# REMEDIAL ACTION PROGRESS REPORT

# for

# Southeast Leg Pond Area

# Phase 1 Sample Results and Recommendations

# HATCO CORPORATION SITE

# FORDS, NEW JERSEY

**July 31, 2020**

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# 1.0 INTRODUCTION

This Remedial Action Progress Report (RAPR) has been prepared by Weston Solutions, Inc. (Weston) to document the results of the first round of sampling of the Southeast Leg (SEL) Pond Area of the former Hatco Corporation (Hatco) site located in Fords, Woodbridge Township, Middlesex County, New Jersey. The sampling program was implemented as described in the SEL Pond Area Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP) Addendum dated March 2020. A copy of the FSP/QAPP Addendum is provided in Appendix A.

The primary intent of this program is to delineate the extent of soil, sediment and/or surface water contamination in the recently reconstructed wetlands in the SEL Remediation Area. Remediation in the SEL Pond Area was performed in 2015, and included excavation and offsite disposal of light non-aqueous phase liquid (LNAPL) and soil containing polychlorinated biphenyls (PCBs) and bis(2-ethylhexyl) phthalate (BEHP). The SEL Pond Area was then backfilled with imported clean fill. The area was restored as a wetland in accordance with the approved wetland disruption permit for this area.

On June 19, 2018, Weston personnel conducting remediation activities in the Area of Concern (AOC) 2 Former Ponds Area of the Hatco Site discovered that a hole had formed in the ground adjacent to a facility standpipe. The standpipe was connected to a stormwater sewer line which ran through an area of contaminated soil. In 2015 the contaminated soil was placed as part of the SEL remediation project and consolidated beneath an engineered cap in accordance with the approved work plan. The area acted as a pathway for contaminated soil to be transported to the ground surface and into the reconstructed wetlands. Sheen was observed on portions of the northern and southern edges of the SEL Pond Area. The majority of the sheen was observed across an approximately 800 square-foot area within roughly ten feet of the southern edge of the pond. The heavy sheen was recovered by Weston personnel using sorbent materials.

The FSP/QAPP Addendum was accepted by United States Environmental Protection Agency (USEPA) by email dated April 14, 2020. The FSP/QAPP Addendum describes the soil, sediment and surface water sampling program to evaluate the potential contamination resulting from the release that occurred in June 2018. Sampling is planned to be performed in three phases to: 1) identify contaminants associated with the sewer release; 2) identify contaminants which have impacted the clean fill used to construct the SEL Pond Area; and 3) delineate the extent of impacts which require remediation. This report presents the results of the first phase of sampling and recommendations for the second phase of sampling.

## 2.0 SAMPLING PROGRAM

Weston personnel performed the Phase 1 SEL Pond Area sampling activities on April 23, 2020. The sampling program included collection and analysis of:

- Four surface water samples
- Six soil samples
- Four sediment samples

Sample locations are shown on Figure 1.

The samples were sent to Eurofins/TestAmerica laboratory in Edison, New Jersey (NJ certification number 12028) for analysis. Weston completed a Data Usability Assessment (DUA) to verify the analytical results. The DUA and copies of the annotated laboratory analytical data summary pages are provided in Appendix B.

Laboratory analytical results and screening criteria for the surface water, soil and sediment samples are summarized on Tables 1, 2 and 3, respectively.

The samples and locations were inspected visually for evidence of contamination (e.g., discoloration or staining, stressed vegetation) and screened for organic vapors using a photoionization detector. No visible evidence of contamination was observed during the sampling effort. No elevated organic vapor readings were detected in any of the samples.

# 3.0 PHASE 1 SAMPLE RESULTS EVALUATION

## 3.1 COMPARISON WITH CLEAN FILL DATA

The pond was constructed as part of the SEL remediation project in 2015. The clean fill material used to construct the pond was obtained from two sources: Buch/Macy located at 401 Clearview Road, Edison, New Jersey and Almasi located on King Georges Post Road in Edison, New Jersey. A total of sixteen samples were originally collected and analyzed to evaluate the clean fill. A copy of the original construction submittal provided for approval by the Licensed Site Remediation Professional (LSRP) is included as Appendix C. Table 4 presents the Clean Fill Data Summary.

To assess the presence of potential new contaminants to the SEL Pond Area, Weston compared the clean fill data with the Phase 1 soil and sediment sample results. Table 5 presents the comparison of the maximum reported concentrations and frequency of detections for each of the analytes. The maximum concentrations were used to assess whether new contaminants may have been introduced to the SEL Pond Area. For purposes of this screening, potential new contaminants are those analytes that were either:

- Detected in the recent SEL Pond Area samples but not detected in the original clean fill samples; or
- Detected in the recent samples at a maximum concentration approximately an order of magnitude or more than the original clean fill samples.

Based on the comparison with clean fill data, the following analytes have been identified as new contaminants to the clean fill material used to construct the SEL Pond Area:

- Volatile Organic Compounds:
    - Acetone
    - Benzene
    - 2-Butanone (MEK)
    - Ethylbenzene
    - Methylcyclohexane
    - 2-Methyl-2-propanol (TBA)
    - Toluene
    - Xylenes
- Semivolatile Organic Compounds
    - Acenaphthene
    - Acenaphthylene
    - Anthracene
    - Benzaldehyde
    - Benzo[a]anthracene
    - Benzo[a]pyrene
    - Benzo[b]fluoranthene
    - Benzo[g,h,i]perylene
    - Benzo[k]fluoranthene

- Bis(2-ethylhexyl) phthalate
- Butyl benzyl phthalate
- Carbazole
- Chrysene
- Dibenz(a,h)anthracene
- Dibenzofuran
- Diethyl phthalate
- Di-n-octyl phthalate
- Fluoranthene
- Fluorene
- Indeno[1,2,3-cd]pyrene
- 2-Methylnaphthalene
- 4-Methylphenol
- Naphthalene
- Phenanthrene
- Pyrene

- Pesticides: None
- PCBs: Aroclor 1248
- Herbicides: None
- Inorganics: Chromium
- General Chemistry: Extractable petroleum hydrocarbons

## 3.2 COMPARISON TO SCREENING CRITERIA

### 3.2.1 Surface Water Sample Results

Table 1 presents a comparison of the surface water sample results with the New Jersey Department of Environmental Protection (NJDEP) Ecological Screening Criteria for Fresh Water Surface Water. None of the parameters analyzed were reported at concentrations above the acute aquatic ecological screening criteria. The following analytes were reported at concentrations above the chronic aquatic ecological screening criteria and/or human health screening criteria:

- Benzo[a]anthracene
- Benzo[a]pyrene
- Benzo[b]fluoranthene
- Hexachlorobenzene
- N-Nitrosodimethylamine
- Arsenic
- Lead

The first three analytes listed above (benzo[a]anthracene, benzo[a]pyrene and benzo[b]fluoranthene) were also identified as potential new contaminants in the soil and sediment (see Section 3.1). Hexachlorobenzene and n-nitrosodimethylamine were each detected in only one of the four surface water samples at estimated concentrations close to the Method Detection Limit

(MDL). These results alone are not indicative of widespread surface water contamination. These analytes will be included with the Phase 2 analysis to assess whether they may be present in the soil or sediment at locations that were not sampled during Phase 1.

Arsenic was detected in all four surface water samples at estimated concentrations above the human health screening criterion. This potential new contaminant will be retained for further evaluation.

Lead was reported in one of the four surface water samples at a concentration above the human health and chronic aquatic screening criterion. However, as discussed later, this analyte was not identified as a new soil or sediment contaminant. Lead will be considered for analysis of future surface water samples after restoration of the SEL Pond Area.

### 3.2.2 Soil Sample Results

Table 2 presents a comparison of the soil sample results with the site specific Residential Direct Contact (RDC) and Non-Residential Direct Contact (NRDC) Soil Cleanup Criteria (SCC) and the NJDEP ecological soil screening levels. None of the parameters analyzed were reported at concentrations above the NRDCSCC. The following analytes were reported at concentrations above the RDCSCC:

- Benzo[a]pyrene
- PCBs

The following analytes were reported at concentrations above the ecological soil screening levels:

- Bis(2-ethylhexyl) phthalate
- Naphthalene
- PCBs
- Aluminum
- Chromium
- Cobalt
- Copper
- Lead
- Manganese
- Mercury
- Nickel
- Vanadium
- Zinc

As discussed in Section 3.1 (comparison with clean fill data), the two analytes reported at concentrations above the RDCSCC (benzo[a]pyrene and PCBs) are new contaminants to the clean fill. Similarly, four of the analytes that were detected at concentrations above the ecological screening criteria for soils (bis[2-ethylhexyl] phthalate, naphthalene, PCBs, and chromium) are also new contaminants. The remaining analytes reported at concentrations above the ecological

soil screening levels (aluminum, cobalt, copper, lead, manganese, mercury, nickel, vanadium, and zinc) are metals that were identified at low levels in the original clean fill samples. These metals are not considered to be site-related contaminants and are not recommended for further evaluation.

### 3.2.3 Sediment Sample Results

Table 3 presents a comparison of the sediment sample results with the ecological screening levels. PCB data were compared with the site-specific remediation goal of 1 mg/kg. Data for bis(2-ethylhexyl)phthalate were compared to the alternate remediation standard of 22 mg/kg developed for the Woodbridge Pond remediation (Hatco AOC-24) which is a similar pond. The remaining data were compared with the NJDEP ecological screening criteria for freshwater sediments.

None of the sample results exceeded the Severe Effects Level ecological screening criteria. The following analytes were detected in one or more samples at concentrations above the Lowest Effects Level ecological screening criteria:

- Acenaphthene
- Anthracene
- Benzo[a]anthracene
- Benzo[a]pyrene
- Chrysene
- Dibenz(a,h)anthracene
- Fluoranthene
- Fluorene
- 2-Methylnaphthalene
- Naphthalene
- Phenanthrene
- Pyrene
- Aroclor 1248
- Aluminum
- Chromium
- Copper
- Lead

With the exception of aluminum, copper and lead, the analytes listed above were also identified as potential new contaminants when compared to the clean fill data (see Section 3.1) and are recommended for further analysis during Phase 2. Aluminum, copper, and lead are metals that were identified at low levels in the original clean fill samples. These metals are not considered to be site-related contaminants and are not recommended for further evaluation.

## 4.0 PHASE 2 SAMPLING RECOMMENDATIONS

As stated in the FSP/QAPP Addendum, the Phase 2 sampling will consist of determining the impact of contaminants identified in the Phase 1 sampling upon the clean fill material used to construct the SEL Pond Area. Phase 2 will involve the collection of soil and sediment samples at approximately 15-foot intervals along the apparent pathway from the original release to the pond and around the perimeter of the pond. (See Figure 1).

Soil and sediment samples will be analyzed for the parameters identified in Section 3.1 as well as hexachlorobenzene, n-nitrosodimethylamine, and arsenic. Soil and sediment sampling and analysis will be performed as described in the FSP/QAPP Addendum.

No additional surface water sampling is planned for Phase 2, but may be considered as part of the Phase 3 sampling.

**Table 1**

**Surface Water Sample Results**

Table 1. Surface Water Sample Results
Southeast Leg Pond Area Phase 1 Sampling
Hatco Remediation Project
Woodbridge, New Jersey

| Sample ID | | NJDEP Ecological Screening Criteria for Fresh Water Surface Water | | | SEL-PA-SW01-0-042320 | | | SEL-PA-SW02-0-042320 | | | SEL-PA-SW03-0-042320 | | | SEL-PA-SW04-0-042320 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Laboratory Sample No. | | | | | 460-207545-4 | | | 460-207545-3 | | | 460-207545-1 | | | 460-207545-5 | | |
| Sample Date and Time | | Aquatic | | Human | 4/23/2020 9:55 | | | 4/23/2020 9:20 | | | 4/23/2020 9:00 | | | 4/23/2020 10:50 | | |
| Parameters Analyzed | CASRN | Acute | Chronic | Health | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL |
| **Volatile Organic Compounds** | | | | | | | | | | | | | | | | |
| Acetone | 67-64-1 | | | | 5.1 | | 4.4 | 35 | J | 4.4 | ND | U | 4.4 | ND | U | 4.4 |
| Acrolein | 107-02-8 | | 0.19 [8] | 6.1 [(h)] | ND | U | 1.1 | ND | U | 1.1 | ND | U | 1.1 | ND | U | 1.1 |
| Acrylonitrile | 107-13-1 | | 66 [8] | 0.051 [(hc)] | ND | U | 0.77 | ND | U | 0.77 | ND | U | 0.77 | ND | U | 0.77 |
| Benzene | 71-43-2 | | 824 [16] | 0.15 [(hc)] | ND | U | 0.2 | ND | U | 0.2 | ND | U | 0.2 | ND | U | 0.2 |
| Bromoform | 75-25-2 | | 230 [8] | 4.3 [(hc)] | ND | U | 0.54 | ND | U | 0.54 | ND | U | 0.54 | ND | U | 0.54 |
| Bromomethane | 74-83-9 | | 16 [8] | 47 [(h)] | ND | U | 0.55 | ND | U | 0.55 | ND | U | 0.55 | ND | U | 0.55 |
| 2-Butanone (MEK) | 78-93-3 | | | | ND | U | 1.9 | ND | U | 1.9 | ND | U | 1.9 | ND | U | 1.9 |
| n-Butylbenzene | 104-51-8 | | | | ND | U | 0.32 | ND | U | 0.32 | ND | U | 0.32 | ND | U | 0.32 |
| sec-Butylbenzene | 135-98-8 | | | | ND | U | 0.37 | ND | U | 0.37 | ND | U | 0.37 | ND | U | 0.37 |
| Carbon disulfide | 75-15-0 | | | | ND | U | 0.82 | ND | U | 0.82 | ND | U | 0.82 | ND | U | 0.82 |
| Carbon tetrachloride | 56-23-5 | | 240 [8] | 0.33 [(hc)] | ND | U | 0.21 | ND | U | 0.21 | ND | U | 0.21 | ND | U | 0.21 |
| Chlorobenzene | 108-90-7 | | 47 [8] | 210 [(h)] | ND | U | 0.38 | ND | U | 0.38 | ND | U | 0.38 | ND | U | 0.38 |
| Chlorobromomethane | 74-97-5 | | | | ND | U | 0.41 | ND | U | 0.41 | ND | U | 0.41 | ND | U | 0.41 |
| Chlorodibromomethane | 124-48-1 | | | 0.4 [(hc)] | ND | U | 0.28 | ND | U | 0.28 | ND | U | 0.28 | ND | U | 0.28 |
| Chloroethane | 75-00-3 | | | | ND | U | 0.32 | ND | U | 0.32 | ND | U | 0.32 | ND | U | 0.32 |
| Chloroform | 67-66-3 | | 140 [8] | 68 [(h)] | ND | U | 0.33 | ND | U | 0.33 | ND | U | 0.33 | ND | U | 0.33 |
| Chloromethane | 74-87-3 | | | | ND | U | 0.4 | ND | U | 0.4 | ND | U | 0.4 | ND | U | 0.4 |
| Cyclohexane | 110-82-7 | | | | ND | U | 0.32 | ND | U | 0.32 | ND | U | 0.32 | ND | U | 0.32 |
| 1,2-Dibromo-3-Chloropropane | 96-12-8 | | | | ND | U | 0.01 | ND | U | 0.01 | ND | U | 0.01 | ND | U | 0.01 |
| 1,2-Dichlorobenzene | 95-50-1 | | 14 [8] | 2,000 [(h)] | ND | U | 0.43 | ND | U | 0.43 | ND | U | 0.43 | ND | U | 0.43 |
| 1,3-Dichlorobenzene | 541-73-1 | | 38 [8] | 2,200 | ND | U | 0.34 | ND | U | 0.34 | ND | U | 0.34 | ND | U | 0.34 |
| 1,4-Dichlorobenzene | 106-46-7 | | 9.4 [8] | 550 [(h)] | ND | U | 0.33 | ND | U | 0.33 | ND | U | 0.33 | ND | U | 0.33 |
| Dichlorobromomethane | 75-27-4 | | | 0.55 [(hc)] | ND | U | 0.34 | ND | U | 0.34 | ND | U | 0.34 | ND | U | 0.34 |
| Dichlorodifluoromethane | 75-71-8 | | | | ND | U | 0.31 | ND | U | 0.31 | ND | U | 0.31 | ND | U | 0.31 |
| 1,1-Dichloroethane | 75-34-3 | | | | ND | U | 0.26 | ND | U | 0.26 | ND | U | 0.26 | ND | U | 0.26 |
| 1,2-Dichloroethane | 107-06-2 | | 910 [8] | 0.29 [(hc)] | ND | U | 0.43 | ND | U | 0.43 | ND | U | 0.43 | ND | U | 0.43 |
| 1,1-Dichloroethene | 75-35-4 | | 65 [8] | 4.7 [(h)] | ND | U | 0.26 | ND | U | 0.26 | ND | U | 0.26 | ND | U | 0.26 |
| cis-1,2-Dichloroethene | 156-59-2 | | | | ND | U | 0.22 | ND | U | 0.22 | ND | U | 0.22 | ND | U | 0.22 |
| trans-1,2-Dichloroethene | 156-60-5 | | 970 [8] | 590 [(h)] | ND | U | 0.24 | ND | U | 0.24 | ND | U | 0.24 | ND | U | 0.24 |
| 1,2-Dichloropropane | 78-87-5 | | 360 [8] | 0.5 [(hc)] | ND | U | 0.35 | ND | U | 0.35 | ND | U | 0.35 | ND | U | 0.35 |
| cis-1,3-Dichloropropene | 10061-01-5 | | | | ND | U | 0.22 | ND | U | 0.22 | ND | U | 0.22 | ND | U | 0.22 |
| trans-1,3-Dichloropropene | 10061-02-6 | | | | ND | U | 0.49 | ND | U | 0.49 | ND | U | 0.49 | ND | U | 0.49 |
| 1,4-Dioxane | 123-91-1 | | | | 0.36 | J | 0.33 | 0.44 | | 0.33 | 0.54 | | 0.33 | 0.6 | | 0.33 |
| Ethylbenzene | 100-41-4 | | 81 [16] | 530 [(h)] | ND | U | 0.3 | ND | U | 0.3 | ND | U | 0.3 | ND | U | 0.3 |
| Ethylene Dibromide | 106-93-4 | | | | ND | U | 0.0079 | ND | U | 0.0079 | ND | U | 0.0079 | ND | U | 0.0079 |
| 2-Hexanone | 591-78-6 | | | | ND | U | 1.1 | ND | U | 1.1 | ND | U | 1.1 | ND | U | 1.1 |
| Isopropylbenzene | 98-82-8 | | | | ND | U | 0.34 | ND | U | 0.34 | ND | U | 0.34 | ND | U | 0.34 |
| Methyl acetate | 79-20-9 | | | | ND | U | 0.79 | ND | U | 0.79 | ND | U | 0.79 | ND | U | 0.79 |
| Methyl tert-butyl ether | 1634-04-4 | 151,000 [17] | 51450 [16] | 70 [(h)] | ND | U | 0.47 | ND | U | 0.47 | ND | U | 0.47 | ND | U | 0.47 |
| 4-Methyl-2-pentanone (MIBK) | 108-10-1 | | | | ND | U | 1.3 | ND | U | 1.3 | ND | U | 1.3 | ND | U | 1.3 |
| 2-Methyl-2-propanol | 75-65-0 | | 355,000 [16] | | ND | U | 8.3 | ND | U | 8.3 | ND | U | 8.3 | ND | U | 8.3 |
| Methylcyclohexane | 108-87-2 | | | | ND | U | 0.26 | ND | U | 0.26 | ND | U | 0.26 | ND | U | 0.26 |
| Methylene Chloride | 75-09-2 | | 940 [8] | 2.5 [(hc)] | ND | U | 0.32 | ND | U | 0.32 | ND | U | 0.32 | ND | U | 0.32 |
| N-Propylbenzene | 103-65-1 | | | | ND | U | 0.32 | ND | U | 0.32 | ND | U | 0.32 | ND | U | 0.32 |
| Styrene | 100-42-5 | | 32 [8] | | ND | U | 0.42 | ND | U | 0.42 | ND | U | 0.42 | ND | U | 0.42 |
| tert-Butylbenzene | 98-06-6 | | | | ND | U | 0.34 | ND | U | 0.34 | ND | U | 0.34 | ND | U | 0.34 |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | | 380 [8] | 4.7 [(h)] | ND | U | 0.37 | ND | U | 0.37 | ND | U | 0.37 | ND | U | 0.37 |

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| Sample ID | | NJDEP Ecological Screening Criteria for Fresh Water Surface Water | | | SEL-PA-SW01-0-042320 | | | SEL-PA-SW02-0-042320 | | | SEL-PA-SW03-0-042320 | | | SEL-PA-SW04-0-042320 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Laboratory Sample No. | | | | | 460-207545-4 | | | 460-207545-3 | | | 460-207545-1 | | | 460-207545-5 | | |
| Sample Date and Time | | Aquatic | | Human | 4/23/2020 9:55 | | | 4/23/2020 9:20 | | | 4/23/2020 9:00 | | | 4/23/2020 10:50 | | |
| Parameters Analyzed | CASRN | Acute | Chronic | Health | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL |
| Tetrachloroethene | 127-18-4 | | 45 [8] | 0.34 [(hc)] | ND | U | 0.25 | ND | U | 0.25 | ND | U | 0.25 | ND | U | 0.25 |
| Toluene | 108-88-3 | | 822 [16] | 1,300 [(h)] | ND | U | 0.38 | ND | U | 0.38 | ND | U | 0.38 | ND | U | 0.38 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 76-13-1 | | | | ND | U | 0.31 | ND | U | 0.31 | ND | U | 0.31 | ND | U | 0.31 |
| 1,2,3-Trichlorobenzene | 87-61-6 | | | | ND | U | 0.36 | ND | U | 0.36 | ND | U | 0.36 | ND | U | 0.36 |
| 1,2,4-Trichlorobenzene | 120-82-1 | | 30 [8] | 21 [(h)] | ND | U | 0.37 | ND | U | 0.37 | ND | U | 0.37 | ND | U | 0.37 |
| 1,1,1-Trichloroethane | 71-55-6 | | 76 [8] | 120 [(h)] | ND | U | 0.24 | ND | U | 0.24 | ND | U | 0.24 | ND | U | 0.24 |
| 1,1,2-Trichloroethane | 79-00-5 | | 500 [8] | 13 [(h)] | ND | U | 0.43 | ND | U | 0.43 | ND | U | 0.43 | ND | U | 0.43 |
| Trichloroethene | 79-01-6 | | 47 [8] | 1 [(hc)] | ND | U | 0.31 | ND | U | 0.31 | ND | U | 0.31 | ND | U | 0.31 |
| Trichlorofluoromethane | 75-69-4 | | | | ND | U | 0.32 | ND | U | 0.32 | ND | U | 0.32 | ND | U | 0.32 |
| 1,2,4-Trimethylbenzene | 95-63-6 | | | | ND | U | 0.37 | ND | U | 0.37 | ND | U | 0.37 | ND | U | 0.37 |
| 1,3,5-Trimethylbenzene | 108-67-8 | | | | ND | U | 0.33 | ND | U | 0.33 | ND | U | 0.33 | ND | U | 0.33 |
| Vinyl chloride | 75-01-4 | | 930 [8] | 0.082 [(hc)] | ND | U | 0.17 | ND | U | 0.17 | ND | U | 0.17 | ND | U | 0.17 |
| o-Xylene | 95-47-6 | | | | ND | U | 0.36 | ND | U | 0.36 | ND | U | 0.36 | ND | U | 0.36 |
| m-Xylene & p-Xylene | 179601-23-1 | | | | ND | U | 0.3 | ND | U | 0.3 | ND | U | 0.3 | ND | U | 0.3 |
| Total VOC Concentration | NA | | | | 5.46 | J | NA | 35.44 | J | NA | 0.54 | J | NA | 0.6 | J | NA |
| Total Tentatively Identified Compounds | NA | | | | ND | U | NA | ND | U | NA | ND | U | NA | ND | U | NA |
| **Semivolatile Organic Compounds** | | | | | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | | 38 [8] | 670 [(h)] | ND | U | 1.1 | ND | U | 1.1 | ND | U | 1.1 | ND | U | 1.1 |
| Acenaphthylene | 208-96-8 | | 4840 [8] | | ND | UJ | 0.82 | ND | U | 0.82 | ND | U | 0.82 | ND | U | 0.82 |
| Acetophenone | 98-86-2 | | | | ND | U | 2.3 | ND | U | 2.3 | ND | U | 2.3 | ND | U | 2.3 |
| Anthracene | 120-12-7 | | 0.035 [8] | 8,300 [(h)] | ND | U | 0.63 | ND | U | 0.63 | ND | U | 0.63 | ND | U | 0.63 |
| Atrazine | 1912-24-9 | | | | ND | UJ | 1.3 | ND | U | 1.3 | ND | U | 1.3 | ND | U | 1.3 |
| Benzaldehyde | 100-52-7 | | | | ND | UJ | 2.1 | ND | U | 2.1 | ND | U | 2.1 | ND | U | 2.1 |
| Benzidine | 92-87-5 | | | 0.000086 [(hc)] | ND | UJ | 11 | ND | U | 11 | ND | U | 11 | ND | U | 11 |
| Benzo[a]anthracene | 56-55-3 | | 0.025 [8] | 0.038 [(hc)] | **0.054** | | 0.016 | **0.054** | | 0.016 | **0.049** | J | 0.016 | ND | U | 0.016 |
| Benzo[a]pyrene | 50-32-8 | | 0.014 [8] | 0.0038 [(hc)] | **0.031** | J | 0.022 | **0.06** | | 0.022 | **0.029** | J | 0.022 | ND | U | 0.022 |
| Benzo[b]fluoranthene | 205-99-2 | | 9.07 [8] | 0.038 [(hc)] | **0.042** | J | 0.024 | **0.063** | | 0.024 | 0.036 | J | 0.024 | ND | U | 0.024 |
| Benzo[g,h,i]perylene | 191-24-2 | | 7.64 [8] | | ND | U | 1.4 | ND | U | 1.4 | ND | U | 1.4 | ND | U | 1.4 |
| Benzo[k]fluoranthene | 207-08-9 | | | 0.38 [(hc)] | ND | U | 0.67 | ND | U | 0.67 | ND | U | 0.67 | ND | U | 0.67 |
| 1,1'-Biphenyl | 92-52-4 | | | | ND | UJ | 1.2 | ND | U | 1.2 | ND | U | 1.2 | ND | U | 1.2 |
| Bis(2-chloroethoxy)methane | 111-91-1 | | | | ND | U | 0.59 | ND | U | 0.59 | ND | U | 0.59 | ND | U | 0.59 |
| Bis(2-chloroethyl)ether | 111-44-4 | | 1900 [8] | 0.03 [(hc)] | ND | U | 0.026 | ND | U | 0.026 | ND | U | 0.026 | ND | U | 0.026 |
| Bis(2-ethylhexyl) phthalate | 117-81-7 | | 0.3 [8] | 1.2 [(hc)] | ND | U | 1.7 | ND | U | 1.7 | ND | U | 1.7 | ND | U | 1.7 |
| 4-Bromophenyl phenyl ether | 101-55-3 | | | | ND | U | 0.75 | ND | U | 0.75 | ND | U | 0.75 | ND | U | 0.75 |
| Butyl benzyl phthalate | 85-68-7 | | 23 [8] | 150 [(h)] | ND | U | 0.85 | ND | U | 0.85 | ND | U | 0.85 | ND | U | 0.85 |
| Caprolactam | 105-60-2 | | | | ND | U | 0.68 | ND | U | 0.68 | ND | U | 0.68 | ND | U | 0.68 |
| Carbazole | 86-74-8 | | | | ND | U | 0.68 | ND | U | 0.68 | ND | U | 0.68 | ND | U | 0.68 |
| 4-Chloro-3-methylphenol | 59-50-7 | | | | ND | U | 0.58 | ND | U | 0.58 | ND | U | 0.58 | ND | U | 0.58 |
| 4-Chloroaniline | 106-47-8 | | | | ND | U | 1.9 | ND | U | 1.9 | ND | U | 1.9 | ND | U | 1.9 |
| 2-Chloronaphthalene | 91-58-7 | | 0.396 [8] | 1,000 [(h)] | ND | UJ | 1.2 | ND | U | 1.2 | ND | U | 1.2 | ND | U | 1.2 |
| 2-Chlorophenol | 95-57-8 | | 24 [8] | 81 [(h)] | ND | U | 0.38 | ND | U | 0.38 | ND | U | 0.38 | ND | U | 0.38 |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | | | | ND | U | 1.3 | ND | U | 1.3 | ND | U | 1.3 | ND | U | 1.3 |
| Chrysene | 218-01-9 | | | 3.8 [(hc)] | ND | U | 0.91 | ND | U | 0.91 | ND | U | 0.91 | ND | U | 0.91 |
| Dibenz(a,h)anthracene | 53-70-3 | | | 0.0038 [(hc)] | ND | U | 0.72 | ND | U | 0.72 | ND | U | 0.72 | ND | U | 0.72 |
| Dibenzofuran | 132-64-9 | | | | ND | UJ | 1.1 | ND | U | 1.1 | ND | U | 1.1 | ND | U | 1.1 |
| 3,3'-Dichlorobenzidine | 91-94-1 | | 4.5 [8] | 0.021 [(hc)] | ND | U | 1.4 | ND | U | 1.4 | ND | U | 1.4 | ND | U | 1.4 |
| 2,4-Dichlorophenol | 120-83-2 | | 11 [8] | 77 [(h)] | ND | U | 1.1 | ND | U | 1.1 | ND | U | 1.1 | ND | U | 1.1 |
| Diethyl phthalate | 84-66-2 | | 110 [8] | 17,000 [(h)] | ND | UJ | 0.98 | ND | U | 0.98 | ND | U | 0.98 | ND | U | 0.98 |

