# ANALYTICAL REPORT

| | |
|---|---|
| Lab Number: | L1722530 |
| Client: | Hazard Evaluations, Inc.<br>3636 North Buffalo Road<br>Orchard Park, NY 14127 |
| ATTN: | Michele Wittman |
| Phone: | (716) 667-3130 |
| Project Name: | PH. II ESA |
| Project Number: | E1641 |
| Report Date: | 07/10/17 |



Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

| Alpha Sample ID | Client ID | Matrix | Sample Location | Collection Date/Time | Receive Date |
|---|---|---|---|---|---|
| L1722530-01 | SB9 | WATER | 124&145 CHANDLER ST., BUFFALO, NY | 06/29/17 15:45 | 06/30/17 |
| L1722530-02 | SB1 (0-2.5') | SOIL | 124&145 CHANDLER ST., BUFFALO, NY | 06/29/17 09:00 | 06/30/17 |
| L1722530-03 | SB2 (0-2.5') | SOIL | 124&145 CHANDLER ST., BUFFALO, NY | 06/29/17 09:20 | 06/30/17 |
| L1722530-04 | SB3 (1-5') | SOIL | 124&145 CHANDLER ST., BUFFALO, NY | 06/29/17 09:50 | 06/30/17 |
| L1722530-05 | SB5 (0-4') | SOIL | 124&145 CHANDLER ST., BUFFALO, NY | 06/29/17 11:05 | 06/30/17 |
| L1722530-06 | SB6 (0-2') | SOIL | 124&145 CHANDLER ST., BUFFALO, NY | 06/29/17 13:20 | 06/30/17 |
| L1722530-07 | SB7 (1-5') | SOIL | 124&145 CHANDLER ST., BUFFALO, NY | 06/29/17 13:40 | 06/30/17 |
| L1722530-08 | SB9 (0-4') | SOIL | 124&145 CHANDLER ST., BUFFALO, NY | 06/29/17 14:20 | 06/30/17 |
| L1722530-09 | SB11 (0-2.5') | SOIL | 124&145 CHANDLER ST., BUFFALO, NY | 06/29/17 15:00 | 06/30/17 |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

## 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 NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. 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. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. 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. All specific QC 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. 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 (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar 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. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

**Project Name:** PH. II ESA **Lab Number:** L1722530
**Project Number:** E1641 **Report Date:** 07/10/17

**Case Narrative (continued)**

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

Any reported concentrations that are below 200 ug/kg may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

Semivolatile Organics

L1722530-02: The sample has elevated detection limits due to the dilution required by the sample matrix.
L1722530-06: The sample 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.
L1722530-06: The surrogate recoveries are below the acceptance criteria for 2-fluorophenol (0%), phenol-d6 (0%), nitrobenzene-d5 (0%), 2-fluorobiphenyl (0%), 2,4,6-tribromophenol (0%) and 4-terphenyl-d14 (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

Semivolatile Organics by SIM

The WG1019446-2 LCS recoveries, associated with L1722530-01, were outside the individual acceptance criteria for acenaphthene (17%), 2-chloronaphthalene (18%), fluoranthene (20%), hexachlorobutadiene (18%), naphthalene (15%), benzo(a)anthracene (22%), benzo(a)pyrene (34%), benzo(b)fluoranthene (34%), benzo(k)fluoranthene (34%), chrysene (22%), acenaphthylene (18%), anthracene (18%), fluorene (19%), phenanthrene (17%), pyrene (20%), 2-methylnaphthalene (16%), hexachlorobenzene (21%) and hexachloroethane (15%); however, re-extraction could not be performed due to lack of additional sample.

Total Metals

L1722530-03 through -06, -08, and -09: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

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: 07/10/17

# ORGANICS

# VOLATILES

**Project Name:** PH. II ESA
**Project Number:** E1641
**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-01
Client ID: SB9
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY
Date Collected: 06/29/17 15:45
Date Received: 06/30/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/06/17 16:04
Analyst: NL

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Methylene chloride | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,1-Dichloroethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Chloroform | ND | | ug/l | 2.5 | 0.70 | 1 |
| Carbon tetrachloride | ND | | ug/l | 0.50 | 0.13 | 1 |
| 1,2-Dichloropropane | ND | | ug/l | 1.0 | 0.14 | 1 |
| Dibromochloromethane | ND | | ug/l | 0.50 | 0.15 | 1 |
| 1,1,2-Trichloroethane | ND | | ug/l | 1.5 | 0.50 | 1 |
| Tetrachloroethene | ND | | ug/l | 0.50 | 0.18 | 1 |
| Chlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Trichlorofluoromethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2-Dichloroethane | ND | | ug/l | 0.50 | 0.13 | 1 |
| 1,1,1-Trichloroethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Bromodichloromethane | ND | | ug/l | 0.50 | 0.19 | 1 |
| trans-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.16 | 1 |
| cis-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.14 | 1 |
| Bromoform | ND | | ug/l | 2.0 | 0.65 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/l | 0.50 | 0.17 | 1 |
| Benzene | 0.16 | J | ug/l | 0.50 | 0.16 | 1 |
| Toluene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Ethylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Chloromethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Bromomethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Vinyl chloride | ND | | ug/l | 1.0 | 0.07 | 1 |
| Chloroethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,1-Dichloroethene | ND | | ug/l | 0.50 | 0.17 | 1 |
| trans-1,2-Dichloroethene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Trichloroethene | ND | | ug/l | 0.50 | 0.18 | 1 |
| 1,2-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,3-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,4-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |

**Project Name:** PH. II ESA **Lab Number:** L1722530

**Project Number:** E1641 **Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-01 Date Collected: 06/29/17 15:45

Client ID: SB9 Date Received: 06/30/17

Sample Location: 124&145 CHANDLER ST., BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Methyl tert butyl ether | ND | | ug/l | 2.5 | 0.70 | 1 |
| p/m-Xylene | ND | | ug/l | 2.5 | 0.70 | 1 |
| o-Xylene | ND | | ug/l | 2.5 | 0.70 | 1 |
| cis-1,2-Dichloroethene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Styrene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Dichlorodifluoromethane | ND | | ug/l | 5.0 | 1.0 | 1 |
| Acetone | 26 | | ug/l | 5.0 | 1.5 | 1 |
| Carbon disulfide | ND | | ug/l | 5.0 | 1.0 | 1 |
| 2-Butanone | 5.4 | | ug/l | 5.0 | 1.9 | 1 |
| 4-Methyl-2-pentanone | ND | | ug/l | 5.0 | 1.0 | 1 |
| 2-Hexanone | ND | | ug/l | 5.0 | 1.0 | 1 |
| Bromochloromethane | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2-Dibromoethane | ND | | ug/l | 2.0 | 0.65 | 1 |
| n-Butylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| sec-Butylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/l | 2.5 | 0.70 | 1 |
| Isopropylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| p-Isopropyltoluene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Naphthalene | ND | | ug/l | 2.5 | 0.70 | 1 |
| n-Propylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| 1,2,4-Trimethylbenzene | ND | | ug/l | 2.5 | 0.70 | 1 |
| Methyl Acetate | ND | | ug/l | 2.0 | 0.23 | 1 |
| Cyclohexane | ND | | ug/l | 10 | 0.27 | 1 |
| 1,4-Dioxane | ND | | ug/l | 250 | 61. | 1 |
| Freon-113 | ND | | ug/l | 2.5 | 0.70 | 1 |
| Methyl cyclohexane | ND | | ug/l | 10 | 0.40 | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 97 | | 70-130 |
| Toluene-d8 | 99 | | 70-130 |
| 4-Bromofluorobenzene | 101 | | 70-130 |
| Dibromofluoromethane | 99 | | 70-130 |

**Project Name:** PH. II ESA
**Lab Number:** L1722530
**Project Number:** E1641
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-04
Client ID: SB3 (1-5')
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY

Date Collected: 06/29/17 09:50
Date Received: 06/30/17
Field Prep: Not Specified

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 07/09/17 19:30
Analyst: JC
Percent Solids: 86%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Methylene chloride | ND | | ug/kg | 12 | 2.0 | 1 |
| 1,1-Dichloroethane | ND | | ug/kg | 1.8 | 0.32 | 1 |
| Chloroform | ND | | ug/kg | 1.8 | 0.45 | 1 |
| Carbon tetrachloride | ND | | ug/kg | 1.2 | 0.42 | 1 |
| 1,2-Dichloropropane | ND | | ug/kg | 4.2 | 0.28 | 1 |
| Dibromochloromethane | ND | | ug/kg | 1.2 | 0.21 | 1 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 1.8 | 0.38 | 1 |
| Tetrachloroethene | ND | | ug/kg | 1.2 | 0.36 | 1 |
| Chlorobenzene | ND | | ug/kg | 1.2 | 0.42 | 1 |
| Trichlorofluoromethane | ND | | ug/kg | 6.0 | 0.50 | 1 |
| 1,2-Dichloroethane | ND | | ug/kg | 1.2 | 0.30 | 1 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 1.2 | 0.42 | 1 |
| Bromodichloromethane | ND | | ug/kg | 1.2 | 0.37 | 1 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 1.2 | 0.25 | 1 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 1.2 | 0.28 | 1 |
| Bromoform | ND | | ug/kg | 4.8 | 0.29 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 1.2 | 0.36 | 1 |
| Benzene | ND | | ug/kg | 1.2 | 0.23 | 1 |
| Toluene | ND | | ug/kg | 1.8 | 0.24 | 1 |
| Ethylbenzene | 0.30 | J | ug/kg | 1.2 | 0.20 | 1 |
| Chloromethane | ND | | ug/kg | 6.0 | 0.53 | 1 |
| Bromomethane | ND | | ug/kg | 2.4 | 0.41 | 1 |
| Vinyl chloride | ND | | ug/kg | 2.4 | 0.38 | 1 |
| Chloroethane | ND | | ug/kg | 2.4 | 0.38 | 1 |
| 1,1-Dichloroethene | ND | | ug/kg | 1.2 | 0.45 | 1 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 1.8 | 0.29 | 1 |
| Trichloroethene | ND | | ug/kg | 1.2 | 0.36 | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 6.0 | 0.22 | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 6.0 | 0.26 | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 6.0 | 0.22 | 1 |

**Project Name:** PH. II ESA **Lab Number:** L1722530

**Project Number:** E1641 **Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-04 Date Collected: 06/29/17 09:50

Client ID: SB3 (1-5') Date Received: 06/30/17

Sample Location: 124&145 CHANDLER ST., BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Methyl tert butyl ether | ND | | ug/kg | 2.4 | 0.18 | 1 |
| p/m-Xylene | ND | | ug/kg | 2.4 | 0.42 | 1 |
| o-Xylene | ND | | ug/kg | 2.4 | 0.41 | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 1.2 | 0.41 | 1 |
| Styrene | ND | | ug/kg | 2.4 | 0.48 | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 12 | 0.60 | 1 |
| Acetone | 64 | | ug/kg | 12 | 2.8 | 1 |
| Carbon disulfide | ND | | ug/kg | 12 | 1.3 | 1 |
| 2-Butanone | 13 | | ug/kg | 12 | 0.83 | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 12 | 0.29 | 1 |
| 2-Hexanone | ND | | ug/kg | 12 | 0.80 | 1 |
| Bromochloromethane | ND | | ug/kg | 6.0 | 0.43 | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 4.8 | 0.24 | 1 |
| n-Butylbenzene | ND | | ug/kg | 1.2 | 0.28 | 1 |
| sec-Butylbenzene | ND | | ug/kg | 1.2 | 0.26 | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 6.0 | 0.48 | 1 |
| Isopropylbenzene | ND | | ug/kg | 1.2 | 0.23 | 1 |
| p-Isopropyltoluene | ND | | ug/kg | 1.2 | 0.24 | 1 |
| Naphthalene | 0.47 | J | ug/kg | 6.0 | 0.17 | 1 |
| n-Propylbenzene | ND | | ug/kg | 1.2 | 0.26 | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 6.0 | 0.30 | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 6.0 | 0.26 | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 6.0 | 0.19 | 1 |
| 1,2,4-Trimethylbenzene | 0.22 | J | ug/kg | 6.0 | 0.22 | 1 |
| Methyl Acetate | ND | | ug/kg | 24 | 0.56 | 1 |
| Cyclohexane | ND | | ug/kg | 24 | 0.52 | 1 |
| 1,4-Dioxane | ND | | ug/kg | 48 | 17. | 1 |
| Freon-113 | ND | | ug/kg | 24 | 0.62 | 1 |
| Methyl cyclohexane | ND | | ug/kg | 4.8 | 0.29 | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 109 | | 70-130 |
| Toluene-d8 | 101 | | 70-130 |
| 4-Bromofluorobenzene | 105 | | 70-130 |
| Dibromofluoromethane | 108 | | 70-130 |

**Project Name:** PH. II ESA
**Lab Number:** L1722530
**Project Number:** E1641
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-05
Client ID: SB5 (0-4')
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY

Date Collected: 06/29/17 11:05
Date Received: 06/30/17
Field Prep: Not Specified

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 07/09/17 11:50
Analyst: JC
Percent Solids: 85%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Methylene chloride | ND | | ug/kg | 12 | 1.9 | 1 |
| 1,1-Dichloroethane | ND | | ug/kg | 1.7 | 0.31 | 1 |
| Chloroform | ND | | ug/kg | 1.7 | 0.43 | 1 |
| Carbon tetrachloride | ND | | ug/kg | 1.2 | 0.40 | 1 |
| 1,2-Dichloropropane | ND | | ug/kg | 4.0 | 0.26 | 1 |
| Dibromochloromethane | ND | | ug/kg | 1.2 | 0.20 | 1 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 1.7 | 0.36 | 1 |
| Tetrachloroethene | ND | | ug/kg | 1.2 | 0.35 | 1 |
| Chlorobenzene | ND | | ug/kg | 1.2 | 0.40 | 1 |
| Trichlorofluoromethane | ND | | ug/kg | 5.8 | 0.48 | 1 |
| 1,2-Dichloroethane | ND | | ug/kg | 1.2 | 0.28 | 1 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 1.2 | 0.40 | 1 |
| Bromodichloromethane | ND | | ug/kg | 1.2 | 0.36 | 1 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 1.2 | 0.24 | 1 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 1.2 | 0.27 | 1 |
| Bromoform | ND | | ug/kg | 4.6 | 0.27 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 1.2 | 0.34 | 1 |
| Benzene | ND | | ug/kg | 1.2 | 0.22 | 1 |
| Toluene | 0.25 | J | ug/kg | 1.7 | 0.22 | 1 |
| Ethylbenzene | 1.2 | | ug/kg | 1.2 | 0.20 | 1 |
| Chloromethane | ND | | ug/kg | 5.8 | 0.50 | 1 |
| Bromomethane | ND | | ug/kg | 2.3 | 0.39 | 1 |
| Vinyl chloride | ND | | ug/kg | 2.3 | 0.36 | 1 |
| Chloroethane | ND | | ug/kg | 2.3 | 0.36 | 1 |
| 1,1-Dichloroethene | ND | | ug/kg | 1.2 | 0.43 | 1 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 1.7 | 0.28 | 1 |
| Trichloroethene | ND | | ug/kg | 1.2 | 0.35 | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 5.8 | 0.21 | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 5.8 | 0.25 | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 5.8 | 0.21 | 1 |

**Project Name:** PH. II ESA **Lab Number:** L1722530

**Project Number:** E1641 **Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-05 Date Collected: 06/29/17 11:05

Client ID: SB5 (0-4') Date Received: 06/30/17

Sample Location: 124&145 CHANDLER ST., BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Methyl tert butyl ether | ND | | ug/kg | 2.3 | 0.18 | 1 |
| p/m-Xylene | 0.78 | J | ug/kg | 2.3 | 0.40 | 1 |
| o-Xylene | ND | | ug/kg | 2.3 | 0.39 | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 1.2 | 0.40 | 1 |
| Styrene | ND | | ug/kg | 2.3 | 0.46 | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 12 | 0.58 | 1 |
| Acetone | 3.1 | J | ug/kg | 12 | 2.6 | 1 |
| Carbon disulfide | ND | | ug/kg | 12 | 1.3 | 1 |
| 2-Butanone | ND | | ug/kg | 12 | 0.80 | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 12 | 0.28 | 1 |
| 2-Hexanone | ND | | ug/kg | 12 | 0.77 | 1 |
| Bromochloromethane | ND | | ug/kg | 5.8 | 0.41 | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 4.6 | 0.23 | 1 |
| n-Butylbenzene | 0.37 | J | ug/kg | 1.2 | 0.26 | 1 |
| sec-Butylbenzene | ND | | ug/kg | 1.2 | 0.25 | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 5.8 | 0.46 | 1 |
| Isopropylbenzene | ND | | ug/kg | 1.2 | 0.22 | 1 |
| p-Isopropyltoluene | ND | | ug/kg | 1.2 | 0.23 | 1 |
| Naphthalene | 1.6 | J | ug/kg | 5.8 | 0.16 | 1 |
| n-Propylbenzene | 0.73 | J | ug/kg | 1.2 | 0.25 | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 5.8 | 0.29 | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 5.8 | 0.25 | 1 |
| 1,3,5-Trimethylbenzene | 0.52 | J | ug/kg | 5.8 | 0.19 | 1 |
| 1,2,4-Trimethylbenzene | 1.1 | J | ug/kg | 5.8 | 0.22 | 1 |
| Methyl Acetate | ND | | ug/kg | 23 | 0.54 | 1 |
| Cyclohexane | ND | | ug/kg | 23 | 0.50 | 1 |
| 1,4-Dioxane | ND | | ug/kg | 46 | 17. | 1 |
| Freon-113 | ND | | ug/kg | 23 | 0.59 | 1 |
| Methyl cyclohexane | 0.41 | J | ug/kg | 4.6 | 0.28 | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 111 | | 70-130 |
| Toluene-d8 | 116 | | 70-130 |
| 4-Bromofluorobenzene | 103 | | 70-130 |
| Dibromofluoromethane | 102 | | 70-130 |

**Project Name:** PH. II ESA
**Lab Number:** L1722530
**Project Number:** E1641
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-06
Client ID: SB6 (0-2')
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY

Date Collected: 06/29/17 13:20
Date Received: 06/30/17
Field Prep: Not Specified

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 07/07/17 15:00
Analyst: JC
Percent Solids: 92%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Methylene chloride | ND | | ug/kg | 12 | 2.0 | 1 |
| 1,1-Dichloroethane | ND | | ug/kg | 1.8 | 0.33 | 1 |
| Chloroform | ND | | ug/kg | 1.8 | 0.46 | 1 |
| Carbon tetrachloride | ND | | ug/kg | 1.2 | 0.43 | 1 |
| 1,2-Dichloropropane | ND | | ug/kg | 4.3 | 0.28 | 1 |
| Dibromochloromethane | ND | | ug/kg | 1.2 | 0.22 | 1 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 1.8 | 0.39 | 1 |
| Tetrachloroethene | ND | | ug/kg | 1.2 | 0.37 | 1 |
| Chlorobenzene | ND | | ug/kg | 1.2 | 0.43 | 1 |
| Trichlorofluoromethane | ND | | ug/kg | 6.2 | 0.52 | 1 |
| 1,2-Dichloroethane | ND | | ug/kg | 1.2 | 0.30 | 1 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 1.2 | 0.43 | 1 |
| Bromodichloromethane | ND | | ug/kg | 1.2 | 0.38 | 1 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 1.2 | 0.26 | 1 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 1.2 | 0.28 | 1 |
| Bromoform | ND | | ug/kg | 5.0 | 0.29 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 1.2 | 0.37 | 1 |
| Benzene | ND | | ug/kg | 1.2 | 0.24 | 1 |
| Toluene | ND | | ug/kg | 1.8 | 0.24 | 1 |
| Ethylbenzene | 0.46 | J | ug/kg | 1.2 | 0.21 | 1 |
| Chloromethane | ND | | ug/kg | 6.2 | 0.54 | 1 |
| Bromomethane | ND | | ug/kg | 2.5 | 0.42 | 1 |
| Vinyl chloride | ND | | ug/kg | 2.5 | 0.39 | 1 |
| Chloroethane | ND | | ug/kg | 2.5 | 0.39 | 1 |
| 1,1-Dichloroethene | ND | | ug/kg | 1.2 | 0.46 | 1 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 1.8 | 0.30 | 1 |
| Trichloroethene | ND | | ug/kg | 1.2 | 0.37 | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 6.2 | 0.22 | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 6.2 | 0.27 | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 6.2 | 0.22 | 1 |

**Project Name:** PH. II ESA **Lab Number:** L1722530

**Project Number:** E1641 **Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-06 Date Collected: 06/29/17 13:20

Client ID: SB6 (0-2') Date Received: 06/30/17

Sample Location: 124&145 CHANDLER ST., BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Methyl tert butyl ether | ND | | ug/kg | 2.5 | 0.19 | 1 |
| p/m-Xylene | ND | | ug/kg | 2.5 | 0.43 | 1 |
| o-Xylene | ND | | ug/kg | 2.5 | 0.42 | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 1.2 | 0.42 | 1 |
| Styrene | ND | | ug/kg | 2.5 | 0.50 | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 12 | 0.62 | 1 |
| Acetone | 4.9 | J | ug/kg | 12 | 2.8 | 1 |
| Carbon disulfide | ND | | ug/kg | 12 | 1.4 | 1 |
| 2-Butanone | ND | | ug/kg | 12 | 0.85 | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 12 | 0.30 | 1 |
| 2-Hexanone | ND | | ug/kg | 12 | 0.82 | 1 |
| Bromochloromethane | ND | | ug/kg | 6.2 | 0.44 | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 5.0 | 0.25 | 1 |
| n-Butylbenzene | ND | | ug/kg | 1.2 | 0.28 | 1 |
| sec-Butylbenzene | ND | | ug/kg | 1.2 | 0.27 | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 6.2 | 0.49 | 1 |
| Isopropylbenzene | ND | | ug/kg | 1.2 | 0.24 | 1 |
| p-Isopropyltoluene | ND | | ug/kg | 1.2 | 0.25 | 1 |
| Naphthalene | ND | | ug/kg | 6.2 | 0.17 | 1 |
| n-Propylbenzene | ND | | ug/kg | 1.2 | 0.27 | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 6.2 | 0.31 | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 6.2 | 0.27 | 1 |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 6.2 | 0.20 | 1 |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 6.2 | 0.23 | 1 |
| Methyl Acetate | ND | | ug/kg | 25 | 0.57 | 1 |
| Cyclohexane | ND | | ug/kg | 25 | 0.54 | 1 |
| 1,4-Dioxane | ND | | ug/kg | 50 | 18. | 1 |
| Freon-113 | ND | | ug/kg | 25 | 0.64 | 1 |
| Methyl cyclohexane | 0.37 | J | ug/kg | 5.0 | 0.30 | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 124 | | 70-130 |
| Toluene-d8 | 98 | | 70-130 |
| 4-Bromofluorobenzene | 104 | | 70-130 |
| Dibromofluoromethane | 109 | | 70-130 |

**Project Name:** PH. II ESA
**Lab Number:** L1722530
**Project Number:** E1641
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-07
Client ID: SB7 (1-5')
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY

Date Collected: 06/29/17 13:40
Date Received: 06/30/17
Field Prep: Not Specified

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 07/09/17 12:17
Analyst: JC
Percent Solids: 77%

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Methylene chloride | ND | | ug/kg | 13 | 2.1 | 1 |
| 1,1-Dichloroethane | ND | | ug/kg | 2.0 | 0.35 | 1 |
| Chloroform | ND | | ug/kg | 2.0 | 0.48 | 1 |
| Carbon tetrachloride | ND | | ug/kg | 1.3 | 0.45 | 1 |
| 1,2-Dichloropropane | ND | | ug/kg | 4.6 | 0.30 | 1 |
| Dibromochloromethane | ND | | ug/kg | 1.3 | 0.23 | 1 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 2.0 | 0.41 | 1 |
| Tetrachloroethene | ND | | ug/kg | 1.3 | 0.39 | 1 |
| Chlorobenzene | ND | | ug/kg | 1.3 | 0.45 | 1 |
| Trichlorofluoromethane | ND | | ug/kg | 6.5 | 0.54 | 1 |
| 1,2-Dichloroethane | ND | | ug/kg | 1.3 | 0.32 | 1 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 1.3 | 0.46 | 1 |
| Bromodichloromethane | ND | | ug/kg | 1.3 | 0.40 | 1 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 1.3 | 0.27 | 1 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 1.3 | 0.30 | 1 |
| Bromoform | ND | | ug/kg | 5.2 | 0.31 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 1.3 | 0.39 | 1 |
| Benzene | ND | | ug/kg | 1.3 | 0.25 | 1 |
| Toluene | 0.25 | J | ug/kg | 2.0 | 0.25 | 1 |
| Ethylbenzene | 7.0 | | ug/kg | 1.3 | 0.22 | 1 |
| Chloromethane | 1.1 | J | ug/kg | 6.5 | 0.57 | 1 |
| Bromomethane | 0.81 | J | ug/kg | 2.6 | 0.44 | 1 |
| Vinyl chloride | ND | | ug/kg | 2.6 | 0.41 | 1 |
| Chloroethane | ND | | ug/kg | 2.6 | 0.41 | 1 |
| 1,1-Dichloroethene | ND | | ug/kg | 1.3 | 0.48 | 1 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 2.0 | 0.31 | 1 |
| Trichloroethene | ND | | ug/kg | 1.3 | 0.39 | 1 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 6.5 | 0.24 | 1 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 6.5 | 0.28 | 1 |
| 1,4-Dichlorobenzene | ND | | ug/kg | 6.5 | 0.24 | 1 |

**Project Name:** PH. II ESA **Lab Number:** L1722530

**Project Number:** E1641 **Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-07 Date Collected: 06/29/17 13:40

Client ID: SB7 (1-5') Date Received: 06/30/17

Sample Location: 124&145 CHANDLER ST., BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Volatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Methyl tert butyl ether | ND | | ug/kg | 2.6 | 0.20 | 1 |
| p/m-Xylene | 18 | | ug/kg | 2.6 | 0.46 | 1 |
| o-Xylene | 17 | | ug/kg | 2.6 | 0.44 | 1 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 1.3 | 0.44 | 1 |
| Styrene | ND | | ug/kg | 2.6 | 0.52 | 1 |
| Dichlorodifluoromethane | ND | | ug/kg | 13 | 0.65 | 1 |
| Acetone | 91 | | ug/kg | 13 | 3.0 | 1 |
| Carbon disulfide | ND | | ug/kg | 13 | 1.4 | 1 |
| 2-Butanone | 13 | | ug/kg | 13 | 0.90 | 1 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 13 | 0.32 | 1 |
| 2-Hexanone | ND | | ug/kg | 13 | 0.87 | 1 |
| Bromochloromethane | ND | | ug/kg | 6.5 | 0.46 | 1 |
| 1,2-Dibromoethane | ND | | ug/kg | 5.2 | 0.26 | 1 |
| n-Butylbenzene | ND | | ug/kg | 1.3 | 0.30 | 1 |
| sec-Butylbenzene | ND | | ug/kg | 1.3 | 0.28 | 1 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 6.5 | 0.51 | 1 |
| Isopropylbenzene | ND | | ug/kg | 1.3 | 0.25 | 1 |
| p-Isopropyltoluene | ND | | ug/kg | 1.3 | 0.26 | 1 |
| Naphthalene | 6.2 | J | ug/kg | 6.5 | 0.18 | 1 |
| n-Propylbenzene | 0.41 | J | ug/kg | 1.3 | 0.28 | 1 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 6.5 | 0.33 | 1 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 6.5 | 0.28 | 1 |
| 1,3,5-Trimethylbenzene | 0.23 | J | ug/kg | 6.5 | 0.21 | 1 |
| 1,2,4-Trimethylbenzene | 0.48 | J | ug/kg | 6.5 | 0.24 | 1 |
| Methyl Acetate | ND | | ug/kg | 26 | 0.60 | 1 |
| Cyclohexane | ND | | ug/kg | 26 | 0.56 | 1 |
| 1,4-Dioxane | ND | | ug/kg | 52 | 19. | 1 |
| Freon-113 | ND | | ug/kg | 26 | 0.67 | 1 |
| Methyl cyclohexane | 0.33 | J | ug/kg | 5.2 | 0.31 | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 110 | | 70-130 |
| Toluene-d8 | 106 | | 70-130 |
| 4-Bromofluorobenzene | 97 | | 70-130 |
| Dibromofluoromethane | 102 | | 70-130 |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/06/17 10:53
Analyst: PD

