limit is shown
Blank- compound not analyzed
Shading-concentration exceeds applicable RCS-1 reportable concentration

TABLE 2

**ANALYTICAL REST RESULTS - ORGANIC SOIL**
**UNLINED LANDFILL- SITE DISP. PKG**
Boylston West, Boston; Project No. 4532

| LOCATION | Reuse Levels Portsmouth, RI Landfill Industrial/Commercial RIDEM DECs | Reportable Concentrations RCS-1 | Method 1 S-1 GW-2 | Method 1 S-1 GW-3 | GP-123A S6A 13-14 | GP-123A S6A-S9 13-20 COMPOSITE | GP-130 S9 18'-20' | GP-130 S7A-S9 15'-20' COMP | GP-132 S10 20'-22' | GP-132 S7-S11 14'-23' | GP-139 S13 24'-26' | GP-139 S11-S14 20'-27' COMP | GP-140 S10 18'-20' | GP-140 S10-S12 18'-24' | (GP-141) G-104 S9 16'-18' | (GP-141) G-104 S8-S11 14'-20.5 COMP | (GP-141) G-104 S8-S11 14'-20.5 COMP | GP-142 S7A-S11 13'-20.5' COMP | GP-142 S8 14'-16' |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLING DATE | | | | | 3/7/2012 | 3/7/2012 | 2/23/2012 | 2/23/2012 | 2/23/2012 | 2/23/2012 | 2/29/2012 | 2/29/2012 | 2/29/2012 | 2/29/2012 | 2/22/2012 | 2/22/2012 | 2/22/2012 | 2/23/2012 | 2/23/2012 |
| LAB SAMPLE ID | | | | | L1203893-15 | L1203893-16 | L1203128-03 | L1203128-04 | L1203128-21 | L1203128-22 | L1203429-11 | L1203429-12 L1203429-12 R2 L1203429-12 R3 | L1203429-21 | L1203429-22 L1203429-22 R4 L1203429-22 R5 L1303484-05 | L1203067-05 | L1203067-06 | L1203067-06 R1 | L1203128-23 L1303484-06 | L1203128-24 |
| SAMPLE TYPE | | | | | Organics | Organics | Organics | Organics | Organics | Organics | Organics | Organics | Organics | Organics | Organics | Organics | | Organics | Organics |
| SAMPLE DEPTH (ft.) | | | | | 13-14' | 13-20' | 18-20' | 15-20' | 20-22' | 14-23' | 24-26' | 20-27' | 18-20' | 18-24' | 16-18' | 14-20.5' | | 13-20.5' | 14-16' |
| **General Chemistry** | | | | | | | | | | | | | | | | | | | |
| Specific Conductance (umhos/cm) | | | | | - | 160 | - | 340 | - | 410 | - | 710 | - | 510 | - | 850 | - | 570 | - |
| Total Solids (%) | | | | | 53 | 53 | 59 | 59 | 65 | 65 | 76 | 76 | 70 | 70 | 48 | 48 | - | 42 | 42 |
| pH (SU) | | | | | - | 7 | - | 7.1 | - | 7.1 | - | 7.9 | - | 7.8 | - | 7.4 | - | 7.4 | - |
| Cyanide, Reactive (mg/kg) | | | | | - | ND(10) | - | ND(10) | - | ND(10) | - | ND(10) | - | ND(10) | - | ND(10) | - | ND(10) | - |
| Sulfide, Reactive (mg/kg) | | | | | - | ND(10) | - | ND(10) | - | ND(10) | - | ND(10) | - | ND(10) | - | ND(10) | - | ND(10) | - |
| Oxidation/Reduction Potential (mv) | | | | | - | - | - | - | - | 93 | - | - | - | - | - | - | - | - | - |
| Ignitability | | | | | - | NI | - | NI | - | NI | - | NI | - | NI | - | NI | - | NI | - |
| Chromium, Hexavalent | | 30 | 30 | 30 | - | - | - | - | - | ND(1.2) | - | - | - | - | - | - | - | - | - |
| **MCP Polychlorinated Biphenyls (mg/kg)** | | | | | | | | | | | | | | | | | | | |
| **SUM** | **10** | **2** | **2** | **2** | **-** | **ND(0.0604)** | **-** | **ND(0.0558)** | **-** | **ND(0.0492)** | **-** | **ND(0.0416)** | **-** | **ND(0.046)** | **-** | **ND(0.0668)** | **ND(0.0656)** | **ND(0.0755)** | **-** |
| **MCP Semivolatile Organics (mg/kg)** | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | 10,000 | 4 | 1000 | 1000 | - | ND(0.48) | - | ND(0.85) | - | ND(0.39) | - | ND(1.7) | - | ND(0.36) | - | ND(1) | - | ND(1.2) | - |
| Fluoranthene | 10,000 | 1000 | 1000 | 1000 | - | ND(0.36) | - | ND(0.64) | - | ND(0.29) | - | ND(1.3) | - | ND(0.27) | - | ND(0.79) | - | ND(0.93) | - |
| Naphthalene | 10,000 | 4 | 40 | 500 | - | ND(0.6) | - | ND(1.1) | - | ND(0.49) | - | ND(2.1) | - | ND(0.45) | - | ND(1.3) | - | ND(1.5) | - |
| Bis(2-Ethylhexyl)phthalate | 410 | 200 | 200 | 200 | - | 6.8 | - | ND(1.1) | - | ND(0.49) | - | ND(2.1) | - | ND(0.45) | - | ND(1.3) | - | ND(1.5) | - |
| Benzo(a)anthracene | 7.8 | 7 | 7 | 7 | - | ND(0.36) | - | ND(0.64) | - | ND(0.29) | - | ND(1.3) | - | ND(0.27) | - | ND(0.79) | - | ND(0.93) | - |
| Benzo(a)pyrene | 0.8 | 2 | 2 | 2 | - | ND(0.48) | - | ND(0.85) | - | ND(0.39) | - | ND(1.7) | - | ND(0.36) | - | ND(1) | - | ND(1.2) | - |
| Benzo(b)fluoranthene | 7.8 | 7 | 7 | 7 | - | ND(0.36) | - | ND(0.64) | - | ND(0.29) | - | ND(1.3) | - | ND(0.27) | - | ND(0.79) | - | ND(0.93) | - |
| Benzo(k)fluoranthene | 78 | 70 | 70 | 70 | - | ND(0.36) | - | ND(0.64) | - | ND(0.29) | - | ND(1.3) | - | ND(0.27) | - | ND(0.79) | - | ND(0.93) | - |
| Chrysene | 780 | 70 | 70 | 70 | - | ND(0.36) | - | ND(0.64) | - | ND(0.29) | - | ND(1.3) | - | ND(0.27) | - | ND(0.79) | - | ND(0.93) | - |
| Acenaphthylene | 10,000 | 1 | 600 | 10 | - | ND(0.48) | - | ND(0.85) | - | ND(0.39) | - | ND(1.7) | - | ND(0.36) | - | ND(1) | - | ND(1.2) | - |
| Anthracene | 10,000 | 1000 | 1000 | 1000 | - | ND(0.36) | - | ND(0.64) | - | ND(0.29) | - | ND(1.3) | - | ND(0.27) | - | ND(0.79) | - | ND(0.93) | - |
| Benzo(ghi)perylene | 10,000 | 1000 | 1000 | 1000 | - | ND(0.48) | - | ND(0.85) | - | ND(0.39) | - | ND(1.7) | - | ND(0.36) | - | ND(1) | - | ND(1.2) | - |
| Fluorene | 10,000 | 1000 | 1000 | 1000 | - | ND(0.6) | - | ND(1.1) | - | ND(0.49) | - | ND(2.1) | - | ND(0.45) | - | ND(1.3) | - | ND(1.5) | - |
| Phenanthrene | 10,000 | 10 | 500 | 500 | - | ND(0.36) | - | ND(0.64) | - | ND(0.29) | - | ND(1.3) | - | ND(0.27) | - | ND(0.79) | - | ND(0.93) | - |
| Dibenzo(a,h)anthracene | 0.8 | 0.7 | 0.7 | 0.7 | - | ND(0.36) | - | ND(0.64) | - | ND(0.29) | - | ND(1.3) | - | ND(0.27) | - | ND(0.79) | - | ND(0.93) | - |
| Indeno(1,2,3-cd)Pyrene | 7.8 | 7 | 7 | 7 | - | ND(0.48) | - | ND(0.85) | - | ND(0.39) | - | ND(1.7) | - | ND(0.36) | - | ND(1) | - | ND(1.2) | - |
| Pyrene | 10,000 | 1000 | 1000 | 1000 | - | ND(0.36) | - | ND(0.64) | - | ND(0.29) | - | ND(1.3) | - | ND(0.27) | - | ND(0.79) | - | ND(0.93) | - |
| Phenol | 10,000 | 1 | 50 | 20 | - | ND(0.6) | - | ND(1.1) | - | ND(0.49) | - | ND(2.1) | - | ND(0.45) | - | **2.9** | - | ND(1.5) | - |
| 3-Methylphenol/4-Methylphenol | | 500 | | | - | 1.2 | - | 2.5 | - | ND(0.7) | - | ND(3) | - | ND(0.65) | - | 4.5 | - | ND(2.2) | - |
| **SUM** | **100** | | | | **-** | **8** | **-** | **2.5** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **7.4** | **-** | **-** | **-** |
| **MCP Total Metals (mg/kg)** | | | | | | | | | | | | | | | | | | | |
| Total Antimony | 820 | | | | | | | | | | | ND(2.7) | | | | | | ND(4.5) | |
| Total Arsenic | 7 | 20 | 20 | 20 | - | 6.4 | - | 6.9 | - | 6 | - | 4 | - | 3.1 | - | 4.1 | - | 3.9 | - |
| Total Barium | 10,000 | 1000 | 1000 | 1000 | - | 33 | - | 26 | - | 23 | - | 18 | - | 6.5 | - | 24 | - | 14 | - |
| Total Beryllium | 1 | | | | | | | | | | | 0.43 | | | | | | 0.5 | |
| Total Cadmium | 1,000 | 2 | 2 | 2 | - | ND(0.71) | - | ND(0.65) | - | ND(0.59) | - | ND(0.54) | - | ND(0.54) | - | ND(0.79) | - | ND(0.9) | - |
| Total Chromium | 10,000 | 30 | 30 | 30 | - | 24 | - | 25 | - | 23 | - | 18 | - | 11 | - | 24 | - | 19 | - |
| Total Copper | 10,000 | | | | | | | | | | | 8.2 | | | | | | 9.7 | |
| Total Lead | 500 | 300 | 300 | 300 | - | 19 | - | 9.9 | - | 11 | - | 4 | - | 3.7 | - | 5.2 | - | 7.5 | - |
| Total Mercury | 610 | 20 | 20 | 20 | - | ND(0.15) | - | ND(0.12) | - | ND(0.12) | - | ND(0.09) | - | ND(0.11) | - | ND(0.14) | - | ND(0.17) | - |
| Total Nickel | 10,000 | | | | | | | | | | | ND(11) | | | | | | ND(11) | |
| Total Selenium | 10,000 | 400 | 400 | 400 | - | ND(3.5) | - | ND(3.2) | - | ND(2.9) | - | ND(2.7) | - | ND(2.7) | - | ND(4) | - | ND(4.5) | - |
| Total Silver | 10,000 | 100 | 100 | 100 | - | ND(0.71) | - | ND(0.65) | - | ND(0.59) | - | ND(0.5) | - | ND(0.54) | - | ND(0.79) | - | ND(0.9) | - |
| Total Thallium | 140 | | | | | | | | | | | ND(2.7) | | | | | | ND(4.5) | |
| Total Zinc | 10,000 | | | | | | | | | | | 29 | | | | | | 34 | |
| **TCLP Metals by EPA 1311 (mg/l)** | | | | | | | | | | | | | | | | | | | |
| Lead, TCLP | 5 | | | | - | - | | | | | - | - | - | - | | | | | |
| **MCP Volatile Organics by 5035 High (mg/kg)** | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | 110 | 1 | 10 | 30 | ND(0.22) | - | ND(0.24) | - | ND(0.24) | - | ND(0.11) | - | ND(0.17) | - | ND(0.22) | - | - | - | ND(0.33) |
| Benzene | 200 | 2 | 30 | 30 | ND(0.22) | - | ND(0.24) | - | ND(0.24) | - | ND(0.11) | - | ND(0.17) | - | 0.26 | - | - | - | ND(0.33) |
| Toluene | 10,000.00 | 30 | 500 | 500 | ND(0.33) | - | ND(0.35) | - | ND(0.36) | - | ND(0.17) | - | ND(0.26) | - | ND(0.33) | - | - | - | ND(0.49) |
| Ethylbenzene | 10,000 | 40 | 500 | 500 | ND(0.22) | - | ND(0.24) | - | ND(0.24) | - | ND(0.11) | - | ND(0.17) | - | ND(0.22) | - | - | - | ND(0.33) |
| 1,1-Dichloroethene | 9.5 | 3 | 40 | 500 | ND(0.22) | - | ND(0.24) | - | ND(0.24) | - | ND(0.11) | - | ND(0.17) | - | ND(0.22) | - | - | - | ND(0.33) |
| trans-1,2-Dichloroethene | 10,000 | 1 | 1 | 500 | ND(0.33) | - | ND(0.35) | - | ND(0.36) | - | ND(0.17) | - | ND(0.26) | - | ND(0.33) | - | - | - | ND(0.49) |
| Trichloroethene | 520 | 0.3 | 2 | 90 | ND(0.22) | - | ND(0.24) | - | ND(0.24) | - | ND(0.11) | - | ND(0.17) | - | ND(0.22) | - | - | - | ND(0.33) |
| p/m-Xylene | Total | 300 | 300 | 500 | ND(0.44) | - | ND(0.47) | - | ND(0.47) | - | ND(0.23) | - | ND(0.35) | - | ND(0.44) | - | - | - | ND(0.66) |
| o-Xylene | 10,000 | 300 | 300 | 500 | ND(0.44) | - | ND(0.47) | - | ND(0.47) | - | ND(0.23) | - | ND(0.35) | - | ND(0.44) | - | - | - | ND(0.66) |
| cis-1,2-Dichloroethene | 10,000 | 0.3 | 0.4 | 100 | ND(0.22) | - | ND(0.24) | - | **1.6** | - | ND(0.11) | - | **0.4** | - | ND(0.22) | - | - | - | ND(0.33) |
| n-Butylbenzene | | | | | ND(0.22) | - | ND(0.24) | - | ND(0.24) | - | ND(0.11) | - | ND(0.17) | - | ND(0.22) | - | - | - | ND(0.33) |
| sec-Butylbenzene | | | | | 0.24 | - | ND(0.24) | - | ND(0.24) | - | ND(0.11) | - | ND(0.17) | - | ND(0.22) | - | - | - | ND(0.33) |
| tert-Butylbenzene | | 100 | | | ND(0.88) | - | ND(0.95) | - | ND(0.95) | - | ND(0.45) | - | ND(0.7) | - | ND(0.87) | - | - | - | ND(1.3) |
| **SUM** | **10** | | | | **0.24** | **-** | **-** | **-** | **1.6** | **-** | **-** | **-** | **0.4** | **-** | **0.26** | **-** | **-** | **-** | **-** |
| **Petroleum Hydrocarbon Quantitation (mg/kg)** | | | | | | | | | | | | | | | | | | | |
| TPH | 2500 | 1000 | 1000 | 1000 | - | 348 | - | 135 | - | 86.3 | - | 49.2 | - | ND(46.7) | - | 412 | - | 812 | - |
| **Soil Disposal Recommendations** | | | | | **UNLINED LANDFILL** | | **UNLINED LANDFILL** | | **UNLINED LANDFILL** | | **UNLINED LANDFILL** | | **UNLINED LANDFILL** | | **UNLINED LANDFILL** | | | **UNLINED LANDFILL** | |

ND(1.0)- none detected lab detection limit is shown
Blank- compound not analyzed
Shading- concentration exceeds applicable RCS-1 reportable concentration

TABLE 8

BOYLSTON WEST

Supplemental Pre-characterization

Grid Cell Delineation Data

| LOCATION | RCS-1 | Reuse Levels Portsmouth, RI Landfill<br><br>Industrial/Commercial RIDEM DECs | | B-207 6-11.5 COMPOSITE | B-208 7-14 COMPOSITE | B-217 0-7 COMPOSITE | B-217 7-14 COMPOSITE | B-236 0-8 COMPOSITE | B-236 14-16 S-8 | B-240 8-14 COMPOSITE |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLING DATE | | | | 6/21/2012 | 6/21/2012 | 6/29/2012 | 6/29/2012 | 6/20/2012 | 6/20/2012 | 6/27/2012 |
| LAB SAMPLE ID | | | | L1211115-05 | L1211115-08 | L1211686-07 | L1211686-08 | L1211008-03 | L1211008-04 | L1211467-22 |
| SAMPLE TYPE | | | Units | FILL | FILL | FILL | FILL | FILL | FILL | FILL |
| Solids, Total (%) | | | % | 70 | - | 90 | 79 | 82 | 88 | 78 |
| **MCP Total Metals (mg/kg)** | | | | | | | | | | |
| Lead, Total | 300 | 500 | mg/kg | 120 | - | 160 | - | - | - | - |
| Mercury, Total | 20 | 610 | mg/kg | - | - | - | - | 1.6 | - | - |
| **TCLP Metals by EPA 1311 (mg/kg)** | | | | | | | | | | |
| Lead, TCLP | | 5 | mg/l | - | 2.1 | - | - | - | - | - |
| **Extractable Petroleum Hydrocarbons (mg/kg)** | | | | | | | | | | |
| C9-C18 Aliphatics | 1000 | | mg/kg | - | - | | ND (8.22) | - | - | - |
| C19-C36 Aliphatics | 3000 | | mg/kg | - | - | | ND (8.22) | - | - | - |
| C11-C22 Aromatics, Adjusted | 1000 | | mg/kg | - | - | | 13.3 | - | - | - |
| **Total EPH (Sum = TPH)** | | **2,500** | **mg/kg** | | | | | | | |
| **MCP Volatile Organics by 5035 High (mg/kg)** | | | | | | | | | | |
| Benzene | 2 | 200 | mg/kg | - | - | - | - | - | ND(0.12) | - |
| Toluene | 30 | 10,000 | mg/kg | - | - | - | - | - | ND(0.18) | - |
| Ethylbenzene | 40 | 10,000 | mg/kg | - | - | - | - | - | ND(0.12) | - |
| Trichloroethene | 0.3 | 520 | mg/kg | - | - | - | - | - | ND(0.12) | - |
| p/m-Xylene | 300 | total | mg/kg | - | - | - | - | - | ND(0.24) | - |
| o-Xylene | 300 | 10,000 | mg/kg | - | - | - | - | - | ND(0.24) | - |
| cis-1,2-Dichloroethene | 0.3 | 10,000 | mg/kg | - | - | - | - | - | ND(0.12) | - |
| n-Butylbenzene | | | mg/kg | - | - | - | - | - | 0.12 | - |
| sec-Butylbenzene | | | mg/kg | - | - | - | - | - | ND(0.12) | - |
| Naphthalene | 4 | | mg/kg | - | - | - | - | - | ND(0.47) | - |
| **SUM** | | | | **-** | **-** | | | **-** | **0.12** | |
| **Petroleum Hydrocarbon Quantitation (mg/kg)** | | | | | | | | | | |
| TPH | 1000 | 2,500 | mg/kg | 88.4 | - | - | - | - | - | 527 |

Bold - concentration exceeds RCS-1 standard
Shading - concentration exceeds unlined landfill acceptance criteria

TABLE 8

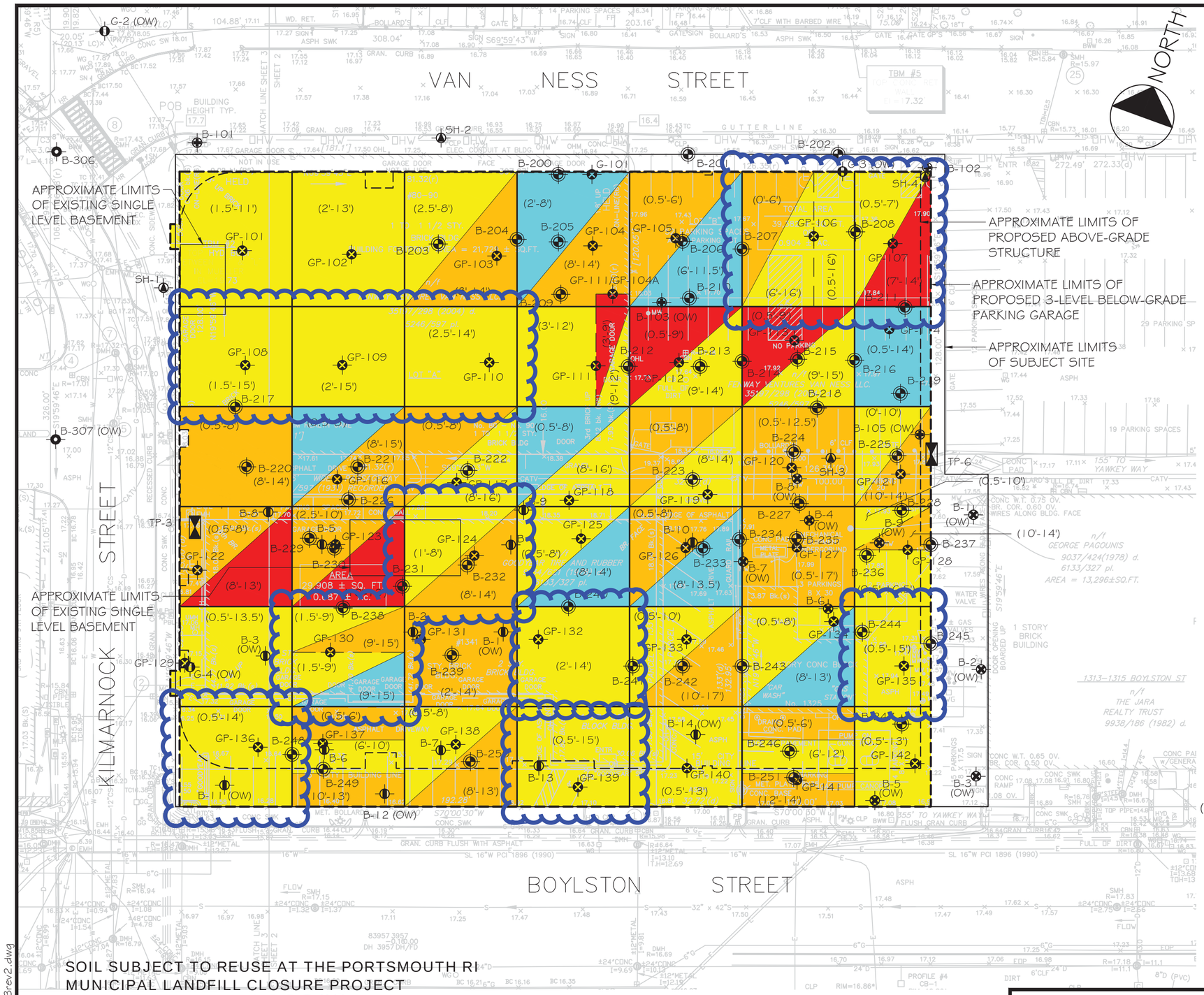
BOYLSTON WEST

Supplemental Pre-characterization

Grid Cell Delineation Data

| LOCATION | RCS-1 | Reuse Levels Portsmouth, RI Landfill<br><br>Industrial/Commercial RIDEM DECs | | B-241 10-17 | B-244 8-13 | B-248 S2 12-13 |
|---|---|---|---|---|---|---|
| SAMPLING DATE | | | | 6/25/2012 | 6/18/2012 | 6/18/2012 |
| LAB SAMPLE ID | | | | L1211296-09 | L1210922-10 | L1210922-08 |
| SAMPLE TYPE | | | Units | FILL | FILL | FILL |
| Solids, Total (%) | | | % | 84 | 77 | 83 |
| **MCP Total Metals (mg/kg)** | | | | | | |
| Lead, Total | 300 | 500 | mg/kg | - | - | - |
| Mercury, Total | 20 | 610 | mg/kg | - | - | - |
| **TCLP Metals by EPA 1311 (mg/kg)** | | | | | | |
| Lead, TCLP | | 5 | mg/l | - | | |
| **Extractable Petroleum Hydrocarbons (mg/kg)** | | | | | | |
| C9-C18 Aliphatics | 1000 | | mg/kg | - | | |
| C19-C36 Aliphatics | 3000 | | mg/kg | - | | |
| C11-C22 Aromatics, Adjusted | 1000 | | mg/kg | - | | |
| **Total EPH (Sum = TPH)** | | **2,500** | **mg/kg** | | | |
| **MCP Volatile Organics by 5035 High (mg/kg)** | | | | | | |
| Benzene | 2 | 200 | mg/kg | ND(0.079) | - | ND(0.077) |
| Toluene | 30 | 10,000 | mg/kg | ND(0.12) | - | ND(0.12) |
| Ethylbenzene | 40 | 10,000 | mg/kg | ND(0.079) | - | ND(0.077) |
| Trichloroethene | 0.3 | 520 | mg/kg | ND(0.079) | - | ND(0.077) |
| p/m-Xylene | 300 | total | mg/kg | ND(0.16) | - | ND(0.15) |
| o-Xylene | 300 | 10,000 | mg/kg | ND(0.16) | - | ND(0.15) |
| cis-1,2-Dichloroethene | 0.3 | 10,000 | mg/kg | ND(0.079) | - | ND(0.077) |
| n-Butylbenzene | | | mg/kg | ND(0.079) | - | ND(0.077) |
| sec-Butylbenzene | | | mg/kg | ND(0.079) | - | ND(0.077) |
| Naphthalene | 4 | | mg/kg | 0.51 | - | ND(0.31) |
| **SUM** | | | | **0.51** | | **ND** |
| **Petroleum Hydrocarbon Quantitation (mg/kg)** | | | | | | |
| TPH | 1000 | 2,500 | mg/kg | 423 | **1220** | - |

Bold - concentration exceeds RCS-1 standard
Shading - concentration exceeds unlined landfill acceptance criteria




## LEGEND

- — APPROXIMATE LOCATION OF BORING OR GEOPROBE PERFORMED BY GEOLOGIC EARTH EXPLORATION, INC. DURING THE PERIOD OF FEBRUARY 20 TO MARCH 12, 2012 FOR McPHAIL ASSOCIATES, LLC
- — APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE CORP. ON JANUARY 9, 2008 TO FEBRUARY 2008 FOR McPHAIL ASSOCIATES, INC.
- — APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE CORP. ON DECEMBER 8 AND 23, 2007 AND JANUARY 4, 2008 FOR McPHAIL ASSOCIATES, INC.
- — APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE CORP. ON JUNE 22 THROUGH 29, 2006 FOR McPHAIL ASSOCIATES, INC.
- — APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE CORP. ON APRIL 22, 2006 FOR McPHAIL ASSOCIATES, INC.
- — APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE CORP. ON FEBRUARY 25, 2006 FOR McPHAIL ASSOCIATES, INC.
- — APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE CORP. ON MARCH 11, 2006 FOR McPHAIL ASSOCIATES, INC.
- — APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE CORP. DURING THE PERIOD OF MARCH 17 THROUGH 25, 2005 UNDER CONTRACT TO McPHAIL ASSOCIATES, INC.
- — APPROXIMATE LOCATION OF BORING PERFORMED BY NEW ENGLAND BORING CONTRACTORS OF CT., INC. DURING THE PERIOD OF SEPTEMBER 28 TO OCTOBER 5, 2000 FOR McPHAIL ASSOCIATES, INC.
- — APPROXIMATE LOCATION OF BORING PERFORMED BY GUILD DRILLING CO., INC. DURING THE PERIOD OF MARCH 9 TO MARCH 30, 1994 FOR HALEY AND ALDRICH, INC.
- — APPROXIMATE LOCATION OF BORING PERFORMED BY GUILD DRILLING CO., INC. DURING THE PERIOD OF MARCH 10 TO 28, 1994 FOR HALEY AND ALDRICH, INC.
- — APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE CORP. DURING THE PERIOD OF JUNE 18, 2012 TO JULY 2, 2012 FOR McPHAIL ASSOCIATES, LLC
- — APPROXIMATE LOCATION OF TEST PIT PERFORMED BY J. DERENZO DURING MAY 2012 FOR McPHAIL ASSOCIATES, LLC

(OW) — INDICATES OBSERVATION WELL INSTALLED WITHIN COMPLETED BORING

GRAPHIC SCALE

30 0 30 60 120

## SOIL SUBJECT TO REUSE AT THE PORTSMOUTH RI MUNICIPAL LANDFILL CLOSURE PROJECT

- — UNLINED LANDFILL - REGULATED A
- — LINED LANDFILL - REGULATED B
- — ASPHALT BATCH PLANT - REGULATED C
- — OUT-OF-STATE NON-HAZARDOUS - REGULATED D
- — HAZARDOUS - REGULATED E

(1.5'-11') — DEPTH IN FEET MEASURED FROM THE TOP OF CONCRETE SLAB OR ASPHALT PAVEMENT

REFERENCE: THIS PLAN WAS PREPARED FROM 20-SCALED DRAWING ENTITLED, "PROJECT F TOPOGRAPHIC PLAN OF LAND" DATED MARCH 25, 2008 PREPARED BY GUNTHER ENGINEERING. THE APPROXIMATE LIMITS OF THE ABOVE GRADE STRUCTURE, BELOW GRADE PARKING GARAGE, AND OF THE SUBJECT SITE ARE REFERENCED FROM DRAWING C-4 ENTITLED, "UTILITY PLAN," WHICH WAS PROVIDED IN THE SCHEMATIC DESIGN SET DRAWINGS COMPILED BY THE PROJECT ARCHITECT, ELKUS MANFREDI ARCHITECTS, DATED DECEMBER 5, 2011.

McPHAIL ASSOCIATES, LLC
Geotechnical and Geoenvironmental Engineers
2269 Massachusetts Avenue
Cambridge, MA 02140
617/868-1420
617/868-1423 (Fax)

# BOYLSTON WEST

BOSTON MASSACHUSETTS

SOIL MANAGEMENT PLAN - FILL

FOR

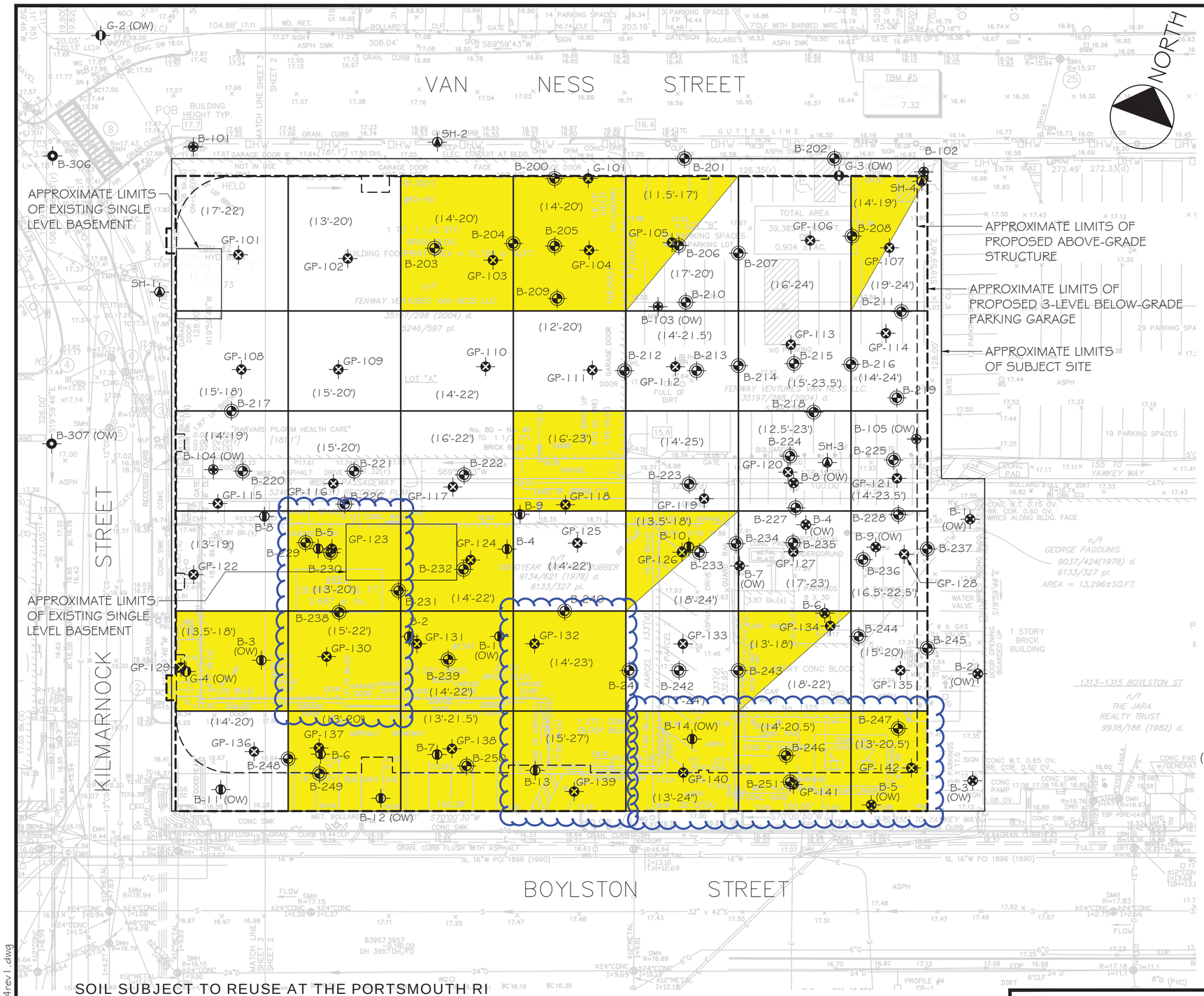
BOYLSTON WEST, LLC

BY

McPHAIL ASSOCIATES, LLC

| Date: DECEMBER 2012 | Dwn: F.G.P. | Chkd: A.L.D. | Scale: 1" = 30' |
|---|---|---|---|
| Project No: 4532 | | | FIGURE 3 |

FILE NAME: H:\Acad\OBS\4532\SMP\4532-F03rev2.dwg




## LEGEND

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- — APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE CORP. ON DECEMBER 8 AND 23, 2007 AND JANUARY 4, 2008 FOR McPHAIL ASSOCIATES, INC.
- — APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE CORP. ON JUNE 22 THROUGH 29, 2006 FOR McPHAIL ASSOCIATES, INC.
- — APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE CORP. ON APRIL 22, 2006 FOR McPHAIL ASSOCIATES, INC.
- — APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE CORP. ON FEBRUARY 25, 2006 FOR McPHAIL ASSOCIATES, INC.
- — APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE CORP. ON MARCH 11, 2006 FOR McPHAIL ASSOCIATES, INC.
- — APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE CORP. DURING THE PERIOD OF MARCH 17 THROUGH 25, 2005 UNDER CONTRACT TO McPHAIL ASSOCIATES, INC.
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- — APPROXIMATE LOCATION OF BORING PERFORMED BY GUILD DRILLING CO., INC. DURING THE PERIOD OF MARCH 9 TO MARCH 30, 1994 FOR HALEY AND ALDRICH, INC.
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- — APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE CORP. DURING THE PERIOD OF JUNE 18, 2012 TO JULY 2, 2012 FOR McPHAIL ASSOCIATES, LLC

(OW) — INDICATES OBSERVATION WELL INSTALLED WITHIN COMPLETED BORING

GRAPHIC SCALE

30 0 30 60 120

SOIL SUBJECT TO REUSE AT THE PORTSMOUTH RI MUNICIPAL LANDFILL CLOSURE PROJECT

— UNLINED LANDFILL - REGULATED A

— LIKE SITE - LESS THAN RCS-1

(17'-22') — DEPTH IN FEET MEASURED FROM THE TOP OF CONCRETE SLAB OR ASPHALT PAVEMENT

REFERENCE: THIS PLAN WAS PREPARED FROM 20-SCALED DRAWING ENTITLED, "PROJECT F TOPOGRAPHIC PLAN OF LAND" DATED MARCH 25, 2008 PREPARED BY GUNTHER ENGINEERING. THE APPROXIMATE LIMITS OF THE ABOVE GRADE STRUCTURE, BELOW GRADE PARKING GARAGE, AND OF THE SUBJECT SITE ARE REFERENCED FROM DRAWING C-4 ENTITLED, "UTILITY PLAN," WHICH WAS PROVIDED IN THE SCHEMATIC DESIGN SET DRAWINGS COMPILED BY THE PROJECT ARCHITECT, ELKUS MANFREDI ARCHITECTS, DATED DECEMBER 5, 2011.

McPHAIL ASSOCIATES, LLC
Geotechnical and Geoenvironmental Engineers
2269 Massachusetts Avenue
Cambridge, MA 02140
617/868-1420
617/868-1423 (Fax)

BOYLSTON WEST

BOSTON MASSACHUSETTS

SOIL MANAGEMENT PLAN - ORGANICS

FOR

BOYLSTON WEST, LLC

BY

McPHAIL ASSOCIATES, LLC

| Date: DECEMBER 2012 | Dwn: F.G.P. | Chkd: A.L.D. | Scale: 1" = 30' |
|---|---|---|---|
| Project No: 4532 | | | FIGURE 4 |

FILE NAME: H:\Acad\JOBS\4532\SMP\4532-E04rev1.dwg

**Massachusetts Department of Environmental Protection**
*Bureau of Waste Site Cleanup*

**BWSC112**

Release Tracking Number
3 - 30918

# BILL OF LADING (pursuant to 310 CMR 40.0030)

**A. LOCATION OF SITE OR DISPOSAL SITE WHERE REMEDIATION WASTE WAS GENERATED:**

1. Release Name/Location Aid: **BOYLSTON WEST**
2. Street Address: **1325 BOYLSTON ST**
3. City/Town: **BOSTON** 4. Zip Code: **02215-0000**

☐ 5. Check here if a Tier Classification Submittal has been provided to DEP for this disposal site:

☐ a. Tier 1A ☐ b. Tier 1B ☐ b. Tier 1C ☐ d. Tier II

6. If applicable provide the Permit Number: _____

**B. THIS FORM IS BEING USED TO:** (check one: B1-B4):

☑ 1. Submit a **Bill of Lading (BOL)** to transport Remediation Waste to Temporary Storage or a Receiving Facility. Response Actions associated with this BOL (check all that apply):

- ☐ a. Immediate Response Action (IRA)
- ☑ b. Release Abatement Measure (RAM)
- ☐ c. Downgradient Property Status (DPS)
- ☐ d. Utility Release Abatement Measure (URAM)
- ☐ e. Comprehensive Response Actions
- ☐ f. Limited Removal Action (LRA): (must be retained pursuant to 310 CMR 40.0034(6); can't be submitted via eDEP)
- ☐ g. Other _____

☐ 2. Submit an Attestation of Completion of **Shipment to Temporary Storage** (Sections C, F and J are not required):

☐ 3. Submit an Attestation of Completion of **Shipment to a Receiving Facility** (Sections C, F and J are not required):

☐ 4. Certify that Remediation Waste Was **Not Shipped, and the Bill of Lading is Void.** (Sections C, D, E, and F are not required)

5. Date Bill of Lading submitted to the Department: _____ (mm/dd/yyyy) b. eDEP Transaction ID: _____

6. Period of Generation Associated with this Bill of Lading **3/1/2013** (mm/dd/yyyy) to **3/1/2014** (mm/dd/yyyy)

**(All sections of this transmittal form must be filled out unless otherwise noted)**

The Bill of Lading is not considered complete until the Attestation of Completion of Shipment is received by the Department.

**C. DESCRIPTION OF WASTE AND WASTE SOURCE:**

1. Contaminated Media /Debris (check all that apply):

☑ a. Soil ☐ b. Groundwater ☐ c. Surface Water ☐ d. Sediment ☐ e. Vegetation or Organic Debris

☐ f. Demolition/Construction Waste ☐ g. Inorganic Absorbent Materials ☐ h. Other: _____

2. Uncontainerized Waste (check all that apply):

☐ a. Inorganic Absorbent Materials ☐ b. Other: _____

DRAFT

**Massachusetts Department of Environmental Protection**
*Bureau of Waste Site Cleanup*

**BILL OF LADING** (pursuant to 310 CMR 40.0030)

**BWSC112**

Release Tracking Number
3 - 30918

**C. DESCRIPTION OF WASTE AND WASTE SOURCE (cont.):**

3. Containerized Waste (check all that apply):

☐ a. Tank Bottoms/Sludges ☐ b. Containers ☐ c. Drums ☐ d. Engineered Impoundments

☐ e. Other:

4. Estimated Quantity: 9,000 ☐ Tons ☑ Cu. Yds. ☐ Gallons

5. Contaminant Source (check one):

☐ a. Transportation Accident ☐ b. Underground Storage Tank ☐ c. Brownfields Redevelopment

☑ d. Other: HISTORIC SITE USE/URBAN FILL

6. Type of Contaminant (check all that apply):

☐ a. Gasoline ☐ b. Diesel Fuel ☐ c. #2 Fuel Oil ☐ d. #4 Fuel Oil ☐ e. #6 Fuel Oil ☐ f. Jet Fuel

☐ g. Waste Oil ☐ h. Kerosene ☑ i. Chlorinated Solvents ☑ j. Urban Fill ☐ k. Other:

7. Constituents of Concern (check all that apply):

☐ a. As ☐ b. Cd ☐ c. Cr ☑ d. Pb ☐ e. Hg ☑ f. EPH/TPH ☐ g. VPH

☐ h. PCBs ☑ i. VOCs ☑ j. SVOCs ☐ k. Other:

8. If applicable, check the box for the Reportable Concentration Category of the site:

☑ a. RCS-1 ☐ b. RCS-2 ☐ c. RCGW-1 ☐ d. RCGW-2

9. Remediation Waste Characterization Documentation (check at least one):

☑ a. Site History Information ☑ b. Sampling Analytical Methods and Procedures ☑ c. Laboratory Data

☑ d. Field Screening Data ☑ e. Characterization Documentation previously submitted to the Department

i. Date submitted: 7/23/2012 (mm/dd/yyyy) ii. Type of Documentation: RAM PLAN

**D. TRANSPORTER OR COMMON CARRIER INFORMATION:**

1. Transporter/Common Carrier Name: BOSTON ENVIRONMENTAL CORPORATION

2. Contact First Name: JOHN 3. Last Name: COLE

4. Street: 338 HOWARD STREET 5. Title: DIRECTOR OF OPERATIONS

6. City/Town: BROCKTON 7. State: MA 8. Zip Code: 02302-0000

9. Telephone: (508) 897-8025 10. Ext: 11. Fax:

DRAFT

**Massachusetts Department of Environmental Protection**
*Bureau of Waste Site Cleanup*

**BWSC112**

Release Tracking Number
3 - 30918

**BILL OF LADING** (pursuant to 310 CMR 40.0030)

**E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION:**

1. Operator/Facility Name: SITE RESTORATION TECHNOLOGIES/FORMER PORTSMOUTH LANDFILL
2. Contact First Name: DAVID 3. Last Name: PETER
4. Street: PARK AVENUE 5. Title: MANAGER
6. City/Town: PORTSMOUTH 7. State: RI 8. Zip Code: 02871-0000
9. Telephone: (508) 380-1267 10. Ext: 11. Fax:
12. Type of Facility: (Check one)
   a. Temporary Storage i. Period of Temporary Storage: _____ (mm/dd/yyyy) to _____ (mm/dd/yyyy)
   ii. Reason for Temporary Storage:
   ☐ b. Asphalt Batch/Hot Mix ☐ c. Landfill/Disposal ☐ d. Landfill/Structural Fill ☑ e. Landfill/Daily Cover
   ☐ f. Asphalt Batch/Cold Mix ☐ g. Thermal Processing ☐ h. Incinerator ☑ i. Other: SHAPING/FINAL CAP
13. Division of Hazardous Waste/Class A Permit Number:
14. Division of Solid Waste Permit Number:
15. EPA Identification Number:

**F. LSP SIGNATURE AND STAMP:**

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this submittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief, the assessment action(s) undertaken to characterize the Remediation Waste which is (are) the subject of this submittal for acceptance at the facility identified in this submittal comply with applicable provisions of 310 CMR 40.0000, and such facility is permitted to accept Remediation Waste having the characteristics described in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #: 3188
2. First Name: JOSEPH G 3. Last Name: LOMBARDO JR
4. Telephone: (617) 349-7344 5. Ext.
6. FAX:
7. Signature:
8. Date: (mm/dd/yyyy)
9. LSP Stamp:

DRAFT

**Massachusetts Department of Environmental Protection**
*Bureau of Waste Site Cleanup*

**BWSC112**

**BILL OF LADING** **(pursuant to 310 CMR 40.0030)**

Release Tracking Number
3 - 30918

**G. PERSON SUBMITTING BILL OF LADING:**

1. Check all that apply: ☐ a. change in contact name ☐ b. Change of address ☑ c. change in person undertaking response actions

2. Name of Organization: BOYLSTON WEST LLC

3. Contact First Name: CHARLES 4. Last Name: ROLLINS

5. Street: 333 NEWBURY STREET 6. Title: AS CONST MGR NOT INDIVIDUALLY

7. City/Town: BOSTON 8. State: MA 9. Zip Code: 02115-0000

10. Telephone: (617) 247-3434 11. Ext: 12. Fax:

**H. RELATIONSHIP TO SITE OF PERSON SUBMITTING BILL OF LADING:** ☐ Check here to change relationship

☑ 1. RP or PRP: ☐ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter

☑ e. Other RP or PRP Specify: ELIGIBLE PERSON DEF. BY MGL C.21E, S.2

☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c.21E, s.2):

☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c.21E, s.5(j))

☐ 4. Any Other person Undertaking Response Actions: Specify Relationship:

**I. REQUIRED ATTACHMENTS AND SUBMITTALS :**

☐ 1. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approvals issued by DEP or EPA. If the box is checked, you must attach a statement identifying the applicable provisions thereof.

☐ 2. Check here if any non-updatable information provided on this form is incorrect, e. g. property address. Send corrections to BWSC.eDEP@state.ma.us

☑ 3. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.

**J. CERTIFICATION OF PERSON SUBMITTING BILL OF LADING :**

1. I, _____, attest under the pains and penalties or perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: 3. Title: AS CONST MGR NOT INDIVIDUALLY

4. For BOYLSTON WEST LLC 5. Date:
(Name of person or entity recorded in Section H) (mm/dd/yyyy)

DRAFT

**Massachusetts Department of Environmental Protection**
*Bureau of Waste Site Cleanup*

**BILL OF LADING** **(pursuant to 310 CMR 40.0030)**

**BWSC112**

Release Tracking Number
3 - 30918

**J. CERTIFICATION OF PERSON SUBMITTING BILL OF LADING (cont.) :**

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section H.

7. Street:

8. City/Town: 9. State: 10. Zip Code:

11. Telephone: 12. Ext: 13. Fax:

**YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO $10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.**

Date Stamp (MassDEP USE ONLY):

DRAFT

Site Restoration Technologies

# Portsmouth, RI Municipal Landfill Closure Project
# Park Avenue, Portsmouth, Rhode Island

## Soil Submittal Checklist

_✓_ Complete and submit **Lab Testing** for TPH, EPA 8260, EPA 8270, 13 Priority Metals.
_✓_ Verify that test results meet RI DEM Direct Exposure Criteria-Industrial Standards.
_✓_ One test required for every 2500 cubic yards (3750 tons).
(Exceedances of Industrial Standards may, in some cases, be accepted by RI DEM)

_✓_ Complete and submit **Material Submittal Request** form.

_✓_ Complete and submit **Environmental Professional Certification** after reviewing the **Beneficial Use Determination** and **Remedial Approval** documents.

_____ Receive, sign and submit the **Proposal/Contract** for soil tipping.

_✓_ Complete and submit **Material Shipping Record and Bill of Lading.**

_____ Arrange for **trucking** to Park Avenue Landfill.

_____ Receive **final approval** and **schedule** for shipping soil.

18 Shoreline Dr., Foxboro, MA 02035 • (508) 380-1267 • FAX (508) 543-3002
www.siteretech.com

McPHAIL ASSOCIATES, LLC

March 11, 2013

Portsmouth, RI Municipal Landfill Closure Project
c/o Site Restoration Technologies
18 Shoreline Drive
Foxboro, MA 02035

Reference: Request for Approval of Soil Reuse at Portsmouth, RI Municipal Landfill Closure Project; Portsmouth, Rhode Island
Boston College, St. Mary's Hall Renovation; Chestnut Hill, Massachusetts

Ladies and Gentlemen:

The purpose of this letter is to request approval for the reuse at the Portsmouth, Rhode Island Municipal Landfill Closure Project of soil generated from the construction related to the renovations to St. Mary's Hall at the Boston College campus located at 140 Commonwealth Avenue in Chestnut Hill, Massachusetts. The quantity of fill material currently estimated to be reused off-site at the Portsmouth Landfill is approximately 2,500 cubic yards.

The material for which approval is requested consists of fill material that exhibited the presence of the compounds analyzed for concentrations that meet the requirements for off-site re-use at a Massachusetts Unlined Landfill as well as meeting the requirements of the Rhode Island Department of Environmental Management (RI DEM) Direct Exposure Criteria (DEC) Industrial/Commercial Standards.

In general, the material consists of a loose to compact mixture of light to dark brown silty gravelly sand and light to dark brown sandy gravel with some silt and contains variable amounts of ash and cinders. Soil descriptions are based on the MIT Soil Classification System.

The proposed development at the subject site includes the construction of a one-story below-grade parking garage and the installation of new below-grade utilities at the northern, eastern and southern areas that surround St. Mary's Hall.

The site of the proposed parking garage at St. Mary's Hall is associated with a recently identified Massachusetts Contingency Plan (MCP) release site, which remains open under the MCP. This site is identified with Release Tracking Number (RTN) 3-31364. During November 2012, during soil pre-characterization in anticipation of site redevelopment, analytical results of soil samples identified Reportable Concentrations of total metals (lead) and VOCs (naphthalene) at localized areas across within the footprint of the proposed parking garage. Groundwater was not affected by a reportable release of the above-identified compounds. On February 1, 2013, the DEP was notified of these releases in soil as a 120-day reporting condition to which RTN 3-31364 was assigned.

The RTN 3-31364 MCP site is in compliance with the regulatory provisions of the MCP. The releases of lead and VOCs (naphthalene) are considered attributable to the nature of the historic fill material used during construction of the courtyard around 1930, and not to a specific release of OHM at the site. A RAM Plan was submitted to the DEP on February 13, 2013 under RTN 3-31364 which addresses planned construction and associated remediation activities for the proposed parking garage. Therefore, 2,000

GEOTECHNICAL AND GEOENVIRONMENTAL ENGINEERS
2269 Massachusetts Avenue
Cambridge, Massachusetts 02140
617 / 868-1420

cubic yards of fill material originating from the excavation for the proposed parking garage at St. Mary's Hall meeting the RI DEM DEC Industrial/Commercial standards would be delivered to the Portsmouth, RI Municipal Landfill Closure Project from the subject site under the attached Bill of Lading (BOL).

The results of laboratory analysis of soil samples obtained from proposed below-ground utility alignments to the northern, eastern and southern areas that surround St. Mary's Hall indicate that the soil has not been affected by the above releases of lead and VOCs (naphthalene). Hence, approximately 500 cubic yards of fill material, originating from the excavation for proposed below-grade utilities surrounding St. Mary's Hall, meeting the RI DEM DEC Industrial/Commercial standards would be delivered to the Portsmouth Municipal Landfill from the subject site under the attached Material Shipping Record (MSR).

Historical research indicated that the St. Mary's Hall site was undeveloped land and was formerly utilized for grazing and pastures until the construction of St. Mary's Hall around 1917. In 1930, an addition to St. Mary's Hall included placement of up to 14 feet of backfill on the eastern side of the building and construction of a level courtyard area.

The following presents supporting information, including a summary of analytical testing performed on five (5) composite samples of fill representative of the material that will require off-site reuse or disposal as part of the construction of the proposed parking garage and installation of new below-grade utilities at the subject site. A discussion of one (1) supplemental fill sample, obtained for the purpose of delineating the extent of material classified as hazardous waste for off-site disposal is also included below.

A total of 43 samples were screened for the presence of total volatile organic compounds (TVOCs). The results of the headspace screening indicated the presence of TVOCs in the 43 samples at levels of 1.6 parts per million (ppm) or less. In the absence of visual or olfactory indications of the presence of OHM, TVOC results below 10 ppm are not considered likely to indicate the presence of a release of OHM. Headspace screening results are included in **Table 1**.

A total of five (5) composite samples of fill were submitted for laboratory analyses in accordance with the requirements contained in DEP policy COMM-97-001 for the presence of pH, reactivity, flashpoint, RCRA-8 metals (including arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver), semi-volatile organic compounds (SVOC), PCBs and total petroleum hydrocarbons (TPH). Additionally, one (1) composite sample was analyzed for total PP-13 metals (including antimony, arsenic, barium, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium and zinc). Additionally, two (2) samples were analyzed for TCLP lead. The composite samples were made up of discrete samples obtained from soil borings across the subject site. The discrete sample with the highest headspace result within each composite was preserved in the field and submitted for VOC analysis. The following is a discussion of the laboratory test results. Laboratory test data is included in **Appendix A** and is summarized in **Table 2**.

Two (2) samples were analyzed for TCLP lead, one (1) of which exhibited a concentration of total lead greater than 100 mg/kg. The results indicated the presence of TCLP lead at concentrations ranging from below the laboratory method detection limits to 0.93 milligrams per liter (mg/l). In consideration of off-site disposal of soils, material that exhibits a TCLP lead level greater than 5.0 mg/l is considered hazardous

waste for off-site disposal. Hence, the material represented herewith is not considered hazardous waste and is acceptable for off-site disposal and/or reuse at the Portsmouth Municipal Landfill Closure Project .

A localized area within the footprint of the proposed parking garage at the project site has been affected by TCLP lead and is considered hazardous waste for off-site disposal. This material is located within grid cell G-3 within a depth range of 6 to 14 feet below existing ground surface. This material is not represented by the enclosed data and is being prepared for in-situ stabilization treatment. However, supplemental data has been obtained to delineate to the extent of the identified TCLP lead contamination. Additional soil samples were submitted for testing for the presence of total lead and TCLP lead. The results of the supplemental testing is summarized on the enclosed **Table 3**, and the analytical data is enclosed in **Appendix B**. Based upon the results of our delineation testing, the extent of the TCLP lead affected soil has been defined. Soil subject to this disposal package has not been affected by TCLP lead.

Due diligence, as described in DEP Policy HW93-01 has been used in characterizing the soil that is the subject of this letter. Analytical testing of the soil samples did not indicate the presence of a listed hazardous waste. Furthermore, the soil that is the subject of this letter did not exhibit a characteristic hazardous waste.

McPhail Associates, LLC is engaged by Boston College, the owner of the subject property to provide full-time on-site monitoring during excavation for the proposed renovation of St. Mary's Hall. The scope of monitoring includes observation of the fill and natural materials during excavation, and the use of headspace screening of soil samples utilizing a photo-ionization detector as needed. If evidence of a release of oil and/or hazardous material becomes evident during the excavation, appropriate actions will be taken.

The 2,000 cubic yards of fill material represented by this disposal package that originates from the excavation for the proposed parking garage at St. Mary's Hall is to be transported to the Rhode Portsmouth Municipal Landfill under a BOL. The 500 cubic yards of fill material represented by this disposal package that originates from installation of proposed below-grade utilities in the areas surrounding St. Mary's Hall is to be transported under an MSR.

Based on the results of the above described analytical testing, the above-referenced composite samples are considered to meet the requirements for off-site re-use at a the Portsmouth, Rhode Island, Municipal Landfill Closure Project. Therefore, this letter provides information to characterize a total of 2,500 cubic yards (4,000 tons) of fill material for off-site disposal/reuse.

McPHAIL ASSOCIATES, LLC



A comparison of the test results with the current regulations contained in RI DEM DEC Regulations for off-site reuse indicates that 2,500 cubic yards of fill material as represented by the tested samples described herein are suitable for re-use at the Portsmouth, RI Municipal Landfill Closure Project in Portsmouth, Rhode Island.

We trust the above and the attached information are sufficient for your present requirements. Should you have any questions concerning this information, please call us.

Very truly yours,

McPHAIL ASSOCIATES, LLC

Andrew D. Stone

Joseph G. Lombardo, Jr., L.S.P.

Enclosure
F:\WP5\JOBS\5386 - St. Mary's_Boston College\St. Mary's Garage\Soil Disposal\Reg A\Portsmouth\LSP Ltr-Portsmouth .wpd
ADS/jlg

# Certification of Environmental Professional

I, Joseph G Lombardo Jr, L.S.P., hereby certify that I am an environmental professional[1] in the Commonwealth of Massachusetts. I have reviewed the permits for the proposed closure of the former Portsmouth Town Landfill in Portsmouth, Rhode Island. ("Project") located on Park Avenue (AP 20, Lots 1, 2 and 13 and AP 25, lot 2) (the "Site"), including the September 20, 2010 Beneficial Use Determination Approval and September 28, 2010 Remedial Approval Letter as well as the Rhode Island Department of Environmental Management ("RIDEM") Direct Exposure Criteria ("DEC"). I have further reviewed the test results dated November 2012 and January 2013 for the proposed fill material from the Boston College St. Mary's Hall Renovation Project site located at 140 Commonwealth Avenue in Chestnut Hill, Massachustts (the "Material"), which results include tests for Total Petroleum Hydrocarbons ("TPH"), Volatile Organic Compounds (EPA 8260), Semi-Volatile Organic Compounds (EPA 8270) and 13 priority pollutant metals.