Table 1. Surface Water Sample Results
Southeast Leg Pond Area Phase 1 Sampling
Hatco Remediation Project
Woodbridge, New Jersey

| Sample ID | | NJDEP Ecological Screening Criteria for Fresh Water Surface Water | | | SEL-PA-SW01-0-042320 | | | SEL-PA-SW02-0-042320 | | | SEL-PA-SW03-0-042320 | | | SEL-PA-SW04-0-042320 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Laboratory Sample No. | | | | | 460-207545-4 | | | 460-207545-3 | | | 460-207545-1 | | | 460-207545-5 | | |
| Sample Date and Time | | Aquatic | | Human | 4/23/2020 9:55 | | | 4/23/2020 9:20 | | | 4/23/2020 9:00 | | | 4/23/2020 10:50 | | |
| Parameters Analyzed | CASRN | Acute | Chronic | Health | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL |
| Dimethyl phthalate | 131-11-3 | | | | ND | UJ | 0.77 | ND | U | 0.77 | ND | U | 0.77 | ND | U | 0.77 |
| 2,4-Dimethylphenol | 105-67-9 | | 100 [8] | 380 [(h)] | ND | U | 0.62 | ND | U | 0.62 | ND | U | 0.62 | ND | U | 0.62 |
| Di-n-butyl phthalate | 84-74-2 | | 9.7 [8] | 2,000 [(h)] | ND | U | 0.84 | ND | U | 0.84 | ND | U | 0.84 | ND | U | 0.84 |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | | | 13 [(h)] | ND | U | 13 | ND | U | 13 | ND | U | 13 | ND | U | 13 |
| 2,4-Dinitrophenol | 51-28-5 | | 19 [8] | 69 [(h)] | ND | U | 14 | ND | U | 14 | ND | U | 14 | ND | U | 14 |
| 2,4-Dinitrotoluene | 121-14-2 | | 44 [8] | 0.11 [(hc)] | ND | U | 1 | ND | U | 1 | ND | U | 1 | ND | U | 1 |
| 2,6-Dinitrotoluene | 606-20-2 | | | | ND | U | 0.83 | ND | U | 0.83 | ND | U | 0.83 | ND | U | 0.83 |
| Di-n-octyl phthalate | 117-84-0 | | | | ND | U | 4.8 | ND | U | 4.8 | ND | U | 4.8 | ND | U | 4.8 |
| 1,2-Diphenylhydrazine | 122-66-7 | | | 0.036 [(hc)] | ND | U | 0.79 | ND | U | 0.79 | ND | U | 0.79 | ND | U | 0.79 |
| Fluoranthene | 206-44-0 | | 1.9 [8] | 130 [(h)] | ND | U | 0.84 | ND | U | 0.84 | ND | U | 0.84 | ND | U | 0.84 |
| Fluorene | 86-73-7 | | 19 [8] | 1,100 [(h)] | ND | UJ | 0.91 | ND | U | 0.91 | ND | U | 0.91 | ND | U | 0.91 |
| Hexachlorobenzene | 118-74-1 | | 0.0003 [8] | 0.00028 [(hc)] | ND | U | 0.013 | ND | U | 0.013 | **0.019** | J | 0.013 | ND | U | 0.013 |
| Hexachlorobutadiene | 87-68-3 | | 0.053 [8] | 0.44 [(hc)] | ND | U | 0.78 | ND | U | 0.78 | ND | U | 0.78 | ND | U | 0.78 |
| Hexachlorocyclopentadiene | 77-47-4 | | 77 [8] | 40 [(h)] | ND | U | 3.6 | ND | U | 3.6 | ND | U | 3.6 | ND | U | 3.6 |
| Hexachloroethane | 67-72-1 | | 8 [8] | 1.4 [(hc)] | ND | U | 0.8 | ND | U | 0.8 | ND | U | 0.8 | ND | U | 0.8 |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | | 4.31 [8] | 0.038 [(hc)] | ND | U | 0.94 | ND | U | 0.94 | ND | U | 0.94 | ND | U | 0.94 |
| Isophorone | 78-59-1 | | 920 [8] | 35 [(hc)] | ND | U | 0.8 | ND | U | 0.8 | ND | U | 0.8 | ND | U | 0.8 |
| 2-Methylnaphthalene | 91-57-6 | | 330 [8] | | ND | U | 1.1 | ND | U | 1.1 | ND | U | 1.1 | ND | U | 1.1 |
| 2-Methylphenol | 95-48-7 | | | | ND | U | 0.67 | ND | U | 0.67 | ND | U | 0.67 | ND | U | 0.67 |
| 4-Methylphenol | 106-44-5 | | | | ND | U | 0.65 | ND | U | 0.65 | ND | U | 0.65 | ND | U | 0.65 |
| Naphthalene | 91-20-3 | | 13 [8] | | ND | U | 1.1 | ND | U | 1.1 | ND | U | 1.1 | ND | U | 1.1 |
| 2-Nitroaniline | 88-74-4 | | | | ND | U | 0.47 | ND | U | 0.47 | ND | U | 0.47 | ND | U | 0.47 |
| 3-Nitroaniline | 99-09-2 | | | | ND | U | 1.9 | ND | U | 1.9 | ND | U | 1.9 | ND | U | 1.9 |
| 4-Nitroaniline | 100-01-6 | | | | ND | U | 1.2 | ND | U | 1.2 | ND | U | 1.2 | ND | U | 1.2 |
| Nitrobenzene | 98-95-3 | | 220 [8] | 17 [(h)] | ND | U | 0.57 | ND | U | 0.57 | ND | U | 0.57 | ND | U | 0.57 |
| 2-Nitrophenol | 88-75-5 | | | | ND | U | 0.75 | ND | U | 0.75 | ND | U | 0.75 | ND | U | 0.75 |
| 4-Nitrophenol | 100-02-7 | | 60 [8] | | ND | U | 4 | ND | U | 4 | ND | U | 4 | ND | U | 4 |
| N-Nitrosodimethylamine | 62-75-9 | | | 0.00069 [(hc)] | **0.23** | | 0.12 | ND | U | 0.12 | ND | U | 0.12 | ND | U | 0.12 |
| N-Nitrosodimethylamine | 62-75-9 | | | | ND | U | 0.45 | ND | U | 0.45 | ND | U | 0.45 | ND | U | 0.45 |
| N-Nitrosodi-n-propylamine | 621-64-7 | | | 0.005 [(hc)] | ND | U | 0.43 | ND | U | 0.43 | ND | U | 0.43 | ND | U | 0.43 |
| N-Nitrosodiphenylamine | 86-30-6 | | | 3.3 [(hc)] | ND | U | 0.89 | ND | U | 0.89 | ND | U | 0.89 | ND | U | 0.89 |
| 2,2'-oxybis[1-chloropropane] | 108-60-1 | | | 1,400 [(h)] | ND | U | 0.63 | ND | U | 0.63 | ND | U | 0.63 | ND | U | 0.63 |
| Pentachlorophenol | 87-86-5 | [(b)] | [(b)] | 0.27 [(hc)] | ND | U | 0.15 | ND | U | 0.15 | ND | U | 0.15 | ND | U | 0.15 |
| Phenanthrene | 85-01-8 | | 3.6 [8] | | ND | U | 0.58 | ND | U | 0.58 | ND | U | 0.58 | ND | U | 0.58 |
| Phenol | 108-95-2 | | 180 [8] | 10,000 [(h)] | ND | U | 0.29 | ND | U | 0.29 | ND | U | 0.29 | ND | U | 0.29 |
| Pyrene | 129-00-0 | | 0.3 [8] | 830 [(h)] | ND | U | 1.6 | ND | U | 1.6 | ND | U | 1.6 | ND | U | 1.6 |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | | 3 [8] | 0.97 [(h)] | ND | U | 1.2 | ND | U | 1.2 | ND | U | 1.2 | ND | U | 1.2 |
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | | | | ND | U | 0.75 | ND | U | 0.75 | ND | U | 0.75 | ND | U | 0.75 |
| 2,4,5-Trichlorophenol | 95-95-4 | | | 1,800 [(h)] | ND | U | 0.88 | ND | U | 0.88 | ND | U | 0.88 | ND | U | 0.88 |
| 2,4,6-Trichlorophenol | 88-06-2 | | 4.9 [8] | 0.58 [(hc)] | ND | U | 0.86 | ND | U | 0.86 | ND | U | 0.86 | ND | U | 0.86 |
| Total SVOC Conc. | NA | | | | 0.357 | J | NA | 0.177 | J | NA | 0.133 | J | NA | 0 | U | NA |
| Total Tentatively Identified Compounds | NA | | | | ND | U | NA | ND | U | NA | ND | U | NA | ND | U | NA |
| **Pesticides** | | | | | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 3 | 0.017 [8] | 0.000049 [(hc)] | ND | U | 0.003 | ND | U | 0.003 | ND | U | 0.003 | ND | U | 0.003 |
| alpha-BHC | 319-84-6 | | 12.4 [8] | 0.0026 [(hc)] | ND | U | 0.007 | ND | U | 0.007 | ND | U | 0.007 | ND | U | 0.007 |
| beta-BHC | 319-85-7 | | 0.495 [8] | 0.0091 [(hc)] | ND | U | 0.004 | ND | U | 0.004 | ND | U | 0.004 | ND | U | 0.004 |
| delta-BHC | 319-86-8 | | | | ND | U | 0.005 | ND | U | 0.005 | ND | U | 0.005 | ND | U | 0.005 |
| gamma-BHC (Lindane) | 58-89-9 | 0.95 | 0.026 [8] | 0.98 [(h)] | ND | U | 0.012 | ND | U | 0.012 | ND | U | 0.012 | ND | U | 0.012 |

Table 1. Surface Water Sample Results
Southeast Leg Pond Area Phase 1 Sampling
Hatco Remediation Project
Woodbridge, New Jersey

| Sample ID | | NJDEP Ecological Screening Criteria for Fresh Water Surface Water | | | SEL-PA-SW01-0-042320 | | | SEL-PA-SW02-0-042320 | | | SEL-PA-SW03-0-042320 | | | SEL-PA-SW04-0-042320 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Laboratory Sample No. | | | | | 460-207545-4 | | | 460-207545-3 | | | 460-207545-1 | | | 460-207545-5 | | |
| Sample Date and Time | | Aquatic | | Human | 4/23/2020 9:55 | | | 4/23/2020 9:20 | | | 4/23/2020 9:00 | | | 4/23/2020 10:50 | | |
| Parameters Analyzed | CASRN | Acute | Chronic | Health | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL |
| cis-Chlordane | 5103-71-9 | | | | ND | U | 0.002 | ND | U | 0.002 | ND | U | 0.002 | ND | U | 0.002 |
| trans-Chlordane | 5103-74-2 | | | | ND | U | 0.003 | ND | U | 0.003 | ND | U | 0.003 | ND | U | 0.003 |
| Chlordane (technical) | 12789-03-6 | | | | ND | U | 0.055 | ND | U | 0.055 | ND | U | 0.055 | ND | U | 0.055 |
| 4,4'-DDD | 72-54-8 | | | 0.00031 (hc) | ND | U | 0.006 | ND | U | 0.006 | ND | U | 0.006 | ND | U | 0.006 |
| 4,4'-DDE | 72-55-9 | | 4.51E-09 [8] | 0.00022 (hc) | ND | U | 0.002 | ND | U | 0.002 | ND | U | 0.002 | ND | U | 0.002 |
| 4,4'-DDT | 50-29-3 | 1.1 | 0.001 | 0.00022 (hc) | ND | U | 0.004 | ND | U | 0.004 | ND | U | 0.004 | ND | U | 0.004 |
| Dieldrin | 60-57-1 | 0.24 | 0.056 | 0.000052 (hc) | ND | U | 0.003 | ND | U | 0.003 | ND | U | 0.003 | ND | U | 0.003 |
| Endosulfan I | 959-98-8 | | | | ND | U | 0.002 | ND | U | 0.002 | ND | U | 0.002 | ND | U | 0.002 |
| Endosulfan II | 33213-65-9 | | | | ND | U | 0.004 | ND | U | 0.004 | ND | U | 0.004 | ND | U | 0.004 |
| Endosulfan sulfate | 1031-07-8 | | 2.22 [8] | 62 (h) | ND | U | 0.006 | ND | U | 0.006 | ND | U | 0.006 | ND | U | 0.006 |
| Endrin | 72-20-8 | 0.086 | 0.036 | 0.059 (h) | ND | U | 0.004 | ND | U | 0.004 | ND | U | 0.004 | ND | U | 0.004 |
| Endrin aldehyde | 7421-93-4 | | 0.15 [8] | 0.059 (h) | ND | U | 0.008 | ND | U | 0.008 | ND | U | 0.008 | ND | U | 0.008 |
| Endrin ketone | 53494-70-5 | | | | ND | U | 0.008 | ND | U | 0.008 | ND | U | 0.008 | ND | U | 0.008 |
| Heptachlor | 76-44-8 | 0.52 | 0.0038 | 0.000079 (hc) | ND | U | 0.003 | ND | U | 0.003 | ND | U | 0.003 | ND | U | 0.003 |
| Heptachlor epoxide | 1024-57-3 | 0.52 | 0.0038 | 0.000039 (hc) | ND | U | 0.005 | ND | U | 0.005 | ND | U | 0.005 | ND | U | 0.005 |
| Methoxychlor | 72-43-5 | | 0.03 | 40 (h) | ND | U | 0.004 | ND | U | 0.004 | ND | U | 0.004 | ND | U | 0.004 |
| Toxaphene | 8001-35-2 | 0.73 | 0.0002 | 0.00028 (hc) | ND | U | 0.11 | ND | U | 0.11 | ND | U | 0.11 | ND | U | 0.11 |
| **PCBs** | | | | | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | | | | ND | U | 0.12 | ND | U | 0.12 | ND | U | 0.12 | ND | U | 0.12 |
| Aroclor 1221 | 11104-28-2 | | | | ND | U | 0.12 | ND | U | 0.12 | ND | U | 0.12 | ND | U | 0.12 |
| Aroclor 1232 | 11141-16-5 | | | | ND | U | 0.12 | ND | U | 0.12 | ND | U | 0.12 | ND | U | 0.12 |
| Aroclor 1242 | 53469-21-9 | | | | ND | U | 0.12 | ND | U | 0.12 | ND | U | 0.12 | ND | U | 0.12 |
| Aroclor 1248 | 12672-29-6 | | | | ND | U | 0.12 | ND | U | 0.12 | ND | U | 0.12 | ND | U | 0.12 |
| Aroclor 1254 | 11097-69-1 | | | | ND | U | 0.11 | ND | U | 0.11 | ND | U | 0.11 | ND | U | 0.11 |
| Aroclor 1260 | 11096-82-5 | | | | ND | UJ | 0.11 | ND | U | 0.11 | ND | U | 0.11 | ND | U | 0.11 |
| Aroclor 1262 | 37324-23-5 | | | | ND | U | 0.11 | ND | U | 0.11 | ND | U | 0.11 | ND | U | 0.11 |
| Aroclor 1268 | 11100-14-4 | | | | ND | U | 0.11 | ND | U | 0.11 | ND | U | 0.11 | ND | U | 0.11 |
| Total PCBs | 1336-36-3 | | 0.014 | 0.000064 (hc) | ND | U | 0.12 | ND | U | 0.12 | ND | U | 0.12 | ND | U | 0.12 |
| **Herbicides** | | | | | | | | | | | | | | | | |
| 2,4,5-T | 93-76-5 | | | | ND | U | 0.12 | ND | U | 0.12 | ND | U | 0.12 | ND | U | 0.12 |
| 2,4-D | 94-75-7 | | | | ND | U | 0.13 | ND | U | 0.13 | ND | U | 0.13 | ND | U | 0.13 |
| Silvex (2,4,5-TP) | 93-72-1 | | | | ND | U | 0.11 | ND | U | 0.11 | ND | U | 0.11 | ND | U | 0.11 |
| **Inorganics** | | | | | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | | | | 216 | | 18.8 | 2450 | | 18.8 | 143 | | 18.8 | 134 | | 18.8 |
| Antimony | 7440-36-0 | | 80 [8] | 5.6 (h)(T) | 0.9 | J | 0.4 | 0.92 | J | 0.4 | 0.63 | J | 0.4 | 0.94 | J | 0.4 |
| Arsenic | 7440-38-2 | 340 (d)(s) | 150 (d)(s) | 0.017 (h)(T) | **0.97** | J | 0.73 | **1.1** | J | 0.73 | **1** | J | 0.73 | **1.1** | J | 0.73 |
| Barium | 7440-39-3 | | 220 [8] | 2000 (h)(T) | 53.2 | | 1.2 | 69.1 | | 1.2 | 57.5 | | 1.2 | 49.2 | | 1.2 |
| Beryllium | 7440-41-7 | | 3.6 [8] | 6 (h)(T) | ND | U | 0.25 | ND | U | 0.25 | ND | U | 0.25 | ND | U | 0.25 |
| Cadmium | 7440-43-9 | (a) | (a) | 3.4 (h)(T) | ND | U | 0.81 | ND | U | 0.81 | ND | U | 0.81 | ND | U | 0.81 |
| Calcium | 7440-70-2 | | | | 45500 | | 98.8 | 45400 | | 98.8 | 44900 | | 98.8 | 43800 | | 98.8 |
| Chromium | 7440-47-3 | | 42 [8] | 92 (h)(T) | ND | U | 2.3 | 4.4 | | 2.3 | ND | U | 2.3 | ND | U | 2.3 |
| Hexavalent Chromium | 18540-29-9 | 15 (d)(s) | 10 (d)(s) | | ND | U | 8.1 | ND | U | 8.1 | ND | U | 8.1 | ND | U | 8.1 |
| Cobalt | 7440-48-4 | | 24 [8] | | ND | U | 1.6 | 2.6 | J | 1.6 | ND | U | 1.6 | ND | U | 1.6 |
| Copper | 7440-50-8 | (a) | (a) | 1300 (h)(T) | ND | U | 2 | 9.4 | | 2 | ND | U | 2 | ND | U | 2 |
| Iron | 7439-89-6 | | | | 3490 | | 51.1 | 7540 | | 51.1 | 2990 | | 51.1 | 2850 | | 51.1 |
| Lead | 7439-92-1 | 38 (d)(s) | 5.4 (d)(s) | 5 (h)(T) | 1.2 | | 0.55 | **8.6** | | 0.55 | 1.2 | | 0.55 | 0.99 | J | 0.55 |
| Magnesium | 7439-95-4 | | | | 9290 | | 73.7 | 11100 | | 73.7 | 9530 | | 73.7 | 8850 | | 73.7 |
| Manganese | 7439-96-5 | | | | 189 | | 2.9 | 357 | | 2.9 | 162 | | 2.9 | 314 | | 2.9 |

Table 1. Surface Water Sample Results
Southeast Leg Pond Area Phase 1 Sampling
Hatco Remediation Project
Woodbridge, New Jersey

| Sample ID | | NJDEP Ecological Screening Criteria for Fresh Water Surface Water | | | SEL-PA-SW01-0-042320 | | | SEL-PA-SW02-0-042320 | | | SEL-PA-SW03-0-042320 | | | SEL-PA-SW04-0-042320 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Laboratory Sample No. | | | | | 460-207545-4 | | | 460-207545-3 | | | 460-207545-1 | | | 460-207545-5 | | |
| Sample Date and Time | | Aquatic | | Human | 4/23/2020 9:55 | | | 4/23/2020 9:20 | | | 4/23/2020 9:00 | | | 4/23/2020 10:50 | | |
| Parameters Analyzed | CASRN | Acute | Chronic | Health | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL |
| Mercury | 7439-97-6 | 1.4 [d][s] | 0.77 [d][s] | 0.05 [h][T] | ND | U | 0.091 | ND | U | 0.091 | ND | U | 0.091 | ND | U | 0.091 |
| Nickel | 7440-02-0 | [a] | [a] | 500 [h][T] | ND | U | 2.4 | 5.9 | | 2.4 | ND | U | 2.4 | ND | U | 2.4 |
| Potassium | 7440-09-7 | | | | 10300 | | 86.7 | 10100 | | 86.7 | 10600 | | 86.7 | 9760 | | 86.7 |
| Selenium | 7782-49-2 | 20 [s] | 5 [s] | 170 [h][T] | ND | U | 5.4 | ND | U | 5.4 | ND | U | 5.4 | ND | U | 5.4 |
| Silver | 7440-22-4 | [a] | 0.12 [8] | 170 [h][T] | ND | U | 0.59 | ND | U | 0.59 | ND | U | 0.59 | ND | U | 0.59 |
| Sodium | 7440-23-5 | | | | 58800 | | 128 | 54900 | | 128 | 59600 | | 128 | 56000 | | 128 |
| Thallium | 7440-28-0 | | 10 [8] | 0.24 [h][T] | ND | U | 0.16 | ND | U | 0.16 | ND | U | 0.16 | ND | U | 0.16 |
| Vanadium | 7440-62-2 | | 12 [8] | | 1.4 | J | 1.1 | 7.2 | | 1.1 | 1.2 | J | 1.1 | 1.1 | J | 1.1 |
| Zinc | 7440-66-6 | [a] | [a] | 7400 [h][T] | ND | U | 11.1 | 18.3 | | 11.1 | ND | U | 11.1 | ND | U | 11.1 |
| Cyanide, Total | 57-12-5 | 22 [fc] | 5.2 [fc] | 140 [h] | ND | U | 0.004 | ND | U | 0.004 | ND | U | 0.004 | ND | U | 0.004 |
| Cyanide, Amenable | 57-12-5 | | | | ND | U | 0.01 | ND | U | 0.01 | ND | U | 0.01 | ND | U | 0.01 |
| **Extractable Petroleum Hydrocarbons** | | | | | | | | | | | | | | | | |
| Total EPH (C9-C40) | NA | | | | ND | U | 0.1 | ND | U | 0.1 | ND | U | 0.1 | ND | U | 0.1 |
| **Field Measurements** | | | | | | | | | | | | | | | | |
| pH (Standard units) | NA | | | | 6.97 | | | 6.91 | | | 6.47 | | | 7.3 | | |
| Temperature (degrees centigrade) | NA | | | | 9.5 | | | 8.5 | | | 9 | | | 12.1 | | |
| Water depth (feet) | NA | | | | 0.59 | | | 0.38 | | | 0.45 | | | 0.25 | | |

Notes
Except where noted all results reported in micrograms per liter
Ecological Screening Criteria and associated notes from NJDEP update dated 3/10/2009: https://www.nj.gov/dep/srp/guidance/ecoscreening/esc_table.pdf
**Bold face underlined text: Chronic criteria exceedance**
**Red Text: Human Health criteria exceedance**
Blue highlight: MDL exceeds one or more ESCs
CASRN: Chemical Abstract Service Registry Number
NA: Not applicable
ND: Not detected
MDL: Method detection limit
Q: Data qualifiers
J : Result is less than the reporting limit but greater than or equal to the MDL and the concentration is an estimated value
U : Indicates the analyte was analyzed for but not detected