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1020223-5 | | | | | |
| Methylene chloride | ND | | ug/l | 2.5 | 0.70 |
| 1,1-Dichloroethane | ND | | ug/l | 2.5 | 0.70 |
| Chloroform | ND | | ug/l | 2.5 | 0.70 |
| Carbon tetrachloride | ND | | ug/l | 0.50 | 0.13 |
| 1,2-Dichloropropane | ND | | ug/l | 1.0 | 0.14 |
| Dibromochloromethane | ND | | ug/l | 0.50 | 0.15 |
| 1,1,2-Trichloroethane | ND | | ug/l | 1.5 | 0.50 |
| Tetrachloroethene | ND | | ug/l | 0.50 | 0.18 |
| Chlorobenzene | ND | | ug/l | 2.5 | 0.70 |
| Trichlorofluoromethane | ND | | ug/l | 2.5 | 0.70 |
| 1,2-Dichloroethane | ND | | ug/l | 0.50 | 0.13 |
| 1,1,1-Trichloroethane | ND | | ug/l | 2.5 | 0.70 |
| Bromodichloromethane | ND | | ug/l | 0.50 | 0.19 |
| trans-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.16 |
| cis-1,3-Dichloropropene | ND | | ug/l | 0.50 | 0.14 |
| Bromoform | ND | | ug/l | 2.0 | 0.65 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/l | 0.50 | 0.17 |
| Benzene | ND | | ug/l | 0.50 | 0.16 |
| Toluene | ND | | ug/l | 2.5 | 0.70 |
| Ethylbenzene | ND | | ug/l | 2.5 | 0.70 |
| Chloromethane | ND | | ug/l | 2.5 | 0.70 |
| Bromomethane | ND | | ug/l | 2.5 | 0.70 |
| Vinyl chloride | ND | | ug/l | 1.0 | 0.07 |
| Chloroethane | ND | | ug/l | 2.5 | 0.70 |
| 1,1-Dichloroethene | ND | | ug/l | 0.50 | 0.17 |
| trans-1,2-Dichloroethene | ND | | ug/l | 2.5 | 0.70 |
| Trichloroethene | ND | | ug/l | 0.50 | 0.18 |
| 1,2-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 |
| 1,3-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/06/17 10:53
Analyst: PD

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1020223-5 | | | | | |
| 1,4-Dichlorobenzene | ND | | ug/l | 2.5 | 0.70 |
| Methyl tert butyl ether | ND | | ug/l | 2.5 | 0.70 |
| p/m-Xylene | ND | | ug/l | 2.5 | 0.70 |
| o-Xylene | ND | | ug/l | 2.5 | 0.70 |
| cis-1,2-Dichloroethene | ND | | ug/l | 2.5 | 0.70 |
| Styrene | ND | | ug/l | 2.5 | 0.70 |
| Dichlorodifluoromethane | ND | | ug/l | 5.0 | 1.0 |
| Acetone | ND | | ug/l | 5.0 | 1.5 |
| Carbon disulfide | ND | | ug/l | 5.0 | 1.0 |
| 2-Butanone | ND | | ug/l | 5.0 | 1.9 |
| 4-Methyl-2-pentanone | ND | | ug/l | 5.0 | 1.0 |
| 2-Hexanone | ND | | ug/l | 5.0 | 1.0 |
| Bromochloromethane | ND | | ug/l | 2.5 | 0.70 |
| 1,2-Dibromoethane | ND | | ug/l | 2.0 | 0.65 |
| n-Butylbenzene | ND | | ug/l | 2.5 | 0.70 |
| sec-Butylbenzene | ND | | ug/l | 2.5 | 0.70 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/l | 2.5 | 0.70 |
| Isopropylbenzene | ND | | ug/l | 2.5 | 0.70 |
| p-Isopropyltoluene | ND | | ug/l | 2.5 | 0.70 |
| Naphthalene | ND | | ug/l | 2.5 | 0.70 |
| n-Propylbenzene | ND | | ug/l | 2.5 | 0.70 |
| 1,2,3-Trichlorobenzene | ND | | ug/l | 2.5 | 0.70 |
| 1,2,4-Trichlorobenzene | ND | | ug/l | 2.5 | 0.70 |
| 1,3,5-Trimethylbenzene | ND | | ug/l | 2.5 | 0.70 |
| 1,2,4-Trimethylbenzene | ND | | ug/l | 2.5 | 0.70 |
| Methyl Acetate | ND | | ug/l | 2.0 | 0.23 |
| Cyclohexane | ND | | ug/l | 10 | 0.27 |
| 1,4-Dioxane | ND | | ug/l | 250 | 61. |
| Freon-113 | ND | | ug/l | 2.5 | 0.70 |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/06/17 10:53
Analyst: PD

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1020223-5 | | | | | |
| Methyl cyclohexane | ND | | ug/l | 10 | 0.40 |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 93 | | 70-130 |
| Toluene-d8 | 100 | | 70-130 |
| 4-Bromofluorobenzene | 101 | | 70-130 |
| Dibromofluoromethane | 97 | | 70-130 |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/09/17 10:45
Analyst: CBN

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG1020841-10 | | | | | |
| Methylene chloride | ND | | ug/kg | 10 | 1.6 |
| 1,1-Dichloroethane | ND | | ug/kg | 1.5 | 0.27 |
| Chloroform | ND | | ug/kg | 1.5 | 0.37 |
| Carbon tetrachloride | ND | | ug/kg | 1.0 | 0.34 |
| 1,2-Dichloropropane | ND | | ug/kg | 3.5 | 0.23 |
| Dibromochloromethane | ND | | ug/kg | 1.0 | 0.18 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 1.5 | 0.31 |
| Tetrachloroethene | ND | | ug/kg | 1.0 | 0.30 |
| Chlorobenzene | ND | | ug/kg | 1.0 | 0.35 |
| Trichlorofluoromethane | ND | | ug/kg | 5.0 | 0.42 |
| 1,2-Dichloroethane | ND | | ug/kg | 1.0 | 0.25 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 1.0 | 0.35 |
| Bromodichloromethane | ND | | ug/kg | 1.0 | 0.31 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 1.0 | 0.21 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 1.0 | 0.23 |
| Bromoform | ND | | ug/kg | 4.0 | 0.24 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 1.0 | 0.30 |
| Benzene | ND | | ug/kg | 1.0 | 0.19 |
| Toluene | ND | | ug/kg | 1.5 | 0.20 |
| Ethylbenzene | ND | | ug/kg | 1.0 | 0.17 |
| Chloromethane | ND | | ug/kg | 5.0 | 0.44 |
| Bromomethane | 1.1 | J | ug/kg | 2.0 | 0.34 |
| Vinyl chloride | ND | | ug/kg | 2.0 | 0.32 |
| Chloroethane | ND | | ug/kg | 2.0 | 0.32 |
| 1,1-Dichloroethene | ND | | ug/kg | 1.0 | 0.37 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 1.5 | 0.24 |
| Trichloroethene | ND | | ug/kg | 1.0 | 0.30 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 5.0 | 0.18 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 5.0 | 0.22 |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/09/17 10:45
Analyst: CBN

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG1020841-10 | | | | | |
| 1,4-Dichlorobenzene | ND | | ug/kg | 5.0 | 0.18 |
| Methyl tert butyl ether | ND | | ug/kg | 2.0 | 0.15 |
| p/m-Xylene | ND | | ug/kg | 2.0 | 0.35 |
| o-Xylene | ND | | ug/kg | 2.0 | 0.34 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 1.0 | 0.34 |
| Styrene | ND | | ug/kg | 2.0 | 0.40 |
| Dichlorodifluoromethane | ND | | ug/kg | 10 | 0.50 |
| Acetone | 3.9 | J | ug/kg | 10 | 2.3 |
| Carbon disulfide | ND | | ug/kg | 10 | 1.1 |
| 2-Butanone | ND | | ug/kg | 10 | 0.69 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 10 | 0.24 |
| 2-Hexanone | ND | | ug/kg | 10 | 0.67 |
| Bromochloromethane | ND | | ug/kg | 5.0 | 0.36 |
| 1,2-Dibromoethane | ND | | ug/kg | 4.0 | 0.20 |
| n-Butylbenzene | ND | | ug/kg | 1.0 | 0.23 |
| sec-Butylbenzene | ND | | ug/kg | 1.0 | 0.22 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 5.0 | 0.40 |
| Isopropylbenzene | ND | | ug/kg | 1.0 | 0.19 |
| p-Isopropyltoluene | ND | | ug/kg | 1.0 | 0.20 |
| Naphthalene | ND | | ug/kg | 5.0 | 0.14 |
| n-Propylbenzene | ND | | ug/kg | 1.0 | 0.22 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 5.0 | 0.25 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 5.0 | 0.22 |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 5.0 | 0.16 |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 5.0 | 0.19 |
| Methyl Acetate | ND | | ug/kg | 20 | 0.46 |
| Cyclohexane | ND | | ug/kg | 20 | 0.43 |
| 1,4-Dioxane | ND | | ug/kg | 40 | 14. |
| Freon-113 | ND | | ug/kg | 20 | 0.51 |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/09/17 10:45
Analyst: CBN

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG1020841-10 | | | | | |
| Methyl cyclohexane | ND | | ug/kg | 4.0 | 0.24 |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 114 | | 70-130 |
| Toluene-d8 | 98 | | 70-130 |
| 4-Bromofluorobenzene | 99 | | 70-130 |
| Dibromofluoromethane | 103 | | 70-130 |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/07/17 11:23
Analyst: JC

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG1020841-5 | | | | | |
| Methylene chloride | ND | | ug/kg | 10 | 1.6 |
| 1,1-Dichloroethane | ND | | ug/kg | 1.5 | 0.27 |
| Chloroform | ND | | ug/kg | 1.5 | 0.37 |
| Carbon tetrachloride | ND | | ug/kg | 1.0 | 0.34 |
| 1,2-Dichloropropane | ND | | ug/kg | 3.5 | 0.23 |
| Dibromochloromethane | ND | | ug/kg | 1.0 | 0.18 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 1.5 | 0.31 |
| Tetrachloroethene | ND | | ug/kg | 1.0 | 0.30 |
| Chlorobenzene | ND | | ug/kg | 1.0 | 0.35 |
| Trichlorofluoromethane | ND | | ug/kg | 5.0 | 0.42 |
| 1,2-Dichloroethane | ND | | ug/kg | 1.0 | 0.25 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 1.0 | 0.35 |
| Bromodichloromethane | ND | | ug/kg | 1.0 | 0.31 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 1.0 | 0.21 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 1.0 | 0.23 |
| Bromoform | ND | | ug/kg | 4.0 | 0.24 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 1.0 | 0.30 |
| Benzene | ND | | ug/kg | 1.0 | 0.19 |
| Toluene | ND | | ug/kg | 1.5 | 0.20 |
| Ethylbenzene | ND | | ug/kg | 1.0 | 0.17 |
| Chloromethane | 0.57 | J | ug/kg | 5.0 | 0.44 |
| Bromomethane | 1.7 | J | ug/kg | 2.0 | 0.34 |
| Vinyl chloride | ND | | ug/kg | 2.0 | 0.32 |
| Chloroethane | ND | | ug/kg | 2.0 | 0.32 |
| 1,1-Dichloroethene | ND | | ug/kg | 1.0 | 0.37 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 1.5 | 0.24 |
| Trichloroethene | ND | | ug/kg | 1.0 | 0.30 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 5.0 | 0.18 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 5.0 | 0.22 |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/07/17 11:23
Analyst: JC

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG1020841-5 | | | | | |
| 1,4-Dichlorobenzene | ND | | ug/kg | 5.0 | 0.18 |
| Methyl tert butyl ether | ND | | ug/kg | 2.0 | 0.15 |
| p/m-Xylene | ND | | ug/kg | 2.0 | 0.35 |
| o-Xylene | ND | | ug/kg | 2.0 | 0.34 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 1.0 | 0.34 |
| Styrene | ND | | ug/kg | 2.0 | 0.40 |
| Dichlorodifluoromethane | ND | | ug/kg | 10 | 0.50 |
| Acetone | ND | | ug/kg | 10 | 2.3 |
| Carbon disulfide | ND | | ug/kg | 10 | 1.1 |
| 2-Butanone | ND | | ug/kg | 10 | 0.69 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 10 | 0.24 |
| 2-Hexanone | ND | | ug/kg | 10 | 0.67 |
| Bromochloromethane | ND | | ug/kg | 5.0 | 0.36 |
| 1,2-Dibromoethane | ND | | ug/kg | 4.0 | 0.20 |
| n-Butylbenzene | ND | | ug/kg | 1.0 | 0.23 |
| sec-Butylbenzene | ND | | ug/kg | 1.0 | 0.22 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 5.0 | 0.40 |
| Isopropylbenzene | ND | | ug/kg | 1.0 | 0.19 |
| p-Isopropyltoluene | ND | | ug/kg | 1.0 | 0.20 |
| Naphthalene | ND | | ug/kg | 5.0 | 0.14 |
| n-Propylbenzene | ND | | ug/kg | 1.0 | 0.22 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 5.0 | 0.25 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 5.0 | 0.22 |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 5.0 | 0.16 |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 5.0 | 0.19 |
| Methyl Acetate | ND | | ug/kg | 20 | 0.46 |
| Cyclohexane | ND | | ug/kg | 20 | 0.43 |
| 1,4-Dioxane | ND | | ug/kg | 40 | 14. |
| Freon-113 | ND | | ug/kg | 20 | 0.51 |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/07/17 11:23
Analyst: JC

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG1020841-5 | | | | | |
| Methyl cyclohexane | ND | | ug/kg | 4.0 | 0.24 |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 128 | | 70-130 |
| Toluene-d8 | 97 | | 70-130 |
| 4-Bromofluorobenzene | 95 | | 70-130 |
| Dibromofluoromethane | 108 | | 70-130 |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/09/17 10:53
Analyst: CBN

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): 05,07 Batch: WG1021016-5 | | | | | |
| Methylene chloride | ND | | ug/kg | 10 | 1.6 |
| 1,1-Dichloroethane | ND | | ug/kg | 1.5 | 0.27 |
| Chloroform | ND | | ug/kg | 1.5 | 0.37 |
| Carbon tetrachloride | ND | | ug/kg | 1.0 | 0.34 |
| 1,2-Dichloropropane | ND | | ug/kg | 3.5 | 0.23 |
| Dibromochloromethane | ND | | ug/kg | 1.0 | 0.18 |
| 1,1,2-Trichloroethane | ND | | ug/kg | 1.5 | 0.31 |
| Tetrachloroethene | ND | | ug/kg | 1.0 | 0.30 |
| Chlorobenzene | ND | | ug/kg | 1.0 | 0.35 |
| Trichlorofluoromethane | ND | | ug/kg | 5.0 | 0.42 |
| 1,2-Dichloroethane | ND | | ug/kg | 1.0 | 0.25 |
| 1,1,1-Trichloroethane | ND | | ug/kg | 1.0 | 0.35 |
| Bromodichloromethane | ND | | ug/kg | 1.0 | 0.31 |
| trans-1,3-Dichloropropene | ND | | ug/kg | 1.0 | 0.21 |
| cis-1,3-Dichloropropene | ND | | ug/kg | 1.0 | 0.23 |
| Bromoform | ND | | ug/kg | 4.0 | 0.24 |
| 1,1,2,2-Tetrachloroethane | ND | | ug/kg | 1.0 | 0.30 |
| Benzene | ND | | ug/kg | 1.0 | 0.19 |
| Toluene | ND | | ug/kg | 1.5 | 0.20 |
| Ethylbenzene | ND | | ug/kg | 1.0 | 0.17 |
| Chloromethane | ND | | ug/kg | 5.0 | 0.44 |
| Bromomethane | ND | | ug/kg | 2.0 | 0.34 |
| Vinyl chloride | ND | | ug/kg | 2.0 | 0.32 |
| Chloroethane | ND | | ug/kg | 2.0 | 0.32 |
| 1,1-Dichloroethene | ND | | ug/kg | 1.0 | 0.37 |
| trans-1,2-Dichloroethene | ND | | ug/kg | 1.5 | 0.24 |
| Trichloroethene | ND | | ug/kg | 1.0 | 0.30 |
| 1,2-Dichlorobenzene | ND | | ug/kg | 5.0 | 0.18 |
| 1,3-Dichlorobenzene | ND | | ug/kg | 5.0 | 0.22 |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/09/17 10:53
Analyst: CBN

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): 05,07 Batch: WG1021016-5 | | | | | |
| 1,4-Dichlorobenzene | ND | | ug/kg | 5.0 | 0.18 |
| Methyl tert butyl ether | ND | | ug/kg | 2.0 | 0.15 |
| p/m-Xylene | ND | | ug/kg | 2.0 | 0.35 |
| o-Xylene | ND | | ug/kg | 2.0 | 0.34 |
| cis-1,2-Dichloroethene | ND | | ug/kg | 1.0 | 0.34 |
| Styrene | ND | | ug/kg | 2.0 | 0.40 |
| Dichlorodifluoromethane | ND | | ug/kg | 10 | 0.50 |
| Acetone | 2.7 | J | ug/kg | 10 | 2.3 |
| Carbon disulfide | ND | | ug/kg | 10 | 1.1 |
| 2-Butanone | ND | | ug/kg | 10 | 0.69 |
| 4-Methyl-2-pentanone | ND | | ug/kg | 10 | 0.24 |
| 2-Hexanone | ND | | ug/kg | 10 | 0.67 |
| Bromochloromethane | ND | | ug/kg | 5.0 | 0.36 |
| 1,2-Dibromoethane | ND | | ug/kg | 4.0 | 0.20 |
| n-Butylbenzene | ND | | ug/kg | 1.0 | 0.23 |
| sec-Butylbenzene | ND | | ug/kg | 1.0 | 0.22 |
| 1,2-Dibromo-3-chloropropane | ND | | ug/kg | 5.0 | 0.40 |
| Isopropylbenzene | ND | | ug/kg | 1.0 | 0.19 |
| p-Isopropyltoluene | ND | | ug/kg | 1.0 | 0.20 |
| Naphthalene | ND | | ug/kg | 5.0 | 0.14 |
| n-Propylbenzene | ND | | ug/kg | 1.0 | 0.22 |
| 1,2,3-Trichlorobenzene | ND | | ug/kg | 5.0 | 0.25 |
| 1,2,4-Trichlorobenzene | ND | | ug/kg | 5.0 | 0.22 |
| 1,3,5-Trimethylbenzene | ND | | ug/kg | 5.0 | 0.16 |
| 1,2,4-Trimethylbenzene | ND | | ug/kg | 5.0 | 0.19 |
| Methyl Acetate | ND | | ug/kg | 20 | 0.46 |
| Cyclohexane | ND | | ug/kg | 20 | 0.43 |
| 1,4-Dioxane | ND | | ug/kg | 40 | 14. |
| Freon-113 | ND | | ug/kg | 20 | 0.51 |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/09/17 10:53
Analyst: CBN

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): 05,07 Batch: WG1021016-5 | | | | | |
| Methyl cyclohexane | ND | | ug/kg | 4.0 | 0.24 |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 1,2-Dichloroethane-d4 | 109 | | 70-130 |
| Toluene-d8 | 104 | | 70-130 |
| 4-Bromofluorobenzene | 94 | | 70-130 |
| Dibromofluoromethane | 98 | | 70-130 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1020223-3 WG1020223-4 | | | | | | | | |
| Methylene chloride | 89 | | 96 | | 70-130 | 8 | | 20 |
| 1,1-Dichloroethane | 93 | | 96 | | 70-130 | 3 | | 20 |
| Chloroform | 93 | | 96 | | 70-130 | 3 | | 20 |
| Carbon tetrachloride | 91 | | 93 | | 63-132 | 2 | | 20 |
| 1,2-Dichloropropane | 94 | | 97 | | 70-130 | 3 | | 20 |
| Dibromochloromethane | 87 | | 91 | | 63-130 | 4 | | 20 |
| 1,1,2-Trichloroethane | 88 | | 93 | | 70-130 | 6 | | 20 |
| Tetrachloroethene | 97 | | 96 | | 70-130 | 1 | | 20 |
| Chlorobenzene | 92 | | 93 | | 75-130 | 1 | | 20 |
| Trichlorofluoromethane | 90 | | 94 | | 62-150 | 4 | | 20 |
| 1,2-Dichloroethane | 92 | | 96 | | 70-130 | 4 | | 20 |
| 1,1,1-Trichloroethane | 93 | | 95 | | 67-130 | 2 | | 20 |
| Bromodichloromethane | 92 | | 96 | | 67-130 | 4 | | 20 |
| trans-1,3-Dichloropropene | 78 | | 82 | | 70-130 | 5 | | 20 |
| cis-1,3-Dichloropropene | 92 | | 95 | | 70-130 | 3 | | 20 |
| Bromoform | 79 | | 87 | | 54-136 | 10 | | 20 |
| 1,1,2,2-Tetrachloroethane | 82 | | 89 | | 67-130 | 8 | | 20 |
| Benzene | 93 | | 95 | | 70-130 | 2 | | 20 |
| Toluene | 94 | | 94 | | 70-130 | 0 | | 20 |
| Ethylbenzene | 93 | | 92 | | 70-130 | 1 | | 20 |
| Chloromethane | 90 | | 93 | | 64-130 | 3 | | 20 |
| Bromomethane | 74 | | 84 | | 39-139 | 13 | | 20 |
| Vinyl chloride | 90 | | 96 | | 55-140 | 6 | | 20 |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** PH. II ESA