Based on my review of the above, it is my professional opinion that the above-referenced testing is sufficient to adequately characterize and identify the concentrations of contaminants in the Material that is proposed to be used in the cap at the Site. It is further my professional opinion that, based on the requirements of the permits and the applicable RIDEM DECs, the Material is appropriate for use as grading and shaping at the Site.

Signed: _____

Company: McPhail Associates, LLC

Title: Project Manager

Dated: 3/8/2013

License#: 3188

*550224_1.doc*

[1] The term "environmental professional" shall have the meaning ascribed to it pursuant to ASTM Standard E1527-05 and 40 CFR §312.10(b).

**Site Restoration Technologies - Foxboro, MA 508-380-1267**

# Material Submittal Request

**Tracking No:** _____

Request to tip soil, urban fill, and other suitable materials for landfill cover, shaping, and final cap of the site known as the Former Portsmouth Landfill Park Avenue Portsmouth, RI

**Contact: David Peter, Manager 508-380-1267 dpeter@siteretech.com**

## Location Information

Provide the following information on the location where the waste was generated:

Boston College, St. Mary's Hall Renovation Project
Location Name

140 Commonwealth Avenue - Chestnut Hill, Massachusetts 02467
Full Address - Street, City, State ,Zip

Tom Runyon
Contact Name

Construction Project Manager
Contact Title

(617) 552-8992
Contact Phone & Extension

thomas.runyon@bc.edu
Contact email address

## Generator Information

Provide the following information on generator of the material:

Boston College
Name of Organization / Owner

140 Commonwealth Avenue - Chestnut Hill, Massachusetts 02467
Full Address - Street, City, State, Zip

Tom Runyon
Contact Name

Construction Project Manager
Contact Title

(617) 552-8992
Contact Phone & Extension

thomas.runyon@bc.edu
Contact email address

## Consultant Information

Provide the following information on the primary consultant overseeing the project:

Joseph G. Lombardo, Jr.
Name

Project Manager
Title

2269 Massachusetts Avenue, Cambridge, MA 02140
Full Address - Street, City, State, Zip

(617) 868-1420 x344
Phone & Extension

jgl@mcphailgeo.com
Email address

## Estimated Soil Quantity

[ ] **Tons** [2,500] **Cubic Yards**

## Soil Contaminants

See LSP Opinion Letter

## Analyses Performed

Please check all that apply

- [x] TPH
- [x] Volatile Organics; EPA 8260
- [x] Semi-volatile Organics; EPA 8270
- [x] 13 Priority Pollutant Metals
- [x] List Other Tests pH, Reactivity, Ignitability, Conductivity, TCLP Lead, PCBs

Alpha Analytical Laboratories, Westborough, MA
Laboratory performing tests (attach)

Site Restoration Technologies

# Material Submittal Request

## Description / Source of Contaminants

Describe

Date of Release (if known)

☒ Unknown / Historical See LSP Opinion Letter

## Soil Description

See LSP Opinion Letter

Physical Description (sand, gravel, silt, etc.)

MIT

Classification Method (if known)

**Check if the following materials are present:**

☐ Clay ☐ Construction Debris ☐ Other Deleterious Material (Please list):

☒ Coal ☐ Vegetative Matter Urban Fill

☒ Ash

## Soil Characterization Methodology

Select the Sampling Method Used

☒ Grab ☒ Composite ☒ Biased samples (e.g, headspace screened, visually contaminated)

See LSP Opinion Letter

Constituents of Concern

## Site History

☒ Check if extra sheets attached

Current Use

Past Use

I, the generator, having used due diligence, have determined that there is no reason to suspect or believe that the soil has been impacted by any releases of oil or hazardous materials other than those I have identified in the above documentation.

I, the generator, realize that due diligence shall consist of a search of information and records reasonably available to the generator of the proposed soil and sufficient to make the determination. Such records and information may include, but are not limited to, those of the generator, location of generation (i.e., facility if not the generator), the Department of Environmental Management (or other environmental officials), and the municipality (i.e., Board of Health, Fire Department) within which the site is located.

Signature of Generator

3/12/13

Date

Tom Runyon Construction Project Manager

Site Restoration Technologies

# Material Submittal Request

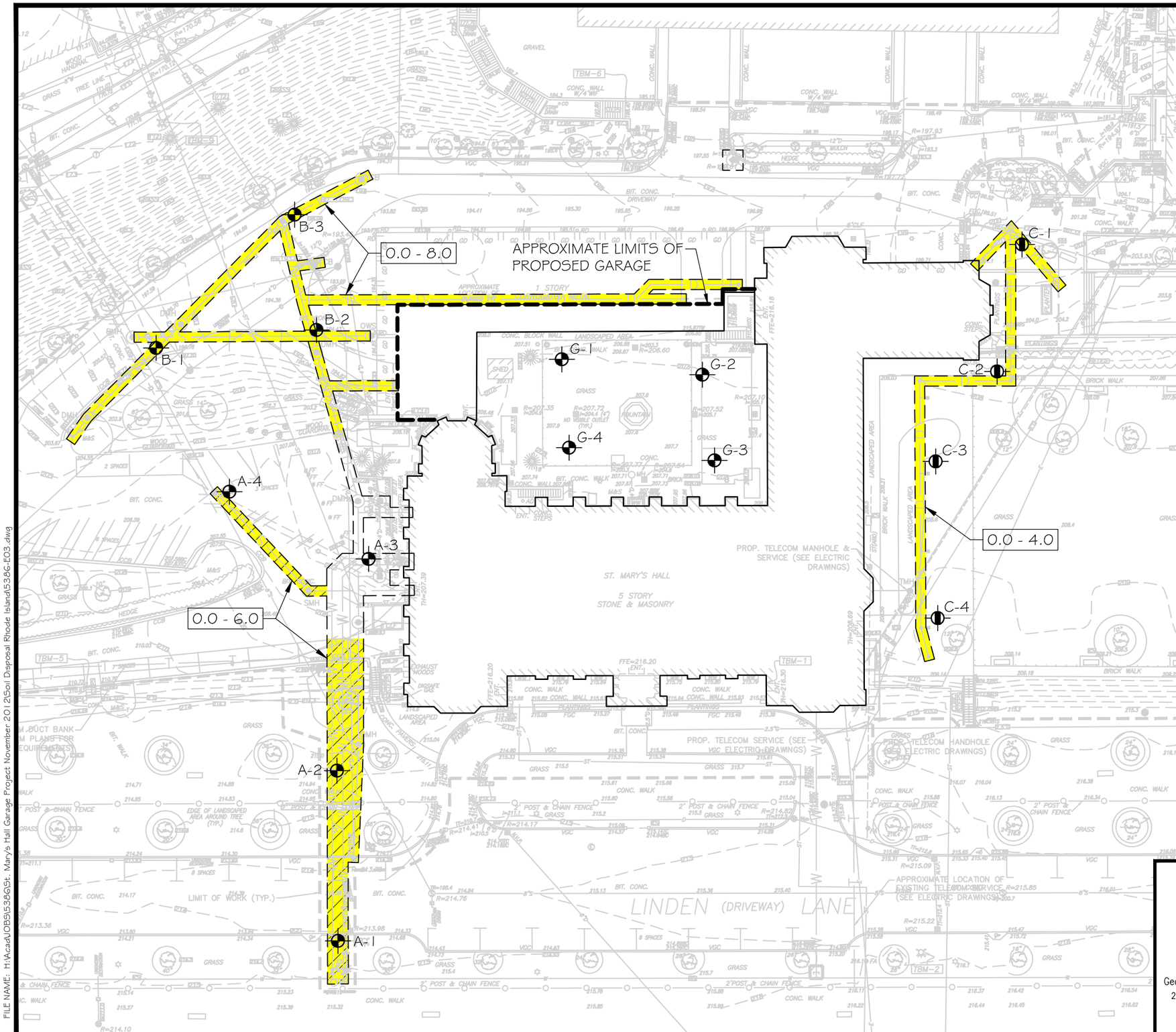
## Site Diagram

A site diagram is required indicating any major structures or roads, excavation areaas, and stockpile locations. All sampling locations must be noted.

☒ Check if diagram is attached

Name of Person preparing diagram: _____

FIGURE 3




## LEGEND

- — APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE DURING THE PERIOD OF NOVEMBER 26 THROUGH 29, 2012 FOR McPHAIL ASSOCIATES, LLC
- — APPROXIMATE LOCATION OF HAND AUGER HOLES PERFORMED BY McPHAIL ASSOCIATES, LLC ON NOVEMBER 28, 2012
- — REGULATED A: UNLINED LANDFILL RHODE ISLAND
- — REGULATED A: UNLINED LANDFILL MASSACHUSETTS

REFERENCE: THIS PLAN WAS PREPARED FROM A 20-SCALE DRAWING ENTITLED "SITE UTILITY PLAN" LAST REVISED ON OCTOBER 22, 2012 PREPARED BY DIMELLA SHAFFER

GRAPHIC SCALE

40 0 40 80

McPHAIL ASSOCIATES, LLC
Geotechnical and Geoenvironmental Engineers
2269 Massachusetts Avenue
Cambridge, MA 02140
617/868-1420
617/868-1423 (Fax)

ST. MARY'S HALL GARAGE

CHESTNUT HILL MASSACHUSETTS

SOIL DISPOSITION PLAN - UTILITY EXCAVATIONS

FOR

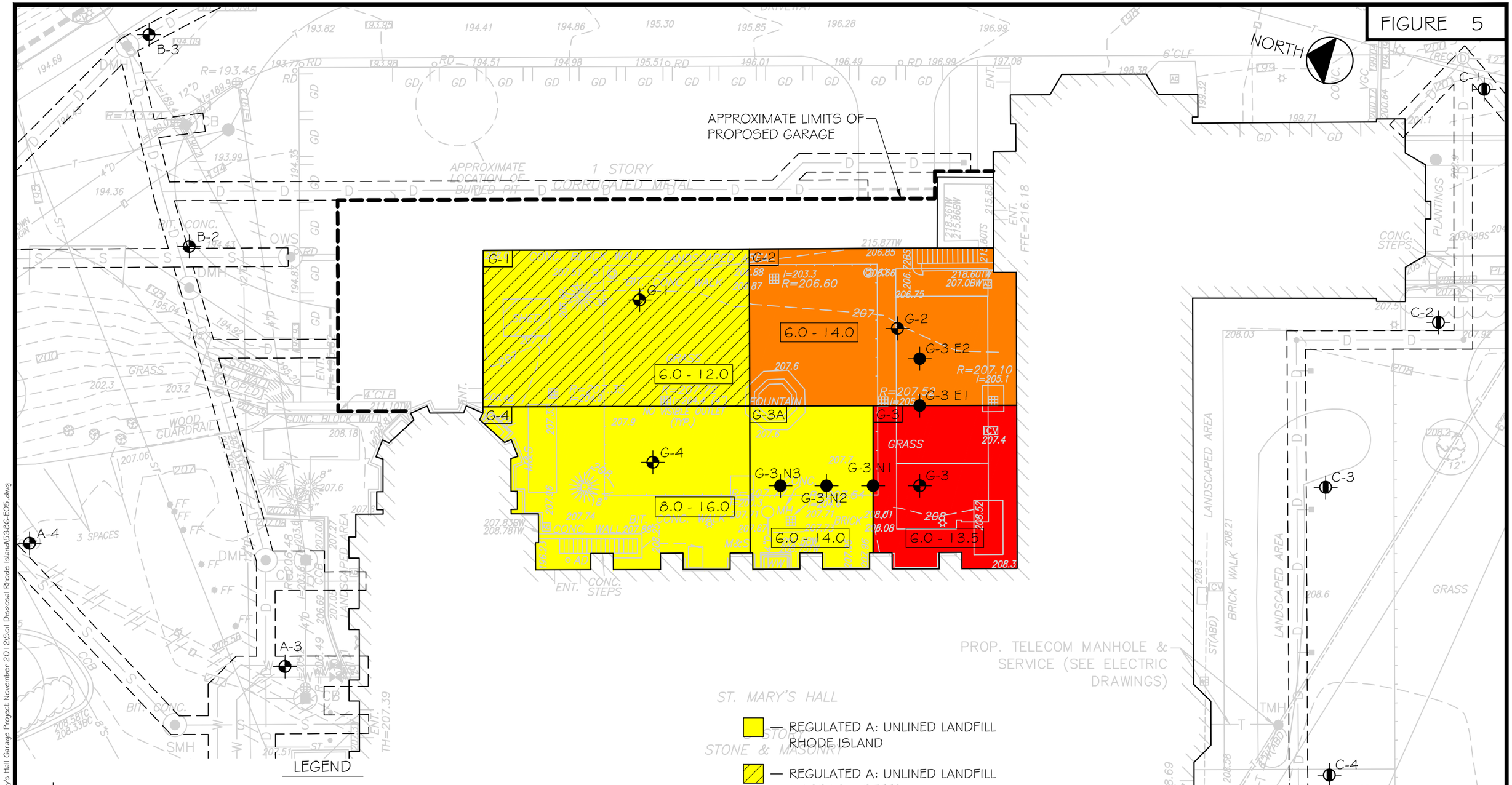
BOSTON COLLEGE

BY

McPHAIL ASSOCIATES, LLC

| | | | |
|---|---|---|---|
| Date: MARCH 2013 | Dwn: F.G.P. | Chkd: A.D.S. | Scale: 1" = 40' |
| Project No: 5386 | | | |

FIGURE 5




## LEGEND

- — APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE CORP. DURING THE PERIOD OF NOVEMBER 26 THROUGH 29, 2012 FOR McPHAIL ASSOCIATES, LLC
- — APPROXIMATE LOCATION OF HAND AUGER HOLES PERFORMED BY McPHAIL ASSOCIATES, LLC ON NOVEMBER 28, 2012
- — APPROXIMATE LOCATION OF GEOPROBE PERFORMED BY TDS, INC. ON JANUARY 15, 2013 FOR McPHAIL ASSOCIATES, LLC

REFERENCE: THIS PLAN WAS PREPARED FROM A 20-SCALE DRAWING ENTITLED, "SITE UTILITY PLAN" LAST REVISED ON OCTOBER 22, 2012 PREPARED BY DIMELLA SHAFFER

- — REGULATED A: UNLINED LANDFILL RHODE ISLAND
- — REGULATED A: UNLINED LANDFILL MASSACHUSETTS
- — REGULATED C: ASPHALT BATCH
- — REGULATED E: HAZARDOUS

GRAPHIC SCALE

20 0 20 40

McPHAIL ASSOCIATES, LLC
Geotechnical and Geoenvironmental Engineers
2269 Massachusetts Avenue
Cambridge, MA 02140
617/868-1420
617/868-1423 (Fax)

ST. MARY'S HALL GARAGE

CHESTNUT HILL MASSACHUSETTS

SOIL DISPOSITION PLAN - MIDDLE FILL

FOR

BOSTON COLLEGE

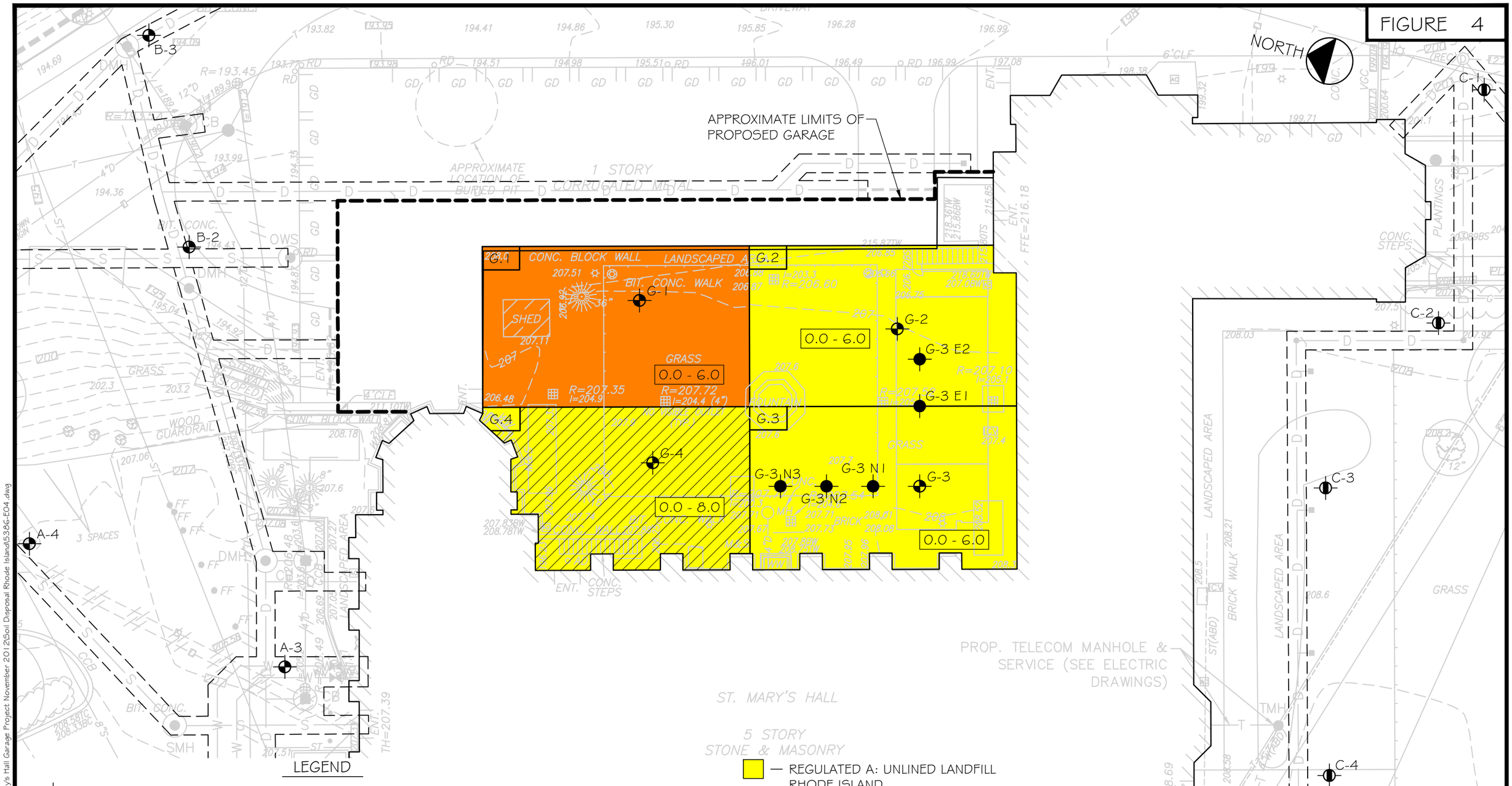
BY

McPHAIL ASSOCIATES, LLC

| | | | |
|---|---|---|---|
| Date: MARCH 2013 | Dwn: F.G.P. | Chkd: A.D.S. | Scale: 1" = 20' |
| Project No: 5386 | | | |

FILE NAME: H:\Acad\OBS\5386GS: Mary's Hall Garage Project November 2012\Soil Disposal Rhode Island\5386-E05.dwg

FIGURE 4




## LEGEND

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- — APPROXIMATE LOCATION OF HAND AUGER HOLES PERFORMED BY McPHAIL ASSOCIATES, LLC ON NOVEMBER 28, 2012
- — APPROXIMATE LOCATION OF GEOPROBE PERFORMED BY TDS, INC. ON JANUARY 15, 2013 FOR McPHAIL ASSOCIATES, LLC

REFERENCE: THIS PLAN WAS PREPARED FROM A 20-SCALE DRAWING ENTITLED, "SITE UTILITY PLAN" LAST REVISED ON OCTOBER 22, 2012 PREPARED BY DIMELLA SHAFFER

- — REGULATED A: UNLINED LANDFILL RHODE ISLAND
- — REGULATED A: UNLINED LANDFILL MASSACHUSETTS
- — REGULATED C: ASPHALT BATCH PLANT

GRAPHIC SCALE

20 0 20 40

McPHAIL ASSOCIATES, LLC
Geotechnical and Geoenvironmental Engineers
2269 Massachusetts Avenue
Cambridge, MA 02140
617/868-1420
617/868-1423 (Fax)

ST. MARY'S HALL GARAGE

CHESTNUT HILL MASSACHUSETTS

SOIL DISPOSITION PLAN - UPPER FILL

FOR

BOSTON COLLEGE

BY

McPHAIL ASSOCIATES, LLC

| Date: MARCH 2013 | Dwn: F.G.P. | Chkd: A.D.S. | Scale: 1" = 20' |
|---|---|---|---|
| Project No: 5386 | | | |

FILE NAME: H:\Acad\JOBS\5386\St. Mary's Hall Garage Project November 2012\Soil Disposal Rhode Island\5386-E04.dwg

# TABLE 1
## PID HEADSPACE READINGS IN SAMPLE JARS

Boston College St. Mary's Garage
Chestnut Hill, MA
Project No. 5386.9.01

| EXPLORATION NO. | SAMPLE NO. | SAMPLE DEPTH (ft.) | SAMPLE TYPE | PID READING (ppm) | VISUAL/OLFACTORY PETROLEUM EVIDENCE |
|---|---|---|---|---|---|
| B-1 | S-1 | 0.5-2 | FILL | 0.0 | |
| | S-2 | 2-4 | FILL | 1.6 | |
| | S-3 | 5-7 | FILL | 1.0 | |
| | S-4 | 7-9 | FILL | 0.8 | |
| | | | | | |
| B-2 | S-1 | 0-2 | FILL | 0.2 | |
| | S-2 | 2-4 | FILL | 0.0 | |
| | S-3 | 4-6 | FILL | 0.3 | |
| | S-4 | 6-8 | FILL | 0.0 | |
| | | | | | |
| B-3 | S-1 | 0.5-2 | FILL | 0.2 | |
| | S-2 | 2-4 | FILL | 0.4 | |
| | S-3 | 4-6 | FILL | 0.0 | |
| | S-4 | 6-8 | FILL | 0.8 | |
| | | | | | |
| C-1 | S-1 | 0-0.5 | TOPSOIL | 0.0 | |
| | S-2 | 0.5-4 | FILL | 0.0 | |
| | | | | | |
| C-2 | S-1 | 0-1 | TOPSOIL | 0.0 | |
| | S-2 | 1-2 | FILL | 0.0 | |
| | S-3 | 2-4 | FILL | 0.0 | |
| | | | | | |
| C-3 | S-1 | 0-1 | TOPSOIL | 0.0 | |
| | S-2 | 1-2.5 | FILL | 1.4 | |
| | S-3 | 2.5-4 | FILL | 1.4 | |
| | | | | | |
| C-4 | S-1 | 0-1 | TOPSOIL | 0.0 | |
| | S-2 | 1-3 | FILL | 0.0 | |
| | | | | | |
| G-2 | S-1 | 0-0.5 | TOPSOIL | 0.0 | |
| | S-1A | 0.5-2 | FILL | 0.0 | |
| | S-2 | 2-4 | FILL | 0.0 | |
| | S-3 | 4-6 | FILL | 0.0 | |
| | ~~S-4~~ | ~~6-8~~ | ~~FILL~~ | ~~0.0~~ | |
| | ~~S-5~~ | ~~8-10~~ | ~~FILL~~ | ~~0.0~~ | |
| | ~~S-6~~ | ~~10-12~~ | ~~FILL~~ | ~~0.0~~ | |
| | ~~S-7~~ | ~~12-14~~ | ~~FILL~~ | ~~0.0~~ | |
| | ~~S-8~~ | ~~14-15.1~~ | ~~W.ROCK~~ | ~~0.0~~ | |
| | | | | | |
| G-3 | S-1 | 0-1.5 | TOPSOIL | 0.0 | |
| | S-1A | 1.5-2 | FILL | 0.0 | |
| | S-2 | 2-4 | FILL | 0.0 | |
| | S-3 | 4-6 | FILL | 0.0 | |
| | ~~S-4~~ | ~~6-8~~ | ~~FILL~~ | ~~0.0~~ | |
| | ~~S-5~~ | ~~8-10~~ | ~~FILL~~ | ~~0.0~~ | |
| | ~~S-6~~ | ~~10-12~~ | ~~FILL~~ | ~~0.0~~ | |
| | ~~S-7~~ | ~~12-13.5~~ | ~~FILL~~ | ~~0.0~~ | |

Equipment:
Mini-Rae 3000 Photoionization
Detector (PID) with 10.6 eV Probe
PPM = Parts Per Million

# TABLE 1
## PID HEADSPACE READINGS IN SAMPLE JARS

Boston College St. Mary's Garage
Chestnut Hill, MA
Project No. 5386.9.01

| EXPLORATION NO. | SAMPLE NO. | SAMPLE DEPTH (ft.) | SAMPLE TYPE | PID READING (ppm) | VISUAL/OLFACTORY PETROLEUM EVIDENCE |
|---|---|---|---|---|---|
| | ~~S-7A~~ | ~~13.5-14~~ | ~~W.ROCK~~ | ~~0.0~~ | |
| | ~~S-8~~ | ~~14-16~~ | ~~W.ROCK~~ | ~~0.0~~ | |
| | ~~S-9~~ | ~~16-16.8~~ | ~~W.ROCK~~ | ~~0.0~~ | |
| | | | | | |
| G-3 N1 | S-1 | 6-8 | FILL | 0.0 | |
| | S-2 | 8-10 | FILL | 0.0 | |
| | S-3 | 10-12 | FILL | 0.0 | |
| | S-4 | 12-14 | FILL | 0.0 | |
| | | | | | |
| G-3 N3 | ~~S-1~~ | ~~0.5-2~~ | ~~FILL~~ | ~~0.3~~ | |
| | ~~S-2~~ | ~~2-4~~ | ~~FILL~~ | ~~0.6~~ | |
| | ~~S-3~~ | ~~4-6~~ | ~~FILL~~ | ~~0.4~~ | |
| | S-4 | 6-8 | FILL | 0.2 | |
| | S-5 | 8-10 | FILL | 0.1 | |
| | S-6 | 10-12 | FILL | 0.3 | |
| | S-7 | 12-14 | FILL | 0.3 | |
| | | | | | |
| G-4 | ~~S-1~~ | ~~0-1~~ | ~~TOPSOIL~~ | ~~0.0~~ | |
| | ~~S-1A~~ | ~~1-2~~ | ~~FILL~~ | ~~0.0~~ | |
| | ~~S-2~~ | ~~2-4~~ | ~~FILL~~ | ~~0.0~~ | |
| | ~~S-3~~ | ~~4-6~~ | ~~FILL~~ | ~~0.0~~ | |
| | ~~S-4~~ | ~~6-8~~ | ~~FILL~~ | ~~0.0~~ | |
| | S-5 | 8-10 | FILL | 0.0 | |
| | S-6 | 10-12 | FILL | 0.0 | |
| | S-7 | 12-14 | FILL | 0.0 | |
| | S-8 | 14-16 | FILL | 0.0 | |
| | S-9 | 16-16.5 | FILL | 0.0 | |
| | ~~S-9A~~ | ~~16.5-17.8~~ | ~~GLACIAL TILL~~ | ~~0.0~~ | |
| | | | | | |

Equipment:
Mini-Rae 3000 Photoionization
Detector (PID) with 10.6 eV Probe
PPM = Parts Per Million

# TABLE 2
## Analytical Results - FILL

Boston College St. Mary's Garage
Chestnut Hill, Massachusetts
Project No. 5386.9.01

| CELL | Reuse Levels Portsmouth, RI | RCS-1 | B + C | | G-2 | |
|---|---|---|---|---|---|---|
| LOCATION | | | B+C FILL COMP | B-2 S-2 | G-2 FILL COMP | G-2 S-2 |
| SAMPLING DATE | | | 11/28/2012 | 11/28/2012 | 11/30/2012 | 11/28/2012 |
| LAB SAMPLE ID | | | L1222248-04 | L1222248-05 | L1222113-07 | L1222113-08 |
| ADDITIONAL LAB SAMPLE ID | Industrial / Commercial RI DEM DECs | | | | | |
| SAMPLE TYPE | | | FILL | FILL | FILL | FILL |
| SAMPLE DEPTH (ft.) | | | 0-8' | 2-4' | 0-6' | 2-4' |
| **General Chemistry** | | | | | | |
| Specific Conductance (umhos/cm) | | | 19 | - | 120 | - |
| Solids, Total (%) | | | 90 | 86 | 87 | 89 |
| pH (SU) | | | 7.4 | - | 7.3 | - |
| Cyanide, Reactive (mg/kg) | | | ND(10) | - | ND(10) | - |
| Not De | | | ND(10) | - | ND(10) | - |
| Ignitability | | | NI | - | NI | - |
| **MCP Total Metals (mg/kg)** | | | | | | |
| Antimony, Total | 820 | 20 | - | - | - | - |
| Arsenic, Total | 7 | 20 | 6.4 | - | 4.7 | - |
| Barium, Total | 10,000 | 1000 | 40 | - | 41 | - |
| Beryllium, Total | 1.3 | 100 | - | - | - | - |
| Cadmium, Total | 1,000 | 2 | ND(0.42) | - | ND(0.44) | - |
| Chromium, Total | 10,000 | 30 | 16 | - | 12 | - |
| Copper, Total | 10,000 | 1000 | - | - | - | - |
| Lead, Total | 500 | 300 | 34 | - | 24 | - |
| Mercury, Total | 610 | 20 | ND(0.09) | - | ND(0.08) | - |
| Nickel, Total | 10,000 | 20 | - | - | - | - |
| Selenium, Total | 10,000 | 400 | ND(2.1) | - | ND(2.2) | - |
| Silver, Total | 10,000 | 100 | ND(0.42) | - | ND(0.44) | - |
| Thallium, Total | 140 | 8 | - | - | - | - |
| Zinc, Total | 10,000 | 2500 | - | - | - | - |
| **TCLP Metals by EPA 1311 (mg/l)** | | | | | | |
| Lead, TCLP | 5 | | - | - | - | - |
| **MCP Semivolatile Organics (mg/kg)** | | | | | | |
| Acenaphthene | 10,000 | 4 | ND(0.29) | - | ND(0.74) | - |
| Fluoranthene | 10,000 | 1000 | 1.2 | - | 0.83 | - |
| Naphthalene | 10,000 | 4 | ND(0.37) | - | ND(0.93) | - |
| Benzo(a)anthracene | 7.8 | 7 | 0.64 | - | ND(0.56) | - |
| Benzo(a)pyrene | 0.8 | 2 | 0.59 | - | ND(0.74) | - |
| Benzo(b)fluoranthene | 7.8 | 7 | 0.77 | - | ND(0.56) | - |
| Benzo(k)fluoranthene | 78 | 70 | 0.27 | - | ND(0.56) | - |
| Chrysene | 780 | 70 | 0.55 | - | ND(0.56) | - |
| Acenaphthylene | 10,000 | 1 | ND(0.29) | - | ND(0.74) | - |
| Anthracene | 10,000 | 1000 | ND(0.22) | - | ND(0.56) | - |
| Benzo(ghi)perylene | 10,000 | 1000 | 0.38 | - | ND(0.74) | - |
| Fluorene | 10,000 | 1000 | ND(0.37) | - | ND(0.93) | - |
| Phenanthrene | 10,000 | 10 | 0.58 | - | ND(0.56) | - |
| Dibenzo(a,h)anthracene | 0.8 | 0.7 | ND(0.22) | - | ND(0.56) | - |
| Indeno(1,2,3-cd)Pyrene | 7.8 | 7 | 0.38 | - | ND(0.74) | - |
| Pyrene | 10,000 | 1000 | 1 | - | 0.7 | - |
| Dibenzofuran | | 100 | ND(0.37) | - | ND(0.93) | - |
| 2-Methylnaphthalene | 10,000 | 0.7 | ND(0.44) | - | **ND(1.1)** | - |
| SUM | 100 | | 6.36 | | 1.53 | - |
| **MCP Polychlorinated Biphenyls (mg/kg)** | | | | | | |
| SUM | 10 | | ND | | ND | - |
| **MCP Volatile Organics by 5035 High (mg/kg)** | | | | | | |
| Naphthalene | 10,000 | 4 | - | 0.6 | - | ND(0.38) |
| SUM | | | - | 0.6 | - | ND |
| **Petroleum Hydrocarbon Quantitation (mg/kg)** | | | | | | |
| TPH | 2500 | 1000 | 183 | - | 90.2 | - |
| **DISPOSAL CLASSIFICATION** | | | UNLINED LANDFILL | | UNLINED LANDFILL | |

Tested compounds not shown were not detected in excess of the laboratory method detection limits

ND - Not detected in excess of the laboratory method detection limits in ( )
**BOLD** - Exceeds RCS-1 Standard
Blank - Not analyzed

# TABLE 2
## Analytical Results - FILL

Boston College St. Mary's Garage
Chestnut Hill, Massachusetts
Project No. 5386.9.01

| CELL | Reuse Levels Portsmouth, RI | RCS-1 | G-3 | | G-3A | |
|---|---|---|---|---|---|---|
| LOCATION | | | G-3 FILL COMP | G-3 S-2 | G-3A FILL COMP | G-3 N3 S-6 |
| SAMPLING DATE | | | 11/30/2012 | 11/29/2012 | 1/15/2013 | 1/15/2013 |
| LAB SAMPLE ID | Industrial / Commercial RI DEM DECs | | L1222113-11 | L1222113-12 | L1301427-01 | L1301427-02 |
| ADDITIONAL LAB SAMPLE ID | | | L1222670-01 | | | |
| SAMPLE TYPE | | | FILL | FILL | FILL | FILL |
| SAMPLE DEPTH (ft.) | | | 0-6' | 2-4' | 6'-14' | 10'-14' |
| **General Chemistry** | | | | | | |
| Specific Conductance (umhos/cm) | | | 100 | - | 51 | - |
| Solids, Total (%) | | | 87 | 86 | 88 | 92 |
| pH (SU) | | | 7.8 | - | 8.5 | - |
| Cyanide, Reactive (mg/kg) | | | ND(10) | - | ND(10) | - |
| Not De | | | ND(10) | - | ND(10) | - |
| Ignitability | | | NI | - | NI | - |
| **MCP Total Metals (mg/kg)** | | | | | | |
| Antimony, Total | 820 | 20 | - | - | - | - |
| Arsenic, Total | 7 | 20 | 5.7 | - | 5.2 | - |
| Barium, Total | 10,000 | 1000 | 47 | - | 44 | - |
| Beryllium, Total | 1.3 | 100 | - | - | - | - |
| Cadmium, Total | 1,000 | 2 | ND(0.44) | - | ND(0.43) | - |
| Chromium, Total | 10,000 | 30 | 13 | - | 11 | - |
| Copper, Total | 10,000 | 1000 | - | - | - | - |
| Lead, Total | 500 | 300 | 120 | - | 32 | - |
| Mercury, Total | 610 | 20 | 0.09 | - | 0.14 | - |
| Nickel, Total | 10,000 | 20 | - | - | - | - |
| Selenium, Total | 10,000 | 400 | ND(2.2) | - | ND(2.1) | - |
| Silver, Total | 10,000 | 100 | ND(0.44) | - | ND(0.43) | - |
| Thallium, Total | 140 | 8 | - | - | - | - |
| Zinc, Total | 10,000 | 2500 | - | - | - | - |
| **TCLP Metals by EPA 1311 (mg/l)** | | | | | | |
| Lead, TCLP | 5 | | 0.93 | - | ND(0.5) | - |
| **MCP Semivolatile Organics (mg/kg)** | | | | | | |
| Acenaphthene | 10,000 | 4 | ND(0.6) | - | ND(0.15) | - |
| Fluoranthene | 10,000 | 1000 | 1 | - | 0.12 | - |
| Naphthalene | 10,000 | 4 | ND(0.75) | - | ND(0.19) | - |
| Benzo(a)anthracene | 7.8 | 7 | ND(0.45) | - | ND(0.11) | - |
| Benzo(a)pyrene | 0.8 | 2 | ND(0.6) | - | ND(0.15) | - |
| Benzo(b)fluoranthene | 7.8 | 7 | 0.52 | - | ND(0.11) | - |
| Benzo(k)fluoranthene | 78 | 70 | ND(0.45) | - | ND(0.11) | - |
| Chrysene | 780 | 70 | ND(0.45) | - | ND(0.11) | - |
| Acenaphthylene | 10,000 | 1 | ND(0.6) | - | ND(0.15) | - |
| Anthracene | 10,000 | 1000 | ND(0.45) | - | ND(0.11) | - |
| Benzo(ghi)perylene | 10,000 | 1000 | ND(0.6) | - | ND(0.15) | - |
| Fluorene | 10,000 | 1000 | ND(0.75) | - | ND(0.19) | - |
| Phenanthrene | 10,000 | 10 | 0.74 | - | ND(0.11) | - |
| Dibenzo(a,h)anthracene | 0.8 | 0.7 | ND(0.45) | - | ND(0.11) | - |
| Indeno(1,2,3-cd)Pyrene | 7.8 | 7 | ND(0.6) | - | ND(0.15) | - |
| Pyrene | 10,000 | 1000 | 0.88 | - | 0.14 | - |
| Dibenzofuran | | 100 | ND(0.75) | - | ND(0.19) | - |
| 2-Methylnaphthalene | 10,000 | 0.7 | **ND(0.9)** | - | ND(0.22) | - |
| SUM | 100 | | 3.14 | - | 0.26 | - |
| **MCP Polychlorinated Biphenyls (mg/kg)** | | | | | | |
| SUM | 10 | | ND | - | ND | - |
| **MCP Volatile Organics by 5035 High (mg/kg)** | | | | | | |
| Naphthalene | 10,000 | 4 | - | ND(0.48) | - | ND(0.46) |
| SUM | | | - | ND | | ND |
| **Petroleum Hydrocarbon Quantitation (mg/kg)** | | | | | | |
| TPH | 2500 | 1000 | 81.7 | - | 47 | - |
| **DISPOSAL CLASSIFICATION** | | | UNLINED LANDFILL | | UNLINED LANDFILL | |

Tested compounds not shown were not detected in excess of the laboratory method detection limits

ND - Not detected in excess of the laboratory method detection limits in ( )
**BOLD** - Exceeds RCS-1 Standard
Blank - Not analyzed

# TABLE 2
## Analytical Results - FILL

Boston College St. Mary's Garage
Chestnut Hill, Massachusetts
Project No. 5386.9.01

| CELL | Reuse Levels Portsmouth, RI | RCS-1 | G-4 | |
|---|---|---|---|---|
| LOCATION | | | G-4 FILL COMP | G-4 S-5 |
| SAMPLING DATE | Industrial / Commercial RI DEM DECs | | 11/30/2012 | 11/27/2012 |
| LAB SAMPLE ID | | | L1222113-17 | L1222113-18 |
| ADDITIONAL LAB SAMPLE ID | | | L1303922-01 | |
| SAMPLE TYPE | | | FILL | FILL |
| SAMPLE DEPTH (ft.) | | | 8-16' | 8-10' |
| **General Chemistry** | | | | |
| Specific Conductance (umhos/cm) | | | 79 | - |
| Solids, Total (%) | | | 89 | 83 |
| pH (SU) | | | 8.1 | - |
| Cyanide, Reactive (mg/kg) | | | ND(10) | - |
| Not De | | | ND(10) | - |
| Ignitability | | | NI | - |
| **MCP Total Metals (mg/kg)** | | | | |
| Antimony, Total | 820 | 20 | ND(2.2) | - |
| Arsenic, Total | 7 | 20 | 4.1 | - |
| Barium, Total | 10,000 | 1000 | 30 | - |
| Beryllium, Total | 1.3 | 100 | 0.32 | - |
| Cadmium, Total | 1,000 | 2 | ND(0.43) | - |
| Chromium, Total | 10,000 | 30 | 12 | - |
| Copper, Total | 10,000 | 1000 | 16 | - |
| Lead, Total | 500 | 300 | 19 | - |
| Mercury, Total | 610 | 20 | ND(0.08) | - |
| Nickel, Total | 10,000 | 20 | 7.9 | - |
| Selenium, Total | 10,000 | 400 | ND(2.2) | - |
| Silver, Total | 10,000 | 100 | ND(0.43) | - |
| Thallium, Total | 140 | 8 | ND(2.2) | - |
| Zinc, Total | 10,000 | 2500 | 33 | - |
| **TCLP Metals by EPA 1311 (mg/l)** | | | | |
| Lead, TCLP | 5 | | - | - |
| **MCP Semivolatile Organics (mg/kg)** | | | | |
| Acenaphthene | 10,000 | 4 | ND(0.15) | - |
| Fluoranthene | 10,000 | 1000 | 0.43 | - |
| Naphthalene | 10,000 | 4 | ND(0.19) | - |
| Benzo(a)anthracene | 7.8 | 7 | 0.2 | - |
| Benzo(a)pyrene | 0.8 | 2 | 0.2 | - |
| Benzo(b)fluoranthene | 7.8 | 7 | 0.25 | - |
| Benzo(k)fluoranthene | 78 | 70 | 0.12 | - |
| Chrysene | 780 | 70 | 0.2 | - |
| Acenaphthylene | 10,000 | 1 | ND(0.15) | - |
| Anthracene | 10,000 | 1000 | ND(0.11) | - |
| Benzo(ghi)perylene | 10,000 | 1000 | ND(0.15) | - |
| Fluorene | 10,000 | 1000 | ND(0.19) | - |
| Phenanthrene | 10,000 | 10 | 0.29 | - |
| Dibenzo(a,h)anthracene | 0.8 | 0.7 | ND(0.11) | - |
| Indeno(1,2,3-cd)Pyrene | 7.8 | 7 | ND(0.15) | - |
| Pyrene | 10,000 | 1000 | 0.38 | - |
| Dibenzofuran | | 100 | ND(0.19) | - |
| 2-Methylnaphthalene | 10,000 | 0.7 | ND(0.22) | - |
| SUM | 100 | | 2.07 | |
| **MCP Polychlorinated Biphenyls (mg/kg)** | | | | |
| SUM | 10 | | ND | |
| **MCP Volatile Organics by 5035 High (mg/kg)** | | | | |
| Naphthalene | 10,000 | 4 | - | ND(0.42) |
| SUM | | | - | ND |
| **Petroleum Hydrocarbon Quantitation (mg/kg)** | | | | |
| TPH | 2500 | 1000 | 52.2 | - |
| **DISPOSAL CLASSIFICATION** | | | UNLINED LANDFILL | |

Tested compounds not shown were not detected in excess of the laboratory method detection limits

ND - Not detected in excess of the laboratory method detection limits in ( )
**BOLD** - Exceeds RCS-1 Standard
Blank - Not analyzed

# TABLE 3
## Analytical Results - FILL DELINEATION SAMPLES

Boston College St. Mary's Garage
Chestnut Hill, Massachusetts
Project No. 5386.9.01

| CELL | Reuse Levels Portsmouth, RI and Industrial / Commercial RI DEM DECs | RCS-1 | G-3 |
|---|---|---|---|
| LOCATION | | | G-3 N1 COMP |
| SAMPLING DATE | | | 1/15/2013 |
| LAB SAMPLE ID | | | L1300898-02 |
| ADDITIONAL LAB SAMPLE ID | | | |
| SAMPLE TYPE | | | FILL |
| SAMPLE DEPTH (ft.) | | | 6-14' |
| **General Chemistry** | | | |
| Specific Conductance (umhos/cm) | | | - |
| Solids, Total (%) | | | 84 |
| pH (SU) | | | - |
| Cyanide, Reactive (mg/kg) | | | - |
| Not De | | | - |
| Ignitability | | | - |
| **MCP Total Metals (mg/kg)** | | | |
| Antimony, Total | 820 | 20 | - |
| Arsenic, Total | 7 | 20 | - |
| Barium, Total | 10,000 | 1000 | - |
| Beryllium, Total | 1 | 100 | - |
| Cadmium, Total | 1,000 | 2 | - |
| Chromium, Total | 10,000 | 30 | - |
| Copper, Total | 10,000 | 1000 | - |
| Lead, Total | 500 | 300 | **460** |
| Mercury, Total | 610 | 20 | - |
| Nickel, Total | 10,000 | 20 | - |
| Selenium, Total | 10,000 | 400 | - |
| Silver, Total | 10,000 | 100 | - |
| Thallium, Total | 140 | 8 | - |
| Zinc, Total | 10,000 | 2500 | - |
| **TCLP Metals by EPA 1311 (mg/l)** | | | |
| Lead, TCLP | 5 | | 0.6 |
| **MCP Semivolatile Organics (mg/kg)** | | | |
| SUM | 100 | | - |
| **MCP Polychlorinated Biphenyls (mg/kg)** | | | |
| SUM | 10 | | - |
| **MCP Volatile Organics by 5035 High (mg/kg)** | | | |
| SUM | | | - |
| **Petroleum Hydrocarbon Quantitation (mg/kg)** | | | |
| TPH | 2500 | 1000 | - |

Tested compounds not shown were not detected in excess of the laboratory method detection limits

ND - Not detected in excess of the laboratory method detection limits in ( )
**BOLD** - Exceeds RCS-1 Standard
Blank - Not analyzed

**Massachusetts Department of Environmental Protection**
Bureau of Waste Prevention

# Material Shipping Record & Log

**For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000**

N/A
Tracking Number

## A. Location Information

**Important:** When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

1. Provide the following information on the location where the waste was generated:

Release name (optional)

140 Commonwealth Avenue — Street
St. Mary's Hall — Location aid
Chestnut Hill — City/Town
MA — State
02467 — Zip code

2. Date/Period of generation: 3/11/2013 — From; 5/1/2014 — To
3. U.S. EPA ID number: _____
4. 21E release: ☐ Yes ☒ No
5. List additional tracking documents associated with this document:

N/A

## B. Generator Information

**Important:** This form is not to be used for the shipment of remediation wastes subject to management under section 310 CMR 40.0035 of the Massachusetts Contingency Plan nor is it to be used in lieu of a hazardous waste manifest for hazardous waste or recyclable materials subject to the Massachusetts Hazardous Waste Regulations 310 CMR 30.000.

1. Provide the following generator information:

Boston College — Name of organization
Gail Hall — Contact name
Director, Environmental Health & Safety — Title
140 Commonwealth Ave — Street address
Chestnut Hill — City/Town
MA — State
02467 — Zip code
(617) 552-0300 — Telephone number(including extension)

## C. Owner and/or Operator Information

1. If the owner and/or operator is different from the generator as indicated in Section B, provide the following information:

Check applicable: ☐ owner ☐ operator

Name of organization
Contact name
Title
Street address
City/Town
State
Zip code
Telephone number
Ext.

**Massachusetts Department of Environmental Protection**
Bureau of Waste Prevention

# Material Shipping Record & Log

**For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000**

N/A
Tracking Number

## D. Transporter/Common Carrier Information

1. Provide the following information:

Boston Environmental Corp
Transporter/Common carrier name

N/A
Hazardous waste license number (if applicable)

N/A
Licensing state (if applicable)

Mr. John Cole
Contact person

Director of Operations
Title

338 Howard Street
Street

Brockton
City/Town

MA
State

02302
Zip code

508-427-6529
Telephone number

Ext.

## E. Receiving Facility Information

1. Provide the following information on the receiving facility:

Site Restoration Technologies - Former Portsmouth Municipal Landfill
Operator/Facility name

David Peter
Contact person

Manager
Title

Park Avenue
Street

Portsmouth
City/Town

RI
State

02871
Zip code

(508) 380-1267
Telephone number

Ext.

2. Type of facility:

- ☐ asphalt batch/cold mix
- ☐ asphalt batch/hot mix
- ☐ landfill/disposal
- ☒ landfill/ daily cover
- ☐ thermal processing
- ☐ landfill/structural fill
- ☒ other(specify): Shaping/Final Cap

3. Permit number: _____

**Massachusetts Department of Environmental Protection**
Bureau of Waste Prevention

# Material Shipping Record & Log

**For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000**

N/A
Tracking Number

## F. Description of Material

Check all that apply:

1. a. ☒ soil ☐ dredge material ☒ fill

   b. Description: light to dark brown silty gravelly sand and light to dark brown sandy gravel with some silt and contains variable amounts of ash and cinders

   c. Classification: ☒ MIT ☐ USDA ☐ USAEC ☐ ASEE

2. ☐ Other(describe):

3. Type of contamination:

   a. ☐ gasoline ☐ diesel fuel ☐ #2 oil ☐ #4 oil
   ☐ #6 oil ☐ waste oil ☐ kerosene ☐ jet fuel

   b. ☐ Debris:

   ☐ demolition ☐ vegetative ☐ inorganic

   c. ☒ Other(describe): Urban Fill

4. Constituents of concern (check all that apply):

   ☐ As ☐ HVOCs
   ☐ Cd ☐ PATH
   ☐ Cr ☐ VOCs
   ☐ Pb ☐ PAHs
   ☐ Hg ☐ BNAs
   ☐ Na ☐ TPH
   ☐ PCBs ☒ Other(describe): None

5. Analyses performed (check all that apply):

   ☒ As ☐ PATH
   ☒ Cd ☒ VOCs
   ☒ Cr ☒ PAHs
   ☒ Pb ☐ BNAs
   ☒ Hg ☒ TPH
   ☐ Na ☐ TCLP (inorganic)
   ☒ PCBs ☐ TCLP (organic)
   ☐ HVOCs ☒ Other(describe): pH, reactivity, flashpoint, specific conductance, PP-13 metals

6. Screening performed:

   Headspace
   Type

   MiniRae 3000 PID
   Instrument used

   total volatile organics less than 2.0 ppm
   Constituents

**Massachusetts Department of Environmental Protection**
Bureau of Waste Prevention

# Material Shipping Record & Log

**For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000**

N/A
Tracking Number

## F. Description of Material (cont.)

7. Estimated volume of materials:

500 Cubic yards | Tons | Other(specify units)

8. Contaminant source (check one):

☐ transportation accident
☐ ust
☒ other(describe): Urban Fill

9. Indicate which waste characterization support documentation is attached:

☒ site history information
☒ sampling and analytical methods/procedure
☒ laboratory data
☒ field screening data

If supporting documentation is not appended, provide an attachment stating the date and in connection with what document such information was previously submitted to the facility.

## G. Qualified Environmental Professional Opinion

"I have personally examined and am familiar with the information contained on and submitted with this form. Based on this information, it is my opinion that the testing and assessment actions undertaken were adequate to characterize the waste, and that the facility or location can accept wastes with the characteristics described in this submittal. I am aware that significant penalties including, but not limited to, possible fines and imprisonment may result if I willfully submit information which I know to be false, inaccurate, or materially incomplete."

McPhail Associates, LLC
Name of organization

Joseph G. Lombardo, Jr.
Name of professional

Project Manager
Title

617-868-1420 Telephone number | 344 Ext.

Signature

3/11/13
Date

3188
License number

Seal:

**Massachusetts Department of Environmental Protection**
Bureau of Waste Prevention

# Material Shipping Record & Log

**For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000**

N/A
Tracking Number

## H. Certification of Generator

"I certify under penalties of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information contained herein is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information."

N. Gail Hall
Signature

3/12/13
Date

Ms. Gail Hall*
Name(print)

*As Director, Office of Environmental Health and Safety and not individually

## I. Acknowledgment of Receipt by Receiving Facility

Receiving facility

Representative (print)

Title

Signature

Date

**Massachusetts Department of Environmental Protection**
Bureau of Waste Prevention

# Material Shipping Record & Log

**For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000**

N/A
Tracking Number

## J. Load Information

**Note:**
Make additional copies of this page as necessary.

Load#: _____

Signature of transporter

Receiving facility

Date received | Time received

Date of shipment | Time of shipment

Truck/Tractor registration

Trailer registration

Load size (cubic yards/tons)

Load#: _____

Signature of transporter

Receiving facility

Date received | Time received

Date of shipment | Time of shipment

Truck/Tractor registration

Trailer registration

Load size (cubic yards/tons)

Load#: _____

Signature of transporter

Receiving facility

Date received | Time received

Date of shipment | Time of shipment

Truck/Tractor registration

Trailer registration

Load size (cubic yards/tons)

## K. Log Sheet Volume Information

Total volume this page (cubic yards/tons)

Total carried forward (cubic yards/tons)

Total carried forward and this page (cubic yards/tons)

Page _____ of _____

**Massachusetts Department of Environmental Protection**
*Bureau of Waste Site Cleanup*

**BWSC112**

Release Tracking Number
3 - 31364

# BILL OF LADING (pursuant to 310 CMR 40.0030)

**A. LOCATION OF SITE OR DISPOSAL SITE WHERE REMEDIATION WASTE WAS GENERATED:**

1. Release Name/Location Aid: ST MARYS HALL
2. Street Address: 140 COMMONWEALTH AVE
3. City/Town: CHESTNUT HILL 4. Zip Code: 02467-0000
5. ☐ Check here if a Tier Classification Submittal has been provided to DEP for this disposal site:
   ☐ a. Tier 1A ☐ b. Tier 1B ☐ b. Tier 1C ☐ d. Tier II
6. If applicable provide the Permit Number: _____

**B. THIS FORM IS BEING USED TO:** (check one: B1-B4):

☑ 1. Submit a **Bill of Lading (BOL)** to transport Remediation Waste to Temporary Storage or a Receiving Facility. Response Actions associated with this BOL (check all that apply):

- ☐ a. Immediate Response Action (IRA)
- ☑ b. Release Abatement Measure (RAM)
- ☐ c. Downgradient Property Status (DPS)
- ☐ d. Utility Release Abatement Measure (URAM)
- ☐ e. Comprehensive Response Actions
- ☐ f.. Limited Removal Action (LRA): (must be retained pursuant to 310 CMR 40.0034(6); can't be submitted via eDEP)
- ☐ g. Other _____

☐ 2. Submit an Attestation of Completion of **Shipment to Temporary Storage** (Sections C, F and J are not required):

☐ 3. Submit an Attestation of Completion of **Shipment to a Receiving Facility** (Sections C, F and J are not required):

☐ 4. Certify that Remediation Waste Was **Not Shipped, and the Bill of Lading is Void.** (Sections C, D, E, and F are not required)

5. Date Bill of Lading submitted to the Department: _____ (mm/dd/yyyy) b. eDEP Transaction ID: _____

6. Period of Generation Associated with this Bill of Lading 3/11/2013 (mm/dd/yyyy) to 5/1/2014 (mm/dd/yyyy)

**(All sections of this transmittal form must be filled out unless otherwise noted)**

The Bill of Lading is not considered complete until the Attestation of Completion of Shipment is received by the Department.

**C. DESCRIPTION OF WASTE AND WASTE SOURCE:**

1. Contaminated Media /Debris (check all that apply):

☑ a. Soil ☐ b. Groundwater ☐ c. Surface Water ☐ d. Sediment ☐ e. Vegetation or Organic Debris

☐ f. Demolition/Construction Waste ☐ g. Inorganic Absorbent Materials ☐ h. Other: _____

2. Uncontainerized Waste (check all that apply):

☐ a. Inorganic Absorbent Materials ☐ b. Other: _____

**Massachusetts Department of Environmental Protection**
*Bureau of Waste Site Cleanup*

**BILL OF LADING** **(pursuant to 310 CMR 40.0030)**

**BWSC112**

Release Tracking Number
3 - 31364

**C. DESCRIPTION OF WASTE AND WASTE SOURCE (cont.):**

3. Containerized Waste (check all that apply):

☐ a. Tank Bottoms/Sludges ☐ b. Containers ☐ c. Drums ☐ d. Engineered Impoundments

☐ e. Other:

4. Estimated Quantity: 2,000 ☐ Tons ☑ Cu. Yds. ☐ Gallons

5. Contaminant Source (check one):

☐ a. Transportation Accident ☐ b. Underground Storage Tank ☐ c. Brownfields Redevelopment

☑ d. Other: URBAN FILL

6. Type of Contaminant (check all that apply):

☐ a. Gasoline ☐ b. Diesel Fuel ☐ c. #2 Fuel Oil ☐ d. #4 Fuel Oil ☐ e. #6 Fuel Oil ☐ f. Jet Fuel

☐ g. Waste Oil ☐ h. Kerosene ☐ i. Chlorinated Solvents ☑ j. Urban Fill ☐ k. Other:

7. Constituents of Concern (check all that apply):

☐ a. As ☐ b. Cd ☐ c. Cr ☑ d. Pb ☐ e. Hg ☐ f. EPH/TPH ☐ g. VPH

☐ h. PCBs ☑ i. VOCs ☐ j. SVOCs ☐ k. Other:

8. If applicable, check the box for the Reportable Concentration Category of the site:

☑ a. RCS-1 ☐ b. RCS-2 ☐ c. RCGW-1 ☐ d. RCGW-2

9. Remediation Waste Characterization Documentation (check at least one):

☑ a. Site History Information ☑ b. Sampling Analytical Methods and Procedures ☑ c. Laboratory Data

☑ d. Field Screening Data ☑ e. Characterization Documentation previously submitted to the Department

i. Date submitted: 2/13/2013 (mm/dd/yyyy) ii. Type of Documentation: RAM

**D. TRANSPORTER OR COMMON CARRIER INFORMATION:**

1. Transporter/Common Carrier Name: BOSTON ENVIRONMENTAL CORP

2. Contact First Name: JOHN 3. Last Name: COLE

4. Street: 338 HOWARD STREET 5. Title: DIRECTOR OF OPERATIONS

6. City/Town: BROCKTON 7. State: MA 8. Zip Code: 02302-0000

9. Telephone: (508) 897-8025 10. Ext: 11. Fax:

**Massachusetts Department of Environmental Protection**
*Bureau of Waste Site Cleanup*

**BWSC112**

**BILL OF LADING** **(pursuant to 310 CMR 40.0030)**

Release Tracking Number
3 - 31364

**E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION:**

1. Operator/Facility Name: SITE RESTORATION TECHNOLOGIES/FORMER PORTSMOUTH LANDFILL
2. Contact First Name: DAVID 3. Last Name: PETER
4. Street: PARK AVENUE 5. Title: MANAGER
6. City/Town: PORTSMOUTH 7. State: RI 8. Zip Code: 02871-0000
9. Telephone: (508) 380-1267 10. Ext: 11. Fax:
12. Type of Facility: (Check one)
   a. Temporary Storage i. Period of Temporary Storage: _____ (mm/dd/yyyy) to _____ (mm/dd/yyyy)
   ii. Reason for Temporary Storage:
   ☐ b. Asphalt Batch/Hot Mix ☐ c. Landfill/Disposal ☐ d. Landfill/Structural Fill ☑ e. Landfill/Daily Cover
   ☐ f. Asphalt Batch/Cold Mix ☐ g. Thermal Processing ☐ h. Incinerator ☑ i. Other: SHAPING/FINAL CAP
13. Division of Hazardous Waste/Class A Permit Number:
14. Division of Solid Waste Permit Number:
15. EPA Identification Number:

**F. LSP SIGNATURE AND STAMP:**

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this submittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief, the assessment action(s) undertaken to characterize the Remediation Waste which is (are) the subject of this submittal for acceptance at the facility identified in this submittal comply with applicable provisions of 310 CMR 40.0000, and such facility is permitted to accept Remediation Waste having the characteristics described in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #: 3188
2. First Name: JOSEPH G 3. Last Name: LOMBARDO JR
4. Telephone: (617) 349-7344 5. Ext.
6. FAX:
7. Signature: JOSEPH G LOMBARDO JR
8. Date: 3/12/2013 (mm/dd/yyyy)
9. LSP Stamp: Commonwealth of Massachusetts Electronic Seal Licensed Site Professional

**Massachusetts Department of Environmental Protection**
*Bureau of Waste Site Cleanup*

**BWSC112**

**BILL OF LADING** **(pursuant to 310 CMR 40.0030)**

Release Tracking Number
3 - 31364

**G. PERSON SUBMITTING BILL OF LADING:**

1. Check all that apply: ☐ a. change in contact name ☐ b. Change of address ☐ c. change in person undertaking response actions

2. Name of Organization: BOSTON COLLEGE

3. Contact First Name: N GAIL 4. Last Name: HALL

5. Street: 140 COMMONWEALTH AVE 6. Title: DIRECTOR-EHS OFFICE

7. City/Town: CHESTNUT HILL 8. State: MA 9. Zip Code: 02467-3862

10. Telephone: (617) 552-0308 11. Ext: 12. Fax:

**H. RELATIONSHIP TO SITE OF PERSON SUBMITTING BILL OF LADING:**

☐ Check here to change relationship

☑ 1. RP or PRP: ☑ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter

☐ e. Other RP or PRP Specify:

☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c.21E, s.2):

☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c.21E, s.5(j))

☐ 4. Any Other person Undertaking Response Actions: Specify Relationship:

**I. REQUIRED ATTACHMENTS AND SUBMITTALS :**

☐ 1. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approvals issued by DEP or EPA. If the box is checked, you must attach a statement identifying the applicable provisions thereof.