**Table 2**

**Soil Sample Results**

Table 2. Soil Sample Results
Southeast Leg Pond Area Phase 1 Sampling
Hatco Remediation Project
Woodbridge, New Jersey

| Sample Identification | CASRN | Site-Specific Soil Criteria | | EcoSSL | SEL-PA-SB01-A-B-0-042320 | | | SEL-PA-SB02-A-B-0-042320 | | | SEL-PA-SBNo-A-B-0-042320 | | | SEL-PA-SBEa-A-B-0-042320 | | | SEL-PA-SBSo-A-B-0-042320 | | | SEL-PA-SBWe-A-B-0-042320 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Laboratory Sample Number | | | | | 460-207545-15 | | | 460-207545-14 | | | 460-207545-13 | | | 460-207545-12 | | | 460-207545-8 | | | 460-207545-17 | | |
| Sample Date and Time | | | | | 4/23/2020 16:30 | | | 4/23/2020 16:15 | | | 4/23/2020 15:55 | | | 4/23/2020 15:35 | | | 4/23/2020 15:00 | | | 4/23/2020 16:40 | | |
| Parameters Analyzed | | RDC | NRDC | | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL |
| **Volatile Organic Compounds** | | | | | | | | | | | | | | | | | | | | | | |
| Acetone | 67-64-1 | 70000 | | | ND | U | 0.0084 | 0.0096 | | 0.0076 | 0.023 | | 0.012 | 0.022 | | 0.0088 | 0.052 | | 0.017 | ND | U | 0.0066 |
| Benzene | 71-43-2 | 3 | 13 | 0.255 | ND | U | 0.00038 | ND | U | 0.00034 | ND | U | 0.00055 | 0.00076 | J | 0.00039 | 0.0011 | J | 0.00075 | ND | U | 0.0003 |
| Bromoform | 75-25-2 | 86 | 370 | 15.9 | ND | U | 0.00062 | ND | U | 0.00056 | ND | U | 0.00091 | ND | U | 0.00065 | ND | U | 0.0012 | ND | U | 0.00049 |
| Bromomethane | 74-83-9 | 79 | 59 | 0.235 | ND | U | 0.00069 | ND | U | 0.00063 | ND | U | 0.001 | ND | U | 0.00073 | ND | U | 0.0014 | ND | U | 0.00055 |
| 2-Butanone (MEK) | 78-93-3 | 3100 | 44000 | | ND | U | 0.004 | ND | UJ | 0.0036 | 0.0077 | J | 0.0058 | 0.0053 | J | 0.0041 | 0.015 | J | 0.0079 | ND | U | 0.0031 |
| Carbon disulfide | 75-15-0 | 7800 | 110000 | | ND | U | 0.00039 | ND | U | 0.00035 | ND | U | 0.00057 | ND | U | 0.00041 | ND | U | 0.00078 | ND | U | 0.00031 |
| Carbon tetrachloride | 56-23-5 | 2 | 4 | 2.98 | ND | U | 0.00057 | ND | U | 0.00051 | ND | U | 0.00083 | ND | U | 0.00059 | ND | U | 0.0011 | ND | U | 0.00045 |
| Chlorobenzene | 108-90-7 | 510 | 7400 | 13.1 | ND | U | 0.00026 | ND | UJ | 0.00023 | ND | U | 0.00038 | ND | U | 0.00027 | ND | U | 0.00052 | ND | U | 0.00021 |
| Chlorobromomethane | 74-97-5 | | | | ND | U | 0.00041 | ND | UJ | 0.00037 | ND | U | 0.0006 | ND | U | 0.00043 | ND | U | 0.00082 | ND | U | 0.00033 |
| Chlorodibromomethane | 124-48-1 | 3 | 8 | 2.05 | ND | U | 0.00028 | ND | U | 0.00026 | ND | U | 0.00042 | ND | U | 0.0003 | ND | U | 0.00057 | ND | U | 0.00023 |
| Chloroethane | 75-00-3 | 220 | 1100 | | ND | U | 0.00076 | ND | U | 0.00069 | ND | U | 0.0011 | ND | U | 0.0008 | ND | U | 0.0015 | ND | U | 0.00061 |
| Chloroform | 67-66-3 | 0.6 | 2 | 1.19 | ND | U | 0.00047 | ND | U | 0.00042 | ND | U | 0.00068 | ND | U | 0.00049 | ND | U | 0.00093 | ND | U | 0.00037 |
| Chloromethane | 74-87-3 | 4 | 12 | | ND | U | 0.00064 | ND | U | 0.00058 | ND | U | 0.00093 | ND | U | 0.00067 | ND | U | 0.0013 | ND | U | 0.00051 |
| Cyclohexane | 110-82-7 | | | | ND | U | 0.00032 | ND | UJ | 0.00029 | ND | U | 0.00047 | ND | U | 0.00034 | ND | U | 0.00064 | ND | U | 0.00026 |
| 1,2-Dibromo-3-Chloropropane | 96-12-8 | 0.08 | 0.2 | | ND | U | 0.00067 | ND | U | 0.00061 | ND | U | 0.00098 | ND | U | 0.0007 | ND | U | 0.0013 | ND | U | 0.00053 |
| 1,2-Dichlorobenzene | 95-50-1 | 5300 | 59000 | 2.96 | ND | U | 0.00021 | ND | UJ | 0.00019 | ND | U | 0.00031 | ND | U | 0.00022 | ND | U | 0.00042 | ND | U | 0.00017 |
| 1,3-Dichlorobenzene | 541-73-1 | 5300 | 59000 | 37.7 | ND | U | 0.00023 | ND | U | 0.00021 | ND | U | 0.00034 | ND | U | 0.00024 | ND | U | 0.00046 | ND | U | 0.00018 |
| 1,4-Dichlorobenzene | 106-46-7 | 5 | 13 | 0.546 | ND | U | 0.00033 | ND | UJ | 0.0003 | ND | U | 0.00048 | ND | U | 0.00034 | ND | U | 0.00066 | ND | U | 0.00026 |
| Dichlorobromomethane | 75-27-4 | 1 | 3 | 0.54 | ND | U | 0.00038 | ND | U | 0.00034 | ND | U | 0.00055 | ND | U | 0.00039 | ND | U | 0.00075 | ND | U | 0.0003 |
| Dichlorodifluoromethane | 75-71-8 | 490 | 230000 | | ND | U | 0.00049 | ND | U | 0.00045 | ND | U | 0.00072 | ND | U | 0.00052 | ND | U | 0.00099 | ND | U | 0.00039 |
| 1,1-Dichloroethane | 75-34-3 | 8 | 24 | | ND | U | 0.0003 | ND | U | 0.00027 | ND | U | 0.00044 | ND | U | 0.00032 | ND | U | 0.0006 | ND | U | 0.00024 |
| 1,2-Dichloroethane | 107-06-2 | 6 | 24 | 21.2 | ND | U | 0.00043 | ND | U | 0.00039 | ND | U | 0.00063 | ND | U | 0.00045 | ND | U | 0.00086 | ND | U | 0.00034 |
| 1,1-Dichloroethene | 75-35-4 | 11 | 150 | 8.28 | ND | U | 0.00033 | ND | U | 0.0003 | ND | U | 0.00048 | ND | U | 0.00034 | ND | U | 0.00066 | ND | U | 0.00026 |
| cis-1,2-Dichloroethene | 156-59-2 | 230 | 1000 | | ND | U | 0.00022 | ND | UJ | 0.0002 | ND | U | 0.00033 | ND | U | 0.00023 | ND | U | 0.00044 | ND | U | 0.00018 |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 1000 | 0.784 | ND | U | 0.00036 | ND | U | 0.00033 | ND | U | 0.00053 | ND | U | 0.00038 | ND | U | 0.00072 | ND | U | 0.00029 |
| 1,2-Dichloropropane | 78-87-5 | 10 | 43 | 32.7 | ND | U | 0.00062 | ND | U | 0.00056 | ND | U | 0.00091 | ND | U | 0.00065 | ND | U | 0.0012 | ND | U | 0.00049 |
| cis-1,3-Dichloropropene | 10061-01-5 | | | | ND | U | 0.0004 | ND | U | 0.00036 | ND | U | 0.00058 | ND | UJ | 0.00042 | ND | U | 0.0008 | ND | UJ | 0.00032 |
| trans-1,3-Dichloropropene | 10061-02-6 | | | | ND | U | 0.00039 | ND | U | 0.00035 | ND | U | 0.00057 | ND | UJ | 0.00041 | ND | U | 0.00078 | ND | UJ | 0.00031 |
| 1,3-Dichloropropene (cis and trans) | 542-75-6 | 4 | 7 | | ND | U | 0.0004 | ND | U | 0.00036 | ND | U | 0.00058 | ND | UJ | 0.00042 | ND | U | 0.0008 | ND | UJ | 0.00032 |
| 1,4-Dioxane | 123-91-1 | | | | ND | U | 0.013 | ND | U | 0.012 | ND | U | 0.02 | ND | U | 0.014 | ND | UJ | 0.027 | ND | U | 0.011 |
| Ethylbenzene | 100-41-4 | 7800 | 110000 | 5.16 | ND | U | 0.00029 | ND | UJ | 0.00026 | ND | U | 0.00043 | ND | U | 0.0003 | ND | U | 0.00058 | ND | U | 0.00023 |
| Ethylene Dibromide | 106-93-4 | 0.008 | 0.04 | | ND | U | 0.00026 | ND | UJ | 0.00024 | ND | U | 0.00039 | ND | U | 0.00028 | ND | U | 0.00052 | ND | U | 0.00021 |
| 2-Hexanone | 591-78-6 | | | | ND | U | 0.0025 | ND | U | 0.0023 | ND | U | 0.0037 | ND | U | 0.0026 | ND | U | 0.005 | ND | U | 0.002 |
| Isopropylbenzene | 98-82-8 | | | | ND | U | 0.00018 | ND | UJ | 0.00017 | ND | U | 0.00027 | ND | U | 0.00019 | ND | U | 0.00037 | ND | U | 0.00015 |
| Methyl acetate | 79-20-9 | 78000 | | | ND | U | 0.0063 | ND | UJ | 0.0057 | ND | U | 0.0092 | ND | U | 0.0066 | ND | U | 0.013 | ND | U | 0.005 |
| Methylcyclohexane | 108-87-2 | | | | ND | U | 0.00073 | ND | UJ | 0.00066 | ND | U | 0.0011 | ND | U | 0.00076 | ND | U | 0.0015 | ND | U | 0.00058 |
| Methylene Chloride | 75-09-2 | 49 | 230 | 4.05 | ND | U | 0.00068 | ND | U | 0.00061 | ND | U | 0.00099 | ND | U | 0.00071 | ND | U | 0.0014 | ND | U | 0.00054 |
| 4-Methyl-2-pentanone (MIBK) | 108-10-1 | | | | ND | U | 0.0023 | ND | U | 0.0021 | ND | U | 0.0033 | ND | U | 0.0024 | ND | U | 0.0045 | ND | U | 0.0018 |
| 2-Methyl-2-propanol (TBA) | 75-65-0 | 1400 | 11000 | | ND | U | 0.0048 | ND | U | 0.0044 | ND | U | 0.0071 | ND | UJ | 0.0051 | ND | U | 0.0096 | ND | UJ | 0.0038 |
| Methyl tert-butyl ether | 1634-04-4 | 110 | 320 | | ND | U | 0.00018 | ND | U | 0.00017 | ND | U | 0.00027 | ND | U | 0.00019 | ND | U | 0.00036 | ND | U | 0.00015 |
| Styrene | 100-42-5 | 90 | 260 | 4.69 | ND | U | 0.00041 | ND | UJ | 0.00037 | ND | U | 0.0006 | ND | U | 0.00043 | ND | U | 0.00081 | 0.00034 | J | 0.00032 |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 1 | 1 | | ND | U | 0.00028 | ND | U | 0.00025 | ND | U | 0.00041 | ND | U | 0.00029 | ND | U | 0.00055 | ND | U | 0.00022 |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 1 | 3 | 0.127 | ND | U | 0.00031 | ND | U | 0.00028 | ND | U | 0.00046 | ND | UJ | 0.00033 | ND | UJ | 0.00062 | ND | UJ | 0.00025 |
| Tetrachloroethene | 127-18-4 | 43 | 1500 | 9.92 | ND | U | 0.00021 | ND | UJ | 0.00019 | ND | U | 0.00031 | ND | U | 0.00022 | ND | U | 0.00042 | ND | U | 0.00017 |
| Toluene | 108-88-3 | 6300 | 91000 | 200 | ND | U | 0.00034 | ND | U | 0.00031 | ND | U | 0.0005 | ND | U | 0.00036 | 0.0021 | J | 0.00068 | ND | U | 0.00027 |
| 1,2,3-Trichlorobenzene | 87-61-6 | | | 20 | ND | U | 0.00026 | ND | UJ | 0.00024 | ND | U | 0.00039 | ND | U | 0.00028 | ND | U | 0.00053 | ND | U | 0.00021 |
| 1,2,4-Trichlorobenzene | 120-82-1 | 73 | 1200 | 20 | ND | U | 0.00052 | ND | UJ | 0.00047 | ND | U | 0.00077 | ND | U | 0.00055 | ND | U | 0.001 | ND | U | 0.00042 |
| 1,1,1-Trichloroethane | 71-55-6 | | | 29.8 | ND | U | 0.00034 | ND | U | 0.00031 | ND | U | 0.0005 | ND | U | 0.00036 | ND | U | 0.00068 | ND | U | 0.00027 |
| 1,1,2-Trichloroethane | 79-00-5 | 2 | 6 | 28.6 | ND | U | 0.00026 | ND | U | 0.00024 | ND | U | 0.00038 | ND | U | 0.00027 | ND | U | 0.00052 | ND | U | 0.00021 |
| Trichloroethene | 79-01-6 | 23 | 54 | 12.4 | ND | U | 0.00021 | ND | UJ | 0.00019 | ND | U | 0.00031 | ND | U | 0.00022 | ND | U | 0.00042 | ND | U | 0.00017 |
| Trichlorofluoromethane | 75-69-4 | 23000 | 340000 | | ND | U | 0.00059 | ND | U | 0.00054 | ND | U | 0.00087 | ND | U | 0.00062 | ND | U | 0.0012 | ND | U | 0.00047 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 76-13-1 | | | | ND | U | 0.00044 | ND | U | 0.0004 | ND | U | 0.00064 | ND | U | 0.00046 | ND | U | 0.00088 | ND | U | 0.00035 |
| Vinyl chloride | 75-01-4 | 2 | 7 | 0.646 | ND | U | 0.0008 | ND | U | 0.00072 | ND | U | 0.0012 | ND | U | 0.00084 | ND | U | 0.0016 | ND | U | 0.00063 |

Table 2. Soil Sample Results
Southeast Leg Pond Area Phase 1 Sampling
Hatco Remediation Project
Woodbridge, New Jersey

| Sample Identification | CASRN | Site-Specific Soil Criteria | | EcoSSL | SEL-PA-SB01-A-B-0-042320 | | | SEL-PA-SB02-A-B-0-042320 | | | SEL-PA-SBNo-A-B-0-042320 | | | SEL-PA-SBEa-A-B-0-042320 | | | SEL-PA-SBSo-A-B-0-042320 | | | SEL-PA-SBWe-A-B-0-042320 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Laboratory Sample Number | | | | | 460-207545-15 | | | 460-207545-14 | | | 460-207545-13 | | | 460-207545-12 | | | 460-207545-8 | | | 460-207545-17 | | |
| Sample Date and Time | | | | | 4/23/2020 16:30 | | | 4/23/2020 16:15 | | | 4/23/2020 15:55 | | | 4/23/2020 15:35 | | | 4/23/2020 15:00 | | | 4/23/2020 16:40 | | |
| Parameters Analyzed | | RDC | NRDC | | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL |
| m-Xylene & p-Xylene | 179601-23-1 | | | | ND | U | 0.00025 | ND | UJ | 0.00023 | ND | U | 0.00037 | ND | U | 0.00027 | ND | U | 0.00051 | ND | U | 0.0002 |
| o-Xylene | 95-47-6 | | | | ND | U | 0.00028 | ND | UJ | 0.00026 | ND | U | 0.00042 | ND | U | 0.0003 | ND | U | 0.00057 | ND | U | 0.00023 |
| Total xylenes | 1330-20-7 | 12000 | 170000 | 10 | ND | U | 0.00028 | ND | UJ | 0.00026 | ND | U | 0.00042 | ND | U | 0.0003 | ND | U | 0.00057 | ND | U | 0.00023 |
| Total VOC Conc. | NA | | | | ND | | NA | 0.0096 | | NA | 0.0307 | | NA | 0.02806 | | NA | 0.0702 | | NA | 0.00034 | | NA |
| Total VOC TICs | NA | | | | ND | | NA | ND | | NA | ND | | NA | ND | | NA | 0.13236 | J | NA | 0.2671 | J | NA |
| **Semivolatile Organic Compounds** | | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 3400 | 37000 | 20 | ND | U | 0.035 | 0.085 | J | 0.065 | ND | U | 0.046 | ND | U | 0.038 | 0.056 | J | 0.048 | ND | U | 0.032 |
| Acenaphthylene | 208-96-8 | | 300000 | 682 | 0.013 | J | 0.0049 | 0.041 | J | 0.0092 | ND | U | 0.0065 | 0.017 | J | 0.0054 | 0.042 | J | 0.0069 | ND | U | 0.0045 |
| Acetophenone | 98-86-2 | 2 | 5 | | ND | U | 0.023 | ND | UJ | 0.044 | ND | U | 0.031 | ND | U | 0.025 | ND | U | 0.033 | ND | U | 0.022 |
| Anthracene | 120-12-7 | 17000 | 30000 | 1480 | ND | U | 0.014 | 0.3 | J | 0.027 | ND | U | 0.019 | 0.058 | J | 0.016 | 0.21 | J | 0.02 | ND | U | 0.013 |
| Atrazine | 1912-24-9 | 210 | 2400 | | ND | U | 0.012 | ND | U | 0.022 | ND | U | 0.016 | ND | U | 0.013 | ND | U | 0.017 | ND | U | 0.011 |
| Benzaldehyde | 100-52-7 | 6100 | 68000 | | ND | U | 0.021 | ND | U | 0.039 | ND | U | 0.028 | 0.03 | J | 0.023 | 0.031 | J | 0.029 | ND | U | 0.019 |
| Benzo[a]anthracene | 56-55-3 | 5 | 17 | 5.21 | 0.27 | | 0.017 | 0.67 | J | 0.031 | 0.26 | | 0.022 | 0.36 | | 0.018 | 0.97 | | 0.023 | 0.13 | | 0.015 |
| Benzo[a]pyrene | 50-32-8 | 0.66 | 2 | 1.52 | 0.29 | | 0.013 | 0.49 | J | 0.024 | 0.26 | | 0.017 | 0.37 | | 0.014 | 0.95 | | 0.018 | 0.12 | | 0.012 |
| Benzo[b]fluoranthene | 205-99-2 | 5 | 17 | 59.8 | 0.4 | | 0.012 | 0.61 | J | 0.023 | 0.32 | | 0.016 | 0.53 | | 0.013 | 1.2 | | 0.017 | 0.15 | | 0.011 |
| Benzo[g,h,i]perylene | 191-24-2 | 380000 | 30000 | 119 | 0.16 | J | 0.014 | 0.25 | J | 0.026 | 0.14 | J | 0.019 | 0.2 | J | 0.015 | 0.4 | J | 0.02 | 0.066 | J | 0.013 |
| Benzo[k]fluoranthene | 207-08-9 | 45 | 170 | 148 | 0.15 | | 0.0093 | 0.23 | J | 0.017 | 0.12 | | 0.012 | 0.2 | | 0.01 | 0.4 | | 0.013 | 0.067 | | 0.0086 |
| 1,1'-Biphenyl | 92-52-4 | 61 | 240 | 60 | ND | U | 0.0063 | ND | UJ | 0.012 | ND | U | 0.0084 | ND | U | 0.0069 | ND | U | 0.0088 | ND | U | 0.0058 |
| Bis(2-chloroethoxy)methane | 111-91-1 | | | | ND | U | 0.037 | ND | UJ | 0.069 | ND | U | 0.049 | ND | U | 0.04 | ND | U | 0.052 | ND | U | 0.034 |
| Bis(2-chloroethyl)ether | 111-44-4 | 0.66 | 3 | 23.7 | ND | U | 0.017 | ND | UJ | 0.031 | ND | U | 0.022 | ND | U | 0.018 | ND | U | 0.023 | ND | U | 0.015 |
| Bis(2-ethylhexyl) phthalate | 117-81-7 | 49 | 210 | 0.925 | **1.6** | | 0.025 | **13** | J | 0.047 | **2** | | 0.033 | 0.083 | J | 0.027 | **9.3** | | 0.035 | **8.1** | | 0.023 |
| 4-Bromophenyl phenyl ether | 101-55-3 | | | | ND | U | 0.019 | ND | UJ | 0.035 | ND | U | 0.025 | ND | U | 0.021 | ND | U | 0.026 | ND | U | 0.017 |
| Butyl benzyl phthalate | 85-68-7 | 1200 | 14000 | 0.239 | ND | U | 0.022 | ND | UJ | 0.042 | ND | U | 0.03 | ND | U | 0.024 | ND | U | 0.031 | 0.054 | J | 0.021 |
| Caprolactam | 105-60-2 | 31000 | 340000 | | ND | U | 0.074 | ND | UJ | 0.14 | ND | U | 0.099 | ND | U | 0.081 | ND | U | 0.1 | ND | U | 0.068 |
| Carbazole | 86-74-8 | 24 | 96 | | ND | U | 0.018 | 0.17 | J | 0.034 | ND | U | 0.024 | 0.037 | J | 0.02 | 0.099 | J | 0.025 | ND | U | 0.017 |
| 4-Chloroaniline | 106-47-8 | | | | ND | U | 0.033 | ND | U | 0.062 | ND | U | 0.044 | ND | U | 0.036 | ND | U | 0.046 | ND | U | 0.031 |
| 4-Chloro-3-methylphenol | 59-50-7 | | | | ND | U | 0.027 | ND | UJ | 0.05 | ND | U | 0.036 | ND | U | 0.029 | ND | U | 0.037 | ND | U | 0.025 |
| 2-Chloronaphthalene | 91-58-7 | | | 0.0122 | ND | U | 0.022 | ND | UJ | 0.041 | ND | U | 0.029 | ND | U | 0.024 | ND | U | 0.031 | ND | U | 0.02 |
| 2-Chlorophenol | 95-57-8 | 310 | 5200 | 0.243 | ND | U | 0.017 | ND | UJ | 0.032 | ND | U | 0.023 | ND | U | 0.018 | ND | U | 0.024 | ND | U | 0.016 |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | | | | ND | U | 0.017 | ND | UJ | 0.031 | ND | U | 0.022 | ND | U | 0.018 | ND | U | 0.023 | ND | U | 0.015 |
| Chrysene | 218-01-9 | 450 | 1700 | 4.73 | 0.29 | J | 0.008 | 0.68 | J | 0.015 | 0.27 | J | 0.011 | 0.34 | J | 0.0087 | 1 | | 0.011 | 0.12 | J | 0.0074 |
| Dibenz(a,h)anthracene | 53-70-3 | 0.66 | 2 | 18.4 | 0.05 | | 0.021 | 0.098 | J | 0.038 | 0.047 | J | 0.027 | 0.065 | | 0.022 | 0.14 | | 0.029 | 0.029 | J | 0.019 |
| Dibenzofuran | 132-64-9 | | | | ND | U | 0.0067 | 0.068 | J | 0.012 | ND | U | 0.0089 | ND | U | 0.0073 | 0.048 | J | 0.0093 | ND | U | 0.0062 |
| 3,3'-Dichlorobenzidine | 91-94-1 | 2 | 6 | 0.646 | ND | U | 0.072 | ND | U | 0.13 | ND | U | 0.096 | ND | U | 0.078 | ND | U | 0.1 | ND | U | 0.066 |
| 2,4-Dichlorophenol | 120-83-2 | 180 | 3100 | 87.5 | ND | U | 0.031 | ND | UJ | 0.057 | ND | U | 0.041 | ND | U | 0.033 | ND | U | 0.043 | ND | U | 0.028 |
| Diethyl phthalate | 84-66-2 | 49000 | 550000 | 24.8 | ND | U | 0.0069 | ND | UJ | 0.013 | ND | U | 0.0092 | ND | U | 0.0075 | 0.03 | J | 0.0096 | 0.037 | J | 0.0064 |
| Dimethyl phthalate | 131-11-3 | | | | ND | U | 0.11 | ND | UJ | 0.2 | ND | U | 0.14 | ND | U | 0.12 | ND | U | 0.15 | ND | U | 0.1 |
| 2,4-Dimethylphenol | 105-67-9 | 1200 | 14000 | 0.01 | ND | U | 0.021 | ND | UJ | 0.039 | ND | U | 0.028 | ND | U | 0.023 | ND | U | 0.029 | ND | U | 0.019 |
| Di-n-butyl phthalate | 84-74-2 | 6100 | 68000 | 0.15 | ND | U | 0.084 | ND | UJ | 0.16 | ND | U | 0.11 | ND | U | 0.091 | ND | U | 0.12 | ND | U | 0.077 |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | 6 | 68 | | ND | U | 0.077 | ND | UJ | 0.14 | ND | U | 0.1 | ND | U | 0.084 | ND | U | 0.11 | ND | U | 0.071 |
| 2,4-Dinitrophenol | 51-28-5 | 120 | 2100 | 20 | ND | U | 0.23 | ND | UJ | 0.44 | ND | U | 0.31 | ND | U | 0.25 | ND | U | 0.33 | ND | U | 0.22 |
| 2,4-Dinitrotoluene | 121-14-2 | 0.7 | 3 | 1.28 | ND | U | 0.051 | ND | UJ | 0.096 | ND | U | 0.068 | ND | U | 0.056 | ND | U | 0.071 | ND | U | 0.047 |
| 2,6-Dinitrotoluene | 606-20-2 | 0.7 | 3 | | ND | U | 0.034 | ND | UJ | 0.064 | ND | U | 0.046 | ND | U | 0.037 | ND | U | 0.048 | ND | U | 0.032 |
| Di-n-octyl phthalate | 117-84-0 | 2400 | 27000 | | 0.042 | J | 0.025 | ND | UJ | 0.047 | ND | U | 0.034 | ND | U | 0.027 | ND | U | 0.035 | ND | U | 0.023 |
| Fluoranthene | 206-44-0 | 2300 | 24000 | 122 | 0.34 | J | 0.017 | 1.7 | J | 0.031 | 0.33 | J | 0.022 | 0.45 | J | 0.018 | 1.6 | | 0.023 | 0.15 | J | 0.015 |
| Fluorene | 86-73-7 | 2300 | 24000 | 122 | 0.013 | J | 0.0065 | 0.14 | J | 0.012 | 0.018 | J | 0.0086 | 0.022 | J | 0.007 | 0.083 | J | 0.009 | 0.01 | J | 0.006 |
| Hexachlorobenzene | 118-74-1 | 0.66 | 2 | 0.199 | ND | U | 0.023 | ND | UJ | 0.042 | ND | U | 0.03 | ND | U | 0.025 | ND | U | 0.032 | ND | U | 0.021 |
| Hexachlorobutadiene | 87-68-3 | 6 | 25 | 0.0398 | ND | U | 0.01 | ND | UJ | 0.019 | ND | U | 0.013 | ND | U | 0.011 | ND | U | 0.014 | ND | U | 0.0093 |
| Hexachlorocyclopentadiene | 77-47-4 | 400 | 110 | 0.755 | ND | U | 0.042 | ND | UJ | 0.078 | ND | U | 0.056 | ND | U | 0.045 | ND | U | 0.058 | ND | U | 0.038 |
| Hexachloroethane | 67-72-1 | 12 | 100 | 0.596 | ND | U | 0.016 | ND | UJ | 0.031 | ND | U | 0.022 | ND | U | 0.018 | ND | U | 0.023 | ND | U | 0.015 |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 5 | 17 | 109 | 0.19 | | 0.019 | 0.31 | J | 0.035 | 0.15 | | 0.025 | 0.23 | | 0.02 | 0.47 | | 0.026 | 0.076 | | 0.017 |
| Isophorone | 78-59-1 | 1100 | 10000 | 139 | ND | U | 0.14 | ND | UJ | 0.26 | ND | U | 0.18 | ND | U | 0.15 | ND | U | 0.19 | ND | U | 0.13 |
| 2-Methylnaphthalene | 91-57-6 | 230 | 2400 | 3.24 | ND | U | 0.013 | ND | UJ | 0.025 | ND | U | 0.018 | ND | U | 0.014 | 0.052 | J | 0.019 | ND | U | 0.012 |
| 2-Methylphenol | 95-48-7 | 310 | 10000 | | ND | U | 0.018 | ND | UJ | 0.033 | ND | U | 0.024 | ND | U | 0.019 | ND | U | 0.025 | ND | U | 0.016 |