**Project Number:** E1641

**Lab Number:** L1722530

**Report Date:** 07/10/17

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1020223-3 WG1020223-4 | | | | | | | | |
| Chloroethane | 97 | | 100 | | 55-138 | 3 | | 20 |
| 1,1-Dichloroethene | 91 | | 95 | | 61-145 | 4 | | 20 |
| trans-1,2-Dichloroethene | 92 | | 95 | | 70-130 | 3 | | 20 |
| Trichloroethene | 95 | | 96 | | 70-130 | 1 | | 20 |
| 1,2-Dichlorobenzene | 89 | | 93 | | 70-130 | 4 | | 20 |
| 1,3-Dichlorobenzene | 92 | | 95 | | 70-130 | 3 | | 20 |
| 1,4-Dichlorobenzene | 89 | | 92 | | 70-130 | 3 | | 20 |
| Methyl tert butyl ether | 87 | | 96 | | 63-130 | 10 | | 20 |
| p/m-Xylene | 95 | | 95 | | 70-130 | 0 | | 20 |
| o-Xylene | 95 | | 95 | | 70-130 | 0 | | 20 |
| cis-1,2-Dichloroethene | 96 | | 96 | | 70-130 | 0 | | 20 |
| Styrene | 95 | | 95 | | 70-130 | 0 | | 20 |
| Dichlorodifluoromethane | 88 | | 92 | | 36-147 | 4 | | 20 |
| Acetone | 97 | | 110 | | 58-148 | 13 | | 20 |
| Carbon disulfide | 91 | | 95 | | 51-130 | 4 | | 20 |
| 2-Butanone | 100 | | 100 | | 63-138 | 0 | | 20 |
| 4-Methyl-2-pentanone | 77 | | 84 | | 59-130 | 9 | | 20 |
| 2-Hexanone | 76 | | 82 | | 57-130 | 8 | | 20 |
| Bromochloromethane | 95 | | 100 | | 70-130 | 5 | | 20 |
| 1,2-Dibromoethane | 90 | | 95 | | 70-130 | 5 | | 20 |
| n-Butylbenzene | 93 | | 95 | | 53-136 | 2 | | 20 |
| sec-Butylbenzene | 93 | | 93 | | 70-130 | 0 | | 20 |
| 1,2-Dibromo-3-chloropropane | 67 | | 76 | | 41-144 | 13 | | 20 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641
**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1020223-3 WG1020223-4 | | | | | | | | |
| Isopropylbenzene | 93 | | 93 | | 70-130 | 0 | | 20 |
| p-Isopropyltoluene | 94 | | 95 | | 70-130 | 1 | | 20 |
| Naphthalene | 130 | | 96 | | 70-130 | **30** | Q | 20 |
| n-Propylbenzene | 92 | | 91 | | 69-130 | 1 | | 20 |
| 1,2,3-Trichlorobenzene | **65** | Q | 90 | | 70-130 | **32** | Q | 20 |
| 1,2,4-Trichlorobenzene | 74 | | 86 | | 70-130 | 15 | | 20 |
| 1,3,5-Trimethylbenzene | 93 | | 94 | | 64-130 | 1 | | 20 |
| 1,2,4-Trimethylbenzene | 95 | | 95 | | 70-130 | 0 | | 20 |
| Methyl Acetate | 82 | | 90 | | 70-130 | 9 | | 20 |
| Cyclohexane | 92 | | 93 | | 70-130 | 1 | | 20 |
| 1,4-Dioxane | 90 | | 108 | | 56-162 | 18 | | 20 |
| Freon-113 | 89 | | 95 | | 70-130 | 7 | | 20 |
| Methyl cyclohexane | 94 | | 94 | | 70-130 | 0 | | 20 |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | 96 | | 97 | | 70-130 |
| Toluene-d8 | 100 | | 100 | | 70-130 |
| 4-Bromofluorobenzene | 98 | | 99 | | 70-130 |
| Dibromofluoromethane | 99 | | 102 | | 70-130 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1020841-3 WG1020841-4 | | | | | | | | |
| Methylene chloride | 94 | | 102 | | 70-130 | 8 | | 30 |
| 1,1-Dichloroethane | 107 | | 116 | | 70-130 | 8 | | 30 |
| Chloroform | 110 | | 118 | | 70-130 | 7 | | 30 |
| Carbon tetrachloride | **138** | Q | **141** | Q | 70-130 | 2 | | 30 |
| 1,2-Dichloropropane | 113 | | 102 | | 70-130 | 10 | | 30 |
| Dibromochloromethane | 105 | | 105 | | 70-130 | 0 | | 30 |
| 1,1,2-Trichloroethane | 96 | | 96 | | 70-130 | 0 | | 30 |
| Tetrachloroethene | 110 | | 112 | | 70-130 | 2 | | 30 |
| Chlorobenzene | 102 | | 103 | | 70-130 | 1 | | 30 |
| Trichlorofluoromethane | 136 | | 138 | | 70-139 | 1 | | 30 |
| 1,2-Dichloroethane | 121 | | 126 | | 70-130 | 4 | | 30 |
| 1,1,1-Trichloroethane | 130 | | **135** | Q | 70-130 | 4 | | 30 |
| Bromodichloromethane | 118 | | 117 | | 70-130 | 1 | | 30 |
| trans-1,3-Dichloropropene | 106 | | 105 | | 70-130 | 1 | | 30 |
| cis-1,3-Dichloropropene | 103 | | 103 | | 70-130 | 0 | | 30 |
| Bromoform | 103 | | 102 | | 70-130 | 1 | | 30 |
| 1,1,2,2-Tetrachloroethane | 95 | | 91 | | 70-130 | 4 | | 30 |
| Benzene | 106 | | 107 | | 70-130 | 1 | | 30 |
| Toluene | 104 | | 103 | | 70-130 | 1 | | 30 |
| Ethylbenzene | 106 | | 106 | | 70-130 | 0 | | 30 |
| Chloromethane | 121 | | 129 | | 52-130 | 6 | | 30 |
| Bromomethane | 120 | | 121 | | 57-147 | 1 | | 30 |
| Vinyl chloride | 127 | | **133** | Q | 67-130 | 5 | | 30 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1020841-3 WG1020841-4 | | | | | | | | |
| Chloroethane | 109 | | 110 | | 50-151 | 1 | | 30 |
| 1,1-Dichloroethene | 94 | | 102 | | 65-135 | 8 | | 30 |
| trans-1,2-Dichloroethene | 103 | | 109 | | 70-130 | 6 | | 30 |
| Trichloroethene | 113 | | 116 | | 70-130 | 3 | | 30 |
| 1,2-Dichlorobenzene | 98 | | 101 | | 70-130 | 3 | | 30 |
| 1,3-Dichlorobenzene | 99 | | 101 | | 70-130 | 2 | | 30 |
| 1,4-Dichlorobenzene | 97 | | 103 | | 70-130 | 6 | | 30 |
| Methyl tert butyl ether | 96 | | 93 | | 66-130 | 3 | | 30 |
| p/m-Xylene | 106 | | 107 | | 70-130 | 1 | | 30 |
| o-Xylene | 102 | | 103 | | 70-130 | 1 | | 30 |
| cis-1,2-Dichloroethene | 106 | | 108 | | 70-130 | 2 | | 30 |
| Styrene | 102 | | 101 | | 70-130 | 1 | | 30 |
| Dichlorodifluoromethane | 136 | | 140 | | 30-146 | 3 | | 30 |
| Acetone | 113 | | 123 | | 54-140 | 8 | | 30 |
| Carbon disulfide | 68 | | 73 | | 59-130 | 7 | | 30 |
| 2-Butanone | 117 | | 107 | | 70-130 | 9 | | 30 |
| 4-Methyl-2-pentanone | 101 | | 97 | | 70-130 | 4 | | 30 |
| 2-Hexanone | 102 | | 104 | | 70-130 | 2 | | 30 |
| Bromochloromethane | 106 | | 104 | | 70-130 | 2 | | 30 |
| 1,2-Dibromoethane | 98 | | 98 | | 70-130 | 0 | | 30 |
| n-Butylbenzene | 107 | | 111 | | 70-130 | 4 | | 30 |
| sec-Butylbenzene | 112 | | 116 | | 70-130 | 4 | | 30 |
| 1,2-Dibromo-3-chloropropane | 88 | | 89 | | 68-130 | 1 | | 30 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641
**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1020841-3 WG1020841-4 | | | | | | | | |
| Isopropylbenzene | 114 | | 115 | | 70-130 | 1 | | 30 |
| p-Isopropyltoluene | 110 | | 110 | | 70-130 | 0 | | 30 |
| Naphthalene | 97 | | 98 | | 70-130 | 1 | | 30 |
| n-Propylbenzene | 112 | | 113 | | 70-130 | 1 | | 30 |
| 1,2,3-Trichlorobenzene | 102 | | 105 | | 70-130 | 3 | | 30 |
| 1,2,4-Trichlorobenzene | 103 | | 105 | | 70-130 | 2 | | 30 |
| 1,3,5-Trimethylbenzene | 112 | | 113 | | 70-130 | 1 | | 30 |
| 1,2,4-Trimethylbenzene | 109 | | 108 | | 70-130 | 1 | | 30 |
| Methyl Acetate | 107 | | 113 | | 51-146 | 5 | | 30 |
| Cyclohexane | 130 | | 136 | | 59-142 | 5 | | 30 |
| 1,4-Dioxane | 113 | | 103 | | 65-136 | 9 | | 30 |
| Freon-113 | 109 | | 123 | | 50-139 | 12 | | 30 |
| Methyl cyclohexane | 120 | | 121 | | 70-130 | 1 | | 30 |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | 120 | | 117 | | 70-130 |
| Toluene-d8 | 99 | | 98 | | 70-130 |
| 4-Bromofluorobenzene | 111 | | 109 | | 70-130 |
| Dibromofluoromethane | 104 | | 112 | | 70-130 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG1020841-8 WG1020841-9 | | | | | | | | |
| Methylene chloride | 99 | | 97 | | 70-130 | 2 | | 30 |
| 1,1-Dichloroethane | 108 | | 109 | | 70-130 | 1 | | 30 |
| Chloroform | 110 | | 110 | | 70-130 | 0 | | 30 |
| Carbon tetrachloride | 125 | | 125 | | 70-130 | 0 | | 30 |
| 1,2-Dichloropropane | 110 | | 111 | | 70-130 | 1 | | 30 |
| Dibromochloromethane | 101 | | 100 | | 70-130 | 1 | | 30 |
| 1,1,2-Trichloroethane | 98 | | 95 | | 70-130 | 3 | | 30 |
| Tetrachloroethene | 107 | | 103 | | 70-130 | 4 | | 30 |
| Chlorobenzene | 100 | | 99 | | 70-130 | 1 | | 30 |
| Trichlorofluoromethane | 119 | | 120 | | 70-139 | 1 | | 30 |
| 1,2-Dichloroethane | 112 | | 112 | | 70-130 | 0 | | 30 |
| 1,1,1-Trichloroethane | 118 | | 119 | | 70-130 | 1 | | 30 |
| Bromodichloromethane | 113 | | 113 | | 70-130 | 0 | | 30 |
| trans-1,3-Dichloropropene | 103 | | 102 | | 70-130 | 1 | | 30 |
| cis-1,3-Dichloropropene | 102 | | 101 | | 70-130 | 1 | | 30 |
| Bromoform | 96 | | 96 | | 70-130 | 0 | | 30 |
| 1,1,2,2-Tetrachloroethane | 95 | | 94 | | 70-130 | 1 | | 30 |
| Benzene | 108 | | 108 | | 70-130 | 0 | | 30 |
| Toluene | 106 | | 101 | | 70-130 | 5 | | 30 |
| Ethylbenzene | 103 | | 103 | | 70-130 | 0 | | 30 |
| Chloromethane | 107 | | 116 | | 52-130 | 8 | | 30 |
| Bromomethane | 113 | | 110 | | 57-147 | 3 | | 30 |
| Vinyl chloride | 122 | | 123 | | 67-130 | 1 | | 30 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG1020841-8 WG1020841-9 | | | | | | | | |
| Chloroethane | 104 | | 106 | | 50-151 | 2 | | 30 |
| 1,1-Dichloroethene | 96 | | 94 | | 65-135 | 2 | | 30 |
| trans-1,2-Dichloroethene | 103 | | 105 | | 70-130 | 2 | | 30 |
| Trichloroethene | 110 | | 110 | | 70-130 | 0 | | 30 |
| 1,2-Dichlorobenzene | 98 | | 94 | | 70-130 | 4 | | 30 |
| 1,3-Dichlorobenzene | 100 | | 99 | | 70-130 | 1 | | 30 |
| 1,4-Dichlorobenzene | 95 | | 96 | | 70-130 | 1 | | 30 |
| Methyl tert butyl ether | 94 | | 94 | | 66-130 | 0 | | 30 |
| p/m-Xylene | 102 | | 102 | | 70-130 | 0 | | 30 |
| o-Xylene | 100 | | 100 | | 70-130 | 0 | | 30 |
| cis-1,2-Dichloroethene | 101 | | 103 | | 70-130 | 2 | | 30 |
| Styrene | 100 | | 99 | | 70-130 | 1 | | 30 |
| Dichlorodifluoromethane | 121 | | 123 | | 30-146 | 2 | | 30 |
| Acetone | 128 | | 121 | | 54-140 | 6 | | 30 |
| Carbon disulfide | 74 | | 69 | | 59-130 | 7 | | 30 |
| 2-Butanone | 105 | | 116 | | 70-130 | 10 | | 30 |
| 4-Methyl-2-pentanone | 101 | | 100 | | 70-130 | 1 | | 30 |
| 2-Hexanone | 107 | | 101 | | 70-130 | 6 | | 30 |
| Bromochloromethane | 103 | | 98 | | 70-130 | 5 | | 30 |
| 1,2-Dibromoethane | 98 | | 96 | | 70-130 | 2 | | 30 |
| n-Butylbenzene | 101 | | 107 | | 70-130 | 6 | | 30 |
| sec-Butylbenzene | 102 | | 101 | | 70-130 | 1 | | 30 |
| 1,2-Dibromo-3-chloropropane | 90 | | 88 | | 68-130 | 2 | | 30 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641
**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG1020841-8 WG1020841-9 | | | | | | | | |
| Isopropylbenzene | 103 | | 105 | | 70-130 | 2 | | 30 |
| p-Isopropyltoluene | 106 | | 106 | | 70-130 | 0 | | 30 |
| Naphthalene | 93 | | 93 | | 70-130 | 0 | | 30 |
| n-Propylbenzene | 103 | | 106 | | 70-130 | 3 | | 30 |
| 1,2,3-Trichlorobenzene | 97 | | 100 | | 70-130 | 3 | | 30 |
| 1,2,4-Trichlorobenzene | 98 | | 101 | | 70-130 | 3 | | 30 |
| 1,3,5-Trimethylbenzene | 105 | | 106 | | 70-130 | 1 | | 30 |
| 1,2,4-Trimethylbenzene | 104 | | 103 | | 70-130 | 1 | | 30 |
| Methyl Acetate | 102 | | 102 | | 51-146 | 0 | | 30 |
| Cyclohexane | 127 | | 126 | | 59-142 | 1 | | 30 |
| 1,4-Dioxane | 108 | | 99 | | 65-136 | 9 | | 30 |
| Freon-113 | 117 | | 109 | | 50-139 | 7 | | 30 |
| Methyl cyclohexane | 121 | | 121 | | 70-130 | 0 | | 30 |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | 106 | | 107 | | 70-130 |
| Toluene-d8 | 101 | | 101 | | 70-130 |
| 4-Bromofluorobenzene | 100 | | 105 | | 70-130 |
| Dibromofluoromethane | 104 | | 102 | | 70-130 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05,07 Batch: WG1021016-3 WG1021016-4 | | | | | | | | |
| Methylene chloride | 100 | | 100 | | 70-130 | 0 | | 30 |
| 1,1-Dichloroethane | 100 | | 100 | | 70-130 | 0 | | 30 |
| Chloroform | 96 | | 99 | | 70-130 | 3 | | 30 |
| Carbon tetrachloride | 89 | | 91 | | 70-130 | 2 | | 30 |
| 1,2-Dichloropropane | 101 | | 103 | | 70-130 | 2 | | 30 |
| Dibromochloromethane | 94 | | 101 | | 70-130 | 7 | | 30 |
| 1,1,2-Trichloroethane | 108 | | 109 | | 70-130 | 1 | | 30 |
| Tetrachloroethene | 104 | | 107 | | 70-130 | 3 | | 30 |
| Chlorobenzene | 102 | | 103 | | 70-130 | 1 | | 30 |
| Trichlorofluoromethane | **140** | Q | **142** | Q | 70-139 | 1 | | 30 |
| 1,2-Dichloroethane | 96 | | 100 | | 70-130 | 4 | | 30 |
| 1,1,1-Trichloroethane | 94 | | 97 | | 70-130 | 3 | | 30 |
| Bromodichloromethane | 92 | | 95 | | 70-130 | 3 | | 30 |
| trans-1,3-Dichloropropene | 91 | | 98 | | 70-130 | 7 | | 30 |
| cis-1,3-Dichloropropene | 92 | | 96 | | 70-130 | 4 | | 30 |
| Bromoform | 84 | | 90 | | 70-130 | 7 | | 30 |
| 1,1,2,2-Tetrachloroethane | 116 | | 119 | | 70-130 | 3 | | 30 |
| Benzene | 100 | | 103 | | 70-130 | 3 | | 30 |
| Toluene | 105 | | 105 | | 70-130 | 0 | | 30 |
| Ethylbenzene | 107 | | 110 | | 70-130 | 3 | | 30 |
| Chloromethane | 68 | | 71 | | 52-130 | 4 | | 30 |
| Bromomethane | 104 | | 102 | | 57-147 | 2 | | 30 |
| Vinyl chloride | 100 | | 102 | | 67-130 | 2 | | 30 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05,07 Batch: WG1021016-3 WG1021016-4 | | | | | | | | |
| Chloroethane | 150 | | **157** | Q | 50-151 | 5 | | 30 |
| 1,1-Dichloroethene | 125 | | 119 | | 65-135 | 5 | | 30 |
| trans-1,2-Dichloroethene | 93 | | 94 | | 70-130 | 1 | | 30 |
| Trichloroethene | 100 | | 101 | | 70-130 | 1 | | 30 |
| 1,2-Dichlorobenzene | 102 | | 104 | | 70-130 | 2 | | 30 |
| 1,3-Dichlorobenzene | 105 | | 105 | | 70-130 | 0 | | 30 |
| 1,4-Dichlorobenzene | 102 | | 102 | | 70-130 | 0 | | 30 |
| Methyl tert butyl ether | 86 | | 91 | | 66-130 | 6 | | 30 |
| p/m-Xylene | 108 | | 108 | | 70-130 | 0 | | 30 |
| o-Xylene | 102 | | 103 | | 70-130 | 1 | | 30 |
| cis-1,2-Dichloroethene | 91 | | 93 | | 70-130 | 2 | | 30 |
| Styrene | 99 | | 102 | | 70-130 | 3 | | 30 |
| Dichlorodifluoromethane | 54 | | 53 | | 30-146 | 2 | | 30 |
| Acetone | 91 | | 100 | | 54-140 | 9 | | 30 |
| Carbon disulfide | 87 | | 88 | | 59-130 | 1 | | 30 |
| 2-Butanone | 96 | | 99 | | 70-130 | 3 | | 30 |
| 4-Methyl-2-pentanone | 94 | | 100 | | 70-130 | 6 | | 30 |
| 2-Hexanone | 89 | | 95 | | 70-130 | 7 | | 30 |
| Bromochloromethane | 93 | | 95 | | 70-130 | 2 | | 30 |
| 1,2-Dibromoethane | 98 | | 103 | | 70-130 | 5 | | 30 |
| n-Butylbenzene | 118 | | 120 | | 70-130 | 2 | | 30 |
| sec-Butylbenzene | 116 | | 117 | | 70-130 | 1 | | 30 |
| 1,2-Dibromo-3-chloropropane | 80 | | 93 | | 68-130 | 15 | | 30 |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** PH. II ESA

**Project Number:** E1641

**Lab Number:** L1722530

**Report Date:** 07/10/17

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05,07 Batch: WG1021016-3 WG1021016-4 | | | | | | | | |
| Isopropylbenzene | 106 | | 107 | | 70-130 | 1 | | 30 |
| p-Isopropyltoluene | 111 | | 112 | | 70-130 | 1 | | 30 |
| Naphthalene | 94 | | 100 | | 70-130 | 6 | | 30 |
| n-Propylbenzene | 111 | | 112 | | 70-130 | 1 | | 30 |
| 1,2,3-Trichlorobenzene | 97 | | 100 | | 70-130 | 3 | | 30 |
| 1,2,4-Trichlorobenzene | 97 | | 97 | | 70-130 | 0 | | 30 |
| 1,3,5-Trimethylbenzene | 109 | | 109 | | 70-130 | 0 | | 30 |
| 1,2,4-Trimethylbenzene | 106 | | 107 | | 70-130 | 1 | | 30 |
| Methyl Acetate | 97 | | 102 | | 51-146 | 5 | | 30 |
| Cyclohexane | 109 | | 110 | | 59-142 | 1 | | 30 |
| 1,4-Dioxane | 106 | | 113 | | 65-136 | 6 | | 30 |
| Freon-113 | 126 | | 127 | | 50-139 | 1 | | 30 |
| Methyl cyclohexane | 104 | | 105 | | 70-130 | 1 | | 30 |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | 107 | | 106 | | 70-130 |
| Toluene-d8 | 106 | | 105 | | 70-130 |
| 4-Bromofluorobenzene | 94 | | 92 | | 70-130 |
| Dibromofluoromethane | 98 | | 98 | | 70-130 |

# SEMIVOLATILES

**Project Name:** PH. II ESA
**Project Number:** E1641
**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-01
Client ID: SB9
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 07/05/17 13:45
Analyst: RC

Date Collected: 06/29/17 15:45
Date Received: 06/30/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 07/03/17 13:48

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Bis(2-chloroethyl)ether | ND | | ug/l | 1.9 | 0.64 | 1 |
| 3,3'-Dichlorobenzidine | ND | | ug/l | 4.8 | 1.3 | 1 |
| 2,4-Dinitrotoluene | ND | | ug/l | 4.8 | 0.82 | 1 |
| 2,6-Dinitrotoluene | ND | | ug/l | 4.8 | 1.1 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | ug/l | 1.9 | 0.60 | 1 |
| 4-Bromophenyl phenyl ether | ND | | ug/l | 1.9 | 0.70 | 1 |
| Bis(2-chloroisopropyl)ether | ND | | ug/l | 1.9 | 0.67 | 1 |
| Bis(2-chloroethoxy)methane | ND | | ug/l | 4.8 | 0.60 | 1 |
| Hexachlorocyclopentadiene | ND | | ug/l | 19 | 7.6 | 1 |
| Isophorone | ND | | ug/l | 4.8 | 0.58 | 1 |
| Nitrobenzene | ND | | ug/l | 1.9 | 0.73 | 1 |
| NDPA/DPA | ND | | ug/l | 1.9 | 0.62 | 1 |
| n-Nitrosodi-n-propylamine | ND | | ug/l | 4.8 | 0.68 | 1 |
| Bis(2-ethylhexyl)phthalate | 5.7 | | ug/l | 2.9 | 0.88 | 1 |
| Butyl benzyl phthalate | ND | | ug/l | 4.8 | 1.2 | 1 |
| Di-n-butylphthalate | ND | | ug/l | 4.8 | 0.66 | 1 |
| Di-n-octylphthalate | ND | | ug/l | 4.8 | 1.1 | 1 |
| Diethyl phthalate | 1.5 | J | ug/l | 4.8 | 0.60 | 1 |
| Dimethyl phthalate | ND | | ug/l | 4.8 | 0.63 | 1 |
| Biphenyl | ND | | ug/l | 1.9 | 0.73 | 1 |
| 4-Chloroaniline | ND | | ug/l | 4.8 | 0.61 | 1 |
| 2-Nitroaniline | ND | | ug/l | 4.8 | 1.1 | 1 |
| 3-Nitroaniline | ND | | ug/l | 4.8 | 1.2 | 1 |
| 4-Nitroaniline | ND | | ug/l | 4.8 | 1.2 | 1 |
| Dibenzofuran | ND | | ug/l | 1.9 | 0.63 | 1 |
| 1,2,4,5-Tetrachlorobenzene | ND | | ug/l | 9.6 | 0.64 | 1 |
| Acetophenone | ND | | ug/l | 4.8 | 0.82 | 1 |
| 2,4,6-Trichlorophenol | ND | | ug/l | 4.8 | 0.66 | 1 |
| p-Chloro-m-cresol | ND | | ug/l | 1.9 | 0.60 | 1 |
| 2-Chlorophenol | ND | | ug/l | 1.9 | 0.61 | 1 |

**Project Name:** PH. II ESA **Lab Number:** L1722530

**Project Number:** E1641 **Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-01 Date Collected: 06/29/17 15:45

Client ID: SB9 Date Received: 06/30/17

Sample Location: 124&145 CHANDLER ST., BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| 2,4-Dichlorophenol | ND | | ug/l | 4.8 | 0.74 | 1 |
| 2,4-Dimethylphenol | ND | | ug/l | 4.8 | 1.6 | 1 |
| 2-Nitrophenol | ND | | ug/l | 9.6 | 1.5 | 1 |
| 4-Nitrophenol | ND | | ug/l | 9.6 | 1.7 | 1 |
| 2,4-Dinitrophenol | ND | | ug/l | 19 | 5.3 | 1 |
| 4,6-Dinitro-o-cresol | ND | | ug/l | 9.6 | 2.0 | 1 |
| Phenol | ND | | ug/l | 4.8 | 1.8 | 1 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/l | 4.8 | 1.1 | 1 |
| 2,4,5-Trichlorophenol | ND | | ug/l | 4.8 | 0.69 | 1 |
| Carbazole | ND | | ug/l | 1.9 | 0.60 | 1 |
| Atrazine | ND | | ug/l | 9.6 | 1.8 | 1 |
| Benzaldehyde | ND | | ug/l | 4.8 | 1.0 | 1 |
| Caprolactam | ND | | ug/l | 9.6 | 3.4 | 1 |
| 2,3,4,6-Tetrachlorophenol | ND | | ug/l | 4.8 | 0.90 | 1 |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 42 | | 21-120 |
| Phenol-d6 | 40 | | 10-120 |
| Nitrobenzene-d5 | 49 | | 23-120 |
| 2-Fluorobiphenyl | 43 | | 15-120 |
| 2,4,6-Tribromophenol | 42 | | 10-120 |
| 4-Terphenyl-d14 | **21** | Q | 41-149 |

**Project Name:** PH. II ESA
**Lab Number:** L1722530
**Project Number:** E1641
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-01
Client ID: SB9
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY

Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 07/08/17 19:05
Analyst: KL

Date Collected: 06/29/17 15:45
Date Received: 06/30/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 07/03/17 14:01

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS-SIM - Westborough Lab** | | | | | | |
| Acenaphthene | 0.23 | | ug/l | 0.10 | 0.03 | 1 |
| 2-Chloronaphthalene | ND | | ug/l | 0.19 | 0.03 | 1 |
| Fluoranthene | 7.5 | | ug/l | 0.10 | 0.04 | 1 |
| Hexachlorobutadiene | ND | | ug/l | 0.48 | 0.04 | 1 |
| Naphthalene | 0.30 | | ug/l | 0.10 | 0.04 | 1 |
| Benzo(a)anthracene | 5.4 | | ug/l | 0.10 | 0.02 | 1 |
| Benzo(a)pyrene | 6.8 | | ug/l | 0.10 | 0.04 | 1 |
| Benzo(b)fluoranthene | 10 | | ug/l | 0.10 | 0.02 | 1 |
| Benzo(k)fluoranthene | 3.1 | | ug/l | 0.10 | 0.04 | 1 |
| Chrysene | 6.7 | | ug/l | 0.10 | 0.04 | 1 |
| Acenaphthylene | 0.15 | | ug/l | 0.10 | 0.03 | 1 |
| Anthracene | 0.66 | | ug/l | 0.10 | 0.03 | 1 |
| Benzo(ghi)perylene | 2.7 | | ug/l | 0.10 | 0.04 | 1 |
| Fluorene | 0.18 | | ug/l | 0.10 | 0.04 | 1 |
| Phenanthrene | 2.8 | | ug/l | 0.10 | 0.01 | 1 |
| Dibenzo(a,h)anthracene | 1.0 | | ug/l | 0.10 | 0.04 | 1 |
| Indeno(1,2,3-cd)pyrene | 3.0 | | ug/l | 0.10 | 0.04 | 1 |
| Pyrene | 8.9 | | ug/l | 0.10 | 0.04 | 1 |
| 2-Methylnaphthalene | 0.46 | | ug/l | 0.10 | 0.04 | 1 |
| Pentachlorophenol | ND | | ug/l | 0.77 | 0.21 | 1 |
| Hexachlorobenzene | ND | | ug/l | 0.77 | 0.03 | 1 |
| Hexachloroethane | ND | | ug/l | 0.77 | 0.03 | 1 |

**Project Name:** PH. II ESA
**Lab Number:** L1722530
**Project Number:** E1641
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-01
Client ID: SB9
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY
Date Collected: 06/29/17 15:45
Date Received: 06/30/17
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|

Semivolatile Organics by GC/MS-SIM - Westborough Lab

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 28 | | 21-120 |
| Phenol-d6 | 26 | | 10-120 |
| Nitrobenzene-d5 | 31 | | 23-120 |
| 2-Fluorobiphenyl | 35 | | 15-120 |
| 2,4,6-Tribromophenol | 42 | | 10-120 |
| 4-Terphenyl-d14 | **20** | Q | 41-149 |

**Project Name:** PH. II ESA
**Project Number:** E1641
**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-02 D
Client ID: SB1 (0-2.5')
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/07/17 04:17
Analyst: KV
Percent Solids: 88%

Date Collected: 06/29/17 09:00
Date Received: 06/30/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/05/17 23:17

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Acenaphthene | 65 | J | ug/kg | 300 | 39. | 2 |
| Hexachlorobenzene | ND | | ug/kg | 230 | 42. | 2 |
| Bis(2-chloroethyl)ether | ND | | ug/kg | 340 | 51. | 2 |
| 2-Chloronaphthalene | ND | | ug/kg | 380 | 38. | 2 |
| 3,3'-Dichlorobenzidine | ND | | ug/kg | 380 | 100 | 2 |
| 2,4-Dinitrotoluene | ND | | ug/kg | 380 | 76. | 2 |
| 2,6-Dinitrotoluene | ND | | ug/kg | 380 | 65. | 2 |
| Fluoranthene | 980 | | ug/kg | 230 | 43. | 2 |
| 4-Chlorophenyl phenyl ether | ND | | ug/kg | 380 | 40. | 2 |
| 4-Bromophenyl phenyl ether | ND | | ug/kg | 380 | 58. | 2 |
| Bis(2-chloroisopropyl)ether | ND | | ug/kg | 450 | 65. | 2 |
| Bis(2-chloroethoxy)methane | ND | | ug/kg | 410 | 38. | 2 |
| Hexachlorobutadiene | ND | | ug/kg | 380 | 55. | 2 |
| Hexachlorocyclopentadiene | ND | | ug/kg | 1100 | 340 | 2 |
| Hexachloroethane | ND | | ug/kg | 300 | 61. | 2 |
| Isophorone | ND | | ug/kg | 340 | 49. | 2 |
| Naphthalene | 110 | J | ug/kg | 380 | 46. | 2 |
| Nitrobenzene | ND | | ug/kg | 340 | 56. | 2 |
| NDPA/DPA | ND | | ug/kg | 300 | 43. | 2 |
| n-Nitrosodi-n-propylamine | ND | | ug/kg | 380 | 58. | 2 |
| Bis(2-ethylhexyl)phthalate | ND | | ug/kg | 380 | 130 | 2 |
| Butyl benzyl phthalate | 110 | J | ug/kg | 380 | 95. | 2 |
| Di-n-butylphthalate | ND | | ug/kg | 380 | 72. | 2 |
| Di-n-octylphthalate | ND | | ug/kg | 380 | 130 | 2 |
| Diethyl phthalate | ND | | ug/kg | 380 | 35. | 2 |
| Dimethyl phthalate | ND | | ug/kg | 380 | 80. | 2 |
| Benzo(a)anthracene | 560 | | ug/kg | 230 | 43. | 2 |
| Benzo(a)pyrene | 430 | | ug/kg | 300 | 92. | 2 |
| Benzo(b)fluoranthene | 610 | | ug/kg | 230 | 64. | 2 |
| Benzo(k)fluoranthene | 190 | J | ug/kg | 230 | 60. | 2 |

**Project Name:** PH. II ESA **Lab Number:** L1722530

**Project Number:** E1641 **Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-02 D Date Collected: 06/29/17 09:00

Client ID: SB1 (0-2.5') Date Received: 06/30/17

Sample Location: 124&145 CHANDLER ST., BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Chrysene | 560 | | ug/kg | 230 | 39. | 2 |
| Acenaphthylene | ND | | ug/kg | 300 | 58. | 2 |
| Anthracene | 160 | J | ug/kg | 230 | 74. | 2 |
| Benzo(ghi)perylene | 280 | J | ug/kg | 300 | 44. | 2 |
| Fluorene | 80 | J | ug/kg | 380 | 37. | 2 |
| Phenanthrene | 780 | | ug/kg | 230 | 46. | 2 |
| Dibenzo(a,h)anthracene | 71 | J | ug/kg | 230 | 44. | 2 |
| Indeno(1,2,3-cd)pyrene | 300 | | ug/kg | 300 | 53. | 2 |
| Pyrene | 960 | | ug/kg | 230 | 38. | 2 |
| Biphenyl | ND | | ug/kg | 860 | 88. | 2 |
| 4-Chloroaniline | ND | | ug/kg | 380 | 69. | 2 |
| 2-Nitroaniline | ND | | ug/kg | 380 | 73. | 2 |
| 3-Nitroaniline | ND | | ug/kg | 380 | 71. | 2 |
| 4-Nitroaniline | ND | | ug/kg | 380 | 160 | 2 |
| Dibenzofuran | 56 | J | ug/kg | 380 | 36. | 2 |
| 2-Methylnaphthalene | 110 | J | ug/kg | 450 | 46. | 2 |
| 1,2,4,5-Tetrachlorobenzene | ND | | ug/kg | 380 | 40. | 2 |
| Acetophenone | ND | | ug/kg | 380 | 47. | 2 |
| 2,4,6-Trichlorophenol | ND | | ug/kg | 230 | 72. | 2 |
| p-Chloro-m-cresol | ND | | ug/kg | 380 | 56. | 2 |
| 2-Chlorophenol | ND | | ug/kg | 380 | 45. | 2 |
| 2,4-Dichlorophenol | ND | | ug/kg | 340 | 61. | 2 |
| 2,4-Dimethylphenol | ND | | ug/kg | 380 | 120 | 2 |
| 2-Nitrophenol | ND | | ug/kg | 820 | 140 | 2 |
| 4-Nitrophenol | ND | | ug/kg | 530 | 150 | 2 |
| 2,4-Dinitrophenol | ND | | ug/kg | 1800 | 180 | 2 |
| 4,6-Dinitro-o-cresol | ND | | ug/kg | 980 | 180 | 2 |
| Pentachlorophenol | ND | | ug/kg | 300 | 83. | 2 |
| Phenol | ND | | ug/kg | 380 | 57. | 2 |
| 2-Methylphenol | ND | | ug/kg | 380 | 59. | 2 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 540 | 59. | 2 |
| 2,4,5-Trichlorophenol | ND | | ug/kg | 380 | 72. | 2 |
| Carbazole | 83 | J | ug/kg | 380 | 37. | 2 |
| Atrazine | ND | | ug/kg | 300 | 130 | 2 |
| Benzaldehyde | ND | | ug/kg | 500 | 100 | 2 |
| Caprolactam | ND | | ug/kg | 380 | 120 | 2 |
| 2,3,4,6-Tetrachlorophenol | ND | | ug/kg | 380 | 76. | 2 |

**Project Name:** PH. II ESA
**Lab Number:** L1722530
**Project Number:** E1641
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-02 D
Client ID: SB1 (0-2.5')
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY
Date Collected: 06/29/17 09:00
Date Received: 06/30/17
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|

Semivolatile Organics by GC/MS - Westborough Lab

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 51 | | 25-120 |
| Phenol-d6 | 55 | | 10-120 |
| Nitrobenzene-d5 | 68 | | 23-120 |
| 2-Fluorobiphenyl | 55 | | 30-120 |
| 2,4,6-Tribromophenol | 64 | | 10-136 |
| 4-Terphenyl-d14 | 41 | | 18-120 |

**Project Name:** PH. II ESA
**Project Number:** E1641
**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-03
Client ID: SB2 (0-2.5')
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/07/17 02:06
Analyst: KV
Percent Solids: 79%

Date Collected: 06/29/17 09:20
Date Received: 06/30/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/05/17 23:17