☐ 2. Check here if any non-updatable information provided on this form is incorrect, e. g. property address. Send corrections to BWSC.eDEP@state.ma.us

☑ 3. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.

**J. CERTIFICATION OF PERSON SUBMITTING BILL OF LADING :**

1. I, N. GAIL HALL, attest under the pains and penalties or perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: N. GAIL HALL 3. Title: DIRECTOR-EHS OFFICE

4. For: BOSTON COLLEGE
(Name of person or entity recorded in Section H)

5. Date: 3/12/2013
(mm/dd/yyyy)

**Massachusetts Department of Environmental Protection**
*Bureau of Waste Site Cleanup*

**BILL OF LADING** **(pursuant to 310 CMR 40.0030)**

**BWSC112**

Release Tracking Number
3 - 31364

**J. CERTIFICATION OF PERSON SUBMITTING BILL OF LADING (cont.) :**

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section H.

7. Street:

8. City/Town: 9. State: 10. Zip Code:

11. Telephone: 12. Ext: 13. Fax:

**YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO $10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.**

Date Stamp (MassDEP USE ONLY):

Laboratory Testing Data
Soil Disposal

# ANALYTICAL REPORT

| | |
|---|---|
| Lab Number: | L1222113 |
| Client: | McPhail Associates<br>2269 Massachusetts Avenue<br>Cambridge, MA 02140 |
| ATTN: | Ambrose Donovan |
| Phone: | (617) 868-1420 |
| Project Name: | ST. MARY'S GARAGE |
| Project Number: | 5386.9.00 |
| Report Date: | 12/19/12 |

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

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

| Alpha Sample ID | Client ID | Sample Location | Collection Date/Time |
|---|---|---|---|
| ~~L1222113-01~~ | ~~G-1 0-6' FILL COMP~~ | ~~CHESTNUT HILL, MA~~ | ~~11/30/12 15:00~~ |
| ~~L1222113-02~~ | ~~G-1 S-1 0-2'~~ | ~~CHESTNUT HILL, MA~~ | ~~11/27/12 11:30~~ |
| ~~L1222113-03~~ | ~~G-1 6-12' FILL COMP~~ | ~~CHESTNUT HILL, MA~~ | ~~11/30/12 15:00~~ |
| ~~L1222113-04~~ | ~~G-1 S-5 8-10'~~ | ~~CHESTNUT HILL, MA~~ | ~~11/27/12 11:45~~ |
| ~~L1222113-05~~ | ~~G-1 12-18' FILL COMP~~ | ~~CHESTNUT HILL, MA~~ | ~~11/30/12 15:00~~ |
| ~~L1222113-06~~ | ~~G-1 S-8 14-16'~~ | ~~CHESTNUT HILL, MA~~ | ~~11/27/12 12:00~~ |
| L1222113-07 | G-2 0-6' FILL COMP | CHESTNUT HILL, MA | 11/30/12 15:00 |
| L1222113-08 | G-2 S-2 2-4' | CHESTNUT HILL, MA | 11/28/12 14:30 |
| ~~L1222113-09~~ | ~~G-2 6-14' FILL COMP~~ | ~~CHESTNUT HILL, MA~~ | ~~11/30/12 15:00~~ |
| ~~L1222113-10~~ | ~~G-2 S-5 8-10'~~ | ~~CHESTNUT HILL, MA~~ | ~~11/28/12 16:00~~ |
| L1222113-11 | G-3 0-6' FILL COMP | CHESTNUT HILL, MA | 11/30/12 15:00 |
| L1222113-12 | G-3 S-2 2-4' | CHESTNUT HILL, MA | 11/29/12 08:00 |
| ~~L1222113-13~~ | ~~G-3 6-14' FILL COMP~~ | ~~CHESTNUT HILL, MA~~ | ~~11/30/12 15:00~~ |
| ~~L1222113-14~~ | ~~G-3 S-6 10-12'~~ | ~~CHESTNUT HILL, MA~~ | ~~11/29/12 10:00~~ |
| ~~L1222113-15~~ | ~~G-4 0-8' FILL COMP~~ | ~~CHESTNUT HILL, MA~~ | ~~11/30/12 15:00~~ |
| ~~L1222113-16~~ | ~~G-4 S-2 2-4'~~ | ~~CHESTNUT HILL, MA~~ | ~~11/27/12 14:00~~ |
| L1222113-17 | G-4 8-16' FILL COMP | CHESTNUT HILL, MA | 11/30/12 15:00 |
| L1222113-18 | G-4 S-5 8-10' | CHESTNUT HILL, MA | 11/27/12 15:00 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

## MADEP MCP Response Action Analytical Report Certification

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

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

| **A response to questions G, H and I is required for "Presumptive Certainty" status** | | |
|---|---|---|
| G | Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)? | NO |
| H | Were all QC performance standards specified in the CAM protocol(s) achieved? | NO |
| I | Were results reported for the complete analyte list specified in the selected CAM protocol(s)? | NO |

**For any questions answered "No", please refer to the case narrative section on the following page(s).**

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

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113
**Project Number:** 5386.9.00 **Report Date:** 12/19/12

## Case Narrative

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

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

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

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

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

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

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1222113 |
| **Project Number:** | 5386.9.00 | **Report Date:** | 12/19/12 |

**Case Narrative (continued)**

Report Submission

This report replaces the report issued December 12, 2012. L1222113-11 and the associated WG577967-4 Laboratory Duplicate were re-analyzed for confirmation. The results of the re-analyses are now reported.

MCP Related Narratives

Sample Receipt

In reference to question H:

A Matrix Spike was not submitted for the analysis of Metals.

Volatile Organics

In reference to question G:

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

In reference to question H:

The initial calibration, associated with L1222113-02, -04, -06, -08, -10, -12, -14, -16, and -18, did not meet the method required minimum response factors on the lowest calibration standards for 1,4-Dioxane (0.00194), as well as the average response factor for 1,4-Dioxane.

The continuing calibration standard, associated with L1222113-02, -04, -06, -08, -10, -12, -14, -16, and -18, is outside the acceptance criteria for several compounds; however, it is within overall method allowances. A copy of the continuing calibration standard is included as an addendum to this report.

Semivolatile Organics

L1222113-03, -07, and -15 have elevated detection limits due to the dilutions required by the sample matrices.

L1222113-11 has elevated detection limits due to the dilution required by the matrix interferences encountered during the concentration of the sample and the analytical dilution required by the sample matrix.

In reference to question G:

L1222113-01, -03, -05, -07, -11, and -15: One or more of the target analytes did not achieve the requested CAM reporting limits.

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1222113 |
| **Project Number:** | 5386.9.00 | **Report Date:** | 12/19/12 |

**Case Narrative (continued)**

Metals

In reference to question I:

All samples were analyzed for a subset of MCP elements per the Chain of Custody.

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

Authorized Signature: Kelly Stenstrom

Title: Technical Director/Representative

Date: 12/19/12

# ORGANICS

# VOLATILES

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1222113-08 | Date Collected: | 11/28/12 14:30 |
| Client ID: | G-2 S-2 2-4' | Date Received: | 12/06/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | | |
| Analytical Method: | 97,8260C | | |
| Analytical Date: | 12/07/12 13:46 | | |
| Analyst: | BN | | |
| Percent Solids: | 89% | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab | | | | | | |
| Methylene chloride | ND | | ug/kg | 960 | -- | 1 |
| 1,1-Dichloroethane | ND | | ug/kg | 140 | -- | 1 |
| Chloroform | ND | | ug/kg | 140 | -- | 1 |
| Carbon tetrachloride | ND | | ug/kg | 96 | -- | 1 |
| 1,2-Dichloropropane | ND | | ug/kg | 340 | -- | 1 |
| Dibromochloromethane | ND | | ug/kg | 96 | -- | 1 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 140 | -- | 1 |
| Tetrachloroethene | ND | | ug/kg | 96 | -- | 1 |
| Chlorobenzene | ND | | ug/kg | 96 | -- | 1 |
| Trichlorofluoromethane | ND | | ug/kg | 380 | -- | 1 |
| 1,2-Dichloroethane | ND | | ug/kg | 96 | -- | 1 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 96 | -- | 1 |
| Bromodichloromethane | ND | | ug/kg | 96 | -- | 1 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 96 | -- | 1 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 96 | -- | 1 |
| 1,1-Dichloropropene | ND | | ug/kg | 380 | -- | 1 |
| Bromoform | ND | | ug/kg | 380 | -- | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 96 | -- | 1 |
| Benzene | ND | | ug/kg | 96 | -- | 1 |
| Toluene | ND | | ug/kg | 140 | -- | 1 |
| Ethylbenzene | ND | | ug/kg | 96 | -- | 1 |
| Chloromethane | ND | | ug/kg | 380 | -- | 1 |
| Bromomethane | ND | | ug/kg | 190 | -- | 1 |
| Vinyl chloride | ND | | ug/kg | 190 | -- | 1 |
| Chloroethane | ND | | ug/kg | 190 | -- | 1 |
| 1,1-Dichloroethene | ND | | ug/kg | 96 | -- | 1 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 140 | -- | 1 |
| Trichloroethene | ND | | ug/kg | 96 | -- | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 380 | -- | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 380 | -- | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 380 | -- | 1 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

## SAMPLE RESULTS

Lab ID: L1222113-08 Date Collected: 11/28/12 14:30

Client ID: G-2 S-2 2-4' Date Received: 12/06/12

Sample Location: CHESTNUT HILL, MA Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab | | | | | | |
| Methyl tert butyl ether | ND | | ug/kg | 190 | -- | 1 |
| p/m-Xylene | ND | | ug/kg | 190 | -- | 1 |
| o-Xylene | ND | | ug/kg | 190 | -- | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 96 | -- | 1 |
| Dibromomethane | ND | | ug/kg | 380 | -- | 1 |
| 1,2,3-Trichloropropane | ND | | ug/kg | 380 | -- | 1 |
| Styrene | ND | | ug/kg | 190 | -- | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 960 | -- | 1 |
| Acetone | ND | | ug/kg | 3400 | -- | 1 |
| Carbon disulfide | ND | | ug/kg | 380 | -- | 1 |
| 2-Butanone | ND | | ug/kg | 960 | -- | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 960 | -- | 1 |
| 2-Hexanone | ND | | ug/kg | 960 | -- | 1 |
| Bromochloromethane | ND | | ug/kg | 380 | -- | 1 |
| Tetrahydrofuran | ND | | ug/kg | 380 | -- | 1 |
| 2,2-Dichloropropane | ND | | ug/kg | 480 | -- | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 380 | -- | 1 |
| 1,3-Dichloropropane | ND | | ug/kg | 380 | -- | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | ug/kg | 96 | -- | 1 |
| Bromobenzene | ND | | ug/kg | 480 | -- | 1 |
| n-Butylbenzene | ND | | ug/kg | 96 | -- | 1 |
| sec-Butylbenzene | ND | | ug/kg | 96 | -- | 1 |
| tert-Butylbenzene | ND | | ug/kg | 380 | -- | 1 |
| o-Chlorotoluene | ND | | ug/kg | 380 | -- | 1 |
| p-Chlorotoluene | ND | | ug/kg | 380 | -- | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 380 | -- | 1 |
| Hexachlorobutadiene | ND | | ug/kg | 380 | -- | 1 |
| Isopropylbenzene | ND | | ug/kg | 96 | -- | 1 |
| p-Isopropyltoluene | ND | | ug/kg | 96 | -- | 1 |
| Naphthalene | ND | | ug/kg | 380 | -- | 1 |
| n-Propylbenzene | ND | | ug/kg | 96 | -- | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 380 | -- | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 380 | -- | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 380 | -- | 1 |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 380 | -- | 1 |
| Ethyl ether | ND | | ug/kg | 480 | -- | 1 |
| Isopropyl Ether | ND | | ug/kg | 380 | -- | 1 |
| Ethyl-Tert-Butyl-Ether | ND | | ug/kg | 380 | -- | 1 |
| Tertiary-Amyl Methyl Ether | ND | | ug/kg | 380 | -- | 1 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1222113-08 | Date Collected: | 11/28/12 14:30 |
| Client ID: | G-2 S-2 2-4' | Date Received: | 12/06/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab | | | | | | |
| 1,4-Dioxane | ND | | ug/kg | 9600 | -- | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 97 | | 70-130 |
| Toluene-d8 | 103 | | 70-130 |
| 4-Bromofluorobenzene | 97 | | 70-130 |
| Dibromofluoromethane | 95 | | 70-130 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1222113-12 | Date Collected: | 11/29/12 08:00 |
| Client ID: | G-3 S-2 2-4' | Date Received: | 12/06/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | | |
| Analytical Method: | 97,8260C | | |
| Analytical Date: | 12/07/12 14:40 | | |
| Analyst: | BN | | |
| Percent Solids: | 86% | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab | | | | | | |
| Methylene chloride | ND | | ug/kg | 1200 | -- | 1 |
| 1,1-Dichloroethane | ND | | ug/kg | 180 | -- | 1 |
| Chloroform | ND | | ug/kg | 180 | -- | 1 |
| Carbon tetrachloride | ND | | ug/kg | 120 | -- | 1 |
| 1,2-Dichloropropane | ND | | ug/kg | 420 | -- | 1 |
| Dibromochloromethane | ND | | ug/kg | 120 | -- | 1 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 180 | -- | 1 |
| Tetrachloroethene | ND | | ug/kg | 120 | -- | 1 |
| Chlorobenzene | ND | | ug/kg | 120 | -- | 1 |
| Trichlorofluoromethane | ND | | ug/kg | 480 | -- | 1 |
| 1,2-Dichloroethane | ND | | ug/kg | 120 | -- | 1 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 120 | -- | 1 |
| Bromodichloromethane | ND | | ug/kg | 120 | -- | 1 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 120 | -- | 1 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 120 | -- | 1 |
| 1,1-Dichloropropene | ND | | ug/kg | 480 | -- | 1 |
| Bromoform | ND | | ug/kg | 480 | -- | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 120 | -- | 1 |
| Benzene | ND | | ug/kg | 120 | -- | 1 |
| Toluene | ND | | ug/kg | 180 | -- | 1 |
| Ethylbenzene | ND | | ug/kg | 120 | -- | 1 |
| Chloromethane | ND | | ug/kg | 480 | -- | 1 |
| Bromomethane | ND | | ug/kg | 240 | -- | 1 |
| Vinyl chloride | ND | | ug/kg | 240 | -- | 1 |
| Chloroethane | ND | | ug/kg | 240 | -- | 1 |
| 1,1-Dichloroethene | ND | | ug/kg | 120 | -- | 1 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 180 | -- | 1 |
| Trichloroethene | ND | | ug/kg | 120 | -- | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 480 | -- | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 480 | -- | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 480 | -- | 1 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

## SAMPLE RESULTS

Lab ID: L1222113-12 Date Collected: 11/29/12 08:00

Client ID: G-3 S-2 2-4' Date Received: 12/06/12

Sample Location: CHESTNUT HILL, MA Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab | | | | | | |
| Methyl tert butyl ether | ND | | ug/kg | 240 | -- | 1 |
| p/m-Xylene | ND | | ug/kg | 240 | -- | 1 |
| o-Xylene | ND | | ug/kg | 240 | -- | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 120 | -- | 1 |
| Dibromomethane | ND | | ug/kg | 480 | -- | 1 |
| 1,2,3-Trichloropropane | ND | | ug/kg | 480 | -- | 1 |
| Styrene | ND | | ug/kg | 240 | -- | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 1200 | -- | 1 |
| Acetone | ND | | ug/kg | 4400 | -- | 1 |
| Carbon disulfide | ND | | ug/kg | 480 | -- | 1 |
| 2-Butanone | ND | | ug/kg | 1200 | -- | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 1200 | -- | 1 |
| 2-Hexanone | ND | | ug/kg | 1200 | -- | 1 |
| Bromochloromethane | ND | | ug/kg | 480 | -- | 1 |
| Tetrahydrofuran | ND | | ug/kg | 480 | -- | 1 |
| 2,2-Dichloropropane | ND | | ug/kg | 610 | -- | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 480 | -- | 1 |
| 1,3-Dichloropropane | ND | | ug/kg | 480 | -- | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | ug/kg | 120 | -- | 1 |
| Bromobenzene | ND | | ug/kg | 610 | -- | 1 |
| n-Butylbenzene | ND | | ug/kg | 120 | -- | 1 |
| sec-Butylbenzene | ND | | ug/kg | 120 | -- | 1 |
| tert-Butylbenzene | ND | | ug/kg | 480 | -- | 1 |
| o-Chlorotoluene | ND | | ug/kg | 480 | -- | 1 |
| p-Chlorotoluene | ND | | ug/kg | 480 | -- | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 480 | -- | 1 |
| Hexachlorobutadiene | ND | | ug/kg | 480 | -- | 1 |
| Isopropylbenzene | ND | | ug/kg | 120 | -- | 1 |
| p-Isopropyltoluene | ND | | ug/kg | 120 | -- | 1 |
| Naphthalene | ND | | ug/kg | 480 | -- | 1 |
| n-Propylbenzene | ND | | ug/kg | 120 | -- | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 480 | -- | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 480 | -- | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 480 | -- | 1 |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 480 | -- | 1 |
| Ethyl ether | ND | | ug/kg | 610 | -- | 1 |
| Isopropyl Ether | ND | | ug/kg | 480 | -- | 1 |
| Ethyl-Tert-Butyl-Ether | ND | | ug/kg | 480 | -- | 1 |
| Tertiary-Amyl Methyl Ether | ND | | ug/kg | 480 | -- | 1 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1222113-12 | Date Collected: | 11/29/12 08:00 |
| Client ID: | G-3 S-2 2-4' | Date Received: | 12/06/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab | | | | | | |
| 1,4-Dioxane | ND | | ug/kg | 12000 | -- | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 96 | | 70-130 |
| Toluene-d8 | 104 | | 70-130 |
| 4-Bromofluorobenzene | 97 | | 70-130 |
| Dibromofluoromethane | 94 | | 70-130 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1222113-18 | Date Collected: | 11/27/12 15:00 |
| Client ID: | G-4 S-5 8-10' | Date Received: | 12/06/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | | |
| Analytical Method: | 97,8260C | | |
| Analytical Date: | 12/07/12 16:01 | | |
| Analyst: | BN | | |
| Percent Solids: | 83% | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab | | | | | | |
| Methylene chloride | ND | | ug/kg | 1000 | -- | 1 |
| 1,1-Dichloroethane | ND | | ug/kg | 160 | -- | 1 |
| Chloroform | ND | | ug/kg | 160 | -- | 1 |
| Carbon tetrachloride | ND | | ug/kg | 100 | -- | 1 |
| 1,2-Dichloropropane | ND | | ug/kg | 360 | -- | 1 |
| Dibromochloromethane | ND | | ug/kg | 100 | -- | 1 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 160 | -- | 1 |
| Tetrachloroethene | ND | | ug/kg | 100 | -- | 1 |
| Chlorobenzene | ND | | ug/kg | 100 | -- | 1 |
| Trichlorofluoromethane | ND | | ug/kg | 420 | -- | 1 |
| 1,2-Dichloroethane | ND | | ug/kg | 100 | -- | 1 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 100 | -- | 1 |
| Bromodichloromethane | ND | | ug/kg | 100 | -- | 1 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 100 | -- | 1 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 100 | -- | 1 |
| 1,1-Dichloropropene | ND | | ug/kg | 420 | -- | 1 |
| Bromoform | ND | | ug/kg | 420 | -- | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 100 | -- | 1 |
| Benzene | ND | | ug/kg | 100 | -- | 1 |
| Toluene | ND | | ug/kg | 160 | -- | 1 |
| Ethylbenzene | ND | | ug/kg | 100 | -- | 1 |
| Chloromethane | ND | | ug/kg | 420 | -- | 1 |
| Bromomethane | ND | | ug/kg | 210 | -- | 1 |
| Vinyl chloride | ND | | ug/kg | 210 | -- | 1 |
| Chloroethane | ND | | ug/kg | 210 | -- | 1 |
| 1,1-Dichloroethene | ND | | ug/kg | 100 | -- | 1 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 160 | -- | 1 |
| Trichloroethene | ND | | ug/kg | 100 | -- | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 420 | -- | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 420 | -- | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 420 | -- | 1 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

## SAMPLE RESULTS

Lab ID: L1222113-18 Date Collected: 11/27/12 15:00

Client ID: G-4 S-5 8-10' Date Received: 12/06/12

Sample Location: CHESTNUT HILL, MA Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab | | | | | | |
| Methyl tert butyl ether | ND | | ug/kg | 210 | -- | 1 |
| p/m-Xylene | ND | | ug/kg | 210 | -- | 1 |
| o-Xylene | ND | | ug/kg | 210 | -- | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 100 | -- | 1 |
| Dibromomethane | ND | | ug/kg | 420 | -- | 1 |
| 1,2,3-Trichloropropane | ND | | ug/kg | 420 | -- | 1 |
| Styrene | ND | | ug/kg | 210 | -- | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 1000 | -- | 1 |
| Acetone | ND | | ug/kg | 3800 | -- | 1 |
| Carbon disulfide | ND | | ug/kg | 420 | -- | 1 |
| 2-Butanone | ND | | ug/kg | 1000 | -- | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 1000 | -- | 1 |
| 2-Hexanone | ND | | ug/kg | 1000 | -- | 1 |
| Bromochloromethane | ND | | ug/kg | 420 | -- | 1 |
| Tetrahydrofuran | ND | | ug/kg | 420 | -- | 1 |
| 2,2-Dichloropropane | ND | | ug/kg | 520 | -- | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 420 | -- | 1 |
| 1,3-Dichloropropane | ND | | ug/kg | 420 | -- | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | ug/kg | 100 | -- | 1 |
| Bromobenzene | ND | | ug/kg | 520 | -- | 1 |
| n-Butylbenzene | ND | | ug/kg | 100 | -- | 1 |
| sec-Butylbenzene | ND | | ug/kg | 100 | -- | 1 |
| tert-Butylbenzene | ND | | ug/kg | 420 | -- | 1 |
| o-Chlorotoluene | ND | | ug/kg | 420 | -- | 1 |
| p-Chlorotoluene | ND | | ug/kg | 420 | -- | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 420 | -- | 1 |
| Hexachlorobutadiene | ND | | ug/kg | 420 | -- | 1 |
| Isopropylbenzene | ND | | ug/kg | 100 | -- | 1 |
| p-Isopropyltoluene | ND | | ug/kg | 100 | -- | 1 |
| Naphthalene | ND | | ug/kg | 420 | -- | 1 |
| n-Propylbenzene | ND | | ug/kg | 100 | -- | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 420 | -- | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 420 | -- | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 420 | -- | 1 |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 420 | -- | 1 |
| Ethyl ether | ND | | ug/kg | 520 | -- | 1 |
| Isopropyl Ether | ND | | ug/kg | 420 | -- | 1 |
| Ethyl-Tert-Butyl-Ether | ND | | ug/kg | 420 | -- | 1 |
| Tertiary-Amyl Methyl Ether | ND | | ug/kg | 420 | -- | 1 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1222113-18 | Date Collected: | 11/27/12 15:00 |
| Client ID: | G-4 S-5 8-10' | Date Received: | 12/06/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab | | | | | | |
| 1,4-Dioxane | ND | | ug/kg | 10000 | -- | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 96 | | 70-130 |
| Toluene-d8 | 104 | | 70-130 |
| 4-Bromofluorobenzene | 98 | | 70-130 |
| Dibromofluoromethane | 95 | | 70-130 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 12/07/12 09:44
Analyst: BN

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab for sample(s): 02,04,06,08,10,12,14,16,18 Batch: WG578468-3 | | | | | |
| Methylene chloride | ND | | ug/kg | 500 | -- |
| 1,1-Dichloroethane | ND | | ug/kg | 75 | -- |
| Chloroform | ND | | ug/kg | 75 | -- |
| Carbon tetrachloride | ND | | ug/kg | 50 | -- |
| 1,2-Dichloropropane | ND | | ug/kg | 180 | -- |
| Dibromochloromethane | ND | | ug/kg | 50 | -- |
| 1,1,2-Trichloroethane | ND | | ug/kg | 75 | -- |
| Tetrachloroethene | ND | | ug/kg | 50 | -- |
| Chlorobenzene | ND | | ug/kg | 50 | -- |
| Trichlorofluoromethane | ND | | ug/kg | 200 | -- |
| 1,2-Dichloroethane | ND | | ug/kg | 50 | -- |
| 1,1,1-Trichloroethane | ND | | ug/kg | 50 | -- |
| Bromodichloromethane | ND | | ug/kg | 50 | -- |
| trans-1,3-Dichloropropene | ND | | ug/kg | 50 | -- |
| cis-1,3-Dichloropropene | ND | | ug/kg | 50 | -- |
| 1,1-Dichloropropene | ND | | ug/kg | 200 | -- |
| Bromoform | ND | | ug/kg | 200 | -- |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 50 | -- |
| Benzene | ND | | ug/kg | 50 | -- |
| Toluene | ND | | ug/kg | 75 | -- |
| Ethylbenzene | ND | | ug/kg | 50 | -- |
| Chloromethane | ND | | ug/kg | 200 | -- |
| Bromomethane | ND | | ug/kg | 100 | -- |
| Vinyl chloride | ND | | ug/kg | 100 | -- |
| Chloroethane | ND | | ug/kg | 100 | -- |
| 1,1-Dichloroethene | ND | | ug/kg | 50 | -- |
| trans-1,2-Dichloroethene | ND | | ug/kg | 75 | -- |
| Trichloroethene | ND | | ug/kg | 50 | -- |
| 1,2-Dichlorobenzene | ND | | ug/kg | 200 | -- |
| 1,3-Dichlorobenzene | ND | | ug/kg | 200 | -- |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 12/07/12 09:44
Analyst: BN

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab for sample(s): 02,04,06,08,10,12,14,16,18 Batch: WG578468-3 | | | | | |
| 1,4-Dichlorobenzene | ND | | ug/kg | 200 | -- |
| Methyl tert butyl ether | ND | | ug/kg | 100 | -- |
| p/m-Xylene | ND | | ug/kg | 100 | -- |
| o-Xylene | ND | | ug/kg | 100 | -- |
| cis-1,2-Dichloroethene | ND | | ug/kg | 50 | -- |
| Dibromomethane | ND | | ug/kg | 200 | -- |
| 1,2,3-Trichloropropane | ND | | ug/kg | 200 | -- |
| Styrene | ND | | ug/kg | 100 | -- |
| Dichlorodifluoromethane | ND | | ug/kg | 500 | -- |
| Acetone | ND | | ug/kg | 1800 | -- |
| Carbon disulfide | ND | | ug/kg | 200 | -- |
| 2-Butanone | ND | | ug/kg | 500 | -- |
| 4-Methyl-2-pentanone | ND | | ug/kg | 500 | -- |
| 2-Hexanone | ND | | ug/kg | 500 | -- |
| Bromochloromethane | ND | | ug/kg | 200 | -- |
| Tetrahydrofuran | ND | | ug/kg | 200 | -- |
| 2,2-Dichloropropane | ND | | ug/kg | 250 | -- |
| 1,2-Dibromoethane | ND | | ug/kg | 200 | -- |
| 1,3-Dichloropropane | ND | | ug/kg | 200 | -- |
| 1,1,1,2-Tetrachloroethane | ND | | ug/kg | 50 | -- |
| Bromobenzene | ND | | ug/kg | 250 | -- |
| n-Butylbenzene | ND | | ug/kg | 50 | -- |
| sec-Butylbenzene | ND | | ug/kg | 50 | -- |
| tert-Butylbenzene | ND | | ug/kg | 200 | -- |
| o-Chlorotoluene | ND | | ug/kg | 200 | -- |
| p-Chlorotoluene | ND | | ug/kg | 200 | -- |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 200 | -- |
| Hexachlorobutadiene | ND | | ug/kg | 200 | -- |
| Isopropylbenzene | ND | | ug/kg | 50 | -- |
| p-Isopropyltoluene | ND | | ug/kg | 50 | -- |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 12/07/12 09:44
Analyst: BN

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab for sample(s): 02,04,06,08,10,12,14,16,18 Batch: WG578468-3 | | | | | |
| Naphthalene | ND | | ug/kg | 200 | -- |
| n-Propylbenzene | ND | | ug/kg | 50 | -- |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 200 | -- |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 200 | -- |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 200 | -- |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 200 | -- |
| Ethyl ether | ND | | ug/kg | 250 | -- |
| Isopropyl Ether | ND | | ug/kg | 200 | -- |
| Ethyl-Tert-Butyl-Ether | ND | | ug/kg | 200 | -- |
| Tertiary-Amyl Methyl Ether | ND | | ug/kg | 200 | -- |
| 1,4-Dioxane | ND | | ug/kg | 5000 | -- |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 99 | | 70-130 |
| Toluene-d8 | 104 | | 70-130 |
| 4-Bromofluorobenzene | 100 | | 70-130 |
| Dibromofluoromethane | 94 | | 70-130 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab Associated sample(s): 02,04,06,08,10,12,14,16,18 Batch: WG578468-1 WG578468-2 | | | | | | | | |
| Methylene chloride | 92 | | 86 | | 70-130 | 7 | | 20 |
| 1,1-Dichloroethane | 93 | | 92 | | 70-130 | 1 | | 20 |
| Chloroform | 94 | | 92 | | 70-130 | 2 | | 20 |
| Carbon tetrachloride | 96 | | 94 | | 70-130 | 2 | | 20 |
| 1,2-Dichloropropane | 92 | | 90 | | 70-130 | 2 | | 20 |
| Dibromochloromethane | 98 | | 96 | | 70-130 | 2 | | 20 |
| 1,1,2-Trichloroethane | 100 | | 97 | | 70-130 | 3 | | 20 |
| Tetrachloroethene | 106 | | 102 | | 70-130 | 4 | | 20 |
| Chlorobenzene | 101 | | 98 | | 70-130 | 3 | | 20 |
| Trichlorofluoromethane | 93 | | 90 | | 70-130 | 3 | | 20 |
| 1,2-Dichloroethane | 89 | | 89 | | 70-130 | 0 | | 20 |
| 1,1,1-Trichloroethane | 96 | | 94 | | 70-130 | 2 | | 20 |
| Bromodichloromethane | 92 | | 91 | | 70-130 | 1 | | 20 |
| trans-1,3-Dichloropropene | 100 | | 97 | | 70-130 | 3 | | 20 |
| cis-1,3-Dichloropropene | 91 | | 91 | | 70-130 | 0 | | 20 |
| 1,1-Dichloropropene | 96 | | 94 | | 70-130 | 2 | | 20 |
| Bromoform | 102 | | 104 | | 70-130 | 2 | | 20 |
| 1,1,2,2-Tetrachloroethane | 100 | | 99 | | 70-130 | 1 | | 20 |
| Benzene | 93 | | 91 | | 70-130 | 2 | | 20 |
| Toluene | 100 | | 98 | | 70-130 | 2 | | 20 |
| Ethylbenzene | 100 | | 96 | | 70-130 | 4 | | 20 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab Associated sample(s): 02,04,06,08,10,12,14,16,18 Batch: WG578468-1 WG578468-2 | | | | | | | | |
| Chloromethane | 71 | | **68** | Q | 70-130 | 4 | | 20 |
| Bromomethane | 104 | | 100 | | 70-130 | 4 | | 20 |
| Vinyl chloride | 80 | | 73 | | 70-130 | 9 | | 20 |
| Chloroethane | 94 | | 89 | | 70-130 | 5 | | 20 |
| 1,1-Dichloroethene | 97 | | 94 | | 70-130 | 3 | | 20 |
| trans-1,2-Dichloroethene | 97 | | 96 | | 70-130 | 1 | | 20 |
| Trichloroethene | 96 | | 94 | | 70-130 | 2 | | 20 |
| 1,2-Dichlorobenzene | 104 | | 102 | | 70-130 | 2 | | 20 |
| 1,3-Dichlorobenzene | 104 | | 101 | | 70-130 | 3 | | 20 |
| 1,4-Dichlorobenzene | 104 | | 101 | | 70-130 | 3 | | 20 |
| Methyl tert butyl ether | 92 | | 91 | | 70-130 | 1 | | 20 |
| p/m-Xylene | 100 | | 96 | | 70-130 | 4 | | 20 |
| o-Xylene | 102 | | 98 | | 70-130 | 4 | | 20 |
| cis-1,2-Dichloroethene | 95 | | 95 | | 70-130 | 0 | | 20 |
| Dibromomethane | 92 | | 91 | | 70-130 | 1 | | 20 |
| 1,2,3-Trichloropropane | 101 | | 100 | | 70-130 | 1 | | 20 |
| Styrene | 102 | | 98 | | 70-130 | 4 | | 20 |
| Dichlorodifluoromethane | **68** | Q | **64** | Q | 70-130 | 6 | | 20 |
| Acetone | 128 | | 106 | | 70-130 | 19 | | 20 |
| Carbon disulfide | 97 | | 91 | | 70-130 | 6 | | 20 |
| 2-Butanone | 98 | | 92 | | 70-130 | 6 | | 20 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab Associated sample(s): 02,04,06,08,10,12,14,16,18 Batch: WG578468-1 WG578468-2 | | | | | | | | |
| 4-Methyl-2-pentanone | 89 | | 88 | | 70-130 | 1 | | 20 |
| 2-Hexanone | 95 | | 88 | | 70-130 | 8 | | 20 |
| Bromochloromethane | 96 | | 96 | | 70-130 | 0 | | 20 |
| Tetrahydrofuran | 82 | | 81 | | 70-130 | 1 | | 20 |
| 2,2-Dichloropropane | 98 | | 95 | | 70-130 | 3 | | 20 |
| 1,2-Dibromoethane | 98 | | 97 | | 70-130 | 1 | | 20 |
| 1,3-Dichloropropane | 97 | | 96 | | 70-130 | 1 | | 20 |
| 1,1,1,2-Tetrachloroethane | 101 | | 98 | | 70-130 | 3 | | 20 |
| Bromobenzene | 101 | | 101 | | 70-130 | 0 | | 20 |
| n-Butylbenzene | 107 | | 103 | | 70-130 | 4 | | 20 |
| sec-Butylbenzene | 105 | | 103 | | 70-130 | 2 | | 20 |
| tert-Butylbenzene | 105 | | 102 | | 70-130 | 3 | | 20 |
| o-Chlorotoluene | 101 | | 100 | | 70-130 | 1 | | 20 |
| p-Chlorotoluene | 103 | | 101 | | 70-130 | 2 | | 20 |
| 1,2-Dibromo-3-chloropropane | 84 | | 99 | | 70-130 | 16 | | 20 |
| Hexachlorobutadiene | 108 | | 107 | | 70-130 | 1 | | 20 |
| Isopropylbenzene | 103 | | 101 | | 70-130 | 2 | | 20 |
| p-Isopropyltoluene | 107 | | 103 | | 70-130 | 4 | | 20 |
| Naphthalene | 100 | | 102 | | 70-130 | 2 | | 20 |
| n-Propylbenzene | 103 | | 101 | | 70-130 | 2 | | 20 |
| 1,2,3-Trichlorobenzene | 105 | | 107 | | 70-130 | 2 | | 20 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab Associated sample(s): 02,04,06,08,10,12,14,16,18 Batch: WG578468-1 WG578468-2 | | | | | | | | |
| 1,2,4-Trichlorobenzene | 106 | | 106 | | 70-130 | 0 | | 20 |
| 1,3,5-Trimethylbenzene | 104 | | 101 | | 70-130 | 3 | | 20 |
| 1,2,4-Trimethylbenzene | 101 | | 98 | | 70-130 | 3 | | 20 |
| Ethyl ether | 86 | | 80 | | 70-130 | 7 | | 20 |
| Isopropyl Ether | 88 | | 88 | | 70-130 | 0 | | 20 |
| Ethyl-Tert-Butyl-Ether | 92 | | 92 | | 70-130 | 0 | | 20 |
| Tertiary-Amyl Methyl Ether | 93 | | 93 | | 70-130 | 0 | | 20 |
| 1,4-Dioxane | 88 | | 90 | | 70-130 | 2 | | 20 |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | 98 | | 98 | | 70-130 |
| Toluene-d8 | 105 | | 105 | | 70-130 |
| 4-Bromofluorobenzene | 97 | | 100 | | 70-130 |
| Dibromofluoromethane | 97 | | 97 | | 70-130 |

# SEMIVOLATILES

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1222113-07 D | Date Collected: | 11/30/12 15:00 |
| Client ID: | G-2 0-6' FILL COMP | Date Received: | 12/06/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | Extraction Method: | EPA 3546 |
| Analytical Method: | 97,8270D | Extraction Date: | 12/07/12 00:53 |
| Analytical Date: | 12/09/12 21:49 | | |
| Analyst: | RC | | |
| Percent Solids: | 87% | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab | | | | | | |
| Acenaphthene | ND | | ug/kg | 740 | -- | 5 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 930 | -- | 5 |
| Hexachlorobenzene | ND | | ug/kg | 560 | -- | 5 |
| Bis(2-chloroethyl)ether | ND | | ug/kg | 840 | -- | 5 |
| 2-Chloronaphthalene | ND | | ug/kg | 930 | -- | 5 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 930 | -- | 5 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 930 | -- | 5 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 930 | -- | 5 |
| 3,3'-Dichlorobenzidine | ND | | ug/kg | 930 | -- | 5 |
| 2,4-Dinitrotoluene | ND | | ug/kg | 930 | -- | 5 |
| 2,6-Dinitrotoluene | ND | | ug/kg | 930 | -- | 5 |
| Azobenzene | ND | | ug/kg | 930 | -- | 5 |
| Fluoranthene | 830 | | ug/kg | 560 | -- | 5 |
| 4-Bromophenyl phenyl ether | ND | | ug/kg | 930 | -- | 5 |
| Bis(2-chloroisopropyl)ether | ND | | ug/kg | 1100 | -- | 5 |
| Bis(2-chloroethoxy)methane | ND | | ug/kg | 1000 | -- | 5 |
| Hexachlorobutadiene | ND | | ug/kg | 930 | -- | 5 |
| Hexachloroethane | ND | | ug/kg | 740 | -- | 5 |
| Isophorone | ND | | ug/kg | 840 | -- | 5 |
| Naphthalene | ND | | ug/kg | 930 | -- | 5 |
| Nitrobenzene | ND | | ug/kg | 840 | -- | 5 |
| Bis(2-Ethylhexyl)phthalate | ND | | ug/kg | 930 | -- | 5 |
| Butyl benzyl phthalate | ND | | ug/kg | 930 | -- | 5 |
| Di-n-butylphthalate | ND | | ug/kg | 930 | -- | 5 |
| Di-n-octylphthalate | ND | | ug/kg | 930 | -- | 5 |
| Diethyl phthalate | ND | | ug/kg | 930 | -- | 5 |
| Dimethyl phthalate | ND | | ug/kg | 930 | -- | 5 |
| Benzo(a)anthracene | ND | | ug/kg | 560 | -- | 5 |
| Benzo(a)pyrene | ND | | ug/kg | 740 | -- | 5 |
| Benzo(b)fluoranthene | ND | | ug/kg | 560 | -- | 5 |
| Benzo(k)fluoranthene | ND | | ug/kg | 560 | -- | 5 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

## SAMPLE RESULTS

Lab ID: L1222113-07 D Date Collected: 11/30/12 15:00

Client ID: G-2 0-6' FILL COMP Date Received: 12/06/12

Sample Location: CHESTNUT HILL, MA Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab | | | | | | |
| Chrysene | ND | | ug/kg | 560 | -- | 5 |
| Acenaphthylene | ND | | ug/kg | 740 | -- | 5 |
| Anthracene | ND | | ug/kg | 560 | -- | 5 |
| Benzo(ghi)perylene | ND | | ug/kg | 740 | -- | 5 |
| Fluorene | ND | | ug/kg | 930 | -- | 5 |
| Phenanthrene | ND | | ug/kg | 560 | -- | 5 |
| Dibenzo(a,h)anthracene | ND | | ug/kg | 560 | -- | 5 |
| Indeno(1,2,3-cd)Pyrene | ND | | ug/kg | 740 | -- | 5 |
| Pyrene | 700 | | ug/kg | 560 | -- | 5 |
| Aniline | ND | | ug/kg | 1100 | -- | 5 |
| 4-Chloroaniline | ND | | ug/kg | 930 | -- | 5 |
| Dibenzofuran | ND | | ug/kg | 930 | -- | 5 |
| 2-Methylnaphthalene | ND | | ug/kg | 1100 | -- | 5 |
| Acetophenone | ND | | ug/kg | 930 | -- | 5 |
| 2,4,6-Trichlorophenol | ND | | ug/kg | 560 | -- | 5 |
| 2-Chlorophenol | ND | | ug/kg | 930 | -- | 5 |
| 2,4-Dichlorophenol | ND | | ug/kg | 840 | -- | 5 |
| 2,4-Dimethylphenol | ND | | ug/kg | 930 | -- | 5 |
| 2-Nitrophenol | ND | | ug/kg | 2000 | -- | 5 |
| 4-Nitrophenol | ND | | ug/kg | 1300 | -- | 5 |
| 2,4-Dinitrophenol | ND | | ug/kg | 4400 | -- | 5 |
| Pentachlorophenol | ND | | ug/kg | 1800 | -- | 5 |
| Phenol | ND | | ug/kg | 930 | -- | 5 |
| 2-Methylphenol | ND | | ug/kg | 930 | -- | 5 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 1300 | -- | 5 |
| 2,4,5-Trichlorophenol | ND | | ug/kg | 930 | -- | 5 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 74 | | 30-130 |
| Phenol-d6 | 78 | | 30-130 |
| Nitrobenzene-d5 | 70 | | 30-130 |
| 2-Fluorobiphenyl | 82 | | 30-130 |
| 2,4,6-Tribromophenol | 110 | | 30-130 |
| 4-Terphenyl-d14 | 88 | | 30-130 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1222113-11 D | Date Collected: | 11/30/12 15:00 |
| Client ID: | G-3 0-6' FILL COMP | Date Received: | 12/06/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | Extraction Method: | EPA 3546 |
| Analytical Method: | 97,8270D | Extraction Date: | 12/07/12 00:53 |
| Analytical Date: | 12/09/12 22:59 | | |
| Analyst: | RC | | |
| Percent Solids: | 87% | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab | | | | | | |
| Acenaphthene | ND | | ug/kg | 600 | -- | 4 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 750 | -- | 4 |
| Hexachlorobenzene | ND | | ug/kg | 450 | -- | 4 |
| Bis(2-chloroethyl)ether | ND | | ug/kg | 680 | -- | 4 |
| 2-Chloronaphthalene | ND | | ug/kg | 750 | -- | 4 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 750 | -- | 4 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 750 | -- | 4 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 750 | -- | 4 |
| 3,3'-Dichlorobenzidine | ND | | ug/kg | 750 | -- | 4 |
| 2,4-Dinitrotoluene | ND | | ug/kg | 750 | -- | 4 |
| 2,6-Dinitrotoluene | ND | | ug/kg | 750 | -- | 4 |
| Azobenzene | ND | | ug/kg | 750 | -- | 4 |
| Fluoranthene | 1000 | | ug/kg | 450 | -- | 4 |
| 4-Bromophenyl phenyl ether | ND | | ug/kg | 750 | -- | 4 |
| Bis(2-chloroisopropyl)ether | ND | | ug/kg | 900 | -- | 4 |
| Bis(2-chloroethoxy)methane | ND | | ug/kg | 810 | -- | 4 |
| Hexachlorobutadiene | ND | | ug/kg | 750 | -- | 4 |
| Hexachloroethane | ND | | ug/kg | 600 | -- | 4 |
| Isophorone | ND | | ug/kg | 680 | -- | 4 |
| Naphthalene | ND | | ug/kg | 750 | -- | 4 |
| Nitrobenzene | ND | | ug/kg | 680 | -- | 4 |
| Bis(2-Ethylhexyl)phthalate | ND | | ug/kg | 750 | -- | 4 |
| Butyl benzyl phthalate | ND | | ug/kg | 750 | -- | 4 |
| Di-n-butylphthalate | ND | | ug/kg | 750 | -- | 4 |
| Di-n-octylphthalate | ND | | ug/kg | 750 | -- | 4 |
| Diethyl phthalate | ND | | ug/kg | 750 | -- | 4 |
| Dimethyl phthalate | ND | | ug/kg | 750 | -- | 4 |
| Benzo(a)anthracene | ND | | ug/kg | 450 | -- | 4 |
| Benzo(a)pyrene | ND | | ug/kg | 600 | -- | 4 |
| Benzo(b)fluoranthene | 520 | | ug/kg | 450 | -- | 4 |
| Benzo(k)fluoranthene | ND | | ug/kg | 450 | -- | 4 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

## SAMPLE RESULTS

Lab ID: L1222113-11 D Date Collected: 11/30/12 15:00

Client ID: G-3 0-6' FILL COMP Date Received: 12/06/12

Sample Location: CHESTNUT HILL, MA Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab | | | | | | |
| Chrysene | ND | | ug/kg | 450 | -- | 4 |
| Acenaphthylene | ND | | ug/kg | 600 | -- | 4 |
| Anthracene | ND | | ug/kg | 450 | -- | 4 |
| Benzo(ghi)perylene | ND | | ug/kg | 600 | -- | 4 |
| Fluorene | ND | | ug/kg | 750 | -- | 4 |
| Phenanthrene | 740 | | ug/kg | 450 | -- | 4 |
| Dibenzo(a,h)anthracene | ND | | ug/kg | 450 | -- | 4 |
| Indeno(1,2,3-cd)Pyrene | ND | | ug/kg | 600 | -- | 4 |
| Pyrene | 880 | | ug/kg | 450 | -- | 4 |
| Aniline | ND | | ug/kg | 900 | -- | 4 |
| 4-Chloroaniline | ND | | ug/kg | 750 | -- | 4 |
| Dibenzofuran | ND | | ug/kg | 750 | -- | 4 |
| 2-Methylnaphthalene | ND | | ug/kg | 900 | -- | 4 |
| Acetophenone | ND | | ug/kg | 750 | -- | 4 |
| 2,4,6-Trichlorophenol | ND | | ug/kg | 450 | -- | 4 |
| 2-Chlorophenol | ND | | ug/kg | 750 | -- | 4 |
| 2,4-Dichlorophenol | ND | | ug/kg | 680 | -- | 4 |
| 2,4-Dimethylphenol | ND | | ug/kg | 750 | -- | 4 |
| 2-Nitrophenol | ND | | ug/kg | 1600 | -- | 4 |
| 4-Nitrophenol | ND | | ug/kg | 1000 | -- | 4 |
| 2,4-Dinitrophenol | ND | | ug/kg | 3600 | -- | 4 |
| Pentachlorophenol | ND | | ug/kg | 1500 | -- | 4 |
| Phenol | ND | | ug/kg | 750 | -- | 4 |
| 2-Methylphenol | ND | | ug/kg | 750 | -- | 4 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 1100 | -- | 4 |
| 2,4,5-Trichlorophenol | ND | | ug/kg | 750 | -- | 4 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 110 | | 30-130 |
| Phenol-d6 | 112 | | 30-130 |
| Nitrobenzene-d5 | 100 | | 30-130 |
| 2-Fluorobiphenyl | 110 | | 30-130 |
| 2,4,6-Tribromophenol | **138** | Q | 30-130 |
| 4-Terphenyl-d14 | 111 | | 30-130 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1222113-17 | Date Collected: | 11/30/12 15:00 |
| Client ID: | G-4 8-16' FILL COMP | Date Received: | 12/06/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | Extraction Method: | EPA 3546 |
| Analytical Method: | 97,8270D | Extraction Date: | 12/07/12 01:39 |
| Analytical Date: | 12/08/12 20:57 | | |
| Analyst: | RC | | |
| Percent Solids: | 89% | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab | | | | | | |
| Acenaphthene | ND | | ug/kg | 150 | -- | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 190 | -- | 1 |
| Hexachlorobenzene | ND | | ug/kg | 110 | -- | 1 |
| Bis(2-chloroethyl)ether | ND | | ug/kg | 170 | -- | 1 |
| 2-Chloronaphthalene | ND | | ug/kg | 190 | -- | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 190 | -- | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 190 | -- | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 190 | -- | 1 |
| 3,3'-Dichlorobenzidine | ND | | ug/kg | 190 | -- | 1 |
| 2,4-Dinitrotoluene | ND | | ug/kg | 190 | -- | 1 |
| 2,6-Dinitrotoluene | ND | | ug/kg | 190 | -- | 1 |
| Azobenzene | ND | | ug/kg | 190 | -- | 1 |
| Fluoranthene | 430 | | ug/kg | 110 | -- | 1 |
| 4-Bromophenyl phenyl ether | ND | | ug/kg | 190 | -- | 1 |
| Bis(2-chloroisopropyl)ether | ND | | ug/kg | 220 | -- | 1 |
| Bis(2-chloroethoxy)methane | ND | | ug/kg | 200 | -- | 1 |
| Hexachlorobutadiene | ND | | ug/kg | 190 | -- | 1 |
| Hexachloroethane | ND | | ug/kg | 150 | -- | 1 |
| Isophorone | ND | | ug/kg | 170 | -- | 1 |
| Naphthalene | ND | | ug/kg | 190 | -- | 1 |
| Nitrobenzene | ND | | ug/kg | 170 | -- | 1 |
| Bis(2-Ethylhexyl)phthalate | ND | | ug/kg | 190 | -- | 1 |
| Butyl benzyl phthalate | ND | | ug/kg | 190 | -- | 1 |
| Di-n-butylphthalate | ND | | ug/kg | 190 | -- | 1 |
| Di-n-octylphthalate | ND | | ug/kg | 190 | -- | 1 |
| Diethyl phthalate | ND | | ug/kg | 190 | -- | 1 |
| Dimethyl phthalate | ND | | ug/kg | 190 | -- | 1 |
| Benzo(a)anthracene | 200 | | ug/kg | 110 | -- | 1 |
| Benzo(a)pyrene | 200 | | ug/kg | 150 | -- | 1 |
| Benzo(b)fluoranthene | 250 | | ug/kg | 110 | -- | 1 |
| Benzo(k)fluoranthene | 120 | | ug/kg | 110 | -- | 1 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

## SAMPLE RESULTS

Lab ID: L1222113-17 Date Collected: 11/30/12 15:00

Client ID: G-4 8-16' FILL COMP Date Received: 12/06/12

Sample Location: CHESTNUT HILL, MA Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab | | | | | | |
| Chrysene | 200 | | ug/kg | 110 | -- | 1 |
| Acenaphthylene | ND | | ug/kg | 150 | -- | 1 |
| Anthracene | ND | | ug/kg | 110 | -- | 1 |
| Benzo(ghi)perylene | ND | | ug/kg | 150 | -- | 1 |
| Fluorene | ND | | ug/kg | 190 | -- | 1 |
| Phenanthrene | 290 | | ug/kg | 110 | -- | 1 |
| Dibenzo(a,h)anthracene | ND | | ug/kg | 110 | -- | 1 |
| Indeno(1,2,3-cd)Pyrene | ND | | ug/kg | 150 | -- | 1 |
| Pyrene | 380 | | ug/kg | 110 | -- | 1 |
| Aniline | ND | | ug/kg | 220 | -- | 1 |
| 4-Chloroaniline | ND | | ug/kg | 190 | -- | 1 |
| Dibenzofuran | ND | | ug/kg | 190 | -- | 1 |
| 2-Methylnaphthalene | ND | | ug/kg | 220 | -- | 1 |
| Acetophenone | ND | | ug/kg | 190 | -- | 1 |
| 2,4,6-Trichlorophenol | ND | | ug/kg | 110 | -- | 1 |
| 2-Chlorophenol | ND | | ug/kg | 190 | -- | 1 |
| 2,4-Dichlorophenol | ND | | ug/kg | 170 | -- | 1 |
| 2,4-Dimethylphenol | ND | | ug/kg | 190 | -- | 1 |
| 2-Nitrophenol | ND | | ug/kg | 400 | -- | 1 |
| 4-Nitrophenol | ND | | ug/kg | 260 | -- | 1 |
| 2,4-Dinitrophenol | ND | | ug/kg | 900 | -- | 1 |
| Pentachlorophenol | ND | | ug/kg | 370 | -- | 1 |
| Phenol | ND | | ug/kg | 190 | -- | 1 |
| 2-Methylphenol | ND | | ug/kg | 190 | -- | 1 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 270 | -- | 1 |
| 2,4,5-Trichlorophenol | ND | | ug/kg | 190 | -- | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 98 | | 30-130 |
| Phenol-d6 | 103 | | 30-130 |
| Nitrobenzene-d5 | 89 | | 30-130 |
| 2-Fluorobiphenyl | 97 | | 30-130 |
| 2,4,6-Tribromophenol | 124 | | 30-130 |
| 4-Terphenyl-d14 | 101 | | 30-130 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 97,8270D
Analytical Date: 12/07/12 08:55
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 12/07/12 00:53

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab for sample(s): 01,03,05,07,09,11,13,15,17 Batch: WG577950-1 | | | | | |
| Acenaphthene | ND | | ug/kg | 130 | -- |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 170 | -- |
| Hexachlorobenzene | ND | | ug/kg | 100 | -- |
| Bis(2-chloroethyl)ether | ND | | ug/kg | 150 | -- |
| 2-Chloronaphthalene | ND | | ug/kg | 170 | -- |
| 1,2-Dichlorobenzene | ND | | ug/kg | 170 | -- |
| 1,3-Dichlorobenzene | ND | | ug/kg | 170 | -- |
| 1,4-Dichlorobenzene | ND | | ug/kg | 170 | -- |
| 3,3'-Dichlorobenzidine | ND | | ug/kg | 170 | -- |
| 2,4-Dinitrotoluene | ND | | ug/kg | 170 | -- |
| 2,6-Dinitrotoluene | ND | | ug/kg | 170 | -- |
| Azobenzene | ND | | ug/kg | 170 | -- |
| Fluoranthene | ND | | ug/kg | 100 | -- |
| 4-Bromophenyl phenyl ether | ND | | ug/kg | 170 | -- |
| Bis(2-chloroisopropyl)ether | ND | | ug/kg | 200 | -- |
| Bis(2-chloroethoxy)methane | ND | | ug/kg | 180 | -- |
| Hexachlorobutadiene | ND | | ug/kg | 170 | -- |
| Hexachloroethane | ND | | ug/kg | 130 | -- |
| Isophorone | ND | | ug/kg | 150 | -- |
| Naphthalene | ND | | ug/kg | 170 | -- |
| Nitrobenzene | ND | | ug/kg | 150 | -- |
| Bis(2-Ethylhexyl)phthalate | ND | | ug/kg | 170 | -- |
| Butyl benzyl phthalate | ND | | ug/kg | 170 | -- |
| Di-n-butylphthalate | ND | | ug/kg | 170 | -- |
| Di-n-octylphthalate | ND | | ug/kg | 170 | -- |
| Diethyl phthalate | ND | | ug/kg | 170 | -- |
| Dimethyl phthalate | ND | | ug/kg | 170 | -- |
| Benzo(a)anthracene | ND | | ug/kg | 100 | -- |
| Benzo(a)pyrene | ND | | ug/kg | 130 | -- |
| Benzo(b)fluoranthene | ND | | ug/kg | 100 | -- |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 97,8270D
Analytical Date: 12/07/12 08:55
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 12/07/12 00:53