Table 2. Soil Sample Results
Southeast Leg Pond Area Phase 1 Sampling
Hatco Remediation Project
Woodbridge, New Jersey

| Sample Identification | CASRN | Site-Specific Soil Criteria | | EcoSSL | SEL-PA-SB01-A-B-0-042320 | | | SEL-PA-SB02-A-B-0-042320 | | | SEL-PA-SBNo-A-B-0-042320 | | | SEL-PA-SBEa-A-B-0-042320 | | | SEL-PA-SBSo-A-B-0-042320 | | | SEL-PA-SBWe-A-B-0-042320 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Laboratory Sample Number | | | | | 460-207545-15 | | | 460-207545-14 | | | 460-207545-13 | | | 460-207545-12 | | | 460-207545-8 | | | 460-207545-17 | | |
| Sample Date and Time | | | | | 4/23/2020 16:30 | | | 4/23/2020 16:15 | | | 4/23/2020 15:55 | | | 4/23/2020 15:35 | | | 4/23/2020 15:00 | | | 4/23/2020 16:40 | | |
| Parameters Analyzed | | RDC | NRDC | | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL |
| 4-Methylphenol | 106-44-5 | 31 | 340 | | ND | U | 0.03 | ND | UJ | 0.056 | ND | U | 0.04 | 0.13 | J | 0.032 | ND | U | 0.041 | ND | U | 0.027 |
| Naphthalene | 91-20-3 | 6 | 17 | 0.0994 | 0.018 | J | 0.0082 | **0.14** | J | 0.015 | 0.025 | J | 0.011 | 0.02 | J | 0.0089 | 0.091 | J | 0.011 | **0.22** | J | 0.0076 |
| 2-Nitroaniline | 88-74-4 | 39 | 23000 | | ND | U | 0.018 | ND | UJ | 0.033 | ND | U | 0.024 | ND | U | 0.019 | ND | U | 0.025 | ND | U | 0.016 |
| 3-Nitroaniline | 99-09-2 | | | | ND | U | 0.054 | ND | U | 0.1 | ND | U | 0.071 | ND | U | 0.058 | ND | U | 0.075 | ND | U | 0.049 |
| 4-Nitroaniline | 100-01-6 | | | | ND | U | 0.055 | ND | U | 0.1 | ND | U | 0.073 | ND | U | 0.059 | ND | U | 0.076 | ND | U | 0.05 |
| 2-Nitrophenol | 88-75-5 | | | | ND | U | 0.048 | ND | UJ | 0.089 | ND | U | 0.063 | ND | U | 0.052 | ND | U | 0.066 | ND | U | 0.044 |
| 4-Nitrophenol | 100-02-7 | | | 5.12 | ND | U | 0.078 | ND | U | 0.14 | ND | U | 0.1 | ND | U | 0.084 | ND | U | 0.11 | ND | U | 0.072 |
| Nitrobenzene | 98-95-3 | 28 | 14 | 1.31 | ND | U | 0.011 | ND | UJ | 0.021 | ND | U | 0.015 | ND | U | 0.012 | ND | U | 0.016 | ND | U | 0.011 |
| N-Nitrosodi-n-propylamine | 621-64-7 | 0.66 | 0.66 | | ND | U | 0.035 | ND | UJ | 0.065 | ND | U | 0.046 | ND | U | 0.038 | ND | U | 0.048 | ND | U | 0.032 |
| N-Nitrosodiphenylamine | 86-30-6 | 140 | 600 | 0.545 | ND | U | 0.0091 | ND | UJ | 0.017 | ND | U | 0.012 | ND | U | 0.0099 | ND | U | 0.013 | ND | U | 0.0084 |
| 2,2'-oxybis[1-chloropropane] | 108-60-1 | 23 | 67 | 19.9 | ND | U | 0.0086 | ND | UJ | 0.016 | ND | U | 0.011 | ND | U | 0.0094 | ND | U | 0.012 | ND | U | 0.0079 |
| Pentachlorophenol | 87-86-5 | 6 | 24 | 0.119 | ND | U | 0.098 | ND | U | 0.18 | ND | U | 0.13 | ND | U | 0.11 | ND | U | 0.14 | ND | U | 0.09 |
| Phenanthrene | 85-01-8 | | 300000 | 45.7 | 0.17 | J | 0.0084 | 1.7 | J | 0.016 | 0.2 | J | 0.011 | 0.27 | J | 0.0091 | 0.95 | | 0.012 | 0.086 | J | 0.0077 |
| Phenol | 108-95-2 | 18000 | 210000 | 30 | ND | U | 0.017 | ND | UJ | 0.033 | ND | U | 0.023 | ND | U | 0.019 | ND | U | 0.024 | ND | U | 0.016 |
| Pyrene | 129-00-0 | 1700 | 18000 | 78.5 | 0.47 | | 0.012 | 1.5 | J | 0.022 | 0.47 | J | 0.016 | 0.67 | | 0.013 | 2 | | 0.017 | 0.24 | J | 0.011 |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | | | 2.02 | ND | U | 0.015 | ND | UJ | 0.028 | ND | U | 0.02 | ND | U | 0.016 | ND | U | 0.021 | ND | U | 0.014 |
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | | | | ND | U | 0.032 | ND | UJ | 0.06 | ND | U | 0.043 | ND | U | 0.035 | ND | U | 0.045 | ND | U | 0.03 |
| 2,4,5-Trichlorophenol | 95-95-4 | 6100 | 68000 | 4 | ND | U | 0.048 | ND | UJ | 0.091 | ND | U | 0.064 | ND | U | 0.053 | ND | U | 0.068 | ND | U | 0.045 |
| 2,4,6-Trichlorophenol | 88-06-2 | 62 | 270 | 4 | ND | U | 0.061 | ND | UJ | 0.11 | ND | U | 0.081 | ND | U | 0.066 | ND | U | 0.085 | ND | U | 0.056 |
| Total SVOC Conc. | NA | | | | 4.466 | | NA | 22.182 | | NA | 4.61 | | NA | 4.082 | | NA | 20.122 | | NA | 9.655 | | NA |
| **Pesticides** | | | | | | | | | | | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 0.04 | 0.2 | 0.00332 | ND | U | 0.0015 | ND | U | 0.0014 | ND | U | 0.0019 | ND | U | 0.0016 | ND | U | 0.002 | ND | U | 0.0013 |
| alpha-BHC | 319-84-6 | 0.1 | 0.5 | 0.0994 | ND | U | 0.00098 | ND | U | 0.00096 | ND | U | 0.0013 | ND | U | 0.0011 | ND | U | 0.0014 | ND | U | 0.0009 |
| beta-BHC | 319-85-7 | 0.4 | 2 | 0.00398 | ND | U | 0.0011 | ND | U | 0.0011 | ND | U | 0.0014 | ND | U | 0.0012 | ND | U | 0.0015 | ND | U | 0.00099 |
| delta-BHC | 319-86-8 | | | | ND | U | 0.00059 | ND | U | 0.00058 | ND | U | 0.00078 | ND | U | 0.00064 | ND | U | 0.00082 | ND | U | 0.00054 |
| gamma-BHC (Lindane) | 58-89-9 | 0.52 | 2.2 | 0.005 | ND | U | 0.00089 | ND | U | 0.00088 | ND | U | 0.0012 | ND | U | 0.00097 | ND | U | 0.0012 | ND | U | 0.00082 |
| Chlordane (technical) | 12789-03-6 | | | | ND | U | 0.023 | ND | U | 0.023 | ND | U | 0.031 | ND | U | 0.025 | ND | U | 0.032 | ND | U | 0.021 |
| 4,4'-DDD | 72-54-8 | 3 | 13 | 0.758 | ND | U | 0.0016 | ND | U | 0.0016 | ND | U | 0.0022 | ND | U | 0.0018 | ND | U | 0.0023 | ND | U | 0.0015 |
| 4,4'-DDE | 72-55-9 | 2 | 9 | 0.596 | ND | U | 0.0011 | ND | U | 0.0011 | ND | U | 0.0015 | ND | U | 0.0012 | ND | U | 0.0016 | ND | U | 0.001 |
| 4,4'-DDT | 50-29-3 | 2 | 9 | 0.0035 | ND | U | 0.0018 | ND | U | 0.0017 | ND | U | 0.0024 | ND | U | 0.0019 | ND | U | 0.0025 | ND | U | 0.0016 |
| Dieldrin | 60-57-1 | 0.042 | 0.2 | 0.00238 | ND | U | 0.0013 | ND | U | 0.0012 | ND | U | 0.0017 | ND | U | 0.0014 | ND | U | 0.0017 | ND | U | 0.0012 |
| Endosulfan I | 959-98-8 | | | | ND | U | 0.0015 | ND | U | 0.0014 | ND | U | 0.002 | ND | U | 0.0016 | ND | U | 0.002 | ND | U | 0.0014 |
| Endosulfan II | 33213-65-9 | | | | ND | U | 0.0025 | ND | U | 0.0024 | ND | U | 0.0033 | ND | U | 0.0027 | ND | U | 0.0035 | ND | U | 0.0023 |
| Endosulfans (I and II) | 115-29-7 | | | | ND | U | 0.0025 | ND | U | 0.0024 | ND | U | 0.0033 | ND | U | 0.0027 | ND | U | 0.0035 | ND | U | 0.0023 |
| Endosulfan sulfate | 1031-07-8 | 470 | 6800 | 0.0358 | ND | U | 0.0012 | ND | U | 0.0012 | ND | U | 0.0016 | ND | U | 0.0013 | ND | U | 0.0017 | ND | U | 0.0011 |
| Endrin | 72-20-8 | 23 | 340 | 0.0101 | ND | U | 0.0014 | ND | U | 0.0014 | ND | U | 0.0018 | ND | U | 0.0015 | ND | U | 0.0019 | ND | U | 0.0013 |
| Endrin aldehyde | 7421-93-4 | | | 0.0105 | ND | U | 0.0023 | ND | U | 0.0022 | ND | U | 0.003 | ND | U | 0.0025 | ND | U | 0.0032 | ND | U | 0.0021 |
| Endrin ketone | 53494-70-5 | | | | ND | U | 0.0019 | ND | U | 0.0018 | ND | U | 0.0025 | ND | U | 0.002 | ND | U | 0.0026 | ND | U | 0.0017 |
| Heptachlor | 76-44-8 | 0.15 | 0.7 | 0.00598 | ND | U | 0.0011 | ND | U | 0.0011 | ND | U | 0.0015 | ND | U | 0.0012 | ND | U | 0.0016 | ND | U | 0.001 |
| Heptachlor epoxide | 1024-57-3 | 0.07 | 0.3 | 0.152 | ND | U | 0.0014 | ND | U | 0.0014 | ND | U | 0.0019 | ND | U | 0.0016 | ND | U | 0.002 | ND | U | 0.0013 |
| Methoxychlor | 72-43-5 | 390 | 5700 | 0.0199 | ND | U | 0.0022 | ND | U | 0.0022 | ND | U | 0.0029 | ND | U | 0.0024 | ND | U | 0.0031 | ND | U | 0.002 |
| Toxaphene | 8001-35-2 | 0.6 | 3 | 0.119 | ND | U | 0.035 | ND | U | 0.034 | ND | U | 0.046 | ND | U | 0.038 | ND | U | 0.049 | ND | U | 0.032 |
| **PCBs** | | | | | | | | | | | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | | | | ND | U | 0.013 | ND | U | 0.013 | ND | U | 0.017 | ND | U | 0.014 | ND | U | 0.018 | ND | U | 0.012 |
| Aroclor 1221 | 11104-28-2 | | | | ND | U | 0.013 | ND | U | 0.013 | ND | U | 0.017 | ND | U | 0.014 | ND | U | 0.018 | ND | U | 0.012 |
| Aroclor 1232 | 11141-16-5 | | | | ND | U | 0.013 | ND | U | 0.013 | ND | U | 0.017 | ND | U | 0.014 | ND | U | 0.018 | ND | U | 0.012 |
| Aroclor 1242 | 53469-21-9 | | | | ND | U | 0.013 | ND | U | 0.013 | ND | U | 0.017 | ND | U | 0.014 | ND | U | 0.018 | ND | U | 0.012 |
| Aroclor 1248 | 12672-29-6 | | | | 0.64 | | 0.013 | 0.68 | | 0.013 | 0.76 | | 0.017 | ND | U | 0.014 | 0.53 | | 0.018 | 1.2 | | 0.012 |
| Aroclor 1254 | 11097-69-1 | | | | ND | U | 0.013 | ND | U | 0.013 | ND | U | 0.018 | ND | U | 0.014 | ND | U | 0.018 | ND | U | 0.012 |
| Aroclor 1260 | 11096-82-5 | | | | ND | U | 0.013 | ND | U | 0.013 | ND | U | 0.018 | ND | U | 0.014 | ND | U | 0.018 | ND | U | 0.012 |
| Aroclor 1262 | 37324-23-5 | | | | ND | U | 0.013 | ND | U | 0.013 | ND | U | 0.018 | ND | U | 0.014 | ND | U | 0.018 | ND | U | 0.012 |
| Aroclor 1268 | 11100-14-4 | | | | ND | U | 0.013 | ND | U | 0.013 | ND | U | 0.018 | ND | U | 0.014 | ND | U | 0.018 | ND | U | 0.012 |
| Total PCBs | 1336-36-3 | 0.49 | 2 | 0.371 | **0.64** | | 0.013 | **0.68** | | 0.013 | **0.76** | | 0.018 | ND | U | 0.014 | **0.53** | | 0.018 | **1.2** | | 0.012 |
| **Herbicides** | | | | | | | | | | | | | | | | | | | | | | |

Table 2. Soil Sample Results
Southeast Leg Pond Area Phase 1 Sampling
Hatco Remediation Project
Woodbridge, New Jersey

| Sample Identification | CASRN | Site-Specific Soil Criteria | | EcoSSL | SEL-PA-SB01-A-B-0-042320 | | | SEL-PA-SB02-A-B-0-042320 | | | SEL-PA-SBNo-A-B-0-042320 | | | SEL-PA-SBEa-A-B-0-042320 | | | SEL-PA-SBSo-A-B-0-042320 | | | SEL-PA-SBWe-A-B-0-042320 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Laboratory Sample Number | | | | | 460-207545-15 | | | 460-207545-14 | | | 460-207545-13 | | | 460-207545-12 | | | 460-207545-8 | | | 460-207545-17 | | |
| Sample Date and Time | | | | | 4/23/2020 16:30 | | | 4/23/2020 16:15 | | | 4/23/2020 15:55 | | | 4/23/2020 15:35 | | | 4/23/2020 15:00 | | | 4/23/2020 16:40 | | |
| Parameters Analyzed | | RDC | NRDC | | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL |
| 2,4,5-T | 93-76-5 | | | | ND | U | 0.01 | ND | U | 0.0095 | ND | U | 0.014 | ND | U | 0.011 | ND | U | 0.014 | ND | U | 0.0094 |
| 2,4-D | 94-75-7 | | | | ND | U | 0.017 | ND | U | 0.016 | ND | U | 0.023 | ND | U | 0.019 | ND | U | 0.024 | ND | U | 0.016 |
| Silvex (2,4,5-TP) | 93-72-1 | | | | ND | U | 0.005 | ND | U | 0.0047 | ND | U | 0.0066 | ND | U | 0.0054 | ND | U | 0.007 | ND | U | 0.0046 |
| **Inorganics** | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | 78000 | | 50 | **9250** | | 7.3 | **5750** | J | 7.2 | **11900** | | 9.9 | **9670** | | 8.2 | **6380** | | 10.7 | **12100** | | 7 |
| Antimony | 7440-36-0 | 31 | 450 | 0.27 | ND | UJ | 1.5 | ND | UJ | 1.5 | ND | UJ | 2 | ND | U | 1.7 | ND | U | 2.2 | ND | U | 1.4 |
| Arsenic | 7440-38-2 | 20 | 20 | 9.9 | 3.6 | J | 0.8 | 2.7 | J | 0.78 | 5.4 | | 1.1 | 5.2 | | 0.89 | 6.5 | | 1.2 | 6.5 | | 0.76 |
| Barium | 7440-39-3 | 16000 | 59000 | 283 | 57.3 | | 5 | 28.2 | J | 4.9 | 81.9 | | 6.8 | 74.7 | | 5.6 | 70.1 | J | 7.3 | 78.3 | | 4.8 |
| Beryllium | 7440-41-7 | 16 | 140 | 10 | 0.083 | J | 0.083 | 0.25 | J | 0.081 | ND | U | 0.11 | ND | U | 0.093 | ND | U | 0.12 | 0.34 | J | 0.079 |
| Cadmium | 7440-43-9 | 78 | 100 | 0.36 | ND | U | 0.089 | ND | U | 0.087 | ND | U | 0.12 | 0.19 | J | 0.1 | ND | U | 0.13 | 0.19 | J | 0.086 |
| Calcium | 7440-70-2 | | | | 5160 | | 95.8 | 2940 | J | 93.7 | 12700 | | 130 | 8940 | | 107 | 9890 | | 140 | 30000 | | 91.6 |
| Chromium | 7440-47-3 | | | 0.4 | **18.3** | | 1.8 | **61.7** | J | 1.8 | **35.2** | | 2.5 | **19.4** | | 2.1 | **15.2** | | 2.7 | **29.9** | | 1.8 |
| Hexavalent Chromium | 18540-29-9 | | | 130 | ND | U | 0.51 | ND | UJ | 0.47 | ND | U | 0.67 | ND | U | 0.55 | ND | U | 0.71 | ND | U | 0.46 |
| Cobalt | 7440-48-4 | 1600 | 590 | 0.14 | **7.3** | J | 0.72 | **5.1** | J | 0.7 | **10.5** | J | 0.97 | **9.7** | J | 0.8 | **6.2** | J | 1 | **9.5** | J | 0.69 |
| Copper | 7440-50-8 | 3100 | 45000 | 5.4 | **38.6** | | 1.6 | **25** | J | 1.6 | **50.5** | | 2.2 | **39.7** | | 1.8 | **34.6** | | 2.4 | **46.7** | | 1.5 |
| Iron | 7439-89-6 | | | | 15500 | | 26.7 | 9920 | J | 26.1 | 23400 | | 36.2 | 18200 | | 29.8 | 13300 | | 39 | 20900 | | 25.5 |
| Lead | 7439-92-1 | 400 | 800 | 0.0537 | **59** | | 0.42 | **19.4** | J | 0.41 | **66.8** | | 0.57 | **56.6** | | 0.47 | **43.5** | | 0.61 | **74.8** | | 0.4 |
| Magnesium | 7439-95-4 | | | | 3580 | | 87.7 | 1450 | J | 85.8 | 7020 | | 119 | 4770 | | 98.1 | 2390 | | 128 | 17300 | | 83.9 |
| Manganese | 7439-96-5 | 11000 | 5900 | 220 | **229** | | 0.29 | **374** | J | 0.29 | **543** | | 0.4 | **453** | | 0.33 | **648** | | 0.43 | **580** | | 0.28 |
| Mercury | 7439-97-6 | 23 | 270 | 0.1 | 0.1 | | 0.0053 | **0.12** | J | 0.005 | **0.27** | | 0.0072 | **0.18** | | 0.0063 | 0.087 | | 0.0074 | 0.065 | | 0.0051 |
| Nickel | 7440-02-0 | 1600 | 23000 | 13.6 | **16.9** | | 0.68 | 7.7 | J | 0.67 | **20** | | 0.92 | **18.7** | | 0.76 | 10.3 | J | 1 | **19.9** | | 0.65 |
| Potassium | 7440-09-7 | | | | 910 | J | 79.6 | 350 | J | 77.8 | 1150 | J | 108 | 1230 | J | 88.9 | 968 | J | 116 | 1060 | J | 76.1 |
| Selenium | 7782-49-2 | 390 | 5700 | 0.21 | ND | U | 0.88 | ND | U | 0.86 | ND | U | 1.2 | ND | U | 0.98 | ND | U | 1.3 | ND | U | 0.84 |
| Silver | 7440-22-4 | 390 | 5700 | 2 | ND | U | 1.5 | ND | UJ | 1.4 | ND | U | 2 | ND | U | 1.6 | ND | U | 2.1 | ND | U | 1.4 |
| Sodium | 7440-23-5 | | | | 237 | J | 113 | 127 | J | 110 | 506 | J | 153 | 492 | J | 126 | 252 | J | 165 | 247 | J | 108 |
| Thallium | 7440-28-0 | | | 1 | ND | U | 0.8 | ND | U | 0.79 | ND | U | 1.1 | ND | U | 0.9 | ND | U | 1.2 | ND | U | 0.77 |
| Vanadium | 7440-62-2 | 370 | 7100 | 2 | **26.3** | | 1.2 | **32.4** | | 1.2 | **45.8** | | 1.6 | **29.5** | | 1.3 | **22.3** | | 1.8 | **41.1** | | 1.2 |
| Zinc | 7440-66-6 | 23000 | 110000 | 6.62 | **83.4** | | 1.4 | **28.7** | J | 1.4 | **107** | | 1.9 | **108** | | 1.6 | **111** | | 2.1 | **117** | | 1.4 |
| Cyanide, Total | 57-12-5 | 47 | 680 | 1.33 | ND | UJ | 0.18 | ND | UJ | 0.17 | ND | UJ | 0.24 | ND | U | 0.19 | ND | U | 0.25 | ND | U | 0.16 |
| **General Chemistry** | | | | | | | | | | | | | | | | | | | | | | |
| Total EPH (C9-C40) | NA | | | | 560 | | 2.9 | 48 | J | 2.7 | 280 | | 3.8 | 140 | | 3.1 | 220 | | 4 | 140 | | 2.7 |
| pH (Standard Units) | NA | | | | 7.4 | | 0.1 | 7.5 | | 0.1 | 7.2 | | 0.1 | 7.3 | | 0.1 | 7.3 | | 0.1 | 7.5 | | 0.1 |
| Total Organic Carbon | NA | | | | 26300 | | 117 | 9410 | J | 109 | 34000 | | 156 | 29900 | | 127 | 49300 | | 0.163 | 24800 | | 108 |

Notes:
Except where noted all results presented in milligrams per kilogram dry weight basis
RDC: Residential Direct Contact
NRDC: Non-Residential Direct Contact
EcoSSL: Ecological Screening Levels and associated notes from NJDEP update dated 3/10/2009: https://www.nj.gov/dep/srp/guidance/ecoscreening/esc_table.pdf
Yellow highlight: Exceeds RDC
**Bold face underlined text: Exceeds Ecological soil screening level**
Blue highlight: MDL exceeds one or more criteria
CASRN: Chemical Abstract Service Registry Number
NA: Not applicable
ND: Not detected
MDL: Method detection limit
Q: Data qualifiers
J : Result is less than the reporting limit but greater than or equal to the MDL and the concentration is an estimated value
U : Indicates the analyte was analyzed for but not detected

**Table 3**

**Sediment Sample Results**

Table 3. Sediment Sample Results
Southeast Leg Pond Area Phase 1 Sampling
Hatco Remediation Project
Woodbridge, New Jersey