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Acenaphthene | 90 | J | ug/kg | 170 | 22. | 1 |
| Hexachlorobenzene | ND | | ug/kg | 120 | 23. | 1 |
| Bis(2-chloroethyl)ether | ND | | ug/kg | 190 | 28. | 1 |
| 2-Chloronaphthalene | ND | | ug/kg | 210 | 21. | 1 |
| 3,3'-Dichlorobenzidine | ND | | ug/kg | 210 | 56. | 1 |
| 2,4-Dinitrotoluene | ND | | ug/kg | 210 | 42. | 1 |
| 2,6-Dinitrotoluene | ND | | ug/kg | 210 | 36. | 1 |
| Fluoranthene | 1900 | | ug/kg | 120 | 24. | 1 |
| 4-Chlorophenyl phenyl ether | ND | | ug/kg | 210 | 22. | 1 |
| 4-Bromophenyl phenyl ether | ND | | ug/kg | 210 | 32. | 1 |
| Bis(2-chloroisopropyl)ether | ND | | ug/kg | 250 | 36. | 1 |
| Bis(2-chloroethoxy)methane | ND | | ug/kg | 220 | 21. | 1 |
| Hexachlorobutadiene | ND | | ug/kg | 210 | 30. | 1 |
| Hexachlorocyclopentadiene | ND | | ug/kg | 600 | 190 | 1 |
| Hexachloroethane | ND | | ug/kg | 170 | 34. | 1 |
| Isophorone | ND | | ug/kg | 190 | 27. | 1 |
| Naphthalene | 280 | | ug/kg | 210 | 25. | 1 |
| Nitrobenzene | ND | | ug/kg | 190 | 31. | 1 |
| NDPA/DPA | ND | | ug/kg | 170 | 24. | 1 |
| n-Nitrosodi-n-propylamine | ND | | ug/kg | 210 | 32. | 1 |
| Bis(2-ethylhexyl)phthalate | ND | | ug/kg | 210 | 72. | 1 |
| Butyl benzyl phthalate | ND | | ug/kg | 210 | 53. | 1 |
| Di-n-butylphthalate | ND | | ug/kg | 210 | 40. | 1 |
| Di-n-octylphthalate | ND | | ug/kg | 210 | 71. | 1 |
| Diethyl phthalate | ND | | ug/kg | 210 | 19. | 1 |
| Dimethyl phthalate | ND | | ug/kg | 210 | 44. | 1 |
| Benzo(a)anthracene | 1100 | | ug/kg | 120 | 24. | 1 |
| Benzo(a)pyrene | 1200 | | ug/kg | 170 | 51. | 1 |
| Benzo(b)fluoranthene | 1600 | | ug/kg | 120 | 35. | 1 |
| Benzo(k)fluoranthene | 550 | | ug/kg | 120 | 33. | 1 |

**Project Name:** PH. II ESA **Lab Number:** L1722530

**Project Number:** E1641 **Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-03 Date Collected: 06/29/17 09:20

Client ID: SB2 (0-2.5') Date Received: 06/30/17

Sample Location: 124&145 CHANDLER ST., BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Chrysene | 1100 | | ug/kg | 120 | 22. | 1 |
| Acenaphthylene | 34 | J | ug/kg | 170 | 32. | 1 |
| Anthracene | 380 | | ug/kg | 120 | 41. | 1 |
| Benzo(ghi)perylene | 660 | | ug/kg | 170 | 24. | 1 |
| Fluorene | 140 | J | ug/kg | 210 | 20. | 1 |
| Phenanthrene | 1400 | | ug/kg | 120 | 25. | 1 |
| Dibenzo(a,h)anthracene | 190 | | ug/kg | 120 | 24. | 1 |
| Indeno(1,2,3-cd)pyrene | 780 | | ug/kg | 170 | 29. | 1 |
| Pyrene | 1500 | | ug/kg | 120 | 21. | 1 |
| Biphenyl | 50 | J | ug/kg | 480 | 48. | 1 |
| 4-Chloroaniline | ND | | ug/kg | 210 | 38. | 1 |
| 2-Nitroaniline | ND | | ug/kg | 210 | 40. | 1 |
| 3-Nitroaniline | ND | | ug/kg | 210 | 39. | 1 |
| 4-Nitroaniline | ND | | ug/kg | 210 | 86. | 1 |
| Dibenzofuran | 130 | J | ug/kg | 210 | 20. | 1 |
| 2-Methylnaphthalene | 320 | | ug/kg | 250 | 25. | 1 |
| 1,2,4,5-Tetrachlorobenzene | ND | | ug/kg | 210 | 22. | 1 |
| Acetophenone | ND | | ug/kg | 210 | 26. | 1 |
| 2,4,6-Trichlorophenol | ND | | ug/kg | 120 | 40. | 1 |
| p-Chloro-m-cresol | ND | | ug/kg | 210 | 31. | 1 |
| 2-Chlorophenol | ND | | ug/kg | 210 | 25. | 1 |
| 2,4-Dichlorophenol | ND | | ug/kg | 190 | 34. | 1 |
| 2,4-Dimethylphenol | ND | | ug/kg | 210 | 69. | 1 |
| 2-Nitrophenol | ND | | ug/kg | 450 | 78. | 1 |
| 4-Nitrophenol | ND | | ug/kg | 290 | 85. | 1 |
| 2,4-Dinitrophenol | ND | | ug/kg | 1000 | 97. | 1 |
| 4,6-Dinitro-o-cresol | ND | | ug/kg | 540 | 100 | 1 |
| Pentachlorophenol | ND | | ug/kg | 170 | 46. | 1 |
| Phenol | ND | | ug/kg | 210 | 32. | 1 |
| 2-Methylphenol | ND | | ug/kg | 210 | 32. | 1 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 300 | 33. | 1 |
| 2,4,5-Trichlorophenol | ND | | ug/kg | 210 | 40. | 1 |
| Carbazole | 140 | J | ug/kg | 210 | 20. | 1 |
| Atrazine | ND | | ug/kg | 170 | 73. | 1 |
| Benzaldehyde | ND | | ug/kg | 280 | 56. | 1 |
| Caprolactam | ND | | ug/kg | 210 | 64. | 1 |
| 2,3,4,6-Tetrachlorophenol | ND | | ug/kg | 210 | 42. | 1 |

**Project Name:** PH. II ESA
**Lab Number:** L1722530
**Project Number:** E1641
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-03
Client ID: SB2 (0-2.5')
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY
Date Collected: 06/29/17 09:20
Date Received: 06/30/17
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|

Semivolatile Organics by GC/MS - Westborough Lab

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 73 | | 25-120 |
| Phenol-d6 | 80 | | 10-120 |
| Nitrobenzene-d5 | 94 | | 23-120 |
| 2-Fluorobiphenyl | 71 | | 30-120 |
| 2,4,6-Tribromophenol | 92 | | 10-136 |
| 4-Terphenyl-d14 | 50 | | 18-120 |

**Project Name:** PH. II ESA
**Project Number:** E1641
**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-04
Client ID: SB3 (1-5')
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/07/17 01:41
Analyst: KV
Percent Solids: 86%

Date Collected: 06/29/17 09:50
Date Received: 06/30/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/05/17 23:17

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Acenaphthene | 83 | J | ug/kg | 150 | 20. | 1 |
| Hexachlorobenzene | ND | | ug/kg | 110 | 21. | 1 |
| Bis(2-chloroethyl)ether | ND | | ug/kg | 170 | 26. | 1 |
| 2-Chloronaphthalene | ND | | ug/kg | 190 | 19. | 1 |
| 3,3'-Dichlorobenzidine | ND | | ug/kg | 190 | 50. | 1 |
| 2,4-Dinitrotoluene | ND | | ug/kg | 190 | 38. | 1 |
| 2,6-Dinitrotoluene | ND | | ug/kg | 190 | 32. | 1 |
| Fluoranthene | 1500 | | ug/kg | 110 | 22. | 1 |
| 4-Chlorophenyl phenyl ether | ND | | ug/kg | 190 | 20. | 1 |
| 4-Bromophenyl phenyl ether | ND | | ug/kg | 190 | 29. | 1 |
| Bis(2-chloroisopropyl)ether | ND | | ug/kg | 230 | 32. | 1 |
| Bis(2-chloroethoxy)methane | ND | | ug/kg | 200 | 19. | 1 |
| Hexachlorobutadiene | ND | | ug/kg | 190 | 28. | 1 |
| Hexachlorocyclopentadiene | ND | | ug/kg | 540 | 170 | 1 |
| Hexachloroethane | ND | | ug/kg | 150 | 31. | 1 |
| Isophorone | ND | | ug/kg | 170 | 24. | 1 |
| Naphthalene | 140 | J | ug/kg | 190 | 23. | 1 |
| Nitrobenzene | ND | | ug/kg | 170 | 28. | 1 |
| NDPA/DPA | ND | | ug/kg | 150 | 22. | 1 |
| n-Nitrosodi-n-propylamine | ND | | ug/kg | 190 | 29. | 1 |
| Bis(2-ethylhexyl)phthalate | ND | | ug/kg | 190 | 65. | 1 |
| Butyl benzyl phthalate | ND | | ug/kg | 190 | 48. | 1 |
| Di-n-butylphthalate | ND | | ug/kg | 190 | 36. | 1 |
| Di-n-octylphthalate | ND | | ug/kg | 190 | 64. | 1 |
| Diethyl phthalate | ND | | ug/kg | 190 | 18. | 1 |
| Dimethyl phthalate | ND | | ug/kg | 190 | 40. | 1 |
| Benzo(a)anthracene | 620 | | ug/kg | 110 | 21. | 1 |
| Benzo(a)pyrene | 530 | | ug/kg | 150 | 46. | 1 |
| Benzo(b)fluoranthene | 720 | | ug/kg | 110 | 32. | 1 |
| Benzo(k)fluoranthene | 220 | | ug/kg | 110 | 30. | 1 |

**Project Name:** PH. II ESA **Lab Number:** L1722530

**Project Number:** E1641 **Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-04 Date Collected: 06/29/17 09:50

Client ID: SB3 (1-5') Date Received: 06/30/17

Sample Location: 124&145 CHANDLER ST., BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Chrysene | 590 | | ug/kg | 110 | 20. | 1 |
| Acenaphthylene | 67 | J | ug/kg | 150 | 29. | 1 |
| Anthracene | 310 | | ug/kg | 110 | 37. | 1 |
| Benzo(ghi)perylene | 320 | | ug/kg | 150 | 22. | 1 |
| Fluorene | 150 | J | ug/kg | 190 | 18. | 1 |
| Phenanthrene | 1200 | | ug/kg | 110 | 23. | 1 |
| Dibenzo(a,h)anthracene | 91 | J | ug/kg | 110 | 22. | 1 |
| Indeno(1,2,3-cd)pyrene | 360 | | ug/kg | 150 | 26. | 1 |
| Pyrene | 1200 | | ug/kg | 110 | 19. | 1 |
| Biphenyl | ND | | ug/kg | 430 | 44. | 1 |
| 4-Chloroaniline | ND | | ug/kg | 190 | 34. | 1 |
| 2-Nitroaniline | ND | | ug/kg | 190 | 36. | 1 |
| 3-Nitroaniline | ND | | ug/kg | 190 | 36. | 1 |
| 4-Nitroaniline | ND | | ug/kg | 190 | 78. | 1 |
| Dibenzofuran | 110 | J | ug/kg | 190 | 18. | 1 |
| 2-Methylnaphthalene | 110 | J | ug/kg | 230 | 23. | 1 |
| 1,2,4,5-Tetrachlorobenzene | ND | | ug/kg | 190 | 20. | 1 |
| Acetophenone | ND | | ug/kg | 190 | 23. | 1 |
| 2,4,6-Trichlorophenol | ND | | ug/kg | 110 | 36. | 1 |
| p-Chloro-m-cresol | ND | | ug/kg | 190 | 28. | 1 |
| 2-Chlorophenol | ND | | ug/kg | 190 | 22. | 1 |
| 2,4-Dichlorophenol | ND | | ug/kg | 170 | 30. | 1 |
| 2,4-Dimethylphenol | ND | | ug/kg | 190 | 62. | 1 |
| 2-Nitrophenol | ND | | ug/kg | 410 | 71. | 1 |
| 4-Nitrophenol | ND | | ug/kg | 260 | 77. | 1 |
| 2,4-Dinitrophenol | ND | | ug/kg | 910 | 88. | 1 |
| 4,6-Dinitro-o-cresol | ND | | ug/kg | 490 | 91. | 1 |
| Pentachlorophenol | ND | | ug/kg | 150 | 42. | 1 |
| Phenol | ND | | ug/kg | 190 | 28. | 1 |
| 2-Methylphenol | ND | | ug/kg | 190 | 29. | 1 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 270 | 30. | 1 |
| 2,4,5-Trichlorophenol | ND | | ug/kg | 190 | 36. | 1 |
| Carbazole | 140 | J | ug/kg | 190 | 18. | 1 |
| Atrazine | ND | | ug/kg | 150 | 66. | 1 |
| Benzaldehyde | ND | | ug/kg | 250 | 51. | 1 |
| Caprolactam | ND | | ug/kg | 190 | 58. | 1 |
| 2,3,4,6-Tetrachlorophenol | ND | | ug/kg | 190 | 38. | 1 |

**Project Name:** PH. II ESA
**Lab Number:** L1722530
**Project Number:** E1641
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-04
Client ID: SB3 (1-5')
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY
Date Collected: 06/29/17 09:50
Date Received: 06/30/17
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|

Semivolatile Organics by GC/MS - Westborough Lab

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 74 | | 25-120 |
| Phenol-d6 | 78 | | 10-120 |
| Nitrobenzene-d5 | 88 | | 23-120 |
| 2-Fluorobiphenyl | 71 | | 30-120 |
| 2,4,6-Tribromophenol | 90 | | 10-136 |
| 4-Terphenyl-d14 | 60 | | 18-120 |

**Project Name:** PH. II ESA
**Project Number:** E1641
**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-05
Client ID: SB5 (0-4')
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/07/17 02:33
Analyst: KV
Percent Solids: 85%

Date Collected: 06/29/17 11:05
Date Received: 06/30/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/05/17 23:17

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Acenaphthene | 60 | J | ug/kg | 150 | 20. | 1 |
| Hexachlorobenzene | ND | | ug/kg | 120 | 22. | 1 |
| Bis(2-chloroethyl)ether | ND | | ug/kg | 170 | 26. | 1 |
| 2-Chloronaphthalene | ND | | ug/kg | 190 | 19. | 1 |
| 3,3'-Dichlorobenzidine | ND | | ug/kg | 190 | 51. | 1 |
| 2,4-Dinitrotoluene | ND | | ug/kg | 190 | 38. | 1 |
| 2,6-Dinitrotoluene | ND | | ug/kg | 190 | 33. | 1 |
| Fluoranthene | 1400 | | ug/kg | 120 | 22. | 1 |
| 4-Chlorophenyl phenyl ether | ND | | ug/kg | 190 | 20. | 1 |
| 4-Bromophenyl phenyl ether | ND | | ug/kg | 190 | 29. | 1 |
| Bis(2-chloroisopropyl)ether | ND | | ug/kg | 230 | 33. | 1 |
| Bis(2-chloroethoxy)methane | ND | | ug/kg | 210 | 19. | 1 |
| Hexachlorobutadiene | ND | | ug/kg | 190 | 28. | 1 |
| Hexachlorocyclopentadiene | ND | | ug/kg | 550 | 170 | 1 |
| Hexachloroethane | ND | | ug/kg | 150 | 31. | 1 |
| Isophorone | ND | | ug/kg | 170 | 25. | 1 |
| Naphthalene | 100 | J | ug/kg | 190 | 23. | 1 |
| Nitrobenzene | ND | | ug/kg | 170 | 28. | 1 |
| NDPA/DPA | ND | | ug/kg | 150 | 22. | 1 |
| n-Nitrosodi-n-propylamine | ND | | ug/kg | 190 | 30. | 1 |
| Bis(2-ethylhexyl)phthalate | ND | | ug/kg | 190 | 66. | 1 |
| Butyl benzyl phthalate | ND | | ug/kg | 190 | 48. | 1 |
| Di-n-butylphthalate | ND | | ug/kg | 190 | 36. | 1 |
| Di-n-octylphthalate | ND | | ug/kg | 190 | 65. | 1 |
| Diethyl phthalate | ND | | ug/kg | 190 | 18. | 1 |
| Dimethyl phthalate | ND | | ug/kg | 190 | 40. | 1 |
| Benzo(a)anthracene | 810 | | ug/kg | 120 | 22. | 1 |
| Benzo(a)pyrene | 820 | | ug/kg | 150 | 47. | 1 |
| Benzo(b)fluoranthene | 1100 | | ug/kg | 120 | 32. | 1 |
| Benzo(k)fluoranthene | 320 | | ug/kg | 120 | 31. | 1 |

**Project Name:** PH. II ESA **Lab Number:** L1722530

**Project Number:** E1641 **Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-05 Date Collected: 06/29/17 11:05

Client ID: SB5 (0-4') Date Received: 06/30/17

Sample Location: 124&145 CHANDLER ST., BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Chrysene | 820 | | ug/kg | 120 | 20. | 1 |
| Acenaphthylene | 42 | J | ug/kg | 150 | 30. | 1 |
| Anthracene | 170 | | ug/kg | 120 | 37. | 1 |
| Benzo(ghi)perylene | 490 | | ug/kg | 150 | 22. | 1 |
| Fluorene | 79 | J | ug/kg | 190 | 19. | 1 |
| Phenanthrene | 830 | | ug/kg | 120 | 23. | 1 |
| Dibenzo(a,h)anthracene | 170 | | ug/kg | 120 | 22. | 1 |
| Indeno(1,2,3-cd)pyrene | 510 | | ug/kg | 150 | 27. | 1 |
| Pyrene | 1200 | | ug/kg | 120 | 19. | 1 |
| Biphenyl | ND | | ug/kg | 440 | 44. | 1 |
| 4-Chloroaniline | ND | | ug/kg | 190 | 35. | 1 |
| 2-Nitroaniline | ND | | ug/kg | 190 | 37. | 1 |
| 3-Nitroaniline | ND | | ug/kg | 190 | 36. | 1 |
| 4-Nitroaniline | ND | | ug/kg | 190 | 80. | 1 |
| Dibenzofuran | 57 | J | ug/kg | 190 | 18. | 1 |
| 2-Methylnaphthalene | 120 | J | ug/kg | 230 | 23. | 1 |
| 1,2,4,5-Tetrachlorobenzene | ND | | ug/kg | 190 | 20. | 1 |
| Acetophenone | ND | | ug/kg | 190 | 24. | 1 |
| 2,4,6-Trichlorophenol | ND | | ug/kg | 120 | 36. | 1 |
| p-Chloro-m-cresol | ND | | ug/kg | 190 | 29. | 1 |
| 2-Chlorophenol | ND | | ug/kg | 190 | 23. | 1 |
| 2,4-Dichlorophenol | ND | | ug/kg | 170 | 31. | 1 |
| 2,4-Dimethylphenol | ND | | ug/kg | 190 | 63. | 1 |
| 2-Nitrophenol | ND | | ug/kg | 410 | 72. | 1 |
| 4-Nitrophenol | ND | | ug/kg | 270 | 78. | 1 |
| 2,4-Dinitrophenol | ND | | ug/kg | 920 | 89. | 1 |
| 4,6-Dinitro-o-cresol | ND | | ug/kg | 500 | 92. | 1 |
| Pentachlorophenol | ND | | ug/kg | 150 | 42. | 1 |
| Phenol | ND | | ug/kg | 190 | 29. | 1 |
| 2-Methylphenol | ND | | ug/kg | 190 | 30. | 1 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 280 | 30. | 1 |
| 2,4,5-Trichlorophenol | ND | | ug/kg | 190 | 37. | 1 |
| Carbazole | 110 | J | ug/kg | 190 | 19. | 1 |
| Atrazine | ND | | ug/kg | 150 | 67. | 1 |
| Benzaldehyde | ND | | ug/kg | 250 | 52. | 1 |
| Caprolactam | ND | | ug/kg | 190 | 58. | 1 |
| 2,3,4,6-Tetrachlorophenol | ND | | ug/kg | 190 | 39. | 1 |

**Project Name:** PH. II ESA
**Lab Number:** L1722530
**Project Number:** E1641
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-05
Client ID: SB5 (0-4')
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY
Date Collected: 06/29/17 11:05
Date Received: 06/30/17
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|

Semivolatile Organics by GC/MS - Westborough Lab

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 66 | | 25-120 |
| Phenol-d6 | 71 | | 10-120 |
| Nitrobenzene-d5 | 82 | | 23-120 |
| 2-Fluorobiphenyl | 66 | | 30-120 |
| 2,4,6-Tribromophenol | 79 | | 10-136 |
| 4-Terphenyl-d14 | 47 | | 18-120 |

**Project Name:** PH. II ESA
**Project Number:** E1641
**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-06 D
Client ID: SB6 (0-2')
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/07/17 04:43
Analyst: KV
Percent Solids: 92%

Date Collected: 06/29/17 13:20
Date Received: 06/30/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/05/17 23:17

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Acenaphthene | ND | | ug/kg | 5100 | 660 | 35 |
| Hexachlorobenzene | ND | | ug/kg | 3800 | 710 | 35 |
| Bis(2-chloroethyl)ether | ND | | ug/kg | 5700 | 860 | 35 |
| 2-Chloronaphthalene | ND | | ug/kg | 6300 | 630 | 35 |
| 3,3'-Dichlorobenzidine | ND | | ug/kg | 6300 | 1700 | 35 |
| 2,4-Dinitrotoluene | ND | | ug/kg | 6300 | 1300 | 35 |
| 2,6-Dinitrotoluene | ND | | ug/kg | 6300 | 1100 | 35 |
| Fluoranthene | 2800 | J | ug/kg | 3800 | 730 | 35 |
| 4-Chlorophenyl phenyl ether | ND | | ug/kg | 6300 | 680 | 35 |
| 4-Bromophenyl phenyl ether | ND | | ug/kg | 6300 | 970 | 35 |
| Bis(2-chloroisopropyl)ether | ND | | ug/kg | 7600 | 1100 | 35 |
| Bis(2-chloroethoxy)methane | ND | | ug/kg | 6800 | 630 | 35 |
| Hexachlorobutadiene | ND | | ug/kg | 6300 | 930 | 35 |
| Hexachlorocyclopentadiene | ND | | ug/kg | 18000 | 5700 | 35 |
| Hexachloroethane | ND | | ug/kg | 5100 | 1000 | 35 |
| Isophorone | ND | | ug/kg | 5700 | 820 | 35 |
| Naphthalene | ND | | ug/kg | 6300 | 770 | 35 |
| Nitrobenzene | ND | | ug/kg | 5700 | 940 | 35 |
| NDPA/DPA | ND | | ug/kg | 5100 | 720 | 35 |
| n-Nitrosodi-n-propylamine | ND | | ug/kg | 6300 | 980 | 35 |
| Bis(2-ethylhexyl)phthalate | ND | | ug/kg | 6300 | 2200 | 35 |
| Butyl benzyl phthalate | ND | | ug/kg | 6300 | 1600 | 35 |
| Di-n-butylphthalate | ND | | ug/kg | 6300 | 1200 | 35 |
| Di-n-octylphthalate | ND | | ug/kg | 6300 | 2200 | 35 |
| Diethyl phthalate | ND | | ug/kg | 6300 | 590 | 35 |
| Dimethyl phthalate | ND | | ug/kg | 6300 | 1300 | 35 |
| Benzo(a)anthracene | 1700 | J | ug/kg | 3800 | 710 | 35 |
| Benzo(a)pyrene | ND | | ug/kg | 5100 | 1500 | 35 |
| Benzo(b)fluoranthene | 1800 | J | ug/kg | 3800 | 1100 | 35 |
| Benzo(k)fluoranthene | ND | | ug/kg | 3800 | 1000 | 35 |

**Project Name:** PH. II ESA **Lab Number:** L1722530

**Project Number:** E1641 **Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-06 D Date Collected: 06/29/17 13:20

Client ID: SB6 (0-2') Date Received: 06/30/17

Sample Location: 124&145 CHANDLER ST., BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Chrysene | 1700 | J | ug/kg | 3800 | 660 | 35 |
| Acenaphthylene | ND | | ug/kg | 5100 | 980 | 35 |
| Anthracene | ND | | ug/kg | 3800 | 1200 | 35 |
| Benzo(ghi)perylene | 1200 | J | ug/kg | 5100 | 740 | 35 |
| Fluorene | ND | | ug/kg | 6300 | 620 | 35 |
| Phenanthrene | 1500 | J | ug/kg | 3800 | 770 | 35 |
| Dibenzo(a,h)anthracene | ND | | ug/kg | 3800 | 730 | 35 |
| Indeno(1,2,3-cd)pyrene | ND | | ug/kg | 5100 | 880 | 35 |
| Pyrene | 2300 | J | ug/kg | 3800 | 630 | 35 |
| Biphenyl | ND | | ug/kg | 14000 | 1500 | 35 |
| 4-Chloroaniline | ND | | ug/kg | 6300 | 1200 | 35 |
| 2-Nitroaniline | ND | | ug/kg | 6300 | 1200 | 35 |
| 3-Nitroaniline | ND | | ug/kg | 6300 | 1200 | 35 |
| 4-Nitroaniline | ND | | ug/kg | 6300 | 2600 | 35 |
| Dibenzofuran | ND | | ug/kg | 6300 | 600 | 35 |
| 2-Methylnaphthalene | ND | | ug/kg | 7600 | 760 | 35 |
| 1,2,4,5-Tetrachlorobenzene | ND | | ug/kg | 6300 | 660 | 35 |
| Acetophenone | ND | | ug/kg | 6300 | 780 | 35 |
| 2,4,6-Trichlorophenol | ND | | ug/kg | 3800 | 1200 | 35 |
| p-Chloro-m-cresol | ND | | ug/kg | 6300 | 940 | 35 |
| 2-Chlorophenol | ND | | ug/kg | 6300 | 750 | 35 |
| 2,4-Dichlorophenol | ND | | ug/kg | 5700 | 1000 | 35 |
| 2,4-Dimethylphenol | ND | | ug/kg | 6300 | 2100 | 35 |
| 2-Nitrophenol | ND | | ug/kg | 14000 | 2400 | 35 |
| 4-Nitrophenol | ND | | ug/kg | 8900 | 2600 | 35 |
| 2,4-Dinitrophenol | ND | | ug/kg | 30000 | 3000 | 35 |
| 4,6-Dinitro-o-cresol | ND | | ug/kg | 16000 | 3000 | 35 |
| Pentachlorophenol | ND | | ug/kg | 5100 | 1400 | 35 |
| Phenol | ND | | ug/kg | 6300 | 960 | 35 |
| 2-Methylphenol | ND | | ug/kg | 6300 | 980 | 35 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 9100 | 990 | 35 |
| 2,4,5-Trichlorophenol | ND | | ug/kg | 6300 | 1200 | 35 |
| Carbazole | ND | | ug/kg | 6300 | 620 | 35 |
| Atrazine | ND | | ug/kg | 5100 | 2200 | 35 |
| Benzaldehyde | ND | | ug/kg | 8400 | 1700 | 35 |
| Caprolactam | ND | | ug/kg | 6300 | 1900 | 35 |
| 2,3,4,6-Tetrachlorophenol | ND | | ug/kg | 6300 | 1300 | 35 |

**Project Name:** PH. II ESA **Lab Number:** L1722530

**Project Number:** E1641 **Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-06 D Date Collected: 06/29/17 13:20

Client ID: SB6 (0-2') Date Received: 06/30/17

Sample Location: 124&145 CHANDLER ST., BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|

Semivolatile Organics by GC/MS - Westborough Lab

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | **0** | Q | 25-120 |
| Phenol-d6 | **0** | Q | 10-120 |
| Nitrobenzene-d5 | **0** | Q | 23-120 |
| 2-Fluorobiphenyl | **0** | Q | 30-120 |
| 2,4,6-Tribromophenol | **0** | Q | 10-136 |
| 4-Terphenyl-d14 | **0** | Q | 18-120 |

**Project Name:** PH. II ESA
**Project Number:** E1641
**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-07
Client ID: SB7 (1-5')
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/07/17 02:59
Analyst: KV
Percent Solids: 77%

Date Collected: 06/29/17 13:40
Date Received: 06/30/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/05/17 23:17