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab for sample(s): 01,03,05,07,09,11,13,15,17 Batch: WG577950-1 | | | | | |
| Benzo(k)fluoranthene | ND | | ug/kg | 100 | -- |
| Chrysene | ND | | ug/kg | 100 | -- |
| Acenaphthylene | ND | | ug/kg | 130 | -- |
| Anthracene | ND | | ug/kg | 100 | -- |
| Benzo(ghi)perylene | ND | | ug/kg | 130 | -- |
| Fluorene | ND | | ug/kg | 170 | -- |
| Phenanthrene | ND | | ug/kg | 100 | -- |
| Dibenzo(a,h)anthracene | ND | | ug/kg | 100 | -- |
| Indeno(1,2,3-cd)Pyrene | ND | | ug/kg | 130 | -- |
| Pyrene | ND | | ug/kg | 100 | -- |
| Aniline | ND | | ug/kg | 200 | -- |
| 4-Chloroaniline | ND | | ug/kg | 170 | -- |
| Dibenzofuran | ND | | ug/kg | 170 | -- |
| 2-Methylnaphthalene | ND | | ug/kg | 200 | -- |
| Acetophenone | ND | | ug/kg | 170 | -- |
| 2,4,6-Trichlorophenol | ND | | ug/kg | 100 | -- |
| 2-Chlorophenol | ND | | ug/kg | 170 | -- |
| 2,4-Dichlorophenol | ND | | ug/kg | 150 | -- |
| 2,4-Dimethylphenol | ND | | ug/kg | 170 | -- |
| 2-Nitrophenol | ND | | ug/kg | 360 | -- |
| 4-Nitrophenol | ND | | ug/kg | 230 | -- |
| 2,4-Dinitrophenol | ND | | ug/kg | 800 | -- |
| Pentachlorophenol | ND | | ug/kg | 330 | -- |
| Phenol | ND | | ug/kg | 170 | -- |
| 2-Methylphenol | ND | | ug/kg | 170 | -- |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 240 | -- |
| 2,4,5-Trichlorophenol | ND | | ug/kg | 170 | -- |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 97,8270D
Analytical Date: 12/07/12 08:55
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 12/07/12 00:53

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab for sample(s): 01,03,05,07,09,11,13,15,17 Batch: WG577950-1 | | | | | |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 84 | | 30-130 |
| Phenol-d6 | 77 | | 30-130 |
| Nitrobenzene-d5 | 74 | | 30-130 |
| 2-Fluorobiphenyl | 82 | | 30-130 |
| 2,4,6-Tribromophenol | 104 | | 30-130 |
| 4-Terphenyl-d14 | 107 | | 30-130 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01,03,05,07,09,11,13,15,17 Batch: WG577950-2 WG577950-3 | | | | | | | | |
| Acenaphthene | 73 | | 78 | | 40-140 | 7 | | 30 |
| 1,2,4-Trichlorobenzene | 70 | | 75 | | 40-140 | 7 | | 30 |
| Hexachlorobenzene | 75 | | 83 | | 40-140 | 10 | | 30 |
| Bis(2-chloroethyl)ether | 68 | | 69 | | 40-140 | 1 | | 30 |
| 2-Chloronaphthalene | 77 | | 80 | | 40-140 | 4 | | 30 |
| 1,2-Dichlorobenzene | 70 | | 72 | | 40-140 | 3 | | 30 |
| 1,3-Dichlorobenzene | 69 | | 72 | | 40-140 | 4 | | 30 |
| 1,4-Dichlorobenzene | 68 | | 71 | | 40-140 | 4 | | 30 |
| 3,3'-Dichlorobenzidine | 56 | | 69 | | 40-140 | 21 | | 30 |
| 2,4-Dinitrotoluene | 92 | | 100 | | 40-140 | 8 | | 30 |
| 2,6-Dinitrotoluene | 93 | | 95 | | 40-140 | 2 | | 30 |
| Azobenzene | 75 | | 83 | | 40-140 | 10 | | 30 |
| Fluoranthene | 81 | | 88 | | 40-140 | 8 | | 30 |
| 4-Bromophenyl phenyl ether | 83 | | 88 | | 40-140 | 6 | | 30 |
| Bis(2-chloroisopropyl)ether | 60 | | 63 | | 40-140 | 5 | | 30 |
| Bis(2-chloroethoxy)methane | 71 | | 74 | | 40-140 | 4 | | 30 |
| Hexachlorobutadiene | 71 | | 76 | | 40-140 | 7 | | 30 |
| Hexachloroethane | 66 | | 69 | | 40-140 | 4 | | 30 |
| Isophorone | 77 | | 81 | | 40-140 | 5 | | 30 |
| Naphthalene | 72 | | 75 | | 40-140 | 4 | | 30 |
| Nitrobenzene | 70 | | 74 | | 40-140 | 6 | | 30 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01,03,05,07,09,11,13,15,17 Batch: WG577950-2 WG577950-3 | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | 98 | | 108 | | 40-140 | 10 | | 30 |
| Butyl benzyl phthalate | 88 | | 96 | | 40-140 | 9 | | 30 |
| Di-n-butylphthalate | 88 | | 96 | | 40-140 | 9 | | 30 |
| Di-n-octylphthalate | 98 | | 106 | | 40-140 | 8 | | 30 |
| Diethyl phthalate | 84 | | 88 | | 40-140 | 5 | | 30 |
| Dimethyl phthalate | 82 | | 87 | | 40-140 | 6 | | 30 |
| Benzo(a)anthracene | 82 | | 88 | | 40-140 | 7 | | 30 |
| Benzo(a)pyrene | 88 | | 94 | | 40-140 | 7 | | 30 |
| Benzo(b)fluoranthene | 78 | | 87 | | 40-140 | 11 | | 30 |
| Benzo(k)fluoranthene | 83 | | 89 | | 40-140 | 7 | | 30 |
| Chrysene | 77 | | 84 | | 40-140 | 9 | | 30 |
| Acenaphthylene | 81 | | 86 | | 40-140 | 6 | | 30 |
| Anthracene | 82 | | 90 | | 40-140 | 9 | | 30 |
| Benzo(ghi)perylene | 80 | | 86 | | 40-140 | 7 | | 30 |
| Fluorene | 77 | | 82 | | 40-140 | 6 | | 30 |
| Phenanthrene | 76 | | 83 | | 40-140 | 9 | | 30 |
| Dibenzo(a,h)anthracene | 80 | | 87 | | 40-140 | 8 | | 30 |
| Indeno(1,2,3-cd)Pyrene | 82 | | 89 | | 40-140 | 8 | | 30 |
| Pyrene | 80 | | 86 | | 40-140 | 7 | | 30 |
| Aniline | **27** | Q | **33** | Q | 40-140 | 20 | | 30 |
| 4-Chloroaniline | **29** | Q | 47 | | 40-140 | **47** | Q | 30 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01,03,05,07,09,11,13,15,17 Batch: WG577950-2 WG577950-3 | | | | | | | | |
| Dibenzofuran | 74 | | 80 | | 40-140 | 8 | | 30 |
| 2-Methylnaphthalene | 76 | | 79 | | 40-140 | 4 | | 30 |
| Acetophenone | 79 | | 83 | | 40-140 | 5 | | 30 |
| 2,4,6-Trichlorophenol | 80 | | 82 | | 30-130 | 2 | | 30 |
| 2-Chlorophenol | 76 | | 79 | | 30-130 | 4 | | 30 |
| 2,4-Dichlorophenol | 81 | | 85 | | 30-130 | 5 | | 30 |
| 2,4-Dimethylphenol | 81 | | 83 | | 30-130 | 2 | | 30 |
| 2-Nitrophenol | 81 | | 83 | | 30-130 | 2 | | 30 |
| 4-Nitrophenol | 83 | | 85 | | 30-130 | 2 | | 30 |
| 2,4-Dinitrophenol | 30 | | 32 | | 30-130 | 6 | | 30 |
| Pentachlorophenol | 63 | | 66 | | 30-130 | 5 | | 30 |
| Phenol | 76 | | 78 | | 30-130 | 3 | | 30 |
| 2-Methylphenol | 79 | | 82 | | 30-130 | 4 | | 30 |
| 3-Methylphenol/4-Methylphenol | 79 | | 82 | | 30-130 | 4 | | 30 |
| 2,4,5-Trichlorophenol | 80 | | 86 | | 30-130 | 7 | | 30 |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE

**Project Number:** 5386.9.00

**Lab Number:** L1222113

**Report Date:** 12/19/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01,03,05,07,09,11,13,15,17 Batch: WG577950-2 WG577950-3 | | | | | | | | |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| 2-Fluorophenol | 80 | | 83 | | 30-130 |
| Phenol-d6 | 84 | | 87 | | 30-130 |
| Nitrobenzene-d5 | 73 | | 77 | | 30-130 |
| 2-Fluorobiphenyl | 77 | | 81 | | 30-130 |
| 2,4,6-Tribromophenol | 95 | | 104 | | 30-130 |
| 4-Terphenyl-d14 | 80 | | 87 | | 30-130 |

# PETROLEUM HYDROCARBONS

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1222113-07 D | Date Collected: | 11/30/12 15:00 |
| Client ID: | G-2 0-6' FILL COMP | Date Received: | 12/06/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | Extraction Method: | EPA 3546 |
| Analytical Method: | 1,8015C(M) | Extraction Date: | 12/07/12 05:21 |
| Analytical Date: | 12/07/12 15:39 | | |
| Analyst: | AR | | |
| Percent Solids: | 87% | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| Petroleum Hydrocarbon Quantitation - Westborough Lab | | | | | | |
| TPH | 90200 | | ug/kg | 76000 | -- | 2 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| o-Terphenyl | 74 | | 40-140 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1222113-11 | Date Collected: | 11/30/12 15:00 |
| Client ID: | G-3 0-6' FILL COMP | Date Received: | 12/06/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | Extraction Method: | EPA 3546 |
| Analytical Method: | 1,8015C(M) | Extraction Date: | 12/07/12 05:21 |
| Analytical Date: | 12/13/12 11:46 | | |
| Analyst: | AR | | |
| Percent Solids: | 87% | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| Petroleum Hydrocarbon Quantitation - Westborough Lab | | | | | | |
| TPH | 92700 | | ug/kg | 37400 | -- | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| o-Terphenyl | 85 | | 40-140 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1222113-17 | Date Collected: | 11/30/12 15:00 |
| Client ID: | G-4 8-16' FILL COMP | Date Received: | 12/06/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | Extraction Method: | EPA 3546 |
| Analytical Method: | 1,8015C(M) | Extraction Date: | 12/07/12 05:21 |
| Analytical Date: | 12/08/12 15:38 | | |
| Analyst: | AR | | |
| Percent Solids: | 89% | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| Petroleum Hydrocarbon Quantitation - Westborough Lab | | | | | | |
| TPH | 52200 | | ug/kg | 36200 | -- | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| o-Terphenyl | 84 | | 40-140 |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8015C(M)
Analytical Date: 12/07/12 17:08
Analyst: AR

Extraction Method: EPA 3546
Extraction Date: 12/07/12 05:21

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Petroleum Hydrocarbon Quantitation - Westborough Lab for sample(s): 01,03,05,07,09,11,13,15,17 Batch: WG577967-1 | | | | | |
| TPH | ND | | ug/kg | 33100 | -- |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| o-Terphenyl | 78 | | 40-140 |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE

**Project Number:** 5386.9.00

**Lab Number:** L1222113

**Report Date:** 12/19/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Petroleum Hydrocarbon Quantitation - Westborough Lab Associated sample(s): 01,03,05,07,09,11,13,15,17 Batch: WG577967-2 | | | | | | | | |
| TPH | 82 | | - | | 40-140 | - | | 40 |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| o-Terphenyl | 81 | | | | 40-140 |

# Lab Duplicate Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

| Parameter | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|
| Petroleum Hydrocarbon Quantitation - Westborough Lab Associated sample(s): 01,03,05,07,09,11,13,15,17 QC Batch ID: WG577967-4 QC Sample: L1222113-11 Client ID: G-3 0-6' FILL COMP | | | | | | |
| TPH | 92700 | 76800 | ug/kg | 19 | | 40 |

| Surrogate | %Recovery | Qualifier | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|---|---|
| o-Terphenyl | 85 | | 85 | | 40-140 |

# PCBS

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1222113-07 | Date Collected: | 11/30/12 15:00 |
| Client ID: | G-2 0-6' FILL COMP | Date Received: | 12/06/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | Extraction Method: | EPA 3546 |
| Analytical Method: | 97,8082A | Extraction Date: | 12/07/12 03:24 |
| Analytical Date: | 12/07/12 16:11 | Cleanup Method1: | EPA 3665A |
| Analyst: | KB | Cleanup Date1: | 12/07/12 |
| Percent Solids: | 87% | Cleanup Method2: | EPA 3660B |
| | | Cleanup Date2: | 12/07/12 |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Polychlorinated Biphenyls - Westborough Lab | | | | | | |
| Aroclor 1016 | ND | | ug/kg | 37.6 | -- | 1 |
| Aroclor 1221 | ND | | ug/kg | 37.6 | -- | 1 |
| Aroclor 1232 | ND | | ug/kg | 37.6 | -- | 1 |
| Aroclor 1242 | ND | | ug/kg | 37.6 | -- | 1 |
| Aroclor 1248 | ND | | ug/kg | 37.6 | -- | 1 |
| Aroclor 1254 | ND | | ug/kg | 37.6 | -- | 1 |
| Aroclor 1260 | ND | | ug/kg | 37.6 | -- | 1 |
| Aroclor 1262 | ND | | ug/kg | 37.6 | -- | 1 |
| Aroclor 1268 | ND | | ug/kg | 37.6 | -- | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 81 | | 30-150 |
| Decachlorobiphenyl | 69 | | 30-150 |
| 2,4,5,6-Tetrachloro-m-xylene | 75 | | 30-150 |
| Decachlorobiphenyl | 70 | | 30-150 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1222113-11 | Date Collected: | 11/30/12 15:00 |
| Client ID: | G-3 0-6' FILL COMP | Date Received: | 12/06/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | Extraction Method: | EPA 3546 |
| Analytical Method: | 97,8082A | Extraction Date: | 12/07/12 03:24 |
| Analytical Date: | 12/07/12 16:43 | Cleanup Method1: | EPA 3665A |
| Analyst: | KB | Cleanup Date1: | 12/07/12 |
| Percent Solids: | 87% | Cleanup Method2: | EPA 3660B |
| | | Cleanup Date2: | 12/07/12 |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Polychlorinated Biphenyls - Westborough Lab | | | | | | |
| Aroclor 1016 | ND | | ug/kg | 36.7 | -- | 1 |
| Aroclor 1221 | ND | | ug/kg | 36.7 | -- | 1 |
| Aroclor 1232 | ND | | ug/kg | 36.7 | -- | 1 |
| Aroclor 1242 | ND | | ug/kg | 36.7 | -- | 1 |
| Aroclor 1248 | ND | | ug/kg | 36.7 | -- | 1 |
| Aroclor 1254 | ND | | ug/kg | 36.7 | -- | 1 |
| Aroclor 1260 | ND | | ug/kg | 36.7 | -- | 1 |
| Aroclor 1262 | ND | | ug/kg | 36.7 | -- | 1 |
| Aroclor 1268 | ND | | ug/kg | 36.7 | -- | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 68 | | 30-150 |
| Decachlorobiphenyl | 64 | | 30-150 |
| 2,4,5,6-Tetrachloro-m-xylene | 63 | | 30-150 |
| Decachlorobiphenyl | 63 | | 30-150 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1222113-17 | Date Collected: | 11/30/12 15:00 |
| Client ID: | G-4 8-16' FILL COMP | Date Received: | 12/06/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | Extraction Method: | EPA 3546 |
| Analytical Method: | 97,8082A | Extraction Date: | 12/07/12 03:24 |
| Analytical Date: | 12/07/12 17:48 | Cleanup Method1: | EPA 3665A |
| Analyst: | KB | Cleanup Date1: | 12/07/12 |
| Percent Solids: | 89% | Cleanup Method2: | EPA 3660B |
| | | Cleanup Date2: | 12/07/12 |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Polychlorinated Biphenyls - Westborough Lab | | | | | | |
| Aroclor 1016 | ND | | ug/kg | 35.9 | -- | 1 |
| Aroclor 1221 | ND | | ug/kg | 35.9 | -- | 1 |
| Aroclor 1232 | ND | | ug/kg | 35.9 | -- | 1 |
| Aroclor 1242 | ND | | ug/kg | 35.9 | -- | 1 |
| Aroclor 1248 | ND | | ug/kg | 35.9 | -- | 1 |
| Aroclor 1254 | ND | | ug/kg | 35.9 | -- | 1 |
| Aroclor 1260 | ND | | ug/kg | 35.9 | -- | 1 |
| Aroclor 1262 | ND | | ug/kg | 35.9 | -- | 1 |
| Aroclor 1268 | ND | | ug/kg | 35.9 | -- | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 72 | | 30-150 |
| Decachlorobiphenyl | 68 | | 30-150 |
| 2,4,5,6-Tetrachloro-m-xylene | 66 | | 30-150 |
| Decachlorobiphenyl | 66 | | 30-150 |

**Project Name:** ST. MARY'S GARAGE

**Project Number:** 5386.9.00

**Lab Number:** L1222113

**Report Date:** 12/19/12

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 97,8082A
Analytical Date: 12/07/12 12:41
Analyst: KB

Extraction Method: EPA 3546
Extraction Date: 12/07/12 03:24
Cleanup Method1: EPA 3665A
Cleanup Date1: 12/07/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 12/07/12

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| MCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 01,03,05,07,09,11,13,15,17 Batch: WG577962-1 | | | | | |
| Aroclor 1016 | ND | | ug/kg | 33.1 | -- |
| Aroclor 1221 | ND | | ug/kg | 33.1 | -- |
| Aroclor 1232 | ND | | ug/kg | 33.1 | -- |
| Aroclor 1242 | ND | | ug/kg | 33.1 | -- |
| Aroclor 1248 | ND | | ug/kg | 33.1 | -- |
| Aroclor 1254 | ND | | ug/kg | 33.1 | -- |
| Aroclor 1260 | ND | | ug/kg | 33.1 | -- |
| Aroclor 1262 | ND | | ug/kg | 33.1 | -- |
| Aroclor 1268 | ND | | ug/kg | 33.1 | -- |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 91 | | 30-150 |
| Decachlorobiphenyl | 83 | | 30-150 |
| 2,4,5,6-Tetrachloro-m-xylene | 99 | | 30-150 |
| Decachlorobiphenyl | 96 | | 30-150 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 01,03,05,07,09,11,13,15,17 Batch: WG577962-2 WG577962-3 | | | | | | | | |
| Aroclor 1016 | 66 | | 86 | | 40-140 | 26 | | 30 |
| Aroclor 1260 | 65 | | 90 | | 40-140 | **32** | Q | 30 |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 71 | | 91 | | 30-150 |
| Decachlorobiphenyl | 69 | | 97 | | 30-150 |
| 2,4,5,6-Tetrachloro-m-xylene | 73 | | 94 | | 30-150 |
| Decachlorobiphenyl | 76 | | 102 | | 30-150 |

# METALS

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1222113 |
| **Project Number:** | 5386.9.00 | **Report Date:** | 12/19/12 |

**SAMPLE RESULTS**

| | | | |
|---|---|---|---|
| Lab ID: | L1222113-07 | Date Collected: | 11/30/12 15:00 |
| Client ID: | G-2 0-6' FILL COMP | Date Received: | 12/06/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | | |
| Percent Solids: | 87% | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Prep Method | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **MCP Total Metals - Westborough Lab** | | | | | | | | | | | |
| Arsenic, Total | 4.7 | | mg/kg | 0.44 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:17 | EPA 3050B | 97,6010C | MG |
| Barium, Total | 41 | | mg/kg | 0.44 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:17 | EPA 3050B | 97,6010C | MG |
| Cadmium, Total | ND | | mg/kg | 0.44 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:17 | EPA 3050B | 97,6010C | MG |
| Chromium, Total | 12 | | mg/kg | 0.44 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:17 | EPA 3050B | 97,6010C | MG |
| Lead, Total | 24 | | mg/kg | 2.2 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:17 | EPA 3050B | 97,6010C | MG |
| Mercury, Total | ND | | mg/kg | 0.08 | -- | 1 | 12/11/12 14:48 | 12/11/12 19:51 | EPA 7471B | 97,7471B | MC |
| Selenium, Total | ND | | mg/kg | 2.2 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:17 | EPA 3050B | 97,6010C | MG |
| Silver, Total | ND | | mg/kg | 0.44 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:17 | EPA 3050B | 97,6010C | MG |

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1222113 |
| **Project Number:** | 5386.9.00 | **Report Date:** | 12/19/12 |

**SAMPLE RESULTS**

| | | | |
|---|---|---|---|
| Lab ID: | L1222113-11 | Date Collected: | 11/30/12 15:00 |
| Client ID: | G-3 0-6' FILL COMP | Date Received: | 12/06/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | | |
| Percent Solids: | 87% | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Prep Method | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **MCP Total Metals - Westborough Lab** | | | | | | | | | | | |
| Arsenic, Total | 5.7 | | mg/kg | 0.44 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:30 | EPA 3050B | 97,6010C | MG |
| Barium, Total | 47 | | mg/kg | 0.44 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:30 | EPA 3050B | 97,6010C | MG |
| Cadmium, Total | ND | | mg/kg | 0.44 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:30 | EPA 3050B | 97,6010C | MG |
| Chromium, Total | 13 | | mg/kg | 0.44 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:30 | EPA 3050B | 97,6010C | MG |
| Lead, Total | 120 | | mg/kg | 2.2 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:30 | EPA 3050B | 97,6010C | MG |
| Mercury, Total | 0.09 | | mg/kg | 0.08 | -- | 1 | 12/11/12 14:48 | 12/11/12 19:54 | EPA 7471B | 97,7471B | MC |
| Selenium, Total | ND | | mg/kg | 2.2 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:30 | EPA 3050B | 97,6010C | MG |
| Silver, Total | ND | | mg/kg | 0.44 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:30 | EPA 3050B | 97,6010C | MG |

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1222113 |
| **Project Number:** | 5386.9.00 | **Report Date:** | 12/19/12 |

**SAMPLE RESULTS**

| | | | |
|---|---|---|---|
| Lab ID: | L1222113-17 | Date Collected: | 11/30/12 15:00 |
| Client ID: | G-4 8-16' FILL COMP | Date Received: | 12/06/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | | |
| Percent Solids: | 89% | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Prep Method | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **MCP Total Metals - Westborough Lab** | | | | | | | | | | | |
| Arsenic, Total | 4.1 | | mg/kg | 0.43 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:38 | EPA 3050B | 97,6010C | MG |
| Barium, Total | 30 | | mg/kg | 0.43 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:38 | EPA 3050B | 97,6010C | MG |
| Cadmium, Total | ND | | mg/kg | 0.43 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:38 | EPA 3050B | 97,6010C | MG |
| Chromium, Total | 12 | | mg/kg | 0.43 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:38 | EPA 3050B | 97,6010C | MG |
| Lead, Total | 19 | | mg/kg | 2.2 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:38 | EPA 3050B | 97,6010C | MG |
| Mercury, Total | ND | | mg/kg | 0.08 | -- | 1 | 12/11/12 17:04 | 12/12/12 11:43 | EPA 7471B | 97,7471B | TT |
| Selenium, Total | ND | | mg/kg | 2.2 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:38 | EPA 3050B | 97,6010C | MG |
| Silver, Total | ND | | mg/kg | 0.43 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:38 | EPA 3050B | 97,6010C | MG |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

# Method Blank Analysis
# Batch Quality Control

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| MCP Total Metals - Westborough Lab for sample(s): 01,03,05,07,09,11 Batch: WG578642-1 | | | | | | | | | | |
| Mercury, Total | ND | | mg/kg | 0.08 | -- | 1 | 12/11/12 14:48 | 12/11/12 19:07 | 97,7471B | MC |

**Prep Information**

Digestion Method: EPA 7471B

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| MCP Total Metals - Westborough Lab for sample(s): 13,15,17 Batch: WG578656-6 | | | | | | | | | | |
| Mercury, Total | ND | | mg/kg | 0.08 | -- | 1 | 12/11/12 17:04 | 12/12/12 11:18 | 97,7471B | TT |

**Prep Information**

Digestion Method: EPA 7471B

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| MCP Total Metals - Westborough Lab for sample(s): 01,03,05,07,09,11,13,15,17 Batch: WG578661-1 | | | | | | | | | | |
| Arsenic, Total | ND | | mg/kg | 0.40 | -- | 1 | 12/11/12 11:09 | 12/11/12 17:20 | 97,6010C | MG |
| Barium, Total | ND | | mg/kg | 0.40 | -- | 1 | 12/11/12 11:09 | 12/11/12 17:20 | 97,6010C | MG |
| Cadmium, Total | ND | | mg/kg | 0.40 | -- | 1 | 12/11/12 11:09 | 12/11/12 17:20 | 97,6010C | MG |
| Chromium, Total | ND | | mg/kg | 0.40 | -- | 1 | 12/11/12 11:09 | 12/11/12 17:20 | 97,6010C | MG |
| Lead, Total | ND | | mg/kg | 2.0 | -- | 1 | 12/11/12 11:09 | 12/11/12 17:20 | 97,6010C | MG |
| Selenium, Total | ND | | mg/kg | 2.0 | -- | 1 | 12/11/12 11:09 | 12/11/12 17:20 | 97,6010C | MG |
| Silver, Total | ND | | mg/kg | 0.40 | -- | 1 | 12/11/12 11:09 | 12/11/12 17:20 | 97,6010C | MG |

**Prep Information**

Digestion Method: EPA 3050B

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Total Metals - Westborough Lab Associated sample(s): 01,03,05,07,09,11 Batch: WG578642-2 WG578642-3 SRM Lot Number: 0518-10-02 | | | | | | | | |
| Mercury, Total | 114 | | 111 | | 67-133 | 3 | | 30 |
| MCP Total Metals - Westborough Lab Associated sample(s): 13,15,17 Batch: WG578656-7 WG578656-8 SRM Lot Number: 0518-10-02 | | | | | | | | |
| Mercury, Total | 108 | | 105 | | 67-133 | 3 | | 30 |
| MCP Total Metals - Westborough Lab Associated sample(s): 01,03,05,07,09,11,13,15,17 Batch: WG578661-2 WG578661-3 SRM Lot Number: 0518-10-02 | | | | | | | | |
| Arsenic, Total | 100 | | 100 | | 81-119 | 0 | | 30 |
| Barium, Total | 112 | | 108 | | 83-118 | 4 | | 30 |
| Cadmium, Total | 102 | | 102 | | 82-117 | 0 | | 30 |
| Chromium, Total | 101 | | 101 | | 80-119 | 0 | | 30 |
| Lead, Total | 95 | | 96 | | 80-120 | 1 | | 30 |
| Selenium, Total | 98 | | 98 | | 80-120 | 0 | | 30 |
| Silver, Total | 111 | | 109 | | 66-134 | 2 | | 30 |

# INORGANICS
# &
# MISCELLANEOUS

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1222113 |
| **Project Number:** | 5386.9.00 | **Report Date:** | 12/19/12 |

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1222113-07 | Date Collected: | 11/30/12 15:00 |
| Client ID: | G-2 0-6' FILL COMP | Date Received: | 12/06/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | | |

### Test Material Information

| | |
|---|---|
| Source of Material: | Unknown |
| Description of Material: | Non-Metallic - Damp Soil |
| Particle Size: | Medium |
| Preliminary Burning Time (sec): | 120 |

| Parameter | Result | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|
| Ignitability of Solids - Westborough Lab | | | | |
| Ignitability | NI | 12/10/12 20:35 | 1,1030 | TL |

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1222113 |
| **Project Number:** | 5386.9.00 | **Report Date:** | 12/19/12 |

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1222113-11 | Date Collected: | 11/30/12 15:00 |
| Client ID: | G-3 0-6' FILL COMP | Date Received: | 12/06/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | | |

### Test Material Information

| | |
|---|---|
| Source of Material: | Unknown |
| Description of Material: | Non-Metallic - Damp Soil |
| Particle Size: | Medium |
| Preliminary Burning Time (sec): | 120 |

| Parameter | Result | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|
| Ignitability of Solids - Westborough Lab | | | | |
| Ignitability | NI | 12/10/12 20:35 | 1,1030 | TL |

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1222113 |
| **Project Number:** | 5386.9.00 | **Report Date:** | 12/19/12 |

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1222113-17 | Date Collected: | 11/30/12 15:00 |
| Client ID: | G-4 8-16' FILL COMP | Date Received: | 12/06/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | | |

### Test Material Information

| | |
|---|---|
| Source of Material: | Unknown |
| Description of Material: | Non-Metallic - Damp Soil |
| Particle Size: | Medium |
| Preliminary Burning Time (sec): | 120 |

| Parameter | Result | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|
| Ignitability of Solids - Westborough Lab | | | | |
| Ignitability | NI | 12/10/12 20:35 | 1,1030 | TL |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

## SAMPLE RESULTS

Lab ID: L1222113-07
Client ID: G-2 0-6' FILL COMP
Sample Location: CHESTNUT HILL, MA
Matrix: Soil

Date Collected: 11/30/12 15:00
Date Received: 12/06/12
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| **General Chemistry - Westborough Lab** | | | | | | | | | | |
| Specific Conductance | 120 | | umhos/cm | 10 | -- | 1 | - | 12/08/12 01:41 | 1,9050A | EL |
| Solids, Total | 87 | | % | 0.10 | NA | 1 | - | 12/09/12 09:24 | 30,2540G | TA |
| pH | 7.3 | | SU | - | NA | 1 | - | 12/08/12 00:10 | 1,9045C | EL |
| Cyanide, Reactive | ND | | mg/kg | 10 | -- | 1 | 12/10/12 16:55 | 12/10/12 19:43 | 1,7.3 | TL |
| Sulfide, Reactive | ND | | mg/kg | 10 | -- | 1 | 12/10/12 16:55 | 12/10/12 19:50 | 1,7.3 | TL |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

## SAMPLE RESULTS

Lab ID: L1222113-08
Client ID: G-2 S-2 2-4'
Sample Location: CHESTNUT HILL, MA
Matrix: Soil

Date Collected: 11/28/12 14:30
Date Received: 12/06/12
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab | | | | | | | | | | |
| Solids, Total | 89 | | % | 0.10 | NA | 1 | - | 12/09/12 09:24 | 30,2540G | TA |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

## SAMPLE RESULTS

Lab ID: L1222113-11
Client ID: G-3 0-6' FILL COMP
Sample Location: CHESTNUT HILL, MA
Matrix: Soil

Date Collected: 11/30/12 15:00
Date Received: 12/06/12
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| **General Chemistry - Westborough Lab** | | | | | | | | | | |
| Specific Conductance | 100 | | umhos/cm | 10 | -- | 1 | - | 12/08/12 01:41 | 1,9050A | EL |
| Solids, Total | 87 | | % | 0.10 | NA | 1 | - | 12/09/12 09:24 | 30,2540G | TA |
| pH | 7.8 | | SU | - | NA | 1 | - | 12/08/12 00:10 | 1,9045C | EL |
| Cyanide, Reactive | ND | | mg/kg | 10 | -- | 1 | 12/10/12 16:55 | 12/10/12 19:43 | 1,7.3 | TL |
| Sulfide, Reactive | ND | | mg/kg | 10 | -- | 1 | 12/10/12 16:55 | 12/10/12 19:50 | 1,7.3 | TL |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

## SAMPLE RESULTS

Lab ID: L1222113-12
Client ID: G-3 S-2 2-4'
Sample Location: CHESTNUT HILL, MA
Matrix: Soil

Date Collected: 11/29/12 08:00
Date Received: 12/06/12
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab | | | | | | | | | | |
| Solids, Total | 86 | | % | 0.10 | NA | 1 | - | 12/09/12 09:24 | 30,2540G | TA |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

## SAMPLE RESULTS

Lab ID: L1222113-17
Client ID: G-4 8-16' FILL COMP
Sample Location: CHESTNUT HILL, MA
Matrix: Soil

Date Collected: 11/30/12 15:00
Date Received: 12/06/12
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| **General Chemistry - Westborough Lab** | | | | | | | | | | |
| Specific Conductance | 79 | | umhos/cm | 10 | -- | 1 | - | 12/08/12 01:41 | 1,9050A | EL |
| Solids, Total | 89 | | % | 0.10 | NA | 1 | - | 12/09/12 09:24 | 30,2540G | TA |
| pH | 8.1 | | SU | - | NA | 1 | - | 12/08/12 00:10 | 1,9045C | EL |
| Cyanide, Reactive | ND | | mg/kg | 10 | -- | 1 | 12/10/12 16:55 | 12/10/12 19:44 | 1,7.3 | TL |
| Sulfide, Reactive | ND | | mg/kg | 10 | -- | 1 | 12/10/12 16:55 | 12/10/12 19:52 | 1,7.3 | TL |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

## SAMPLE RESULTS

Lab ID: L1222113-18
Client ID: G-4 S-5 8-10'
Sample Location: CHESTNUT HILL, MA
Matrix: Soil

Date Collected: 11/27/12 15:00
Date Received: 12/06/12
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab | | | | | | | | | | |
| Solids, Total | 83 | | % | 0.10 | NA | 1 | - | 12/09/12 09:24 | 30,2540G | TA |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113

**Project Number:** 5386.9.00 **Report Date:** 12/19/12

# Method Blank Analysis
## Batch Quality Control

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab for sample(s): 01,03,05,07,09,11,13,15,17 Batch: WG578447-1 | | | | | | | | | | |
| Cyanide, Reactive | ND | | mg/kg | 10 | -- | 1 | 12/10/12 16:55 | 12/10/12 19:42 | 1,7.3 | TL |
| General Chemistry - Westborough Lab for sample(s): 01,03,05,07,09,11,13,15,17 Batch: WG578448-1 | | | | | | | | | | |
| Sulfide, Reactive | ND | | mg/kg | 10 | -- | 1 | 12/10/12 16:55 | 12/10/12 19:49 | 1,7.3 | TL |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab Associated sample(s): 01,03,05,07,09,11,13,15,17 Batch: WG578210-1 | | | | | | | | |
| pH | 100 | | - | | 99-101 | - | | |
| General Chemistry - Westborough Lab Associated sample(s): 01,03,05,07,09,11,13,15,17 Batch: WG578214-1 | | | | | | | | |
| Specific Conductance | 93 | | - | | 80-120 | - | | |
| General Chemistry - Westborough Lab Associated sample(s): 01,03,05,07,09,11,13,15,17 Batch: WG578447-2 | | | | | | | | |
| Cyanide, Reactive | 71 | | - | | 30-125 | - | | 40 |
| General Chemistry - Westborough Lab Associated sample(s): 01,03,05,07,09,11,13,15,17 Batch: WG578448-2 | | | | | | | | |
| Sulfide, Reactive | 88 | | - | | 60-125 | - | | 40 |

# Lab Duplicate Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

| Parameter | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab Associated sample(s): 01,03,05,07,09,11,13,15,17 QC Batch ID: WG578210-2 QC Sample: L1222113-01 Client ID: G-1 0-6' FILL COMP | | | | | | |
| pH | 6.8 | 6.7 | SU | 1 | | 5 |
| General Chemistry - Westborough Lab Associated sample(s): 01,03,05,07,09,11,13,15,17 QC Batch ID: WG578214-2 QC Sample: L1222113-01 Client ID: G-1 0-6' FILL COMP | | | | | | |
| Specific Conductance | 16 | 18 | umhos/cm | 12 | | 20 |
| General Chemistry - Westborough Lab Associated sample(s): 01-18 QC Batch ID: WG578280-1 QC Sample: L1222113-01 Client ID: G-1 0-6' FILL COMP | | | | | | |
| Solids, Total | 86 | 87 | % | 1 | | 20 |
| General Chemistry - Westborough Lab Associated sample(s): 01,03,05,07,09,11,13,15,17 QC Batch ID: WG578447-3 QC Sample: L1222248-04 Client ID: DUP Sample | | | | | | |
| Cyanide, Reactive | ND | ND | mg/kg | NC | | 40 |
| General Chemistry - Westborough Lab Associated sample(s): 01,03,05,07,09,11,13,15,17 QC Batch ID: WG578448-3 QC Sample: L1222248-04 Client ID: DUP Sample | | | | | | |
| Sulfide, Reactive | ND | ND | mg/kg | NC | | 40 |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

**Reagent H2O Preserved Vials Frozen on:** NA

| Cooler Information | Custody Seal |
|---|---|
| **Cooler** | |
| A | Absent |

**Container Information**

| Container ID | Container Type | Cooler | pH | Temp deg C | Pres | Seal | Analysis(*) |
|---|---|---|---|---|---|---|---|
| L1222113-01A | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222113-01B | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222113-01C | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222113-02A | Vial MeOH preserved | A | N/A | 2.9 | Y | Absent | MCP-8260H-10(14) |
| L1222113-02B | Vial MeOH preserved | A | N/A | 2.9 | Y | Absent | MCP-8260H-10(14) |

*Values in parentheses indicate holding time in days

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

## Container Information

| Container ID | Container Type | Cooler | pH | Temp deg C | Pres | Seal | Analysis(*) |
|---|---|---|---|---|---|---|---|
| L1222113-02C | Plastic 2oz unpreserved for TS | A | N/A | 2.9 | Y | Absent | TS(7) |
| L1222113-03A | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222113-03B | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222113-03C | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222113-04A | Vial MeOH preserved | A | N/A | 2.9 | Y | Absent | MCP-8260H-10(14) |
| L1222113-04B | Vial MeOH preserved | A | N/A | 2.9 | Y | Absent | MCP-8260H-10(14) |
| L1222113-04C | Plastic 2oz unpreserved for TS | A | N/A | 2.9 | Y | Absent | TS(7) |

*Values in parentheses indicate holding time in days

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

**Container Information**

| Container ID | Container Type | Cooler | pH | Temp deg C | Pres | Seal | Analysis(*) |
|---|---|---|---|---|---|---|---|
| L1222113-05A | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222113-05B | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222113-05C | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222113-06A | Vial MeOH preserved | A | N/A | 2.9 | Y | Absent | MCP-8260H-10(14) |
| L1222113-06B | Vial MeOH preserved | A | N/A | 2.9 | Y | Absent | MCP-8260H-10(14) |
| L1222113-06C | Plastic 2oz unpreserved for TS | A | N/A | 2.9 | Y | Absent | TS(7) |
| L1222113-07A | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |

*Values in parentheses indicate holding time in days

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

**Container Information**

| Container ID | Container Type | Cooler | pH | Temp deg C | Pres | Seal | Analysis(*) |
|---|---|---|---|---|---|---|---|
| L1222113-07B | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222113-07C | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222113-08A | Vial MeOH preserved | A | N/A | 2.9 | Y | Absent | MCP-8260H-10(14) |
| L1222113-08B | Vial MeOH preserved | A | N/A | 2.9 | Y | Absent | MCP-8260H-10(14) |
| L1222113-08C | Plastic 2oz unpreserved for TS | A | N/A | 2.9 | Y | Absent | TS(7) |
| L1222113-09A | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222113-09B | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |

*Values in parentheses indicate holding time in days

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

**Container Information**

| Container ID | Container Type | Cooler | pH | Temp deg C | Pres | Seal | Analysis(*) |
|---|---|---|---|---|---|---|---|
| L1222113-09C | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222113-10A | Vial MeOH preserved | A | N/A | 2.9 | Y | Absent | MCP-8260H-10(14) |
| L1222113-10B | Vial MeOH preserved | A | N/A | 2.9 | Y | Absent | MCP-8260H-10(14) |
| L1222113-10C | Plastic 2oz unpreserved for TS | A | N/A | 2.9 | Y | Absent | TS(7) |
| L1222113-11A | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222113-11B | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222113-11C | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |

*Values in parentheses indicate holding time in days

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

## Container Information

| Container ID | Container Type | Cooler | pH | Temp deg C | Pres | Seal | Analysis(*) |
|---|---|---|---|---|---|---|---|
| L1222113-12A | Vial MeOH preserved | A | N/A | 2.9 | Y | Absent | MCP-8260H-10(14) |
| L1222113-12B | Vial MeOH preserved | A | N/A | 2.9 | Y | Absent | MCP-8260H-10(14) |
| L1222113-12C | Plastic 2oz unpreserved for TS | A | N/A | 2.9 | Y | Absent | TS(7) |
| L1222113-13A | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222113-13B | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222113-13C | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222113-14A | Vial MeOH preserved | A | N/A | 2.9 | Y | Absent | MCP-8260H-10(14) |
| L1222113-14B | Vial MeOH preserved | A | N/A | 2.9 | Y | Absent | MCP-8260H-10(14) |
| L1222113-14C | Plastic 2oz unpreserved for TS | A | N/A | 2.9 | Y | Absent | TS(7) |

*Values in parentheses indicate holding time in days

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

**Container Information**

| Container ID | Container Type | Cooler | pH | Temp deg C | Pres | Seal | Analysis(*) |
|---|---|---|---|---|---|---|---|
| L1222113-15A | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222113-15B | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222113-15C | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222113-16A | Vial MeOH preserved | A | N/A | 2.9 | Y | Absent | MCP-8260H-10(14) |
| L1222113-16B | Vial MeOH preserved | A | N/A | 2.9 | Y | Absent | MCP-8260H-10(14) |
| L1222113-16C | Plastic 2oz unpreserved for TS | A | N/A | 2.9 | Y | Absent | TS(7) |
| L1222113-17A | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |

*Values in parentheses indicate holding time in days

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222113
**Report Date:** 12/19/12

**Container Information**

| Container ID | Container Type | Cooler | pH | Temp deg C | Pres | Seal | Analysis(*) |
|---|---|---|---|---|---|---|---|
| L1222113-17B | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222113-17C | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222113-18A | Vial MeOH preserved | A | N/A | 2.9 | Y | Absent | MCP-8260H-10(14) |
| L1222113-18B | Vial MeOH preserved | A | N/A | 2.9 | Y | Absent | MCP-8260H-10(14) |
| L1222113-18C | Plastic 2oz unpreserved for TS | A | N/A | 2.9 | Y | Absent | TS(7) |

*Values in parentheses indicate holding time in days

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1222113 |
| **Project Number:** | 5386.9.00 | **Report Date:** | 12/19/12 |

# GLOSSARY

### *Acronyms*

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

### *Footnotes*

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

### *Terms*

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

### *Data Qualifiers*

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

*Report Format:* Data Usability Report

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1222113 |
| **Project Number:** | 5386.9.00 | **Report Date:** | 12/19/12 |

***Data Qualifiers***

due to obvious interference.

**M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

**NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

**P** - The RPD between the results for the two columns exceeds the method-specified criteria.

**Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

**R** - Analytical results are from sample re-analysis.

**RE** - Analytical results are from sample re-extraction.

**J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

**ND** - Not detected at the reporting limit (RL) for the sample.

*Report Format:* Data Usability Report

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222113
**Project Number:** 5386.9.00 **Report Date:** 12/19/12

## REFERENCES


1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.


## LIMITATION OF LIABILITIES

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

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

# Certificate/Approval Program Summary

Last revised August 16, 2012 - Westboro Facility

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

**Connecticut Department of Public Health** Certificate/Lab ID: PH-0574. ***NELAP Accredited Solid Waste/Soil.***

*Drinking Water* (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Selenium, Silver, Sodium, Thallium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223, Enumeration and P/A), E. Coli. – Colilert (SM9223, Enumeration and P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform-EC Medium (SM 9221E).

*Wastewater/Non-Potable Water* (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), E. Coli – Colilert (SM9223 Enumeration), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E), Enterococcus - Enterolert.

*Solid Waste/Soil* (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Dalapon, Volatile Organics (SW 8260), Acid Extractables (Phenols) (SW 8270), Benzidines (SW 8270), Phthalates (SW 8270), Nitrosamines (SW 8270), Nitroaromatics & Cyclic Ketones (SW 8270), PAHs (SW 8270), Haloethers (SW 8270), Chlorinated Hydrocarbons (SW 8270). )

**Maine Department of Human Services** Certificate/Lab ID: 2009024.
*Drinking Water* (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

*Wastewater/Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010B, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 624, 625, 8081A, 8082, 8330, 8151A, 8260B, 8270C, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

*Solid Waste/Soil* (Inorganic Parameters: 9010B, 9012A, 9014A, 9030B, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

**Massachusetts Department of Environmental Protection** Certificate/Lab ID: M-MA086.
*Drinking Water (*Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)


*Non-Potable Water (*Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7

for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT,Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

**New Hampshire Department of Environmental Services** Certificate/Lab ID: 200307. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, SW-846 6010B, 6010C, 6020, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9030B, 9040B, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D, 3060A. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082, 8082A, 8081A, 8081B, 8151A, 8330, 8270C-SIM, 8270D-SIM.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846 6010B, 6010C, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050, 9065,1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3050B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, 8151A, 8015B, 8015C, 8082, 8082A, 8081A, 8081B.)

**New Jersey Department of Environmental Protection** Certificate/Lab ID: MA935. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.1, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, 2540G, EPA 120.1, SM2510B, SM2520B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ EPH.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9040C, 9045C, 9045D, 9050A, 9065, 9251. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

**New York Department of Health** Certificate/Lab ID: 11148. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water* (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 624, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1010, 1030, EPA 6010B, 6010C, 7196A, 7471A, 7471B, 9012A, 9014, 9065, 9050A, EPA 1311, 1312, 3005A, 3050B, 9010B, 9040C, 9045D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8015B, 8015C, 8081A, 8081B, 8151A, 8330, 8082 8082A, 3540C, 3546, 3580, 3580A, 5030B, 5035A-H, 5035A-L.)

**North Carolina Department of the Environment and Natural Resources** Certificate/Lab ID : 666. (Inorganic Parameters: SM2310B, 2320B, 4500Cl-E, 4500Cn-E, 9014, Lachat 10-204-00-1-X, 1010A, 1030, 4500NO3-F, 353.2, 4500P-E, 4500SO4-E, 300.0, 4500S-D, 5310B, 5310C, 6010C, 6020A, 200.7, 200.8, 3500Cr-B, 7196A, 245.1, 7471A, 7471B, 1311,1312. Organic Parameters: 608, 8081B, 8082A, 624, 8260B, 625, 8270D, 8151A, 8015C, 504.1, MA-EPH, MA-VPH.)

*Drinking Water Program* Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

**Pennsylvania Department of Environmental Protection** Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: 200.7, 200.8, 245.2, 300.0, 332.0, 2120B, 2320B, 2510B, 2540C, 4500-CN-CE, 4500F-C, 4500H+-B, 4500NO3-F, 5310C. Organic Parameters: EPA 524.2, 504.1)

*Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1312, 3005A,3015, 3060A, 200.7, 200.8, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE, 245.1, 300.0, 3501., 350.2, 353.2, 420.1, 6010B, 6010C, 6020, 6020A, 7196A, 7470A, 9010B, 9030B, 9040B, Lachat 10-107-06-2-D, NJ-EPH, 2120B, 2310B, 2320B, 2340B, 2510C, 2540B, 2540C, 3500Cr-D, 436C, 4500CN-CE, 4500Cl-E, 4500F-B, 4500F-C, 4500H+-B, 4500NO2-B, 4500NO3-F, 4500S-D, 4500SO3-B, 5310BCD, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330, 8015B, )

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3005A, 3050B, 3060A, 6010B, 6010C, 6020A, 7196A, 7471A, 7471B, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-BH, 9030B, 9038, 9251. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, NJ-EPH.)

**Rhode Island Department of Health** Certificate/Lab ID: LAO00065. ***NELAP Accredited via NJ-DEP.***
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

**Texas Commisson on Environmental Quality** Certificate/Lab ID: T104704476-09-1. ***NELAP Accredited.***
*Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S2¯D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

**Virginia Division of Consolidated Laboratory Services** Certificate/Lab ID: 460195. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: EPA 200.7, 200.8, 300.0, 2510B, 2120B, 2540C, 4500CN-CE, 245.2, 2320B, 4500F-C, 4500F-C, 4500NO3-F, 5310C. Organic Parameters: EPA 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664A, 200.7, 2..08, 245.1, 300.0, 3005A, 3015, 1312, 6010B, 6010C, 3060A, 353.2, 420.1, 6020, 6020A, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X, 7196A, 7470A, 9010B, 9040B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500Cl-E, 4500F-B, 4500F-C, 4500PE, 510AC, 5210B, 5310B 5310C, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 8260B, 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, )

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1010A, 1030, 3060A, 3050B, 1311, 1312, 6010B, 6010C, 6020, , 7196A, 7471A, 7471B, 6020A, 9030B, 9010B, 9012A, 9014 9040B, 9045C, 9050A, 9065. Organic Parameters: EPA 5035, 3540C, 3546, 3550, 3580, 3630C, 8260B, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330.)

**Department of Defense, L-A-B** Certificate/Lab ID: L2217.
*Drinking Water* (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water* (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 200.7, 6010B, 6010C, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 9012A, 9040B, 9045C, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

**The following analytes are not included in our current NELAP/TNI Scope of Accreditation:**
**EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix, SO4 in a soil matrix. **EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

# CHAIN OF CUSTODY

PAGE 1 OF 4

1/5

ALPHA ANALYTICAL

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193
Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 12/6/12

ALPHA Job #: L1222113

## Client Information

Client: McPhail Associates, LLC
Address: 2269 Massachusetts Ave.
Cambridge, MA 02140
Phone: 617 868 1420 x 325
Fax:
Email: astone@mcphailgeo.com

☐ These samples have been Previously analyzed by Alpha

## Project Information

Project ~~Name: St.~~ Mary's Garage
Project Location: Chestnut Hill, MA
Project #: 5386.9.00
Project Manager: Andrew Stone
ALPHA Quote #:

## Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: 12/13 Time:

## Report Information Data Deliverables

☐ FAX ☐ EMAIL
☒ ADEx ☐ Add'l Deliverables

## Billing Information

☒ Same as Client info PO #:

## Regulatory Requirements/Report Limits

*State/Fed Program* MA MCP *Criteria* RCS-1

## MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

| | | |
|---|---|---|
| ☒ Yes | ☐ No | Are MCP Analytical Methods Required? |
| ☐ Yes | ☒ No | Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments) |
| ☐ Yes | ☒ No | Are CT RCP (Reasonable Confidence Protocols) Required? |

Other Project Specific Requirements/Comments/Detection Limits:
(If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed. (Note: All CAM methods for inorganic analyses require MS every 20 soil samples)

## ANALYSIS

SAMPLE HANDLING
*Filtration*
☐ Done
☐ Not Needed
☐ Lab to do
*Preservation*
☐ Lab to do
*(Please specify below)*

| ALPHA Lab ID (Lab Use Only) | Sample ID | Collection Date | Collection Time | Sample Matrix | Sampler's Initials | Soil Disposal Pack IV | VOC 8260 High Discrete | Total Solids | | | | | | | | | | Sample Specific Comments | TOTAL # BOTTLES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22113 - 01 | G-1 0-6' FILL COMP | 11/30/12 | 1500 | S | ADS | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| -02 | G-1 S-1 0-2' | 11/27/12 | 1130 | S | NTD | ☐ | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| -03 | G-1 6-12' FILL COMP | 11/30/12 | 1500 | S | ADS | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| -04 | G-1 S-5 8-10' | 11/27/12 | 1145 | S | NTD | ☐ | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| -05 | G-1 12-18' FILL COMP | 11/30/12 | 1500 | S | ADS | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| -06 | G-1 S-8 14-16' | 11/27/12 | 1200 | S | NTD | ☐ | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | Container Type | A | V | P | - | - | - | - | - | - | - | - | | |
| | | | | | | Preservative | A | F | A | - | - | - | - | - | - | - | - | | |

**PLEASE ANSWER QUESTIONS ABOVE!**

**IS YOUR PROJECT MA MCP or CT RCP?**

FORM NO: 01-01(I) (rev. 20-JAN-2010)

| Relinquished By: | Date/Time | Received By: | Date/Time |
|---|---|---|---|
| [signature] | 12/6/ 1530 | [signature] | 12/6/12 1610 |
| [signature] | 12/6/12 1780 | [signature] | 12/6/12 17:30 |

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# CHAIN OF CUSTODY

PAGE 2 OF 4

2/5

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Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193
Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 12/6/12

ALPHA Job #: L1222113

## Client Information

Client: McPhail Associates, LLC
Address: 2269 Massachusetts Ave.
Cambridge, MA 02140
Phone: 617 868 1420 x 325
Fax:
Email: astone@mcphailgeo.com

☐ These samples have been Previously analyzed by Alpha

## Project Information

Project Name: St. Mary's Garage
Project Location: Chestnut Hill, MA
Project #: 5386.9.00
Project Manager: Andrew Stone
ALPHA Quote #:

## Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: 12/13 Time:

## Report Information Data Deliverables

☐ FAX ☐ EMAIL
☒ ADEx ☐ Add'l Deliverables

## Billing Information

☒ Same as Client info PO #:

## Regulatory Requirements/Report Limits

*State/Fed Program* MA MCP *Criteria* RCS-1

## MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

| | | |
|---|---|---|
| ☒ Yes | ☐ No | Are MCP Analytical Methods Required? |
| ☐ Yes | ☒ No | Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments) |
| ☐ Yes | ☒ No | Are CT RCP (Reasonable Confidence Protocols) Required? |

Other Project Specific Requirements/Comments/Detection Limits:
(If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed. (Note: All CAM methods for inorganic analyses require MS every 20 soil samples)

## ANALYSIS

SAMPLE HANDLING
*Filtration*
☐ Done
☐ Not Needed
☐ Lab to do
*Preservation*
☐ Lab to do
*(Please specify below)*

| ALPHA Lab ID (Lab Use Only) | Sample ID | Collection Date | Collection Time | Sample Matrix | Sampler's Initials | Soil Disposal Pack IV | VOC 8260 High Discrete | Total Solids | | | | | | | | | | Sample Specific Comments | TOTAL # BOTTLES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22113 -07 | G-2 0-6' FILL COMP | 11/30/12 | 1500 | S | ADS | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| -08 | G-2 S-2 2-4' | 11/28/12 | 1430 | S | NTD | ☐ | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| -09 | G-2 6-14' FILL COMP | 11/30 | 1500 | S | ADS | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| -10 | G-2 S-5 8-10' | 11/28 | 1600 | S | NTD | ☐ | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | Container Type | A | V | P | - | - | - | - | - | - | - | - | - | | |
| | | | | | Preservative | A | F | A | - | - | - | - | - | - | - | - | - | | |

**PLEASE ANSWER QUESTIONS ABOVE!**

**IS YOUR PROJECT MA MCP *or* CT RCP?**

FORM NO: 01-01(I)
(rev. 20-JAN-2010)

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| [signature] | 12/6 1530 | [signature] | 12/6/12 1610 |
| [signature] | 12/6/12 1750 | [signature] | 12/6/12 17:50 |

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# CHAIN OF CUSTODY

PAGE 3 OF 4

3/5

ALPHA ANALYTICAL

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193
Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 12/6/12

ALPHA Job #: L1222113

## Project Information

Project Name: St. Mary's Garage

Project Location: Chestnut Hill, MA

Project #: 5386.9.00

Project Manager: Andrew Stone

ALPHA Quote #:

## Client Information

Client: McPhail Associates, LLC

Address: 2269 Massachusetts Ave.

Cambridge, MA 02140

Phone: 617 868 1420 x 325

Fax:

Email: astone@mcphailgeo.com

☐ These samples have been Previously analyzed by Alpha

## Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: 12/13 Time:

## Report Information / Data Deliverables

☐ FAX ☐ EMAIL

☒ ADEx ☐ Add'l Deliverables

## Billing Information

☒ Same as Client info PO #:

## Regulatory Requirements/Report Limits

*State/Fed Program* MA MCP *Criteria* RCS-1

## MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

| | | |
|---|---|---|
| ☒ Yes | ☐ No | Are MCP Analytical Methods Required? |
| ☐ Yes | ☒ No | Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments) |
| ☐ Yes | ☒ No | Are CT RCP (Reasonable Confidence Protocols) Required? |

Other Project Specific Requirements/Comments/Detection Limits:
(If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed. (Note: All CAM methods for inorganic analyses require MS every 20 soil samples)

## ANALYSIS

SAMPLE HANDLING
*Filtration*
☐ Done
☐ Not Needed
☐ Lab to do
*Preservation*
☐ Lab to do
*(Please specify below)*

| ALPHA Lab ID (Lab Use Only) | Sample ID | Collection Date | Collection Time | Sample Matrix | Sampler's Initials | Soil Disposal Pack IV | VOC 8260 High Discrete | Total Solids | | | | | | | | | | Sample Specific Comments | TOTAL # BOTTLES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22113 - 11 | G-3 0-6' FILL COMP | 11/30 | 1500 | S | ADS | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| -12 | G-3 S-2 2-4' | 11/29 | 800 | S | NTD | ☐ | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| -13 | G-3 6-14' FILL COMP | 11/30 | 1500 | S | ADS | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| -14 | G-3 S-6 10-12' | 11/29 | 1000 | S | NTD | ☐ | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | Container Type | A | V | P | - | - | - | - | - | - | - | - | - | | |
| | | | | | Preservative | A | F | A | - | - | - | - | - | - | - | - | - | | |

PLEASE ANSWER QUESTIONS ABOVE!

**IS YOUR PROJECT MA MCP *or* CT RCP?**

FORM NO: 01-01(I) (rev. 20-JAN-2010)

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| [signature] | 12/6 1530 | [signature] | 12/6/12 1610 |
| [signature] | 12/6/12 1750 | [signature] | 12/6/12 17:50 |

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# CHAIN OF CUSTODY

PAGE 4 OF 4

4/5

ALPHA ANALYTICAL

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193
Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 12/6/12

ALPHA Job #: L1222113

**Project Information**

Project Name: St. Mary's Garage

Project Location: Chestnut Hill, MA

Project #: 5386.9.00

Project Manager: Andrew Stone

ALPHA Quote #:

**Client Information**

Client: McPhail Associates, LLC

Address: 2269 Massachusetts Ave.