| Client ID | | EcoSSL | | SEL-PA-SED01-A-B-0-042320 | | | SEL-PA-SED02-A-B-0-042320 | | | SEL-PA-SED03-A-B-0-042320 | | | SEL-PA-SED04-A-B-0-042320 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | | Lowest Effects Level | Severe Effects Level | 460-207545-11 | | | 460-207545-9 | | | 460-207545-6 | | | 460-207545-10 | | |
| Sample Date and Time | | | | 4/23/2020 14:25 | | | 4/23/2020 13:37 | | | 4/23/2020 11:20 | | | 4/23/2020 15:15 | | |
| Parameters Analyzed | CASRN | | | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL |
| **Volatile Organic Compounds** | | | | | | | | | | | | | | | |
| Acetone | 67-64-1 | | | 0.27 | | 0.0064 | 0.024 | | 0.0076 | 0.011 | J | 0.0056 | 0.16 | | 0.008 |
| Benzene | 71-43-2 | 0.142 [8] | | ND | U | 0.00029 | 0.0011 | J | 0.00034 | 0.0021 | | 0.00025 | 0.013 | | 0.00036 |
| Bromoform | 75-25-2 | 0.492 [8] | | ND | U | 0.00047 | ND | U | 0.00056 | ND | U | 0.00042 | ND | U | 0.00059 |
| Bromomethane | 74-83-9 | 0.00137 [8] | | ND | U | 0.00053 | ND | U | 0.00063 | ND | U | 0.00046 | ND | U | 0.00066 |
| 2-Butanone (MEK) | 78-93-3 | | | ND | U | 0.003 | 0.0055 | J | 0.0036 | ND | UJ | 0.0026 | 0.0067 | J | 0.0038 |
| Carbon disulfide | 75-15-0 | | | ND | U | 0.0003 | ND | U | 0.00035 | ND | U | 0.00026 | ND | U | 0.00037 |
| Carbon tetrachloride | 56-23-5 | 1.45 [8] | | ND | U | 0.00043 | ND | U | 0.00051 | ND | U | 0.00038 | ND | U | 0.00054 |
| Chlorobenzene | 108-90-7 | 0.291 [8] | | ND | U | 0.0002 | ND | U | 0.00023 | ND | U | 0.00017 | ND | U | 0.00025 |
| Chlorobromomethane | 74-97-5 | | | ND | U | 0.00031 | ND | U | 0.00037 | ND | U | 0.00027 | ND | U | 0.00039 |
| Chlorodibromomethane | 124-48-1 | | | ND | U | 0.00022 | ND | U | 0.00026 | ND | U | 0.00019 | ND | U | 0.00027 |
| Chloroethane | 75-00-3 | | | ND | U | 0.00058 | ND | U | 0.00069 | ND | U | 0.00051 | ND | U | 0.00073 |
| Chloroform | 67-66-3 | 0.121 [8] | | ND | U | 0.00035 | ND | U | 0.00042 | ND | U | 0.00031 | ND | U | 0.00045 |
| Chloromethane | 74-87-3 | | | ND | U | 0.00048 | ND | U | 0.00058 | ND | U | 0.00043 | ND | U | 0.00061 |
| Cyclohexane | 110-82-7 | | | ND | U | 0.00025 | ND | U | 0.00029 | ND | U | 0.00022 | ND | U | 0.00031 |
| 1,2-Dibromo-3-Chloropropane | 96-12-8 | | | ND | U | 0.00051 | ND | U | 0.00061 | ND | U | 0.00045 | ND | U | 0.00064 |
| 1,2-Dichlorobenzene | 95-50-1 | 0.294 [8] | | ND | U | 0.00016 | ND | U | 0.00019 | ND | U | 0.00014 | ND | U | 0.0002 |
| 1,3-Dichlorobenzene | 541-73-1 | 1.315 [8] | | ND | U | 0.00018 | ND | U | 0.00021 | ND | U | 0.00016 | ND | U | 0.00022 |
| 1,4-Dichlorobenzene | 106-46-7 | 0.318 [8] | | ND | U | 0.00025 | ND | U | 0.0003 | ND | U | 0.00022 | ND | U | 0.00031 |
| Dichlorobromomethane | 75-27-4 | | | ND | U | 0.00029 | ND | U | 0.00034 | ND | U | 0.00025 | ND | U | 0.00036 |
| Dichlorodifluoromethane | 75-71-8 | | | ND | U | 0.00038 | ND | U | 0.00045 | ND | U | 0.00033 | ND | U | 0.00047 |
| 1,1-Dichloroethane | 75-34-3 | | | ND | U | 0.00023 | ND | U | 0.00027 | ND | U | 0.0002 | ND | U | 0.00029 |
| 1,2-Dichloroethane | 107-06-2 | 0.26 [8] | | ND | U | 0.00033 | ND | U | 0.00039 | ND | U | 0.00029 | ND | U | 0.00041 |
| 1,1-Dichloroethene | 75-35-4 | 0.0194 [8] | | ND | U | 0.00025 | ND | U | 0.0003 | ND | U | 0.00022 | ND | U | 0.00031 |
| cis-1,2-Dichloroethene | 156-59-2 | | | ND | U | 0.00017 | ND | U | 0.0002 | ND | U | 0.00015 | 0.00028 | J | 0.00021 |
| trans-1,2-Dichloroethene | 156-60-5 | 0.654 [8] | | ND | U | 0.00027 | ND | U | 0.00033 | ND | U | 0.00024 | ND | U | 0.00034 |
| 1,2-Dichloropropane | 78-87-5 | 0.333 [8] | | ND | U | 0.00047 | ND | U | 0.00056 | ND | U | 0.00041 | ND | U | 0.00059 |
| cis-1,3-Dichloropropene | 10061-01-5 | | | ND | U | 0.0003 | ND | U | 0.00036 | ND | U | 0.00027 | ND | U | 0.00038 |
| trans-1,3-Dichloropropene | 10061-02-6 | | | ND | U | 0.0003 | ND | U | 0.00035 | ND | U | 0.00026 | ND | U | 0.00037 |
| 1,3-Dichloropropene (cis and trans) | 542-75-6 | | | ND | U | 0.0003 | ND | U | 0.00036 | ND | U | 0.00027 | ND | U | 0.00038 |
| 1,4-Dioxane | 123-91-1 | | | ND | U | 0.01 | ND | UJ | 0.012 | ND | UJ | 0.009 | ND | UJ | 0.013 |
| Ethylbenzene | 100-41-4 | 0.175 [8] | | ND | U | 0.00022 | 0.00029 | J | 0.00026 | ND | U | 0.00019 | 0.00053 | J | 0.00028 |
| Ethylene Dibromide | 106-93-4 | | | ND | U | 0.0002 | ND | U | 0.00024 | ND | U | 0.00018 | ND | U | 0.00025 |
| 2-Hexanone | 591-78-6 | | | ND | U | 0.0019 | ND | U | 0.0023 | ND | U | 0.0017 | ND | U | 0.0024 |
| Isopropylbenzene | 98-82-8 | | | ND | U | 0.00014 | ND | U | 0.00017 | ND | U | 0.00012 | 0.00039 | J | 0.00018 |
| Methyl acetate | 79-20-9 | | | ND | U | 0.0048 | ND | U | 0.0057 | ND | U | 0.0042 | ND | U | 0.006 |
| Methylcyclohexane | 108-87-2 | | | ND | U | 0.00055 | ND | U | 0.00066 | 0.0033 | | 0.00049 | 0.0053 | | 0.0007 |
| Methylene Chloride | 75-09-2 | 0.159 [8] | | ND | U | 0.00052 | ND | U | 0.00061 | ND | U | 0.00045 | ND | U | 0.00065 |
| 4-Methyl-2-pentanone (MIBK) | 108-10-1 | | | ND | U | 0.0017 | ND | U | 0.0021 | ND | U | 0.0015 | ND | U | 0.0022 |
| 2-Methyl-2-propanol | 75-65-0 | | | ND | U | 0.0037 | ND | U | 0.0044 | ND | U | 0.0032 | 0.0086 | J | 0.0046 |
| Methyl tert-butyl ether | 1634-04-4 | | | ND | U | 0.00014 | ND | U | 0.00017 | ND | U | 0.00012 | ND | U | 0.00017 |
| Styrene | 100-42-5 | 0.254 [8] | | ND | U | 0.00031 | ND | U | 0.00037 | ND | U | 0.00027 | ND | U | 0.00039 |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | | | ND | U | 0.00021 | ND | U | 0.00025 | ND | U | 0.00019 | ND | U | 0.00027 |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 0.85 [8] | | ND | UJ | 0.00024 | ND | UJ | 0.00028 | ND | UJ | 0.00021 | ND | UJ | 0.0003 |
| Tetrachloroethene | 127-18-4 | 0.99 [8] | | ND | U | 0.00016 | ND | U | 0.00019 | ND | U | 0.00014 | ND | U | 0.0002 |
| Toluene | 108-88-3 | 1.22 [8] | | ND | U | 0.00026 | 0.0008 | J | 0.00031 | ND | U | 0.00023 | 0.0011 | J | 0.00033 |
| 1,2,3-Trichlorobenzene | 87-61-6 | | | ND | U | 0.0002 | ND | U | 0.00024 | ND | U | 0.00018 | ND | U | 0.00025 |
| 1,2,4-Trichlorobenzene | 120-82-1 | 5.062 [8] | | ND | U | 0.0004 | ND | U | 0.00047 | ND | U | 0.00035 | ND | U | 0.0005 |

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Southeast Leg Pond Area Phase 1 Sampling
Hatco Remediation Project
Woodbridge, New Jersey

| Client ID | | EcoSSL | | SEL-PA-SED01-A-B-0-042320 | | | SEL-PA-SED02-A-B-0-042320 | | | SEL-PA-SED03-A-B-0-042320 | | | SEL-PA-SED04-A-B-0-042320 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | | Lowest Effects Level | Severe Effects Level | 460-207545-11 | | | 460-207545-9 | | | 460-207545-6 | | | 460-207545-10 | | |
| Sample Date and Time | | | | 4/23/2020 14:25 | | | 4/23/2020 13:37 | | | 4/23/2020 11:20 | | | 4/23/2020 15:15 | | |
| Parameters Analyzed | CASRN | | | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL |
| 1,1,1-Trichloroethane | 71-55-6 | 0.213 [8] | | ND | U | 0.00026 | ND | U | 0.00031 | ND | U | 0.00023 | ND | U | 0.00033 |
| 1,1,2-Trichloroethane | 79-00-5 | 0.518 [8] | | ND | UJ | 0.0002 | ND | U | 0.00024 | ND | U | 0.00017 | ND | U | 0.00025 |
| Trichloroethene | 79-01-6 | 0.112 [8] | | ND | U | 0.00016 | ND | U | 0.00019 | ND | U | 0.00014 | ND | U | 0.0002 |
| Trichlorofluoromethane | 75-69-4 | | | ND | U | 0.00045 | ND | U | 0.00054 | ND | U | 0.0004 | ND | U | 0.00057 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 76-13-1 | | | ND | U | 0.00033 | ND | U | 0.0004 | ND | U | 0.00029 | ND | U | 0.00042 |
| Vinyl chloride | 75-01-4 | 0.202 [8] | | ND | U | 0.00061 | ND | U | 0.00072 | ND | U | 0.00053 | ND | U | 0.00076 |
| m-Xylene & p-Xylene | 179601-23-1 | | | ND | U | 0.00019 | ND | U | 0.00023 | ND | U | 0.00017 | 0.0012 | J | 0.00024 |
| o-Xylene | 95-47-6 | | | ND | U | 0.00022 | ND | U | 0.00026 | ND | U | 0.00019 | 0.0017 | | 0.00027 |
| Total xylenes | 1330-20-7 | 0.433 [8] | | ND | U | 0.00022 | ND | U | 0.00026 | ND | U | 0.00019 | 0.0017 | J | 0.00027 |
| Total VOC Conc. | NA | | | 0.27 | J | NA | 0.03169 | J | NA | 0.0164 | J | NA | 0.1988 | J | NA |
| Total VOC TICs | NA | | | ND | U | NA | 0.0709 | U | NA | 0.0463 | U | NA | 2.542 | U | NA |
| **Semivolatile Organic Compounds** | | | | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 0.00671 [8] | | 0.043 | J | 0.033 | 0.035 | J | 0.032 | ND | U | 0.061 | ND | U | 0.074 |
| Acenaphthylene | 208-96-8 | 0.00587 [8] | | ND | U | 0.0047 | ND | U | 0.0045 | ND | U | 0.0087 | ND | U | 0.011 |
| Acetophenone | 98-86-2 | | | ND | U | 0.022 | ND | U | 0.021 | ND | U | 0.041 | ND | U | 0.05 |
| Anthracene | 120-12-7 | 0.0572 [8] | 370 | 0.082 | J | 0.014 | 0.062 | J | 0.013 | ND | U | 0.026 | 0.067 | J | 0.031 |
| Atrazine | 1912-24-9 | | | ND | U | 0.011 | ND | U | 0.011 | ND | U | 0.021 | ND | U | 0.026 |
| Benzaldehyde | 100-52-7 | | | ND | U | 0.02 | ND | U | 0.019 | ND | U | 0.037 | ND | U | 0.045 |
| Benzo[a]anthracene | 56-55-3 | 0.108 [8] | 1480 | 0.31 | | 0.016 | 0.21 | | 0.015 | 0.077 | J | 0.029 | 0.25 | | 0.036 |
| Benzo[a]pyrene | 50-32-8 | 0.15 [8] | 1440 | 0.27 | | 0.012 | 0.21 | | 0.012 | 0.054 | J | 0.022 | 0.2 | | 0.027 |
| Benzo[b]fluoranthene | 205-99-2 | 10.4 [8] | | 0.34 | | 0.012 | 0.25 | | 0.011 | 0.07 | J | 0.022 | 0.25 | | 0.026 |
| Benzo[g,h,i]perylene | 191-24-2 | 0.17 | 320 | 0.13 | J | 0.013 | 0.1 | J | 0.013 | ND | U | 0.025 | 0.11 | J | 0.03 |
| Benzo[k]fluoranthene | 207-08-9 | 0.24 | 1340 | 0.14 | | 0.0089 | 0.085 | | 0.0085 | 0.029 | J | 0.016 | 0.098 | J | 0.02 |
| 1,1'-Biphenyl | 92-52-4 | | | ND | U | 0.006 | ND | U | 0.0058 | ND | U | 0.011 | ND | U | 0.014 |
| Bis(2-chloroethoxy)methane | 111-91-1 | | | ND | U | 0.035 | ND | U | 0.034 | ND | U | 0.065 | ND | U | 0.08 |
| Bis(2-chloroethyl)ether | 111-44-4 | 3.52 [8] | | ND | U | 0.016 | ND | U | 0.015 | ND | U | 0.029 | ND | U | 0.036 |
| Bis(2-ethylhexyl) phthalate | 117-81-7 | 22 [b] | 22 [b] | 8.9 | | 0.024 | 8.4 | | 0.023 | 15 | | 0.044 | 20 | | 0.054 |
| 4-Bromophenyl phenyl ether | 101-55-3 | | | ND | U | 0.018 | ND | U | 0.017 | ND | U | 0.033 | ND | U | 0.041 |
| Butyl benzyl phthalate | 85-68-7 | 1.97 [8] | | 0.029 | J | 0.021 | 0.039 | J | 0.02 | ND | U | 0.039 | ND | U | 0.048 |
| Caprolactam | 105-60-2 | | | ND | U | 0.071 | ND | U | 0.067 | ND | U | 0.13 | ND | U | 0.16 |
| Carbazole | 86-74-8 | | | 0.028 | J | 0.017 | 0.023 | J | 0.017 | ND | U | 0.032 | ND | U | 0.039 |
| 4-Chloroaniline | 106-47-8 | | | ND | U | 0.032 | ND | U | 0.03 | ND | U | 0.059 | ND | U | 0.072 |
| 4-Chloro-3-methylphenol | 59-50-7 | | | ND | U | 0.026 | ND | U | 0.024 | ND | U | 0.047 | ND | U | 0.057 |
| 2-Chloronaphthalene | 91-58-7 | 0.417 [8] | | ND | U | 0.021 | ND | U | 0.02 | ND | U | 0.039 | ND | U | 0.047 |
| 2-Chlorophenol | 95-57-8 | 0.0319 [8] | | ND | U | 0.016 | ND | U | 0.015 | ND | U | 0.03 | ND | U | 0.036 |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | | | ND | U | 0.016 | ND | U | 0.015 | ND | U | 0.03 | ND | U | 0.036 |
| Chrysene | 218-01-9 | 0.166 [8] | 460 | 0.3 | J | 0.0077 | 0.24 | J | 0.0073 | 0.066 | J | 0.014 | 0.26 | J | 0.017 |
| Dibenz(a,h)anthracene | 53-70-3 | 0.033 [8] | 130 | 0.042 | J | 0.02 | 0.036 | J | 0.019 | ND | U | 0.036 | ND | U | 0.044 |
| Dibenzofuran | 132-64-9 | | | 0.039 | J | 0.0064 | 0.025 | J | 0.0061 | ND | U | 0.012 | 0.036 | J | 0.014 |
| 3,3'-Dichlorobenzidine | 91-94-1 | 0.127 [8] | | ND | U | 0.069 | ND | U | 0.065 | ND | U | 0.13 | ND | U | 0.15 |
| 2,4-Dichlorophenol | 120-83-2 | 0.0817 [8] | | ND | U | 0.029 | ND | U | 0.028 | ND | U | 0.054 | ND | U | 0.066 |
| Diethyl phthalate | 84-66-2 | 0.295 [8] | | ND | U | 0.0066 | ND | U | 0.0063 | ND | U | 0.012 | ND | U | 0.015 |
| Dimethyl phthalate | 131-11-3 | | | ND | U | 0.1 | ND | U | 0.098 | ND | U | 0.19 | ND | U | 0.23 |
| 2,4-Dimethylphenol | 105-67-9 | 0.304 [8] | | ND | U | 0.02 | ND | U | 0.019 | ND | U | 0.037 | ND | U | 0.045 |
| Di-n-butyl phthalate | 84-74-2 | 1.114 [8] | 0.11 [15] | ND | U | 0.08 | ND | U | 0.076 | ND | U | 0.15 | ND | U | 0.18 |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | | | ND | U | 0.074 | ND | U | 0.07 | ND | U | 0.14 | ND | U | 0.17 |
| 2,4-Dinitrophenol | 51-28-5 | 0.00621 [8] | | ND | U | 0.22 | ND | U | 0.21 | ND | U | 0.41 | ND | U | 0.5 |
| 2,4-Dinitrotoluene | 121-14-2 | 0.0144 [8] | | ND | U | 0.049 | ND | U | 0.047 | ND | U | 0.09 | ND | U | 0.11 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | | Lowest Effects Level | Severe Effects Level | 460-207545-11 | | | 460-207545-9 | | | 460-207545-6 | | | 460-207545-10 | | |
| Sample Date and Time | | | | 4/23/2020 14:25 | | | 4/23/2020 13:37 | | | 4/23/2020 11:20 | | | 4/23/2020 15:15 | | |
| Parameters Analyzed | CASRN | | | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL |
| 2,6-Dinitrotoluene | 606-20-2 | | | ND | U | 0.033 | ND | U | 0.031 | ND | U | 0.061 | ND | U | 0.074 |
| Di-n-octyl phthalate | 117-84-0 | | | ND | U | 0.024 | ND | U | 0.023 | ND | U | 0.045 | ND | U | 0.054 |
| Fluoranthene | 206-44-0 | 0.423 [8] | 1020 | 0.48 | | 0.016 | 0.36 | J | 0.015 | 0.14 | J | 0.029 | 0.51 | J | 0.036 |
| Fluorene | 86-73-7 | 0.0774 [8] | 160 | 0.088 | J | 0.0062 | 0.08 | J | 0.0059 | ND | U | 0.011 | 0.067 | J | 0.014 |
| Hexachlorobenzene | 118-74-1 | 0.02 | 24 | ND | U | 0.022 | ND | U | 0.021 | ND | U | 0.04 | ND | U | 0.049 |
| Hexachlorobutadiene | 87-68-3 | 0.0265 [8] | | ND | U | 0.0097 | ND | U | 0.0092 | ND | U | 0.018 | ND | U | 0.022 |
| Hexachlorocyclopentadiene | 77-47-4 | 0.901 [8] | | ND | U | 0.04 | ND | U | 0.038 | ND | U | 0.074 | ND | U | 0.09 |
| Hexachloroethane | 67-72-1 | 0.584 [8] | | ND | U | 0.016 | ND | U | 0.015 | ND | U | 0.029 | ND | U | 0.035 |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 0.2 | 320 | 0.15 | | 0.018 | 0.11 | | 0.017 | 0.073 | J | 0.033 | 0.16 | | 0.04 |
| Isophorone | 78-59-1 | 0.432 [8] | | ND | U | 0.13 | ND | U | 0.13 | ND | U | 0.24 | ND | U | 0.3 |
| 2-Methylnaphthalene | 91-57-6 | 0.0202 [8] | | 0.034 | J | 0.013 | 0.029 | J | 0.012 | ND | U | 0.024 | 0.037 | J | 0.029 |
| 2-Methylphenol | 95-48-7 | | | ND | U | 0.017 | ND | U | 0.016 | ND | U | 0.031 | ND | U | 0.038 |
| 4-Methylphenol | 106-44-5 | | | ND | U | 0.028 | ND | U | 0.027 | ND | U | 0.053 | ND | U | 0.064 |
| Naphthalene | 91-20-3 | 0.176 [8] | | 0.18 | J | 0.0079 | 0.11 | J | 0.0075 | 0.11 | J | 0.015 | 10 | | 0.018 |
| 2-Nitroaniline | 88-74-4 | | | ND | U | 0.017 | ND | U | 0.016 | ND | U | 0.031 | ND | U | 0.038 |
| 3-Nitroaniline | 99-09-2 | | | ND | U | 0.051 | ND | U | 0.049 | ND | U | 0.095 | ND | U | 0.12 |
| 4-Nitroaniline | 100-01-6 | | | ND | U | 0.052 | ND | U | 0.05 | ND | U | 0.097 | ND | U | 0.12 |
| 2-Nitrophenol | 88-75-5 | | | ND | U | 0.046 | ND | U | 0.043 | ND | U | 0.084 | ND | U | 0.1 |
| 4-Nitrophenol | 100-02-7 | 0.0133 [8] | | ND | U | 0.074 | ND | U | 0.071 | ND | U | 0.14 | ND | U | 0.17 |
| Nitrobenzene | 98-95-3 | 0.145 [8] | | ND | U | 0.011 | ND | U | 0.01 | ND | U | 0.02 | ND | U | 0.025 |
| N-Nitrosodi-n-propylamine | 621-64-7 | | | ND | U | 0.033 | ND | U | 0.031 | ND | U | 0.061 | ND | U | 0.074 |
| N-Nitrosodiphenylamine | 86-30-6 | | | ND | U | 0.0087 | ND | U | 0.0083 | ND | U | 0.016 | ND | U | 0.02 |
| 2,2'-oxybis[1-chloropropane] | 108-60-1 | | | ND | U | 0.0082 | ND | U | 0.0078 | ND | U | 0.015 | ND | U | 0.019 |
| Pentachlorophenol | 87-86-5 | 23 [8] | | ND | U | 0.093 | ND | U | 0.089 | ND | U | 0.17 | ND | U | 0.21 |
| Phenanthrene | 85-01-8 | 0.204 [8] | 950 | 0.44 | J | 0.008 | 0.38 | J | 0.0076 | 0.12 | J | 0.015 | 0.32 | J | 0.018 |
| Phenol | 108-95-2 | 0.0491 [8] | 0.048 [15] | ND | U | 0.017 | ND | U | 0.016 | ND | U | 0.031 | ND | U | 0.038 |
| Pyrene | 129-00-0 | 0.195 [8] | 850 | 0.69 | | 0.011 | 0.56 | | 0.011 | 0.14 | J | 0.021 | 0.51 | J | 0.025 |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | | | ND | U | 0.014 | ND | U | 0.014 | ND | U | 0.026 | ND | U | 0.032 |
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | | | ND | U | 0.031 | ND | U | 0.029 | ND | U | 0.057 | ND | U | 0.069 |
| 2,4,5-Trichlorophenol | 95-95-4 | | | ND | U | 0.046 | ND | U | 0.044 | ND | U | 0.086 | ND | U | 0.1 |
| 2,4,6-Trichlorophenol | 88-06-2 | 0.208 [8] | | ND | U | 0.058 | ND | U | 0.056 | ND | U | 0.11 | ND | U | 0.13 |
| Total SVOC Conc. | NA | | | 12.715 | J | NA | 11.344 | J | NA | 15.879 | J | NA | 32.875 | J | NA |
| **Pesticides** | | | | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 0.002 | 8 | ND | U | 0.0014 | ND | U | 0.0013 | ND | U | 0.0013 | ND | U | 0.0016 |
| alpha-BHC | 319-84-6 | 0.006 | 10 | ND | U | 0.00094 | ND | U | 0.00089 | ND | U | 0.00086 | ND | U | 0.0011 |
| beta-BHC | 319-85-7 | 0.005 | 21 | ND | U | 0.001 | ND | U | 0.00098 | ND | U | 0.00095 | ND | U | 0.0012 |
| delta-BHC | 319-86-8 | | | ND | U | 0.00056 | ND | U | 0.00054 | ND | U | 0.00052 | ND | U | 0.00063 |
| gamma-BHC (Lindane) | 58-89-9 | 0.003 | 1 | ND | U | 0.00085 | ND | U | 0.00081 | ND | U | 0.00079 | ND | U | 0.00096 |
| Chlordane (technical) | 12789-03-6 | | | ND | U | 0.022 | ND | U | 0.021 | ND | U | 0.021 | ND | U | 0.025 |
| 4,4'-DDD | 72-54-8 | 0.00488 [8] | 6 | ND | U | 0.0016 | ND | U | 0.0015 | ND | U | 0.0014 | ND | U | 0.0018 |
| 4,4'-DDE | 72-55-9 | 0.00316 [8] | 19 | ND | U | 0.0011 | ND | U | 0.001 | ND | U | 0.001 | ND | U | 0.0012 |
| 4,4'-DDT | 50-29-3 | 0.00416 [8] | 71 | ND | U | 0.0017 | ND | U | 0.0016 | ND | U | 0.0016 | ND | U | 0.0019 |
| Dieldrin | 60-57-1 | 0.0019 [8] | 91 | ND | U | 0.0012 | ND | U | 0.0011 | ND | U | 0.0011 | ND | U | 0.0013 |
| Endosulfan I | 959-98-8 | | | ND | U | 0.0014 | ND | U | 0.0013 | ND | U | 0.0013 | ND | U | 0.0016 |
| Endosulfan II | 33213-65-9 | | | ND | U | 0.0024 | ND | U | 0.0023 | ND | U | 0.0022 | ND | U | 0.0027 |
| Endosulfans (I and II) | 115-29-7 | | | ND | U | 0.0024 | ND | U | 0.0023 | ND | U | 0.0022 | ND | U | 0.0027 |
| Endosulfan sulfate | 1031-07-8 | 0.0346 [8] | | ND | U | 0.0012 | ND | U | 0.0011 | ND | U | 0.0011 | ND | U | 0.0013 |

Table 3. Sediment Sample Results
Southeast Leg Pond Area Phase 1 Sampling
Hatco Remediation Project
Woodbridge, New Jersey

| Client ID | | EcoSSL | | SEL-PA-SED01-A-B-0-042320 | | | SEL-PA-SED02-A-B-0-042320 | | | SEL-PA-SED03-A-B-0-042320 | | | SEL-PA-SED04-A-B-0-042320 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | | Lowest Effects Level | Severe Effects Level | 460-207545-11 | | | 460-207545-9 | | | 460-207545-6 | | | 460-207545-10 | | |
| Sample Date and Time | | | | 4/23/2020 14:25 | | | 4/23/2020 13:37 | | | 4/23/2020 11:20 | | | 4/23/2020 15:15 | | |
| Parameters Analyzed | CASRN | | | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL |
| Endrin | 72-20-8 | 0.00222 [8] | 130 | ND | U | 0.0013 | ND | U | 0.0013 | ND | U | 0.0012 | ND | U | 0.0015 |
| Endrin aldehyde | 7421-93-4 | 0.48 [8] | | ND | U | 0.0022 | ND | U | 0.0021 | ND | U | 0.002 | ND | U | 0.0024 |
| Endrin ketone | 53494-70-5 | | | ND | U | 0.0018 | ND | U | 0.0017 | ND | U | 0.0017 | ND | U | 0.002 |
| Heptachlor | 76-44-8 | 0.0006 [8] | 0.01 [15] | ND | U | 0.0011 | ND | U | 0.001 | ND | U | 0.001 | ND | U | 0.0012 |
| Heptachlor epoxide | 1024-57-3 | 0.00247 [8] | 5 | ND | U | 0.0014 | ND | U | 0.0013 | ND | U | 0.0013 | ND | U | 0.0015 |
| Methoxychlor | 72-43-5 | 0.0136 [8] | | ND | U | 0.0021 | ND | U | 0.002 | ND | U | 0.0019 | ND | U | 0.0024 |
| Toxaphene | 8001-35-2 | 0.000077 [8] | | ND | U | 0.033 | ND | U | 0.032 | ND | U | 0.031 | ND | U | 0.037 |
| **PCBs** | | | | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | 1 [a] | | ND | U | 0.012 | ND | U | 0.012 | ND | U | 0.011 | ND | U | 0.14 |
| Aroclor 1221 | 11104-28-2 | 1 [a] | | ND | U | 0.012 | ND | U | 0.012 | ND | U | 0.011 | ND | U | 0.14 |
| Aroclor 1232 | 11141-16-5 | 1 [a] | | ND | U | 0.012 | ND | U | 0.012 | ND | U | 0.011 | ND | U | 0.14 |
| Aroclor 1242 | 53469-21-9 | 1 [a] | | ND | U | 0.012 | ND | U | 0.012 | ND | U | 0.011 | ND | U | 0.14 |
| Aroclor 1248 | 12672-29-6 | 1 [a] | | 0.27 | | 0.012 | 0.46 | | 0.012 | 0.39 | | 0.011 | 18 | | 0.14 |
| Aroclor 1254 | 11097-69-1 | 1 [a] | | ND | U | 0.013 | ND | U | 0.012 | ND | U | 0.012 | ND | U | 0.14 |
| Aroclor 1260 | 11096-82-5 | 1 [a] | | ND | U | 0.013 | ND | U | 0.012 | ND | U | 0.012 | ND | U | 0.14 |
| Aroclor 1262 | 37324-23-5 | 1 [a] | | ND | U | 0.013 | ND | U | 0.012 | ND | U | 0.012 | ND | U | 0.14 |
| Aroclor 1268 | 11100-14-4 | 1 [a] | | ND | U | 0.013 | ND | U | 0.012 | ND | U | 0.012 | ND | U | 0.14 |
| Total PCBs | 1336-36-3 | 1 [a] | | 0.27 | | 0.013 | 0.46 | | 0.012 | 0.39 | | 0.012 | 18 | | 0.14 |
| **Herbicides** | | | | | | | | | | | | | | | |
| 2,4,5-T | 93-76-5 | | | ND | U | 0.0097 | ND | U | 0.0093 | ND | U | 0.009 | ND | U | 0.011 |
| 2,4-D | 94-75-7 | | | ND | U | 0.017 | ND | U | 0.016 | ND | U | 0.015 | ND | U | 0.019 |
| Silvex (2,4,5-TP) | 93-72-1 | | | ND | U | 0.0048 | ND | U | 0.0045 | ND | U | 0.0044 | ND | U | 0.0054 |
| **Inorganics** | | | | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | 0.0255 [15] | | 7730 | | 7.1 | 5960 | | 6.9 | 5610 | | 6.8 | 9440 | | 8.1 |
| Antimony | 7440-36-0 | | 3 [15] | ND | U | 1.5 | ND | U | 1.4 | ND | U | 1.4 | ND | U | 1.6 |
| Arsenic | 7440-38-2 | 9.979 [8] | 33 | 5.4 | | 0.78 | 3.8 | | 0.75 | 3.3 | J | 0.74 | 5.4 | | 0.88 |
| Barium | 7440-39-3 | | | 51.5 | | 4.9 | 39.4 | J | 4.7 | 28.7 | J | 4.7 | 60.5 | | 5.5 |
| Beryllium | 7440-41-7 | | | 0.52 | | 0.081 | 0.29 | J | 0.078 | 0.27 | J | 0.077 | 0.17 | J | 0.092 |
| Cadmium | 7440-43-9 | 0.99 [8] | 10 | ND | U | 0.087 | ND | U | 0.084 | ND | U | 0.083 | 0.14 | J | 0.099 |
| Calcium | 7440-70-2 | | | 4950 | | 93.2 | 4350 | | 90.5 | 3000 | | 89.4 | 5570 | | 106 |
| Chromium | 7440-47-3 | 43.4 [8] | 110 | 63.5 | | 1.8 | 44.9 | | 1.7 | 29.9 | | 1.7 | 27.8 | | 2 |
| Hexavalent Chromium | 18540-29-9 | | | ND | U | 0.48 | ND | U | 0.46 | ND | U | 0.45 | ND | U | 0.54 |
| Cobalt | 7440-48-4 | 50 [8] | | 6.2 | J | 0.7 | 7.2 | J | 0.68 | 3.6 | J | 0.67 | 8.7 | J | 0.79 |
| Copper | 7440-50-8 | 31.6 [8] | 110 | 50.7 | | 1.6 | 30.3 | | 1.5 | 18.2 | | 1.5 | 33.6 | | 1.8 |
| Iron | 7439-89-6 | | | 18900 | | 26 | 15900 | | 25.2 | 10700 | | 24.9 | 16400 | | 29.5 |
| Lead | 7439-92-1 | 35.8 [8] | 250 | 34.4 | | 0.41 | 19.1 | | 0.4 | 23.3 | | 0.39 | 64.6 | | 0.46 |
| Magnesium | 7439-95-4 | | | 2100 | | 85.4 | 2010 | | 82.9 | 1480 | | 81.9 | 3040 | | 96.9 |
| Manganese | 7439-96-5 | 630 [15] | 1100 [15] | 418 | | 0.28 | 276 | | 0.28 | 250 | | 0.27 | 387 | | 0.32 |
| Mercury | 7439-97-6 | 0.174 [8] | 2 | 0.076 | | 0.0052 | 0.02 | J | 0.0051 | 0.025 | | 0.0048 | 0.094 | | 0.0055 |
| Nickel | 7440-02-0 | 22.7 [8] | 75 | 10.6 | | 0.66 | 12.5 | | 0.64 | 6.7 | J | 0.64 | 15.3 | | 0.75 |
| Potassium | 7440-09-7 | | | 566 | J | 77.5 | 439 | J | 75.2 | 412 | J | 74.3 | 934 | J | 87.9 |
| Selenium | 7782-49-2 | | | ND | U | 0.86 | ND | U | 0.83 | ND | U | 4.8 | ND | U | 0.97 |
| Silver | 7440-22-4 | 0.5 [8] | | ND | U | 1.4 | ND | U | 1.4 | ND | U | 1.4 | ND | U | 1.6 |
| Sodium | 7440-23-5 | | | 220 | J | 110 | 238 | J | 106 | 113 | J | 105 | 329 | J | 125 |
| Thallium | 7440-28-0 | | | ND | U | 0.78 | ND | U | 0.76 | ND | U | 0.75 | ND | U | 0.89 |
| Vanadium | 7440-62-2 | | | 61.8 | | 1.2 | 47.5 | | 1.1 | 38.9 | | 1.1 | 33.8 | | 1.3 |
| Zinc | 7440-66-6 | 121 [8] | 820 | 35.3 | | 1.4 | 25.9 | | 1.3 | 32 | | 1.3 | 74.1 | | 1.6 |