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Acenaphthene | 120 | J | ug/kg | 170 | 22. | 1 |
| Hexachlorobenzene | ND | | ug/kg | 130 | 24. | 1 |
| Bis(2-chloroethyl)ether | ND | | ug/kg | 190 | 29. | 1 |
| 2-Chloronaphthalene | ND | | ug/kg | 220 | 21. | 1 |
| 3,3'-Dichlorobenzidine | ND | | ug/kg | 220 | 57. | 1 |
| 2,4-Dinitrotoluene | ND | | ug/kg | 220 | 43. | 1 |
| 2,6-Dinitrotoluene | ND | | ug/kg | 220 | 37. | 1 |
| Fluoranthene | 2100 | | ug/kg | 130 | 25. | 1 |
| 4-Chlorophenyl phenyl ether | ND | | ug/kg | 220 | 23. | 1 |
| 4-Bromophenyl phenyl ether | ND | | ug/kg | 220 | 33. | 1 |
| Bis(2-chloroisopropyl)ether | ND | | ug/kg | 260 | 37. | 1 |
| Bis(2-chloroethoxy)methane | ND | | ug/kg | 230 | 22. | 1 |
| Hexachlorobutadiene | ND | | ug/kg | 220 | 31. | 1 |
| Hexachlorocyclopentadiene | ND | | ug/kg | 610 | 190 | 1 |
| Hexachloroethane | ND | | ug/kg | 170 | 35. | 1 |
| Isophorone | ND | | ug/kg | 190 | 28. | 1 |
| Naphthalene | 440 | | ug/kg | 220 | 26. | 1 |
| Nitrobenzene | ND | | ug/kg | 190 | 32. | 1 |
| NDPA/DPA | ND | | ug/kg | 170 | 24. | 1 |
| n-Nitrosodi-n-propylamine | ND | | ug/kg | 220 | 33. | 1 |
| Bis(2-ethylhexyl)phthalate | ND | | ug/kg | 220 | 74. | 1 |
| Butyl benzyl phthalate | ND | | ug/kg | 220 | 54. | 1 |
| Di-n-butylphthalate | ND | | ug/kg | 220 | 41. | 1 |
| Di-n-octylphthalate | ND | | ug/kg | 220 | 73. | 1 |
| Diethyl phthalate | ND | | ug/kg | 220 | 20. | 1 |
| Dimethyl phthalate | ND | | ug/kg | 220 | 45. | 1 |
| Benzo(a)anthracene | 780 | | ug/kg | 130 | 24. | 1 |
| Benzo(a)pyrene | 660 | | ug/kg | 170 | 52. | 1 |
| Benzo(b)fluoranthene | 960 | | ug/kg | 130 | 36. | 1 |
| Benzo(k)fluoranthene | 300 | | ug/kg | 130 | 34. | 1 |

**Project Name:** PH. II ESA **Lab Number:** L1722530

**Project Number:** E1641 **Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-07 Date Collected: 06/29/17 13:40

Client ID: SB7 (1-5') Date Received: 06/30/17

Sample Location: 124&145 CHANDLER ST., BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Chrysene | 880 | | ug/kg | 130 | 22. | 1 |
| Acenaphthylene | 110 | J | ug/kg | 170 | 33. | 1 |
| Anthracene | 270 | | ug/kg | 130 | 42. | 1 |
| Benzo(ghi)perylene | 380 | | ug/kg | 170 | 25. | 1 |
| Fluorene | 280 | | ug/kg | 220 | 21. | 1 |
| Phenanthrene | 2200 | | ug/kg | 130 | 26. | 1 |
| Dibenzo(a,h)anthracene | 100 | J | ug/kg | 130 | 25. | 1 |
| Indeno(1,2,3-cd)pyrene | 440 | | ug/kg | 170 | 30. | 1 |
| Pyrene | 1600 | | ug/kg | 130 | 21. | 1 |
| Biphenyl | ND | | ug/kg | 490 | 50. | 1 |
| 4-Chloroaniline | ND | | ug/kg | 220 | 39. | 1 |
| 2-Nitroaniline | ND | | ug/kg | 220 | 41. | 1 |
| 3-Nitroaniline | ND | | ug/kg | 220 | 40. | 1 |
| 4-Nitroaniline | ND | | ug/kg | 220 | 89. | 1 |
| Dibenzofuran | 250 | | ug/kg | 220 | 20. | 1 |
| 2-Methylnaphthalene | 150 | J | ug/kg | 260 | 26. | 1 |
| 1,2,4,5-Tetrachlorobenzene | ND | | ug/kg | 220 | 22. | 1 |
| Acetophenone | ND | | ug/kg | 220 | 27. | 1 |
| 2,4,6-Trichlorophenol | ND | | ug/kg | 130 | 41. | 1 |
| p-Chloro-m-cresol | ND | | ug/kg | 220 | 32. | 1 |
| 2-Chlorophenol | ND | | ug/kg | 220 | 25. | 1 |
| 2,4-Dichlorophenol | ND | | ug/kg | 190 | 34. | 1 |
| 2,4-Dimethylphenol | ND | | ug/kg | 220 | 71. | 1 |
| 2-Nitrophenol | ND | | ug/kg | 460 | 81. | 1 |
| 4-Nitrophenol | ND | | ug/kg | 300 | 88. | 1 |
| 2,4-Dinitrophenol | ND | | ug/kg | 1000 | 100 | 1 |
| 4,6-Dinitro-o-cresol | ND | | ug/kg | 560 | 100 | 1 |
| Pentachlorophenol | ND | | ug/kg | 170 | 47. | 1 |
| Phenol | ND | | ug/kg | 220 | 32. | 1 |
| 2-Methylphenol | ND | | ug/kg | 220 | 33. | 1 |
| 3-Methylphenol/4-Methylphenol | 96 | J | ug/kg | 310 | 34. | 1 |
| 2,4,5-Trichlorophenol | ND | | ug/kg | 220 | 41. | 1 |
| Carbazole | 280 | | ug/kg | 220 | 21. | 1 |
| Atrazine | ND | | ug/kg | 170 | 75. | 1 |
| Benzaldehyde | ND | | ug/kg | 280 | 58. | 1 |
| Caprolactam | ND | | ug/kg | 220 | 65. | 1 |
| 2,3,4,6-Tetrachlorophenol | ND | | ug/kg | 220 | 43. | 1 |

**Project Name:** PH. II ESA
**Lab Number:** L1722530
**Project Number:** E1641
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-07
Client ID: SB7 (1-5')
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY
Date Collected: 06/29/17 13:40
Date Received: 06/30/17
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|

Semivolatile Organics by GC/MS - Westborough Lab

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 75 | | 25-120 |
| Phenol-d6 | 77 | | 10-120 |
| Nitrobenzene-d5 | 86 | | 23-120 |
| 2-Fluorobiphenyl | 71 | | 30-120 |
| 2,4,6-Tribromophenol | 83 | | 10-136 |
| 4-Terphenyl-d14 | 55 | | 18-120 |

**Project Name:** PH. II ESA
**Project Number:** E1641
**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-08
Client ID: SB9 (0-4')
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/07/17 03:25
Analyst: KV
Percent Solids: 86%

Date Collected: 06/29/17 14:20
Date Received: 06/30/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/05/17 23:17

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Acenaphthene | 380 | | ug/kg | 150 | 20. | 1 |
| Hexachlorobenzene | ND | | ug/kg | 110 | 21. | 1 |
| Bis(2-chloroethyl)ether | ND | | ug/kg | 170 | 26. | 1 |
| 2-Chloronaphthalene | ND | | ug/kg | 190 | 19. | 1 |
| 3,3'-Dichlorobenzidine | ND | | ug/kg | 190 | 51. | 1 |
| 2,4-Dinitrotoluene | ND | | ug/kg | 190 | 38. | 1 |
| 2,6-Dinitrotoluene | ND | | ug/kg | 190 | 33. | 1 |
| Fluoranthene | 2500 | | ug/kg | 110 | 22. | 1 |
| 4-Chlorophenyl phenyl ether | ND | | ug/kg | 190 | 20. | 1 |
| 4-Bromophenyl phenyl ether | ND | | ug/kg | 190 | 29. | 1 |
| Bis(2-chloroisopropyl)ether | ND | | ug/kg | 230 | 33. | 1 |
| Bis(2-chloroethoxy)methane | ND | | ug/kg | 210 | 19. | 1 |
| Hexachlorobutadiene | ND | | ug/kg | 190 | 28. | 1 |
| Hexachlorocyclopentadiene | ND | | ug/kg | 550 | 170 | 1 |
| Hexachloroethane | ND | | ug/kg | 150 | 31. | 1 |
| Isophorone | ND | | ug/kg | 170 | 25. | 1 |
| Naphthalene | 200 | | ug/kg | 190 | 23. | 1 |
| Nitrobenzene | ND | | ug/kg | 170 | 28. | 1 |
| NDPA/DPA | ND | | ug/kg | 150 | 22. | 1 |
| n-Nitrosodi-n-propylamine | ND | | ug/kg | 190 | 30. | 1 |
| Bis(2-ethylhexyl)phthalate | ND | | ug/kg | 190 | 66. | 1 |
| Butyl benzyl phthalate | ND | | ug/kg | 190 | 48. | 1 |
| Di-n-butylphthalate | ND | | ug/kg | 190 | 36. | 1 |
| Di-n-octylphthalate | ND | | ug/kg | 190 | 65. | 1 |
| Diethyl phthalate | 38 | J | ug/kg | 190 | 18. | 1 |
| Dimethyl phthalate | ND | | ug/kg | 190 | 40. | 1 |
| Benzo(a)anthracene | 1400 | | ug/kg | 110 | 22. | 1 |
| Benzo(a)pyrene | 920 | | ug/kg | 150 | 47. | 1 |
| Benzo(b)fluoranthene | 1400 | | ug/kg | 110 | 32. | 1 |
| Benzo(k)fluoranthene | 420 | | ug/kg | 110 | 30. | 1 |

**Project Name:** PH. II ESA **Lab Number:** L1722530

**Project Number:** E1641 **Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-08 Date Collected: 06/29/17 14:20

Client ID: SB9 (0-4') Date Received: 06/30/17

Sample Location: 124&145 CHANDLER ST., BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Chrysene | 1300 | | ug/kg | 110 | 20. | 1 |
| Acenaphthylene | ND | | ug/kg | 150 | 30. | 1 |
| Anthracene | 1000 | | ug/kg | 110 | 37. | 1 |
| Benzo(ghi)perylene | 550 | | ug/kg | 150 | 22. | 1 |
| Fluorene | 540 | | ug/kg | 190 | 18. | 1 |
| Phenanthrene | 3100 | | ug/kg | 110 | 23. | 1 |
| Dibenzo(a,h)anthracene | 170 | | ug/kg | 110 | 22. | 1 |
| Indeno(1,2,3-cd)pyrene | 580 | | ug/kg | 150 | 27. | 1 |
| Pyrene | 1900 | | ug/kg | 110 | 19. | 1 |
| Biphenyl | 51 | J | ug/kg | 440 | 44. | 1 |
| 4-Chloroaniline | ND | | ug/kg | 190 | 35. | 1 |
| 2-Nitroaniline | ND | | ug/kg | 190 | 37. | 1 |
| 3-Nitroaniline | ND | | ug/kg | 190 | 36. | 1 |
| 4-Nitroaniline | ND | | ug/kg | 190 | 79. | 1 |
| Dibenzofuran | 400 | | ug/kg | 190 | 18. | 1 |
| 2-Methylnaphthalene | 180 | J | ug/kg | 230 | 23. | 1 |
| 1,2,4,5-Tetrachlorobenzene | ND | | ug/kg | 190 | 20. | 1 |
| Acetophenone | ND | | ug/kg | 190 | 24. | 1 |
| 2,4,6-Trichlorophenol | ND | | ug/kg | 110 | 36. | 1 |
| p-Chloro-m-cresol | ND | | ug/kg | 190 | 28. | 1 |
| 2-Chlorophenol | ND | | ug/kg | 190 | 22. | 1 |
| 2,4-Dichlorophenol | ND | | ug/kg | 170 | 31. | 1 |
| 2,4-Dimethylphenol | ND | | ug/kg | 190 | 63. | 1 |
| 2-Nitrophenol | ND | | ug/kg | 410 | 72. | 1 |
| 4-Nitrophenol | ND | | ug/kg | 270 | 78. | 1 |
| 2,4-Dinitrophenol | ND | | ug/kg | 920 | 89. | 1 |
| 4,6-Dinitro-o-cresol | ND | | ug/kg | 500 | 92. | 1 |
| Pentachlorophenol | ND | | ug/kg | 150 | 42. | 1 |
| Phenol | ND | | ug/kg | 190 | 29. | 1 |
| 2-Methylphenol | ND | | ug/kg | 190 | 30. | 1 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 280 | 30. | 1 |
| 2,4,5-Trichlorophenol | ND | | ug/kg | 190 | 37. | 1 |
| Carbazole | 410 | | ug/kg | 190 | 18. | 1 |
| Atrazine | ND | | ug/kg | 150 | 67. | 1 |
| Benzaldehyde | ND | | ug/kg | 250 | 52. | 1 |
| Caprolactam | ND | | ug/kg | 190 | 58. | 1 |
| 2,3,4,6-Tetrachlorophenol | ND | | ug/kg | 190 | 39. | 1 |

**Project Name:** PH. II ESA
**Lab Number:** L1722530
**Project Number:** E1641
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-08
Client ID: SB9 (0-4')
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY
Date Collected: 06/29/17 14:20
Date Received: 06/30/17
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|

### Semivolatile Organics by GC/MS - Westborough Lab

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 59 | | 25-120 |
| Phenol-d6 | 61 | | 10-120 |
| Nitrobenzene-d5 | 74 | | 23-120 |
| 2-Fluorobiphenyl | 61 | | 30-120 |
| 2,4,6-Tribromophenol | 62 | | 10-136 |
| 4-Terphenyl-d14 | 43 | | 18-120 |

**Project Name:** PH. II ESA
**Lab Number:** L1722530
**Project Number:** E1641
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-09
Client ID: SB11 (0-2.5')
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/07/17 03:51
Analyst: KV
Percent Solids: 80%

Date Collected: 06/29/17 15:00
Date Received: 06/30/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/05/17 23:17

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Acenaphthene | 800 | | ug/kg | 160 | 21. | 1 |
| Hexachlorobenzene | ND | | ug/kg | 120 | 23. | 1 |
| Bis(2-chloroethyl)ether | ND | | ug/kg | 190 | 28. | 1 |
| 2-Chloronaphthalene | ND | | ug/kg | 210 | 20. | 1 |
| 3,3'-Dichlorobenzidine | ND | | ug/kg | 210 | 55. | 1 |
| 2,4-Dinitrotoluene | ND | | ug/kg | 210 | 41. | 1 |
| 2,6-Dinitrotoluene | ND | | ug/kg | 210 | 36. | 1 |
| Fluoranthene | 18000 | E | ug/kg | 120 | 24. | 1 |
| 4-Chlorophenyl phenyl ether | ND | | ug/kg | 210 | 22. | 1 |
| 4-Bromophenyl phenyl ether | ND | | ug/kg | 210 | 32. | 1 |
| Bis(2-chloroisopropyl)ether | ND | | ug/kg | 250 | 35. | 1 |
| Bis(2-chloroethoxy)methane | ND | | ug/kg | 220 | 21. | 1 |
| Hexachlorobutadiene | ND | | ug/kg | 210 | 30. | 1 |
| Hexachlorocyclopentadiene | ND | | ug/kg | 590 | 190 | 1 |
| Hexachloroethane | ND | | ug/kg | 160 | 33. | 1 |
| Isophorone | ND | | ug/kg | 190 | 27. | 1 |
| Naphthalene | 230 | | ug/kg | 210 | 25. | 1 |
| Nitrobenzene | ND | | ug/kg | 190 | 31. | 1 |
| NDPA/DPA | ND | | ug/kg | 160 | 24. | 1 |
| n-Nitrosodi-n-propylamine | ND | | ug/kg | 210 | 32. | 1 |
| Bis(2-ethylhexyl)phthalate | ND | | ug/kg | 210 | 72. | 1 |
| Butyl benzyl phthalate | ND | | ug/kg | 210 | 52. | 1 |
| Di-n-butylphthalate | ND | | ug/kg | 210 | 39. | 1 |
| Di-n-octylphthalate | ND | | ug/kg | 210 | 70. | 1 |
| Diethyl phthalate | ND | | ug/kg | 210 | 19. | 1 |
| Dimethyl phthalate | ND | | ug/kg | 210 | 43. | 1 |
| Benzo(a)anthracene | 14000 | E | ug/kg | 120 | 23. | 1 |
| Benzo(a)pyrene | 9100 | E | ug/kg | 160 | 50. | 1 |
| Benzo(b)fluoranthene | 14000 | E | ug/kg | 120 | 35. | 1 |
| Benzo(k)fluoranthene | 3100 | | ug/kg | 120 | 33. | 1 |

**Project Name:** PH. II ESA **Lab Number:** L1722530

**Project Number:** E1641 **Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-09 Date Collected: 06/29/17 15:00

Client ID: SB11 (0-2.5') Date Received: 06/30/17

Sample Location: 124&145 CHANDLER ST., BUFFALO, NY Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Chrysene | 10000 | E | ug/kg | 120 | 22. | 1 |
| Acenaphthylene | 680 | | ug/kg | 160 | 32. | 1 |
| Anthracene | 6700 | | ug/kg | 120 | 40. | 1 |
| Benzo(ghi)perylene | 4400 | | ug/kg | 160 | 24. | 1 |
| Fluorene | 2800 | | ug/kg | 210 | 20. | 1 |
| Phenanthrene | 17000 | E | ug/kg | 120 | 25. | 1 |
| Dibenzo(a,h)anthracene | 1500 | | ug/kg | 120 | 24. | 1 |
| Indeno(1,2,3-cd)pyrene | 5500 | | ug/kg | 160 | 29. | 1 |
| Pyrene | 15000 | E | ug/kg | 120 | 20. | 1 |
| Biphenyl | 110 | J | ug/kg | 470 | 48. | 1 |
| 4-Chloroaniline | ND | | ug/kg | 210 | 38. | 1 |
| 2-Nitroaniline | ND | | ug/kg | 210 | 40. | 1 |
| 3-Nitroaniline | ND | | ug/kg | 210 | 39. | 1 |
| 4-Nitroaniline | ND | | ug/kg | 210 | 86. | 1 |
| Dibenzofuran | 1400 | | ug/kg | 210 | 20. | 1 |
| 2-Methylnaphthalene | 200 | J | ug/kg | 250 | 25. | 1 |
| 1,2,4,5-Tetrachlorobenzene | ND | | ug/kg | 210 | 22. | 1 |
| Acetophenone | ND | | ug/kg | 210 | 26. | 1 |
| 2,4,6-Trichlorophenol | ND | | ug/kg | 120 | 39. | 1 |
| p-Chloro-m-cresol | ND | | ug/kg | 210 | 31. | 1 |
| 2-Chlorophenol | ND | | ug/kg | 210 | 24. | 1 |
| 2,4-Dichlorophenol | ND | | ug/kg | 190 | 33. | 1 |
| 2,4-Dimethylphenol | ND | | ug/kg | 210 | 68. | 1 |
| 2-Nitrophenol | ND | | ug/kg | 450 | 78. | 1 |
| 4-Nitrophenol | ND | | ug/kg | 290 | 84. | 1 |
| 2,4-Dinitrophenol | ND | | ug/kg | 990 | 96. | 1 |
| 4,6-Dinitro-o-cresol | ND | | ug/kg | 540 | 99. | 1 |
| Pentachlorophenol | ND | | ug/kg | 160 | 46. | 1 |
| Phenol | ND | | ug/kg | 210 | 31. | 1 |
| 2-Methylphenol | ND | | ug/kg | 210 | 32. | 1 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 300 | 32. | 1 |
| 2,4,5-Trichlorophenol | ND | | ug/kg | 210 | 40. | 1 |
| Carbazole | 1300 | | ug/kg | 210 | 20. | 1 |
| Atrazine | ND | | ug/kg | 160 | 72. | 1 |
| Benzaldehyde | ND | | ug/kg | 270 | 56. | 1 |
| Caprolactam | ND | | ug/kg | 210 | 63. | 1 |
| 2,3,4,6-Tetrachlorophenol | ND | | ug/kg | 210 | 42. | 1 |

**Project Name:** PH. II ESA
**Lab Number:** L1722530
**Project Number:** E1641
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-09
Client ID: SB11 (0-2.5')
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY
Date Collected: 06/29/17 15:00
Date Received: 06/30/17
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|

Semivolatile Organics by GC/MS - Westborough Lab

| Surrogate | % Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 60 | | 25-120 |
| Phenol-d6 | 65 | | 10-120 |
| Nitrobenzene-d5 | 81 | | 23-120 |
| 2-Fluorobiphenyl | 64 | | 30-120 |
| 2,4,6-Tribromophenol | 79 | | 10-136 |
| 4-Terphenyl-d14 | 48 | | 18-120 |

**Project Name:** PH. II ESA
**Lab Number:** L1722530
**Project Number:** E1641
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-09 D
Client ID: SB11 (0-2.5')
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/10/17 13:32
Analyst: KV
Percent Solids: 80%

Date Collected: 06/29/17 15:00
Date Received: 06/30/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/05/17 23:17

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor |
|---|---|---|---|---|---|---|
| **Semivolatile Organics by GC/MS - Westborough Lab** | | | | | | |
| Fluoranthene | 39000 | | ug/kg | 1200 | 240 | 10 |
| Benzo(a)anthracene | 18000 | | ug/kg | 1200 | 230 | 10 |
| Benzo(a)pyrene | 13000 | | ug/kg | 1600 | 500 | 10 |
| Benzo(b)fluoranthene | 17000 | | ug/kg | 1200 | 350 | 10 |
| Chrysene | 16000 | | ug/kg | 1200 | 220 | 10 |
| Phenanthrene | 33000 | | ug/kg | 1200 | 250 | 10 |
| Pyrene | 30000 | | ug/kg | 1200 | 200 | 10 |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/03/17 23:01
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 07/03/17 13:48

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1019445-1 | | | | | |
| Bis(2-chloroethyl)ether | ND | | ug/l | 2.0 | 0.67 |
| 3,3'-Dichlorobenzidine | ND | | ug/l | 5.0 | 1.4 |
| 2,4-Dinitrotoluene | ND | | ug/l | 5.0 | 0.84 |
| 2,6-Dinitrotoluene | ND | | ug/l | 5.0 | 1.1 |
| 4-Chlorophenyl phenyl ether | ND | | ug/l | 2.0 | 0.62 |
| 4-Bromophenyl phenyl ether | ND | | ug/l | 2.0 | 0.73 |
| Bis(2-chloroisopropyl)ether | ND | | ug/l | 2.0 | 0.70 |
| Bis(2-chloroethoxy)methane | ND | | ug/l | 5.0 | 0.63 |
| Hexachlorocyclopentadiene | ND | | ug/l | 20 | 7.8 |
| Isophorone | ND | | ug/l | 5.0 | 0.60 |
| Nitrobenzene | ND | | ug/l | 2.0 | 0.75 |
| NDPA/DPA | ND | | ug/l | 2.0 | 0.64 |
| n-Nitrosodi-n-propylamine | ND | | ug/l | 5.0 | 0.70 |
| Bis(2-ethylhexyl)phthalate | ND | | ug/l | 3.0 | 0.91 |
| Butyl benzyl phthalate | ND | | ug/l | 5.0 | 1.3 |
| Di-n-butylphthalate | ND | | ug/l | 5.0 | 0.69 |
| Di-n-octylphthalate | ND | | ug/l | 5.0 | 1.1 |
| Diethyl phthalate | ND | | ug/l | 5.0 | 0.63 |
| Dimethyl phthalate | ND | | ug/l | 5.0 | 0.65 |
| Biphenyl | ND | | ug/l | 2.0 | 0.76 |
| 4-Chloroaniline | ND | | ug/l | 5.0 | 0.63 |
| 2-Nitroaniline | ND | | ug/l | 5.0 | 1.1 |
| 3-Nitroaniline | ND | | ug/l | 5.0 | 1.2 |
| 4-Nitroaniline | ND | | ug/l | 5.0 | 1.3 |
| Dibenzofuran | ND | | ug/l | 2.0 | 0.66 |
| 1,2,4,5-Tetrachlorobenzene | ND | | ug/l | 10 | 0.67 |
| Acetophenone | ND | | ug/l | 5.0 | 0.85 |
| 2,4,6-Trichlorophenol | ND | | ug/l | 5.0 | 0.68 |
| p-Chloro-m-cresol | ND | | ug/l | 2.0 | 0.62 |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/03/17 23:01
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 07/03/17 13:48

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1019445-1 | | | | | |
| 2-Chlorophenol | ND | | ug/l | 2.0 | 0.63 |
| 2,4-Dichlorophenol | ND | | ug/l | 5.0 | 0.77 |
| 2,4-Dimethylphenol | ND | | ug/l | 5.0 | 1.6 |
| 2-Nitrophenol | ND | | ug/l | 10 | 1.5 |
| 4-Nitrophenol | ND | | ug/l | 10 | 1.8 |
| 2,4-Dinitrophenol | ND | | ug/l | 20 | 5.5 |
| 4,6-Dinitro-o-cresol | ND | | ug/l | 10 | 2.1 |
| Phenol | ND | | ug/l | 5.0 | 1.9 |
| 3-Methylphenol/4-Methylphenol | ND | | ug/l | 5.0 | 1.1 |
| 2,4,5-Trichlorophenol | ND | | ug/l | 5.0 | 0.72 |
| Carbazole | ND | | ug/l | 2.0 | 0.63 |
| Atrazine | ND | | ug/l | 10 | 1.8 |
| Benzaldehyde | ND | | ug/l | 5.0 | 1.1 |
| Caprolactam | ND | | ug/l | 10 | 3.6 |
| 2,3,4,6-Tetrachlorophenol | ND | | ug/l | 5.0 | 0.93 |
| Tentatively Identified Compounds | | | | | |
| No Tentatively Identified Compounds | ND | | ug/l | | |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/03/17 23:01
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 07/03/17 13:48

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1019445-1 | | | | | |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 39 | | 21-120 |
| Phenol-d6 | 26 | | 10-120 |
| Nitrobenzene-d5 | 67 | | 23-120 |
| 2-Fluorobiphenyl | 76 | | 15-120 |
| 2,4,6-Tribromophenol | 112 | | 10-120 |
| 4-Terphenyl-d14 | 94 | | 41-149 |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 07/06/17 09:08
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/03/17 14:01

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1019446-1 | | | | | |
| Acenaphthene | ND | | ug/l | 0.10 | 0.04 |
| 2-Chloronaphthalene | ND | | ug/l | 0.20 | 0.04 |
| Fluoranthene | ND | | ug/l | 0.10 | 0.04 |
| Hexachlorobutadiene | ND | | ug/l | 0.50 | 0.04 |
| Naphthalene | ND | | ug/l | 0.10 | 0.04 |
| Benzo(a)anthracene | ND | | ug/l | 0.10 | 0.02 |
| Benzo(a)pyrene | ND | | ug/l | 0.10 | 0.04 |
| Benzo(b)fluoranthene | ND | | ug/l | 0.10 | 0.02 |
| Benzo(k)fluoranthene | ND | | ug/l | 0.10 | 0.04 |
| Chrysene | ND | | ug/l | 0.10 | 0.04 |
| Acenaphthylene | ND | | ug/l | 0.10 | 0.04 |
| Anthracene | ND | | ug/l | 0.10 | 0.04 |
| Benzo(ghi)perylene | ND | | ug/l | 0.10 | 0.04 |
| Fluorene | ND | | ug/l | 0.10 | 0.04 |
| Phenanthrene | ND | | ug/l | 0.10 | 0.02 |
| Dibenzo(a,h)anthracene | ND | | ug/l | 0.10 | 0.04 |
| Indeno(1,2,3-cd)pyrene | ND | | ug/l | 0.10 | 0.04 |
| Pyrene | ND | | ug/l | 0.10 | 0.04 |
| 2-Methylnaphthalene | ND | | ug/l | 0.10 | 0.05 |
| Pentachlorophenol | ND | | ug/l | 0.80 | 0.22 |
| Hexachlorobenzene | ND | | ug/l | 0.80 | 0.03 |
| Hexachloroethane | ND | | ug/l | 0.80 | 0.03 |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 07/06/17 09:08
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 07/03/17 14:01

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1019446-1 | | | | | |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 33 | | 21-120 |
| Phenol-d6 | 22 | | 10-120 |
| Nitrobenzene-d5 | 59 | | 23-120 |
| 2-Fluorobiphenyl | 62 | | 15-120 |
| 2,4,6-Tribromophenol | 85 | | 10-120 |
| 4-Terphenyl-d14 | 73 | | 41-149 |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/06/17 23:03
Analyst: KV