Cambridge, MA 02140

Phone: 617 868 1420 x 325

Fax:

Email: astone@mcphailgeo.com

☐ These samples have been Previously analyzed by Alpha

**Turn-Around Time**

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Due Date: 12/13 Time:

**Report Information Data Deliverables**

☐ FAX ☐ EMAIL

☒ ADEx ☐ Add'l Deliverables

**Billing Information**

☒ Same as Client info PO #:

**Regulatory Requirements/Report Limits**

*State/Fed Program* MA MCP *Criteria* RCS-1

**MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS**

| | | |
|---|---|---|
| ☒ Yes | ☐ No | Are MCP Analytical Methods Required? |
| ☐ Yes | ☒ No | Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments) |
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☐ Not Needed
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☐ Lab to do
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| ALPHA Lab ID (Lab Use Only) | Sample ID | Collection Date | Collection Time | Sample Matrix | Sampler's Initials | Soil Disposal Pack IV | VOC 8260 High Discrete | Total Solids | | | | | | | | | | Sample Specific Comments | TOTAL # BOTTLES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22113 - 15 | G-4 0-8' FILL COMP | 11/30 | 1500 | S | ADS | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| -16 | G-4 S-2 2-4' | 11/27 | 1400 | S | NTD | ☐ | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| -17 | G-4 8-16' FILL COMP | 11/30 | 1500 | S | ADS | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| -18 | G-4 S-5 8-10' | 11/27 | 1500 | S | NTD | ☐ | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| Container Type | | | | | | A | V | P | - | - | - | - | - | - | - | - | - | | |
| Preservative | | | | | | A | F | A | - | - | - | - | - | - | - | - | - | | |

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Phone: 617 868 1420 x 325
Fax:
Email: astone@mcphailgeo.com

☐ These samples have been Previously analyzed by Alpha

## Project Information

Project ~~Name: St.~~ Mary's Garage
Project Location: Chestnut Hill, MA
Project #: 5386.9.00
Project Manager: Andrew Stone
ALPHA Quote #:

## Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: 12/13 Time:

## Report Information Data Deliverables

☐ FAX ☐ EMAIL
☒ ADEx ☐ Add'l Deliverables

## Billing Information

☒ Same as Client info PO #:

## Regulatory Requirements/Report Limits

*State/Fed Program* MA MCP *Criteria* RCS-1

## MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

| | | |
|---|---|---|
| ☒ Yes | ☐ No | Are MCP Analytical Methods Required? |
| ☐ Yes | ☒ No | Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments) |
| ☐ Yes | ☒ No | Are CT RCP (Reasonable Confidence Protocols) Required? |

Other Project Specific Requirements/Comments/Detection Limits:
(If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed. (Note: All CAM methods for inorganic analyses require MS every 20 soil samples)

*without VOCs

## ANALYSIS

SAMPLE HANDLING
*Filtration*
☐ Done
☐ Not Needed
☐ Lab to do
*Preservation*
☐ Lab to do
*(Please specify below)*

| ALPHA Lab ID (Lab Use Only) | Sample ID | Collection Date | Collection Time | Sample Matrix | Sampler's Initials | Soil Disposal Pack IV * | VOC 8260 High Discrete | Total Solids | | | | | | | | | | Sample Specific Comments | TOTAL # BOTTLES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22113 - 01 | G-1 0-6' FILL COMP | 11/30/12 | 1500 | S | ADS | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| -02 | G-1 S-1 0-2' | 11/27/12 | 1130 | S | NTD | ☐ | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| -03 | G-1 6-12' FILL COMP | 11/30/12 | 1500 | S | ADS | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| -04 | G-1 S-5 8-10' | 11/27/12 | 1145 | S | NTD | ☐ | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| -05 | G-1 12-18' FILL COMP | 11/30/12 | 1500 | S | ADS | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| -06 | G-1 S-8 14-16' | 11/27/12 | 1200 | S | NTD | ☐ | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Container Type | A | V | P | - | - | - | - | - | - | - | - | - | |
| Preservative | A | F | A | - | - | - | - | - | - | - | - | - | |

**PLEASE ANSWER QUESTIONS ABOVE!**

**IS YOUR PROJECT MA MCP *or* CT RCP?**

FORM NO: 01-01(I) (rev. 20-JAN-2010)

| Relinquished By: | Date/Time | Received By: | Date/Time |
|---|---|---|---|
| [signature] | 12/6/ 1530 | [signature] | 12/6/12 1610 |
| [signature] | 12/6/12 1780 | [signature] | 12/6/12 17:30 |

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

# CHAIN OF CUSTODY

PAGE 2 OF 4

2/5

ALPHA ANALYTICAL

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193
Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 12/6/12

ALPHA Job #: L1222113

## Client Information

Client: McPhail Associates, LLC
Address: 2269 Massachusetts Ave.
Cambridge, MA 02140
Phone: 617 868 1420 x 325
Fax:
Email: astone@mcphailgeo.com

☐ These samples have been Previously analyzed by Alpha

## Project Information

Project Name: St. Mary's Garage
Project Location: Chestnut Hill, MA
Project #: 5386.9.00
Project Manager: Andrew Stone
ALPHA Quote #:

## Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: 12/13 Time:

## Report Information Data Deliverables

☐ FAX ☐ EMAIL
☒ ADEx ☐ Add'l Deliverables

## Billing Information

☒ Same as Client info PO #:

## Regulatory Requirements/Report Limits

State/Fed Program MA MCP Criteria RCS-1

## MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

| | | |
|---|---|---|
| ☒ Yes | ☐ No | Are MCP Analytical Methods Required? |
| ☐ Yes | ☒ No | Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments) |
| ☐ Yes | ☒ No | Are CT RCP (Reasonable Confidence Protocols) Required? |

Other Project Specific Requirements/Comments/Detection Limits:
(If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed. (Note: All CAM methods for inorganic analyses require MS every 20 soil samples)

*without VOCs

## ANALYSIS

SAMPLE HANDLING
*Filtration*
☐ Done
☐ Not Needed
☐ Lab to do
*Preservation*
☐ Lab to do
*(Please specify below)*

| ALPHA Lab ID (Lab Use Only) | Sample ID | Collection Date | Collection Time | Sample Matrix | Sampler's Initials | Soil Disposal Pack IV * | VOC 8260 High Discrete | Total Solids | | | | | | | | | | Sample Specific Comments | TOTAL # BOTTLES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22113 -07 | G-2 0-6' FILL COMP | 11/30/12 | 1500 | S | ADS | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| -08 | G-2 S-2 2-4' | 11/28/12 | 1430 | S | NTD | ☐ | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| -09 | G-2 6-14' FILL COMP | 11/30 | 1500 | S | ADS | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| -10 | G-2 S-5 8-10' | 11/28 | 1600 | S | NTD | ☐ | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | Container Type | A | V | P | - | - | - | - | - | - | - | - | - | | |
| | | | | | Preservative | A | F | A | - | - | - | - | - | - | - | - | - | | |

**PLEASE ANSWER QUESTIONS ABOVE!**

**IS YOUR PROJECT MA MCP or CT RCP?**

FORM NO: 01-01(I)
(rev. 20-JAN-2010)

| Relinquished By: | Date/Time | Received By: | Date/Time |
|---|---|---|---|
| [signature] | 12/6 1530 | [signature] | 12/6/12 1610 |
| [signature] | 12/6/12 1750 | [signature] | 12/6/12 17:50 |

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# CHAIN OF CUSTODY

PAGE 3 OF 4

3/5

ALPHA ANALYTICAL

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193
Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 12/6/12

ALPHA Job #: L1222113

## Project Information

Project Name: St. Mary's Garage

Project Location: Chestnut Hill, MA

Project #: 5386.9.00

Project Manager: Andrew Stone

ALPHA Quote #:

## Client Information

Client: McPhail Associates, LLC

Address: 2269 Massachusetts Ave.

Cambridge, MA 02140

Phone: 617 868 1420 x 325

Fax:

Email: astone@mcphailgeo.com

☐ These samples have been Previously analyzed by Alpha

## Turn-Around Time

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Due Date: 12/13 Time:

## Report Information / Data Deliverables

☐ FAX ☐ EMAIL

☒ ADEx ☐ Add'l Deliverables

## Billing Information

☒ Same as Client info PO #:

## Regulatory Requirements/Report Limits

*State/Fed Program* MA MCP *Criteria* RCS-1

## MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

| | | |
|---|---|---|
| ☒ Yes | ☐ No | Are MCP Analytical Methods Required? |
| ☐ Yes | ☒ No | Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments) |
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(If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed. (Note: All CAM methods for inorganic analyses require MS every 20 soil samples)

*without VOCs

## ANALYSIS

SAMPLE HANDLING
*Filtration*
☐ Done
☐ Not Needed
☐ Lab to do
*Preservation*
☐ Lab to do
*(Please specify below)*

| ALPHA Lab ID (Lab Use Only) | Sample ID | Collection Date | Collection Time | Sample Matrix | Sampler's Initials | Soil Disposal Pack IV * | VOC 8260 High Discrete | Total Solids | | | | | | | | | | Sample Specific Comments | TOTAL # BOTTLES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22113 - 11 | G-3 0-6' FILL COMP | 11/30 | 1500 | S | ADS | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| -12 | G-3 S-2 2-4' | 11/29 | 800 | S | NTD | ☐ | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| -13 | G-3 6-14' FILL COMP | 11/30 | 1500 | S | ADS | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| -14 | G-3 S-6 10-12' | 11/29 | 1000 | S | NTD | ☐ | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | Container Type | A | V | P | - | - | - | - | - | - | - | - | - | | |
| | | | | | Preservative | A | F | A | - | - | - | - | - | - | - | - | - | | |

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FORM NO: 01-01(I) (rev. 20-JAN-2010)

| Relinquished By: | Date/Time | Received By: | Date/Time |
|---|---|---|---|
| [signature] | 12/6 1530 | [signature] | 12/6/12 1610 |
| [signature] | 12/6/12 1750 | [signature] | 12/6/12 17:50 |

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# CHAIN OF CUSTODY

PAGE 4 OF 4

4/5

ALPHA ANALYTICAL

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193
Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 12/6/12

ALPHA Job #: L1222113

## Client Information

Client: McPhail Associates, LLC
Address: 2269 Massachusetts Ave.
Cambridge, MA 02140
Phone: 617 868 1420 x 325
Fax:
Email: astone@mcphailgeo.com
☐ These samples have been Previously analyzed by Alpha

## Project Information

Project Name: St. Mary's Garage
Project Location: Chestnut Hill, MA
Project #: 5386.9.00
Project Manager: Andrew Stone
ALPHA Quote #:

## Turn-Around Time

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Due Date: 12/13 Time:

## Report Information / Data Deliverables

☐ FAX ☐ EMAIL
☒ ADEx ☐ Add'l Deliverables

## Billing Information

☒ Same as Client info PO #:

## Regulatory Requirements/Report Limits

State/Fed Program MA MCP Criteria RCS-1

## MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

| | | |
|---|---|---|
| ☒ Yes | ☐ No | Are MCP Analytical Methods Required? |
| ☐ Yes | ☒ No | Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments) |
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*without VOCs

## ANALYSIS

SAMPLE HANDLING
*Filtration*
☐ Done
☐ Not Needed
☐ Lab to do
*Preservation*
☐ Lab to do
*(Please specify below)*

| ALPHA Lab ID (Lab Use Only) | Sample ID | Collection Date | Collection Time | Sample Matrix | Sampler's Initials | Soil Disposal Pack IV * | VOC 8260 High Discrete | Total Solids | | | | | | | | | | Sample Specific Comments | TOTAL # BOTTLES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22113 - 15 | G-4 0-8' FILL COMP | 11/30 | 1500 | S | ADS | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| -16 | G-4 S-2 2-4' | 11/27 | 1400 | S | NTD | ☐ | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| -17 | G-4 8-16' FILL COMP | 11/30 | 1500 | S | ADS | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| -18 | G-4 S-5 8-10' | 11/27 | 1500 | S | NTD | ☐ | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| Container Type | | | | | | A | V | P | - | - | - | - | - | - | - | - | - | | |
| Preservative | | | | | | A | F | A | - | - | - | - | - | - | - | - | - | | |

PLEASE ANSWER QUESTIONS ABOVE!

**IS YOUR PROJECT MA MCP or CT RCP?**

FORM NO: 01-01(I) (rev. 20-JAN-2010)

| Relinquished By: | Date/Time | Received By: | Date/Time |
|---|---|---|---|
| [signature] | 12/6 15:30 | [signature] | 12/6/12 16:10 |
| [signature] | 12/6/12 1750 | [signature] | 12/6/12 17:50 |

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7A
Volatile CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1222113

Instrument ID: Voa100.i  Calibration Date: 07-DEC-2012  Time: 08:50

Lab File ID: 1207A01  Init. Calib. Date(s): 13-NOV-2  13-NOV-2

Sample No:  Init. Calib. Times : 08:20  11:02

| Compound | RRF | RRF | MIN RRF | %D | MAX %D | |
|---|---|---|---|---|---|---|
| dichlorodifluoromethane | .21639 | .14666 | .1 | -32 | 20 | F |
| chloromethane | .376 | .26757 | .1 | -29 | 20 | F |
| vinyl chloride | .3164 | .25305 | .1 | -20 | 20 | F |
| bromomethane | .14114 | .14722 | .1 | 4 | 20 | |
| chloroethane | .1732 | .1625 | .1 | -6 | 20 | |
| trichlorofluoromethane | .31924 | .2963 | .1 | -7 | 20 | |
| ethyl ether | .15499 | .13395 | .05 | -14 | 20 | |
| 1,1,-dichloroethene | .21292 | .206 | .1 | -3 | 20 | |
| carbon disulfide | .74202 | .71901 | .1 | -3 | 20 | |
| methylene chloride | 100 | 92.007 | .1 | -8 | 20 | |
| acetone | 100 | 128 | .1 | 28 | 20 | F |
| trans-1,2-dichloroethene | .25569 | .24888 | .1 | -3 | 20 | |
| methyl tert butyl ether | .74694 | .68364 | .1 | -8 | 20 | |
| Diisopropyl Ether | 1.1499 | 1.0143 | .05 | -12 | 20 | |
| 1,1-dichloroethane | .54926 | .50889 | .2 | -7 | 20 | |
| Ethyl-Tert-Butyl-Ether | 1.0308 | .94327 | .05 | -8 | 20 | |
| cis-1,2-dichloroethene | .28259 | .26955 | .1 | -5 | 20 | |
| 2,2-dichloropropane | .38184 | .37412 | .05 | -2 | 20 | |
| bromochloromethane | .12892 | .12433 | .05 | -4 | 20 | |
| chloroform | .484 | .45751 | .2 | -5 | 20 | |
| carbontetrachloride | .33685 | .32415 | .1 | -4 | 20 | |
| tetrahydrofuran | .11258 | .09279 | .05 | -18 | 20 | |
| 1,1,1-trichloroethane | .38617 | .3715 | .1 | -4 | 20 | |
| 2-butanone | .17445 | .17025 | .1 | -2 | 20 | |
| 1,1-dichloropropene | .35872 | .34346 | .05 | -4 | 20 | |
| benzene | 1.0910 | 1.0179 | .5 | -7 | 20 | |
| Tertiary-Amyl Methyl Ether | .75302 | .70169 | .05 | -7 | 20 | |
| 1,2-dichloroethane | .39037 | .34797 | .1 | -11 | 20 | |
| trichloroethene | .27082 | .25888 | .2 | -4 | 20 | |
| dibromomethane | .16183 | .14832 | .05 | -8 | 20 | |
| 1,2-dichloropropane | .32675 | .30018 | .1 | -8 | 20 | |
| bromodichloromethane | .36691 | .3371 | .2 | -8 | 20 | |
| 1,4-dioxane | .00299 | .00264 | .05 | -12 | 20 | F |
| cis-1,3-dichloropropene | .45857 | .4193 | .2 | -9 | 20 | |
| toluene | .86626 | .87135 | .4 | 1 | 20 | |
| 4-methyl-2-pentanone | .13093 | .11704 | .1 | -11 | 20 | |
| tetrachloroethene | .32806 | .34784 | .2 | 6 | 20 | |
| trans-1,3-dichloropropene | .52629 | .52452 | .1 | 0 | 20 | |

FORM VII MCP-8260H-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1222113

Instrument ID: Voa100.i  Calibration Date: 07-DEC-2012  Time: 08:50

Lab File ID: 1207A01  Init. Calib. Date(s): 13-NOV-2  13-NOV-2

Sample No:  Init. Calib. Times : 08:20  11:02

| Compound | RRF | RRF | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| 1,1,2-trichloroethane | .25384 | .25429 | .1 | 0 | 20 |
| chlorodibromomethane | .34599 | .33825 | .1 | -2 | 20 |
| 1,3-dichloropropane | .5453 | .52968 | .05 | -3 | 20 |
| 1,2-dibromoethane | .30488 | .29868 | .1 | -2 | 20 |
| 2-hexanone | .34084 | .32509 | .1 | -5 | 20 |
| chlorobenzene | .93444 | .94486 | .5 | 1 | 20 |
| ethyl benzene | 1.6521 | 1.6501 | .1 | 0 | 20 |
| 1,1,1,2-tetrachloroethane | .33142 | .33441 | .05 | 1 | 20 |
| p/m xylene | .63062 | .62837 | .1 | 0 | 20 |
| o xylene | .58891 | .60152 | .3 | 2 | 20 |
| styrene | .98755 | 1.0041 | .3 | 2 | 20 |
| bromoform | .4272 | .43616 | .1 | 2 | 20 |
| isopropylbenzene | 2.9715 | 3.0551 | .1 | 3 | 20 |
| bromobenzene | .71814 | .72882 | .05 | 1 | 20 |
| n-propylbenzene | 3.5402 | 3.6506 | .05 | 3 | 20 |
| 1,1,2,2,-tetrachloroethane | .8051 | .80395 | .3 | 0 | 20 |
| 2-chlorotoluene | 2.3774 | 2.4027 | .05 | 1 | 20 |
| 1,3,5-trimethybenzene | 2.5059 | 2.5968 | .05 | 4 | 20 |
| 1,2,3-trichloropropane | .66603 | .6707 | .05 | 1 | 20 |
| 4-chorotoluene | 2.2562 | 2.3155 | .05 | 3 | 20 |
| tert-butylbenzene | 2.1127 | 2.2122 | .05 | 5 | 20 |
| 1,2,4-trimethylbenzene | 2.5754 | 2.5968 | .05 | 1 | 20 |
| sec-butylbenzene | 3.1971 | 3.3575 | .05 | 5 | 20 |
| p-isopropyltoluene | 2.5886 | 2.7745 | .05 | 7 | 20 |
| 1,3-dichlorobenzene | 1.3687 | 1.4242 | .6 | 4 | 20 |
| 1,4-dichlorobenzene | 1.4117 | 1.4622 | .5 | 4 | 20 |
| n-butylbenzene | 2.5342 | 2.7047 | .05 | 7 | 20 |
| 1,2-dichlorobenzene | 1.2861 | 1.3422 | .4 | 4 | 20 |
| 1,2-dibromo-3-chloropropane | .15568 | .13151 | .05 | -16 | 20 |
| hexachlorobutadiene | .43309 | .46914 | .05 | 8 | 20 |
| 1,2,4-trichlorobenzene | .9294 | .98566 | .2 | 6 | 20 |
| naphthalene | 2.5013 | 2.5003 | .05 | 0 | 20 |
| 1,2,3-trichlorobenzene | .87876 | .92325 | .05 | 5 | 20 |
| dibromofluoromethane | .2518 | .24418 | .05 | -3 | 30 |
| 1,2-dichloroethane-d4 | .27726 | .27102 | .05 | -2 | 30 |
| toluene-d8 | 1.2448 | 1.3067 | .05 | 5 | 30 |
| 4-bromofluorobenzene | 1.0128 | .98378 | .05 | -3 | 30 |

FORM VII MCP-8260H-10

# ANALYTICAL REPORT

| | |
|---|---|
| Lab Number: | L1222248 |
| Client: | McPhail Associates<br>2269 Massachusetts Avenue<br>Cambridge, MA 02140 |
| ATTN: | Ambrose Donovan |
| Phone: | (617) 868-1420 |
| Project Name: | ST. MARY'S GARAGE |
| Project Number: | 5386.9.00 |
| Report Date: | 12/13/12 |

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Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222248
**Report Date:** 12/13/12

| Alpha Sample ID | Client ID | Sample Location | Collection Date/Time |
|---|---|---|---|
| ~~L1222248-01~~ | ~~A-1+A-2+A-4 FILL COMP~~ | ~~CHESTNUT HILL, MA~~ | ~~11/28/12 15:00~~ |
| ~~L1222248-02~~ | ~~A-4 S-1 0.5-2' FILL~~ | ~~CHESTNUT HILL, MA~~ | ~~11/28/12 08:30~~ |
| ~~L1222248-03~~ | ~~A-3 0-10' FILL COMP~~ | ~~CHESTNUT HILL, MA~~ | ~~11/28/12 15:00~~ |
| L1222248-04 | B+C FILL COMP | CHESTNUT HILL, MA | 11/28/12 15:00 |
| L1222248-05 | B-2 S-2 2-4 | CHESTNUT HILL, MA | 11/28/12 11:00 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222248

**Project Number:** 5386.9.00 **Report Date:** 12/13/12

## MADEP MCP Response Action Analytical Report Certification

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

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

| **A response to questions G, H and I is required for "Presumptive Certainty" status** | | |
|---|---|---|
| G | Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)? | NO |
| H | Were all QC performance standards specified in the CAM protocol(s) achieved? | NO |
| I | Were results reported for the complete analyte list specified in the selected CAM protocol(s)? | NO |

**For any questions answered "No", please refer to the case narrative section on the following page(s).**

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

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222248
**Project Number:** 5386.9.00 **Report Date:** 12/13/12

## Case Narrative

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

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

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

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

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

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

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222248
**Project Number:** 5386.9.00 **Report Date:** 12/13/12

**Case Narrative (continued)**

MCP Related Narratives

Sample Receipt

In reference to question H:

A Matrix Spike was not submitted for the analysis of Metals.

Volatile Organics

In reference to question G:

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

In reference to question H:

The initial calibration, associated with L1222248-02 and -05, did not meet the method required minimum response factors on the lowest calibration standards for 1,4-Dioxane (0.00293), as well as the average response factor for 1,4-Dioxane.

The continuing calibration standard, associated with L1222248-02 and -05, is outside the acceptance criteria for several compounds; however, it is within overall method allowances. A copy of the continuing calibration standard is included as an addendum to this report.

Semivolatile Organics

L1222248-01 and -04 have elevated detection limits due to the dilutions required by the sample matrices.

EPH

In reference to question G:

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

In reference to question H:

The surrogate recovery for L1222248-03 is outside the acceptance criteria for o-Terphenyl (283%); however, the sample was not re-extracted due to coelution with obvious interferences. A copy of the chromatogram is included as an attachment to this report. The results are not considered to be biased.

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1222248 |
| **Project Number:** | 5386.9.00 | **Report Date:** | 12/13/12 |

**Case Narrative (continued)**

Metals

In reference to question I:

All samples were analyzed for a subset of MCP elements per the Chain of Custody.

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

Authorized Signature: Michelle M. Morris

Title: Technical Director/Representative

Date: 12/13/12

# ORGANICS

# VOLATILES

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222248

**Project Number:** 5386.9.00 **Report Date:** 12/13/12

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1222248-05 | Date Collected: | 11/28/12 11:00 |
| Client ID: | B-2 S-2 2-4 | Date Received: | 12/07/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | | |
| Analytical Method: | 97,8260C | | |
| Analytical Date: | 12/11/12 15:52 | | |
| Analyst: | BN | | |
| Percent Solids: | 86% | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab | | | | | | |
| Methylene chloride | ND | | ug/kg | 1000 | -- | 1 |
| 1,1-Dichloroethane | ND | | ug/kg | 150 | -- | 1 |
| Chloroform | ND | | ug/kg | 150 | -- | 1 |
| Carbon tetrachloride | ND | | ug/kg | 100 | -- | 1 |
| 1,2-Dichloropropane | ND | | ug/kg | 350 | -- | 1 |
| Dibromochloromethane | ND | | ug/kg | 100 | -- | 1 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 150 | -- | 1 |
| Tetrachloroethene | ND | | ug/kg | 100 | -- | 1 |
| Chlorobenzene | ND | | ug/kg | 100 | -- | 1 |
| Trichlorofluoromethane | ND | | ug/kg | 400 | -- | 1 |
| 1,2-Dichloroethane | ND | | ug/kg | 100 | -- | 1 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 100 | -- | 1 |
| Bromodichloromethane | ND | | ug/kg | 100 | -- | 1 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 100 | -- | 1 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 100 | -- | 1 |
| 1,1-Dichloropropene | ND | | ug/kg | 400 | -- | 1 |
| Bromoform | ND | | ug/kg | 400 | -- | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 100 | -- | 1 |
| Benzene | ND | | ug/kg | 100 | -- | 1 |
| Toluene | ND | | ug/kg | 150 | -- | 1 |
| Ethylbenzene | ND | | ug/kg | 100 | -- | 1 |
| Chloromethane | ND | | ug/kg | 400 | -- | 1 |
| Bromomethane | ND | | ug/kg | 200 | -- | 1 |
| Vinyl chloride | ND | | ug/kg | 200 | -- | 1 |
| Chloroethane | ND | | ug/kg | 200 | -- | 1 |
| 1,1-Dichloroethene | ND | | ug/kg | 100 | -- | 1 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 150 | -- | 1 |
| Trichloroethene | ND | | ug/kg | 100 | -- | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 400 | -- | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 400 | -- | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 400 | -- | 1 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222248

**Project Number:** 5386.9.00 **Report Date:** 12/13/12

**SAMPLE RESULTS**

Lab ID: L1222248-05 Date Collected: 11/28/12 11:00

Client ID: B-2 S-2 2-4 Date Received: 12/07/12

Sample Location: CHESTNUT HILL, MA Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab | | | | | | |
| Methyl tert butyl ether | ND | | ug/kg | 200 | -- | 1 |
| p/m-Xylene | ND | | ug/kg | 200 | -- | 1 |
| o-Xylene | ND | | ug/kg | 200 | -- | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 100 | -- | 1 |
| Dibromomethane | ND | | ug/kg | 400 | -- | 1 |
| 1,2,3-Trichloropropane | ND | | ug/kg | 400 | -- | 1 |
| Styrene | ND | | ug/kg | 200 | -- | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 1000 | -- | 1 |
| Acetone | ND | | ug/kg | 3600 | -- | 1 |
| Carbon disulfide | ND | | ug/kg | 400 | -- | 1 |
| 2-Butanone | ND | | ug/kg | 1000 | -- | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 1000 | -- | 1 |
| 2-Hexanone | ND | | ug/kg | 1000 | -- | 1 |
| Bromochloromethane | ND | | ug/kg | 400 | -- | 1 |
| Tetrahydrofuran | ND | | ug/kg | 400 | -- | 1 |
| 2,2-Dichloropropane | ND | | ug/kg | 500 | -- | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 400 | -- | 1 |
| 1,3-Dichloropropane | ND | | ug/kg | 400 | -- | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | ug/kg | 100 | -- | 1 |
| Bromobenzene | ND | | ug/kg | 500 | -- | 1 |
| n-Butylbenzene | ND | | ug/kg | 100 | -- | 1 |
| sec-Butylbenzene | ND | | ug/kg | 100 | -- | 1 |
| tert-Butylbenzene | ND | | ug/kg | 400 | -- | 1 |
| o-Chlorotoluene | ND | | ug/kg | 400 | -- | 1 |
| p-Chlorotoluene | ND | | ug/kg | 400 | -- | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 400 | -- | 1 |
| Hexachlorobutadiene | ND | | ug/kg | 400 | -- | 1 |
| Isopropylbenzene | ND | | ug/kg | 100 | -- | 1 |
| p-Isopropyltoluene | ND | | ug/kg | 100 | -- | 1 |
| Naphthalene | 600 | | ug/kg | 400 | -- | 1 |
| n-Propylbenzene | ND | | ug/kg | 100 | -- | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 400 | -- | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 400 | -- | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 400 | -- | 1 |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 400 | -- | 1 |
| Ethyl ether | ND | | ug/kg | 500 | -- | 1 |
| Isopropyl Ether | ND | | ug/kg | 400 | -- | 1 |
| Ethyl-Tert-Butyl-Ether | ND | | ug/kg | 400 | -- | 1 |
| Tertiary-Amyl Methyl Ether | ND | | ug/kg | 400 | -- | 1 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222248

**Project Number:** 5386.9.00 **Report Date:** 12/13/12

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1222248-05 | Date Collected: | 11/28/12 11:00 |
| Client ID: | B-2 S-2 2-4 | Date Received: | 12/07/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab | | | | | | |
| 1,4-Dioxane | ND | | ug/kg | 10000 | -- | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 99 | | 70-130 |
| Toluene-d8 | 96 | | 70-130 |
| 4-Bromofluorobenzene | 99 | | 70-130 |
| Dibromofluoromethane | 96 | | 70-130 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222248

**Project Number:** 5386.9.00 **Report Date:** 12/13/12

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 12/11/12 14:57
Analyst: BN

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| MCP Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02,05 Batch: WG578960-3 | | | | | |
| Methylene chloride | ND | | ug/kg | 500 | -- |
| 1,1-Dichloroethane | ND | | ug/kg | 75 | -- |
| Chloroform | ND | | ug/kg | 75 | -- |
| Carbon tetrachloride | ND | | ug/kg | 50 | -- |
| 1,2-Dichloropropane | ND | | ug/kg | 180 | -- |
| Dibromochloromethane | ND | | ug/kg | 50 | -- |
| 1,1,2-Trichloroethane | ND | | ug/kg | 75 | -- |
| Tetrachloroethene | ND | | ug/kg | 50 | -- |
| Chlorobenzene | ND | | ug/kg | 50 | -- |
| Trichlorofluoromethane | ND | | ug/kg | 200 | -- |
| 1,2-Dichloroethane | ND | | ug/kg | 50 | -- |
| 1,1,1-Trichloroethane | ND | | ug/kg | 50 | -- |
| Bromodichloromethane | ND | | ug/kg | 50 | -- |
| trans-1,3-Dichloropropene | ND | | ug/kg | 50 | -- |
| cis-1,3-Dichloropropene | ND | | ug/kg | 50 | -- |
| 1,1-Dichloropropene | ND | | ug/kg | 200 | -- |
| Bromoform | ND | | ug/kg | 200 | -- |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 50 | -- |
| Benzene | ND | | ug/kg | 50 | -- |
| Toluene | ND | | ug/kg | 75 | -- |
| Ethylbenzene | ND | | ug/kg | 50 | -- |
| Chloromethane | ND | | ug/kg | 200 | -- |
| Bromomethane | ND | | ug/kg | 100 | -- |
| Vinyl chloride | ND | | ug/kg | 100 | -- |
| Chloroethane | ND | | ug/kg | 100 | -- |
| 1,1-Dichloroethene | ND | | ug/kg | 50 | -- |
| trans-1,2-Dichloroethene | ND | | ug/kg | 75 | -- |
| Trichloroethene | ND | | ug/kg | 50 | -- |
| 1,2-Dichlorobenzene | ND | | ug/kg | 200 | -- |
| 1,3-Dichlorobenzene | ND | | ug/kg | 200 | -- |
| 1,4-Dichlorobenzene | ND | | ug/kg | 200 | -- |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222248

**Project Number:** 5386.9.00 **Report Date:** 12/13/12

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 12/11/12 14:57
Analyst: BN

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| MCP Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02,05 Batch: WG578960-3 | | | | | |
| Methyl tert butyl ether | ND | | ug/kg | 100 | -- |
| p/m-Xylene | ND | | ug/kg | 100 | -- |
| o-Xylene | ND | | ug/kg | 100 | -- |
| cis-1,2-Dichloroethene | ND | | ug/kg | 50 | -- |
| Dibromomethane | ND | | ug/kg | 200 | -- |
| 1,2,3-Trichloropropane | ND | | ug/kg | 200 | -- |
| Styrene | ND | | ug/kg | 100 | -- |
| Dichlorodifluoromethane | ND | | ug/kg | 500 | -- |
| Acetone | ND | | ug/kg | 1800 | -- |
| Carbon disulfide | ND | | ug/kg | 200 | -- |
| 2-Butanone | ND | | ug/kg | 500 | -- |
| 4-Methyl-2-pentanone | ND | | ug/kg | 500 | -- |
| 2-Hexanone | ND | | ug/kg | 500 | -- |
| Bromochloromethane | ND | | ug/kg | 200 | -- |
| Tetrahydrofuran | ND | | ug/kg | 200 | -- |
| 2,2-Dichloropropane | ND | | ug/kg | 250 | -- |
| 1,2-Dibromoethane | ND | | ug/kg | 200 | -- |
| 1,3-Dichloropropane | ND | | ug/kg | 200 | -- |
| 1,1,1,2-Tetrachloroethane | ND | | ug/kg | 50 | -- |
| Bromobenzene | ND | | ug/kg | 250 | -- |
| n-Butylbenzene | ND | | ug/kg | 50 | -- |
| sec-Butylbenzene | ND | | ug/kg | 50 | -- |
| tert-Butylbenzene | ND | | ug/kg | 200 | -- |
| o-Chlorotoluene | ND | | ug/kg | 200 | -- |
| p-Chlorotoluene | ND | | ug/kg | 200 | -- |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 200 | -- |
| Hexachlorobutadiene | ND | | ug/kg | 200 | -- |
| Isopropylbenzene | ND | | ug/kg | 50 | -- |
| p-Isopropyltoluene | ND | | ug/kg | 50 | -- |
| Naphthalene | ND | | ug/kg | 200 | -- |
| n-Propylbenzene | ND | | ug/kg | 50 | -- |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222248

**Project Number:** 5386.9.00 **Report Date:** 12/13/12

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 12/11/12 14:57
Analyst: BN

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| MCP Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02,05 Batch: WG578960-3 | | | | | |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 200 | -- |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 200 | -- |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 200 | -- |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 200 | -- |
| Ethyl ether | ND | | ug/kg | 250 | -- |
| Isopropyl Ether | ND | | ug/kg | 200 | -- |
| Ethyl-Tert-Butyl-Ether | ND | | ug/kg | 200 | -- |
| Tertiary-Amyl Methyl Ether | ND | | ug/kg | 200 | -- |
| 1,4-Dioxane | ND | | ug/kg | 5000 | -- |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 101 | | 70-130 |
| Toluene-d8 | 99 | | 70-130 |
| 4-Bromofluorobenzene | 98 | | 70-130 |
| Dibromofluoromethane | 98 | | 70-130 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222248
**Report Date:** 12/13/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02,05 Batch: WG578960-1 WG578960-2 | | | | | | | | |
| Methylene chloride | 96 | | 93 | | 70-130 | 3 | | 20 |
| 1,1-Dichloroethane | 94 | | 89 | | 70-130 | 5 | | 20 |
| Chloroform | 96 | | 92 | | 70-130 | 4 | | 20 |
| Carbon tetrachloride | 92 | | 86 | | 70-130 | 7 | | 20 |
| 1,2-Dichloropropane | 97 | | 93 | | 70-130 | 4 | | 20 |
| Dibromochloromethane | 97 | | 96 | | 70-130 | 1 | | 20 |
| 1,1,2-Trichloroethane | 99 | | 98 | | 70-130 | 1 | | 20 |
| Tetrachloroethene | 91 | | 86 | | 70-130 | 6 | | 20 |
| Chlorobenzene | 94 | | 91 | | 70-130 | 3 | | 20 |
| Trichlorofluoromethane | 94 | | 87 | | 70-130 | 8 | | 20 |
| 1,2-Dichloroethane | 99 | | 97 | | 70-130 | 2 | | 20 |
| 1,1,1-Trichloroethane | 92 | | 86 | | 70-130 | 7 | | 20 |
| Bromodichloromethane | 99 | | 95 | | 70-130 | 4 | | 20 |
| trans-1,3-Dichloropropene | 98 | | 96 | | 70-130 | 2 | | 20 |
| cis-1,3-Dichloropropene | 98 | | 94 | | 70-130 | 4 | | 20 |
| 1,1-Dichloropropene | 91 | | 83 | | 70-130 | 9 | | 20 |
| Bromoform | 98 | | 99 | | 70-130 | 1 | | 20 |
| 1,1,2,2-Tetrachloroethane | 96 | | 97 | | 70-130 | 1 | | 20 |
| Benzene | 93 | | 88 | | 70-130 | 6 | | 20 |
| Toluene | 94 | | 88 | | 70-130 | 7 | | 20 |
| Ethylbenzene | 92 | | 88 | | 70-130 | 4 | | 20 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222248
**Report Date:** 12/13/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02,05 Batch: WG578960-1 WG578960-2 | | | | | | | | |
| Chloromethane | 90 | | 82 | | 70-130 | 9 | | 20 |
| Bromomethane | 96 | | 88 | | 70-130 | 9 | | 20 |
| Vinyl chloride | 88 | | 82 | | 70-130 | 7 | | 20 |
| Chloroethane | 96 | | 88 | | 70-130 | 9 | | 20 |
| 1,1-Dichloroethene | 88 | | 84 | | 70-130 | 5 | | 20 |
| trans-1,2-Dichloroethene | 90 | | 86 | | 70-130 | 5 | | 20 |
| Trichloroethene | 93 | | 86 | | 70-130 | 8 | | 20 |
| 1,2-Dichlorobenzene | 96 | | 94 | | 70-130 | 2 | | 20 |
| 1,3-Dichlorobenzene | 96 | | 92 | | 70-130 | 4 | | 20 |
| 1,4-Dichlorobenzene | 95 | | 92 | | 70-130 | 3 | | 20 |
| Methyl tert butyl ether | 100 | | 99 | | 70-130 | 1 | | 20 |
| p/m-Xylene | 94 | | 89 | | 70-130 | 5 | | 20 |
| o-Xylene | 95 | | 91 | | 70-130 | 4 | | 20 |
| cis-1,2-Dichloroethene | 96 | | 91 | | 70-130 | 5 | | 20 |
| Dibromomethane | 99 | | 96 | | 70-130 | 3 | | 20 |
| 1,2,3-Trichloropropane | 96 | | 97 | | 70-130 | 1 | | 20 |
| Styrene | 97 | | 94 | | 70-130 | 3 | | 20 |
| Dichlorodifluoromethane | 86 | | 79 | | 70-130 | 8 | | 20 |
| Acetone | 121 | | 103 | | 70-130 | 16 | | 20 |
| Carbon disulfide | 91 | | 85 | | 70-130 | 7 | | 20 |
| 2-Butanone | 98 | | 94 | | 70-130 | 4 | | 20 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222248
**Report Date:** 12/13/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02,05 Batch: WG578960-1 WG578960-2 | | | | | | | | |
| 4-Methyl-2-pentanone | 100 | | 100 | | 70-130 | 0 | | 20 |
| 2-Hexanone | 98 | | 95 | | 70-130 | 3 | | 20 |
| Bromochloromethane | 101 | | 97 | | 70-130 | 4 | | 20 |
| Tetrahydrofuran | 96 | | 97 | | 70-130 | 1 | | 20 |
| 2,2-Dichloropropane | 91 | | 86 | | 70-130 | 6 | | 20 |
| 1,2-Dibromoethane | 98 | | 97 | | 70-130 | 1 | | 20 |
| 1,3-Dichloropropane | 97 | | 96 | | 70-130 | 1 | | 20 |
| 1,1,1,2-Tetrachloroethane | 95 | | 93 | | 70-130 | 2 | | 20 |
| Bromobenzene | 97 | | 94 | | 70-130 | 3 | | 20 |
| n-Butylbenzene | 92 | | 86 | | 70-130 | 7 | | 20 |
| sec-Butylbenzene | 92 | | 85 | | 70-130 | 8 | | 20 |
| tert-Butylbenzene | 92 | | 87 | | 70-130 | 6 | | 20 |
| o-Chlorotoluene | 93 | | 89 | | 70-130 | 4 | | 20 |
| p-Chlorotoluene | 94 | | 90 | | 70-130 | 4 | | 20 |
| 1,2-Dibromo-3-chloropropane | 90 | | 106 | | 70-130 | 16 | | 20 |
| Hexachlorobutadiene | 92 | | 84 | | 70-130 | 9 | | 20 |
| Isopropylbenzene | 91 | | 86 | | 70-130 | 6 | | 20 |
| p-Isopropyltoluene | 92 | | 86 | | 70-130 | 7 | | 20 |
| Naphthalene | 98 | | 96 | | 70-130 | 2 | | 20 |
| n-Propylbenzene | 92 | | 87 | | 70-130 | 6 | | 20 |
| 1,2,3-Trichlorobenzene | 98 | | 95 | | 70-130 | 3 | | 20 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222248
**Report Date:** 12/13/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02,05 Batch: WG578960-1 WG578960-2 | | | | | | | | |
| 1,2,4-Trichlorobenzene | 97 | | 92 | | 70-130 | 5 | | 20 |
| 1,3,5-Trimethylbenzene | 93 | | 88 | | 70-130 | 6 | | 20 |
| 1,2,4-Trimethylbenzene | 95 | | 90 | | 70-130 | 5 | | 20 |
| Ethyl ether | 99 | | 97 | | 70-130 | 2 | | 20 |
| Isopropyl Ether | 98 | | 95 | | 70-130 | 3 | | 20 |
| Ethyl-Tert-Butyl-Ether | 100 | | 97 | | 70-130 | 3 | | 20 |
| Tertiary-Amyl Methyl Ether | 100 | | 98 | | 70-130 | 2 | | 20 |
| 1,4-Dioxane | 99 | | 100 | | 70-130 | 1 | | 20 |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | 99 | | 99 | | 70-130 |
| Toluene-d8 | 99 | | 99 | | 70-130 |
| 4-Bromofluorobenzene | 100 | | 100 | | 70-130 |
| Dibromofluoromethane | 100 | | 100 | | 70-130 |

# SEMIVOLATILES

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222248

**Project Number:** 5386.9.00 **Report Date:** 12/13/12

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1222248-04 D | Date Collected: | 11/28/12 15:00 |
| Client ID: | B+C FILL COMP | Date Received: | 12/07/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | Extraction Method: | EPA 3546 |
| Analytical Method: | 97,8270D | Extraction Date: | 12/08/12 01:53 |
| Analytical Date: | 12/10/12 03:09 | | |
| Analyst: | JC | | |
| Percent Solids: | 90% | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab | | | | | | |
| Acenaphthene | ND | | ug/kg | 290 | -- | 2 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 370 | -- | 2 |
| Hexachlorobenzene | ND | | ug/kg | 220 | -- | 2 |
| Bis(2-chloroethyl)ether | ND | | ug/kg | 330 | -- | 2 |
| 2-Chloronaphthalene | ND | | ug/kg | 370 | -- | 2 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 370 | -- | 2 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 370 | -- | 2 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 370 | -- | 2 |
| 3,3'-Dichlorobenzidine | ND | | ug/kg | 370 | -- | 2 |
| 2,4-Dinitrotoluene | ND | | ug/kg | 370 | -- | 2 |
| 2,6-Dinitrotoluene | ND | | ug/kg | 370 | -- | 2 |
| Azobenzene | ND | | ug/kg | 370 | -- | 2 |
| Fluoranthene | 1200 | | ug/kg | 220 | -- | 2 |
| 4-Bromophenyl phenyl ether | ND | | ug/kg | 370 | -- | 2 |
| Bis(2-chloroisopropyl)ether | ND | | ug/kg | 440 | -- | 2 |
| Bis(2-chloroethoxy)methane | ND | | ug/kg | 400 | -- | 2 |
| Hexachlorobutadiene | ND | | ug/kg | 370 | -- | 2 |
| Hexachloroethane | ND | | ug/kg | 290 | -- | 2 |
| Isophorone | ND | | ug/kg | 330 | -- | 2 |
| Naphthalene | ND | | ug/kg | 370 | -- | 2 |
| Nitrobenzene | ND | | ug/kg | 330 | -- | 2 |
| Bis(2-Ethylhexyl)phthalate | ND | | ug/kg | 370 | -- | 2 |
| Butyl benzyl phthalate | ND | | ug/kg | 370 | -- | 2 |
| Di-n-butylphthalate | ND | | ug/kg | 370 | -- | 2 |
| Di-n-octylphthalate | ND | | ug/kg | 370 | -- | 2 |
| Diethyl phthalate | ND | | ug/kg | 370 | -- | 2 |
| Dimethyl phthalate | ND | | ug/kg | 370 | -- | 2 |
| Benzo(a)anthracene | 640 | | ug/kg | 220 | -- | 2 |
| Benzo(a)pyrene | 590 | | ug/kg | 290 | -- | 2 |
| Benzo(b)fluoranthene | 770 | | ug/kg | 220 | -- | 2 |
| Benzo(k)fluoranthene | 270 | | ug/kg | 220 | -- | 2 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222248

**Project Number:** 5386.9.00 **Report Date:** 12/13/12

## SAMPLE RESULTS

Lab ID: L1222248-04 D Date Collected: 11/28/12 15:00
Client ID: B+C FILL COMP Date Received: 12/07/12
Sample Location: CHESTNUT HILL, MA Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab | | | | | | |
| Chrysene | 550 | | ug/kg | 220 | -- | 2 |
| Acenaphthylene | ND | | ug/kg | 290 | -- | 2 |
| Anthracene | ND | | ug/kg | 220 | -- | 2 |
| Benzo(ghi)perylene | 380 | | ug/kg | 290 | -- | 2 |
| Fluorene | ND | | ug/kg | 370 | -- | 2 |
| Phenanthrene | 580 | | ug/kg | 220 | -- | 2 |
| Dibenzo(a,h)anthracene | ND | | ug/kg | 220 | -- | 2 |
| Indeno(1,2,3-cd)Pyrene | 380 | | ug/kg | 290 | -- | 2 |
| Pyrene | 1000 | | ug/kg | 220 | -- | 2 |
| Aniline | ND | | ug/kg | 440 | -- | 2 |
| 4-Chloroaniline | ND | | ug/kg | 370 | -- | 2 |
| Dibenzofuran | ND | | ug/kg | 370 | -- | 2 |
| 2-Methylnaphthalene | ND | | ug/kg | 440 | -- | 2 |
| Acetophenone | ND | | ug/kg | 370 | -- | 2 |
| 2,4,6-Trichlorophenol | ND | | ug/kg | 220 | -- | 2 |
| 2-Chlorophenol | ND | | ug/kg | 370 | -- | 2 |
| 2,4-Dichlorophenol | ND | | ug/kg | 330 | -- | 2 |
| 2,4-Dimethylphenol | ND | | ug/kg | 370 | -- | 2 |
| 2-Nitrophenol | ND | | ug/kg | 790 | -- | 2 |
| 4-Nitrophenol | ND | | ug/kg | 510 | -- | 2 |
| 2,4-Dinitrophenol | ND | | ug/kg | 1800 | -- | 2 |
| Pentachlorophenol | ND | | ug/kg | 730 | -- | 2 |
| Phenol | ND | | ug/kg | 370 | -- | 2 |
| 2-Methylphenol | ND | | ug/kg | 370 | -- | 2 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 530 | -- | 2 |
| 2,4,5-Trichlorophenol | ND | | ug/kg | 370 | -- | 2 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 74 | | 30-130 |
| Phenol-d6 | 71 | | 30-130 |
| Nitrobenzene-d5 | 58 | | 30-130 |
| 2-Fluorobiphenyl | 69 | | 30-130 |
| 2,4,6-Tribromophenol | 108 | | 30-130 |
| 4-Terphenyl-d14 | 55 | | 30-130 |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222248
**Report Date:** 12/13/12

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 97,8270D
Analytical Date: 12/09/12 17:56
Analyst: JC

Extraction Method: EPA 3546
Extraction Date: 12/08/12 01:53

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab for sample(s): 01,04 Batch: WG578224-1 | | | | | |
| Acenaphthene | ND | | ug/kg | 130 | -- |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 160 | -- |
| Hexachlorobenzene | ND | | ug/kg | 100 | -- |
| Bis(2-chloroethyl)ether | ND | | ug/kg | 150 | -- |
| 2-Chloronaphthalene | ND | | ug/kg | 160 | -- |
| 1,2-Dichlorobenzene | ND | | ug/kg | 160 | -- |
| 1,3-Dichlorobenzene | ND | | ug/kg | 160 | -- |
| 1,4-Dichlorobenzene | ND | | ug/kg | 160 | -- |
| 3,3'-Dichlorobenzidine | ND | | ug/kg | 160 | -- |
| 2,4-Dinitrotoluene | ND | | ug/kg | 160 | -- |
| 2,6-Dinitrotoluene | ND | | ug/kg | 160 | -- |
| Azobenzene | ND | | ug/kg | 160 | -- |
| Fluoranthene | ND | | ug/kg | 100 | -- |
| 4-Bromophenyl phenyl ether | ND | | ug/kg | 160 | -- |
| Bis(2-chloroisopropyl)ether | ND | | ug/kg | 200 | -- |
| Bis(2-chloroethoxy)methane | ND | | ug/kg | 180 | -- |
| Hexachlorobutadiene | ND | | ug/kg | 160 | -- |
| Hexachloroethane | ND | | ug/kg | 130 | -- |
| Isophorone | ND | | ug/kg | 150 | -- |
| Naphthalene | ND | | ug/kg | 160 | -- |
| Nitrobenzene | ND | | ug/kg | 150 | -- |
| Bis(2-Ethylhexyl)phthalate | ND | | ug/kg | 160 | -- |
| Butyl benzyl phthalate | ND | | ug/kg | 160 | -- |
| Di-n-butylphthalate | ND | | ug/kg | 160 | -- |
| Di-n-octylphthalate | ND | | ug/kg | 160 | -- |
| Diethyl phthalate | ND | | ug/kg | 160 | -- |
| Dimethyl phthalate | ND | | ug/kg | 160 | -- |
| Benzo(a)anthracene | ND | | ug/kg | 100 | -- |
| Benzo(a)pyrene | ND | | ug/kg | 130 | -- |
| Benzo(b)fluoranthene | ND | | ug/kg | 100 | -- |
| Benzo(k)fluoranthene | ND | | ug/kg | 100 | -- |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222248
**Report Date:** 12/13/12

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 97,8270D
Analytical Date: 12/09/12 17:56
Analyst: JC

Extraction Method: EPA 3546
Extraction Date: 12/08/12 01:53

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab for sample(s): 01,04 Batch: WG578224-1 | | | | | |
| Chrysene | ND | | ug/kg | 100 | -- |
| Acenaphthylene | ND | | ug/kg | 130 | -- |
| Anthracene | ND | | ug/kg | 100 | -- |
| Benzo(ghi)perylene | ND | | ug/kg | 130 | -- |
| Fluorene | ND | | ug/kg | 160 | -- |
| Phenanthrene | ND | | ug/kg | 100 | -- |
| Dibenzo(a,h)anthracene | ND | | ug/kg | 100 | -- |
| Indeno(1,2,3-cd)Pyrene | ND | | ug/kg | 130 | -- |
| Pyrene | ND | | ug/kg | 100 | -- |
| Aniline | ND | | ug/kg | 200 | -- |
| 4-Chloroaniline | ND | | ug/kg | 160 | -- |
| Dibenzofuran | ND | | ug/kg | 160 | -- |
| 2-Methylnaphthalene | ND | | ug/kg | 200 | -- |
| Acetophenone | ND | | ug/kg | 160 | -- |
| 2,4,6-Trichlorophenol | ND | | ug/kg | 100 | -- |
| 2-Chlorophenol | ND | | ug/kg | 160 | -- |
| 2,4-Dichlorophenol | ND | | ug/kg | 150 | -- |
| 2,4-Dimethylphenol | ND | | ug/kg | 160 | -- |
| 2-Nitrophenol | ND | | ug/kg | 360 | -- |
| 4-Nitrophenol | ND | | ug/kg | 230 | -- |
| 2,4-Dinitrophenol | ND | | ug/kg | 800 | -- |
| Pentachlorophenol | ND | | ug/kg | 330 | -- |
| Phenol | ND | | ug/kg | 160 | -- |
| 2-Methylphenol | ND | | ug/kg | 160 | -- |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 240 | -- |
| 2,4,5-Trichlorophenol | ND | | ug/kg | 160 | -- |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222248
**Report Date:** 12/13/12

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 97,8270D
Analytical Date: 12/09/12 17:56
Analyst: JC

Extraction Method: EPA 3546
Extraction Date: 12/08/12 01:53

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab for sample(s): 01,04 Batch: WG578224-1 | | | | | |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 74 | | 30-130 |
| Phenol-d6 | 68 | | 30-130 |
| Nitrobenzene-d5 | 60 | | 30-130 |
| 2-Fluorobiphenyl | 75 | | 30-130 |
| 2,4,6-Tribromophenol | 86 | | 30-130 |
| 4-Terphenyl-d14 | 89 | | 30-130 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222248
**Report Date:** 12/13/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01,04 Batch: WG578224-2 WG578224-3 | | | | | | | | |
| Acenaphthene | 88 | | 84 | | 40-140 | 5 | | 30 |
| 1,2,4-Trichlorobenzene | 89 | | 80 | | 40-140 | 11 | | 30 |
| Hexachlorobenzene | 97 | | 100 | | 40-140 | 3 | | 30 |
| Bis(2-chloroethyl)ether | 68 | | 64 | | 40-140 | 6 | | 30 |
| 2-Chloronaphthalene | 99 | | 90 | | 40-140 | 10 | | 30 |
| 1,2-Dichlorobenzene | 77 | | 70 | | 40-140 | 10 | | 30 |
| 1,3-Dichlorobenzene | 77 | | 69 | | 40-140 | 11 | | 30 |
| 1,4-Dichlorobenzene | 76 | | 70 | | 40-140 | 8 | | 30 |
| 3,3'-Dichlorobenzidine | 62 | | 68 | | 40-140 | 9 | | 30 |
| 2,4-Dinitrotoluene | 104 | | 104 | | 40-140 | 0 | | 30 |
| 2,6-Dinitrotoluene | 110 | | 110 | | 40-140 | 0 | | 30 |
| Azobenzene | 92 | | 91 | | 40-140 | 1 | | 30 |
| Fluoranthene | 107 | | 107 | | 40-140 | 0 | | 30 |
| 4-Bromophenyl phenyl ether | 108 | | 108 | | 40-140 | 0 | | 30 |
| Bis(2-chloroisopropyl)ether | 67 | | 62 | | 40-140 | 8 | | 30 |
| Bis(2-chloroethoxy)methane | 76 | | 72 | | 40-140 | 5 | | 30 |
| Hexachlorobutadiene | 97 | | 87 | | 40-140 | 11 | | 30 |
| Hexachloroethane | 79 | | 75 | | 40-140 | 5 | | 30 |
| Isophorone | 86 | | 82 | | 40-140 | 5 | | 30 |
| Naphthalene | 81 | | 75 | | 40-140 | 8 | | 30 |
| Nitrobenzene | 84 | | 75 | | 40-140 | 11 | | 30 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222248
**Report Date:** 12/13/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01,04 Batch: WG578224-2 WG578224-3 | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | 89 | | 90 | | 40-140 | 1 | | 30 |
| Butyl benzyl phthalate | 95 | | 96 | | 40-140 | 1 | | 30 |
| Di-n-butylphthalate | 104 | | 103 | | 40-140 | 1 | | 30 |
| Di-n-octylphthalate | 102 | | 102 | | 40-140 | 0 | | 30 |
| Diethyl phthalate | 106 | | 104 | | 40-140 | 2 | | 30 |
| Dimethyl phthalate | 102 | | 100 | | 40-140 | 2 | | 30 |
| Benzo(a)anthracene | 103 | | 103 | | 40-140 | 0 | | 30 |
| Benzo(a)pyrene | 88 | | 86 | | 40-140 | 2 | | 30 |
| Benzo(b)fluoranthene | 104 | | 100 | | 40-140 | 4 | | 30 |
| Benzo(k)fluoranthene | 86 | | 91 | | 40-140 | 6 | | 30 |
| Chrysene | 87 | | 89 | | 40-140 | 2 | | 30 |
| Acenaphthylene | 106 | | 102 | | 40-140 | 4 | | 30 |
| Anthracene | 104 | | 100 | | 40-140 | 4 | | 30 |
| Benzo(ghi)perylene | 98 | | 98 | | 40-140 | 0 | | 30 |
| Fluorene | 98 | | 97 | | 40-140 | 1 | | 30 |
| Phenanthrene | 87 | | 85 | | 40-140 | 2 | | 30 |
| Dibenzo(a,h)anthracene | 101 | | 102 | | 40-140 | 1 | | 30 |
| Indeno(1,2,3-cd)Pyrene | 86 | | 86 | | 40-140 | 0 | | 30 |
| Pyrene | 100 | | 99 | | 40-140 | 1 | | 30 |
| Aniline | **37** | Q | **38** | Q | 40-140 | 3 | | 30 |
| 4-Chloroaniline | 55 | | 55 | | 40-140 | 0 | | 30 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00
**Lab Number:** L1222248
**Report Date:** 12/13/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01,04 Batch: WG578224-2 WG578224-3 | | | | | | | | |
| Dibenzofuran | 90 | | 88 | | 40-140 | 2 | | 30 |
| 2-Methylnaphthalene | 92 | | 85 | | 40-140 | 8 | | 30 |
| Acetophenone | 89 | | 84 | | 40-140 | 6 | | 30 |
| 2,4,6-Trichlorophenol | 123 | | 119 | | 30-130 | 3 | | 30 |
| 2-Chlorophenol | 91 | | 83 | | 30-130 | 9 | | 30 |
| 2,4-Dichlorophenol | 112 | | 101 | | 30-130 | 10 | | 30 |
| 2,4-Dimethylphenol | 90 | | 89 | | 30-130 | 1 | | 30 |
| 2-Nitrophenol | 90 | | 85 | | 30-130 | 6 | | 30 |
| 4-Nitrophenol | 96 | | 90 | | 30-130 | 6 | | 30 |
| 2,4-Dinitrophenol | 72 | | 71 | | 30-130 | 1 | | 30 |
| Pentachlorophenol | 94 | | 94 | | 30-130 | 0 | | 30 |
| Phenol | 85 | | 81 | | 30-130 | 5 | | 30 |
| 2-Methylphenol | 92 | | 87 | | 30-130 | 6 | | 30 |
| 3-Methylphenol/4-Methylphenol | 91 | | 85 | | 30-130 | 7 | | 30 |
| 2,4,5-Trichlorophenol | 111 | | 111 | | 30-130 | 0 | | 30 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222248
**Report Date:** 12/13/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01,04 Batch: WG578224-2 WG578224-3 | | | | | | | | |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| 2-Fluorophenol | 95 | | 91 | | 30-130 |
| Phenol-d6 | 96 | | 93 | | 30-130 |
| Nitrobenzene-d5 | 90 | | 84 | | 30-130 |
| 2-Fluorobiphenyl | 96 | | 96 | | 30-130 |
| 2,4,6-Tribromophenol | 125 | | 124 | | 30-130 |
| 4-Terphenyl-d14 | 104 | | 107 | | 30-130 |