Table 3. Sediment Sample Results
Southeast Leg Pond Area Phase 1 Sampling
Hatco Remediation Project
Woodbridge, New Jersey

| Client ID | | EcoSSL | | SEL-PA-SED01-A-B-0-042320 | | | SEL-PA-SED02-A-B-0-042320 | | | SEL-PA-SED03-A-B-0-042320 | | | SEL-PA-SED04-A-B-0-042320 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID | | Lowest | Severe | 460-207545-11 | | | 460-207545-9 | | | 460-207545-6 | | | 460-207545-10 | | |
| Sample Date and Time | | Effects | Effects | 4/23/2020 14:25 | | | 4/23/2020 13:37 | | | 4/23/2020 11:20 | | | 4/23/2020 15:15 | | |
| Parameters Analyzed | CASRN | Level | Level | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL | Result | Q | MDL |
| Cyanide, Total | 57-12-5 | 0.0001 [8] | | ND | U | 0.17 | ND | UJ | 0.16 | ND | U | 0.16 | ND | U | 0.19 |
| **General Chemistry** | | | | | | | | | | | | | | | |
| Total EPH (C9-C40) | NA | | | 120 | | 2.8 | 140 | | 2.6 | 34 | J | 2.5 | 500 | | 3.1 |
| pH (Standard Units) | NA | | | 7 | | 0.1 | 7.1 | | 0.1 | 7.4 | | 0.1 | 7.1 | | 0.1 |
| Total Organic Carbon | NA | | | 16800 | | 112 | 16800 | | 106 | 9320 | | 0.103 | 29700 | | 126 |

Notes:
EcoSSL: Ecological Screening Levels and associated notes from NJDEP update dated 3/10/2009: https://www.nj.gov/dep/srp/guidance/ecoscreening/esc_table.pdf
[8]: USEPA Region 5, RCRA Ecological Screening Levels (ESLs) represent a protective benchmark (e.g., water quality criteria, sediment quality guidelines/ criteria, and chronic no adverse effect levels) for 223 contaminants and are not intended to serve as cleanup levels, but are intended to function as screening levels. http://www.epa.gov/reg5rcra/ca/ESL.pdf
[15]: Sediment value from NOAA Screening Quick Reference Tables (SQuiRTs).
[a]: Site specific sediment criterion for PCBs is 1 mg/kg
[b]: BEHP screening evaluation of 22 mg/kg based on Alternate Remediation Standard previously approved for Woodbridge Pond remediation
Yellow highlight: Exceeds Lowest Effects Level EcoSSL
Blue highlight: MDL exceeds one or screening criteria
CASRN: Chemical Abstract Service Registry Number
NA: Not applicable
ND: Not detected
MDL: Method detection limit
Q: Data qualifiers
J : Result is less than the reporting limit but greater than or equal to the MDL and the concentration is an estimated value
U : Indicates the analyte was analyzed for but not detected.

**Table 4**

**Clean Fill Data Summary**

Table 4. Clean Fill Data Summary
Southeast Leg Pond Area Phase 1 Sampling
Hatco Remediation Project
Woodbridge, New Jersey

| Sample Identification | | 14103-CF-02/03 | 1400101-03 | CF-BUCH-01 | ET-TP7 (4.5-5) | ET-TP7 (11-11.5) | ET-BS22 (5-5.5) | ET-BS22 (9-9.5) | ET-BS23 (5-5.5) | ET-BS24 (5-5.5) | GES_SB3_0.5 | GES_TP4_0.5 | GES_TP7_0.5 | GES_TP15_0.5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Laboratory Sample Number | | 3/5/2014 | 1/17/2014 | 11/5/2014 | 10/8/2014 | 10/8/2014 | 10/9/2014 | 10/9/2014 | 10/9/2014 | 10/9/2014 | 6/24/2014 | 6/25/2014 | 6/25/2014 | 6/25/2014 |
| Sample Date and Time | | F1563 | 1400103 | F4620-01 | JB78845 | JB78845 | JB78959 | JB78959 | JB78959 | JB78959 | 4060795 | 4060831 | 4060831 | 4060831 |
| Parameters Analyzed | CASRN | Result | Result | Result | Result | Result | Result | Result | Result | Result | Result | Result | Result | Result |
| **Volatile Organic Compounds** | | | | | | | | | | | | | | |
| Acetone | 67-64-1 | ND | ND | ND | 0.0234 | ND | ND | 0.0244 | ND | ND | --- | ND | ND | ND |
| Benzene | 71-43-2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Bromoform | 75-25-2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Bromomethane | 74-83-9 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 2-Butanone (MEK) | 78-93-3 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Carbon disulfide | 75-15-0 | ND | ND | ND | 0.0013 | ND | 0.00089 | ND | ND | ND | --- | ND | ND | ND |
| Carbon tetrachloride | 56-23-5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Chlorobenzene | 108-90-7 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Chlorobromomethane | 74-97-5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Chlorodibromomethane | 124-48-1 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Chloroethane | 75-00-3 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Chloroform | 67-66-3 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Chloromethane | 74-87-3 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Cyclohexane | 110-82-7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1,2-Dibromo-3-Chloropropane | 96-12-8 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 1,2-Dichlorobenzene | 95-50-1 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 1,3-Dichlorobenzene | 541-73-1 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 1,4-Dichlorobenzene | 106-46-7 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Dichlorobromomethane | 75-27-4 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Dichlorodifluoromethane | 75-71-8 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 1,1-Dichloroethane | 75-34-3 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 1,2-Dichloroethane | 107-06-2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 1,1-Dichloroethene | 75-35-4 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| cis-1,2-Dichloroethene | 156-59-2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | --- | --- |
| trans-1,2-Dichloroethene | 156-60-5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 1,2-Dichloropropane | 78-87-5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| trans-1,3-Dichloropropene | 10061-02-6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1,3-Dichloropropene (cis and trans) | 542-75-6 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 1,4-Dioxane | 123-91-1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ethylbenzene | 100-41-4 | ND | --- | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Ethylene Dibromide | 106-93-4 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 2-Hexanone | 591-78-6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Isopropylbenzene | 98-82-8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Methyl acetate | 79-20-9 | ND | --- | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Methylcyclohexane | 108-87-2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Methylene Chloride | 75-09-2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 4-Methyl-2-pentanone (MIBK) | 108-10-1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2-Methyl-2-propanol (TBA) | 75-65-0 | ND | ND | ND | --- | --- | --- | --- | --- | --- | --- | ND | ND | ND |
| Methyl tert-butyl ether | 1634-04-4 | ND | ND | ND | ND | ND | ND | ND | 0.0005 | ND | --- | ND | ND | ND |
| Styrene | 100-42-5 | ND | --- | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Tetrachloroethene | 127-18-4 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Toluene | 108-88-3 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | 0.000647 | ND | ND |
| 1,2,3-Trichlorobenzene | 87-61-6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1,2,4-Trichlorobenzene | 120-82-1 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 1,1,1-Trichloroethane | 71-55-6 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 1,1,2-Trichloroethane | 79-00-5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Trichloroethene | 79-01-6 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Trichlorofluoromethane | 75-69-4 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 76-13-1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Vinyl chloride | 75-01-4 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |

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Hatco Remediation Project
Woodbridge, New Jersey

| Sample Identification | | 14103-CF-02/03 | 1400101-03 | CF-BUCH-01 | ET-TP7 (4.5-5) | ET-TP7 (11-11.5) | ET-BS22 (5-5.5) | ET-BS22 (9-9.5) | ET-BS23 (5-5.5) | ET-BS24 (5-5.5) | GES_SB3_0.5 | GES_TP4_0.5 | GES_TP7_0.5 | GES_TP15_0.5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Laboratory Sample Number | | 3/5/2014 | 1/17/2014 | 11/5/2014 | 10/8/2014 | 10/8/2014 | 10/9/2014 | 10/9/2014 | 10/9/2014 | 10/9/2014 | 6/24/2014 | 6/25/2014 | 6/25/2014 | 6/25/2014 |
| Sample Date and Time | | F1563 | 1400103 | F4620-01 | JB78845 | JB78845 | JB78959 | JB78959 | JB78959 | JB78959 | 4060795 | 4060831 | 4060831 | 4060831 |
| Parameters Analyzed | CASRN | Result | Result | Result | Result | Result | Result | Result | Result | Result | Result | Result | Result | Result |
| m-Xylene & p-Xylene | 179601-23-1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| o-Xylene | 95-47-6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Total xylenes | 1330-20-7 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Total VOC Conc. | NA | ND | ND | ND | 0.0247 | ND | 0.00089 | 0.0244 | 0.0005 | ND | ND | 0.000647 | ND | ND |
| Total VOC TICs | NA | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Semivolatile Organic Compounds** | | | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Acenaphthylene | 208-96-8 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Acetophenone | 98-86-2 | ND | --- | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Anthracene | 120-12-7 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Atrazine | 1912-24-9 | ND | --- | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Benzaldehyde | 100-52-7 | ND | --- | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Benzo[a]anthracene | 56-55-3 | ND | ND | ND | ND | ND | 0.0181 | ND | ND | ND | 0.0509 | ND | 0.0858 | 0.0485 |
| Benzo[a]pyrene | 50-32-8 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.0575 | ND |
| Benzo[b]fluoranthene | 205-99-2 | ND | ND | ND | ND | ND | 0.0166 | ND | ND | ND | 0.0523 | ND | 0.0735 | ND |
| Benzo[g,h,i]perylene | 191-24-2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Benzo[k]fluoranthene | 207-08-9 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.0378 | ND |
| 1,1'-Biphenyl | 92-52-4 | ND | --- | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Bis(2-chloroethoxy)methane | 111-91-1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Bis(2-chloroethyl)ether | 111-44-4 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Bis(2-ethylhexyl) phthalate | 117-81-7 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | 0.0524 | ND |
| 4-Bromophenyl phenyl ether | 101-55-3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Butyl benzyl phthalate | 85-68-7 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Caprolactam | 105-60-2 | ND | --- | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Carbazole | 86-74-8 | ND | --- | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 4-Chloroaniline | 106-47-8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4-Chloro-3-methylphenol | 59-50-7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2-Chloronaphthalene | 91-58-7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2-Chlorophenol | 95-57-8 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Chrysene | 218-01-9 | ND | ND | ND | ND | ND | 0.0178 | ND | ND | ND | 0.0101 | ND | 0.0618 | 0.0455 |
| Dibenz(a,h)anthracene | 53-70-3 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Dibenzofuran | 132-64-9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3,3'-Dichlorobenzidine | 91-94-1 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 2,4-Dichlorophenol | 120-83-2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Diethyl phthalate | 84-66-2 | 0.00015 | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Dimethyl phthalate | 131-11-3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2,4-Dimethylphenol | 105-67-9 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Di-n-butyl phthalate | 84-74-2 | ND | ND | ND | ND | ND | ND | 0.0721 | 0.0743 | ND | --- | ND | ND | ND |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 2,4-Dinitrophenol | 51-28-5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 2,4-Dinitrotoluene | 121-14-2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 2,6-Dinitrotoluene | 606-20-2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Di-n-octyl phthalate | 117-84-0 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Fluoranthene | 206-44-0 | ND | ND | ND | ND | ND | 0.0275 | ND | ND | ND | 0.0795 | 0.0452 | 0.118 | 0.0656 |
| Fluorene | 86-73-7 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Hexachlorobenzene | 118-74-1 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Hexachlorobutadiene | 87-68-3 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Hexachlorocyclopentadiene | 77-47-4 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Hexachloroethane | 67-72-1 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Isophorone | 78-59-1 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 2-Methylnaphthalene | 91-57-6 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 2-Methylphenol | 95-48-7 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |

Table 4. Clean Fill Data Summary
Southeast Leg Pond Area Phase 1 Sampling
Hatco Remediation Project
Woodbridge, New Jersey

| Sample Identification | | 14103-CF-02/03 | 1400101-03 | CF-BUCH-01 | ET-TP7 (4.5-5) | ET-TP7 (11-11.5) | ET-BS22 (5-5.5) | ET-BS22 (9-9.5) | ET-BS23 (5-5.5) | ET-BS24 (5-5.5) | GES_SB3_0.5 | GES_TP4_0.5 | GES_TP7_0.5 | GES_TP15_0.5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Laboratory Sample Number | | 3/5/2014 | 1/17/2014 | 11/5/2014 | 10/8/2014 | 10/8/2014 | 10/9/2014 | 10/9/2014 | 10/9/2014 | 10/9/2014 | 6/24/2014 | 6/25/2014 | 6/25/2014 | 6/25/2014 |
| Sample Date and Time | | F1563 | 1400103 | F4620-01 | JB78845 | JB78845 | JB78959 | JB78959 | JB78959 | JB78959 | 4060795 | 4060831 | 4060831 | 4060831 |
| Parameters Analyzed | CASRN | Result | Result | Result | Result | Result | Result | Result | Result | Result | Result | Result | Result | Result |
| 4-Methylphenol | 106-44-5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Naphthalene | 91-20-3 | ND | ND | ND | ND | ND | ND | ND | ND | 0.0791 | ND | ND | ND | ND |
| 2-Nitroaniline | 88-74-4 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 3-Nitroaniline | 99-09-2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4-Nitroaniline | 100-01-6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2-Nitrophenol | 88-75-5 | ND | ND | --- | ND | ND | ND | ND | ND | ND | --- | ND | --- | --- |
| 4-Nitrophenol | 100-02-7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Nitrobenzene | 98-95-3 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| N-Nitrosodi-n-propylamine | 621-64-7 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| N-Nitrosodiphenylamine | 86-30-6 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 2,2'-oxybis[1-chloropropane] | 108-60-1 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Pentachlorophenol | 87-86-5 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Phenanthrene | 85-01-8 | ND | ND | ND | ND | ND | 0.0178 | ND | ND | ND | 0.0473 | ND | 0.064 | ND |
| Phenol | 108-95-2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Pyrene | 129-00-0 | ND | ND | ND | ND | ND | 0.029 | ND | ND | ND | 0.0652 | 0.0445 | 0.112 | 0.0604 |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2,4,5-Trichlorophenol | 95-95-4 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 2,4,6-Trichlorophenol | 88-06-2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Total SVOC Conc. | NA | 0.00015 | ND | ND | ND | ND | 0.0921 | 0.0721 | 0.0743 | 0.0791 | 0.2021 | 0.0897 | 0.4082 | 0.1715 |
| **Pesticides** | | | | | | | | | | | | | | |
| Aldrin | 309-00-2 | --- | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| alpha-BHC | 319-84-6 | --- | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| beta-BHC | 319-85-7 | --- | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| delta-BHC | 319-86-8 | --- | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| gamma-BHC (Lindane) | 58-89-9 | --- | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Chlordane (technical) | 12789-03-6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4,4'-DDD | 72-54-8 | --- | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| 4,4'-DDE | 72-55-9 | --- | ND | ND | ND | ND | 0.00087 | ND | ND | ND | --- | ND | ND | ND |
| 4,4'-DDT | 50-29-3 | --- | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Dieldrin | 60-57-1 | --- | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Endosulfan I | 959-98-8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Endosulfan II | 33213-65-9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Endosulfans (I and II) | 115-29-7 | --- | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Endosulfan sulfate | 1031-07-8 | --- | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Endrin | 72-20-8 | --- | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Endrin aldehyde | 7421-93-4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Endrin ketone | 53494-70-5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Heptachlor | 76-44-8 | --- | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Heptachlor epoxide | 1024-57-3 | --- | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Methoxychlor | 72-43-5 | --- | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Toxaphene | 8001-35-2 | --- | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| **PCBs** | | | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | --- | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Aroclor 1221 | 11104-28-2 | --- | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Aroclor 1232 | 11141-16-5 | --- | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Aroclor 1242 | 53469-21-9 | --- | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Aroclor 1248 | 12672-29-6 | --- | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Aroclor 1254 | 11097-69-1 | --- | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Aroclor 1260 | 11096-82-5 | --- | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| Aroclor 1262 | 37324-23-5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Aroclor 1268 | 11100-14-4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Total PCBs | 1336-36-3 | --- | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| **Herbicides** | | | | | | | | | | | | | | |

Table 4. Clean Fill Data Summary
Southeast Leg Pond Area Phase 1 Sampling
Hatco Remediation Project
Woodbridge, New Jersey

| Sample Identification | | 14103-CF-02/03 | 1400101-03 | CF-BUCH-01 | ET-TP7 (4.5-5) | ET-TP7 (11-11.5) | ET-BS22 (5-5.5) | ET-BS22 (9-9.5) | ET-BS23 (5-5.5) | ET-BS24 (5-5.5) | GES_SB3_0.5 | GES_TP4_0.5 | GES_TP7_0.5 | GES_TP15_0.5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Laboratory Sample Number | | 3/5/2014 | 1/17/2014 | 11/5/2014 | 10/8/2014 | 10/8/2014 | 10/9/2014 | 10/9/2014 | 10/9/2014 | 10/9/2014 | 6/24/2014 | 6/25/2014 | 6/25/2014 | 6/25/2014 |
| Sample Date and Time | | F1563 | 1400103 | F4620-01 | JB78845 | JB78845 | JB78959 | JB78959 | JB78959 | JB78959 | 4060795 | 4060831 | 4060831 | 4060831 |
| Parameters Analyzed | CASRN | Result | Result | Result | Result | Result | Result | Result | Result | Result | Result | Result | Result | Result |
| 2,4,5-T | 93-76-5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2,4-D | 94-75-7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Silvex (2,4,5-TP) | 93-72-1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Inorganics** | | | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | --- | 2170 | 330 | 1990 | 476 | 3270 | 595 | 265 | 387 | 2520 | 1400 | 2560 | 6220 |
| Antimony | 7440-36-0 | --- | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Arsenic | 7440-38-2 | --- | 2.26 | 1.64 | 3.7 | ND | ND | 3.8 | ND | ND | 1.73 | 0.624 | 1.94 | 9.53 |
| Barium | 7440-39-3 | --- | 31.1 | 4.16 | ND | ND | ND | ND | ND | ND | 14.3 | 5.44 | 14.4 | 92.6 |
| Beryllium | 7440-41-7 | --- | ND | 0.091 | ND | ND | ND | ND | ND | ND | 0.21 | 0.077 | 0.209 | 1.13 |
| Cadmium | 7440-43-9 | --- | ND | ND | ND | ND | ND | ND | ND | ND | 0.0598 | ND | ND | 0.216 |
| Calcium | 7440-70-2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Chromium | 7440-47-3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Hexavalent Chromium | 18540-29-9 | ND | --- | --- | ND | --- | --- | --- | --- | --- | --- | ND | ND | ND |
| Cobalt | 7440-48-4 | --- | ND | 0.558 | ND | ND | ND | ND | ND | ND | 0.955 | 1.22 | 1.3 | 4.79 |
| Copper | 7440-50-8 | --- | 14.9 | 3.48 | 46.7 | 3.8 | 7.5 | ND | 7.3 | 4.1 | 9.6 | 6.52 | 8.49 | 23.8 |
| Iron | 7439-89-6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Lead | 7439-92-1 | --- | 7.46 | 2.55 | 10.2 | 2.3 | 7.6 | ND | 3.1 | ND | 5.95 | 3.23 | 6.04 | 11.3 |
| Magnesium | 7439-95-4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Manganese | 7439-96-5 | --- | 514 | 2.6 | 5.4 | 2.6 | 9.7 | 2.4 | 2.1 | ND | 15.6 | 7.07 | 13.6 | 51.2 |
| Mercury | 7439-97-6 | --- | ND | 0.015 | ND | ND | ND | ND | ND | ND | ND | ND | 0.0262 | 0.0559 |
| Nickel | 7440-02-0 | --- | ND | 0.746 | ND | ND | ND | ND | ND | ND | 2.09 | 1.22 | 2.25 | 9.99 |
| Potassium | 7440-09-7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Selenium | 7782-49-2 | --- | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.909 |
| Silver | 7440-22-4 | --- | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Sodium | 7440-23-5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Thallium | 7440-28-0 | --- | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1.41 |
| Vanadium | 7440-62-2 | 5.2 | 26.1 | 21.5 | 56.5 | 16.3 | 24.7 | 5.4 | 28.8 | 11.2 | 16.1 | 21.7 | 16.7 | 35 |
| Zinc | 7440-66-6 | 2.8 | 12 | 1.49 | ND | ND | 7.2 | ND | ND | ND | 8.24 | 3.87 | 8.68 | 20.7 |
| Cyanide, Total | 57-12-5 | --- | ND | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND |
| **General Chemistry** | | | | | | | | | | | | | | |
| Total EPH (C9-C40) | NA | 3.64 | --- | 2.91 | ND | ND | 36.5 | ND | ND | ND | --- | ND | ND | ND |
| pH (Standard Units) | NA | 5.14 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 3.7 | 5.5 | 7.8 |
| Total Organic Carbon | NA | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

Notes:
All results presented in milligrams per kilogram dry weight basis
---: Sample not analyzed for parameter indicated
NA: Not applicable
ND: Not detected
CASRN: Chemical Abstract Service Registry Number
Source: Data from Southeast Leg Remediation Project clean fill submittal dated November 10, 2014