Extraction Method: EPA 3546
Extraction Date: 07/05/17 23:17

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-09 Batch: WG1019905-1 | | | | | |
| Acenaphthene | ND | | ug/kg | 130 | 17. |
| Hexachlorobenzene | ND | | ug/kg | 100 | 19. |
| Bis(2-chloroethyl)ether | ND | | ug/kg | 150 | 22. |
| 2-Chloronaphthalene | ND | | ug/kg | 170 | 16. |
| 3,3'-Dichlorobenzidine | ND | | ug/kg | 170 | 44. |
| 2,4-Dinitrotoluene | ND | | ug/kg | 170 | 33. |
| 2,6-Dinitrotoluene | ND | | ug/kg | 170 | 28. |
| Fluoranthene | ND | | ug/kg | 100 | 19. |
| 4-Chlorophenyl phenyl ether | ND | | ug/kg | 170 | 18. |
| 4-Bromophenyl phenyl ether | ND | | ug/kg | 170 | 25. |
| Bis(2-chloroisopropyl)ether | ND | | ug/kg | 200 | 28. |
| Bis(2-chloroethoxy)methane | ND | | ug/kg | 180 | 17. |
| Hexachlorobutadiene | ND | | ug/kg | 170 | 24. |
| Hexachlorocyclopentadiene | ND | | ug/kg | 480 | 150 |
| Hexachloroethane | ND | | ug/kg | 130 | 27. |
| Isophorone | ND | | ug/kg | 150 | 22. |
| Naphthalene | ND | | ug/kg | 170 | 20. |
| Nitrobenzene | ND | | ug/kg | 150 | 25. |
| NDPA/DPA | ND | | ug/kg | 130 | 19. |
| n-Nitrosodi-n-propylamine | ND | | ug/kg | 170 | 26. |
| Bis(2-ethylhexyl)phthalate | ND | | ug/kg | 170 | 58. |
| Butyl benzyl phthalate | ND | | ug/kg | 170 | 42. |
| Di-n-butylphthalate | ND | | ug/kg | 170 | 32. |
| Di-n-octylphthalate | ND | | ug/kg | 170 | 57. |
| Diethyl phthalate | ND | | ug/kg | 170 | 15. |
| Dimethyl phthalate | ND | | ug/kg | 170 | 35. |
| Benzo(a)anthracene | ND | | ug/kg | 100 | 19. |
| Benzo(a)pyrene | ND | | ug/kg | 130 | 41. |
| Benzo(b)fluoranthene | ND | | ug/kg | 100 | 28. |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/06/17 23:03
Analyst: KV

Extraction Method: EPA 3546
Extraction Date: 07/05/17 23:17

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-09 Batch: WG1019905-1 | | | | | |
| Benzo(k)fluoranthene | ND | | ug/kg | 100 | 27. |
| Chrysene | ND | | ug/kg | 100 | 17. |
| Acenaphthylene | ND | | ug/kg | 130 | 26. |
| Anthracene | ND | | ug/kg | 100 | 32. |
| Benzo(ghi)perylene | ND | | ug/kg | 130 | 20. |
| Fluorene | ND | | ug/kg | 170 | 16. |
| Phenanthrene | ND | | ug/kg | 100 | 20. |
| Dibenzo(a,h)anthracene | ND | | ug/kg | 100 | 19. |
| Indeno(1,2,3-cd)pyrene | ND | | ug/kg | 130 | 23. |
| Pyrene | ND | | ug/kg | 100 | 16. |
| Biphenyl | ND | | ug/kg | 380 | 39. |
| 4-Chloroaniline | ND | | ug/kg | 170 | 30. |
| 2-Nitroaniline | ND | | ug/kg | 170 | 32. |
| 3-Nitroaniline | ND | | ug/kg | 170 | 31. |
| 4-Nitroaniline | ND | | ug/kg | 170 | 69. |
| Dibenzofuran | ND | | ug/kg | 170 | 16. |
| 2-Methylnaphthalene | ND | | ug/kg | 200 | 20. |
| 1,2,4,5-Tetrachlorobenzene | ND | | ug/kg | 170 | 17. |
| Acetophenone | ND | | ug/kg | 170 | 21. |
| 2,4,6-Trichlorophenol | ND | | ug/kg | 100 | 32. |
| p-Chloro-m-cresol | ND | | ug/kg | 170 | 25. |
| 2-Chlorophenol | ND | | ug/kg | 170 | 20. |
| 2,4-Dichlorophenol | ND | | ug/kg | 150 | 27. |
| 2,4-Dimethylphenol | ND | | ug/kg | 170 | 55. |
| 2-Nitrophenol | ND | | ug/kg | 360 | 63. |
| 4-Nitrophenol | ND | | ug/kg | 230 | 68. |
| 2,4-Dinitrophenol | ND | | ug/kg | 800 | 78. |
| 4,6-Dinitro-o-cresol | ND | | ug/kg | 430 | 80. |
| Pentachlorophenol | ND | | ug/kg | 130 | 37. |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/06/17 23:03
Analyst: KV

Extraction Method: EPA 3546
Extraction Date: 07/05/17 23:17

| Parameter | Result | Qualifier | Units | RL | MDL |
|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-09 Batch: WG1019905-1 | | | | | |
| Phenol | ND | | ug/kg | 170 | 25. |
| 2-Methylphenol | ND | | ug/kg | 170 | 26. |
| 3-Methylphenol/4-Methylphenol | ND | | ug/kg | 240 | 26. |
| 2,4,5-Trichlorophenol | ND | | ug/kg | 170 | 32. |
| Carbazole | ND | | ug/kg | 170 | 16. |
| Atrazine | ND | | ug/kg | 130 | 58. |
| Benzaldehyde | ND | | ug/kg | 220 | 45. |
| Caprolactam | ND | | ug/kg | 170 | 51. |
| 2,3,4,6-Tetrachlorophenol | ND | | ug/kg | 170 | 34. |
| Tentatively Identified Compounds | | | | | |
| No Tentatively Identified Compounds | ND | | ug/kg | | |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria |
|---|---|---|---|
| 2-Fluorophenol | 78 | | 25-120 |
| Phenol-d6 | 79 | | 10-120 |
| Nitrobenzene-d5 | 81 | | 23-120 |
| 2-Fluorobiphenyl | 73 | | 30-120 |
| 2,4,6-Tribromophenol | 87 | | 10-136 |
| 4-Terphenyl-d14 | 79 | | 18-120 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1019445-2 WG1019445-3 | | | | | | | | |
| Bis(2-chloroethyl)ether | 75 | | 75 | | 40-140 | 0 | | 30 |
| 3,3'-Dichlorobenzidine | 81 | | 87 | | 40-140 | 7 | | 30 |
| 2,4-Dinitrotoluene | **145** | Q | **146** | Q | 48-143 | 1 | | 30 |
| 2,6-Dinitrotoluene | 128 | | 125 | | 40-140 | 2 | | 30 |
| 4-Chlorophenyl phenyl ether | 108 | | 107 | | 40-140 | 1 | | 30 |
| 4-Bromophenyl phenyl ether | 115 | | 113 | | 40-140 | 2 | | 30 |
| Bis(2-chloroisopropyl)ether | 72 | | 74 | | 40-140 | 3 | | 30 |
| Bis(2-chloroethoxy)methane | 84 | | 85 | | 40-140 | 1 | | 30 |
| Hexachlorocyclopentadiene | 81 | | 83 | | 40-140 | 2 | | 30 |
| Isophorone | 86 | | 87 | | 40-140 | 1 | | 30 |
| Nitrobenzene | 81 | | 84 | | 40-140 | 4 | | 30 |
| NDPA/DPA | 113 | | 111 | | 40-140 | 2 | | 30 |
| n-Nitrosodi-n-propylamine | 80 | | 78 | | 29-132 | 3 | | 30 |
| Bis(2-ethylhexyl)phthalate | 100 | | 102 | | 40-140 | 2 | | 30 |
| Butyl benzyl phthalate | 113 | | 113 | | 40-140 | 0 | | 30 |
| Di-n-butylphthalate | 106 | | 105 | | 40-140 | 1 | | 30 |
| Di-n-octylphthalate | 104 | | 104 | | 40-140 | 0 | | 30 |
| Diethyl phthalate | 114 | | 113 | | 40-140 | 1 | | 30 |
| Dimethyl phthalate | 106 | | 105 | | 40-140 | 1 | | 30 |
| Biphenyl | 97 | | 96 | | 40-140 | 1 | | 30 |
| 4-Chloroaniline | 78 | | 70 | | 40-140 | 11 | | 30 |
| 2-Nitroaniline | 131 | | 129 | | 52-143 | 2 | | 30 |
| 3-Nitroaniline | 114 | | 119 | | 25-145 | 4 | | 30 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1019445-2 WG1019445-3 | | | | | | | | |
| 4-Nitroaniline | 125 | | 121 | | 51-143 | 3 | | 30 |
| Dibenzofuran | 108 | | 106 | | 40-140 | 2 | | 30 |
| 1,2,4,5-Tetrachlorobenzene | 95 | | 98 | | 2-134 | 3 | | 30 |
| Acetophenone | 82 | | 85 | | 39-129 | 4 | | 30 |
| 2,4,6-Trichlorophenol | 107 | | 106 | | 30-130 | 1 | | 30 |
| p-Chloro-m-cresol | 97 | | **98** | Q | 23-97 | 1 | | 30 |
| 2-Chlorophenol | 77 | | 81 | | 27-123 | 5 | | 30 |
| 2,4-Dichlorophenol | 95 | | 96 | | 30-130 | 1 | | 30 |
| 2,4-Dimethylphenol | 90 | | 91 | | 30-130 | 1 | | 30 |
| 2-Nitrophenol | 104 | | 106 | | 30-130 | 2 | | 30 |
| 4-Nitrophenol | 70 | | **103** | Q | 10-80 | **38** | Q | 30 |
| 2,4-Dinitrophenol | **144** | Q | **143** | Q | 20-130 | 1 | | 30 |
| 4,6-Dinitro-o-cresol | 156 | | 152 | | 20-164 | 3 | | 30 |
| Phenol | 38 | | 54 | | 12-110 | **35** | Q | 30 |
| 3-Methylphenol/4-Methylphenol | 72 | | 85 | | 30-130 | 17 | | 30 |
| 2,4,5-Trichlorophenol | 114 | | 113 | | 30-130 | 1 | | 30 |
| Carbazole | 99 | | 101 | | 55-144 | 2 | | 30 |
| Atrazine | 125 | | 123 | | 40-140 | 2 | | 30 |
| Benzaldehyde | 68 | | 71 | | 40-140 | 4 | | 30 |
| Caprolactam | 32 | | 30 | | 10-130 | 6 | | 30 |
| 2,3,4,6-Tetrachlorophenol | 123 | | 124 | | 40-140 | 1 | | 30 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1019445-2 WG1019445-3 | | | | | | | | |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| 2-Fluorophenol | 50 | | 67 | | 21-120 |
| Phenol-d6 | 37 | | 56 | | 10-120 |
| Nitrobenzene-d5 | 86 | | 87 | | 23-120 |
| 2-Fluorobiphenyl | 97 | | 92 | | 15-120 |
| 2,4,6-Tribromophenol | **145** | Q | **140** | Q | 10-120 |
| 4-Terphenyl-d14 | 105 | | 103 | | 41-149 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1019446-2 WG1019446-3 | | | | | | | | |
| Acenaphthene | **17** | Q | 62 | | 37-111 | **114** | Q | 40 |
| 2-Chloronaphthalene | **18** | Q | 65 | | 40-140 | **113** | Q | 40 |
| Fluoranthene | **20** | Q | 66 | | 40-140 | **107** | Q | 40 |
| Hexachlorobutadiene | **18** | Q | 68 | | 40-140 | **116** | Q | 40 |
| Naphthalene | **15** | Q | 57 | | 40-140 | **117** | Q | 40 |
| Benzo(a)anthracene | **22** | Q | 58 | | 40-140 | **90** | Q | 40 |
| Benzo(a)pyrene | **34** | Q | 57 | | 40-140 | **51** | Q | 40 |
| Benzo(b)fluoranthene | **34** | Q | 59 | | 40-140 | **54** | Q | 40 |
| Benzo(k)fluoranthene | **34** | Q | 55 | | 40-140 | **47** | Q | 40 |
| Chrysene | **22** | Q | 56 | | 40-140 | **87** | Q | 40 |
| Acenaphthylene | **18** | Q | 66 | | 40-140 | **114** | Q | 40 |
| Anthracene | **18** | Q | 61 | | 40-140 | **109** | Q | 40 |
| Benzo(ghi)perylene | 46 | | 62 | | 40-140 | 30 | | 40 |
| Fluorene | **19** | Q | 67 | | 40-140 | **112** | Q | 40 |
| Phenanthrene | **17** | Q | 58 | | 40-140 | **109** | Q | 40 |
| Dibenzo(a,h)anthracene | 47 | | 60 | | 40-140 | 24 | | 40 |
| Indeno(1,2,3-cd)pyrene | 49 | | 65 | | 40-140 | 28 | | 40 |
| Pyrene | **20** | Q | 64 | | 26-127 | **105** | Q | 40 |
| 2-Methylnaphthalene | **16** | Q | 61 | | 40-140 | **117** | Q | 40 |
| Pentachlorophenol | 20 | | 66 | | 9-103 | **107** | Q | 40 |
| Hexachlorobenzene | **21** | Q | 72 | | 40-140 | **110** | Q | 40 |
| Hexachloroethane | **15** | Q | 58 | | 40-140 | **118** | Q | 40 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1019446-2 WG1019446-3 | | | | | | | | |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| 2-Fluorophenol | 26 | | 35 | | 21-120 |
| Phenol-d6 | 21 | | 24 | | 10-120 |
| Nitrobenzene-d5 | **17** | Q | 58 | | 23-120 |
| 2-Fluorobiphenyl | 18 | | 60 | | 15-120 |
| 2,4,6-Tribromophenol | 24 | | 83 | | 10-120 |
| 4-Terphenyl-d14 | 43 | | 67 | | 41-149 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-09 Batch: WG1019905-2 WG1019905-3 | | | | | | | | |
| Acenaphthene | 84 | | 81 | | 31-137 | 4 | | 50 |
| Hexachlorobenzene | 94 | | 90 | | 40-140 | 4 | | 50 |
| Bis(2-chloroethyl)ether | 86 | | 80 | | 40-140 | 7 | | 50 |
| 2-Chloronaphthalene | 88 | | 84 | | 40-140 | 5 | | 50 |
| 3,3'-Dichlorobenzidine | 59 | | 59 | | 40-140 | 0 | | 50 |
| 2,4-Dinitrotoluene | 113 | | 110 | | 40-132 | 3 | | 50 |
| 2,6-Dinitrotoluene | 108 | | 104 | | 40-140 | 4 | | 50 |
| Fluoranthene | 90 | | 86 | | 40-140 | 5 | | 50 |
| 4-Chlorophenyl phenyl ether | 86 | | 83 | | 40-140 | 4 | | 50 |
| 4-Bromophenyl phenyl ether | 90 | | 86 | | 40-140 | 5 | | 50 |
| Bis(2-chloroisopropyl)ether | 83 | | 80 | | 40-140 | 4 | | 50 |
| Bis(2-chloroethoxy)methane | 91 | | 86 | | 40-117 | 6 | | 50 |
| Hexachlorobutadiene | 82 | | 76 | | 40-140 | 8 | | 50 |
| Hexachlorocyclopentadiene | 75 | | 72 | | 40-140 | 4 | | 50 |
| Hexachloroethane | 85 | | 82 | | 40-140 | 4 | | 50 |
| Isophorone | 87 | | 84 | | 40-140 | 4 | | 50 |
| Naphthalene | 83 | | 78 | | 40-140 | 6 | | 50 |
| Nitrobenzene | 90 | | 87 | | 40-140 | 3 | | 50 |
| NDPA/DPA | 90 | | 87 | | 36-157 | 3 | | 50 |
| n-Nitrosodi-n-propylamine | 84 | | 82 | | 32-121 | 2 | | 50 |
| Bis(2-ethylhexyl)phthalate | 95 | | 92 | | 40-140 | 3 | | 50 |
| Butyl benzyl phthalate | 100 | | 96 | | 40-140 | 4 | | 50 |
| Di-n-butylphthalate | 92 | | 88 | | 40-140 | 4 | | 50 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-09 Batch: WG1019905-2 WG1019905-3 | | | | | | | | |
| Di-n-octylphthalate | 100 | | 95 | | 40-140 | 5 | | 50 |
| Diethyl phthalate | 89 | | 85 | | 40-140 | 5 | | 50 |
| Dimethyl phthalate | 89 | | 84 | | 40-140 | 6 | | 50 |
| Benzo(a)anthracene | 84 | | 82 | | 40-140 | 2 | | 50 |
| Benzo(a)pyrene | 91 | | 86 | | 40-140 | 6 | | 50 |
| Benzo(b)fluoranthene | 91 | | 86 | | 40-140 | 6 | | 50 |
| Benzo(k)fluoranthene | 89 | | 86 | | 40-140 | 3 | | 50 |
| Chrysene | 86 | | 84 | | 40-140 | 2 | | 50 |
| Acenaphthylene | 89 | | 84 | | 40-140 | 6 | | 50 |
| Anthracene | 87 | | 84 | | 40-140 | 4 | | 50 |
| Benzo(ghi)perylene | 90 | | 86 | | 40-140 | 5 | | 50 |
| Fluorene | 88 | | 85 | | 40-140 | 3 | | 50 |
| Phenanthrene | 88 | | 83 | | 40-140 | 6 | | 50 |
| Dibenzo(a,h)anthracene | 90 | | 87 | | 40-140 | 3 | | 50 |
| Indeno(1,2,3-cd)pyrene | 90 | | 87 | | 40-140 | 3 | | 50 |
| Pyrene | 90 | | 84 | | 35-142 | 7 | | 50 |
| Biphenyl | 88 | | 83 | | 54-104 | 6 | | 50 |
| 4-Chloroaniline | 52 | | 47 | | 40-140 | 10 | | 50 |
| 2-Nitroaniline | 117 | | 113 | | 47-134 | 3 | | 50 |
| 3-Nitroaniline | 88 | | 86 | | 26-129 | 2 | | 50 |
| 4-Nitroaniline | 102 | | 98 | | 41-125 | 4 | | 50 |
| Dibenzofuran | 87 | | 82 | | 40-140 | 6 | | 50 |
| 2-Methylnaphthalene | 85 | | 80 | | 40-140 | 6 | | 50 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-09 Batch: WG1019905-2 WG1019905-3 | | | | | | | | |
| 1,2,4,5-Tetrachlorobenzene | 90 | | 86 | | 40-117 | 5 | | 50 |
| Acetophenone | 88 | | 86 | | 14-144 | 2 | | 50 |
| 2,4,6-Trichlorophenol | 96 | | 90 | | 30-130 | 6 | | 50 |
| p-Chloro-m-cresol | 91 | | 87 | | 26-103 | 4 | | 50 |
| 2-Chlorophenol | 91 | | 87 | | 25-102 | 4 | | 50 |
| 2,4-Dichlorophenol | 97 | | 94 | | 30-130 | 3 | | 50 |
| 2,4-Dimethylphenol | 93 | | 91 | | 30-130 | 2 | | 50 |
| 2-Nitrophenol | 111 | | 109 | | 30-130 | 2 | | 50 |
| 4-Nitrophenol | 104 | | 107 | | 11-114 | 3 | | 50 |
| 2,4-Dinitrophenol | 74 | | 76 | | 4-130 | 3 | | 50 |
| 4,6-Dinitro-o-cresol | 116 | | 112 | | 10-130 | 4 | | 50 |
| Pentachlorophenol | 88 | | 86 | | 17-109 | 2 | | 50 |
| Phenol | 88 | | 85 | | 26-90 | 3 | | 50 |
| 2-Methylphenol | 92 | | 90 | | 30-130. | 2 | | 50 |
| 3-Methylphenol/4-Methylphenol | 91 | | 90 | | 30-130 | 1 | | 50 |
| 2,4,5-Trichlorophenol | 96 | | 92 | | 30-130 | 4 | | 50 |
| Carbazole | 90 | | 85 | | 54-128 | 6 | | 50 |
| Atrazine | 86 | | 84 | | 40-140 | 2 | | 50 |
| Benzaldehyde | 77 | | 71 | | 40-140 | 8 | | 50 |
| Caprolactam | 96 | | 93 | | 15-130 | 3 | | 50 |
| 2,3,4,6-Tetrachlorophenol | 96 | | 94 | | 40-140 | 2 | | 50 |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-09 Batch: WG1019905-2 WG1019905-3 | | | | | | | | |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria |
|---|---|---|---|---|---|
| 2-Fluorophenol | 90 | | 85 | | 25-120 |
| Phenol-d6 | 90 | | 87 | | 10-120 |
| Nitrobenzene-d5 | 93 | | 91 | | 23-120 |
| 2-Fluorobiphenyl | 86 | | 80 | | 30-120 |
| 2,4,6-Tribromophenol | 101 | | 99 | | 10-136 |
| 4-Terphenyl-d14 | 88 | | 85 | | 18-120 |

# PCBS

**Project Name:** PH. II ESA
**Project Number:** E1641
**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-03
Client ID: SB2 (0-2.5')
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 07/07/17 01:56
Analyst: JA
Percent Solids: 79%

Date Collected: 06/29/17 09:20
Date Received: 06/30/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/06/17 07:58
Cleanup Method: EPA 3665A
Cleanup Date: 07/06/17
Cleanup Method: EPA 3660B
Cleanup Date: 07/07/17

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---|---|---|---|---|---|---|---|
| **Polychlorinated Biphenyls by GC - Westborough Lab** | | | | | | | |
| Aroclor 1016 | ND | | ug/kg | 41.6 | 4.72 | 1 | A |
| Aroclor 1221 | ND | | ug/kg | 41.6 | 6.33 | 1 | A |
| Aroclor 1232 | ND | | ug/kg | 41.6 | 4.09 | 1 | A |
| Aroclor 1242 | ND | | ug/kg | 41.6 | 5.09 | 1 | A |
| Aroclor 1248 | ND | | ug/kg | 41.6 | 4.67 | 1 | A |
| Aroclor 1254 | ND | | ug/kg | 41.6 | 3.40 | 1 | A |
| Aroclor 1260 | 29.6 | J | ug/kg | 41.6 | 4.34 | 1 | B |
| Aroclor 1262 | ND | | ug/kg | 41.6 | 3.42 | 1 | A |
| Aroclor 1268 | ND | | ug/kg | 41.6 | 2.95 | 1 | A |
| PCBs, Total | 29.6 | J | ug/kg | 41.6 | 4.34 | 1 | B |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria | Column |
|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 64 | | 30-150 | A |
| Decachlorobiphenyl | 54 | | 30-150 | A |
| 2,4,5,6-Tetrachloro-m-xylene | 66 | | 30-150 | B |
| Decachlorobiphenyl | 58 | | 30-150 | B |

**Project Name:** PH. II ESA
**Project Number:** E1641
**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-04
Client ID: SB3 (1-5')
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 07/07/17 02:09
Analyst: JA
Percent Solids: 86%

Date Collected: 06/29/17 09:50
Date Received: 06/30/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/06/17 07:58
Cleanup Method: EPA 3665A
Cleanup Date: 07/06/17
Cleanup Method: EPA 3660B
Cleanup Date: 07/07/17

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---|---|---|---|---|---|---|---|
| **Polychlorinated Biphenyls by GC - Westborough Lab** | | | | | | | |
| Aroclor 1016 | ND | | ug/kg | 36.8 | 4.18 | 1 | A |
| Aroclor 1221 | ND | | ug/kg | 36.8 | 5.60 | 1 | A |
| Aroclor 1232 | ND | | ug/kg | 36.8 | 3.62 | 1 | A |
| Aroclor 1242 | ND | | ug/kg | 36.8 | 4.51 | 1 | A |
| Aroclor 1248 | ND | | ug/kg | 36.8 | 4.13 | 1 | A |
| Aroclor 1254 | ND | | ug/kg | 36.8 | 3.00 | 1 | A |
| Aroclor 1260 | 10.6 | J | ug/kg | 36.8 | 3.84 | 1 | B |
| Aroclor 1262 | ND | | ug/kg | 36.8 | 3.03 | 1 | A |
| Aroclor 1268 | ND | | ug/kg | 36.8 | 2.61 | 1 | A |
| PCBs, Total | 10.6 | J | ug/kg | 36.8 | 3.84 | 1 | B |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria | Column |
|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 63 | | 30-150 | A |
| Decachlorobiphenyl | 52 | | 30-150 | A |
| 2,4,5,6-Tetrachloro-m-xylene | 63 | | 30-150 | B |
| Decachlorobiphenyl | 53 | | 30-150 | B |

**Project Name:** PH. II ESA
**Project Number:** E1641
**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-06
Client ID: SB6 (0-2')
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 07/07/17 02:23
Analyst: JA
Percent Solids: 92%

Date Collected: 06/29/17 13:20
Date Received: 06/30/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/06/17 07:58
Cleanup Method: EPA 3665A
Cleanup Date: 07/06/17
Cleanup Method: EPA 3660B
Cleanup Date: 07/07/17

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---|---|---|---|---|---|---|---|
| **Polychlorinated Biphenyls by GC - Westborough Lab** | | | | | | | |
| Aroclor 1016 | ND | | ug/kg | 34.3 | 3.89 | 1 | A |
| Aroclor 1221 | ND | | ug/kg | 34.3 | 5.22 | 1 | A |
| Aroclor 1232 | ND | | ug/kg | 34.3 | 3.38 | 1 | A |
| Aroclor 1242 | ND | | ug/kg | 34.3 | 4.20 | 1 | A |
| Aroclor 1248 | ND | | ug/kg | 34.3 | 3.85 | 1 | A |
| Aroclor 1254 | 27.3 | J | ug/kg | 34.3 | 2.80 | 1 | B |
| Aroclor 1260 | 24.4 | J | ug/kg | 34.3 | 3.58 | 1 | B |
| Aroclor 1262 | ND | | ug/kg | 34.3 | 2.82 | 1 | A |
| Aroclor 1268 | ND | | ug/kg | 34.3 | 2.43 | 1 | A |
| PCBs, Total | 51.7 | J | ug/kg | 34.3 | 2.80 | 1 | B |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria | Column |
|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 56 | | 30-150 | A |
| Decachlorobiphenyl | 44 | | 30-150 | A |
| 2,4,5,6-Tetrachloro-m-xylene | 58 | | 30-150 | B |
| Decachlorobiphenyl | 51 | | 30-150 | B |

**Project Name:** PH. II ESA
**Project Number:** E1641
**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-09
Client ID: SB11 (0-2.5')
Sample Location: 124&145 CHANDLER ST., BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 07/07/17 02:36
Analyst: JA
Percent Solids: 80%

Date Collected: 06/29/17 15:00
Date Received: 06/30/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/06/17 07:58
Cleanup Method: EPA 3665A
Cleanup Date: 07/06/17
Cleanup Method: EPA 3660B
Cleanup Date: 07/07/17

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Column |
|---|---|---|---|---|---|---|---|
| **Polychlorinated Biphenyls by GC - Westborough Lab** | | | | | | | |
| Aroclor 1016 | ND | | ug/kg | 40.7 | 4.61 | 1 | A |
| Aroclor 1221 | ND | | ug/kg | 40.7 | 6.19 | 1 | A |
| Aroclor 1232 | ND | | ug/kg | 40.7 | 4.00 | 1 | A |
| Aroclor 1242 | ND | | ug/kg | 40.7 | 4.98 | 1 | A |
| Aroclor 1248 | ND | | ug/kg | 40.7 | 4.56 | 1 | A |
| Aroclor 1254 | ND | | ug/kg | 40.7 | 3.32 | 1 | A |
| Aroclor 1260 | 20.2 | J | ug/kg | 40.7 | 4.25 | 1 | B |
| Aroclor 1262 | ND | | ug/kg | 40.7 | 3.34 | 1 | A |
| Aroclor 1268 | ND | | ug/kg | 40.7 | 2.88 | 1 | A |
| PCBs, Total | 20.2 | J | ug/kg | 40.7 | 4.25 | 1 | B |

| Surrogate | % Recovery | Qualifier | Acceptance Criteria | Column |
|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 59 | | 30-150 | A |
| Decachlorobiphenyl | 48 | | 30-150 | A |
| 2,4,5,6-Tetrachloro-m-xylene | 58 | | 30-150 | B |
| Decachlorobiphenyl | 49 | | 30-150 | B |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

# Method Blank Analysis
## Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 07/05/17 19:03
Analyst: HT

Extraction Method: EPA 3546
Extraction Date: 07/05/17 08:16
Cleanup Method: EPA 3665A
Cleanup Date: 07/05/17
Cleanup Method: EPA 3660B
Cleanup Date: 07/05/17

| Parameter | Result | Qualifier | Units | RL | MDL | Column |
|---|---|---|---|---|---|---|
| Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 03-04,06,09 Batch: WG1019633-1 | | | | | | |
| Aroclor 1016 | ND | | ug/kg | 32.1 | 3.64 | A |
| Aroclor 1221 | ND | | ug/kg | 32.1 | 4.89 | A |
| Aroclor 1232 | ND | | ug/kg | 32.1 | 3.16 | A |
| Aroclor 1242 | ND | | ug/kg | 32.1 | 3.93 | A |
| Aroclor 1248 | ND | | ug/kg | 32.1 | 3.60 | A |
| Aroclor 1254 | ND | | ug/kg | 32.1 | 2.62 | A |
| Aroclor 1260 | ND | | ug/kg | 32.1 | 3.35 | A |
| Aroclor 1262 | ND | | ug/kg | 32.1 | 2.64 | A |
| Aroclor 1268 | ND | | ug/kg | 32.1 | 2.28 | A |
| PCBs, Total | ND | | ug/kg | 32.1 | 2.28 | A |

| Surrogate | %Recovery | Qualifier | Acceptance Criteria | Column |
|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 85 | | 30-150 | A |
| Decachlorobiphenyl | 88 | | 30-150 | A |
| 2,4,5,6-Tetrachloro-m-xylene | 83 | | 30-150 | B |
| Decachlorobiphenyl | 91 | | 30-150 | B |