# PETROLEUM HYDROCARBONS

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222248

**Project Number:** 5386.9.00 **Report Date:** 12/13/12

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1222248-04 D | Date Collected: | 11/28/12 15:00 |
| Client ID: | B+C FILL COMP | Date Received: | 12/07/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | Extraction Method: | EPA 3546 |
| Analytical Method: | 1,8015C(M) | Extraction Date: | 12/08/12 03:32 |
| Analytical Date: | 12/08/12 17:14 | | |
| Analyst: | AR | | |
| Percent Solids: | 90% | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| Petroleum Hydrocarbon Quantitation - Westborough Lab | | | | | | |
| TPH | 183000 | | ug/kg | 71100 | -- | 2 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| o-Terphenyl | 89 | | 40-140 |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222248
**Report Date:** 12/13/12

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8015C(M)
Analytical Date: 12/08/12 12:58
Analyst: AR

Extraction Method: EPA 3546
Extraction Date: 12/08/12 03:32

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Petroleum Hydrocarbon Quantitation - Westborough Lab for sample(s): 01,04 Batch: WG578232-1 | | | | | |
| TPH | ND | | ug/kg | 33200 | -- |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| o-Terphenyl | 86 | | 40-140 |

# Lab Control Sample Analysis

**Batch Quality Control**

**Project Name:** ST. MARY'S GARAGE

**Project Number:** 5386.9.00

**Lab Number:** L1222248

**Report Date:** 12/13/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Petroleum Hydrocarbon Quantitation - Westborough Lab Associated sample(s): 01,04 Batch: WG578232-2 | | | | | | | | |
| TPH | 78 | | - | | 40-140 | - | | 40 |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| o-Terphenyl | 76 | | | | 40-140 |

# Lab Duplicate Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222248
**Report Date:** 12/13/12

| Parameter | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|
| Petroleum Hydrocarbon Quantitation - Westborough Lab Associated sample(s): 01,04 QC Batch ID: WG578232-3 QC Sample: L1222170-02 Client ID: DUP Sample | | | | | | |
| TPH | 47200 | 46600 | ug/kg | 1 | | 40 |

| Surrogate | %Recovery | Qualifier | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|---|---|
| o-Terphenyl | 83 | | 72 | | 40-140 |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222248
**Report Date:** 12/13/12

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 98,EPH-04-1.1
Analytical Date: 12/11/12 23:03
Analyst: MW

Extraction Method: EPA 3546
Extraction Date: 12/09/12 12:32
Cleanup Method1: EPH-04-1
Cleanup Date1: 12/10/12

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Extractable Petroleum Hydrocarbons - Westborough Lab for sample(s): 03 Batch: WG578285-1 | | | | | |
| C9-C18 Aliphatics | ND | | mg/kg | 6.51 | -- |
| C19-C36 Aliphatics | ND | | mg/kg | 6.51 | -- |
| C11-C22 Aromatics | ND | | mg/kg | 6.51 | -- |
| C11-C22 Aromatics, Adjusted | ND | | mg/kg | 6.51 | -- |
| Naphthalene | ND | | mg/kg | 0.326 | -- |
| 2-Methylnaphthalene | ND | | mg/kg | 0.326 | -- |
| Acenaphthylene | ND | | mg/kg | 0.326 | -- |
| Acenaphthene | ND | | mg/kg | 0.326 | -- |
| Fluorene | ND | | mg/kg | 0.326 | -- |
| Phenanthrene | ND | | mg/kg | 0.326 | -- |
| Anthracene | ND | | mg/kg | 0.326 | -- |
| Fluoranthene | ND | | mg/kg | 0.326 | -- |
| Pyrene | ND | | mg/kg | 0.326 | -- |
| Benzo(a)anthracene | ND | | mg/kg | 0.326 | -- |
| Chrysene | ND | | mg/kg | 0.326 | -- |
| Benzo(b)fluoranthene | ND | | mg/kg | 0.326 | -- |
| Benzo(k)fluoranthene | ND | | mg/kg | 0.326 | -- |
| Benzo(a)pyrene | ND | | mg/kg | 0.326 | -- |
| Indeno(1,2,3-cd)Pyrene | ND | | mg/kg | 0.326 | -- |
| Dibenzo(a,h)anthracene | ND | | mg/kg | 0.326 | -- |
| Benzo(ghi)perylene | ND | | mg/kg | 0.326 | -- |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| Chloro-Octadecane | 83 | | 40-140 |
| o-Terphenyl | 122 | | 40-140 |
| 2-Fluorobiphenyl | 114 | | 40-140 |
| 2-Bromonaphthalene | 119 | | 40-140 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222248
**Report Date:** 12/13/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 03 Batch: WG578285-2 WG578285-3 | | | | | | | | |
| C9-C18 Aliphatics | 71 | | 70 | | 40-140 | 1 | | 25 |
| C19-C36 Aliphatics | 88 | | 84 | | 40-140 | 5 | | 25 |
| C11-C22 Aromatics | 92 | | 118 | | 40-140 | 25 | | 25 |
| Naphthalene | 89 | | 110 | | 40-140 | 21 | | 25 |
| 2-Methylnaphthalene | 96 | | 121 | | 40-140 | 23 | | 25 |
| Acenaphthylene | 87 | | 113 | | 40-140 | **26** | Q | 25 |
| Acenaphthene | 94 | | 121 | | 40-140 | 25 | | 25 |
| Fluorene | 94 | | 125 | | 40-140 | **28** | Q | 25 |
| Phenanthrene | 96 | | 126 | | 40-140 | **27** | Q | 25 |
| Anthracene | 97 | | 126 | | 40-140 | **26** | Q | 25 |
| Fluoranthene | 95 | | 126 | | 40-140 | **28** | Q | 25 |
| Pyrene | 96 | | 127 | | 40-140 | **28** | Q | 25 |
| Benzo(a)anthracene | 87 | | 117 | | 40-140 | **29** | Q | 25 |
| Chrysene | 87 | | 116 | | 40-140 | **29** | Q | 25 |
| Benzo(b)fluoranthene | 89 | | 119 | | 40-140 | **29** | Q | 25 |
| Benzo(k)fluoranthene | 84 | | 109 | | 40-140 | **26** | Q | 25 |
| Benzo(a)pyrene | 80 | | 107 | | 40-140 | **29** | Q | 25 |
| Indeno(1,2,3-cd)Pyrene | 83 | | 108 | | 40-140 | **26** | Q | 25 |
| Dibenzo(a,h)anthracene | 82 | | 106 | | 40-140 | **26** | Q | 25 |
| Benzo(ghi)perylene | 84 | | 108 | | 40-140 | 25 | | 25 |
| Nonane (C9) | 60 | | 61 | | 30-140 | 2 | | 25 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00
**Lab Number:** L1222248
**Report Date:** 12/13/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 03 Batch: WG578285-2 WG578285-3 | | | | | | | | |
| Decane (C10) | 70 | | 71 | | 40-140 | 1 | | 25 |
| Dodecane (C12) | 75 | | 75 | | 40-140 | 0 | | 25 |
| Tetradecane (C14) | 76 | | 76 | | 40-140 | 0 | | 25 |
| Hexadecane (C16) | 82 | | 80 | | 40-140 | 2 | | 25 |
| Octadecane (C18) | 88 | | 85 | | 40-140 | 3 | | 25 |
| Nonadecane (C19) | 88 | | 85 | | 40-140 | 3 | | 25 |
| Eicosane (C20) | 90 | | 86 | | 40-140 | 5 | | 25 |
| Docosane (C22) | 91 | | 87 | | 40-140 | 4 | | 25 |
| Tetracosane (C24) | 91 | | 87 | | 40-140 | 4 | | 25 |
| Hexacosane (C26) | 92 | | 88 | | 40-140 | 4 | | 25 |
| Octacosane (C28) | 90 | | 86 | | 40-140 | 5 | | 25 |
| Triacontane (C30) | 91 | | 86 | | 40-140 | 6 | | 25 |
| Hexatriacontane (C36) | 91 | | 86 | | 40-140 | 6 | | 25 |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| Chloro-Octadecane | 89 | | 88 | | 40-140 |
| o-Terphenyl | 105 | | 137 | | 40-140 |
| 2-Fluorobiphenyl | 98 | | 123 | | 40-140 |
| 2-Bromonaphthalene | 100 | | 123 | | 40-140 |
| % Naphthalene Breakthrough | 0 | | 0 | | |
| % 2-Methylnaphthalene Breakthrough | 0 | | 0 | | |

# PCBS

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222248

**Project Number:** 5386.9.00 **Report Date:** 12/13/12

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1222248-04 | Date Collected: | 11/28/12 15:00 |
| Client ID: | B+C FILL COMP | Date Received: | 12/07/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | Extraction Method: | EPA 3546 |
| Analytical Method: | 97,8082A | Extraction Date: | 12/08/12 09:26 |
| Analytical Date: | 12/10/12 23:39 | Cleanup Method1: | EPA 3665A |
| Analyst: | KB | Cleanup Date1: | 12/10/12 |
| Percent Solids: | 90% | Cleanup Method2: | EPA 3660B |
| | | Cleanup Date2: | 12/10/12 |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Polychlorinated Biphenyls - Westborough Lab | | | | | | |
| Aroclor 1016 | ND | | ug/kg | 36.3 | -- | 1 |
| Aroclor 1221 | ND | | ug/kg | 36.3 | -- | 1 |
| Aroclor 1232 | ND | | ug/kg | 36.3 | -- | 1 |
| Aroclor 1242 | ND | | ug/kg | 36.3 | -- | 1 |
| Aroclor 1248 | ND | | ug/kg | 36.3 | -- | 1 |
| Aroclor 1254 | ND | | ug/kg | 36.3 | -- | 1 |
| Aroclor 1260 | ND | | ug/kg | 36.3 | -- | 1 |
| Aroclor 1262 | ND | | ug/kg | 36.3 | -- | 1 |
| Aroclor 1268 | ND | | ug/kg | 36.3 | -- | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 57 | | 30-150 |
| Decachlorobiphenyl | 57 | | 30-150 |
| 2,4,5,6-Tetrachloro-m-xylene | 57 | | 30-150 |
| Decachlorobiphenyl | 72 | | 30-150 |

**Project Name:** ST. MARY'S GARAGE

**Project Number:** 5386.9.00

**Lab Number:** L1222248

**Report Date:** 12/13/12

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 97,8082A
Analytical Date: 12/11/12 00:28
Analyst: KB

Extraction Method: EPA 3546
Extraction Date: 12/08/12 09:26
Cleanup Method1: EPA 3665A
Cleanup Date1: 12/10/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 12/10/12

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| MCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 01,04 Batch: WG578240-1 | | | | | |
| Aroclor 1016 | ND | | ug/kg | 32.4 | -- |
| Aroclor 1221 | ND | | ug/kg | 32.4 | -- |
| Aroclor 1232 | ND | | ug/kg | 32.4 | -- |
| Aroclor 1242 | ND | | ug/kg | 32.4 | -- |
| Aroclor 1248 | ND | | ug/kg | 32.4 | -- |
| Aroclor 1254 | ND | | ug/kg | 32.4 | -- |
| Aroclor 1260 | ND | | ug/kg | 32.4 | -- |
| Aroclor 1262 | ND | | ug/kg | 32.4 | -- |
| Aroclor 1268 | ND | | ug/kg | 32.4 | -- |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 33 | | 30-150 |
| Decachlorobiphenyl | 133 | | 30-150 |
| 2,4,5,6-Tetrachloro-m-xylene | 34 | | 30-150 |
| Decachlorobiphenyl | **165** | Q | 30-150 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222248
**Report Date:** 12/13/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 01,04 Batch: WG578240-2 WG578240-3 | | | | | | | | |
| Aroclor 1016 | 78 | | 52 | | 40-140 | **40** | Q | 30 |
| Aroclor 1260 | 68 | | 77 | | 40-140 | 12 | | 30 |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 75 | | **15** | Q | 30-150 |
| Decachlorobiphenyl | 70 | | 66 | | 30-150 |
| 2,4,5,6-Tetrachloro-m-xylene | 74 | | **15** | Q | 30-150 |
| Decachlorobiphenyl | 88 | | 82 | | 30-150 |

# METALS

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1222248 |
| **Project Number:** | 5386.9.00 | **Report Date:** | 12/13/12 |

**SAMPLE RESULTS**

| | | | |
|---|---|---|---|
| Lab ID: | L1222248-04 | Date Collected: | 11/28/12 15:00 |
| Client ID: | B+C FILL COMP | Date Received: | 12/07/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | | |
| Percent Solids: | 90% | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Prep Method | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **MCP Total Metals - Westborough Lab** | | | | | | | | | | | |
| Arsenic, Total | 6.4 | | mg/kg | 0.42 | -- | 1 | 12/12/12 10:24 | 12/12/12 20:32 | EPA 3050B | 97,6010C | MS |
| Barium, Total | 40 | | mg/kg | 0.42 | -- | 1 | 12/12/12 10:24 | 12/12/12 20:32 | EPA 3050B | 97,6010C | MS |
| Cadmium, Total | ND | | mg/kg | 0.42 | -- | 1 | 12/12/12 10:24 | 12/12/12 20:32 | EPA 3050B | 97,6010C | MS |
| Chromium, Total | 16 | | mg/kg | 0.42 | -- | 1 | 12/12/12 10:24 | 12/12/12 20:32 | EPA 3050B | 97,6010C | MS |
| Lead, Total | 34 | | mg/kg | 2.1 | -- | 1 | 12/12/12 10:24 | 12/12/12 20:32 | EPA 3050B | 97,6010C | MS |
| Mercury, Total | ND | | mg/kg | 0.09 | -- | 1 | 12/11/12 17:04 | 12/12/12 11:47 | EPA 7471B | 97,7471B | TT |
| Selenium, Total | ND | | mg/kg | 2.1 | -- | 1 | 12/12/12 10:24 | 12/12/12 20:32 | EPA 3050B | 97,6010C | MS |
| Silver, Total | ND | | mg/kg | 0.42 | -- | 1 | 12/12/12 10:24 | 12/12/12 20:32 | EPA 3050B | 97,6010C | MS |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222248

**Project Number:** 5386.9.00 **Report Date:** 12/13/12

# Method Blank Analysis
# Batch Quality Control

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| MCP Total Metals - Westborough Lab for sample(s): 01,04 Batch: WG578656-6 | | | | | | | | | | |
| Mercury, Total | ND | | mg/kg | 0.08 | -- | 1 | 12/11/12 17:04 | 12/12/12 11:18 | 97,7471B | TT |

**Prep Information**

Digestion Method: EPA 7471B

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| MCP Total Metals - Westborough Lab for sample(s): 01,04 Batch: WG578939-1 | | | | | | | | | | |
| Arsenic, Total | ND | | mg/kg | 0.40 | -- | 1 | 12/12/12 10:24 | 12/12/12 19:49 | 97,6010C | MS |
| Barium, Total | ND | | mg/kg | 0.40 | -- | 1 | 12/12/12 10:24 | 12/12/12 19:49 | 97,6010C | MS |
| Cadmium, Total | ND | | mg/kg | 0.40 | -- | 1 | 12/12/12 10:24 | 12/12/12 19:49 | 97,6010C | MS |
| Chromium, Total | ND | | mg/kg | 0.40 | -- | 1 | 12/12/12 10:24 | 12/12/12 19:49 | 97,6010C | MS |
| Lead, Total | ND | | mg/kg | 2.0 | -- | 1 | 12/12/12 10:24 | 12/12/12 19:49 | 97,6010C | MS |
| Selenium, Total | ND | | mg/kg | 2.0 | -- | 1 | 12/12/12 10:24 | 12/12/12 19:49 | 97,6010C | MS |
| Silver, Total | ND | | mg/kg | 0.40 | -- | 1 | 12/12/12 10:24 | 12/12/12 19:49 | 97,6010C | MS |

**Prep Information**

Digestion Method: EPA 3050B

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222248
**Report Date:** 12/13/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Total Metals - Westborough Lab Associated sample(s): 01,04 Batch: WG578656-7 WG578656-8 SRM Lot Number: 0518-10-02 | | | | | | | | |
| Mercury, Total | 108 | | 105 | | 67-133 | 3 | | 30 |
| MCP Total Metals - Westborough Lab Associated sample(s): 01,04 Batch: WG578939-2 WG578939-3 SRM Lot Number: 0518-10-02 | | | | | | | | |
| Arsenic, Total | 100 | | 94 | | 81-119 | 6 | | 30 |
| Barium, Total | 100 | | 100 | | 83-118 | 0 | | 30 |
| Cadmium, Total | 94 | | 94 | | 82-117 | 0 | | 30 |
| Chromium, Total | 97 | | 97 | | 80-119 | 0 | | 30 |
| Lead, Total | 93 | | 93 | | 80-120 | 0 | | 30 |
| Selenium, Total | 98 | | 95 | | 80-120 | 3 | | 30 |
| Silver, Total | 105 | | 105 | | 66-134 | 0 | | 30 |

# INORGANICS
# &
# MISCELLANEOUS

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1222248 |
| **Project Number:** | 5386.9.00 | **Report Date:** | 12/13/12 |

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1222248-04 | Date Collected: | 11/28/12 15:00 |
| Client ID: | B+C FILL COMP | Date Received: | 12/07/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | | |

### Test Material Information

| | |
|---|---|
| Source of Material: | Unknown |
| Description of Material: | Non-Metallic - Damp Soil |
| Particle Size: | Medium |
| Preliminary Burning Time (sec): | 120 |

| Parameter | Result | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|
| Ignitability of Solids - Westborough Lab | | | | |
| Ignitability | NI | 12/10/12 20:35 | 1,1030 | TL |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222248
**Report Date:** 12/13/12

## SAMPLE RESULTS

Lab ID: L1222248-04
Client ID: B+C FILL COMP
Sample Location: CHESTNUT HILL, MA
Matrix: Soil

Date Collected: 11/28/12 15:00
Date Received: 12/07/12
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| **General Chemistry - Westborough Lab** | | | | | | | | | | |
| Specific Conductance | 19 | | umhos/cm | 10 | -- | 1 | - | 12/12/12 16:58 | 1,9050A | EL |
| Solids, Total | 90 | | % | 0.10 | NA | 1 | - | 12/11/12 12:03 | 30,2540G | SD |
| pH | 7.4 | | SU | - | NA | 1 | - | 12/08/12 15:31 | 1,9045C | EL |
| Cyanide, Reactive | ND | | mg/kg | 10 | -- | 1 | 12/10/12 16:55 | 12/10/12 19:44 | 1,7.3 | TL |
| Sulfide, Reactive | ND | | mg/kg | 10 | -- | 1 | 12/10/12 16:55 | 12/10/12 19:52 | 1,7.3 | TL |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222248
**Report Date:** 12/13/12

## SAMPLE RESULTS

Lab ID: L1222248-05
Client ID: B-2 S-2 2-4
Sample Location: CHESTNUT HILL, MA
Matrix: Soil

Date Collected: 11/28/12 11:00
Date Received: 12/07/12
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab | | | | | | | | | | |
| Solids, Total | 86 | | % | 0.10 | NA | 1 | - | 12/11/12 12:03 | 30,2540G | SD |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222248

**Project Number:** 5386.9.00 **Report Date:** 12/13/12

# Method Blank Analysis
## Batch Quality Control

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab for sample(s): 01,04 Batch: WG578447-1 | | | | | | | | | | |
| Cyanide, Reactive | ND | | mg/kg | 10 | -- | 1 | 12/10/12 16:55 | 12/10/12 19:42 | 1,7.3 | TL |
| General Chemistry - Westborough Lab for sample(s): 01,04 Batch: WG578448-1 | | | | | | | | | | |
| Sulfide, Reactive | ND | | mg/kg | 10 | -- | 1 | 12/10/12 16:55 | 12/10/12 19:49 | 1,7.3 | TL |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222248
**Report Date:** 12/13/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab Associated sample(s): 01,04 Batch: WG578260-1 | | | | | | | | |
| pH | 101 | | - | | 99-101 | - | | |
| General Chemistry - Westborough Lab Associated sample(s): 01,04 Batch: WG578447-2 | | | | | | | | |
| Cyanide, Reactive | 71 | | - | | 30-125 | - | | 40 |
| General Chemistry - Westborough Lab Associated sample(s): 01,04 Batch: WG578448-2 | | | | | | | | |
| Sulfide, Reactive | 88 | | - | | 60-125 | - | | 40 |
| General Chemistry - Westborough Lab Associated sample(s): 01,04 Batch: WG579100-1 | | | | | | | | |
| Specific Conductance | 94 | | - | | 80-120 | - | | |

# Lab Duplicate Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222248
**Report Date:** 12/13/12

| Parameter | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab Associated sample(s): 01,04 QC Batch ID: WG578260-2 QC Sample: L1222286-01 Client ID: DUP Sample | | | | | | |
| pH | 11.1 | 11.0 | SU | 1 | | 5 |
| General Chemistry - Westborough Lab Associated sample(s): 01,04 QC Batch ID: WG578447-3 QC Sample: L1222248-04 Client ID: B+C FILL COMP | | | | | | |
| Cyanide, Reactive | ND | ND | mg/kg | NC | | 40 |
| General Chemistry - Westborough Lab Associated sample(s): 01,04 QC Batch ID: WG578448-3 QC Sample: L1222248-04 Client ID: B+C FILL COMP | | | | | | |
| Sulfide, Reactive | ND | ND | mg/kg | NC | | 40 |
| General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG578671-1 QC Sample: L1222141-01 Client ID: DUP Sample | | | | | | |
| Solids, Total | 85 | 87 | % | 2 | | 20 |
| General Chemistry - Westborough Lab Associated sample(s): 01,04 QC Batch ID: WG579100-2 QC Sample: L1222437-02 Client ID: DUP Sample | | | | | | |
| Specific Conductance | 11 | 12 | umhos/cm | 9 | | 20 |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222248
**Report Date:** 12/13/12

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

**Reagent H2O Preserved Vials Frozen on:** NA

| Cooler Information | Custody Seal |
|---|---|
| Cooler | |
| A | Absent |

**Container Information**

| Container ID | Container Type | Cooler | pH | Temp deg C | Pres | Seal | Analysis(*) |
|---|---|---|---|---|---|---|---|
| L1222248-01A | Amber 250ml unpreserved | A | N/A | 2.4 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP(),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222248-01B | Amber 250ml unpreserved | A | N/A | 2.4 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP(),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222248-01C | Amber 250ml unpreserved | A | N/A | 2.4 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP(),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222248-02A | Vial MeOH preserved | A | N/A | 2.4 | Y | Absent | MCP-8260H-10(14) |
| L1222248-02B | Vial MeOH preserved | A | N/A | 2.4 | Y | Absent | MCP-8260H-10(14) |

*Values in parentheses indicate holding time in days

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222248
**Report Date:** 12/13/12

## Container Information

| Container ID | Container Type | Cooler | pH | Temp deg C | Pres | Seal | Analysis(*) |
|---|---|---|---|---|---|---|---|
| L1222248-02C | Plastic 2oz unpreserved for TS | A | N/A | 2.4 | Y | Absent | TS(7) |
| L1222248-03A | Amber 250ml unpreserved | A | N/A | 2.4 | Y | Absent | TS(7),EPH-DELUX-10(14) |
| L1222248-04A | Amber 250ml unpreserved | A | N/A | 2.4 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP(),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222248-04B | Amber 250ml unpreserved | A | N/A | 2.4 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP(),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222248-04C | Amber 250ml unpreserved | A | N/A | 2.4 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP(),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1222248-05A | Vial MeOH preserved | A | N/A | 2.4 | Y | Absent | MCP-8260H-10(14) |
| L1222248-05B | Vial MeOH preserved | A | N/A | 2.4 | Y | Absent | MCP-8260H-10(14) |
| L1222248-05C | Plastic 2oz unpreserved for TS | A | N/A | 2.4 | Y | Absent | TS(7) |

*Values in parentheses indicate holding time in days

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1222248 |
| **Project Number:** | 5386.9.00 | **Report Date:** | 12/13/12 |

# GLOSSARY

### *Acronyms*

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

### *Footnotes*

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

### *Terms*

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

### *Data Qualifiers*

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

*Report Format:* Data Usability Report

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1222248 |
| **Project Number:** | 5386.9.00 | **Report Date:** | 12/13/12 |

***Data Qualifiers***

due to obvious interference.

**M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

**NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

**P** - The RPD between the results for the two columns exceeds the method-specified criteria.

**Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

**R** - Analytical results are from sample re-analysis.

**RE** - Analytical results are from sample re-extraction.

**J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

**ND** - Not detected at the reporting limit (RL) for the sample.

*Report Format:* Data Usability Report

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1222248 |
| **Project Number:** | 5386.9.00 | **Report Date:** | 12/13/12 |

## REFERENCES


1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

98 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, July 2010.


## LIMITATION OF LIABILITIES

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

# Certificate/Approval Program Summary

Last revised August 16, 2012 - Westboro Facility

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

**Connecticut Department of Public Health** Certificate/Lab ID: PH-0574. ***NELAP Accredited Solid Waste/Soil.***

*Drinking Water* (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Selenium, Silver, Sodium, Thallium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223, Enumeration and P/A), E. Coli. – Colilert (SM9223, Enumeration and P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform-EC Medium (SM 9221E).

*Wastewater/Non-Potable Water* (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), E. Coli – Colilert (SM9223 Enumeration), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E), Enterococcus - Enterolert.

*Solid Waste/Soil* (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Dalapon, Volatile Organics (SW 8260), Acid Extractables (Phenols) (SW 8270), Benzidines (SW 8270), Phthalates (SW 8270), Nitrosamines (SW 8270), Nitroaromatics & Cyclic Ketones (SW 8270), PAHs (SW 8270), Haloethers (SW 8270), Chlorinated Hydrocarbons (SW 8270). )

**Maine Department of Human Services** Certificate/Lab ID: 2009024.
*Drinking Water* (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

*Wastewater/Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010B, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 624, 625, 8081A, 8082, 8330, 8151A, 8260B, 8270C, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

*Solid Waste/Soil* (Inorganic Parameters: 9010B, 9012A, 9014A, 9030B, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

**Massachusetts Department of Environmental Protection** Certificate/Lab ID: M-MA086.
*Drinking Water (*Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)


*Non-Potable Water (*Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7

for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT,Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

**New Hampshire Department of Environmental Services** Certificate/Lab ID: 200307. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, SW-846 6010B, 6010C, 6020, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9030B, 9040B, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D, 3060A. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082, 8082A, 8081A, 8081B, 8151A, 8330, 8270C-SIM, 8270D-SIM.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846 6010B, 6010C, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050, 9065,1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3050B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, 8151A, 8015B, 8015C, 8082, 8082A, 8081A, 8081B.)

**New Jersey Department of Environmental Protection** Certificate/Lab ID: MA935. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.1, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, 2540G, EPA 120.1, SM2510B, SM2520B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ EPH.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9040C, 9045C, 9045D, 9050A, 9065, 9251. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

**New York Department of Health** Certificate/Lab ID: 11148. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water* (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 624, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1010, 1030, EPA 6010B, 6010C, 7196A, 7471A, 7471B, 9012A, 9014, 9065, 9050A, EPA 1311, 1312, 3005A, 3050B, 9010B, 9040C, 9045D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8015B, 8015C, 8081A, 8081B, 8151A, 8330, 8082 8082A, 3540C, 3546, 3580, 3580A, 5030B, 5035A-H, 5035A-L.)

**North Carolina Department of the Environment and Natural Resources** Certificate/Lab ID : 666. (Inorganic Parameters: SM2310B, 2320B, 4500Cl-E, 4500Cn-E, 9014, Lachat 10-204-00-1-X, 1010A, 1030, 4500NO3-F, 353.2, 4500P-E, 4500SO4-E, 300.0, 4500S-D, 5310B, 5310C, 6010C, 6020A, 200.7, 200.8, 3500Cr-B, 7196A, 245.1, 7471A, 7471B, 1311,1312. Organic Parameters: 608, 8081B, 8082A, 624, 8260B, 625, 8270D, 8151A, 8015C, 504.1, MA-EPH, MA-VPH.)

*Drinking Water Program* Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

**Pennsylvania Department of Environmental Protection** Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: 200.7, 200.8, 245.2, 300.0, 332.0, 2120B, 2320B, 2510B, 2540C, 4500-CN-CE, 4500F-C, 4500H+-B, 4500NO3-F, 5310C. Organic Parameters: EPA 524.2, 504.1)

*Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1312, 3005A,3015, 3060A, 200.7, 200.8, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE, 245.1, 300.0, 3501., 350.2, 353.2, 420.1, 6010B, 6010C, 6020, 6020A, 7196A, 7470A, 9010B, 9030B, 9040B, Lachat 10-107-06-2-D, NJ-EPH, 2120B, 2310B, 2320B, 2340B, 2510C, 2540B, 2540C, 3500Cr-D, 436C, 4500CN-CE, 4500Cl-E, 4500F-B, 4500F-C, 4500H+-B, 4500NO2-B, 4500NO3-F, 4500S-D, 4500SO3-B, 5310BCD, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330, 8015B, )

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3005A, 3050B, 3060A, 6010B, 6010C, 6020A, 7196A, 7471A, 7471B, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-BH, 9030B, 9038, 9251. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, NJ-EPH.)

**Rhode Island Department of Health** Certificate/Lab ID: LAO00065. ***NELAP Accredited via NJ-DEP.***
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

**Texas Commisson on Environmental Quality** Certificate/Lab ID: T104704476-09-1. ***NELAP Accredited.***
*Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S2¯D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

**Virginia Division of Consolidated Laboratory Services** Certificate/Lab ID: 460195. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: EPA 200.7, 200.8, 300.0, 2510B, 2120B, 2540C, 4500CN-CE, 245.2, 2320B, 4500F-C, 4500F-C, 4500NO3-F, 5310C. Organic Parameters: EPA 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664A, 200.7, 2..08, 245.1, 300.0, 3005A, 3015, 1312, 6010B, 6010C, 3060A, 353.2, 420.1, 6020, 6020A, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X, 7196A, 7470A, 9010B, 9040B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500Cl-E, 4500F-B, 4500F-C, 4500PE, 510AC, 5210B, 5310B 5310C, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 8260B, 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, )

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1010A, 1030, 3060A, 3050B, 1311, 1312, 6010B, 6010C, 6020, , 7196A, 7471A, 7471B, 6020A, 9030B, 9010B, 9012A, 9014 9040B, 9045C, 9050A, 9065. Organic Parameters: EPA 5035, 3540C, 3546, 3550, 3580, 3630C, 8260B, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330.)

**Department of Defense, L-A-B** Certificate/Lab ID: L2217.
*Drinking Water* (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water* (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 200.7, 6010B, 6010C, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 9012A, 9040B, 9045C, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

**The following analytes are not included in our current NELAP/TNI Scope of Accreditation:**
**EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix, SO4 in a soil matrix. **EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

# CHAIN OF CUSTODY

PAGE 1 OF 1

4/4

ALPHA ANALYTICAL

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193
Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 12/7/12

ALPHA Job #: L1222248

## Project Information

Project Name: St. Mary's Garage

Project Location: Chestnut Hill, MA

Project #: 5386.9.00

Project Manager: Andrew Stone

ALPHA Quote #:

## Client Information

Client: McPhail Associates, LLC

Address: 2269 Massachusetts Ave.

Cambridge, MA 02140

Phone: 617 868 1420 x 325

Fax:

Email: astone@mcphailgeo.com

☐ These samples have been Previously analyzed by Alpha

## Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: 12/13/12 Time:

## Report Information Data Deliverables

☐ FAX ☐ EMAIL

☒ ADEx ☐ Add'l Deliverables

## Billing Information

☒ Same as Client info PO #:

## Regulatory Requirements/Report Limits

*State/Fed Program* MA MCP *Criteria* RCS-1

## MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

| | | |
|---|---|---|
| ☒ Yes | ☐ No | Are MCP Analytical Methods Required? |
| ☐ Yes | ☒ No | Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments) |
| ☐ Yes | ☒ No | Are CT RCP (Reasonable Confidence Protocols) Required? |

Other Project Specific Requirements/Comments/Detection Limits:
(If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed. (Note: All CAM methods for inorganic analyses require MS every 20 soil samples)

## ANALYSIS

SAMPLE HANDLING
*Filtration*
☐ Done
☐ Not Needed
☐ Lab to do
*Preservation*
☐ Lab to do
*(Please specify below)*

| ALPHA Lab ID (Lab Use Only) | Sample ID | Collection Date | Collection Time | Sample Matrix | Sampler's Initials | Soil Disposal Pack IV | VOC 8260 High Discrete | Total Solids | EPH ADEUX | | | | | | | | | Sample Specific Comments | TOTAL # BOTTLES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2248 -01 | A-1 + A-2 + A-4 FILL COMP | 11/28 | 15:00 | S | ADS | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| -02 | A-4 S-1 0.5-2' FILL | 11/28 | 8:30 | S | ADS | ☐ | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| -03 | A-3 0-10' FILL COMP | 11/28 | 15:00 | S | ADS | ☐ | ☐ | ☐ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | 2.4(571) | 1 |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| -04 | B+C FILL COMP | 11/28 | 15:00 | S | ADS | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| -05 | B-2 S-1 2-4 | 11/28 | 11:00 | S | ADS | ☐ | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Container Type | A | V | P | - | - | - | - | - | - | - | - | - | |
| Preservative | A | F | A | - | - | - | - | - | - | - | - | - | |

PLEASE ANSWER QUESTIONS ABOVE!

**IS YOUR PROJECT MA MCP *or* CT RCP?**

FORM NO: 01-01(I) (rev. 20-JAN-2010)

| Relinquished By: | Date/Time | Received By: | Date/Time |
|---|---|---|---|
| [signature] | 12/7/12 14:30 | [signature] | 12/7/12 16:[illegible] |
| [signature] | 12/7/12 1750 | [signature] | 12/7/12 [illegible] |

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

7A
Volatile CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1222248

Instrument ID: Voa104.i  Calibration Date: 11-DEC-2012  Time: 14:02

Lab File ID: 1211A01  Init. Calib. Date(s): 05-DEC-2  05-DEC-2

Sample No: 8260 CCAL  Init. Calib. Times : 15:38  18:23

| Compound | RRF | RRF | MIN RRF | %D | MAX %D | |
|---|---|---|---|---|---|---|
| dichlorodifluoromethane | .23482 | .20146 | .1 | -14 | 20 | |
| chloromethane | .46113 | .41664 | .1 | -10 | 20 | |
| vinyl chloride | .33595 | .29728 | .1 | -12 | 20 | |
| bromomethane | .1725 | .1656 | .1 | -4 | 20 | |
| chloroethane | .15813 | .1518 | .1 | -4 | 20 | |
| trichlorofluoromethane | .30686 | .28892 | .1 | -6 | 20 | |
| ethyl ether | .1134 | .11201 | .05 | -1 | 20 | |
| 1,1,-dichloroethene | .22269 | .19679 | .1 | -12 | 20 | |
| carbon disulfide | .73839 | .66971 | .1 | -9 | 20 | |
| methylene chloride | .30258 | .29017 | .1 | -4 | 20 | |
| acetone | 100 | 121 | .1 | 21 | 20 | F |
| trans-1,2-dichloroethene | .26311 | .23812 | .1 | -9 | 20 | |
| methyl tert butyl ether | .70123 | .70438 | .1 | 0 | 20 | |
| Diisopropyl Ether | 1.2279 | 1.1974 | .05 | -2 | 20 | |
| 1,1-dichloroethane | .58226 | .54544 | .2 | -6 | 20 | |
| Ethyl-Tert-Butyl-Ether | 1.1162 | 1.1110 | .05 | 0 | 20 | |
| cis-1,2-dichloroethene | .28741 | .27555 | .1 | -4 | 20 | |
| 2,2-dichloropropane | .38257 | .3488 | .05 | -9 | 20 | |
| bromochloromethane | .13764 | .13898 | .05 | 1 | 20 | |
| chloroform | .46986 | .45233 | .2 | -4 | 20 | |
| carbontetrachloride | .35744 | .32986 | .1 | -8 | 20 | |
| tetrahydrofuran | .13066 | .12563 | .05 | -4 | 20 | |
| 1,1,1-trichloroethane | .41396 | .37944 | .1 | -8 | 20 | |
| 2-butanone | .18169 | .17739 | .1 | -2 | 20 | |
| 1,1-dichloropropene | .34846 | .31662 | .05 | -9 | 20 | |
| benzene | 1.0209 | .94546 | .5 | -7 | 20 | |
| Tertiary-Amyl Methyl Ether | .73621 | .74039 | .05 | 1 | 20 | |
| 1,2-dichloroethane | .40473 | .39981 | .1 | -1 | 20 | |
| trichloroethene | .27984 | .25901 | .2 | -7 | 20 | |
| dibromomethane | .16915 | .16726 | .05 | -1 | 20 | |
| 1,2-dichloropropane | .34282 | .33398 | .1 | -3 | 20 | |
| bromodichloromethane | .36772 | .36297 | .2 | -1 | 20 | |
| 1,4-dioxane | .0026 | .00257 | .05 | -1 | 20 | F |
| cis-1,3-dichloropropene | .44108 | .43174 | .2 | -2 | 20 | |
| toluene | .87067 | .81439 | .4 | -6 | 20 | |
| tetrachloroethene | .38613 | .35131 | .2 | -9 | 20 | |
| 4-methyl-2-pentanone | .14159 | .14195 | .1 | 0 | 20 | |
| trans-1,3-dichloropropene | .52572 | .51348 | .1 | -2 | 20 | |

FORM VII MCP-8260H-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1222248

Instrument ID: Voa104.i  Calibration Date: 11-DEC-2012  Time: 14:02

Lab File ID: 1211A01  Init. Calib. Date(s): 05-DEC-2  05-DEC-2

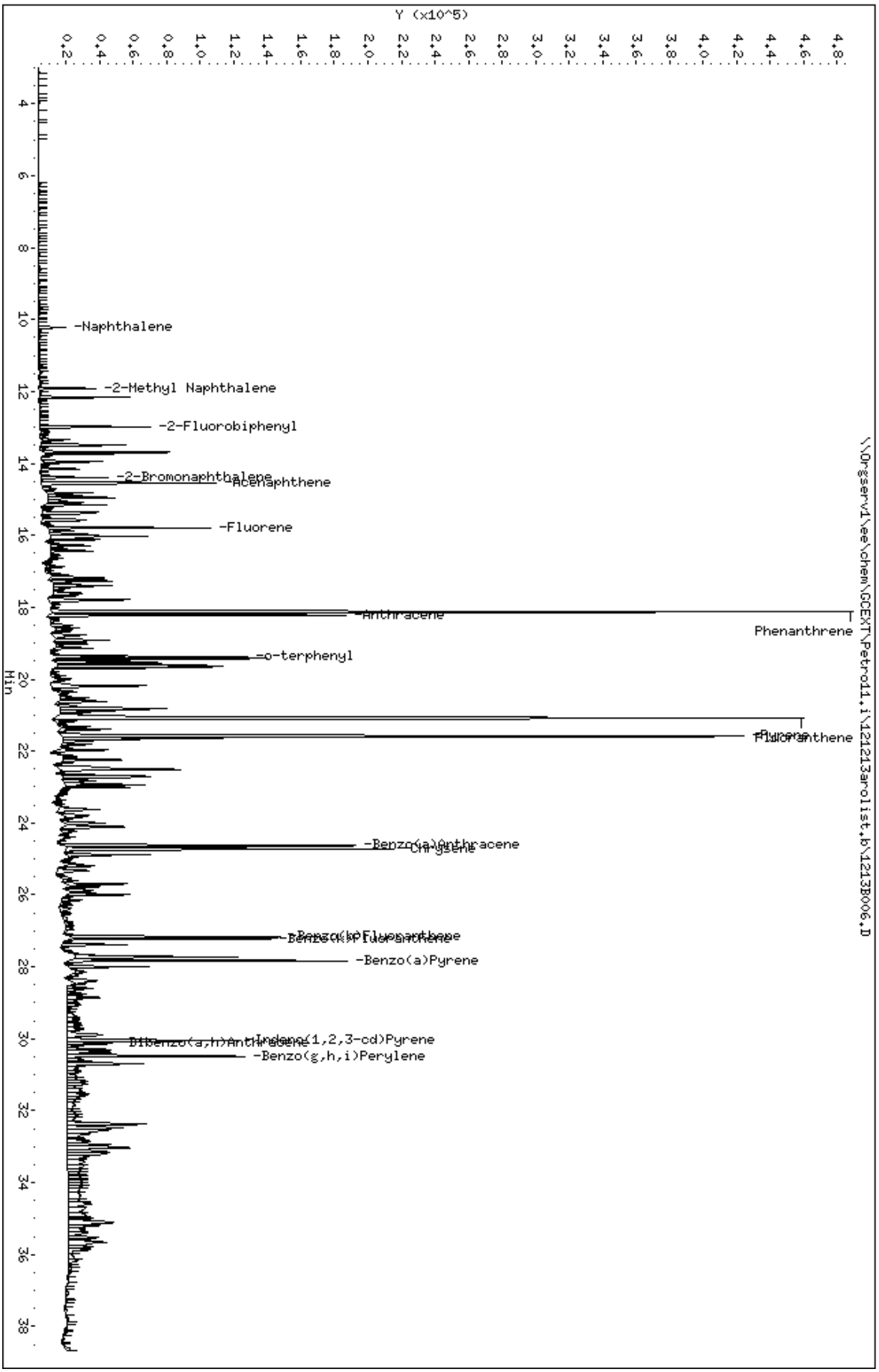
Sample No: 8260 CCAL  Init. Calib. Times : 15:38  18:23

| Compound | $\overline{RRF}$ | RRF | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| 1,1,2-trichloroethane | .2544 | .25112 | .1 | -1 | 20 |
| chlorodibromomethane | .40029 | .38729 | .1 | -3 | 20 |
| 1,3-dichloropropane | .50554 | .49251 | .05 | -3 | 20 |
| 1,2-dibromoethane | .32614 | .31857 | .1 | -2 | 20 |
| 2-hexanone | .35325 | .34624 | .1 | -2 | 20 |
| chlorobenzene | .97739 | .92395 | .5 | -5 | 20 |
| ethyl benzene | 1.6829 | 1.5485 | .1 | -8 | 20 |
| 1,1,1,2-tetrachloroethane | .36552 | .34864 | .05 | -5 | 20 |
| p/m xylene | .62506 | .58524 | .1 | -6 | 20 |
| o xylene | .60154 | .5714 | .3 | -5 | 20 |
| styrene | .98563 | .95843 | .3 | -3 | 20 |
| bromoform | .51281 | .50515 | .1 | -1 | 20 |
| isopropylbenzene | 3.1304 | 2.8622 | .1 | -9 | 20 |
| bromobenzene | .83141 | .80978 | .05 | -3 | 20 |
| n-propylbenzene | 3.6690 | 3.3800 | .05 | -8 | 20 |
| 1,1,2,2,-tetrachloroethane | .81019 | .77635 | .3 | -4 | 20 |
| 2-chlorotoluene | 2.3266 | 2.1645 | .05 | -7 | 20 |
| 1,2,3-trichloropropane | .60665 | .58543 | .05 | -3 | 20 |
| 1,3,5-trimethybenzene | 2.6204 | 2.4269 | .05 | -7 | 20 |
| 4-chorotoluene | 2.3683 | 2.2238 | .05 | -6 | 20 |
| tert-butylbenzene | 2.2379 | 2.0662 | .05 | -8 | 20 |
| 1,2,4-trimethylbenzene | 2.5966 | 2.4568 | .05 | -5 | 20 |
| sec-butylbenzene | 3.2974 | 3.0183 | .05 | -8 | 20 |
| p-isopropyltoluene | 2.7697 | 2.5540 | .05 | -8 | 20 |
| 1,3-dichlorobenzene | 1.5133 | 1.4487 | .6 | -4 | 20 |
| 1,4-dichlorobenzene | 1.5489 | 1.4659 | .5 | -5 | 20 |
| n-butylbenzene | 2.6381 | 2.4154 | .05 | -8 | 20 |
| 1,2-dichlorobenzene | 1.4253 | 1.3732 | .4 | -4 | 20 |
| 1,2-dibromo-3-chloropropane | .14948 | .13411 | .05 | -10 | 20 |
| hexachlorobutadiene | .56668 | .52409 | .05 | -8 | 20 |
| 1,2,4-trichlorobenzene | 1.0806 | 1.0515 | .2 | -3 | 20 |
| naphthalene | 2.5397 | 2.4762 | .05 | -2 | 20 |
| 1,2,3-trichlorobenzene | .98894 | .96642 | .05 | -2 | 20 |
| dibromofluoromethane | .26378 | .26486 | .05 | 0 | 30 |
| 1,2-dichloroethane-d4 | .29109 | .28902 | .05 | -1 | 30 |
| toluene-d8 | 1.3009 | 1.2928 | .05 | -1 | 30 |
| 4-bromofluorobenzene | .98475 | .98254 | .05 | 0 | 30 |

FORM VII MCP-8260H-10

Data File: \\Orgserv1\ee\chem\GCEXT\Petrol1.i\121213arolist.b\1213B006.D
Date : 13-DEC-2012 14:18
Client ID:
Sample Info: 11222248-03,42, fv2 1x
Purge Volume: 1000.0
Column phase:

Instrument: Petrol1.i
Operator: mw
Column diameter: 0.53




Page 3

# ANALYTICAL REPORT

| | |
|---|---|
| Lab Number: | L1222670 |
| Client: | McPhail Associates<br>2269 Massachusetts Avenue<br>Cambridge, MA 02140 |
| ATTN: | Ambrose Donovan |
| Phone: | (617) 868-1420 |
| Project Name: | ST. MARY'S GARAGE |
| Project Number: | 5386.9.00 |
| Report Date: | 12/18/12 |

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

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222670
**Report Date:** 12/18/12

| Alpha Sample ID | Client ID | Sample Location | Collection Date/Time |
|---|---|---|---|
| L1222670-01 | G-3 0-6' FILL COMP | CHESTNUT HILL, MA | 11/30/12 15:00 |
| ~~L1222670-02~~ | ~~G-3 6-14' FILL COMP~~ | ~~CHESTNUT HILL, MA~~ | ~~11/30/12 15:00~~ |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222670

**Project Number:** 5386.9.00 **Report Date:** 12/18/12

## MADEP MCP Response Action Analytical Report Certification

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

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

| **A response to questions G, H and I is required for "Presumptive Certainty" status** | | |
|---|---|---|
| G | Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)? | YES |
| H | Were all QC performance standards specified in the CAM protocol(s) achieved? | YES |
| I | Were results reported for the complete analyte list specified in the selected CAM protocol(s)? | YES |

**For any questions answered "No", please refer to the case narrative section on the following page(s).**

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

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222670
**Project Number:** 5386.9.00 **Report Date:** 12/18/12

## Case Narrative

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

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

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

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

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

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

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1222670 |
| **Project Number:** | 5386.9.00 | **Report Date:** | 12/18/12 |

**Case Narrative (continued)**

MCP Related Narratives

Report Submission

All MCP required questions were answered with affirmative responses; therefore, there are no relevant protocol-specific QC and/or performance standard non-conformances to report.

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

Authorized Signature: Cynthia McQueen

Title: Technical Director/Representative

Date: 12/18/12

# METALS

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1222670 |
| **Project Number:** | 5386.9.00 | **Report Date:** | 12/18/12 |

**SAMPLE RESULTS**

| | | | |
|---|---|---|---|
| Lab ID: | L1222670-01 | Date Collected: | 11/30/12 15:00 |
| Client ID: | G-3 0-6' FILL COMP | Date Received: | 12/06/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | TCLP/SPLP Ext. Date: | 12/14/12 15:31 |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Prep Method | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLP Metals by EPA 1311 - Westborough Lab | | | | | | | | | | | |
| Lead, TCLP | 0.93 | | mg/l | 0.50 | -- | 1 | 12/17/12 11:32 | 12/17/12 16:31 | EPA 3015 | 1,6010C | MG |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222670

**Project Number:** 5386.9.00 **Report Date:** 12/18/12

# Method Blank Analysis
# Batch Quality Control

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| TCLP Metals by EPA 1311 - Westborough Lab for sample(s): 01-02 Batch: WG579863-1 | | | | | | | | | | |
| Lead, TCLP | ND | | mg/l | 0.50 | -- | 1 | 12/17/12 11:32 | 12/17/12 13:15 | 1,6010C | MG |

**Prep Information**

Digestion Method: EPA 3015

TCLP/SPLP Extraction Date: 12/14/12 15:31

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222670
**Report Date:** 12/18/12

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| TCLP Metals by EPA 1311 - Westborough Lab Associated sample(s): 01-02 Batch: WG579863-2 | | | | | | | | |
| Lead, TCLP | 96 | | - | | 75-125 | - | | 20 |

# Matrix Spike Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222670
**Report Date:** 12/18/12

| Parameter | Native Sample | MS Added | MS Found | MS %Recovery | Qual | MSD Found | MSD %Recovery | Qual | Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLP Metals by EPA 1311 - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG579863-4 QC Sample: L1222657-01 Client ID: MS Sample | | | | | | | | | | | | |
| Lead, TCLP | 1.2 | 5.1 | 6.2 | 98 | | - | - | | 75-125 | - | | 20 |

# Lab Duplicate Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222670
**Report Date:** 12/18/12

| Parameter | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|
| TCLP Metals by EPA 1311 - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG579863-3 QC Sample: L1222657-01 Client ID: DUP Sample | | | | | | |
| Lead, TCLP | 1.2 | 1.2 | mg/l | 0 | | 20 |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1222670
**Report Date:** 12/18/12

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

**Reagent H2O Preserved Vials Frozen on:** NA

**Cooler Information Custody Seal**

| Cooler | |
|---|---|
| A | Absent |

**Container Information**

| Container ID | Container Type | Cooler | pH | Temp deg C | Pres | Seal | Analysis(*) |
|---|---|---|---|---|---|---|---|
| L1222670-01A | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | - |
| L1222670-01X | Plastic 250ml HNO3 preserved spl | A | <2 | 2.9 | Y | Absent | PB-CI(180) |
| L1222670-02A | Amber 250ml unpreserved | A | N/A | 2.9 | Y | Absent | - |
| L1222670-02X | Plastic 250ml HNO3 preserved spl | A | <2 | 2.9 | Y | Absent | PB-CI(180) |

*Values in parentheses indicate holding time in days

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1222670 |
| **Project Number:** | 5386.9.00 | **Report Date:** | 12/18/12 |

# GLOSSARY

### *Acronyms*

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

### *Footnotes*

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

### *Terms*

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

### *Data Qualifiers*

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

*Report Format:* Data Usability Report

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1222670 |
| **Project Number:** | 5386.9.00 | **Report Date:** | 12/18/12 |

***Data Qualifiers***

due to obvious interference.

**M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

**NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

**P** - The RPD between the results for the two columns exceeds the method-specified criteria.

**Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

**R** - Analytical results are from sample re-analysis.

**RE** - Analytical results are from sample re-extraction.

**J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

**ND** - Not detected at the reporting limit (RL) for the sample.

*Report Format:* Data Usability Report

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1222670
**Project Number:** 5386.9.00 **Report Date:** 12/18/12

## REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

## LIMITATION OF LIABILITIES

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

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

# Certificate/Approval Program Summary

Last revised August 16, 2012 - Westboro Facility

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

**Connecticut Department of Public Health** Certificate/Lab ID: PH-0574. ***NELAP Accredited Solid Waste/Soil.***

*Drinking Water* (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Selenium, Silver, Sodium, Thallium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223, Enumeration and P/A), E. Coli. – Colilert (SM9223, Enumeration and P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform-EC Medium (SM 9221E).

*Wastewater/Non-Potable Water* (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), E. Coli – Colilert (SM9223 Enumeration), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E), Enterococcus - Enterolert.

*Solid Waste/Soil* (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Dalapon, Volatile Organics (SW 8260), Acid Extractables (Phenols) (SW 8270), Benzidines (SW 8270), Phthalates (SW 8270), Nitrosamines (SW 8270), Nitroaromatics & Cyclic Ketones (SW 8270), PAHs (SW 8270), Haloethers (SW 8270), Chlorinated Hydrocarbons (SW 8270). )

**Maine Department of Human Services** Certificate/Lab ID: 2009024.
*Drinking Water* (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

*Wastewater/Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010B, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 624, 625, 8081A, 8082, 8330, 8151A, 8260B, 8270C, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

*Solid Waste/Soil* (Inorganic Parameters: 9010B, 9012A, 9014A, 9030B, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

**Massachusetts Department of Environmental Protection** Certificate/Lab ID: M-MA086.
*Drinking Water (*Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)



*Non-Potable Water (*Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7

for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT,Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

**New Hampshire Department of Environmental Services** Certificate/Lab ID: 200307. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, SW-846 6010B, 6010C, 6020, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9030B, 9040B, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D, 3060A. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082, 8082A, 8081A, 8081B, 8151A, 8330, 8270C-SIM, 8270D-SIM.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846 6010B, 6010C, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050, 9065,1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3050B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, 8151A, 8015B, 8015C, 8082, 8082A, 8081A, 8081B.)

**New Jersey Department of Environmental Protection** Certificate/Lab ID: MA935. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.1, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, 2540G, EPA 120.1, SM2510B, SM2520B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ EPH.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9040C, 9045C, 9045D, 9050A, 9065, 9251. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

**New York Department of Health** Certificate/Lab ID: 11148. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water* (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 624, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1010, 1030, EPA 6010B, 6010C, 7196A, 7471A, 7471B, 9012A, 9014, 9065, 9050A, EPA 1311, 1312, 3005A, 3050B, 9010B, 9040C, 9045D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8015B, 8015C, 8081A, 8081B, 8151A, 8330, 8082 8082A, 3540C, 3546, 3580, 3580A, 5030B, 5035A-H, 5035A-L.)

**North Carolina Department of the Environment and Natural Resources** Certificate/Lab ID : 666. (Inorganic Parameters: SM2310B, 2320B, 4500Cl-E, 4500Cn-E, 9014, Lachat 10-204-00-1-X, 1010A, 1030, 4500NO3-F, 353.2, 4500P-E, 4500SO4-E, 300.0, 4500S-D, 5310B, 5310C, 6010C, 6020A, 200.7, 200.8, 3500Cr-B, 7196A, 245.1, 7471A, 7471B, 1311,1312. Organic Parameters: 608, 8081B, 8082A, 624, 8260B, 625, 8270D, 8151A, 8015C, 504.1, MA-EPH, MA-VPH.)

*Drinking Water Program* Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

**Pennsylvania Department of Environmental Protection** Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: 200.7, 200.8, 245.2, 300.0, 332.0, 2120B, 2320B, 2510B, 2540C, 4500-CN-CE, 4500F-C, 4500H+-B, 4500NO3-F, 5310C. Organic Parameters: EPA 524.2, 504.1)

*Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1312, 3005A,3015, 3060A, 200.7, 200.8, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE, 245.1, 300.0, 3501., 350.2, 353.2, 420.1, 6010B, 6010C, 6020, 6020A, 7196A, 7470A, 9010B, 9030B, 9040B, Lachat 10-107-06-2-D, NJ-EPH, 2120B, 2310B, 2320B, 2340B, 2510C, 2540B, 2540C, 3500Cr-D, 436C, 4500CN-CE, 4500Cl-E, 4500F-B, 4500F-C, 4500H+-B, 4500NO2-B, 4500NO3-F, 4500S-D, 4500SO3-B, 5310BCD, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330, 8015B, )

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3005A, 3050B, 3060A, 6010B, 6010C, 6020A, 7196A, 7471A, 7471B, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-BH, 9030B, 9038, 9251. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, NJ-EPH.)

**Rhode Island Department of Health** Certificate/Lab ID: LAO00065. ***NELAP Accredited via NJ-DEP.***
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

**Texas Commisson on Environmental Quality** Certificate/Lab ID: T104704476-09-1. ***NELAP Accredited.***
*Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S2¯D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

**Virginia Division of Consolidated Laboratory Services** Certificate/Lab ID: 460195. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: EPA 200.7, 200.8, 300.0, 2510B, 2120B, 2540C, 4500CN-CE, 245.2, 2320B, 4500F-C, 4500F-C, 4500NO3-F, 5310C. Organic Parameters: EPA 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664A, 200.7, 2..08, 245.1, 300.0, 3005A, 3015, 1312, 6010B, 6010C, 3060A, 353.2, 420.1, 6020, 6020A, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X, 7196A, 7470A, 9010B, 9040B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500Cl-E, 4500F-B, 4500F-C, 4500PE, 510AC, 5210B, 5310B 5310C, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 8260B, 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, )

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1010A, 1030, 3060A, 3050B, 1311, 1312, 6010B, 6010C, 6020, , 7196A, 7471A, 7471B, 6020A, 9030B, 9010B, 9012A, 9014 9040B, 9045C, 9050A, 9065. Organic Parameters: EPA 5035, 3540C, 3546, 3550, 3580, 3630C, 8260B, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330.)