Table 4. Clean Fill Data Summary
Southeast Leg Pond Area Phase 1 Sampling
Hatco Remediation Project
Woodbridge, New Jersey

| Sample Identification | | GES_SB2_0.5 | GES_TP15_1.5 | AS_SB-1_0.5 |
|---|---|---|---|---|
| Laboratory Sample Number | | 6/26/2014 | 6/26/2014 | 7/10/2014 |
| Sample Date and Time | | 4060880 | 4060880 | 4070365 |
| Parameters Analyzed | CASRN | Result | Result | Result |
| **Volatile Organic Compounds** | | | | |
| Acetone | 67-64-1 | --- | ND | --- |
| Benzene | 71-43-2 | --- | ND | --- |
| Bromoform | 75-25-2 | --- | ND | --- |
| Bromomethane | 74-83-9 | --- | ND | --- |
| 2-Butanone (MEK) | 78-93-3 | --- | ND | --- |
| Carbon disulfide | 75-15-0 | --- | ND | --- |
| Carbon tetrachloride | 56-23-5 | --- | ND | --- |
| Chlorobenzene | 108-90-7 | --- | ND | --- |
| Chlorobromomethane | 74-97-5 | --- | --- | --- |
| Chlorodibromomethane | 124-48-1 | --- | ND | --- |
| Chloroethane | 75-00-3 | --- | ND | --- |
| Chloroform | 67-66-3 | --- | ND | --- |
| Chloromethane | 74-87-3 | --- | ND | --- |
| Cyclohexane | 110-82-7 | --- | --- | --- |
| 1,2-Dibromo-3-Chloropropane | 96-12-8 | --- | ND | --- |
| 1,2-Dichlorobenzene | 95-50-1 | --- | ND | --- |
| 1,3-Dichlorobenzene | 541-73-1 | --- | ND | --- |
| 1,4-Dichlorobenzene | 106-46-7 | --- | ND | --- |
| Dichlorobromomethane | 75-27-4 | --- | ND | --- |
| Dichlorodifluoromethane | 75-71-8 | --- | ND | --- |
| 1,1-Dichloroethane | 75-34-3 | --- | ND | --- |
| 1,2-Dichloroethane | 107-06-2 | --- | ND | --- |
| 1,1-Dichloroethene | 75-35-4 | --- | ND | --- |
| cis-1,2-Dichloroethene | 156-59-2 | --- | --- | --- |
| trans-1,2-Dichloroethene | 156-60-5 | --- | ND | --- |
| 1,2-Dichloropropane | 78-87-5 | --- | ND | --- |
| cis-1,3-Dichloropropene | 10061-01-5 | --- | --- | --- |
| trans-1,3-Dichloropropene | 10061-02-6 | --- | --- | --- |
| 1,3-Dichloropropene (cis and trans) | 542-75-6 | --- | ND | --- |
| 1,4-Dioxane | 123-91-1 | --- | --- | --- |
| Ethylbenzene | 100-41-4 | --- | ND | --- |
| Ethylene Dibromide | 106-93-4 | --- | ND | --- |
| 2-Hexanone | 591-78-6 | --- | --- | --- |
| Isopropylbenzene | 98-82-8 | --- | --- | --- |
| Methyl acetate | 79-20-9 | --- | ND | --- |
| Methylcyclohexane | 108-87-2 | --- | --- | --- |
| Methylene Chloride | 75-09-2 | --- | ND | --- |
| 4-Methyl-2-pentanone (MIBK) | 108-10-1 | --- | --- | --- |
| 2-Methyl-2-propanol (TBA) | 75-65-0 | --- | ND | --- |
| Methyl tert-butyl ether | 1634-04-4 | --- | ND | --- |
| Styrene | 100-42-5 | --- | ND | --- |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | --- | --- | --- |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | --- | ND | --- |
| Tetrachloroethene | 127-18-4 | --- | ND | --- |
| Toluene | 108-88-3 | --- | ND | --- |
| 1,2,3-Trichlorobenzene | 87-61-6 | --- | --- | --- |
| 1,2,4-Trichlorobenzene | 120-82-1 | --- | ND | --- |
| 1,1,1-Trichloroethane | 71-55-6 | --- | ND | --- |
| 1,1,2-Trichloroethane | 79-00-5 | --- | ND | --- |
| Trichloroethene | 79-01-6 | --- | ND | --- |
| Trichlorofluoromethane | 75-69-4 | --- | ND | --- |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 76-13-1 | --- | --- | --- |
| Vinyl chloride | 75-01-4 | --- | ND | --- |

Table 4. Clean Fill Data Summary
Southeast Leg Pond Area Phase 1 Sampling
Hatco Remediation Project
Woodbridge, New Jersey

| Sample Identification | | GES_SB2_0.5 | GES_TP15_1.5 | AS_SB-1_0.5 |
|---|---|---|---|---|
| Laboratory Sample Number | | 6/26/2014 | 6/26/2014 | 7/10/2014 |
| Sample Date and Time | | 4060880 | 4060880 | 4070365 |
| Parameters Analyzed | CASRN | Result | Result | Result |
| m-Xylene & p-Xylene | 179601-23-1 | --- | --- | --- |
| o-Xylene | 95-47-6 | --- | --- | --- |
| Total xylenes | 1330-20-7 | --- | ND | --- |
| Total VOC Conc. | NA | ND | ND | ND |
| Total VOC TICs | NA | --- | --- | --- |
| **Semivolatile Organic Compounds** | | | | |
| Acenaphthene | 83-32-9 | ND | ND | ND |
| Acenaphthylene | 208-96-8 | ND | ND | ND |
| Acetophenone | 98-86-2 | --- | ND | --- |
| Anthracene | 120-12-7 | 0.0359 | ND | ND |
| Atrazine | 1912-24-9 | --- | ND | --- |
| Benzaldehyde | 100-52-7 | --- | ND | --- |
| Benzo[a]anthracene | 56-55-3 | 0.0612 | ND | ND |
| Benzo[a]pyrene | 50-32-8 | 0.0577 | ND | ND |
| Benzo[b]fluoranthene | 205-99-2 | 0.0921 | ND | ND |
| Benzo[g,h,i]perylene | 191-24-2 | 0.0366 | ND | ND |
| Benzo[k]fluoranthene | 207-08-9 | 0.0373 | ND | ND |
| 1,1'-Biphenyl | 92-52-4 | --- | ND | --- |
| Bis(2-chloroethoxy)methane | 111-91-1 | --- | --- | --- |
| Bis(2-chloroethyl)ether | 111-44-4 | --- | ND | --- |
| Bis(2-ethylhexyl) phthalate | 117-81-7 | --- | ND | --- |
| 4-Bromophenyl phenyl ether | 101-55-3 | --- | --- | --- |
| Butyl benzyl phthalate | 85-68-7 | --- | ND | --- |
| Caprolactam | 105-60-2 | --- | ND | --- |
| Carbazole | 86-74-8 | --- | ND | --- |
| 4-Chloroaniline | 106-47-8 | --- | --- | --- |
| 4-Chloro-3-methylphenol | 59-50-7 | --- | --- | --- |
| 2-Chloronaphthalene | 91-58-7 | --- | --- | --- |
| 2-Chlorophenol | 95-57-8 | --- | ND | --- |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | --- | --- | --- |
| Chrysene | 218-01-9 | 0.0802 | ND | ND |
| Dibenz(a,h)anthracene | 53-70-3 | ND | ND | ND |
| Dibenzofuran | 132-64-9 | --- | --- | --- |
| 3,3'-Dichlorobenzidine | 91-94-1 | --- | ND | --- |
| 2,4-Dichlorophenol | 120-83-2 | --- | ND | --- |
| Diethyl phthalate | 84-66-2 | --- | ND | --- |
| Dimethyl phthalate | 131-11-3 | --- | --- | --- |
| 2,4-Dimethylphenol | 105-67-9 | --- | ND | --- |
| Di-n-butyl phthalate | 84-74-2 | --- | ND | --- |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | --- | ND | --- |
| 2,4-Dinitrophenol | 51-28-5 | --- | ND | --- |
| 2,4-Dinitrotoluene | 121-14-2 | --- | ND | --- |
| 2,6-Dinitrotoluene | 606-20-2 | --- | ND | --- |
| Di-n-octyl phthalate | 117-84-0 | --- | ND | --- |
| Fluoranthene | 206-44-0 | 0.12 | ND | ND |
| Fluorene | 86-73-7 | ND | ND | ND |
| Hexachlorobenzene | 118-74-1 | --- | ND | --- |
| Hexachlorobutadiene | 87-68-3 | --- | ND | --- |
| Hexachlorocyclopentadiene | 77-47-4 | --- | ND | --- |
| Hexachloroethane | 67-72-1 | --- | ND | --- |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | ND | ND | ND |
| Isophorone | 78-59-1 | --- | ND | --- |
| 2-Methylnaphthalene | 91-57-6 | --- | ND | --- |
| 2-Methylphenol | 95-48-7 | --- | ND | --- |

Table 4. Clean Fill Data Summary
Southeast Leg Pond Area Phase 1 Sampling
Hatco Remediation Project
Woodbridge, New Jersey

| Sample Identification | | GES_SB2_0.5 | GES_TP15_1.5 | AS_SB-1_0.5 |
|---|---|---|---|---|
| Laboratory Sample Number | | 6/26/2014 | 6/26/2014 | 7/10/2014 |
| Sample Date and Time | | 4060880 | 4060880 | 4070365 |
| Parameters Analyzed | CASRN | Result | Result | Result |
| 4-Methylphenol | 106-44-5 | --- | --- | --- |
| Naphthalene | 91-20-3 | ND | ND | ND |
| 2-Nitroaniline | 88-74-4 | --- | ND | --- |
| 3-Nitroaniline | 99-09-2 | --- | --- | --- |
| 4-Nitroaniline | 100-01-6 | --- | --- | --- |
| 2-Nitrophenol | 88-75-5 | --- | 0 | --- |
| 4-Nitrophenol | 100-02-7 | --- | --- | --- |
| Nitrobenzene | 98-95-3 | --- | ND | --- |
| N-Nitrosodi-n-propylamine | 621-64-7 | --- | ND | --- |
| N-Nitrosodiphenylamine | 86-30-6 | --- | ND | --- |
| 2,2'-oxybis[1-chloropropane] | 108-60-1 | --- | ND | --- |
| Pentachlorophenol | 87-86-5 | --- | ND | --- |
| Phenanthrene | 85-01-8 | 0.0499 | ND | ND |
| Phenol | 108-95-2 | --- | ND | --- |
| Pyrene | 129-00-0 | 0.11 | ND | ND |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | --- | --- | --- |
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | --- | --- | --- |
| 2,4,5-Trichlorophenol | 95-95-4 | --- | ND | --- |
| 2,4,6-Trichlorophenol | 88-06-2 | --- | ND | --- |
| Total SVOC Conc. | NA | 0.3601 | ND | ND |
| **Pesticides** | | | | |
| Aldrin | 309-00-2 | --- | ND | --- |
| alpha-BHC | 319-84-6 | --- | ND | --- |
| beta-BHC | 319-85-7 | --- | ND | --- |
| delta-BHC | 319-86-8 | --- | ND | --- |
| gamma-BHC (Lindane) | 58-89-9 | --- | ND | --- |
| Chlordane (technical) | 12789-03-6 | --- | --- | --- |
| 4,4'-DDD | 72-54-8 | --- | ND | --- |
| 4,4'-DDE | 72-55-9 | --- | ND | --- |
| 4,4'-DDT | 50-29-3 | --- | ND | --- |
| Dieldrin | 60-57-1 | --- | ND | --- |
| Endosulfan I | 959-98-8 | --- | --- | --- |
| Endosulfan II | 33213-65-9 | --- | --- | --- |
| Endosulfans (I and II) | 115-29-7 | --- | ND | --- |
| Endosulfan sulfate | 1031-07-8 | --- | ND | --- |
| Endrin | 72-20-8 | --- | ND | --- |
| Endrin aldehyde | 7421-93-4 | --- | --- | --- |
| Endrin ketone | 53494-70-5 | --- | --- | --- |
| Heptachlor | 76-44-8 | --- | ND | --- |
| Heptachlor epoxide | 1024-57-3 | --- | ND | --- |
| Methoxychlor | 72-43-5 | --- | ND | --- |
| Toxaphene | 8001-35-2 | --- | ND | --- |
| **PCBs** | | | | |
| Aroclor 1016 | 12674-11-2 | --- | ND | --- |
| Aroclor 1221 | 11104-28-2 | --- | ND | --- |
| Aroclor 1232 | 11141-16-5 | --- | ND | --- |
| Aroclor 1242 | 53469-21-9 | --- | ND | --- |
| Aroclor 1248 | 12672-29-6 | --- | ND | --- |
| Aroclor 1254 | 11097-69-1 | --- | ND | --- |
| Aroclor 1260 | 11096-82-5 | --- | ND | --- |
| Aroclor 1262 | 37324-23-5 | --- | --- | --- |
| Aroclor 1268 | 11100-14-4 | --- | --- | --- |
| Total PCBs | 1336-36-3 | --- | ND | --- |
| **Herbicides** | | | | |

Table 4. Clean Fill Data Summary
Southeast Leg Pond Area Phase 1 Sampling
Hatco Remediation Project
Woodbridge, New Jersey

| Sample Identification | | GES_SB2_0.5 | GES_TP15_1.5 | AS_SB-1_0.5 |
|---|---|---|---|---|
| Laboratory Sample Number | | 6/26/2014 | 6/26/2014 | 7/10/2014 |
| Sample Date and Time | | 4060880 | 4060880 | 4070365 |
| Parameters Analyzed | CASRN | Result | Result | Result |
| 2,4,5-T | 93-76-5 | --- | --- | --- |
| 2,4-D | 94-75-7 | --- | --- | --- |
| Silvex (2,4,5-TP) | 93-72-1 | --- | --- | --- |
| **Inorganics** | | | | |
| Aluminum | 7429-90-5 | 3590 | 584 | 678 |
| Antimony | 7440-36-0 | ND | ND | ND |
| Arsenic | 7440-38-2 | 1.7 | ND | ND |
| Barium | 7440-39-3 | 19.1 | 0.879 | 2.5 |
| Beryllium | 7440-41-7 | 0.139 | ND | 0.0419 |
| Cadmium | 7440-43-9 | ND | ND | ND |
| Calcium | 7440-70-2 | --- | --- | --- |
| Chromium | 7440-47-3 | --- | --- | --- |
| Hexavalent Chromium | 18540-29-9 | 0 | --- | --- |
| Cobalt | 7440-48-4 | 1.62 | ND | 0.273 |
| Copper | 7440-50-8 | 13.8 | 1.37 | 3.01 |
| Iron | 7439-89-6 | --- | --- | --- |
| Lead | 7439-92-1 | 7.71 | 0.857 | 1.44 |
| Magnesium | 7439-95-4 | --- | --- | --- |
| Manganese | 7439-96-5 | 205 | 0.609 | 9.67 |
| Mercury | 7439-97-6 | ND | ND | ND |
| Nickel | 7440-02-0 | 2.57 | ND | 0.575 |
| Potassium | 7440-09-7 | --- | --- | --- |
| Selenium | 7782-49-2 | ND | ND | ND |
| Silver | 7440-22-4 | ND | ND | ND |
| Sodium | 7440-23-5 | --- | --- | --- |
| Thallium | 7440-28-0 | 0.77 | ND | ND |
| Vanadium | 7440-62-2 | 28.3 | 0 | 12.3 |
| Zinc | 7440-66-6 | 8.66 | 0 | ND |
| Cyanide, Total | 57-12-5 | --- | ND | --- |
| **General Chemistry** | | | | |
| Total EPH (C9-C40) | NA | --- | ND | --- |
| pH (Standard Units) | NA | --- | 4 | --- |
| Total Organic Carbon | NA | --- | --- | --- |

Notes:
All results presented in milligrams per kilogram dry weight basis
---: Sample not analyzed for parameter indicated
NA: Not applicable
ND: Not detected
CASRN: Chemical Abstract Service Registry Number
Source: Data from Southeast Leg Remediation Project clean fill submittal dated November 10, 2014

**Table 5**

**Clean Fill and SEL Pond Area Sample Data Comparison**

Table 5. Clean Fill and SEL Pond Area Sample Data Comparison
Southeast Leg Pond Area Phase 1 Sampling
Hatco Remediation Project
Woodbridge, New Jersey

| Parameters Analyzed | CASRN | Clean Fill Data Summary | | SEL Pond Soil and Sediment | | Order of Magnitude Variance | Summary of Comparison |
|---|---|---|---|---|---|---|---|
| | | Frequency of Detections | Maximum Result Reported | Frequency of Detections | Maximum Result Reported | | |
| **Volatile Organic Compounds** | | | | | | | |
| Acetone | 67-64-1 | 2 of 13 | 0.0244 | 8 of 10 | 0.27 | 1.04 | Potential new contaminant: Maximum concentration exceeds clean fill by more than 10x |
| Benzene | 71-43-2 | 0 of 13 | ND | 5 of 10 | 0.013 | -- | Potential new contaminant: Not detected in clean fill |
| Bromoform | 75-25-2 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| Bromomethane | 74-83-9 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| 2-Butanone (MEK) | 78-93-3 | 0 of 13 | ND | 5 of 10 | 0.015 | -- | Potential new contaminant: Not detected in clean fill |
| Carbon disulfide | 75-15-0 | 2 of 13 | 0.0013 | 0 of 10 | ND | -- | |
| Carbon tetrachloride | 56-23-5 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| Chlorobenzene | 108-90-7 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| Chlorobromomethane | 74-97-5 | --- | --- | 0 of 10 | ND | -- | |
| Chlorodibromomethane | 124-48-1 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| Chloroethane | 75-00-3 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| Chloroform | 67-66-3 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| Chloromethane | 74-87-3 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| Cyclohexane | 110-82-7 | --- | --- | 0 of 10 | ND | -- | |
| 1,2-Dibromo-3-Chloropropane | 96-12-8 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| 1,2-Dichlorobenzene | 95-50-1 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| 1,3-Dichlorobenzene | 541-73-1 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| 1,4-Dichlorobenzene | 106-46-7 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| Dichlorobromomethane | 75-27-4 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| Dichlorodifluoromethane | 75-71-8 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| 1,1-Dichloroethane | 75-34-3 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| 1,2-Dichloroethane | 107-06-2 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| 1,1-Dichloroethene | 75-35-4 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| cis-1,2-Dichloroethene | 156-59-2 | 0 of 10 | ND | 1 of 10 | 0.00028 | -- | Detected in only one sample at concentration below criteria. No further sampling recommended. |
| trans-1,2-Dichloroethene | 156-60-5 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| 1,2-Dichloropropane | 78-87-5 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| cis-1,3-Dichloropropene | 10061-01-5 | --- | --- | 0 of 10 | ND | -- | |
| trans-1,3-Dichloropropene | 10061-02-6 | --- | --- | 0 of 10 | ND | -- | |
| 1,3-Dichloropropene (cis and trans) | 542-75-6 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| 1,4-Dioxane | 123-91-1 | --- | --- | 0 of 10 | ND | -- | |
| Ethylbenzene | 100-41-4 | 0 of 12 | ND | 2 of 10 | 0.00053 | -- | Potential new contaminant: Not detected in clean fill |
| Ethylene Dibromide | 106-93-4 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| 2-Hexanone | 591-78-6 | --- | --- | 0 of 10 | ND | -- | |
| Isopropylbenzene | 98-82-8 | --- | --- | 1 of 10 | 0.00039 | -- | Detected in only one sample at estimated concentration below reporting limit. No further sampling recommended. |
| Methyl acetate | 79-20-9 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| Methylcyclohexane | 108-87-2 | --- | --- | 2 of 10 | 0.0053 | -- | Potential new contaminant: Not detected in clean fill |
| Methylene Chloride | 75-09-2 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| 4-Methyl-2-pentanone (MIBK) | 108-10-1 | --- | --- | 0 of 10 | ND | -- | |
| 2-Methyl-2-propanol (TBA) | 75-65-0 | 0 of 7 | ND | 1 of 10 | 0.0086 | -- | Potential new contaminant: Not detected in clean fill |
| Methyl tert-butyl ether | 1634-04-4 | 1 of 13 | 0.0005 | 0 of 10 | ND | -- | |
| Styrene | 100-42-5 | 0 of 12 | ND | 1 of 10 | 0.00034 | -- | Detected in only one sample at estimated concentration below reporting limit. No further sampling recommended. |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | --- | --- | 0 of 10 | ND | -- | |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| Tetrachloroethene | 127-18-4 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| Toluene | 108-88-3 | 1 of 13 | 0.000647 | 3 of 10 | 0.0021 | 0.51 | Potential new contaminant: Not detected in clean fill |
| 1,2,3-Trichlorobenzene | 87-61-6 | --- | --- | 0 of 10 | ND | -- | |
| 1,2,4-Trichlorobenzene | 120-82-1 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| 1,1,1-Trichloroethane | 71-55-6 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| 1,1,2-Trichloroethane | 79-00-5 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| Trichloroethene | 79-01-6 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| Trichlorofluoromethane | 75-69-4 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 76-13-1 | --- | --- | 0 of 10 | ND | -- | |
| Vinyl chloride | 75-01-4 | 0 of 13 | ND | 0 of 10 | ND | -- | |

Table 5. Clean Fill and SEL Pond Area Sample Data Comparison
Southeast Leg Pond Area Phase 1 Sampling
Hatco Remediation Project
Woodbridge, New Jersey

| Parameters Analyzed | CASRN | Clean Fill Data Summary | | SEL Pond Soil and Sediment | | Order of Magnitude Variance | Summary of Comparison |
|---|---|---|---|---|---|---|---|
| | | Frequency of Detections | Maximum Result Reported | Frequency of Detections | Maximum Result Reported | | |
| m-Xylene & p-Xylene | 179601-23-1 | --- | --- | 1 of 10 | 0.0012 | -- | Potential new contaminant: Not detected in clean fill |
| o-Xylene | 95-47-6 | --- | --- | 1 of 10 | 0.0017 | -- | Potential new contaminant: Not detected in clean fill |
| Total xylenes | 1330-20-7 | 0 of 13 | ND | 1 of 10 | 0.0017 | -- | Potential new contaminant: Not detected in clean fill |
| Total VOC Conc. | NA | 5 of 16 | 0.0247 | 9 of 10 | 0.27 | 1.04 | |
| Total VOC TICs | NA | --- | --- | 5 of 10 | 2.542 | -- | |
| **Semivolatile Organic Compounds** | | | | | | | |
| Acenaphthene | 83-32-9 | 0 of 16 | ND | 4 of 10 | 0.085 | -- | Potential new contaminant: Not detected in clean fill |
| Acenaphthylene | 208-96-8 | 0 of 16 | ND | 4 of 10 | 0.042 | -- | Potential new contaminant: Not detected in clean fill |
| Acetophenone | 98-86-2 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| Anthracene | 120-12-7 | 1 of 16 | 0.0359 | 6 of 10 | 0.3 | 0.92 | Potential new contaminant: Maximum concentration exceeds clean fill by nearly 10x |
| Atrazine | 1912-24-9 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| Benzaldehyde | 100-52-7 | 0 of 12 | ND | 2 of 10 | 0.031 | -- | Potential new contaminant: Not detected in clean fill |
| Benzo[a]anthracene | 56-55-3 | 5 of 16 | 0.0858 | 10 of 10 | 0.97 | 1.05 | Potential new contaminant: Maximum concentration exceeds clean fill by more than 10x |
| Benzo[a]pyrene | 50-32-8 | 2 of 16 | 0.0577 | 10 of 10 | 0.95 | 1.22 | Potential new contaminant: Maximum concentration exceeds clean fill by more than 10x |
| Benzo[b]fluoranthene | 205-99-2 | 4 of 16 | 0.0921 | 10 of 10 | 1.2 | 1.11 | Potential new contaminant: Maximum concentration exceeds clean fill by more than 10x |
| Benzo[g,h,i]perylene | 191-24-2 | 1 of 16 | 0.0366 | 9 of 10 | 0.4 | 1.04 | Potential new contaminant: Maximum concentration exceeds clean fill by more than 10x |
| Benzo[k]fluoranthene | 207-08-9 | 2 of 16 | 0.0378 | 10 of 10 | 0.4 | 1.02 | Potential new contaminant: Maximum concentration exceeds clean fill by more than 10x |
| 1,1'-Biphenyl | 92-52-4 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| Bis(2-chloroethoxy)methane | 111-91-1 | --- | --- | 0 of 10 | ND | -- | |
| Bis(2-chloroethyl)ether | 111-44-4 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| Bis(2-ethylhexyl) phthalate | 117-81-7 | 1 of 13 | 0.0524 | 10 of 10 | 20 | 2.58 | Potential new contaminant: Maximum concentration exceeds clean fill by more than 10x |
| 4-Bromophenyl phenyl ether | 101-55-3 | --- | --- | 0 of 10 | ND | -- | |
| Butyl benzyl phthalate | 85-68-7 | 0 of 13 | ND | 3 of 10 | 0.054 | -- | Potential new contaminant: Not detected in clean fill |
| Caprolactam | 105-60-2 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| Carbazole | 86-74-8 | 0 of 12 | ND | 5 of 10 | 0.17 | -- | Potential new contaminant: Not detected in clean fill |
| 4-Chloroaniline | 106-47-8 | --- | --- | 0 of 10 | ND | -- | |
| 4-Chloro-3-methylphenol | 59-50-7 | --- | --- | 0 of 10 | ND | -- | |
| 2-Chloronaphthalene | 91-58-7 | --- | --- | 0 of 10 | ND | -- | |
| 2-Chlorophenol | 95-57-8 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | --- | --- | 0 of 10 | ND | -- | |
| Chrysene | 218-01-9 | 5 of 16 | 0.0802 | 10 of 10 | 1 | 1.10 | Potential new contaminant: Maximum concentration exceeds clean fill by more than 10x |
| Dibenz(a,h)anthracene | 53-70-3 | 0 of 16 | ND | 8 of 10 | 0.14 | -- | Potential new contaminant: Not detected in clean fill |
| Dibenzofuran | 132-64-9 | --- | --- | 5 of 10 | 0.068 | -- | Potential new contaminant: Not analyzed in clean fill |
| 3,3'-Dichlorobenzidine | 91-94-1 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| 2,4-Dichlorophenol | 120-83-2 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| Diethyl phthalate | 84-66-2 | 1 of 13 | 0.00015 | 2 of 10 | 0.037 | 2.39 | Potential new contaminant: Maximum concentration exceeds clean fill by more than 10x |
| Dimethyl phthalate | 131-11-3 | --- | --- | 0 of 10 | ND | -- | |
| 2,4-Dimethylphenol | 105-67-9 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| Di-n-butyl phthalate | 84-74-2 | 2 of 13 | 0.0743 | 0 of 10 | ND | -- | |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| 2,4-Dinitrophenol | 51-28-5 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| 2,4-Dinitrotoluene | 121-14-2 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| 2,6-Dinitrotoluene | 606-20-2 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| Di-n-octyl phthalate | 117-84-0 | 0 of 13 | ND | 1 of 10 | 0.042 | -- | Potential new contaminant: Not detected in clean fill |
| Fluoranthene | 206-44-0 | 6 of 16 | 0.12 | 10 of 10 | 1.7 | 1.15 | Potential new contaminant: Maximum concentration exceeds clean fill by more than 10x |
| Fluorene | 86-73-7 | 0 of 16 | ND | 9 of 10 | 0.14 | -- | Potential new contaminant: Not detected in clean fill |
| Hexachlorobenzene | 118-74-1 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| Hexachlorobutadiene | 87-68-3 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| Hexachlorocyclopentadiene | 77-47-4 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| Hexachloroethane | 67-72-1 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 0 of 16 | ND | 10 of 10 | 0.47 | -- | Potential new contaminant: Not detected in clean fill |
| Isophorone | 78-59-1 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| 2-Methylnaphthalene | 91-57-6 | 0 of 13 | ND | 4 of 10 | 0.052 | -- | Potential new contaminant: Not detected in clean fill |
| 2-Methylphenol | 95-48-7 | 0 of 13 | ND | 0 of 10 | ND | -- | |