# Lab Control Sample Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits | Column |
|---|---|---|---|---|---|---|---|---|---|
| Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 03-04,06,09 Batch: WG1019633-2 WG1019633-3 | | | | | | | | | |
| Aroclor 1016 | 70 | | 72 | | 40-140 | 3 | | 50 | A |
| Aroclor 1260 | 66 | | 63 | | 40-140 | 5 | | 50 | A |

| Surrogate | LCS %Recovery | Qual | LCSD %Recovery | Qual | Acceptance Criteria | Column |
|---|---|---|---|---|---|---|
| 2,4,5,6-Tetrachloro-m-xylene | 85 | | 87 | | 30-150 | A |
| Decachlorobiphenyl | 75 | | 72 | | 30-150 | A |
| 2,4,5,6-Tetrachloro-m-xylene | 79 | | 84 | | 30-150 | B |
| Decachlorobiphenyl | 82 | | 85 | | 30-150 | B |

# METALS

**Project Name:** PH. II ESA
**Project Number:** E1641
**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-03
Client ID: SB2 (0-2.5')
Sample Location: 124&145 CHANDLER ST., BUFFALO,
Matrix: Soil
Percent Solids: 79%

Date Collected: 06/29/17 09:20
Date Received: 06/30/17
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Prep Method | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total Metals - Mansfield Lab** | | | | | | | | | | | |
| Aluminum, Total | 12400 | | mg/kg | 9.90 | 2.67 | 2 | 07/06/17 06:30 | 07/07/17 15:50 | EPA 3050B | 1,6010C | PS |
| Antimony, Total | ND | | mg/kg | 4.95 | 0.376 | 2 | 07/06/17 06:30 | 07/07/17 15:50 | EPA 3050B | 1,6010C | PS |
| Arsenic, Total | 13.0 | | mg/kg | 0.990 | 0.206 | 2 | 07/06/17 06:30 | 07/07/17 15:50 | EPA 3050B | 1,6010C | PS |
| Barium, Total | 229 | | mg/kg | 0.990 | 0.172 | 2 | 07/06/17 06:30 | 07/07/17 15:50 | EPA 3050B | 1,6010C | PS |
| Beryllium, Total | 1.08 | | mg/kg | 0.495 | 0.033 | 2 | 07/06/17 06:30 | 07/07/17 15:50 | EPA 3050B | 1,6010C | PS |
| Cadmium, Total | 1.11 | | mg/kg | 0.990 | 0.097 | 2 | 07/06/17 06:30 | 07/07/17 15:50 | EPA 3050B | 1,6010C | PS |
| Calcium, Total | 74400 | | mg/kg | 9.90 | 3.46 | 2 | 07/06/17 06:30 | 07/07/17 15:50 | EPA 3050B | 1,6010C | PS |
| Chromium, Total | 41.4 | | mg/kg | 0.990 | 0.095 | 2 | 07/06/17 06:30 | 07/07/17 15:50 | EPA 3050B | 1,6010C | PS |
| Cobalt, Total | 4.95 | | mg/kg | 1.98 | 0.164 | 2 | 07/06/17 06:30 | 07/07/17 15:50 | EPA 3050B | 1,6010C | PS |
| Copper, Total | 109 | | mg/kg | 0.990 | 0.255 | 2 | 07/06/17 06:30 | 07/07/17 15:50 | EPA 3050B | 1,6010C | PS |
| Iron, Total | 21100 | | mg/kg | 4.95 | 0.894 | 2 | 07/06/17 06:30 | 07/07/17 15:50 | EPA 3050B | 1,6010C | PS |
| Lead, Total | 133 | | mg/kg | 4.95 | 0.265 | 2 | 07/06/17 06:30 | 07/07/17 15:50 | EPA 3050B | 1,6010C | PS |
| Magnesium, Total | 8530 | | mg/kg | 9.90 | 1.52 | 2 | 07/06/17 06:30 | 07/07/17 15:50 | EPA 3050B | 1,6010C | PS |
| Manganese, Total | 2360 | | mg/kg | 0.990 | 0.157 | 2 | 07/06/17 06:30 | 07/07/17 15:50 | EPA 3050B | 1,6010C | PS |
| Mercury, Total | 0.16 | | mg/kg | 0.08 | 0.02 | 1 | 07/06/17 08:10 | 07/08/17 11:54 | EPA 7471B | 1,7471B | BV |
| Nickel, Total | 12.0 | | mg/kg | 2.47 | 0.240 | 2 | 07/06/17 06:30 | 07/07/17 15:50 | EPA 3050B | 1,6010C | PS |
| Potassium, Total | 1200 | | mg/kg | 247 | 14.2 | 2 | 07/06/17 06:30 | 07/07/17 15:50 | EPA 3050B | 1,6010C | PS |
| Selenium, Total | 2.47 | | mg/kg | 1.98 | 0.255 | 2 | 07/06/17 06:30 | 07/07/17 15:50 | EPA 3050B | 1,6010C | PS |
| Silver, Total | ND | | mg/kg | 0.990 | 0.280 | 2 | 07/06/17 06:30 | 07/07/17 15:50 | EPA 3050B | 1,6010C | PS |
| Sodium, Total | 527 | | mg/kg | 198 | 3.12 | 2 | 07/06/17 06:30 | 07/07/17 15:50 | EPA 3050B | 1,6010C | PS |
| Thallium, Total | 3.59 | | mg/kg | 1.98 | 0.312 | 2 | 07/06/17 06:30 | 07/07/17 15:50 | EPA 3050B | 1,6010C | PS |
| Vanadium, Total | 20.2 | | mg/kg | 0.990 | 0.201 | 2 | 07/06/17 06:30 | 07/07/17 15:50 | EPA 3050B | 1,6010C | PS |
| Zinc, Total | 249 | | mg/kg | 4.95 | 0.290 | 2 | 07/06/17 06:30 | 07/07/17 15:50 | EPA 3050B | 1,6010C | PS |

**Project Name:** PH. II ESA
**Project Number:** E1641
**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-04
Client ID: SB3 (1-5')
Sample Location: 124&145 CHANDLER ST., BUFFALO,
Matrix: Soil
Percent Solids: 86%

Date Collected: 06/29/17 09:50
Date Received: 06/30/17
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Prep Method | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total Metals - Mansfield Lab** | | | | | | | | | | | |
| Aluminum, Total | 8650 | | mg/kg | 8.86 | 2.39 | 2 | 07/06/17 06:30 | 07/07/17 15:54 | EPA 3050B | 1,6010C | PS |
| Antimony, Total | ND | | mg/kg | 4.43 | 0.337 | 2 | 07/06/17 06:30 | 07/07/17 15:54 | EPA 3050B | 1,6010C | PS |
| Arsenic, Total | 13.4 | | mg/kg | 0.886 | 0.184 | 2 | 07/06/17 06:30 | 07/07/17 15:54 | EPA 3050B | 1,6010C | PS |
| Barium, Total | 102 | | mg/kg | 0.886 | 0.154 | 2 | 07/06/17 06:30 | 07/07/17 15:54 | EPA 3050B | 1,6010C | PS |
| Beryllium, Total | 0.762 | | mg/kg | 0.443 | 0.029 | 2 | 07/06/17 06:30 | 07/07/17 15:54 | EPA 3050B | 1,6010C | PS |
| Cadmium, Total | 1.00 | | mg/kg | 0.886 | 0.087 | 2 | 07/06/17 06:30 | 07/07/17 15:54 | EPA 3050B | 1,6010C | PS |
| Calcium, Total | 48200 | | mg/kg | 8.86 | 3.10 | 2 | 07/06/17 06:30 | 07/07/17 15:54 | EPA 3050B | 1,6010C | PS |
| Chromium, Total | 28.0 | | mg/kg | 0.886 | 0.085 | 2 | 07/06/17 06:30 | 07/07/17 15:54 | EPA 3050B | 1,6010C | PS |
| Cobalt, Total | 4.29 | | mg/kg | 1.77 | 0.147 | 2 | 07/06/17 06:30 | 07/07/17 15:54 | EPA 3050B | 1,6010C | PS |
| Copper, Total | 309 | | mg/kg | 0.886 | 0.228 | 2 | 07/06/17 06:30 | 07/07/17 15:54 | EPA 3050B | 1,6010C | PS |
| Iron, Total | 52600 | | mg/kg | 4.43 | 0.800 | 2 | 07/06/17 06:30 | 07/07/17 15:54 | EPA 3050B | 1,6010C | PS |
| Lead, Total | 147 | | mg/kg | 4.43 | 0.237 | 2 | 07/06/17 06:30 | 07/07/17 15:54 | EPA 3050B | 1,6010C | PS |
| Magnesium, Total | 7550 | | mg/kg | 8.86 | 1.36 | 2 | 07/06/17 06:30 | 07/07/17 15:54 | EPA 3050B | 1,6010C | PS |
| Manganese, Total | 1070 | | mg/kg | 0.886 | 0.141 | 2 | 07/06/17 06:30 | 07/07/17 15:54 | EPA 3050B | 1,6010C | PS |
| Mercury, Total | 0.03 | J | mg/kg | 0.07 | 0.02 | 1 | 07/06/17 08:10 | 07/08/17 11:56 | EPA 7471B | 1,7471B | BV |
| Nickel, Total | 23.2 | | mg/kg | 2.21 | 0.214 | 2 | 07/06/17 06:30 | 07/07/17 15:54 | EPA 3050B | 1,6010C | PS |
| Potassium, Total | 1010 | | mg/kg | 221 | 12.8 | 2 | 07/06/17 06:30 | 07/07/17 15:54 | EPA 3050B | 1,6010C | PS |
| Selenium, Total | ND | | mg/kg | 1.77 | 0.228 | 2 | 07/06/17 06:30 | 07/07/17 15:54 | EPA 3050B | 1,6010C | PS |
| Silver, Total | ND | | mg/kg | 0.886 | 0.251 | 2 | 07/06/17 06:30 | 07/07/17 15:54 | EPA 3050B | 1,6010C | PS |
| Sodium, Total | 222 | | mg/kg | 177 | 2.79 | 2 | 07/06/17 06:30 | 07/07/17 15:54 | EPA 3050B | 1,6010C | PS |
| Thallium, Total | 1.70 | J | mg/kg | 1.77 | 0.279 | 2 | 07/06/17 06:30 | 07/07/17 15:54 | EPA 3050B | 1,6010C | PS |
| Vanadium, Total | 14.7 | | mg/kg | 0.886 | 0.180 | 2 | 07/06/17 06:30 | 07/07/17 15:54 | EPA 3050B | 1,6010C | PS |
| Zinc, Total | 176 | | mg/kg | 4.43 | 0.260 | 2 | 07/06/17 06:30 | 07/07/17 15:54 | EPA 3050B | 1,6010C | PS |

**Project Name:** PH. II ESA
**Project Number:** E1641
**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-05
Client ID: SB5 (0-4')
Sample Location: 124&145 CHANDLER ST., BUFFALO,
Matrix: Soil
Percent Solids: 85%

Date Collected: 06/29/17 11:05
Date Received: 06/30/17
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Prep Method | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total Metals - Mansfield Lab** | | | | | | | | | | | |
| Aluminum, Total | 27200 | | mg/kg | 9.20 | 2.48 | 2 | 07/06/17 06:30 | 07/07/17 15:59 | EPA 3050B | 1,6010C | PS |
| Antimony, Total | ND | | mg/kg | 4.60 | 0.350 | 2 | 07/06/17 06:30 | 07/07/17 15:59 | EPA 3050B | 1,6010C | PS |
| Arsenic, Total | 10.4 | | mg/kg | 0.920 | 0.191 | 2 | 07/06/17 06:30 | 07/07/17 15:59 | EPA 3050B | 1,6010C | PS |
| Barium, Total | 293 | | mg/kg | 0.920 | 0.160 | 2 | 07/06/17 06:30 | 07/07/17 15:59 | EPA 3050B | 1,6010C | PS |
| Beryllium, Total | 1.74 | | mg/kg | 0.460 | 0.030 | 2 | 07/06/17 06:30 | 07/07/17 15:59 | EPA 3050B | 1,6010C | PS |
| Cadmium, Total | 0.865 | J | mg/kg | 0.920 | 0.090 | 2 | 07/06/17 06:30 | 07/07/17 15:59 | EPA 3050B | 1,6010C | PS |
| Calcium, Total | 89200 | | mg/kg | 9.20 | 3.22 | 2 | 07/06/17 06:30 | 07/07/17 15:59 | EPA 3050B | 1,6010C | PS |
| Chromium, Total | 147 | | mg/kg | 0.920 | 0.088 | 2 | 07/06/17 06:30 | 07/07/17 15:59 | EPA 3050B | 1,6010C | PS |
| Cobalt, Total | 4.69 | | mg/kg | 1.84 | 0.153 | 2 | 07/06/17 06:30 | 07/07/17 15:59 | EPA 3050B | 1,6010C | PS |
| Copper, Total | 338 | | mg/kg | 0.920 | 0.238 | 2 | 07/06/17 06:30 | 07/07/17 15:59 | EPA 3050B | 1,6010C | PS |
| Iron, Total | 24800 | | mg/kg | 4.60 | 0.831 | 2 | 07/06/17 06:30 | 07/07/17 15:59 | EPA 3050B | 1,6010C | PS |
| Lead, Total | 144 | | mg/kg | 4.60 | 0.247 | 2 | 07/06/17 06:30 | 07/07/17 15:59 | EPA 3050B | 1,6010C | PS |
| Magnesium, Total | 3490 | | mg/kg | 9.20 | 1.42 | 2 | 07/06/17 06:30 | 07/07/17 15:59 | EPA 3050B | 1,6010C | PS |
| Manganese, Total | 12300 | | mg/kg | 0.920 | 0.146 | 2 | 07/06/17 06:30 | 07/07/17 15:59 | EPA 3050B | 1,6010C | PS |
| Mercury, Total | 0.10 | | mg/kg | 0.07 | 0.02 | 1 | 07/06/17 08:10 | 07/08/17 11:58 | EPA 7471B | 1,7471B | BV |
| Nickel, Total | 9.32 | | mg/kg | 2.30 | 0.223 | 2 | 07/06/17 06:30 | 07/07/17 15:59 | EPA 3050B | 1,6010C | PS |
| Potassium, Total | 3430 | | mg/kg | 230 | 13.2 | 2 | 07/06/17 06:30 | 07/07/17 15:59 | EPA 3050B | 1,6010C | PS |
| Selenium, Total | 10.8 | | mg/kg | 1.84 | 0.238 | 2 | 07/06/17 06:30 | 07/07/17 15:59 | EPA 3050B | 1,6010C | PS |
| Silver, Total | 1.93 | | mg/kg | 0.920 | 0.260 | 2 | 07/06/17 06:30 | 07/07/17 15:59 | EPA 3050B | 1,6010C | PS |
| Sodium, Total | 1790 | | mg/kg | 184 | 2.90 | 2 | 07/06/17 06:30 | 07/07/17 15:59 | EPA 3050B | 1,6010C | PS |
| Thallium, Total | 18.4 | | mg/kg | 1.84 | 0.290 | 2 | 07/06/17 06:30 | 07/07/17 15:59 | EPA 3050B | 1,6010C | PS |
| Vanadium, Total | 38.4 | | mg/kg | 0.920 | 0.187 | 2 | 07/06/17 06:30 | 07/07/17 15:59 | EPA 3050B | 1,6010C | PS |
| Zinc, Total | 232 | | mg/kg | 4.60 | 0.270 | 2 | 07/06/17 06:30 | 07/07/17 15:59 | EPA 3050B | 1,6010C | PS |

**Project Name:** PH. II ESA
**Project Number:** E1641
**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-06
Client ID: SB6 (0-2')
Sample Location: 124&145 CHANDLER ST., BUFFALO,
Matrix: Soil
Percent Solids: 92%

Date Collected: 06/29/17 13:20
Date Received: 06/30/17
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Prep Method | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total Metals - Mansfield Lab** | | | | | | | | | | | |
| Aluminum, Total | 4700 | | mg/kg | 8.50 | 2.30 | 2 | 07/06/17 06:30 | 07/07/17 18:02 | EPA 3050B | 1,6010C | AB |
| Antimony, Total | 3.04 | J | mg/kg | 4.25 | 0.323 | 2 | 07/06/17 06:30 | 07/07/17 18:02 | EPA 3050B | 1,6010C | AB |
| Arsenic, Total | 4.86 | | mg/kg | 0.850 | 0.177 | 2 | 07/06/17 06:30 | 07/07/17 18:02 | EPA 3050B | 1,6010C | AB |
| Barium, Total | 61.8 | | mg/kg | 0.850 | 0.148 | 2 | 07/06/17 06:30 | 07/07/17 18:02 | EPA 3050B | 1,6010C | AB |
| Beryllium, Total | 0.468 | | mg/kg | 0.425 | 0.028 | 2 | 07/06/17 06:30 | 07/07/17 18:02 | EPA 3050B | 1,6010C | AB |
| Cadmium, Total | 0.867 | | mg/kg | 0.850 | 0.083 | 2 | 07/06/17 06:30 | 07/07/17 18:02 | EPA 3050B | 1,6010C | AB |
| Calcium, Total | 145000 | | mg/kg | 85.0 | 29.8 | 20 | 07/06/17 06:30 | 07/07/17 19:44 | EPA 3050B | 1,6010C | AB |
| Chromium, Total | 8.37 | | mg/kg | 0.850 | 0.082 | 2 | 07/06/17 06:30 | 07/07/17 18:02 | EPA 3050B | 1,6010C | AB |
| Cobalt, Total | 2.15 | | mg/kg | 1.70 | 0.141 | 2 | 07/06/17 06:30 | 07/07/17 18:02 | EPA 3050B | 1,6010C | AB |
| Copper, Total | 3750 | | mg/kg | 0.850 | 0.219 | 2 | 07/06/17 06:30 | 07/07/17 18:02 | EPA 3050B | 1,6010C | AB |
| Iron, Total | 7730 | | mg/kg | 4.25 | 0.768 | 2 | 07/06/17 06:30 | 07/07/17 18:02 | EPA 3050B | 1,6010C | AB |
| Lead, Total | 258 | | mg/kg | 4.25 | 0.228 | 2 | 07/06/17 06:30 | 07/07/17 18:02 | EPA 3050B | 1,6010C | AB |
| Magnesium, Total | 14300 | | mg/kg | 8.50 | 1.31 | 2 | 07/06/17 06:30 | 07/07/17 18:02 | EPA 3050B | 1,6010C | AB |
| Manganese, Total | 518 | | mg/kg | 0.850 | 0.135 | 2 | 07/06/17 06:30 | 07/07/17 18:02 | EPA 3050B | 1,6010C | AB |
| Mercury, Total | 0.06 | J | mg/kg | 0.07 | 0.01 | 1 | 07/06/17 08:10 | 07/08/17 12:03 | EPA 7471B | 1,7471B | BV |
| Nickel, Total | 18.1 | | mg/kg | 2.12 | 0.206 | 2 | 07/06/17 06:30 | 07/07/17 18:02 | EPA 3050B | 1,6010C | AB |
| Potassium, Total | 429 | | mg/kg | 212 | 12.2 | 2 | 07/06/17 06:30 | 07/07/17 18:02 | EPA 3050B | 1,6010C | AB |
| Selenium, Total | 0.451 | J | mg/kg | 1.70 | 0.219 | 2 | 07/06/17 06:30 | 07/07/17 18:02 | EPA 3050B | 1,6010C | AB |
| Silver, Total | 1.53 | | mg/kg | 0.850 | 0.241 | 2 | 07/06/17 06:30 | 07/07/17 18:02 | EPA 3050B | 1,6010C | AB |
| Sodium, Total | 271 | | mg/kg | 170 | 2.68 | 2 | 07/06/17 06:30 | 07/07/17 18:02 | EPA 3050B | 1,6010C | AB |
| Thallium, Total | 0.697 | J | mg/kg | 1.70 | 0.268 | 2 | 07/06/17 06:30 | 07/07/17 18:02 | EPA 3050B | 1,6010C | AB |
| Vanadium, Total | 11.2 | | mg/kg | 0.850 | 0.173 | 2 | 07/06/17 06:30 | 07/07/17 18:02 | EPA 3050B | 1,6010C | AB |
| Zinc, Total | 960 | | mg/kg | 4.25 | 0.249 | 2 | 07/06/17 06:30 | 07/07/17 18:02 | EPA 3050B | 1,6010C | AB |

**Project Name:** PH. II ESA
**Project Number:** E1641
**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-08
Client ID: SB9 (0-4')
Sample Location: 124&145 CHANDLER ST., BUFFALO,
Matrix: Soil
Percent Solids: 86%

Date Collected: 06/29/17 14:20
Date Received: 06/30/17
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Prep Method | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total Metals - Mansfield Lab** | | | | | | | | | | | |
| Aluminum, Total | 5620 | | mg/kg | 8.76 | 2.36 | 2 | 07/06/17 06:30 | 07/07/17 18:07 | EPA 3050B | 1,6010C | AB |
| Antimony, Total | ND | | mg/kg | 4.38 | 0.333 | 2 | 07/06/17 06:30 | 07/07/17 18:07 | EPA 3050B | 1,6010C | AB |
| Arsenic, Total | 3.83 | | mg/kg | 0.876 | 0.182 | 2 | 07/06/17 06:30 | 07/07/17 18:07 | EPA 3050B | 1,6010C | AB |
| Barium, Total | 54.0 | | mg/kg | 0.876 | 0.152 | 2 | 07/06/17 06:30 | 07/07/17 18:07 | EPA 3050B | 1,6010C | AB |
| Beryllium, Total | 0.674 | | mg/kg | 0.438 | 0.029 | 2 | 07/06/17 06:30 | 07/07/17 18:07 | EPA 3050B | 1,6010C | AB |
| Cadmium, Total | 0.788 | J | mg/kg | 0.876 | 0.086 | 2 | 07/06/17 06:30 | 07/07/17 18:07 | EPA 3050B | 1,6010C | AB |
| Calcium, Total | 34400 | | mg/kg | 8.76 | 3.06 | 2 | 07/06/17 06:30 | 07/07/17 18:07 | EPA 3050B | 1,6010C | AB |
| Chromium, Total | 6.70 | | mg/kg | 0.876 | 0.084 | 2 | 07/06/17 06:30 | 07/07/17 18:07 | EPA 3050B | 1,6010C | AB |
| Cobalt, Total | 4.66 | | mg/kg | 1.75 | 0.145 | 2 | 07/06/17 06:30 | 07/07/17 18:07 | EPA 3050B | 1,6010C | AB |
| Copper, Total | 1910 | | mg/kg | 0.876 | 0.226 | 2 | 07/06/17 06:30 | 07/07/17 18:07 | EPA 3050B | 1,6010C | AB |
| Iron, Total | 22100 | | mg/kg | 4.38 | 0.791 | 2 | 07/06/17 06:30 | 07/07/17 18:07 | EPA 3050B | 1,6010C | AB |
| Lead, Total | 126 | | mg/kg | 4.38 | 0.235 | 2 | 07/06/17 06:30 | 07/07/17 18:07 | EPA 3050B | 1,6010C | AB |
| Magnesium, Total | 3140 | | mg/kg | 8.76 | 1.35 | 2 | 07/06/17 06:30 | 07/07/17 18:07 | EPA 3050B | 1,6010C | AB |
| Manganese, Total | 579 | | mg/kg | 0.876 | 0.139 | 2 | 07/06/17 06:30 | 07/07/17 18:07 | EPA 3050B | 1,6010C | AB |
| Mercury, Total | 0.03 | J | mg/kg | 0.07 | 0.02 | 1 | 07/06/17 08:10 | 07/08/17 12:05 | EPA 7471B | 1,7471B | BV |
| Nickel, Total | 31.4 | | mg/kg | 2.19 | 0.212 | 2 | 07/06/17 06:30 | 07/07/17 18:07 | EPA 3050B | 1,6010C | AB |
| Potassium, Total | 396 | | mg/kg | 219 | 12.6 | 2 | 07/06/17 06:30 | 07/07/17 18:07 | EPA 3050B | 1,6010C | AB |
| Selenium, Total | ND | | mg/kg | 1.75 | 0.226 | 2 | 07/06/17 06:30 | 07/07/17 18:07 | EPA 3050B | 1,6010C | AB |
| Silver, Total | 0.639 | J | mg/kg | 0.876 | 0.248 | 2 | 07/06/17 06:30 | 07/07/17 18:07 | EPA 3050B | 1,6010C | AB |
| Sodium, Total | 300 | | mg/kg | 175 | 2.76 | 2 | 07/06/17 06:30 | 07/07/17 18:07 | EPA 3050B | 1,6010C | AB |
| Thallium, Total | 0.876 | J | mg/kg | 1.75 | 0.276 | 2 | 07/06/17 06:30 | 07/07/17 18:07 | EPA 3050B | 1,6010C | AB |
| Vanadium, Total | 10.7 | | mg/kg | 0.876 | 0.178 | 2 | 07/06/17 06:30 | 07/07/17 18:07 | EPA 3050B | 1,6010C | AB |
| Zinc, Total | 890 | | mg/kg | 4.38 | 0.256 | 2 | 07/06/17 06:30 | 07/07/17 18:07 | EPA 3050B | 1,6010C | AB |

**Project Name:** PH. II ESA
**Project Number:** E1641
**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-09
Client ID: SB11 (0-2.5')
Sample Location: 124&145 CHANDLER ST., BUFFALO,
Matrix: Soil
Percent Solids: 80%

Date Collected: 06/29/17 15:00
Date Received: 06/30/17
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Prep Method | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total Metals - Mansfield Lab** | | | | | | | | | | | |
| Aluminum, Total | 8860 | | mg/kg | 9.85 | 2.66 | 2 | 07/06/17 06:30 | 07/07/17 18:12 | EPA 3050B | 1,6010C | AB |
| Antimony, Total | ND | | mg/kg | 4.92 | 0.374 | 2 | 07/06/17 06:30 | 07/07/17 18:12 | EPA 3050B | 1,6010C | AB |
| Arsenic, Total | 10.4 | | mg/kg | 0.985 | 0.205 | 2 | 07/06/17 06:30 | 07/07/17 18:12 | EPA 3050B | 1,6010C | AB |
| Barium, Total | 105 | | mg/kg | 0.985 | 0.171 | 2 | 07/06/17 06:30 | 07/07/17 18:12 | EPA 3050B | 1,6010C | AB |
| Beryllium, Total | 0.611 | | mg/kg | 0.492 | 0.033 | 2 | 07/06/17 06:30 | 07/07/17 18:12 | EPA 3050B | 1,6010C | AB |
| Cadmium, Total | 1.69 | | mg/kg | 0.985 | 0.097 | 2 | 07/06/17 06:30 | 07/07/17 18:12 | EPA 3050B | 1,6010C | AB |
| Calcium, Total | 13400 | | mg/kg | 9.85 | 3.45 | 2 | 07/06/17 06:30 | 07/07/17 18:12 | EPA 3050B | 1,6010C | AB |
| Chromium, Total | 22.1 | | mg/kg | 0.985 | 0.095 | 2 | 07/06/17 06:30 | 07/07/17 18:12 | EPA 3050B | 1,6010C | AB |
| Cobalt, Total | 7.94 | | mg/kg | 1.97 | 0.164 | 2 | 07/06/17 06:30 | 07/07/17 18:12 | EPA 3050B | 1,6010C | AB |
| Copper, Total | 638 | | mg/kg | 0.985 | 0.254 | 2 | 07/06/17 06:30 | 07/07/17 18:12 | EPA 3050B | 1,6010C | AB |
| Iron, Total | 33900 | | mg/kg | 4.92 | 0.890 | 2 | 07/06/17 06:30 | 07/07/17 18:12 | EPA 3050B | 1,6010C | AB |
| Lead, Total | 360 | | mg/kg | 4.92 | 0.264 | 2 | 07/06/17 06:30 | 07/07/17 18:12 | EPA 3050B | 1,6010C | AB |
| Magnesium, Total | 3620 | | mg/kg | 9.85 | 1.52 | 2 | 07/06/17 06:30 | 07/07/17 18:12 | EPA 3050B | 1,6010C | AB |
| Manganese, Total | 578 | | mg/kg | 0.985 | 0.157 | 2 | 07/06/17 06:30 | 07/07/17 18:12 | EPA 3050B | 1,6010C | AB |
| Mercury, Total | 0.12 | | mg/kg | 0.08 | 0.02 | 1 | 07/06/17 08:10 | 07/08/17 12:07 | EPA 7471B | 1,7471B | BV |
| Nickel, Total | 18.1 | | mg/kg | 2.46 | 0.238 | 2 | 07/06/17 06:30 | 07/07/17 18:12 | EPA 3050B | 1,6010C | AB |
| Potassium, Total | 791 | | mg/kg | 246 | 14.2 | 2 | 07/06/17 06:30 | 07/07/17 18:12 | EPA 3050B | 1,6010C | AB |
| Selenium, Total | 0.266 | J | mg/kg | 1.97 | 0.254 | 2 | 07/06/17 06:30 | 07/07/17 18:12 | EPA 3050B | 1,6010C | AB |
| Silver, Total | 0.286 | J | mg/kg | 0.985 | 0.279 | 2 | 07/06/17 06:30 | 07/07/17 18:12 | EPA 3050B | 1,6010C | AB |
| Sodium, Total | 150 | J | mg/kg | 197 | 3.10 | 2 | 07/06/17 06:30 | 07/07/17 18:12 | EPA 3050B | 1,6010C | AB |
| Thallium, Total | 0.896 | J | mg/kg | 1.97 | 0.310 | 2 | 07/06/17 06:30 | 07/07/17 18:12 | EPA 3050B | 1,6010C | AB |
| Vanadium, Total | 36.8 | | mg/kg | 0.985 | 0.200 | 2 | 07/06/17 06:30 | 07/07/17 18:12 | EPA 3050B | 1,6010C | AB |
| Zinc, Total | 598 | | mg/kg | 4.92 | 0.289 | 2 | 07/06/17 06:30 | 07/07/17 18:12 | EPA 3050B | 1,6010C | AB |