**Department of Defense, L-A-B** Certificate/Lab ID: L2217.
*Drinking Water* (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water* (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 200.7, 6010B, 6010C, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 9012A, 9040B, 9045C, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

**The following analytes are not included in our current NELAP/TNI Scope of Accreditation:**
**EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix, SO4 in a soil matrix. **EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

L1222670

# CHAIN OF CUSTODY

PAGE 3 OF 4

3/5

ALPHA ANALYTICAL

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193
Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 12/6/12

ALPHA Job #: L1222713 2/3 12/13

## Client Information

Client: McPhail Associates, LLC
Address: 2269 Massachusetts Ave.
Cambridge, MA 02140
Phone: 617 868 1420 x 325
Fax:
Email: astone@mcphailgeo.com

☐ These samples have been Previously analyzed by Alpha

## Project Information

Project Name: St. Mary's Garage
Project Location: Chestnut Hill, MA
Project #: 5386.9.00
Project Manager: Andrew Stone
ALPHA Quote #:

## Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: 12/19 12/13 Time:

## Report Information Data Deliverables

☐ FAX ☐ EMAIL
☒ ADEx ☐ Add'l Deliverables

## Billing Information

☒ Same as Client info PO #:

## Regulatory Requirements/Report Limits

State/Fed Program MA MCP Criteria RCS-1

## MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

| | | |
|---|---|---|
| ☒ Yes | ☐ No | Are MCP Analytical Methods Required? |
| ☐ Yes | ☒ No | Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments) |
| ☐ Yes | ☒ No | Are CT RCP (Reasonable Confidence Protocols) Required? |

Other Project Specific Requirements/Comments/Detection Limits:
(If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed. (Note: All CAM methods for inorganic analyses require MS every 20 soil samples)

## ANALYSIS

SAMPLE HANDLING
Filtration
☐ Done
☐ Not Needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

| ALPHA Lab ID (Lab Use Only) | Sample ID | Collection Date | Collection Time | Sample Matrix | Sampler's Initials | Soil Disposal Pack IV | VOC 8260 High Discrete | Total Solids | | TCLP Pb | | | | | | | | Sample Specific Comments | TOTAL # BOTTLES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22113-1 | G-3 0-6' FILL COMP | 11/30 | 15:00 | S | ADS | ☒ | ☐ | ☐ | ☐ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| 7610-12 | G-3 S-2 2-4' | 11/29 | 8:00 | S | NTD | ☐ | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| 2-13 | G-3 6-14' FILL COMP | 11/30 | 15:00 | S | ADS | ☒ | ☐ | ☐ | ☐ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| -14 | G-3 S-6 10-12' | 11/29 | 10:00 | S | NTD | ☐ | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | Container Type | A | V | P | - | - | - | - | - | - | - | - | - | | |
| | | | | | Preservative | A | F | A | - | - | - | - | - | - | - | - | - | | |

PLEASE ANSWER QUESTIONS ABOVE!

**IS YOUR PROJECT MA MCP *or* CT RCP?**

FORM NO: 01-01(I) (rev. 20-JAN-2010)

| Relinquished By: | Date/Time | Received By: | Date/Time |
|---|---|---|---|
| [signature] | 12/6 1530 | [signature] | 12/6/12 1610 |
| [signature] | 12/6/12 1750 | [signature] | 12/6/12 17:50 |

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

# ANALYTICAL REPORT

| | |
|---|---|
| Lab Number: | L1301427 |
| Client: | McPhail Associates<br>2269 Massachusetts Avenue<br>Cambridge, MA 02140 |
| ATTN: | Ambrose Donovan |
| Phone: | (617) 868-1420 |
| Project Name: | ST. MARY'S GARAGE |
| Project Number: | 5386.9.01 |
| Report Date: | 01/29/13 |

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

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1301427
**Report Date:** 01/29/13

| Alpha Sample ID | Client ID | Sample Location | Collection Date/Time |
|---|---|---|---|
| L1301427-01 | G-3A FILL COMP 6-14' | CHESTNUT HILL, MA | 01/15/13 15:00 |
| L1301427-02 | G-3N3 S-6 10-12' | CHESTNUT HILL, MA | 01/15/13 15:00 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1301427

**Project Number:** 5386.9.01 **Report Date:** 01/29/13

## MADEP MCP Response Action Analytical Report Certification

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

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

| **A response to questions G, H and I is required for "Presumptive Certainty" status** | | |
|---|---|---|
| G | Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)? | NO |
| H | Were all QC performance standards specified in the CAM protocol(s) achieved? | NO |
| I | Were results reported for the complete analyte list specified in the selected CAM protocol(s)? | NO |

**For any questions answered "No", please refer to the case narrative section on the following page(s).**

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

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1301427
**Project Number:** 5386.9.01 **Report Date:** 01/29/13

## Case Narrative

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

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

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

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

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

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

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1301427
**Project Number:** 5386.9.01 **Report Date:** 01/29/13

**Case Narrative (continued)**

MCP Related Narratives

Sample Receipt

In reference to question H:

A Matrix Spike was not submitted for the analysis of Metals.

Volatile Organics

In reference to question G:

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

In reference to question H:

The initial calibration, associated with L1301427-02, did not meet the method required minimum response factors on the lowest calibration standards for 1,4-Dioxane (0.00265), as well as the average response factor for 1,4-Dioxane.

The continuing calibration standard, associated with L1301427-02, is outside the acceptance criteria for Acetone and 1,4-Dioxane; however, it is within overall method allowances. A copy of the continuing calibration standard is included as an addendum to this report.

Metals

In reference to question I:

All samples were analyzed for a subset of MCP elements per the Chain of Custody.

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

Authorized Signature: Cynthia McQueen

Title: Technical Director/Representative Date: 01/29/13

# ORGANICS

# VOLATILES

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1301427

**Project Number:** 5386.9.01 **Report Date:** 01/29/13

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1301427-02 | Date Collected: | 01/15/13 15:00 |
| Client ID: | G-3N3 S-6 10-12' | Date Received: | 01/23/13 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | | |
| Analytical Method: | 97,8260C | | |
| Analytical Date: | 01/24/13 18:57 | | |
| Analyst: | BN | | |
| Percent Solids: | 92% | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab | | | | | | |
| Methylene chloride | ND | | ug/kg | 1100 | -- | 1 |
| 1,1-Dichloroethane | ND | | ug/kg | 170 | -- | 1 |
| Chloroform | ND | | ug/kg | 170 | -- | 1 |
| Carbon tetrachloride | ND | | ug/kg | 110 | -- | 1 |
| 1,2-Dichloropropane | ND | | ug/kg | 400 | -- | 1 |
| Dibromochloromethane | ND | | ug/kg | 110 | -- | 1 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 170 | -- | 1 |
| Tetrachloroethene | ND | | ug/kg | 110 | -- | 1 |
| Chlorobenzene | ND | | ug/kg | 110 | -- | 1 |
| Trichlorofluoromethane | ND | | ug/kg | 460 | -- | 1 |
| 1,2-Dichloroethane | ND | | ug/kg | 110 | -- | 1 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 110 | -- | 1 |
| Bromodichloromethane | ND | | ug/kg | 110 | -- | 1 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 110 | -- | 1 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 110 | -- | 1 |
| 1,1-Dichloropropene | ND | | ug/kg | 460 | -- | 1 |
| Bromoform | ND | | ug/kg | 460 | -- | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 110 | -- | 1 |
| Benzene | ND | | ug/kg | 110 | -- | 1 |
| Toluene | ND | | ug/kg | 170 | -- | 1 |
| Ethylbenzene | ND | | ug/kg | 110 | -- | 1 |
| Chloromethane | ND | | ug/kg | 460 | -- | 1 |
| Bromomethane | ND | | ug/kg | 230 | -- | 1 |
| Vinyl chloride | ND | | ug/kg | 230 | -- | 1 |
| Chloroethane | ND | | ug/kg | 230 | -- | 1 |
| 1,1-Dichloroethene | ND | | ug/kg | 110 | -- | 1 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 170 | -- | 1 |
| Trichloroethene | ND | | ug/kg | 110 | -- | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 460 | -- | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 460 | -- | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 460 | -- | 1 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1301427

**Project Number:** 5386.9.01 **Report Date:** 01/29/13

**SAMPLE RESULTS**

Lab ID: L1301427-02 Date Collected: 01/15/13 15:00

Client ID: G-3N3 S-6 10-12' Date Received: 01/23/13

Sample Location: CHESTNUT HILL, MA Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab | | | | | | |
| Methyl tert butyl ether | ND | | ug/kg | 230 | -- | 1 |
| p/m-Xylene | ND | | ug/kg | 230 | -- | 1 |
| o-Xylene | ND | | ug/kg | 230 | -- | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 110 | -- | 1 |
| Dibromomethane | ND | | ug/kg | 460 | -- | 1 |
| 1,2,3-Trichloropropane | ND | | ug/kg | 460 | -- | 1 |
| Styrene | ND | | ug/kg | 230 | -- | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 1100 | -- | 1 |
| Acetone | ND | | ug/kg | 4100 | -- | 1 |
| Carbon disulfide | ND | | ug/kg | 460 | -- | 1 |
| 2-Butanone | ND | | ug/kg | 1100 | -- | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 1100 | -- | 1 |
| 2-Hexanone | ND | | ug/kg | 1100 | -- | 1 |
| Bromochloromethane | ND | | ug/kg | 460 | -- | 1 |
| Tetrahydrofuran | ND | | ug/kg | 460 | -- | 1 |
| 2,2-Dichloropropane | ND | | ug/kg | 570 | -- | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 460 | -- | 1 |
| 1,3-Dichloropropane | ND | | ug/kg | 460 | -- | 1 |
| 1,1,1,2-Tetrachloroethane | ND | | ug/kg | 110 | -- | 1 |
| Bromobenzene | ND | | ug/kg | 570 | -- | 1 |
| n-Butylbenzene | ND | | ug/kg | 110 | -- | 1 |
| sec-Butylbenzene | ND | | ug/kg | 110 | -- | 1 |
| tert-Butylbenzene | ND | | ug/kg | 460 | -- | 1 |
| o-Chlorotoluene | ND | | ug/kg | 460 | -- | 1 |
| p-Chlorotoluene | ND | | ug/kg | 460 | -- | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 460 | -- | 1 |
| Hexachlorobutadiene | ND | | ug/kg | 460 | -- | 1 |
| Isopropylbenzene | ND | | ug/kg | 110 | -- | 1 |
| p-Isopropyltoluene | ND | | ug/kg | 110 | -- | 1 |
| Naphthalene | ND | | ug/kg | 460 | -- | 1 |
| n-Propylbenzene | ND | | ug/kg | 110 | -- | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 460 | -- | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 460 | -- | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 460 | -- | 1 |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 460 | -- | 1 |
| Ethyl ether | ND | | ug/kg | 570 | -- | 1 |
| Isopropyl Ether | ND | | ug/kg | 460 | -- | 1 |
| Ethyl-Tert-Butyl-Ether | ND | | ug/kg | 460 | -- | 1 |
| Tertiary-Amyl Methyl Ether | ND | | ug/kg | 460 | -- | 1 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1301427

**Project Number:** 5386.9.01 **Report Date:** 01/29/13

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1301427-02 | Date Collected: | 01/15/13 15:00 |
| Client ID: | G-3N3 S-6 10-12' | Date Received: | 01/23/13 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab | | | | | | |
| 1,4-Dioxane | ND | | ug/kg | 11000 | -- | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 98 | | 70-130 |
| Toluene-d8 | 95 | | 70-130 |
| 4-Bromofluorobenzene | 102 | | 70-130 |
| Dibromofluoromethane | 95 | | 70-130 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1301427

**Project Number:** 5386.9.01 **Report Date:** 01/29/13

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 01/24/13 14:07
Analyst: BN

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab for sample(s): 02 Batch: WG587078-3 | | | | | |
| Methylene chloride | ND | | ug/kg | 500 | -- |
| 1,1-Dichloroethane | ND | | ug/kg | 75 | -- |
| Chloroform | ND | | ug/kg | 75 | -- |
| Carbon tetrachloride | ND | | ug/kg | 50 | -- |
| 1,2-Dichloropropane | ND | | ug/kg | 180 | -- |
| Dibromochloromethane | ND | | ug/kg | 50 | -- |
| 1,1,2-Trichloroethane | ND | | ug/kg | 75 | -- |
| Tetrachloroethene | ND | | ug/kg | 50 | -- |
| Chlorobenzene | ND | | ug/kg | 50 | -- |
| Trichlorofluoromethane | ND | | ug/kg | 200 | -- |
| 1,2-Dichloroethane | ND | | ug/kg | 50 | -- |
| 1,1,1-Trichloroethane | ND | | ug/kg | 50 | -- |
| Bromodichloromethane | ND | | ug/kg | 50 | -- |
| trans-1,3-Dichloropropene | ND | | ug/kg | 50 | -- |
| cis-1,3-Dichloropropene | ND | | ug/kg | 50 | -- |
| 1,1-Dichloropropene | ND | | ug/kg | 200 | -- |
| Bromoform | ND | | ug/kg | 200 | -- |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 50 | -- |
| Benzene | ND | | ug/kg | 50 | -- |
| Toluene | ND | | ug/kg | 75 | -- |
| Ethylbenzene | ND | | ug/kg | 50 | -- |
| Chloromethane | ND | | ug/kg | 200 | -- |
| Bromomethane | ND | | ug/kg | 100 | -- |
| Vinyl chloride | ND | | ug/kg | 100 | -- |
| Chloroethane | ND | | ug/kg | 100 | -- |
| 1,1-Dichloroethene | ND | | ug/kg | 50 | -- |
| trans-1,2-Dichloroethene | ND | | ug/kg | 75 | -- |
| Trichloroethene | ND | | ug/kg | 50 | -- |
| 1,2-Dichlorobenzene | ND | | ug/kg | 200 | -- |
| 1,3-Dichlorobenzene | ND | | ug/kg | 200 | -- |
| 1,4-Dichlorobenzene | ND | | ug/kg | 200 | -- |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1301427

**Project Number:** 5386.9.01 **Report Date:** 01/29/13

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 01/24/13 14:07
Analyst: BN

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab for sample(s): 02 Batch: WG587078-3 | | | | | |
| Methyl tert butyl ether | ND | | ug/kg | 100 | -- |
| p/m-Xylene | ND | | ug/kg | 100 | -- |
| o-Xylene | ND | | ug/kg | 100 | -- |
| cis-1,2-Dichloroethene | ND | | ug/kg | 50 | -- |
| Dibromomethane | ND | | ug/kg | 200 | -- |
| 1,2,3-Trichloropropane | ND | | ug/kg | 200 | -- |
| Styrene | ND | | ug/kg | 100 | -- |
| Dichlorodifluoromethane | ND | | ug/kg | 500 | -- |
| Acetone | ND | | ug/kg | 1800 | -- |
| Carbon disulfide | ND | | ug/kg | 200 | -- |
| 2-Butanone | ND | | ug/kg | 500 | -- |
| 4-Methyl-2-pentanone | ND | | ug/kg | 500 | -- |
| 2-Hexanone | ND | | ug/kg | 500 | -- |
| Bromochloromethane | ND | | ug/kg | 200 | -- |
| Tetrahydrofuran | ND | | ug/kg | 200 | -- |
| 2,2-Dichloropropane | ND | | ug/kg | 250 | -- |
| 1,2-Dibromoethane | ND | | ug/kg | 200 | -- |
| 1,3-Dichloropropane | ND | | ug/kg | 200 | -- |
| 1,1,1,2-Tetrachloroethane | ND | | ug/kg | 50 | -- |
| Bromobenzene | ND | | ug/kg | 250 | -- |
| n-Butylbenzene | ND | | ug/kg | 50 | -- |
| sec-Butylbenzene | ND | | ug/kg | 50 | -- |
| tert-Butylbenzene | ND | | ug/kg | 200 | -- |
| o-Chlorotoluene | ND | | ug/kg | 200 | -- |
| p-Chlorotoluene | ND | | ug/kg | 200 | -- |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 200 | -- |
| Hexachlorobutadiene | ND | | ug/kg | 200 | -- |
| Isopropylbenzene | ND | | ug/kg | 50 | -- |
| p-Isopropyltoluene | ND | | ug/kg | 50 | -- |
| Naphthalene | ND | | ug/kg | 200 | -- |
| n-Propylbenzene | ND | | ug/kg | 50 | -- |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1301427

**Project Number:** 5386.9.01 **Report Date:** 01/29/13

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 97,8260C
Analytical Date: 01/24/13 14:07
Analyst: BN

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab for sample(s): 02 Batch: WG587078-3 | | | | | |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 200 | -- |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 200 | -- |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 200 | -- |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 200 | -- |
| Ethyl ether | ND | | ug/kg | 250 | -- |
| Isopropyl Ether | ND | | ug/kg | 200 | -- |
| Ethyl-Tert-Butyl-Ether | ND | | ug/kg | 200 | -- |
| Tertiary-Amyl Methyl Ether | ND | | ug/kg | 200 | -- |
| 1,4-Dioxane | ND | | ug/kg | 5000 | -- |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 97 | | 70-130 |
| Toluene-d8 | 96 | | 70-130 |
| 4-Bromofluorobenzene | 102 | | 70-130 |
| Dibromofluoromethane | 96 | | 70-130 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1301427
**Report Date:** 01/29/13

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab Associated sample(s): 02 Batch: WG587078-1 WG587078-2 | | | | | | | | |
| Methylene chloride | 92 | | 94 | | 70-130 | 2 | | 20 |
| 1,1-Dichloroethane | 102 | | 104 | | 70-130 | 2 | | 20 |
| Chloroform | 99 | | 100 | | 70-130 | 1 | | 20 |
| Carbon tetrachloride | 98 | | 98 | | 70-130 | 0 | | 20 |
| 1,2-Dichloropropane | 100 | | 101 | | 70-130 | 1 | | 20 |
| Dibromochloromethane | 86 | | 87 | | 70-130 | 1 | | 20 |
| 1,1,2-Trichloroethane | 97 | | 97 | | 70-130 | 0 | | 20 |
| Tetrachloroethene | 94 | | 94 | | 70-130 | 0 | | 20 |
| Chlorobenzene | 96 | | 97 | | 70-130 | 1 | | 20 |
| Trichlorofluoromethane | 87 | | 88 | | 70-130 | 1 | | 20 |
| 1,2-Dichloroethane | 98 | | 99 | | 70-130 | 1 | | 20 |
| 1,1,1-Trichloroethane | 99 | | 100 | | 70-130 | 1 | | 20 |
| Bromodichloromethane | 94 | | 95 | | 70-130 | 1 | | 20 |
| trans-1,3-Dichloropropene | 91 | | 92 | | 70-130 | 1 | | 20 |
| cis-1,3-Dichloropropene | 99 | | 99 | | 70-130 | 0 | | 20 |
| 1,1-Dichloropropene | 106 | | 106 | | 70-130 | 0 | | 20 |
| Bromoform | 83 | | 82 | | 70-130 | 1 | | 20 |
| 1,1,2,2-Tetrachloroethane | 98 | | 97 | | 70-130 | 1 | | 20 |
| Benzene | 105 | | 106 | | 70-130 | 1 | | 20 |
| Toluene | 98 | | 99 | | 70-130 | 1 | | 20 |
| Ethylbenzene | 98 | | 98 | | 70-130 | 0 | | 20 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1301427
**Report Date:** 01/29/13

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab Associated sample(s): 02 Batch: WG587078-1 WG587078-2 | | | | | | | | |
| Chloromethane | 94 | | 96 | | 70-130 | 2 | | 20 |
| Bromomethane | 85 | | 85 | | 70-130 | 0 | | 20 |
| Vinyl chloride | 94 | | 94 | | 70-130 | 0 | | 20 |
| Chloroethane | 94 | | 94 | | 70-130 | 0 | | 20 |
| 1,1-Dichloroethene | 106 | | 105 | | 70-130 | 1 | | 20 |
| trans-1,2-Dichloroethene | 104 | | 106 | | 70-130 | 2 | | 20 |
| Trichloroethene | 101 | | 102 | | 70-130 | 1 | | 20 |
| 1,2-Dichlorobenzene | 93 | | 93 | | 70-130 | 0 | | 20 |
| 1,3-Dichlorobenzene | 96 | | 96 | | 70-130 | 0 | | 20 |
| 1,4-Dichlorobenzene | 95 | | 96 | | 70-130 | 1 | | 20 |
| Methyl tert butyl ether | 96 | | 97 | | 70-130 | 1 | | 20 |
| p/m-Xylene | 99 | | 100 | | 70-130 | 1 | | 20 |
| o-Xylene | 98 | | 99 | | 70-130 | 1 | | 20 |
| cis-1,2-Dichloroethene | 100 | | 102 | | 70-130 | 2 | | 20 |
| Dibromomethane | 97 | | 98 | | 70-130 | 1 | | 20 |
| 1,2,3-Trichloropropane | 100 | | 98 | | 70-130 | 2 | | 20 |
| Styrene | 99 | | 100 | | 70-130 | 1 | | 20 |
| Dichlorodifluoromethane | 83 | | 83 | | 70-130 | 0 | | 20 |
| Acetone | 126 | | 121 | | 70-130 | 4 | | 20 |
| Carbon disulfide | 98 | | 98 | | 70-130 | 0 | | 20 |
| 2-Butanone | 110 | | 112 | | 70-130 | 2 | | 20 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1301427
**Report Date:** 01/29/13

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab Associated sample(s): 02 Batch: WG587078-1 WG587078-2 | | | | | | | | |
| 4-Methyl-2-pentanone | 100 | | 97 | | 70-130 | 3 | | 20 |
| 2-Hexanone | 98 | | 97 | | 70-130 | 1 | | 20 |
| Bromochloromethane | 97 | | 99 | | 70-130 | 2 | | 20 |
| Tetrahydrofuran | 106 | | 107 | | 70-130 | 1 | | 20 |
| 2,2-Dichloropropane | 101 | | 102 | | 70-130 | 1 | | 20 |
| 1,2-Dibromoethane | 91 | | 91 | | 70-130 | 0 | | 20 |
| 1,3-Dichloropropane | 95 | | 96 | | 70-130 | 1 | | 20 |
| 1,1,1,2-Tetrachloroethane | 89 | | 91 | | 70-130 | 2 | | 20 |
| Bromobenzene | 92 | | 92 | | 70-130 | 0 | | 20 |
| n-Butylbenzene | 105 | | 103 | | 70-130 | 2 | | 20 |
| sec-Butylbenzene | 101 | | 101 | | 70-130 | 0 | | 20 |
| tert-Butylbenzene | 98 | | 98 | | 70-130 | 0 | | 20 |
| o-Chlorotoluene | 94 | | 98 | | 70-130 | 4 | | 20 |
| p-Chlorotoluene | 100 | | 99 | | 70-130 | 1 | | 20 |
| 1,2-Dibromo-3-chloropropane | 87 | | 71 | | 70-130 | 20 | | 20 |
| Hexachlorobutadiene | 88 | | 88 | | 70-130 | 0 | | 20 |
| Isopropylbenzene | 100 | | 99 | | 70-130 | 1 | | 20 |
| p-Isopropyltoluene | 100 | | 99 | | 70-130 | 1 | | 20 |
| Naphthalene | 92 | | 90 | | 70-130 | 2 | | 20 |
| n-Propylbenzene | 102 | | 102 | | 70-130 | 0 | | 20 |
| 1,2,3-Trichlorobenzene | 87 | | 86 | | 70-130 | 1 | | 20 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01
**Lab Number:** L1301427
**Report Date:** 01/29/13

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Volatile Organics by 5035 High - Westborough Lab Associated sample(s): 02 Batch: WG587078-1 WG587078-2 | | | | | | | | |
| 1,2,4-Trichlorobenzene | 91 | | 90 | | 70-130 | 1 | | 20 |
| 1,3,5-Trimethylbenzene | 98 | | 98 | | 70-130 | 0 | | 20 |
| 1,2,4-Trimethylbenzene | 97 | | 97 | | 70-130 | 0 | | 20 |
| Ethyl ether | 91 | | 89 | | 70-130 | 2 | | 20 |
| Isopropyl Ether | 104 | | 105 | | 70-130 | 1 | | 20 |
| Ethyl-Tert-Butyl-Ether | 98 | | 99 | | 70-130 | 1 | | 20 |
| Tertiary-Amyl Methyl Ether | 98 | | 99 | | 70-130 | 1 | | 20 |
| 1,4-Dioxane | **134** | Q | 128 | | 70-130 | 5 | | 20 |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | 99 | | 98 | | 70-130 |
| Toluene-d8 | 96 | | 97 | | 70-130 |
| 4-Bromofluorobenzene | 103 | | 102 | | 70-130 |
| Dibromofluoromethane | 99 | | 99 | | 70-130 |

# SEMIVOLATILES

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1301427

**Project Number:** 5386.9.01 **Report Date:** 01/29/13

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1301427-01 | Date Collected: | 01/15/13 15:00 |
| Client ID: | G-3A FILL COMP 6-14' | Date Received: | 01/23/13 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | Extraction Method: | EPA 3546 |
| Analytical Method: | 97,8270D | Extraction Date: | 01/24/13 04:21 |
| Analytical Date: | 01/28/13 15:19 | | |
| Analyst: | JB | | |
| Percent Solids: | 88% | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab | | | | | | |
| Acenaphthene | ND | | ug/kg | 150 | -- | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 190 | -- | 1 |
| Hexachlorobenzene | ND | | ug/kg | 110 | -- | 1 |
| Bis(2-chloroethyl)ether | ND | | ug/kg | 170 | -- | 1 |
| 2-Chloronaphthalene | ND | | ug/kg | 190 | -- | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 190 | -- | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 190 | -- | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 190 | -- | 1 |
| 3,3'-Dichlorobenzidine | ND | | ug/kg | 190 | -- | 1 |
| 2,4-Dinitrotoluene | ND | | ug/kg | 190 | -- | 1 |
| 2,6-Dinitrotoluene | ND | | ug/kg | 190 | -- | 1 |
| Azobenzene | ND | | ug/kg | 190 | -- | 1 |
| Fluoranthene | 120 | | ug/kg | 110 | -- | 1 |
| 4-Bromophenyl phenyl ether | ND | | ug/kg | 190 | -- | 1 |
| Bis(2-chloroisopropyl)ether | ND | | ug/kg | 220 | -- | 1 |
| Bis(2-chloroethoxy)methane | ND | | ug/kg | 200 | -- | 1 |
| Hexachlorobutadiene | ND | | ug/kg | 190 | -- | 1 |
| Hexachloroethane | ND | | ug/kg | 150 | -- | 1 |
| Isophorone | ND | | ug/kg | 170 | -- | 1 |
| Naphthalene | ND | | ug/kg | 190 | -- | 1 |
| Nitrobenzene | ND | | ug/kg | 170 | -- | 1 |
| Bis(2-Ethylhexyl)phthalate | ND | | ug/kg | 190 | -- | 1 |
| Butyl benzyl phthalate | ND | | ug/kg | 190 | -- | 1 |
| Di-n-butylphthalate | ND | | ug/kg | 190 | -- | 1 |
| Di-n-octylphthalate | ND | | ug/kg | 190 | -- | 1 |
| Diethyl phthalate | ND | | ug/kg | 190 | -- | 1 |
| Dimethyl phthalate | ND | | ug/kg | 190 | -- | 1 |
| Benzo(a)anthracene | ND | | ug/kg | 110 | -- | 1 |
| Benzo(a)pyrene | ND | | ug/kg | 150 | -- | 1 |
| Benzo(b)fluoranthene | ND | | ug/kg | 110 | -- | 1 |
| Benzo(k)fluoranthene | ND | | ug/kg | 110 | -- | 1 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1301427

**Project Number:** 5386.9.01 **Report Date:** 01/29/13

## SAMPLE RESULTS

Lab ID: L1301427-01 Date Collected: 01/15/13 15:00

Client ID: G-3A FILL COMP 6-14' Date Received: 01/23/13

Sample Location: CHESTNUT HILL, MA Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab | | | | | | |
| Chrysene | ND | | ug/kg | 110 | -- | 1 |
| Acenaphthylene | ND | | ug/kg | 150 | -- | 1 |
| Anthracene | ND | | ug/kg | 110 | -- | 1 |
| Benzo(ghi)perylene | ND | | ug/kg | 150 | -- | 1 |
| Fluorene | ND | | ug/kg | 190 | -- | 1 |
| Phenanthrene | ND | | ug/kg | 110 | -- | 1 |
| Dibenzo(a,h)anthracene | ND | | ug/kg | 110 | -- | 1 |
| Indeno(1,2,3-cd)Pyrene | ND | | ug/kg | 150 | -- | 1 |
| Pyrene | 140 | | ug/kg | 110 | -- | 1 |
| Aniline | ND | | ug/kg | 220 | -- | 1 |
| 4-Chloroaniline | ND | | ug/kg | 190 | -- | 1 |
| Dibenzofuran | ND | | ug/kg | 190 | -- | 1 |
| 2-Methylnaphthalene | ND | | ug/kg | 220 | -- | 1 |
| Acetophenone | ND | | ug/kg | 190 | -- | 1 |
| 2,4,6-Trichlorophenol | ND | | ug/kg | 110 | -- | 1 |
| 2-Chlorophenol | ND | | ug/kg | 190 | -- | 1 |
| 2,4-Dichlorophenol | ND | | ug/kg | 170 | -- | 1 |
| 2,4-Dimethylphenol | ND | | ug/kg | 190 | -- | 1 |
| 2-Nitrophenol | ND | | ug/kg | 410 | -- | 1 |
| 4-Nitrophenol | ND | | ug/kg | 260 | -- | 1 |
| 2,4-Dinitrophenol | ND | | ug/kg | 900 | -- | 1 |
| Pentachlorophenol | ND | | ug/kg | 380 | -- | 1 |
| Phenol | ND | | ug/kg | 190 | -- | 1 |
| 2-Methylphenol | ND | | ug/kg | 190 | -- | 1 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 270 | -- | 1 |
| 2,4,5-Trichlorophenol | ND | | ug/kg | 190 | -- | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 97 | | 30-130 |
| Phenol-d6 | 96 | | 30-130 |
| Nitrobenzene-d5 | 93 | | 30-130 |
| 2-Fluorobiphenyl | 81 | | 30-130 |
| 2,4,6-Tribromophenol | 93 | | 30-130 |
| 4-Terphenyl-d14 | 90 | | 30-130 |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1301427
**Report Date:** 01/29/13

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 97,8270D
Analytical Date: 01/28/13 13:59
Analyst: JB

Extraction Method: EPA 3546
Extraction Date: 01/24/13 04:21

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab for sample(s): 01 Batch: WG586732-1 | | | | | |
| Acenaphthene | ND | | ug/kg | 130 | -- |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 170 | -- |
| Hexachlorobenzene | ND | | ug/kg | 100 | -- |
| Bis(2-chloroethyl)ether | ND | | ug/kg | 150 | -- |
| 2-Chloronaphthalene | ND | | ug/kg | 170 | -- |
| 1,2-Dichlorobenzene | ND | | ug/kg | 170 | -- |
| 1,3-Dichlorobenzene | ND | | ug/kg | 170 | -- |
| 1,4-Dichlorobenzene | ND | | ug/kg | 170 | -- |
| 3,3'-Dichlorobenzidine | ND | | ug/kg | 170 | -- |
| 2,4-Dinitrotoluene | ND | | ug/kg | 170 | -- |
| 2,6-Dinitrotoluene | ND | | ug/kg | 170 | -- |
| Azobenzene | ND | | ug/kg | 170 | -- |
| Fluoranthene | ND | | ug/kg | 100 | -- |
| 4-Bromophenyl phenyl ether | ND | | ug/kg | 170 | -- |
| Bis(2-chloroisopropyl)ether | ND | | ug/kg | 200 | -- |
| Bis(2-chloroethoxy)methane | ND | | ug/kg | 180 | -- |
| Hexachlorobutadiene | ND | | ug/kg | 170 | -- |
| Hexachloroethane | ND | | ug/kg | 130 | -- |
| Isophorone | ND | | ug/kg | 150 | -- |
| Naphthalene | ND | | ug/kg | 170 | -- |
| Nitrobenzene | ND | | ug/kg | 150 | -- |
| Bis(2-Ethylhexyl)phthalate | ND | | ug/kg | 170 | -- |
| Butyl benzyl phthalate | ND | | ug/kg | 170 | -- |
| Di-n-butylphthalate | ND | | ug/kg | 170 | -- |
| Di-n-octylphthalate | ND | | ug/kg | 170 | -- |
| Diethyl phthalate | ND | | ug/kg | 170 | -- |
| Dimethyl phthalate | ND | | ug/kg | 170 | -- |
| Benzo(a)anthracene | ND | | ug/kg | 100 | -- |
| Benzo(a)pyrene | ND | | ug/kg | 130 | -- |
| Benzo(b)fluoranthene | ND | | ug/kg | 100 | -- |
| Benzo(k)fluoranthene | ND | | ug/kg | 100 | -- |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1301427
**Report Date:** 01/29/13

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 97,8270D
Analytical Date: 01/28/13 13:59
Analyst: JB

Extraction Method: EPA 3546
Extraction Date: 01/24/13 04:21

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab for sample(s): 01 Batch: WG586732-1 | | | | | |
| Chrysene | ND | | ug/kg | 100 | -- |
| Acenaphthylene | ND | | ug/kg | 130 | -- |
| Anthracene | ND | | ug/kg | 100 | -- |
| Benzo(ghi)perylene | ND | | ug/kg | 130 | -- |
| Fluorene | ND | | ug/kg | 170 | -- |
| Phenanthrene | ND | | ug/kg | 100 | -- |
| Dibenzo(a,h)anthracene | ND | | ug/kg | 100 | -- |
| Indeno(1,2,3-cd)Pyrene | ND | | ug/kg | 130 | -- |
| Pyrene | ND | | ug/kg | 100 | -- |
| Aniline | ND | | ug/kg | 200 | -- |
| 4-Chloroaniline | ND | | ug/kg | 170 | -- |
| Dibenzofuran | ND | | ug/kg | 170 | -- |
| 2-Methylnaphthalene | ND | | ug/kg | 200 | -- |
| Acetophenone | ND | | ug/kg | 170 | -- |
| 2,4,6-Trichlorophenol | ND | | ug/kg | 100 | -- |
| 2-Chlorophenol | ND | | ug/kg | 170 | -- |
| 2,4-Dichlorophenol | ND | | ug/kg | 150 | -- |
| 2,4-Dimethylphenol | ND | | ug/kg | 170 | -- |
| 2-Nitrophenol | ND | | ug/kg | 360 | -- |
| 4-Nitrophenol | ND | | ug/kg | 230 | -- |
| 2,4-Dinitrophenol | ND | | ug/kg | 800 | -- |
| Pentachlorophenol | ND | | ug/kg | 330 | -- |
| Phenol | ND | | ug/kg | 170 | -- |
| 2-Methylphenol | ND | | ug/kg | 170 | -- |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 240 | -- |
| 2,4,5-Trichlorophenol | ND | | ug/kg | 170 | -- |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1301427
**Report Date:** 01/29/13

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 97,8270D
Analytical Date: 01/28/13 13:59
Analyst: JB

Extraction Method: EPA 3546
Extraction Date: 01/24/13 04:21

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab for sample(s): 01 Batch: WG586732-1 | | | | | |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 72 | | 30-130 |
| Phenol-d6 | 69 | | 30-130 |
| Nitrobenzene-d5 | 56 | | 30-130 |
| 2-Fluorobiphenyl | 62 | | 30-130 |
| 2,4,6-Tribromophenol | 70 | | 30-130 |
| 4-Terphenyl-d14 | 97 | | 30-130 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1301427
**Report Date:** 01/29/13

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG586732-2 WG586732-3 | | | | | | | | |
| Acenaphthene | 72 | | 82 | | 40-140 | 13 | | 30 |
| 1,2,4-Trichlorobenzene | 75 | | 77 | | 40-140 | 3 | | 30 |
| Hexachlorobenzene | 74 | | 79 | | 40-140 | 7 | | 30 |
| Bis(2-chloroethyl)ether | 67 | | 84 | | 40-140 | 23 | | 30 |
| 2-Chloronaphthalene | 77 | | 82 | | 40-140 | 6 | | 30 |
| 1,2-Dichlorobenzene | 71 | | 81 | | 40-140 | 13 | | 30 |
| 1,3-Dichlorobenzene | 73 | | 80 | | 40-140 | 9 | | 30 |
| 1,4-Dichlorobenzene | 69 | | 80 | | 40-140 | 15 | | 30 |
| 3,3'-Dichlorobenzidine | **32** | Q | **39** | Q | 40-140 | 20 | | 30 |
| 2,4-Dinitrotoluene | 80 | | 89 | | 40-140 | 11 | | 30 |
| 2,6-Dinitrotoluene | 78 | | 83 | | 40-140 | 6 | | 30 |
| Azobenzene | 69 | | 94 | | 40-140 | **31** | Q | 30 |
| Fluoranthene | 79 | | 92 | | 40-140 | 15 | | 30 |
| 4-Bromophenyl phenyl ether | 78 | | 82 | | 40-140 | 5 | | 30 |
| Bis(2-chloroisopropyl)ether | 64 | | 91 | | 40-140 | **35** | Q | 30 |
| Bis(2-chloroethoxy)methane | 68 | | 87 | | 40-140 | 25 | | 30 |
| Hexachlorobutadiene | 78 | | 76 | | 40-140 | 3 | | 30 |
| Hexachloroethane | 69 | | 83 | | 40-140 | 18 | | 30 |
| Isophorone | 68 | | 90 | | 40-140 | 28 | | 30 |
| Naphthalene | 73 | | 82 | | 40-140 | 12 | | 30 |
| Nitrobenzene | 72 | | 87 | | 40-140 | 19 | | 30 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1301427
**Report Date:** 01/29/13

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG586732-2 WG586732-3 | | | | | | | | |
| Bis(2-Ethylhexyl)phthalate | 77 | | 98 | | 40-140 | 24 | | 30 |
| Butyl benzyl phthalate | 74 | | 89 | | 40-140 | 18 | | 30 |
| Di-n-butylphthalate | 81 | | 97 | | 40-140 | 18 | | 30 |
| Di-n-octylphthalate | 77 | | 99 | | 40-140 | 25 | | 30 |
| Diethyl phthalate | 73 | | 90 | | 40-140 | 21 | | 30 |
| Dimethyl phthalate | 78 | | 87 | | 40-140 | 11 | | 30 |
| Benzo(a)anthracene | 78 | | 92 | | 40-140 | 16 | | 30 |
| Benzo(a)pyrene | 82 | | 94 | | 40-140 | 14 | | 30 |
| Benzo(b)fluoranthene | 82 | | 92 | | 40-140 | 11 | | 30 |
| Benzo(k)fluoranthene | 80 | | 93 | | 40-140 | 15 | | 30 |
| Chrysene | 75 | | 88 | | 40-140 | 16 | | 30 |
| Acenaphthylene | 78 | | 82 | | 40-140 | 5 | | 30 |
| Anthracene | 81 | | 94 | | 40-140 | 15 | | 30 |
| Benzo(ghi)perylene | 75 | | 83 | | 40-140 | 10 | | 30 |
| Fluorene | 79 | | 90 | | 40-140 | 13 | | 30 |
| Phenanthrene | 76 | | 88 | | 40-140 | 15 | | 30 |
| Dibenzo(a,h)anthracene | 78 | | 86 | | 40-140 | 10 | | 30 |
| Indeno(1,2,3-cd)Pyrene | 78 | | 82 | | 40-140 | 5 | | 30 |
| Pyrene | 76 | | 88 | | 40-140 | 15 | | 30 |
| Aniline | **17** | Q | **26** | Q | 40-140 | **42** | Q | 30 |
| 4-Chloroaniline | **24** | Q | **35** | Q | 40-140 | **37** | Q | 30 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1301427
**Report Date:** 01/29/13

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG586732-2 WG586732-3 | | | | | | | | |
| Dibenzofuran | 74 | | 83 | | 40-140 | 11 | | 30 |
| 2-Methylnaphthalene | 77 | | 82 | | 40-140 | 6 | | 30 |
| Acetophenone | 74 | | 89 | | 40-140 | 18 | | 30 |
| 2,4,6-Trichlorophenol | 81 | | 84 | | 30-130 | 4 | | 30 |
| 2-Chlorophenol | 76 | | 92 | | 30-130 | 19 | | 30 |
| 2,4-Dichlorophenol | 83 | | 88 | | 30-130 | 6 | | 30 |
| 2,4-Dimethylphenol | 73 | | 95 | | 30-130 | 26 | | 30 |
| 2-Nitrophenol | 75 | | 89 | | 30-130 | 17 | | 30 |
| 4-Nitrophenol | 70 | | 97 | | 30-130 | **32** | Q | 30 |
| 2,4-Dinitrophenol | 31 | | 42 | | 30-130 | 30 | | 30 |
| Pentachlorophenol | 68 | | 76 | | 30-130 | 11 | | 30 |
| Phenol | 68 | | 85 | | 30-130 | 22 | | 30 |
| 2-Methylphenol | 76 | | 92 | | 30-130 | 19 | | 30 |
| 3-Methylphenol/4-Methylphenol | 73 | | 92 | | 30-130 | 23 | | 30 |
| 2,4,5-Trichlorophenol | 83 | | 85 | | 30-130 | 2 | | 30 |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE

**Project Number:** 5386.9.01

**Lab Number:** L1301427

**Report Date:** 01/29/13

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG586732-2 WG586732-3 | | | | | | | | |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| 2-Fluorophenol | 99 | | 99 | | 30-130 |
| Phenol-d6 | 90 | | 101 | | 30-130 |
| Nitrobenzene-d5 | 84 | | 98 | | 30-130 |
| 2-Fluorobiphenyl | 95 | | 86 | | 30-130 |
| 2,4,6-Tribromophenol | 104 | | 105 | | 30-130 |
| 4-Terphenyl-d14 | 93 | | 93 | | 30-130 |

# PETROLEUM HYDROCARBONS

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1301427

**Project Number:** 5386.9.01 **Report Date:** 01/29/13

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1301427-01 | Date Collected: | 01/15/13 15:00 |
| Client ID: | G-3A FILL COMP 6-14' | Date Received: | 01/23/13 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | Extraction Method: | EPA 3546 |
| Analytical Method: | 1,8015C(M) | Extraction Date: | 01/24/13 00:59 |
| Analytical Date: | 01/24/13 10:53 | | |
| Analyst: | MW | | |
| Percent Solids: | 88% | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| Petroleum Hydrocarbon Quantitation - Westborough Lab | | | | | | |
| TPH | 47000 | | ug/kg | 35700 | -- | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| o-Terphenyl | 88 | | 40-140 |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1301427
**Report Date:** 01/29/13

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8015C(M)
Analytical Date: 01/24/13 10:53
Analyst: MW

Extraction Method: EPA 3546
Extraction Date: 01/24/13 00:59

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Petroleum Hydrocarbon Quantitation - Westborough Lab for sample(s): 01 Batch: WG586719-1 | | | | | |
| TPH | ND | | ug/kg | 32900 | -- |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| o-Terphenyl | 78 | | 40-140 |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE

**Project Number:** 5386.9.01

**Lab Number:** L1301427

**Report Date:** 01/29/13

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Petroleum Hydrocarbon Quantitation - Westborough Lab Associated sample(s): 01 Batch: WG586719-2 | | | | | | | | |
| TPH | 80 | | - | | 40-140 | - | | 40 |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| o-Terphenyl | 79 | | | | 40-140 |

# Lab Duplicate Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1301427
**Report Date:** 01/29/13

| Parameter | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|
| Petroleum Hydrocarbon Quantitation - Westborough Lab Associated sample(s): 01 QC Batch ID: WG586719-3 QC Sample: L1301393-01 Client ID: DUP Sample | | | | | | |
| TPH | 183000 | 154000 | ug/kg | 17 | | 40 |

| Surrogate | %Recovery | Qualifier | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|---|---|
| o-Terphenyl | 81 | | 84 | | 40-140 |

# PCBS

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1301427

**Project Number:** 5386.9.01 **Report Date:** 01/29/13

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1301427-01 | Date Collected: | 01/15/13 15:00 |
| Client ID: | G-3A FILL COMP 6-14' | Date Received: | 01/23/13 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | Extraction Method: | EPA 3546 |
| Analytical Method: | 97,8082A | Extraction Date: | 01/24/13 00:52 |
| Analytical Date: | 01/24/13 17:22 | Cleanup Method1: | EPA 3665A |
| Analyst: | SH | Cleanup Date1: | 01/24/13 |
| Percent Solids: | 88% | Cleanup Method2: | EPA 3660B |
| | | Cleanup Date2: | 01/24/13 |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| MCP Polychlorinated Biphenyls - Westborough Lab | | | | | | |
| Aroclor 1016 | ND | | ug/kg | 36.6 | -- | 1 |
| Aroclor 1221 | ND | | ug/kg | 36.6 | -- | 1 |
| Aroclor 1232 | ND | | ug/kg | 36.6 | -- | 1 |
| Aroclor 1242 | ND | | ug/kg | 36.6 | -- | 1 |
| Aroclor 1248 | ND | | ug/kg | 36.6 | -- | 1 |
| Aroclor 1254 | ND | | ug/kg | 36.6 | -- | 1 |
| Aroclor 1260 | ND | | ug/kg | 36.6 | -- | 1 |
| Aroclor 1262 | ND | | ug/kg | 36.6 | -- | 1 |
| Aroclor 1268 | ND | | ug/kg | 36.6 | -- | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 60 | | 30-150 |
| Decachlorobiphenyl | 60 | | 30-150 |
| 2,4,5,6-Tetrachloro-m-xylene | 59 | | 30-150 |
| Decachlorobiphenyl | 69 | | 30-150 |

**Project Name:** ST. MARY'S GARAGE

**Project Number:** 5386.9.01

**Lab Number:** L1301427

**Report Date:** 01/29/13

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 97,8082A
Analytical Date: 01/24/13 14:19
Analyst: SH

Extraction Method: EPA 3546
Extraction Date: 01/24/13 00:52
Cleanup Method1: EPA 3665A
Cleanup Date1: 01/24/13
Cleanup Method2: EPA 3660B
Cleanup Date2: 01/24/13

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| MCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 01 Batch: WG586718-1 | | | | | |
| Aroclor 1016 | ND | | ug/kg | 33.0 | -- |
| Aroclor 1221 | ND | | ug/kg | 33.0 | -- |
| Aroclor 1232 | ND | | ug/kg | 33.0 | -- |
| Aroclor 1242 | ND | | ug/kg | 33.0 | -- |
| Aroclor 1248 | ND | | ug/kg | 33.0 | -- |
| Aroclor 1254 | ND | | ug/kg | 33.0 | -- |
| Aroclor 1260 | ND | | ug/kg | 33.0 | -- |
| Aroclor 1262 | ND | | ug/kg | 33.0 | -- |
| Aroclor 1268 | ND | | ug/kg | 33.0 | -- |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 76 | | 30-150 |
| Decachlorobiphenyl | 79 | | 30-150 |
| 2,4,5,6-Tetrachloro-m-xylene | 79 | | 30-150 |
| Decachlorobiphenyl | 86 | | 30-150 |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE

**Project Number:** 5386.9.01

**Lab Number:** L1301427

**Report Date:** 01/29/13

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 01 Batch: WG586718-2 WG586718-3 | | | | | | | | |
| Aroclor 1016 | 82 | | 99 | | 40-140 | 19 | | 30 |
| Aroclor 1260 | 79 | | 99 | | 40-140 | 22 | | 30 |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 74 | | 82 | | 30-150 |
| Decachlorobiphenyl | 81 | | 99 | | 30-150 |
| 2,4,5,6-Tetrachloro-m-xylene | 75 | | 81 | | 30-150 |
| Decachlorobiphenyl | 85 | | 103 | | 30-150 |

# METALS

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1301427 |
| **Project Number:** | 5386.9.01 | **Report Date:** | 01/29/13 |

**SAMPLE RESULTS**

| | | | |
|---|---|---|---|
| Lab ID: | L1301427-01 | Date Collected: | 01/15/13 15:00 |
| Client ID: | G-3A FILL COMP 6-14' | Date Received: | 01/23/13 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | TCLP/SPLP Ext. Date: | 01/28/13 15:51 |
| Percent Solids: | 88% | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Prep Method | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLP Metals by EPA 1311 - Westborough Lab | | | | | | | | | | | |
| Lead, TCLP | ND | | mg/l | 0.50 | -- | 1 | 01/29/13 10:53 | 01/29/13 12:44 | EPA 3015 | 1,6010C | BM |

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1301427 |
| **Project Number:** | 5386.9.01 | **Report Date:** | 01/29/13 |

**SAMPLE RESULTS**

| | | | |
|---|---|---|---|
| Lab ID: | L1301427-01 | Date Collected: | 01/15/13 15:00 |
| Client ID: | G-3A FILL COMP 6-14' | Date Received: | 01/23/13 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | TCLP/SPLP Ext. Date: | |
| Percent Solids: | 88% | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Prep Method | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **MCP Total Metals - Westborough Lab** | | | | | | | | | | | |
| Arsenic, Total | 5.2 | | mg/kg | 0.43 | -- | 1 | 01/28/13 08:51 | 01/28/13 17:56 | EPA 3050B | 97,6010C | MG |
| Barium, Total | 44 | | mg/kg | 0.43 | -- | 1 | 01/28/13 08:51 | 01/28/13 17:56 | EPA 3050B | 97,6010C | MG |
| Cadmium, Total | ND | | mg/kg | 0.43 | -- | 1 | 01/28/13 08:51 | 01/28/13 17:56 | EPA 3050B | 97,6010C | MG |
| Chromium, Total | 11 | | mg/kg | 0.43 | -- | 1 | 01/28/13 08:51 | 01/28/13 17:56 | EPA 3050B | 97,6010C | MG |
| Lead, Total | 32 | | mg/kg | 2.1 | -- | 1 | 01/28/13 08:51 | 01/28/13 17:56 | EPA 3050B | 97,6010C | MG |
| Mercury, Total | 0.14 | | mg/kg | 0.09 | -- | 1 | 01/28/13 16:00 | 01/28/13 19:29 | EPA 7471B | 97,7471B | MC |
| Selenium, Total | ND | | mg/kg | 2.1 | -- | 1 | 01/28/13 08:51 | 01/28/13 17:56 | EPA 3050B | 97,6010C | MG |
| Silver, Total | ND | | mg/kg | 0.43 | -- | 1 | 01/28/13 08:51 | 01/28/13 17:56 | EPA 3050B | 97,6010C | MG |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1301427

**Project Number:** 5386.9.01 **Report Date:** 01/29/13

# Method Blank Analysis
# Batch Quality Control

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| MCP Total Metals - Westborough Lab for sample(s): 01 Batch: WG587120-1 | | | | | | | | | | |
| Arsenic, Total | ND | | mg/kg | 0.40 | -- | 1 | 01/28/13 08:51 | 01/28/13 16:24 | 97,6010C | MG |
| Barium, Total | ND | | mg/kg | 0.40 | -- | 1 | 01/28/13 08:51 | 01/28/13 16:24 | 97,6010C | MG |
| Cadmium, Total | ND | | mg/kg | 0.40 | -- | 1 | 01/28/13 08:51 | 01/28/13 16:24 | 97,6010C | MG |
| Chromium, Total | ND | | mg/kg | 0.40 | -- | 1 | 01/28/13 08:51 | 01/28/13 16:24 | 97,6010C | MG |
| Lead, Total | ND | | mg/kg | 2.0 | -- | 1 | 01/28/13 08:51 | 01/28/13 16:24 | 97,6010C | MG |
| Selenium, Total | ND | | mg/kg | 2.0 | -- | 1 | 01/28/13 08:51 | 01/28/13 16:24 | 97,6010C | MG |
| Silver, Total | ND | | mg/kg | 0.40 | -- | 1 | 01/28/13 08:51 | 01/28/13 16:24 | 97,6010C | MG |

**Prep Information**

Digestion Method: EPA 3050B

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| MCP Total Metals - Westborough Lab for sample(s): 01 Batch: WG587274-1 | | | | | | | | | | |
| Mercury, Total | ND | | mg/kg | 0.08 | -- | 1 | 01/28/13 16:00 | 01/28/13 18:34 | 97,7471B | MC |

**Prep Information**

Digestion Method: EPA 7471B

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| TCLP Metals by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG587581-1 | | | | | | | | | | |
| Lead, TCLP | ND | | mg/l | 0.50 | -- | 1 | 01/29/13 10:53 | 01/29/13 11:39 | 1,6010C | BM |

**Prep Information**

Digestion Method: EPA 3015

TCLP/SPLP Extraction Date: 01/28/13 15:51

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1301427
**Report Date:** 01/29/13

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG587120-2 WG587120-3 SRM Lot Number: 0518-10-02 | | | | | | | | |
| Arsenic, Total | 94 | | 94 | | 81-119 | 0 | | 30 |
| Barium, Total | 92 | | 92 | | 83-118 | 0 | | 30 |
| Cadmium, Total | 89 | | 89 | | 82-117 | 0 | | 30 |
| Chromium, Total | 92 | | 92 | | 80-119 | 0 | | 30 |
| Lead, Total | 92 | | 92 | | 80-120 | 0 | | 30 |
| Selenium, Total | 98 | | 98 | | 80-120 | 0 | | 30 |
| Silver, Total | 97 | | 97 | | 66-134 | 0 | | 30 |
| MCP Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG587274-2 WG587274-3 SRM Lot Number: 0518-10-02 | | | | | | | | |
| Mercury, Total | 111 | | 108 | | 67-133 | 3 | | 30 |
| TCLP Metals by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG587581-2 | | | | | | | | |
| Lead, TCLP | 96 | | - | | 75-125 | - | | 20 |

# Matrix Spike Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1301427
**Report Date:** 01/29/13

| Parameter | Native Sample | MS Added | MS Found | MS %Recovery | Qual | MSD Found | MSD %Recovery | Qual | Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLP Metals by EPA 1311 - Westborough Lab Associated sample(s): 01 QC Batch ID: WG587581-4 QC Sample: L1301446-09 Client ID: MS Sample | | | | | | | | | | | | |
| Lead, TCLP | ND | 5.1 | 4.9 | 96 | | - | - | | 75-125 | - | | 20 |

# Lab Duplicate Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1301427
**Report Date:** 01/29/13

| Parameter | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|
| TCLP Metals by EPA 1311 - Westborough Lab Associated sample(s): 01 QC Batch ID: WG587581-3 QC Sample: L1301446-09 Client ID: DUP Sample | | | | | | |
| Lead, TCLP | ND | ND | mg/l | NC | | 20 |

# INORGANICS
# &
# MISCELLANEOUS

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1301427 |
| **Project Number:** | 5386.9.01 | **Report Date:** | 01/29/13 |

## SAMPLE RESULTS

| | | | |
|---|---|---|---|
| Lab ID: | L1301427-01 | Date Collected: | 01/15/13 15:00 |
| Client ID: | G-3A FILL COMP 6-14' | Date Received: | 01/23/13 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | | |

### Test Material Information

| | |
|---|---|
| Source of Material: | Unknown |
| Description of Material: | Non-Metallic - Damp Soil |
| Particle Size: | Medium |
| Preliminary Burning Time (sec): | 120 |

| Parameter | Result | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|
| Ignitability of Solids - Westborough Lab | | | | |
| Ignitability | NI | 01/24/13 10:05 | 1,1030 | DM |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1301427
**Report Date:** 01/29/13

## SAMPLE RESULTS

Lab ID: L1301427-01
Client ID: G-3A FILL COMP 6-14'
Sample Location: CHESTNUT HILL, MA
Matrix: Soil

Date Collected: 01/15/13 15:00
Date Received: 01/23/13
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| **General Chemistry - Westborough Lab** | | | | | | | | | | |
| Specific Conductance | 51 | | umhos/cm | 10 | -- | 1 | - | 01/24/13 12:15 | 1,9050A | JO |
| Solids, Total | 88 | | % | 0.10 | NA | 1 | - | 01/24/13 09:25 | 30,2540G | SD |
| pH | 8.5 | | SU | - | NA | 1 | - | 01/24/13 09:30 | 1,9045C | JO |
| Cyanide, Reactive | ND | | mg/kg | 10 | -- | 1 | 01/25/13 15:55 | 01/25/13 18:19 | 1,7.3 | TL |
| Sulfide, Reactive | ND | | mg/kg | 10 | -- | 1 | 01/25/13 15:55 | 01/25/13 18:26 | 1,7.3 | TL |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1301427
**Report Date:** 01/29/13

## SAMPLE RESULTS

Lab ID: L1301427-02
Client ID: G-3N3 S-6 10-12'
Sample Location: CHESTNUT HILL, MA
Matrix: Soil

Date Collected: 01/15/13 15:00
Date Received: 01/23/13
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab | | | | | | | | | | |
| Solids, Total | 92 | | % | 0.10 | NA | 1 | - | 01/24/13 09:25 | 30,2540G | SD |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1301427

**Project Number:** 5386.9.01 **Report Date:** 01/29/13

# Method Blank Analysis
## Batch Quality Control

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab for sample(s): 01 Batch: WG587117-1 | | | | | | | | | | |
| Cyanide, Reactive | ND | | mg/kg | 10 | -- | 1 | 01/25/13 15:55 | 01/25/13 18:18 | 1,7.3 | TL |
| General Chemistry - Westborough Lab for sample(s): 01 Batch: WG587118-1 | | | | | | | | | | |
| Sulfide, Reactive | ND | | mg/kg | 10 | -- | 1 | 01/25/13 15:55 | 01/25/13 18:25 | 1,7.3 | TL |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1301427
**Report Date:** 01/29/13

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG586798-1 | | | | | | | | |
| pH | 101 | | - | | 99-101 | - | | |
| General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG586823-1 | | | | | | | | |
| Specific Conductance | 94 | | - | | 80-120 | - | | |
| General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG587117-2 | | | | | | | | |
| Cyanide, Reactive | 36 | | - | | 30-125 | - | | 40 |
| General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG587118-2 | | | | | | | | |
| Sulfide, Reactive | 100 | | - | | 60-125 | - | | 40 |

# Lab Duplicate Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1301427
**Report Date:** 01/29/13

| Parameter | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG586796-1 QC Sample: L1301345-01 Client ID: DUP Sample | | | | | | |
| Solids, Total | 95 | 95 | % | 0 | | 20 |
| General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG586798-2 QC Sample: L1301453-01 Client ID: DUP Sample | | | | | | |
| pH | 8.1 | 8.1 | SU | 0 | | 5 |
| General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG586823-2 QC Sample: L1301393-01 Client ID: DUP Sample | | | | | | |
| Specific Conductance | ND | ND | umhos/cm | NC | | 20 |
| General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG587117-3 QC Sample: L1301455-10 Client ID: DUP Sample | | | | | | |
| Cyanide, Reactive | ND | ND | mg/kg | NC | | 40 |
| General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG587118-3 QC Sample: L1301455-10 Client ID: DUP Sample | | | | | | |
| Sulfide, Reactive | ND | ND | mg/kg | NC | | 40 |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1301427
**Report Date:** 01/29/13

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

**Reagent H2O Preserved Vials Frozen on:** NA

| Cooler Information | Custody Seal |
|---|---|
| Cooler | |
| A | Absent |

### Container Information

| Container ID | Container Type | Cooler | pH | Temp deg C | Pres | Seal | Analysis(*) |
|---|---|---|---|---|---|---|---|
| L1301427-01A | Amber 250ml unpreserved | A | N/A | 3 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1301427-01B | Amber 250ml unpreserved | A | N/A | 3 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1301427-01C | Amber 250ml unpreserved | A | N/A | 3 | Y | Absent | IGNIT-1030(14),MCP-8082-10(365),MCP-CR-6010T-10(180),REACTS(14),MCP-8270-10(14),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),TS(7),MCP-AG-6010T-10(180),PH-9045(1),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),REACTCN(14),TPH-DRO-D(14),COND-9050(28),MCP-PB-6010T-10(180) |
| L1301427-01X | Plastic 250ml HNO3 preserved spl | A | N/A | 3 | Y | Absent | PB-CI(180) |
| L1301427-02A | Vial MeOH preserved | A | N/A | 3 | Y | Absent | MCP-8260H-10(14) |

*Values in parentheses indicate holding time in days

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1301427
**Report Date:** 01/29/13

**Container Information**

| Container ID | Container Type | Cooler | pH | Temp deg C | Pres | Seal | Analysis(*) |
|---|---|---|---|---|---|---|---|
| L1301427-02B | Vial MeOH preserved | A | N/A | 3 | Y | Absent | MCP-8260H-10(14) |
| L1301427-02C | Plastic 2oz unpreserved for TS | A | N/A | 3 | Y | Absent | TS(7) |

*Values in parentheses indicate holding time in days

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1301427 |
| **Project Number:** | 5386.9.01 | **Report Date:** | 01/29/13 |

# GLOSSARY

### *Acronyms*

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

### *Footnotes*

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

### *Terms*

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

### *Data Qualifiers*

**A** - Spectra identified as "Aldol Condensation Product".

**B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.

**C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

**D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

**E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

**G** - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

**H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

**I** - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported

*Report Format:* Data Usability Report

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1301427 |
| **Project Number:** | 5386.9.01 | **Report Date:** | 01/29/13 |

***Data Qualifiers***

due to obvious interference.