**Project Name:** PH. II ESA
**Project Number:** E1641
**Lab Number:** L1722530
**Report Date:** 07/10/17

# Method Blank Analysis
# Batch Quality Control

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Metals - Mansfield Lab for sample(s): 03-06,08-09 Batch: WG1019580-1 | | | | | | | | | | |
| Mercury, Total | ND | | mg/kg | 0.08 | 0.02 | 1 | 07/06/17 08:10 | 07/08/17 11:42 | 1,7471B | BV |

**Prep Information**

Digestion Method: EPA 7471B

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Metals - Mansfield Lab for sample(s): 03-06,08-09 Batch: WG1019940-1 | | | | | | | | | | |
| Aluminum, Total | ND | | mg/kg | 4.00 | 1.08 | 1 | 07/06/17 06:30 | 07/07/17 19:17 | 1,6010C | AB |
| Antimony, Total | 0.152 | J | mg/kg | 2.00 | 0.152 | 1 | 07/06/17 06:30 | 07/07/17 14:13 | 1,6010C | PS |
| Arsenic, Total | ND | | mg/kg | 0.400 | 0.083 | 1 | 07/06/17 06:30 | 07/07/17 19:17 | 1,6010C | AB |
| Barium, Total | ND | | mg/kg | 0.400 | 0.070 | 1 | 07/06/17 06:30 | 07/07/17 19:17 | 1,6010C | AB |
| Beryllium, Total | ND | | mg/kg | 0.200 | 0.013 | 1 | 07/06/17 06:30 | 07/07/17 19:17 | 1,6010C | AB |
| Cadmium, Total | ND | | mg/kg | 0.400 | 0.039 | 1 | 07/06/17 06:30 | 07/07/17 19:17 | 1,6010C | AB |
| Calcium, Total | ND | | mg/kg | 4.00 | 1.40 | 1 | 07/06/17 06:30 | 07/07/17 19:17 | 1,6010C | AB |
| Chromium, Total | ND | | mg/kg | 0.400 | 0.038 | 1 | 07/06/17 06:30 | 07/07/17 19:17 | 1,6010C | AB |
| Cobalt, Total | ND | | mg/kg | 0.800 | 0.066 | 1 | 07/06/17 06:30 | 07/07/17 19:17 | 1,6010C | AB |
| Copper, Total | ND | | mg/kg | 0.400 | 0.103 | 1 | 07/06/17 06:30 | 07/07/17 19:17 | 1,6010C | AB |
| Iron, Total | ND | | mg/kg | 2.00 | 0.361 | 1 | 07/06/17 06:30 | 07/07/17 19:17 | 1,6010C | AB |
| Lead, Total | ND | | mg/kg | 2.00 | 0.107 | 1 | 07/06/17 06:30 | 07/07/17 19:17 | 1,6010C | AB |
| Magnesium, Total | ND | | mg/kg | 4.00 | 0.616 | 1 | 07/06/17 06:30 | 07/07/17 19:17 | 1,6010C | AB |
| Manganese, Total | ND | | mg/kg | 0.400 | 0.064 | 1 | 07/06/17 06:30 | 07/07/17 19:17 | 1,6010C | AB |
| Nickel, Total | ND | | mg/kg | 1.00 | 0.097 | 1 | 07/06/17 06:30 | 07/07/17 19:17 | 1,6010C | AB |
| Potassium, Total | ND | | mg/kg | 100 | 5.76 | 1 | 07/06/17 06:30 | 07/07/17 19:17 | 1,6010C | AB |
| Selenium, Total | ND | | mg/kg | 0.800 | 0.103 | 1 | 07/06/17 06:30 | 07/07/17 19:17 | 1,6010C | AB |
| Silver, Total | ND | | mg/kg | 0.400 | 0.113 | 1 | 07/06/17 06:30 | 07/07/17 19:17 | 1,6010C | AB |
| Sodium, Total | ND | | mg/kg | 80.0 | 1.26 | 1 | 07/06/17 06:30 | 07/07/17 19:17 | 1,6010C | AB |
| Thallium, Total | ND | | mg/kg | 0.800 | 0.126 | 1 | 07/06/17 06:30 | 07/07/17 19:17 | 1,6010C | AB |
| Vanadium, Total | ND | | mg/kg | 0.400 | 0.081 | 1 | 07/06/17 06:30 | 07/07/17 19:17 | 1,6010C | AB |
| Zinc, Total | ND | | mg/kg | 2.00 | 0.117 | 1 | 07/06/17 06:30 | 07/07/17 19:17 | 1,6010C | AB |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

# Method Blank Analysis
# Batch Quality Control

**Prep Information**

Digestion Method: EPA 3050B

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** PH. II ESA

**Project Number:** E1641

**Lab Number:** L1722530

**Report Date:** 07/10/17

| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| Total Metals - Mansfield Lab Associated sample(s): 03-06,08-09 Batch: WG1019580-2 SRM Lot Number: D093-540 | | | | | | | | |
| Mercury, Total | 102 | | - | | 72-128 | - | | |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** PH. II ESA

**Project Number:** E1641

**Lab Number:** L1722530

**Report Date:** 07/10/17

| Parameter | LCS %Recovery | LCSD %Recovery | %Recovery Limits | RPD | RPD Limits |
|---|---|---|---|---|---|
| Total Metals - Mansfield Lab Associated sample(s): 03-06,08-09 Batch: WG1019940-2 SRM Lot Number: D093-540 | | | | | |
| Aluminum, Total | 79 | - | 55-146 | - | |
| Antimony, Total | 198 | - | 2-204 | - | |
| Arsenic, Total | 114 | - | 70-130 | - | |
| Barium, Total | 104 | - | 83-117 | - | |
| Beryllium, Total | 106 | - | 83-117 | - | |
| Cadmium, Total | 107 | - | 83-117 | - | |
| Calcium, Total | 106 | - | 83-117 | - | |
| Chromium, Total | 103 | - | 80-120 | - | |
| Cobalt, Total | 106 | - | 84-116 | - | |
| Copper, Total | 105 | - | 82-118 | - | |
| Iron, Total | 108 | - | 47-153 | - | |
| Lead, Total | 106 | - | 82-117 | - | |
| Magnesium, Total | 90 | - | 77-124 | - | |
| Manganese, Total | 100 | - | 81-119 | - | |
| Nickel, Total | 104 | - | 83-117 | - | |
| Potassium, Total | 88 | - | 71-129 | - | |
| Selenium, Total | 116 | - | 78-122 | - | |
| Silver, Total | 106 | - | 76-124 | - | |
| Sodium, Total | 100 | - | 72-128 | - | |
| Thallium, Total | 108 | - | 79-121 | - | |
| Vanadium, Total | 106 | - | 78-122 | - | |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** PH. II ESA

**Project Number:** E1641

**Lab Number:** L1722530

**Report Date:** 07/10/17

| Parameter | LCS %Recovery | LCSD %Recovery | %Recovery Limits | RPD | RPD Limits |
|---|---|---|---|---|---|
| Total Metals - Mansfield Lab Associated sample(s): 03-06,08-09 Batch: WG1019940-2 SRM Lot Number: D093-540 | | | | | |
| Zinc, Total | 110 | - | 83-117 | - | |

# Matrix Spike Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | Native Sample | MS Added | MS Found | MS %Recovery | Qual | MSD Found | MSD %Recovery | Qual | Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Metals - Mansfield Lab Associated sample(s): 03-06,08-09 QC Batch ID: WG1019580-3 WG1019580-4 QC Sample: L1722538-03 Client ID: MS Sample | | | | | | | | | | | | |
| Mercury, Total | 2.0 | 0.152 | 2.2 | **131** | Q | 1.9 | **0** | Q | 80-120 | 15 | | 20 |

# Matrix Spike Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | Native Sample | MS Added | MS Found | MS %Recovery | | MSD Found | MSD %Recovery | Recovery Limits | RPD | RPD Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Metals - Mansfield Lab Associated sample(s): 03-06,08-09 QC Batch ID: WG1019940-3 QC Sample: L1722502-01 Client ID: MS Sample | | | | | | | | | | |
| Aluminum, Total | 4340 | 173 | 4880 | **312** | Q | - | - | 75-125 | - | 20 |
| Antimony, Total | 7.79 | 43.3 | 52.9 | 104 | | - | - | 75-125 | - | 20 |
| Arsenic, Total | 12.8 | 10.4 | 21.2 | 81 | | - | - | 75-125 | - | 20 |
| Barium, Total | 69.5 | 173 | 237 | 97 | | - | - | 75-125 | - | 20 |
| Beryllium, Total | 0.415J | 4.33 | 4.67 | 108 | | - | - | 75-125 | - | 20 |
| Cadmium, Total | 0.570J | 4.41 | 4.79 | 108 | | - | - | 75-125 | - | 20 |
| Calcium, Total | 19000 | 865 | 18100 | **0** | Q | - | - | 75-125 | - | 20 |
| Chromium, Total | 27.7 | 17.3 | 30.5 | **16** | Q | - | - | 75-125 | - | 20 |
| Cobalt, Total | 4.15 | 43.3 | 44.2 | 92 | | - | - | 75-125 | - | 20 |
| Copper, Total | 75.7 | 21.6 | 97.4 | 100 | | - | - | 75-125 | - | 20 |
| Iron, Total | 15000 | 86.5 | 13800 | **0** | Q | - | - | 75-125 | - | 20 |
| Lead, Total | 185. | 44.1 | 260 | **170** | Q | - | - | 75-125 | - | 20 |
| Magnesium, Total | 2060 | 865 | 2520 | **53** | Q | - | - | 75-125 | - | 20 |
| Manganese, Total | 149. | 43.3 | 185 | 83 | | - | - | 75-125 | - | 20 |
| Nickel, Total | 12.3 | 43.3 | 49.9 | 87 | | - | - | 75-125 | - | 20 |
| Potassium, Total | 1060 | 865 | 1780 | 83 | | - | - | 75-125 | - | 20 |
| Selenium, Total | 0.372J | 10.4 | 10.6 | 102 | | - | - | 75-125 | - | 20 |
| Silver, Total | ND | 26 | 25.9 | 100 | | - | - | 75-125 | - | 20 |
| Sodium, Total | 439. | 865 | 1330 | 103 | | - | - | 75-125 | - | 20 |
| Thallium, Total | ND | 10.4 | 9.59 | 92 | | - | - | 75-125 | - | 20 |
| Vanadium, Total | 16.5 | 43.3 | 59.5 | 99 | | - | - | 75-125 | - | 20 |

# Matrix Spike Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | Native Sample | MS Added | MS Found | MS %Recovery | MSD Found | MSD %Recovery | Recovery Limits | RPD | RPD Limits |
|---|---|---|---|---|---|---|---|---|---|
| Total Metals - Mansfield Lab Associated sample(s): 03-06,08-09 QC Batch ID: WG1019940-3 QC Sample: L1722502-01 Client ID: MS Sample | | | | | | | | | |
| Zinc, Total | 147. | 43.3 | 182 | 81 | - | - | 75-125 | - | 20 |

# Lab Duplicate Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|
| Total Metals - Mansfield Lab Associated sample(s): 03-06,08-09 QC Batch ID: WG1019940-4 QC Sample: L1722502-01 Client ID: DUP Sample | | | | | | |
| Aluminum, Total | 4340 | 4280 | mg/kg | 1 | | 20 |
| Antimony, Total | 7.79 | 7.74 | mg/kg | 1 | | 20 |
| Arsenic, Total | 12.8 | 11.1 | mg/kg | 14 | | 20 |
| Barium, Total | 69.5 | 78.8 | mg/kg | 13 | | 20 |
| Beryllium, Total | 0.415J | 0.342J | mg/kg | NC | | 20 |
| Cadmium, Total | 0.570J | 0.634J | mg/kg | NC | | 20 |
| Calcium, Total | 19000 | 20200 | mg/kg | 6 | | 20 |
| Chromium, Total | 27.7 | 13.5 | mg/kg | **69** | Q | 20 |
| Cobalt, Total | 4.15 | 4.43 | mg/kg | 7 | | 20 |
| Copper, Total | 75.7 | 82.0 | mg/kg | 8 | | 20 |
| Iron, Total | 15000 | 14700 | mg/kg | 2 | | 20 |
| Lead, Total | 185. | 219 | mg/kg | 17 | | 20 |
| Magnesium, Total | 2060 | 2270 | mg/kg | 10 | | 20 |
| Manganese, Total | 149. | 151 | mg/kg | 1 | | 20 |
| Nickel, Total | 12.3 | 11.3 | mg/kg | 8 | | 20 |
| Potassium, Total | 1060 | 865 | mg/kg | 20 | | 20 |
| Selenium, Total | 0.372J | 0.514J | mg/kg | NC | | 20 |
| Silver, Total | ND | ND | mg/kg | NC | | 20 |
| Sodium, Total | 439. | 449 | mg/kg | 2 | | 20 |

# Lab Duplicate Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | Native Sample | Duplicate Sample | Units | RPD | RPD Limits |
|---|---|---|---|---|---|
| Total Metals - Mansfield Lab Associated sample(s): 03-06,08-09 QC Batch ID: WG1019940-4 QC Sample: L1722502-01 Client ID: DUP Sample | | | | | |
| Thallium, Total | ND | 0.291J | mg/kg | NC | 20 |
| Vanadium, Total | 16.5 | 15.9 | mg/kg | 4 | 20 |
| Zinc, Total | 147. | 144 | mg/kg | 2 | 20 |

# INORGANICS
# &
# MISCELLANEOUS

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-02
Client ID: SB1 (0-2.5')
Sample Location: 124&145 CHANDLER ST., BUFFALO,
Matrix: Soil

Date Collected: 06/29/17 09:00
Date Received: 06/30/17
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 | 87.6 | | % | 0.100 | NA | 1 | - | 07/05/17 10:27 | 121,2540G | RI |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-03
Client ID: SB2 (0-2.5')
Sample Location: 124&145 CHANDLER ST., BUFFALO,
Matrix: Soil

Date Collected: 06/29/17 09:20
Date Received: 06/30/17
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 | 79.1 | | % | 0.100 | NA | 1 | - | 07/05/17 10:27 | 121,2540G | RI |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-04
Client ID: SB3 (1-5')
Sample Location: 124&145 CHANDLER ST., BUFFALO,
Matrix: Soil

Date Collected: 06/29/17 09:50
Date Received: 06/30/17
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 | 86.3 | | % | 0.100 | NA | 1 | - | 07/05/17 10:27 | 121,2540G | RI |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-05
Client ID: SB5 (0-4')
Sample Location: 124&145 CHANDLER ST., BUFFALO,
Matrix: Soil

Date Collected: 06/29/17 11:05
Date Received: 06/30/17
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 | 84.8 | | % | 0.100 | NA | 1 | - | 07/05/17 10:27 | 121,2540G | RI |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-06
Client ID: SB6 (0-2')
Sample Location: 124&145 CHANDLER ST., BUFFALO,
Matrix: Soil

Date Collected: 06/29/17 13:20
Date Received: 06/30/17
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 | 91.8 | | % | 0.100 | NA | 1 | - | 07/05/17 10:27 | 121,2540G | RI |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-07
Client ID: SB7 (1-5')
Sample Location: 124&145 CHANDLER ST., BUFFALO,
Matrix: Soil

Date Collected: 06/29/17 13:40
Date Received: 06/30/17
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 | 76.9 | | % | 0.100 | NA | 1 | - | 07/05/17 10:27 | 121,2540G | RI |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-08
Client ID: SB9 (0-4')
Sample Location: 124&145 CHANDLER ST., BUFFALO,
Matrix: Soil

Date Collected: 06/29/17 14:20
Date Received: 06/30/17
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 | 86.2 | | % | 0.100 | NA | 1 | - | 07/05/17 10:27 | 121,2540G | RI |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

## SAMPLE RESULTS

Lab ID: L1722530-09
Client ID: SB11 (0-2.5')
Sample Location: 124&145 CHANDLER ST., BUFFALO,
Matrix: Soil

Date Collected: 06/29/17 15:00
Date Received: 06/30/17
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 | 79.8 | | % | 0.100 | NA | 1 | - | 07/05/17 10:27 | 121,2540G | RI |

# Lab Duplicate Analysis
## Batch Quality Control

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

| Parameter | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab Associated sample(s): 02-09 QC Batch ID: WG1019682-1 QC Sample: L1722609-02 Client ID: DUP Sample | | | | | | |
| Solids, Total | 78.8 | 79.1 | % | 0 | | 20 |

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

### Cooler Information

| Cooler | Custody Seal |
|---|---|
| A | Absent |

### Container Information

| Container ID | Container Type | Cooler | Initial pH | Final pH | Temp deg C | Pres | Seal | Frozen Date/Time | Analysis(*) |
|---|---|---|---|---|---|---|---|---|---|
| L1722530-01A | Vial HCl preserved | A | NA | | 3.4 | Y | Absent | | NYTCL-8260-R2(14) |
| L1722530-01B | Vial HCl preserved | A | NA | | 3.4 | Y | Absent | | NYTCL-8260-R2(14) |
| L1722530-01C | Vial HCl preserved | A | NA | | 3.4 | Y | Absent | | NYTCL-8260-R2(14) |
| L1722530-01D | Amber 1000ml unpreserved | A | 7 | 7 | 3.4 | Y | Absent | | NYTCL-8270(7),NYTCL-8270-SIM(7) |
| L1722530-02A | Glass 120ml/4oz unpreserved | A | NA | | 3.4 | Y | Absent | | NYTCL-8270(14),TS(7) |
| L1722530-03A | Glass 120ml/4oz unpreserved | A | NA | | 3.4 | Y | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180) |
| L1722530-03B | Glass 250ml/8oz unpreserved | A | NA | | 3.4 | Y | Absent | | NYTCL-8270(14),TS(7),NYTCL-8082(14) |
| L1722530-04A | Glass 120ml/4oz unpreserved | A | NA | | 3.4 | Y | Absent | | NYTCL-8260-R2(14) |
| L1722530-04B | Glass 120ml/4oz unpreserved | A | NA | | 3.4 | Y | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180) |
| L1722530-04C | Glass 250ml/8oz unpreserved | A | NA | | 3.4 | Y | Absent | | NYTCL-8270(14),TS(7),NYTCL-8082(14) |
| L1722530-04X | Vial MeOH preserved split | A | NA | | 3.4 | Y | Absent | | NYTCL-8260-R2(14) |
| L1722530-04Y | Vial Water preserved split | A | NA | | 3.4 | Y | Absent | **05-JUL-17 10:56** | NYTCL-8260-R2(14) |
| L1722530-04Z | Vial Water preserved split | A | NA | | 3.4 | Y | Absent | **05-JUL-17 10:56** | NYTCL-8260-R2(14) |
| L1722530-05A | Glass 120ml/4oz unpreserved | A | NA | | 3.4 | Y | Absent | | NYTCL-8260-R2(14) |
| L1722530-05B | Glass 60ml unpreserved split | A | NA | | 3.4 | Y | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180) |
| L1722530-05C | Glass 250ml/8oz unpreserved | A | NA | | 3.4 | Y | Absent | | NYTCL-8270(14),TS(7) |



*Values in parentheses indicate holding time in days

**Project Name:** PH. II ESA
**Project Number:** E1641

**Lab Number:** L1722530
**Report Date:** 07/10/17

## Container Information

| Container ID | Container Type | Cooler | Initial pH | Final pH | Temp deg C | Pres | Seal | Frozen Date/Time | Analysis(*) |
|---|---|---|---|---|---|---|---|---|---|
| L1722530-05X | Vial MeOH preserved split | A | NA | | 3.4 | Y | Absent | | NYTCL-8260-R2(14) |
| L1722530-05Y | Vial Water preserved split | A | NA | | 3.4 | Y | Absent | **05-JUL-17 10:56** | NYTCL-8260-R2(14) |
| L1722530-05Z | Vial Water preserved split | A | NA | | 3.4 | Y | Absent | **05-JUL-17 10:56** | NYTCL-8260-R2(14) |
| L1722530-06A | Glass 120ml/4oz unpreserved | A | NA | | 3.4 | Y | Absent | | NYTCL-8260-R2(14) |
| L1722530-06B | Glass 120ml/4oz unpreserved | A | NA | | 3.4 | Y | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180) |
| L1722530-06C | Glass 250ml/8oz unpreserved | A | NA | | 3.4 | Y | Absent | | NYTCL-8270(14),TS(7),NYTCL-8082(14) |
| L1722530-06X | Vial MeOH preserved split | A | NA | | 3.4 | Y | Absent | | NYTCL-8260-R2(14) |
| L1722530-06Y | Vial Water preserved split | A | NA | | 3.4 | Y | Absent | **05-JUL-17 10:56** | NYTCL-8260-R2(14) |
| L1722530-06Z | Vial Water preserved split | A | NA | | 3.4 | Y | Absent | **05-JUL-17 10:56** | NYTCL-8260-R2(14) |
| L1722530-07A | Glass 120ml/4oz unpreserved | A | NA | | 3.4 | Y | Absent | | NYTCL-8260-R2(14) |
| L1722530-07B | Glass 120ml/4oz unpreserved | A | NA | | 3.4 | Y | Absent | | NYTCL-8270(14),TS(7) |
| L1722530-07X | Vial MeOH preserved split | A | NA | | 3.4 | Y | Absent | | NYTCL-8260-R2(14) |
| L1722530-07Y | Vial Water preserved split | A | NA | | 3.4 | Y | Absent | **05-JUL-17 10:56** | NYTCL-8260-R2(14) |
| L1722530-07Z | Vial Water preserved split | A | NA | | 3.4 | Y | Absent | **05-JUL-17 10:56** | NYTCL-8260-R2(14) |
| L1722530-08A | Glass 250ml/8oz unpreserved | A | NA | | 3.4 | Y | Absent | | NYTCL-8270(14),TS(7) |
| L1722530-08B | Glass 60ml unpreserved split | A | NA | | 3.4 | Y | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180) |
| L1722530-09A | Glass 120ml/4oz unpreserved | A | NA | | 3.4 | Y | Absent | | BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180) |
| L1722530-09B | Glass 250ml/8oz unpreserved | A | NA | | 3.4 | Y | Absent | | NYTCL-8270(14),TS(7),NYTCL-8082(14) |



*Values in parentheses indicate holding time in days

| | | | |
|---|---|---|---|
| **Project Name:** | PH. II ESA | **Lab Number:** | L1722530 |
| **Project Number:** | E1641 | **Report Date:** | 07/10/17 |

## 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. |
| NDPA/DPA | - N-Nitrosodiphenylamine/Diphenylamine. |
| NI | - Not Ignitable. |
| NP | - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil. |
| 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. |
| STLP | - Semi-dynamic Tank Leaching Procedure per EPA Method 1315. |
| TIC | - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations. |

### *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.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

### *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 ten times (10x) the concentration found in the blank. For MCP-related |

*Report Format:* DU Report with 'J' Qualifiers

| | | | |
|---|---|---|---|
| **Project Name:** | PH. II ESA | **Lab Number:** | L1722530 |
| **Project Number:** | E1641 | **Report Date:** | 07/10/17 |

***Data Qualifiers***

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. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

**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 lower value for the two columns has been reported 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.

**S** - Analytical results are from modified screening analysis.

**J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

**ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

*Report Format:* DU Report with 'J' Qualifiers

| | | | |
|---|---|---|---|
| **Project Name:** | PH. II ESA | **Lab Number:** | L1722530 |
| **Project Number:** | E1641 | **Report Date:** | 07/10/17 |

## REFERENCES


1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.


## 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.

# Certification Information

**The following analytes are not included in our Primary NELAP Scope of Accreditation:**

**Westborough Facility**
**EPA 624:** m/p-xylene, o-xylene
**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
**EPA 8270D:** NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
**EPA 300:** DW: Bromide
**EPA 6860:** NPW and SCM: Perchlorate
**EPA 9010:** NPW and SCM: Amenable Cyanide Distillation
**EPA 9012B:** NPW: Total Cyanide
**EPA 9050A:** NPW: Specific Conductance
**SM3500:** NPW: Ferrous Iron
**SM4500**: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
**SM5310C:** DW: Dissolved Organic Carbon

**Mansfield Facility**
**SM 2540D:** TSS
**EPA 3005A** NPW
**EPA 8082A:** NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
**Biological Tissue Matrix:** EPA 3050B

**The following analytes are included in our Massachusetts DEP Scope of Accreditation**

**Westborough Facility:**

***Drinking Water***
**EPA 300.0**: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
**EPA 332**: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
**Microbiology**: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

***Non-Potable Water***
**SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH**, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
**EPA 624**: Volatile Halocarbons & Aromatics,
**EPA 608**: 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
**EPA 625**: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
**Microbiology**: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.**

**Mansfield Facility:**

***Drinking Water***
**EPA 200.7:** Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1** Hg.

***Non-Potable Water***
**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
**EPA 245.1** Hg.
**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

# NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581 — 8 Walkup Dr. — TEL: 508-898-9220 — FAX: 508-898-9193

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

**Service Centers**
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 7/1/17

ALPHA Job #: L1722530

**Client Information**
Client: Hazard Evaluations Inc.
Address: 3636 North. Buffalo Rd orchard Park, NY 14127
Phone: 716-667-3130
Fax: 716-667-3156
Email: mwittman@hazardevaluations.com

**Project Information**
Project Name: Ph. II ESA
Project Location: 125 & 145 Chandler St, Buffalo, NY
Project #: e1641
(Use Project name as Project #) ☐
Project Manager: Candy Fox
ALPHAQuote #:

**Turn-Around Time**
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days: 5 day Firm

**Deliverables**
☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

**Regulatory Requirement**
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

**Billing Information**
☒ Same as Client Info
PO #

**Disposal Site Information**
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

**Other project specific requirements/comments:**
Additionally email results to ebetzold@hazardevaluations.com

**Please specify Metals or TAL.**

**Sample Filtration**
☐ Done
☐ 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 | VOC 8260 TCL +STARS | VOC 8260 TCL + STARS | SVOC 8270 TCL | TAL Metals | Total PCBs | | | | Sample Specific Comments | Total Bottle |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22530-01 | SB9 | 6/29/17 | 3:45pm | GW | EB | X | | X | | | | | | | 4 |
| -02 | SB1 (0-2.5') | | 9:00am | Soil | EB | | | X | | | | | | | 1 |
| -03 | SB2 (0-2.5') | | 9:20am | Soil | EB | | | X | X | X | | | | | 2 |
| -04 | SB3 (1-5') | | 9:50am | Soil | EB | | X | X | X | X | | | | | 3 |
| -05 | SB5 (0-4') | | 11:05am | Soil | EB | | X | X | X | | | | | | 2 |
| -06 | SB6 (0-2') | | 1:20pm | Soil | EB | | X | X | X | X | | | | | 3 |
| -07 | SB7 (1-5') | | 1:40pm | Soil | EB | | X | X | | | | | | | 2 |
| -08 | SB9 (0-4') | | 2:20pm | Soil | EB | | | X | X | | | | | | 1 |
| -09 | SB11 (0-2.5') | ↓ | 3:00pm | Soil | EB | | | X | X | X | | | | | 2 |
| | | | | | | | | | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Container Type | V | A | A | A | A | | | |
| Preservative | B | A | A | A | A | | | |

Preservative Code:
A = None
B = HCl
C = $HNO_3$
D = $H_2SO_4$
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

| Relinquished By: | Date/Time | Received By: | Date/Time |
|---|---|---|---|
| Eric J Betzold | 6/30/17 1430 | Audrey Tilley ABC | 6/30/17 14:30 |
| Audrey Tilley ABC | 6/30/17 14:30 | | 7/1/17 08:20 |

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)