**M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

**NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

**P** - The RPD between the results for the two columns exceeds the method-specified criteria.

**Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

**R** - Analytical results are from sample re-analysis.

**RE** - Analytical results are from sample re-extraction.

**J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

**ND** - Not detected at the reporting limit (RL) for the sample.

*Report Format:* Data Usability Report

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1301427
**Project Number:** 5386.9.01 **Report Date:** 01/29/13

## REFERENCES


1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.


## LIMITATION OF LIABILITIES

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

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

# Certificate/Approval Program Summary

Last revised December 19, 2012 - Westboro Facility

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

**Connecticut Department of Public Health** Certificate/Lab ID: PH-0574. ***NELAP Accredited Solid Waste/Soil.***

*Drinking Water* (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Selenium, Silver, Sodium, Thallium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223, Enumeration and P/A), E. Coli. – Colilert (SM9223, Enumeration and P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform-EC Medium (SM 9221E).

*Wastewater/Non-Potable Water* (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), E. Coli – Colilert (SM9223 Enumeration), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E), Enterococcus - Enterolert.

*Solid Waste/Soil* (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Dalapon, Volatile Organics (SW 8260), Acid Extractables (Phenols) (SW 8270), Benzidines (SW 8270), Phthalates (SW 8270), Nitrosamines (SW 8270), Nitroaromatics & Cyclic Ketones (SW 8270), PAHs (SW 8270), Haloethers (SW 8270), Chlorinated Hydrocarbons (SW 8270). )

**Maine Department of Human Services** Certificate/Lab ID: 2009024.
*Drinking Water* (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

*Wastewater/Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010B, 6010C, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223B, 9222D. Organic Parameters: 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8330, 8151A, 8260B, 8260C, 8270C, 8270D, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

*Solid Waste/Soil* (Inorganic Parameters: 9010B, 9012A, 9014, 9030B, 9040B, 9045C, 6010B, 6010C, 6020, 6020A, 7471A, 7471B, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8270D, 8330, 8151A, 8081A, 8081B, 8082, 8082A, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

**Massachusetts Department of Environmental Protection** Certificate/Lab ID: M-MA086.
*Drinking Water* (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

*Non-Potable Water (*Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT,Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

**New Hampshire Department of Environmental Services** Certificate/Lab ID: 200307. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, SW-846 6010C, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9010C, 9030, 9040B, 9040C, SM2120B, 2310B, 2320B, 2340B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 4500SO3-B, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D, 3060A. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082A, 8081B, 8015C, 8151A, 8330, 8270D-SIM.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846 6010C, 6020A, 7196A, 7471B, 1010, 1010A, 1030, 9010C, 9012B, 9014, 9030B, 9040C, 9045C, 9045D, 9050, 9065, 9251, 1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3050B, 3580A, 3620D, 3630C, 5030B, 5035, 8260C, 8270D, 8270D-SIM, 8330, 8151A, 8015B, 8015C, 8082A, 8081B.)

**New Jersey Department of Environmental Protection** Certificate/Lab ID: MA935. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.1, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM2520B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, SW-846 9040B, 9040C, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010C, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8011, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ EPH.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9030B, 1010, 1010A, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9010C, 9012B, 9014, 9038, 9040B, 9040C, 9045C, 9045D, 9050A, 9065, 9251. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3620C, 3630C, 5030B, 5035L, 5035H, NJ EPH.)

**New York Department of Health** Certificate/Lab ID: 11148. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water* (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010C, 9030B. Organic Parameters: EPA 624, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1010A, 1030, EPA 6010B, 6010C, 7196A, 7471A, 7471B, 9012B, 9014, 9065, 9050A, EPA 1311, 1312, 3005A, 3050B, 9010C, 9030B, 9040C, 9045D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8015B, 8015C, 8081A, 8081B, 8151A, 8330, 8082 8082A, 3540C,

3546, 3580A, 5030B, 5035A-H, 5035A-L.)

**North Carolina Department of the Environment and Natural Resources** Certificate/Lab ID : 666. (Inorganic Parameters: SM2310B, 2320B, 4500Cl-E, 4500Cn-E, 9014, Lachat 10-204-00-1-X, 1010A, 1030, 4500NO3-F, 353.2, 4500P-E, 4500SO4-E, 300.0, 4500S-D, 5310B, 5310C, 6010C, 6020A, 200.7, 200.8, 3500Cr-B, 7196A, 245.1, 7470A, 7471B, 1311,1312. Organic Parameters: 608, 8081B, 8082A, 624, 8260B, 625, 8270D, 8151A, 8015C, 504.1, MA-EPH, MA-VPH.)

*Drinking Water Program* Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

**Pennsylvania Department of Environmental Protection** Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: 200.7, 200.8, 300.0, 332.0, 2120B, 2320B, 2510B, 2540C, 4500-CN-CE, 4500F-C, 4500H+-B, 4500NO3-F, 5310C. Organic Parameters: EPA 524.2, 504.1)

*Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1312, 3005A,3015, 3060A, 200.7, 200.8, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE, 245.1, 300.0, 350.1, 350.2, 351.1, 353.2, 420.1, 6010C, 6020A, 7196A, 7470A, 9030B, 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500CN-CE, 4500Cl-E, 4500F-B, 4500F-C, 4500H+-B, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500S-D, 4500SO3-B, 5310BCD, 5540C, 9010C, 9040C. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, 8015C, NJ-EPH.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3005A, 3050B, 3060A, 6010C, 6020A, 7196A, 7471B, 9010C, 9012B, 9014, 9040B, 9045D, 9050A, 9065, SM 4500NH3-BH, 9030B, 9038, 9251. Organic Parameters: 3540C, 3546, 3580A, 3620C, 3630C, 5035, 8015C, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, NJ-EPH.)

**Rhode Island Department of Health** Certificate/Lab ID: LAO00065. ***NELAP Accredited via NJ-DEP.***
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

**Texas Commisson on Environmental Quality** Certificate/Lab ID: T104704476. ***NELAP Accredited.***
*Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S2¯D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

**Virginia Division of Consolidated Laboratory Services** Certificate/Lab ID: 460195. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: EPA 200.7, 200.8, 300.0, 2510B, 2120B, 2540C, 4500CN-CE, 245.2, 2320B, 4500F-C, 4500NO3-F, 5310C. Organic Parameters: EPA 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664A, 200.7, 200.8, 245.1, 300.0, 3005A, 3015, 1312, 6010B, 6010C, 3060A, 353.2, 420.1, 6020, 6020A, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X, 7196A, 7470A, 9010B, 9040B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500Cl-E, 4500F-B, 4500F-C, 4500PE, 510AC, 5210B, 5310B 5310C, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 8260B, 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, )

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1010A, 1030, 3060A, 3050B, 1311, 1312, 6010B, 6010C, 6020, , 7196A, 7471A, 7471B, 6020A, 9030B, 9010B, 9012A, 9014 9040B, 9045C, 9050A, 9065. Organic Parameters: EPA 5030B, 5035, 3540C, 3546, 355B0, 3580A, 3630C, 6020A, 8260B, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330.)

**Department of Defense, L-A-B** Certificate/Lab ID: L2217.
*Drinking Water* (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water* (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056, 7196A, 3500-Cr-D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 200.7, 6010B, 6010C, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 9012A, 9040B, 9045C, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8260C, 8270C,

8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

**The following analytes are not included in our current NELAP/TNI Scope of Accreditation:**
**EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix. **EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

# CHAIN OF CUSTODY

PAGE 1 OF 1 (1 of 3)

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 1/23/13

ALPHA Job #: L1301427

**Client Information**

Client: McPhail Associates LLC
Address: 2269 Mass. Ave, Cambridge, MA 02140
Phone: 617 868 1420
Fax:
Email: astone@mcphailgeo.com
☐ These samples have been previously analyzed by Alpha

**Project Information**

Project Name: St. Mary's Garage
Project Location: Chestnut Hill, MA
Project #: 5386.9.01
Project Manager: Andrew Stone
ALPHA Quote #:

**Turn-Around Time**

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 1/30/13 Time: 1700

**Report Information - Data Deliverables**

☐ FAX ☐ EMAIL
☒ ADEx ☐ Add'l Deliverables

**Billing Information**

☒ Same as Client info PO #:

**Regulatory Requirements/Report Limits**

State /Fed Program: MA / MCP Criteria: RCS-1

**MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO**

☒ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☒ No Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)
☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:
If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.
(Note: All *CAM* methods for inorganic analyses require MS every 20 soil samples)

SAMPLE HANDLING
Filtration ☐ Done ☐ Not needed ☐ Lab to do
Preservation ☐ Lab to do
(Please specify below)

| ALPHA Lab ID (Lab Use Only) | Sample ID | Collection Date | Collection Time | Sample Matrix | Sampler's Initials | Soil Management Assessment Pack IV | + TCLP Lead | Discrete for VOCs + Total Solids cont. | Sample Specific Comments | Total # Bottles |
|---|---|---|---|---|---|---|---|---|---|---|
| 01427.1 | G-3A Fill Comp 6-14' | 1/15/13 | 1500 | S | ADS | X | X | X | | 3 |
| 2 | | | | | | | X | X | | 3 |
| | | | | | | | | | | 6 |
| Container Type | | | | | | A | A | A | V | P |
| Preservative | | | | | | A | A | A | F | A |

**PLEASE ANSWER QUESTIONS ABOVE!**

IS YOUR PROJECT MA MCP or CT RCP?

| Relinquished By: | Date/Time | Received By: | Date/Time |
|---|---|---|---|
| [signature] | 1/23/13 16:00 | [signature] | 1-23-13 16:20 |
| [signature] | 1-23-13 17:13 | [signature] | 1/23/13 1730 |

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

FORM NO: 01-01 (rev. 18-Jan-2010)

# CHAIN OF CUSTODY

PAGE 1 OF 1 (1 of 3)

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 1/23/13

ALPHA Job #: L1301427

**Client Information**

Client: McPhail Associates LLC
Address: 2269 Mass. Ave, Cambridge, MA 02140
Phone: 617 868 1420
Fax:
Email: astone@mcphailgeo.com
☐ These samples have been previously analyzed by Alpha

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**Turn-Around Time**

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 1/30/13 Time: 1700

**Report Information - Data Deliverables**

☐ FAX ☐ EMAIL
☒ ADEx ☐ Add'l Deliverables

**Billing Information**

☒ Same as Client info PO #:

**Regulatory Requirements/Report Limits**

State /Fed Program: MA / MCP Criteria: RCS-1

**MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO**

☒ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☒ No Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)
☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:
If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.
(Note: All *CAM* methods for inorganic analyses require MS every 20 soil samples)

SAMPLE HANDLING
*Filtration*
☐ Done
☐ Not needed
☐ Lab to do
*Preservation*
☐ Lab to do
(Please specify below)

| ALPHA Lab ID (Lab Use Only) | Sample ID | Collection Date | Collection Time | Sample Matrix | Sampler's Initials | Soil Management Assessment Pack IV | + TCLP Lead | Discrete for VOCs + Total Solids cont. | Sample Specific Comments | Total # Bottles |
|---|---|---|---|---|---|---|---|---|---|---|
| 01427.1 | G-3A Fill Comp 6-14' | 1/15/13 | 1500 | S | ADS | X | X | X | | 3 |
| 2 | G-3N3 S-6 10-12' | " | " | " | " | | | X X | | 3 |
| | | | | | | | | | | 6 |

| | | | | | |
|---|---|---|---|---|---|
| Container Type | A | A | A | V | P |
| Preservative | A | A | A | F | A |

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

| Relinquished By: | Date/Time | Received By: | Date/Time |
|---|---|---|---|
| [signature] | 1/23/13 1600 | [signature] | 1-23-13 1600 |
| [signature] | 1-23-13 1713 | [signature] | 1/23/13 1730 |

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

FORM NO: 01-01 (rev. 18-Jan-2010)

7A
Volatile CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1301427

Instrument ID: Voa104.i  Calibration Date: 24-JAN-2013  Time: 13:12

Lab File ID: 0124C01  Init. Calib. Date(s): 08-JAN-2  08-JAN-2

Sample No: 8260 CCAL  Init. Calib. Times : 17:51  20:36

| Compound | RRF | RRF | MIN RRF | %D | MAX %D | |
|---|---|---|---|---|---|---|
| dichlorodifluoromethane | .26664 | .22201 | .1 | -17 | 20 | |
| chloromethane | .52176 | .48924 | .1 | -6 | 20 | |
| vinyl chloride | .38978 | .36645 | .1 | -6 | 20 | |
| bromomethane | .20295 | .17175 | .1 | -15 | 20 | |
| chloroethane | .1872 | .17685 | .1 | -6 | 20 | |
| trichlorofluoromethane | .34922 | .3043 | .1 | -13 | 20 | |
| ethyl ether | .13023 | .11849 | .05 | -9 | 20 | |
| 1,1,-dichloroethene | .23144 | .24538 | .1 | 6 | 20 | |
| carbon disulfide | .84487 | .83163 | .1 | -2 | 20 | |
| methylene chloride | .35477 | .32522 | .1 | -8 | 20 | |
| acetone | 100 | 126 | .1 | 26 | 20 | F |
| trans-1,2-dichloroethene | .2729 | .28289 | .1 | 4 | 20 | |
| methyl tert butyl ether | .76386 | .73069 | .1 | -4 | 20 | |
| Diisopropyl Ether | 1.2852 | 1.3332 | .05 | 4 | 20 | |
| 1,1-dichloroethane | .61701 | .62794 | .2 | 2 | 20 | |
| Ethyl-Tert-Butyl-Ether | 1.1825 | 1.1567 | .05 | -2 | 20 | |
| cis-1,2-dichloroethene | .30455 | .30561 | .1 | 0 | 20 | |
| 2,2-dichloropropane | .40538 | .40907 | .05 | 1 | 20 | |
| bromochloromethane | .14505 | .14055 | .05 | -3 | 20 | |
| chloroform | .50138 | .49686 | .2 | -1 | 20 | |
| carbontetrachloride | .38051 | .37283 | .1 | -2 | 20 | |
| tetrahydrofuran | .13059 | .13802 | .05 | 6 | 20 | |
| 1,1,1-trichloroethane | .44375 | .43867 | .1 | -1 | 20 | |
| 2-butanone | .17371 | .19099 | .1 | 10 | 20 | |
| 1,1-dichloropropene | .35739 | .37768 | .05 | 6 | 20 | |
| benzene | 1.0594 | 1.1108 | .5 | 5 | 20 | |
| Tertiary-Amyl Methyl Ether | .76174 | .74956 | .05 | -2 | 20 | |
| 1,2-dichloroethane | .4357 | .42465 | .1 | -3 | 20 | |
| trichloroethene | .29538 | .29795 | .2 | 1 | 20 | |
| dibromomethane | .17897 | .17351 | .05 | -3 | 20 | |
| 1,2-dichloropropane | .36073 | .35995 | .1 | 0 | 20 | |
| bromodichloromethane | .39821 | .37376 | .2 | -6 | 20 | |
| 1,4-dioxane | .00265 | .00353 | .05 | 34 | 20 | F |
| cis-1,3-dichloropropene | .46524 | .46118 | .2 | -1 | 20 | |
| toluene | .93466 | .91687 | .4 | -2 | 20 | |
| tetrachloroethene | .41172 | .38758 | .2 | -6 | 20 | |
| 4-methyl-2-pentanone | .14578 | .14557 | .1 | 0 | 20 | |
| trans-1,3-dichloropropene | .57388 | .52473 | .1 | -9 | 20 | |

FORM VII MCP-8260H-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1301427

Instrument ID: Voa104.i  Calibration Date: 24-JAN-2013  Time: 13:12

Lab File ID: 0124C01  Init. Calib. Date(s): 08-JAN-2  08-JAN-2

Sample No: 8260 CCAL  Init. Calib. Times : 17:51  20:36

| Compound | $\overline{RRF}$ | RRF | MIN RRF | %D | MAX %D |
|---|---|---|---|---|---|
| 1,1,2-trichloroethane | .27549 | .26778 | .1 | -3 | 20 |
| chlorodibromomethane | .43828 | .37841 | .1 | -14 | 20 |
| 1,3-dichloropropane | .54447 | .51926 | .05 | -5 | 20 |
| 1,2-dibromoethane | .35134 | .31861 | .1 | -9 | 20 |
| 2-hexanone | .35039 | .34185 | .1 | -2 | 20 |
| chlorobenzene | 1.0469 | 1.0085 | .5 | -4 | 20 |
| ethyl benzene | 1.7960 | 1.7535 | .1 | -2 | 20 |
| 1,1,1,2-tetrachloroethane | .39899 | .3556 | .05 | -11 | 20 |
| p/m xylene | .66238 | .65878 | .1 | -1 | 20 |
| o xylene | .64323 | .6329 | .3 | -2 | 20 |
| styrene | 1.0708 | 1.0638 | .3 | -1 | 20 |
| bromoform | .59657 | .49733 | .1 | -17 | 20 |
| isopropylbenzene | 3.4481 | 3.4474 | .1 | 0 | 20 |
| bromobenzene | .93763 | .86282 | .05 | -8 | 20 |
| n-propylbenzene | 4.0366 | 4.1099 | .05 | 2 | 20 |
| 1,1,2,2,-tetrachloroethane | .8785 | .85786 | .3 | -2 | 20 |
| 2-chlorotoluene | 2.6443 | 2.4751 | .05 | -6 | 20 |
| 1,2,3-trichloropropane | .67206 | .66861 | .05 | -1 | 20 |
| 1,3,5-trimethybenzene | 2.8981 | 2.8437 | .05 | -2 | 20 |
| 4-chorotoluene | 2.6015 | 2.5909 | .05 | 0 | 20 |
| tert-butylbenzene | 2.473 | 2.4235 | .05 | -2 | 20 |
| 1,2,4-trimethylbenzene | 2.9046 | 2.8183 | .05 | -3 | 20 |
| sec-butylbenzene | 3.6174 | 3.6648 | .05 | 1 | 20 |
| p-isopropyltoluene | 3.0334 | 3.0172 | .05 | -1 | 20 |
| 1,3-dichlorobenzene | 1.6717 | 1.6060 | .6 | -4 | 20 |
| 1,4-dichlorobenzene | 1.6971 | 1.6193 | .5 | -5 | 20 |
| n-butylbenzene | 2.8713 | 3.0040 | .05 | 5 | 20 |
| 1,2-dichlorobenzene | 1.5973 | 1.4917 | .4 | -7 | 20 |
| 1,2-dibromo-3-chloropropane | .17028 | .14857 | .05 | -13 | 20 |
| hexachlorobutadiene | .6266 | .55154 | .05 | -12 | 20 |
| 1,2,4-trichlorobenzene | 1.1844 | 1.0822 | .2 | -9 | 20 |
| naphthalene | 2.7996 | 2.5743 | .05 | -8 | 20 |
| 1,2,3-trichlorobenzene | 1.1110 | .9659 | .05 | -13 | 20 |
| dibromofluoromethane | .25156 | .24821 | .05 | -1 | 30 |
| 1,2-dichloroethane-d4 | .29537 | .29091 | .05 | -2 | 30 |
| toluene-d8 | 1.3115 | 1.2632 | .05 | -4 | 30 |
| 4-bromofluorobenzene | 1.0126 | 1.0461 | .05 | 3 | 30 |

FORM VII MCP-8260H-10

# ANALYTICAL REPORT

| | |
|---|---|
| Lab Number: | L1303922 |
| Client: | McPhail Associates<br>2269 Massachusetts Avenue<br>Cambridge, MA 02140 |
| ATTN: | Ambrose Donovan |
| Phone: | (617) 868-1420 |
| Project Name: | ST. MARY'S GARAGE |
| Project Number: | 5386.9.00 |
| Report Date: | 03/08/13 |

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

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1303922
**Report Date:** 03/08/13

| Alpha Sample ID | Client ID | Sample Location | Collection Date/Time |
|---|---|---|---|
| L1303922-01 | G-4 8-16' FILL COMP | CHESTNUT HILL, MA | 11/30/12 15:00 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1303922

**Project Number:** 5386.9.00 **Report Date:** 03/08/13

## MADEP MCP Response Action Analytical Report Certification

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

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

| **A response to questions G, H and I is required for "Presumptive Certainty" status** | | |
|---|---|---|
| G | Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)? | YES |
| H | Were all QC performance standards specified in the CAM protocol(s) achieved? | NO |
| I | Were results reported for the complete analyte list specified in the selected CAM protocol(s)? | NO |

**For any questions answered "No", please refer to the case narrative section on the following page(s).**

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

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1303922
**Project Number:** 5386.9.00 **Report Date:** 03/08/13

## Case Narrative

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

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

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

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

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

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

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1303922 |
| **Project Number:** | 5386.9.00 | **Report Date:** | 03/08/13 |

**Case Narrative (continued)**

MCP Related Narratives

Sample Receipt

In reference to question H:

A Matrix Spike was not submitted for the analysis of Metals.

Metals

In reference to question I:

All samples were analyzed for a subset of MCP elements per the Chain of Custody.

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

Authorized Signature: Cynthia McQueen

Title: Technical Director/Representative

Date: 03/08/13

# METALS

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1303922 |
| **Project Number:** | 5386.9.00 | **Report Date:** | 03/08/13 |

**SAMPLE RESULTS**

| | | | |
|---|---|---|---|
| Lab ID: | L1303922-01 | Date Collected: | 11/30/12 15:00 |
| Client ID: | G-4 8-16' FILL COMP | Date Received: | 12/06/12 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | | |
| Percent Solids: | 89% | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Prep Method | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **MCP Total Metals - Westborough Lab** | | | | | | | | | | | |
| Antimony, Total | ND | | mg/kg | 2.2 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:38 | EPA 3050B | 97,6010C | MG |
| Beryllium, Total | 0.32 | | mg/kg | 0.22 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:38 | EPA 3050B | 97,6010C | MG |
| Copper, Total | 16 | | mg/kg | 0.43 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:38 | EPA 3050B | 97,6010C | MG |
| Nickel, Total | 7.9 | | mg/kg | 1.1 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:38 | EPA 3050B | 97,6010C | MG |
| Thallium, Total | ND | | mg/kg | 2.2 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:38 | EPA 3050B | 97,6010C | MG |
| Zinc, Total | 33 | | mg/kg | 2.2 | -- | 1 | 12/11/12 11:09 | 12/11/12 18:38 | EPA 3050B | 97,6010C | MG |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1303922

**Project Number:** 5386.9.00 **Report Date:** 03/08/13

# Method Blank Analysis
# Batch Quality Control

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| MCP Total Metals - Westborough Lab for sample(s): 01 Batch: WG578661-1 | | | | | | | | | | |
| Antimony, Total | ND | | mg/kg | 2.0 | -- | 1 | 12/11/12 11:09 | 12/11/12 17:20 | 97,6010C | MG |
| Beryllium, Total | ND | | mg/kg | 0.20 | -- | 1 | 12/11/12 11:09 | 12/11/12 17:20 | 97,6010C | MG |
| Copper, Total | ND | | mg/kg | 0.40 | -- | 1 | 12/11/12 11:09 | 12/11/12 17:20 | 97,6010C | MG |
| Nickel, Total | ND | | mg/kg | 1.0 | -- | 1 | 12/11/12 11:09 | 12/11/12 17:20 | 97,6010C | MG |
| Thallium, Total | ND | | mg/kg | 2.0 | -- | 1 | 12/11/12 11:09 | 12/11/12 17:20 | 97,6010C | MG |
| Zinc, Total | ND | | mg/kg | 2.0 | -- | 1 | 12/11/12 11:09 | 12/11/12 17:20 | 97,6010C | MG |

**Prep Information**

Digestion Method: EPA 3050B

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1303922
**Report Date:** 03/08/13

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| MCP Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG578661-2 WG578661-3 SRM Lot Number: 0518-10-02 | | | | | | | | |
| Antimony, Total | 96 | | 96 | | 4-196 | 0 | | 30 |
| Beryllium, Total | 104 | | 104 | | 83-117 | 0 | | 30 |
| Copper, Total | 109 | | 101 | | 83-117 | 8 | | 30 |
| Nickel, Total | 99 | | 99 | | 82-117 | 0 | | 30 |
| Thallium, Total | 96 | | 101 | | 79-120 | 5 | | 30 |
| Zinc, Total | 100 | | 100 | | 82-119 | 0 | | 30 |

# INORGANICS
# &
# MISCELLANEOUS

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1303922
**Report Date:** 03/08/13

## SAMPLE RESULTS

Lab ID: L1303922-01
Client ID: G-4 8-16' FILL COMP
Sample Location: CHESTNUT HILL, MA
Matrix: Soil

Date Collected: 11/30/12 15:00
Date Received: 12/06/12
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab | | | | | | | | | | |
| Solids, Total | 89 | | % | 0.10 | NA | 1 | - | 12/09/12 09:24 | 30,2540G | TA |

# Lab Duplicate Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.00

**Lab Number:** L1303922
**Report Date:** 03/08/13

| Parameter | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG594165-1 QC Sample: L1303478-43 Client ID: DUP Sample | | | | | | |
| Solids, Total | 86 | 87 | % | 1 | | 20 |

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1303922 |
| **Project Number:** | 5386.9.00 | **Report Date:** | 03/08/13 |

# GLOSSARY

### *Acronyms*

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

### *Footnotes*

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

### *Terms*

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

### *Data Qualifiers*

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

*Report Format:* Data Usability Report

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1303922 |
| **Project Number:** | 5386.9.00 | **Report Date:** | 03/08/13 |

***Data Qualifiers***

due to obvious interference.

**M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

**NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

**P** - The RPD between the results for the two columns exceeds the method-specified criteria.

**Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

**R** - Analytical results are from sample re-analysis.

**RE** - Analytical results are from sample re-extraction.

**J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

**ND** - Not detected at the reporting limit (RL) for the sample.

*Report Format:* Data Usability Report

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1303922
**Project Number:** 5386.9.00 **Report Date:** 03/08/13

## REFERENCES

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

## LIMITATION OF LIABILITIES

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

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

# Certificate/Approval Program Summary

Last revised December 19, 2012 - Westboro Facility

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

**Connecticut Department of Public Health** Certificate/Lab ID: PH-0574. ***NELAP Accredited Solid Waste/Soil.***

*Drinking Water* (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Selenium, Silver, Sodium, Thallium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223, Enumeration and P/A), E. Coli. – Colilert (SM9223, Enumeration and P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform-EC Medium (SM 9221E).

*Wastewater/Non-Potable Water* (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), E. Coli – Colilert (SM9223 Enumeration), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E), Enterococcus - Enterolert.

*Solid Waste/Soil* (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Dalapon, Volatile Organics (SW 8260), Acid Extractables (Phenols) (SW 8270), Benzidines (SW 8270), Phthalates (SW 8270), Nitrosamines (SW 8270), Nitroaromatics & Cyclic Ketones (SW 8270), PAHs (SW 8270), Haloethers (SW 8270), Chlorinated Hydrocarbons (SW 8270). )

**Maine Department of Human Services** Certificate/Lab ID: 2009024.
*Drinking Water* (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

*Wastewater/Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010B, 6010C, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223B, 9222D. Organic Parameters: 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8330, 8151A, 8260B, 8260C, 8270C, 8270D, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

*Solid Waste/Soil* (Inorganic Parameters: 9010B, 9012A, 9014, 9030B, 9040B, 9045C, 6010B, 6010C, 6020, 6020A, 7471A, 7471B, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8270D, 8330, 8151A, 8081A, 8081B, 8082, 8082A, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

**Massachusetts Department of Environmental Protection** Certificate/Lab ID: M-MA086.
*Drinking Water* (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertOT SM9223B; MF-SM9222D.)

*Non-Potable Water (*Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT,Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

**New Hampshire Department of Environmental Services** Certificate/Lab ID: 200307. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, SW-846 6010C, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9010C, 9030, 9040B, 9040C, SM2120B, 2310B, 2320B, 2340B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 4500SO3-B, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D, 3060A. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082A, 8081B, 8015C, 8151A, 8330, 8270D-SIM.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846 6010C, 6020A, 7196A, 7471B, 1010, 1010A, 1030, 9010C, 9012B, 9014, 9030B, 9040C, 9045C, 9045D, 9050, 9065, 9251, 1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3050B, 3580A, 3620D, 3630C, 5030B, 5035, 8260C, 8270D, 8270D-SIM, 8330, 8151A, 8015B, 8015C, 8082A, 8081B.)

**New Jersey Department of Environmental Protection** Certificate/Lab ID: MA935. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.1, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM2520B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, SW-846 9040B, 9040C, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010C, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8011, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ EPH.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9030B, 1010, 1010A, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9010C, 9012B, 9014, 9038, 9040B, 9040C, 9045C, 9045D, 9050A, 9065, 9251. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3620C, 3630C, 5030B, 5035L, 5035H, NJ EPH.)

**New York Department of Health** Certificate/Lab ID: 11148. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water* (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010C, 9030B. Organic Parameters: EPA 624, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1010A, 1030, EPA 6010B, 6010C, 7196A, 7471A, 7471B, 9012B, 9014, 9065, 9050A, EPA 1311, 1312, 3005A, 3050B, 9010C, 9030B, 9040C, 9045D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8015B, 8015C, 8081A, 8081B, 8151A, 8330, 8082 8082A, 3540C,

3546, 3580A, 5030B, 5035A-H, 5035A-L.)

**North Carolina Department of the Environment and Natural Resources** Certificate/Lab ID : 666. (Inorganic Parameters: SM2310B, 2320B, 4500Cl-E, 4500Cn-E, 9014, Lachat 10-204-00-1-X, 1010A, 1030, 4500NO3-F, 353.2, 4500P-E, 4500SO4-E, 300.0, 4500S-D, 5310B, 5310C, 6010C, 6020A, 200.7, 200.8, 3500Cr-B, 7196A, 245.1, 7470A, 7471B, 1311,1312. Organic Parameters: 608, 8081B, 8082A, 624, 8260B, 625, 8270D, 8151A, 8015C, 504.1, MA-EPH, MA-VPH.)

*Drinking Water Program* Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

**Pennsylvania Department of Environmental Protection** Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: 200.7, 200.8, 300.0, 332.0, 2120B, 2320B, 2510B, 2540C, 4500-CN-CE, 4500F-C, 4500H+-B, 4500NO3-F, 5310C. Organic Parameters: EPA 524.2, 504.1)

*Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1312, 3005A,3015, 3060A, 200.7, 200.8, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE, 245.1, 300.0, 350.1, 350.2, 351.1, 353.2, 420.1, 6010C, 6020A, 7196A, 7470A, 9030B, 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500CN-CE, 4500Cl-E, 4500F-B, 4500F-C, 4500H+-B, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500S-D, 4500SO3-B, 5310BCD, 5540C, 9010C, 9040C. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, 8015C, NJ-EPH.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3005A, 3050B, 3060A, 6010C, 6020A, 7196A, 7471B, 9010C, 9012B, 9014, 9040B, 9045D, 9050A, 9065, SM 4500NH3-BH, 9030B, 9038, 9251. Organic Parameters: 3540C, 3546, 3580A, 3620C, 3630C, 5035, 8015C, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, NJ-EPH.)

**Rhode Island Department of Health** Certificate/Lab ID: LAO00065. ***NELAP Accredited via NJ-DEP.***
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

**Texas Commisson on Environmental Quality** Certificate/Lab ID: T104704476. ***NELAP Accredited.***
*Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 $S2^{-}$D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

**Virginia Division of Consolidated Laboratory Services** Certificate/Lab ID: 460195. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: EPA 200.7, 200.8, 300.0, 2510B, 2120B, 2540C, 4500CN-CE, 245.2, 2320B, 4500F-C, 4500NO3-F, 5310C. Organic Parameters: EPA 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664A, 200.7, 200.8, 245.1, 300.0, 3005A, 3015, 1312, 6010B, 6010C, 3060A, 353.2, 420.1, 6020, 6020A, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X, 7196A, 7470A, 9010B, 9040B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500Cl-E, 4500F-B, 4500F-C, 4500PE, 510AC, 5210B, 5310B 5310C, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 8260B, 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, )

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1010A, 1030, 3060A, 3050B, 1311, 1312, 6010B, 6010C, 6020, , 7196A, 7471A, 7471B, 6020A, 9030B, 9010B, 9012A, 9014 9040B, 9045C, 9050A, 9065. Organic Parameters: EPA 5030B, 5035, 3540C, 3546, 355B0, 3580A, 3630C, 6020A, 8260B, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330.)

**Department of Defense, L-A-B** Certificate/Lab ID: L2217.
*Drinking Water* (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water* (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056, 7196A, 3500-Cr-D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 200.7, 6010B, 6010C, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 9012A, 9040B, 9045C, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8260C, 8270C,

8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

**The following analytes are not included in our current NELAP/TNI Scope of Accreditation:**
**EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix. **EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

L1303922

# CHAIN OF CUSTODY

PAGE 4 OF 4

4/5

ALPHA ANALYTICAL

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193

Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 12/6/12 ALPHA Job #: L1222913

## Client Information

Client: McPhail Associates, LLC

Address: 2269 Massachusetts Ave.

Cambridge, MA 02140

Phone: 617 868 1420 x 325

Fax:

Email: astone@mcphailgeo.com

☐ These samples have been Previously analyzed by Alpha

## Project Information

Project Name: St. Mary's Garage

Project Location: Chestnut Hill, MA

Project #: 5386.9.00

Project Manager: Andrew Stone

ALPHA Quote #:

## Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: ~~12/13~~ 3/8/13 Time:

## Report Information

☐ FAX ☐ EMAIL

☒ ADEx ☐ Add'l Deliverables

## Data Deliverables

## Billing Information

☒ Same as Client info PO #:

## Regulatory Requirements/Report Limits

State/Fed Program MA MCP Criteria RCS-1

## MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

| | | |
|---|---|---|
| ☒ Yes | ☐ No | Are MCP Analytical Methods Required? |
| ☐ Yes | ☒ No | Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments) |
| ☐ Yes | ☒ No | Are CT RCP (Reasonable Confidence Protocols) Required? |

Other Project Specific Requirements/Comments/Detection Limits:
(If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed. (Note: All CAM methods for inorganic analyses require MS every 20 soil samples)

## ANALYSIS

SAMPLE HANDLING
*Filtration*
☐ Done
☐ Not Needed
☐ Lab to do
*Preservation*
☐ Lab to do
*(Please specify below)*

| ALPHA Lab ID (Lab Use Only) | Sample ID | Collection Date | Collection Time | Sample Matrix | Sampler's Initials | Soil Disposal Pack IV | VOC 8260 High Discrete | ~~Total Solids~~ | Be, Cu, Sb, Ni, Tl, Zn | | | | | | | | | Sample Specific Comments | TOTAL # BOTTLES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32713-15 | G-4 0-8' FILL COMP | 11/30 | 15:00 | S | ADS | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| 03922-16 | G-4 S-2 2-4' | 11/27 | 14:00 | S | NTD | ☐ | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| 1-17 | G-4 8-16' FILL COMP | 11/30 | 15:00 | S | ADS | ☒ | ☐ | ☐ | ☐ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| 1-18 | G-4 S-5 8-10' | 11/27 | 15:00 | S | NTD | ☐ | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | 3 |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | | |
| | | | | | | Container Type | A | V | P | - | - | - | - | - | - | - | - | | |
| | | | | | | Preservative | A | F | A | - | - | - | - | - | - | - | - | | |

**PLEASE ANSWER QUESTIONS ABOVE!**

**IS YOUR PROJECT MA MCP or CT RCP?**

FORM NO: 01-01(I) (rev. 20-JAN-2010)

| Relinquished By: | Date/Time | Received By: | Date/Time |
|---|---|---|---|
| | 12/6 15:30 | | 12/6/12 16:10 |
| | 12/6/12 1750 | | 12/6/12 17:50 |

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

Laboratory Testing Data
Delineation Sample(s)

# ANALYTICAL REPORT

| | |
|---|---|
| Lab Number: | L1300898 |
| Client: | McPhail Associates<br>2269 Massachusetts Avenue<br>Cambridge, MA 02140 |
| ATTN: | Ambrose Donovan |
| Phone: | (617) 868-1420 |
| Project Name: | ST. MARY'S GARAGE |
| Project Number: | 5386.9.01 |
| Report Date: | 01/18/13 |

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

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1300898
**Report Date:** 01/18/13

| Alpha Sample ID | Client ID | Sample Location | Collection Date/Time |
|---|---|---|---|
| ~~L1300898-01~~ | ~~G-3 E1 COMP~~ | ~~CHESTNUT HILL, MA~~ | ~~01/15/13 09:00~~ |
| L1300898-02 | G-3 N1 COMP | CHESTNUT HILL, MA | 01/15/13 11:00 |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1300898

**Project Number:** 5386.9.01 **Report Date:** 01/18/13

## MADEP MCP Response Action Analytical Report Certification

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

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

| **A response to questions G, H and I is required for "Presumptive Certainty" status** | | |
|---|---|---|
| G | Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)? | YES |
| H | Were all QC performance standards specified in the CAM protocol(s) achieved? | NO |
| I | Were results reported for the complete analyte list specified in the selected CAM protocol(s)? | NO |

**For any questions answered "No", please refer to the case narrative section on the following page(s).**

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

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1300898
**Project Number:** 5386.9.01 **Report Date:** 01/18/13

## Case Narrative

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

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

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

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

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

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

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1300898
**Project Number:** 5386.9.01 **Report Date:** 01/18/13

**Case Narrative (continued)**

MCP Related Narratives

Sample Receipt

In reference to question H:

A Matrix Spike was not submitted for the analysis of Total Metals.

Total Metals

In reference to question H:

The WG585666-2 LCS recovery, associated with L1300898-01 and -02, is below the acceptance criteria for Lead (78%). Re-analysis of the LCS yielded an unacceptable recovery of 77%. The LCSD recovery was within acceptance criteria; therefore, no further action was taken.

In reference to question I:

All samples were analyzed for a subset of MCP elements per the Chain of Custody.

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

Authorized Signature: Kelly Stenstrom

Title: Technical Director/Representative Date: 01/18/13

# METALS

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1300898 |
| **Project Number:** | 5386.9.01 | **Report Date:** | 01/18/13 |

**SAMPLE RESULTS**

| | | | |
|---|---|---|---|
| Lab ID: | L1300898-02 | Date Collected: | 01/15/13 11:00 |
| Client ID: | G-3 N1 COMP | Date Received: | 01/15/13 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | TCLP/SPLP Ext. Date: | 01/16/13 14:29 |
| Percent Solids: | 84% | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Prep Method | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLP Metals by EPA 1311 - Westborough Lab | | | | | | | | | | | |
| Lead, TCLP | 0.60 | | mg/l | 0.50 | -- | 1 | 01/17/13 10:17 | 01/17/13 13:56 | EPA 3015 | 1,6010C | KL |

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1300898 |
| **Project Number:** | 5386.9.01 | **Report Date:** | 01/18/13 |

**SAMPLE RESULTS**

| | | | |
|---|---|---|---|
| Lab ID: | L1300898-02 | Date Collected: | 01/15/13 11:00 |
| Client ID: | G-3 N1 COMP | Date Received: | 01/15/13 |
| Sample Location: | CHESTNUT HILL, MA | Field Prep: | Not Specified |
| Matrix: | Soil | TCLP/SPLP Ext. Date: | |
| Percent Solids: | 84% | | |

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Prep Method | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MCP Total Metals - Westborough Lab | | | | | | | | | | | |
| Lead, Total | 460 | | mg/kg | 4.7 | -- | 2 | 01/18/13 09:35 | 01/18/13 14:43 | EPA 3050B | 97,6010C | KL |

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1300898

**Project Number:** 5386.9.01 **Report Date:** 01/18/13

# Method Blank Analysis
# Batch Quality Control

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| TCLP Metals by EPA 1311 - Westborough Lab for sample(s): 01-02 Batch: WG585418-1 | | | | | | | | | | |
| Lead, TCLP | ND | | mg/l | 0.50 | -- | 1 | 01/17/13 10:17 | 01/17/13 13:05 | 1,6010C | KL |

**Prep Information**

Digestion Method: EPA 3015

TCLP/SPLP Extraction Date: 01/16/13 14:29

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| MCP Total Metals - Westborough Lab for sample(s): 01-02 Batch: WG585666-1 | | | | | | | | | | |
| Lead, Total | ND | | mg/kg | 2.0 | -- | 1 | 01/18/13 09:35 | 01/18/13 14:28 | 97,6010C | KL |

**Prep Information**

Digestion Method: EPA 3050B

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1300898
**Report Date:** 01/18/13

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| TCLP Metals by EPA 1311 - Westborough Lab Associated sample(s): 01-02 Batch: WG585418-2 | | | | | | | | |
| Lead, TCLP | 92 | | - | | 75-125 | - | | 20 |
| MCP Total Metals - Westborough Lab Associated sample(s): 01-02 Batch: WG585666-2 WG585666-3 SRM Lot Number: 0518-10-02 | | | | | | | | |
| Lead, Total | **78** | Q | 101 | | 80-120 | 26 | | 30 |

# Matrix Spike Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1300898
**Report Date:** 01/18/13

| Parameter | Native Sample | MS Added | MS Found | MS %Recovery | Qual | MSD Found | MSD %Recovery | Qual | Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLP Metals by EPA 1311 - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG585418-4 QC Sample: L1300921-03 Client ID: MS Sample | | | | | | | | | | | | |
| Lead, TCLP | ND | 5.1 | 4.7 | 92 | | - | - | | 75-125 | - | | 20 |

# Lab Duplicate Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1300898
**Report Date:** 01/18/13

| Parameter | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|
| TCLP Metals by EPA 1311 - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG585418-3 QC Sample: L1300921-03 Client ID: DUP Sample | | | | | | |
| Lead, TCLP | ND | ND | mg/l | NC | | 20 |

# INORGANICS
# &
# MISCELLANEOUS

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1300898
**Report Date:** 01/18/13

## SAMPLE RESULTS

Lab ID: L1300898-02
Client ID: G-3 N1 COMP
Sample Location: CHESTNUT HILL, MA
Matrix: Soil

Date Collected: 01/15/13 11:00
Date Received: 01/15/13
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| **General Chemistry - Westborough Lab** | | | | | | | | | | |
| Solids, Total | 84 | | % | 0.10 | NA | 1 | - | 01/17/13 11:20 | 30,2540G | SD |

# Lab Duplicate Analysis
## Batch Quality Control

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1300898
**Report Date:** 01/18/13

| Parameter | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG585462-1 QC Sample: L1300806-22 Client ID: DUP Sample | | | | | | |
| Solids, Total | 75 | 76 | % | 1 | | 20 |

**Project Name:** ST. MARY'S GARAGE
**Project Number:** 5386.9.01

**Lab Number:** L1300898
**Report Date:** 01/18/13

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

**Reagent H2O Preserved Vials Frozen on:** NA

**Cooler Information Custody Seal**

| Cooler | |
|---|---|
| A | Absent |

**Container Information**

| Container ID | Container Type | Cooler | pH | Temp deg C | Pres | Seal | Analysis(*) |
|---|---|---|---|---|---|---|---|
| L1300898-01A | Amber 250ml unpreserved | A | N/A | 4 | Y | Absent | TS(7),MCP-PB-6010T-10(180) |
| L1300898-01X | Plastic 250ml HNO3 preserved spl | A | <2 | 4 | Y | Absent | PB-CI(180) |
| L1300898-02A | Amber 250ml unpreserved | A | N/A | 4 | Y | Absent | TS(7),MCP-PB-6010T-10(180) |
| L1300898-02X | Plastic 250ml HNO3 preserved spl | A | <2 | 4 | Y | Absent | PB-CI(180) |

*Values in parentheses indicate holding time in days

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1300898 |
| **Project Number:** | 5386.9.01 | **Report Date:** | 01/18/13 |

# GLOSSARY

### *Acronyms*

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

### *Footnotes*

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

### *Terms*

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

### *Data Qualifiers*

**A** - Spectra identified as "Aldol Condensation Product".

**B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.

**C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

**D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

**E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

**G** - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

**H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

**I** - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported

*Report Format:* Data Usability Report

| | | | |
|---|---|---|---|
| **Project Name:** | ST. MARY'S GARAGE | **Lab Number:** | L1300898 |
| **Project Number:** | 5386.9.01 | **Report Date:** | 01/18/13 |

***Data Qualifiers***

due to obvious interference.

**M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

**NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

**P** - The RPD between the results for the two columns exceeds the method-specified criteria.

**Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

**R** - Analytical results are from sample re-analysis.

**RE** - Analytical results are from sample re-extraction.

**J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

**ND** - Not detected at the reporting limit (RL) for the sample.

*Report Format:* Data Usability Report

**Project Name:** ST. MARY'S GARAGE **Lab Number:** L1300898
**Project Number:** 5386.9.01 **Report Date:** 01/18/13

## REFERENCES


1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.


## LIMITATION OF LIABILITIES

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

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

# Certificate/Approval Program Summary

Last revised December 19, 2012 - Westboro Facility

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

**Connecticut Department of Public Health** Certificate/Lab ID: PH-0574. ***NELAP Accredited Solid Waste/Soil.***

*Drinking Water* (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Selenium, Silver, Sodium, Thallium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223, Enumeration and P/A), E. Coli. – Colilert (SM9223, Enumeration and P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform-EC Medium (SM 9221E).

*Wastewater/Non-Potable Water* (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), E. Coli – Colilert (SM9223 Enumeration), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E), Enterococcus - Enterolert.

*Solid Waste/Soil* (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Dalapon, Volatile Organics (SW 8260), Acid Extractables (Phenols) (SW 8270), Benzidines (SW 8270), Phthalates (SW 8270), Nitrosamines (SW 8270), Nitroaromatics & Cyclic Ketones (SW 8270), PAHs (SW 8270), Haloethers (SW 8270), Chlorinated Hydrocarbons (SW 8270). )

**Maine Department of Human Services** Certificate/Lab ID: 2009024.
*Drinking Water* (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

*Wastewater/Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010B, 6010C, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223B, 9222D. Organic Parameters: 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8330, 8151A, 8260B, 8260C, 8270C, 8270D, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

*Solid Waste/Soil* (Inorganic Parameters: 9010B, 9012A, 9014, 9030B, 9040B, 9045C, 6010B, 6010C, 6020, 6020A, 7471A, 7471B, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8270D, 8330, 8151A, 8081A, 8081B, 8082, 8082A, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

**Massachusetts Department of Environmental Protection** Certificate/Lab ID: M-MA086.
*Drinking Water* (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertOT SM9223B; MF-SM9222D.)

*Non-Potable Water (*Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT,Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

**New Hampshire Department of Environmental Services** Certificate/Lab ID: 200307. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, SW-846 6010C, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9010C, 9030, 9040B, 9040C, SM2120B, 2310B, 2320B, 2340B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 4500SO3-B, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D, 3060A. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082A, 8081B, 8015C, 8151A, 8330, 8270D-SIM.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846 6010C, 6020A, 7196A, 7471B, 1010, 1010A, 1030, 9010C, 9012B, 9014, 9030B, 9040C, 9045C, 9045D, 9050, 9065, 9251, 1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3050B, 3580A, 3620D, 3630C, 5030B, 5035, 8260C, 8270D, 8270D-SIM, 8330, 8151A, 8015B, 8015C, 8082A, 8081B.)

**New Jersey Department of Environmental Protection** Certificate/Lab ID: MA935. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.1, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM2520B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, SW-846 9040B, 9040C, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010C, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8011, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ EPH.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9030B, 1010, 1010A, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9010C, 9012B, 9014, 9038, 9040B, 9040C, 9045C, 9045D, 9050A, 9065, 9251. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3620C, 3630C, 5030B, 5035L, 5035H, NJ EPH.)

**New York Department of Health** Certificate/Lab ID: 11148. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water* (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010C, 9030B. Organic Parameters: EPA 624, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1010A, 1030, EPA 6010B, 6010C, 7196A, 7471A, 7471B, 9012B, 9014, 9065, 9050A, EPA 1311, 1312, 3005A, 3050B, 9010C, 9030B, 9040C, 9045D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8015B, 8015C, 8081A, 8081B, 8151A, 8330, 8082 8082A, 3540C,

3546, 3580A, 5030B, 5035A-H, 5035A-L.)

**North Carolina Department of the Environment and Natural Resources** Certificate/Lab ID : 666. (Inorganic Parameters: SM2310B, 2320B, 4500Cl-E, 4500Cn-E, 9014, Lachat 10-204-00-1-X, 1010A, 1030, 4500NO3-F, 353.2, 4500P-E, 4500SO4-E, 300.0, 4500S-D, 5310B, 5310C, 6010C, 6020A, 200.7, 200.8, 3500Cr-B, 7196A, 245.1, 7470A, 7471B, 1311,1312. Organic Parameters: 608, 8081B, 8082A, 624, 8260B, 625, 8270D, 8151A, 8015C, 504.1, MA-EPH, MA-VPH.)

*Drinking Water Program* Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

**Pennsylvania Department of Environmental Protection** Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: 200.7, 200.8, 300.0, 332.0, 2120B, 2320B, 2510B, 2540C, 4500-CN-CE, 4500F-C, 4500H+-B, 4500NO3-F, 5310C. Organic Parameters: EPA 524.2, 504.1)

*Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1312, 3005A,3015, 3060A, 200.7, 200.8, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE, 245.1, 300.0, 350.1, 350.2, 351.1, 353.2, 420.1, 6010C, 6020A, 7196A, 7470A, 9030B, 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500CN-CE, 4500Cl-E, 4500F-B, 4500F-C, 4500H+-B, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500S-D, 4500SO3-B, 5310BCD, 5540C, 9010C, 9040C. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, 8015C, NJ-EPH.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3005A, 3050B, 3060A, 6010C, 6020A, 7196A, 7471B, 9010C, 9012B, 9014, 9040B, 9045D, 9050A, 9065, SM 4500NH3-BH, 9030B, 9038, 9251. Organic Parameters: 3540C, 3546, 3580A, 3620C, 3630C, 5035, 8015C, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, NJ-EPH.)

**Rhode Island Department of Health** Certificate/Lab ID: LAO00065. ***NELAP Accredited via NJ-DEP.***
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

**Texas Commisson on Environmental Quality** Certificate/Lab ID: T104704476. ***NELAP Accredited.***
*Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 $S2^{-}$D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

**Virginia Division of Consolidated Laboratory Services** Certificate/Lab ID: 460195. ***NELAP Accredited.***
*Drinking Water* (Inorganic Parameters: EPA 200.7, 200.8, 300.0, 2510B, 2120B, 2540C, 4500CN-CE, 245.2, 2320B, 4500F-C, 4500NO3-F, 5310C. Organic Parameters: EPA 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664A, 200.7, 200.8, 245.1, 300.0, 3005A, 3015, 1312, 6010B, 6010C, 3060A, 353.2, 420.1, 6020, 6020A, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X, 7196A, 7470A, 9010B, 9040B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500Cl-E, 4500F-B, 4500F-C, 4500PE, 510AC, 5210B, 5310B 5310C, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 8260B, 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, )

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1010A, 1030, 3060A, 3050B, 1311, 1312, 6010B, 6010C, 6020, , 7196A, 7471A, 7471B, 6020A, 9030B, 9010B, 9012A, 9014 9040B, 9045C, 9050A, 9065. Organic Parameters: EPA 5030B, 5035, 3540C, 3546, 355B0, 3580A, 3630C, 6020A, 8260B, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330.)

**Department of Defense, L-A-B** Certificate/Lab ID: L2217.
*Drinking Water* (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water* (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056, 7196A, 3500-Cr-D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 200.7, 6010B, 6010C, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 9012A, 9040B, 9045C, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8260C, 8270C,

8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

**The following analytes are not included in our current NELAP/TNI Scope of Accreditation:**
**EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix. **EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

# CHAIN OF CUSTODY

PAGE 1 OF 1

3 of 3

ALPHA ANALYTICAL

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193

MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 1/15/13

ALPHA Job #: L1300898

## Client Information

Client: McPhail Associates LLC

Address: 2269 Mass. Ave, Cambridge, MA 02140

Phone: 617 868 1420

Fax:

Email: astone@mcphailgeo.com

☐ These samples have been previously analyzed by Alpha

## Project Information

Project Name: St. Mary's Garage

Project Location: Chestnut Hill, MA

Project #: 5386.9.01

Project Manager: Andrew Stone

ALPHA Quote #:

## Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 1/22/13 Time: 1700

## Report Information - Data Deliverables

☐ FAX ☐ EMAIL

☒ ADEx ☐ Add'l Deliverables

## Billing Information

☐ Same as Client info PO #:

## Regulatory Requirements/Report Limits

State /Fed Program MA / MCP Criteria RCS-1

## MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO

☒ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☒ No Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)

☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

## Other Project Specific Requirements/Comments/Detection Limits:

If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.
(Note: All *CAM* methods for inorganic analyses require MS every 20 soil samples)

SAMPLE HANDLING

*Filtration*
☐ Done
☐ Not needed
☐ Lab to do

*Preservation*
☐ Lab to do
(Please specify below)

| ALPHA Lab ID (Lab Use Only) | Sample ID | Collection Date | Collection Time | Sample Matrix | Sampler's Initials | TOTAL LEAD | TCLP LEAD | Sample Specific Comments | TOTAL # BOTTLES |
|---|---|---|---|---|---|---|---|---|---|
| 00898-01 | G-3E1 COMP | 1/15 | 900 | S | ADS | X | X | | 1 |
| | | | | | | | | | 1 |
| 02 | G-3N1 COMP | 1/15 | 1100 | S | ADS | X | X | | 1 |
| | | | | | | | | | 2 |

| | | |
|---|---|---|
| Container Type | A | A |
| Preservative | A | A |

**PLEASE ANSWER QUESTIONS ABOVE!**

IS YOUR PROJECT MA MCP *or* CT RCP?

| Relinquished By: | Date/Time | Received By: | Date/Time |
|---|---|---|---|
| [signature] | 1/15 1500 | [signature] | 1-15-13 15:55 |
| [signature] | 1-15-13 18:10 | [signature] | 1/15/13 1810 |

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

FORM NO: 01-01 (rev. 18-Jan-2010)

Serial_No:01181319:07