Table 5. Clean Fill and SEL Pond Area Sample Data Comparison
Southeast Leg Pond Area Phase 1 Sampling
Hatco Remediation Project
Woodbridge, New Jersey

| Parameters Analyzed | CASRN | Clean Fill Data Summary | | SEL Pond Soil and Sediment | | Order of Magnitude Variance | Summary of Comparison |
|---|---|---|---|---|---|---|---|
| | | Frequency of Detections | Maximum Result Reported | Frequency of Detections | Maximum Result Reported | | |
| 4-Methylphenol | 106-44-5 | --- | --- | 1 of 10 | 0.13 | -- | Potential new contaminant: Not analyzed in clean fill |
| Naphthalene | 91-20-3 | 1 of 16 | 0.0791 | 10 of 10 | 10 | 2.10 | Potential new contaminant: Maximum concentration exceeds clean fill by more than 10x |
| 2-Nitroaniline | 88-74-4 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| 3-Nitroaniline | 99-09-2 | --- | --- | 0 of 10 | ND | -- | |
| 4-Nitroaniline | 100-01-6 | --- | --- | 0 of 10 | ND | -- | |
| 2-Nitrophenol | 88-75-5 | 1 of 10 | ND | 0 of 10 | ND | -- | |
| 4-Nitrophenol | 100-02-7 | --- | --- | 0 of 10 | ND | -- | |
| Nitrobenzene | 98-95-3 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| N-Nitrosodi-n-propylamine | 621-64-7 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| N-Nitrosodiphenylamine | 86-30-6 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| 2,2'-oxybis[1-chloropropane] | 108-60-1 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| Pentachlorophenol | 87-86-5 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| Phenanthrene | 85-01-8 | 4 of 16 | 0.064 | 10 of 10 | 1.7 | 1.42 | Potential new contaminant: Maximum concentration exceeds clean fill by more than 10x |
| Phenol | 108-95-2 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| Pyrene | 129-00-0 | 6 of 16 | 0.112 | 10 of 10 | 2 | 1.25 | Potential new contaminant: Maximum concentration exceeds clean fill by more than 10x |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | --- | --- | 0 of 10 | ND | -- | |
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | --- | --- | 0 of 10 | ND | -- | |
| 2,4,5-Trichlorophenol | 95-95-4 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| 2,4,6-Trichlorophenol | 88-06-2 | 0 of 13 | ND | 0 of 10 | ND | -- | |
| Total SVOC Conc. | NA | 10 of 16 | 0.4082 | 10 of 10 | 32.875 | 1.91 | |
| **Pesticides** | | | | | | | |
| Aldrin | 309-00-2 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| alpha-BHC | 319-84-6 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| beta-BHC | 319-85-7 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| delta-BHC | 319-86-8 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| gamma-BHC (Lindane) | 58-89-9 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| Chlordane (technical) | 12789-03-6 | --- | --- | 0 of 10 | ND | -- | |
| 4,4'-DDD | 72-54-8 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| 4,4'-DDE | 72-55-9 | 1 of 12 | 0.00087 | 0 of 10 | ND | -- | |
| 4,4'-DDT | 50-29-3 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| Dieldrin | 60-57-1 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| Endosulfan I | 959-98-8 | --- | --- | 0 of 10 | ND | -- | |
| Endosulfan II | 33213-65-9 | --- | --- | 0 of 10 | ND | -- | |
| Endosulfans (I and II) | 115-29-7 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| Endosulfan sulfate | 1031-07-8 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| Endrin | 72-20-8 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| Endrin aldehyde | 7421-93-4 | --- | --- | 0 of 10 | ND | -- | |
| Endrin ketone | 53494-70-5 | --- | --- | 0 of 10 | ND | -- | |
| Heptachlor | 76-44-8 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| Heptachlor epoxide | 1024-57-3 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| Methoxychlor | 72-43-5 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| Toxaphene | 8001-35-2 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| **PCBs** | | | | | | | |
| Aroclor 1016 | 12674-11-2 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| Aroclor 1221 | 11104-28-2 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| Aroclor 1232 | 11141-16-5 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| Aroclor 1242 | 53469-21-9 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| Aroclor 1248 | 12672-29-6 | 0 of 12 | ND | 9 of 10 | 18 | -- | Potential new contaminant: Not detected in clean fill |
| Aroclor 1254 | 11097-69-1 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| Aroclor 1260 | 11096-82-5 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| Aroclor 1262 | 37324-23-5 | --- | --- | 0 of 10 | ND | -- | |
| Aroclor 1268 | 11100-14-4 | --- | --- | 0 of 10 | ND | -- | |
| Total PCBs | 1336-36-3 | 0 of 12 | ND | 9 of 10 | 18 | -- | |
| **Herbicides** | | | | | | | |

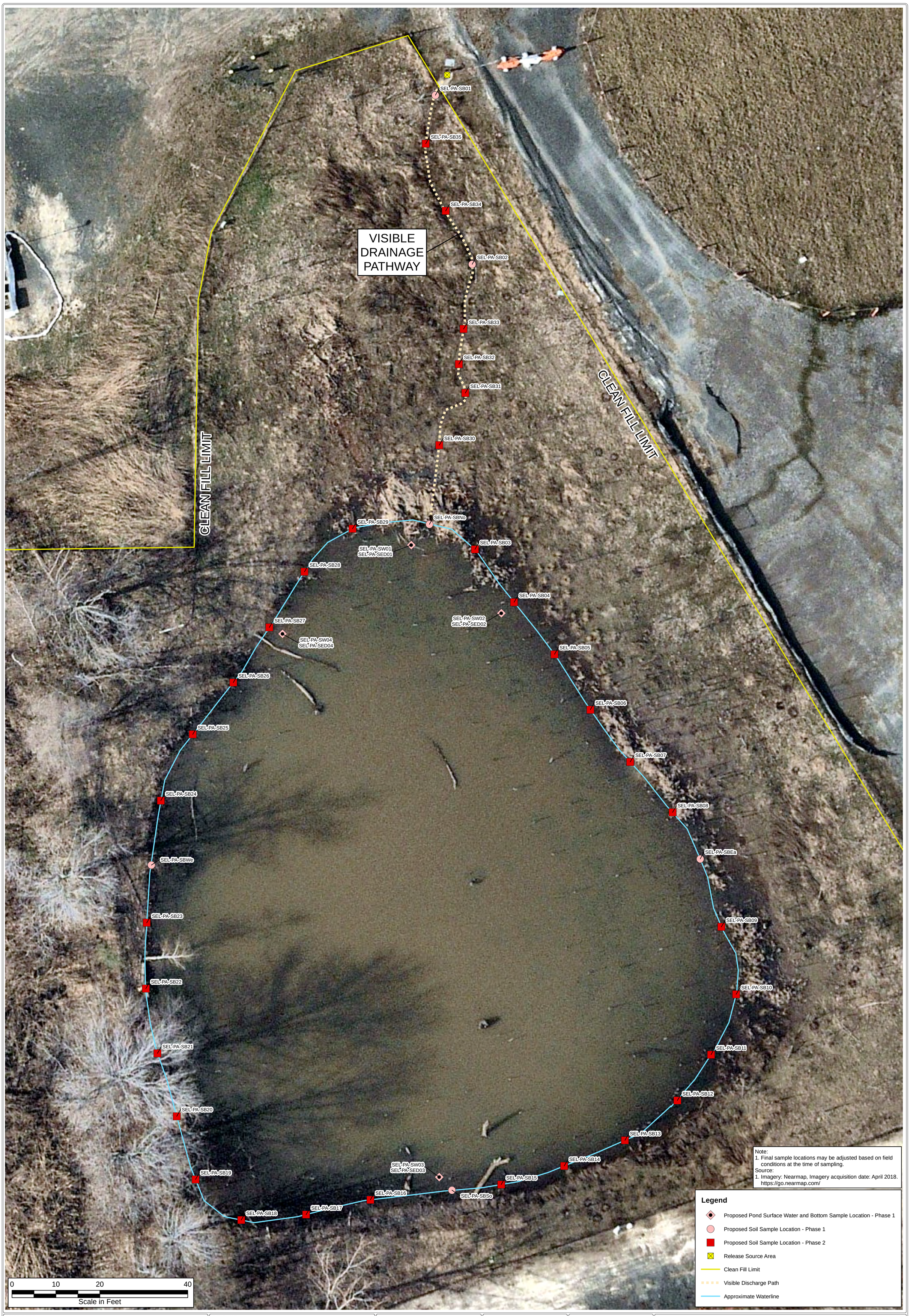
Table 5. Clean Fill and SEL Pond Area Sample Data Comparison
Southeast Leg Pond Area Phase 1 Sampling
Hatco Remediation Project
Woodbridge, New Jersey

| Parameters Analyzed | CASRN | Clean Fill Data Summary | | SEL Pond Soil and Sediment | | Order of Magnitude Variance | Summary of Comparison |
|---|---|---|---|---|---|---|---|
| | | Frequency of Detections | Maximum Result Reported | Frequency of Detections | Maximum Result Reported | | |
| 2,4,5-T | 93-76-5 | --- | --- | 0 of 10 | ND | -- | |
| 2,4-D | 94-75-7 | --- | --- | 0 of 10 | ND | -- | |
| Silvex (2,4,5-TP) | 93-72-1 | --- | --- | 0 of 10 | ND | -- | |
| **Inorganics** | | | | | | | |
| Aluminum | 7429-90-5 | 15 of 15 | 6220 | 10 of 10 | 12100 | 0.29 | Concentration and frequency of detection similar to clean fill. No further sampling recommended |
| Antimony | 7440-36-0 | 0 of 15 | ND | 0 of 10 | ND | -- | |
| Arsenic | 7440-38-2 | 9 of 15 | 9.53 | 10 of 10 | 6.5 | (0.17) | Concentration and frequency of detection similar to clean fill. No further sampling recommended |
| Barium | 7440-39-3 | 9 of 15 | 92.6 | 10 of 10 | 81.9 | (0.05) | Concentration and frequency of detection similar to clean fill. No further sampling recommended |
| Beryllium | 7440-41-7 | 7 of 15 | 1.13 | 7 of 10 | 0.52 | (0.34) | Concentration and frequency of detection similar to clean fill. No further sampling recommended |
| Cadmium | 7440-43-9 | 2 of 15 | 0.216 | 3 of 10 | 0.19 | (0.06) | Concentration and frequency of detection similar to clean fill. No further sampling recommended |
| Calcium | 7440-70-2 | --- | --- | 10 of 10 | 30000 | -- | Not analyzed in clean fill. Not a contaminant of concern. No further sampling recommended. |
| Chromium | 7440-47-3 | --- | --- | 10 of 10 | 63.5 | -- | Potential new contaminant: Not analyzed in clean fill |
| Hexavalent Chromium | 18540-29-9 | 1 of 6 | ND | 0 of 10 | ND | -- | |
| Cobalt | 7440-48-4 | 7 of 15 | 4.79 | 10 of 10 | 10.5 | 0.34 | Concentration and frequency of detection similar to clean fill. No further sampling recommended |
| Copper | 7440-50-8 | 14 of 15 | 46.7 | 10 of 10 | 50.7 | 0.04 | Concentration and frequency of detection similar to clean fill. No further sampling recommended |
| Iron | 7439-89-6 | --- | --- | 10 of 10 | 23400 | -- | Not analyzed in clean fill. Not a contaminant of concern. No further sampling recommended. |
| Lead | 7439-92-1 | 13 of 15 | 11.3 | 10 of 10 | 74.8 | 0.82 | Concentration and frequency of detection similar to clean fill. No further sampling recommended |
| Magnesium | 7439-95-4 | --- | --- | 10 of 10 | 17300 | -- | Not analyzed in clean fill. Not a contaminant of concern. No further sampling recommended. |
| Manganese | 7439-96-5 | 14 of 15 | 514 | 10 of 10 | 648 | 0.10 | Concentration and frequency of detection similar to clean fill. No further sampling recommended |
| Mercury | 7439-97-6 | 3 of 15 | 0.0559 | 10 of 10 | 0.27 | 0.68 | Concentration and frequency of detection similar to clean fill. No further sampling recommended |
| Nickel | 7440-02-0 | 7 of 15 | 9.99 | 10 of 10 | 20 | 0.30 | Concentration and frequency of detection similar to clean fill. No further sampling recommended |
| Potassium | 7440-09-7 | --- | --- | 10 of 10 | 1230 | -- | Not analyzed in clean fill. Not a contaminant of concern. No further sampling recommended. |
| Selenium | 7782-49-2 | 1 of 15 | 0.909 | 0 of 10 | ND | -- | Concentration and frequency of detection similar to clean fill. No further sampling recommended |
| Silver | 7440-22-4 | 0 of 15 | ND | 0 of 10 | ND | -- | |
| Sodium | 7440-23-5 | --- | --- | 10 of 10 | 506 | -- | Not analyzed in clean fill. Not a contaminant of concern. No further sampling recommended. |
| Thallium | 7440-28-0 | 2 of 15 | 1.41 | 0 of 10 | ND | -- | |
| Vanadium | 7440-62-2 | 16 of 16 | 56.5 | 10 of 10 | 61.8 | 0.04 | Concentration and frequency of detection similar to clean fill. No further sampling recommended |
| Zinc | 7440-66-6 | 10 of 16 | 20.7 | 10 of 10 | 117 | 0.75 | Concentration and frequency of detection similar to clean fill. No further sampling recommended |
| Cyanide, Total | 57-12-5 | 0 of 12 | ND | 0 of 10 | ND | -- | |
| **General Chemistry** | | | | | | | |
| Total EPH (C9-C40) | NA | 3 of 12 | 36.5 | 10 of 10 | 560 | 1.19 | Potential new contaminant: Maximum concentration exceeds clean fill by more than 10x |
| pH (Standard Units) | NA | 5 of 5 | 7.8 | 10 of 10 | 7.5 | (0.02) | |
| Total Organic Carbon | NA | --- | --- | 10 of 10 | 49300 | -- | |

Notes:
Maximum result reported in milligrams per kilogram dry weight basis unless otherwise noted
Frequency of detections is the total number of results greater than the MDL out of the total number of samples analyzed
---: Sample not analyzed for parameter indicated
NA: Not applicable
ND: Not detected
CASRN: Chemical Abstract Service Registry Number

**Figure 1**

**Southeast Leg Pond Area Sewer Line Release Sampling**




DRAWING TITLE:
Southeast Leg Pond Area
Sewer Line Release Sampling

FIGURE: 1
SCALE: 1 " = 10 '
DATE: April 2020

CLIENT NAME: Hatco

PROJECT NAME: SEL Pond Restoration

N W E S

REPORT DATE: April 2020

DRAWING: 25193_SEL_Pond_FSP_Phase1_2_Rev1.mxd
PATH: P:\Hatco\GIS\MXD\2019_10_SEL_Pond_FSP\

REVISION No. 0

WORK ORDER No. 13067.001.004.8003

PROJECT MANAGER: J. Schindler

CHECKED BY: C. Devorak

CONTRACT No.

DELIVERY ORDER NO.

DRAWN/MODIFIED BY: H. Bravo-Ruiz
DATE CREATED: 10/18/2019

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# Appendix A

## Southeast Leg Wetland Pond Area Field Sampling Plan and Quality Assurance Project Plan Addendum

**Southeast Leg Wetland Pond Area Field Sampling Plan and Quality Assurance Project Plan Addendum**
**Hatco Site – Fords, New Jersey**
**March 2020**

## 1. Problem Definition

Weston Solutions, Inc. (Weston®) has prepared this Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP) Addendum to describe investigation activities in the portion of the Hatco Remediation Site designated as AOC-2 Former Ponds Area, Southeast Leg (SEL) Wetland Pond Area. This document is intended as an addendum to the project QAPP originally prepared as part of Weston's 2009 *Addendum 3 to the Consolidated Remedial Action Work Plan (RAWP),* and provides specific sample collection methodology and laboratory analyses requirements.

The primary intent of this program is to delineate the extent of soil and/or surface water contamination in the recently reconstructed wetlands in the SEL Remediation Area. Remediation in the SEL Wetland Pond Area was performed in 2015, and included excavation and offsite disposal of light non-aqueous phase liquid (LNAPL) and soil containing polychlorinated biphenyls (PCBs) and bis(2-ethylhexyl) phthalate (BEHP). Post-remediation soil samples confirmed removal of PCBs above the remediation goal of 2 mg/kg and BEHP above the remediation goal of 210 mg/kg, to the limits of the excavation. The SEL Wetland Pond Area was then backfilled with imported clean fill. The area was restored as a wetland in accordance with the approved wetland disruption permit for this area.

On June 19, 2018, Weston personnel conducting remediation activities in the AOC-2 Former Ponds Area of the Hatco Site discovered that a hole had formed in the ground adjacent to a facility standpipe. The standpipe was connected to a stormwater sewer line which ran through an area of contaminated soil. In 2015 the contaminated soil was placed as part of the Southeast Leg (SEL) remediation project and consolidated beneath an engineered cap in accordance with the approved work plan. The area acted as a pathway for contaminated soil to be transported to the ground surface and into the reconstructed wetlands. Sheen was observed on portions of the northern and southern edges of the SEL Wetland Pond Area. The majority of the sheen was observed across an approximately 800 square-foot area within roughly ten feet of the southern edge of the pond. The heavy sheen was recovered by Weston personnel using sorbent materials.

Weston plans to implement a multiple-phase sampling approach to:

1. Identify contaminants present at concentrations above applicable remediation criteria;
2. Determine the extent of soil contamination; and
3. Delineate the impacts that require remediation.

Results of this sampling program will be used to define the horizontal and vertical limits of possible contaminated soil to be removed from this area.

## 2. Project Data Quality Objectives

The following data quality objectives have been established for this work:

- Sensitivity Data Quality Objectives (DQO): Reporting limits will be below the site-specific criteria summarized in ***Table 1: Site-Specific Direct Contact Soil Remediation Criteria*.**

- Accuracy, precision, representativeness, completeness and comparability goals will be as stated in Weston's *2009 Addendum 3 to the Consolidated RAWP*.

Weston will communicate project-specific DQO to the analytical laboratory.

## 3. Sample Design, Rationale and Locations

Soil samples will be collected to define the extent of soil contamination at the SEL Wetland Pond Area. Sampling will be performed in three phases to: 1) identify contaminants associated with the sewer release; 2) identify contaminants which have impacted the clean fill used to construct the SEL Wetlands in 2015; and 3) delineate the extent of impacts which require remediation. One surface water sample will be collected to evaluate the effect of the contaminants upon surface water quality. Each sampling location will be photographed and documented with a field sketch. If a location is inaccessible then the final location may be adjusted based on field conditions. ***Figure 1: Southeast Leg Pond Area Sewer Line Release Sampling*** is an overall site map showing the location of the soil and surface water samples. No permitting will be required for sampling.

### *3.1 Phase 1: Identify Contaminants*

Phase 1 will consist of identifying contaminants associated with the sewer release. Weston will collect soil and water samples for laboratory analysis as described on ***Table 3: Sample Summary,*** using a standard laboratory turnaround time. Sample results will be compared to site specific criteria. Applicable criteria for the Hatco Site are defined in the RAWP and United States Environmental Protection Agency (USEPA) Risk-Based PCB Disposal Approval. Direct contact soil criteria are the New Jersey Department of Environmental Protection (NJDEP) soil cleanup criteria subject to the NJDEP Order of Magnitude Guidance, updated August 10, 2009. Applicable soil criteria are summarized on ***Table 1.*** Surface water results will be compared to applicable Surface Water Quality Standards (NJAC 7:9B) for FW2.

Two soil samples will be collected along the apparent pathway from the original release leading to the pond; Eight solid samples will be collected from the north, east, south and west perimeter of the pond. At each location one soil sample will be collected from unsaturated soil approximately 3 to 5 feet horizontally above the water line and one will be collected from saturated pond bottom material approximately 3 to 5 feet horizontally below the water line. Two surface water samples will be collected: one from the north end of the pond near the pathway noted above and one from the south end of the pond where a visible sheen was previously identified. Soil samples will be collected from the 0- to 6-inch depth interval. Planned sample locations are shown on ***Figure 1***. These locations are subject to adjustment based on field observations.

### *3.2 Phase 2: Determine Extent of Soil Contamination*

Phase 2 will consist of determining the impact of contaminants identified in the Phase 1 sampling upon the clean fill used to construct the SEL Wetlands in 2015. If any contaminants are identified above a standard by Phase 1 sampling, Weston will implement Phase 2. Weston will collect soil samples at 15-foot intervals along the apparent pathway from the original release to the pond and around the perimeter of the pond at the approximate water line. Samples will be analyzed for the potential contaminants identified in Phase 1. Sample results will be compared to the remediation criteria for the site summarized on ***Table 1.***

Contaminants detected in the SEL Wetland Pond Area at concentrations greater than the Non-Residential Direct Contact Soil Cleanup Criteria (NRDCSCC) are subject to remediation by removal. Contaminants detected at concentrations less than the NRDCSCC but greater than the Residential Direct Contact Soil Cleanup Criteria (RDCSCC) will be managed through a deed notice to be established for the entire site.

### *3.3 Phase 3: Determine the Extent of Impacts Which Require Remediation*

Phase 3 will consist of determining the extent of impacts which require remediation. Horizontal step-out samples will be collected at approximately 5-foot intervals, as necessary, to delineate contamination at locations identified during Phase 2 sampling.

## 4. Key Project Personnel and Contact Information

| Name | Title | Company | Cell Phone | Email |
|---|---|---|---|---|
| Jason Schindler | Principal Project Manager | Weston Solutions | (732) 740-5529 | Jason.schindler@westonsolutions.com |
| Mark Fisher | Licensed Site Remediation Professional | The ELM Group | (609) 683-4848 | mfisher@elminc.com |
| Coleen Devorak | Senior Project Leader | Weston Solutions | (732) 476-7479 | Coleen.devorak@westonsolutions.com |
| Aaron Roppoli | Associate Geoscientist/Site Safety Officer | Weston Solutions | (251) 751-2882 | Aaron.Roppoli@WestonSolutions.com |
| Habib Bravo-Ruiz | Associate Geoscientist | Weston Solutions | (787) 360-4156 | Habib.Bravo-Ruiz@WestonSolutions.com |
| Eliel Lucero | Project Scientist | Weston Solutions | (908) 229-3614 | Eliel.Lucero@WestonSolutions.com |
| Larry Werts | Health and Safety Coordinator | Weston Solutions | (215) 815-6237 | Lawrence.Werts@WestonSolutions.com |
| Yunru Yang | Quality Assurance Coordinator | Weston Solutions | (732) 417-5822 | Yunru.Yang@WestonSolutions.com |
| Patricia Greico | Laboratory Contact | Eurofins TestAmerica | (732) 593-2507 | Patricia.Greico@testamericainc.com |

## 5. Sampling Methodology

The sampling procedures will follow the guidelines documented in the *NJDEP Field Sampling Procedures Manual* (August 2005) as described below, and are detailed in Weston's 2009 QAPP. Lithologic descriptions and field observations will be recorded in the field logbook. Soil samples will be collected from discrete 6-inch intervals from designated depths, as outlined in ***Table 1.***

### *5.1 Soil Sampling*

The sampling team will navigate to the target sample locations using the coordinates identified on ***Table 2: Field Sampling Plan*** and handheld Global Positioning System (GPS) navigational equipment. Soil samples for non-VOC analysis will be collected from the top 6 inches using dedicated disposable high density polyethylene (HDPE) trowels, homogenized in dedicated, disposable aluminum trays, and placed into laboratory-prepared sample containers. EnCore® Samplers will be used to collect soil from the undisturbed soil below the non-VOC sample material for volatile organic analysis. Samples will be preserved as described on ***Table 4: Sample Preservation***.

The following process will be utilized at each sample location to collect the soil samples for laboratory analysis:

1) Set up at the sampling location. A clean sheet of plastic sheeting will be placed over the area and secured.
2) Ensure all necessary supplies are accessible (i.e., disposable aluminum pans, disposable sampling trowels, labeled sample containers, EnCore® samplers, garbage bags, logbook, weather-resistant pen, and required personal protective equipment (PPE) including but not limited to butyl and nitrile gloves, Tychem suits, safety glasses, hard hat, steel-toe boots, etc.).
3) Use dedicated, disposable sampling trowel to collect soil from 0- to 6-inch interval and place soil into dedicated, disposable aluminum tray
4) Screen soil for organic vapors using photoionization detector (PID).
5) Collect soil sample aliquot for VOC analysis from the soil at the bottom of the sample location (approximately 6 inches below grade) using EnCore® sampling device.
6) Homogenize soil sample for non-VOC analysis using trowel. Transfer homogenized soil from aluminum tray to laboratory-prepared sample containers.

7) Place filled sample containers into a cooler with wet ice and a temperature blank for shipment to the laboratory.
8) Containerize used sampling equipment and PPE for disposal.
9) Set up at next sampling location.

### *5.2 Pond Bottom Sampling*

Pond bottom samples will be collected using an Ekman grab sampler, Ponar dredge or coring device. The final device selected will be determined based on field conditions and will be employed in accordance with the sampling procedures described in the NJDEP Field Sampling Procedures manual. Pond bottom material will be collected from the 0- to 6-inch interval. The material will be managed and processed following the procedures described above for the soil samples, with the following exception. The VOC sample aliquot will be collected from material in the sampling device prior to transferring the remaining material to the aluminum tray for processing.

### *5.3 Surface Water Sampling*

The sampling team will navigate to the target sample location using the coordinates identified on ***Table 2*** and handheld GPS navigational equipment. The surface water sample will be collected by immersion of the laboratory cleaned sample bottles into the pond. Water sample bottles will be pre-preserved as described on ***Table 4.*** The following process will be utilized to collect the surface water sample for laboratory analysis:

1) Ensure bottles are intact with a good fitting lid.
2) Collect samples for volatile organics analysis first to prevent loss of volatiles due to disturbance of the water. Use a laboratory clean, unpreserved, empty sample jar or a pond sampler to collect surface water and fill pre-preserved vials to zero headspace. Cap vial and invert to ensure no air remains in the vial.
3) For all bottles except samples for volatile organic analysis, proceed to immerse bottle by hand into surface water and allow water to run slowly into bottle until nearly full; do not fill to the point that preservative can wash out of the bottles.
4) Use care not to create sediment disturbance, especially when trace metals sampling is included in the requested analysis.
5) Samples will be placed into a cooler with wet ice and a temperature blank for shipment to the laboratory.
6) Containerize used PPE for disposal.

### *5.4 Sample Management*

The sample bottles will be prepared for shipment accompanied by a chain of custody and the cooler containing them will be custody sealed. The chain of custody will also accompany the bottles during sample collection, transportation back to the laboratory, and analysis. Each form will be completed in the field and signed and dated by a member of the field team who will verify the exact sample shipment.

### *5.5 Quality Assurance and Quality Control*

Quality assurance/quality control (QA/QC) samples will be collected in accordance with Weston's QAPP, included as part of the 2009 Consolidated RAWP *(Addendum 3).* Laboratory-blind field duplicate and matrix spike/matrix spike duplicate (MS/MSD) samples will be collected at a rate of 1 per 20 samples per

analytical parameter. Field blanks will be collected once per day per matrix and analyzed for the same parameters as the field samples. A trip blank will accompany the surface water sample for VOC analysis.

Field activities, tests and observations will be recorded in a field logbook. Entries in the logbook will include the names of the individuals participating in the field effort, date and time, and the initials of the individual responsible for recording the observations.

## 6. Decontamination

Disposable sampling equipment will be used. However, should reusable sampling equipment be used, sampling equipment that comes in contact with contaminated material will be decontaminated prior to reuse and prior to removal from the site. Decontamination will be performed atop a pad or other device to capture all decontamination liquids; these liquids will be containerized for disposal as required in 40 CFR 761.79(g).

Wipe samples will be collected prior to release of decontaminated reusable sampling equipment from the site to document that decontamination is sufficient to meet the requirements of 40 CFR 761.79(b)(3)(i). Wipe testing will be performed in accordance with 40 CFR 761.243, with one wipe sample collected from each unique surface of the decontaminated equipment. One wipe sample will be collected per type of decontaminated equipment.

Once wipe sample results have confirmed decontamination has met the objectives of 40 CFR 761.79(b)(3)(i), the equipment may be released from the site for re-use. Should wipe samples fail to confirm sufficient decontamination, the above process will be repeated.

Reusable sampling equipment employed in areas with PCB concentrations less than 1 mg/kg will be decontaminated in the following sequence, prescribed in the *NJDEP Field Sampling Procedures Manual (August 2005), Section 2.4.1*:

1) Laboratory grade glassware detergent plus tap water wash
2) Generous tap water rinse
3) Distilled and deionized (ASTM Type II) water rinse
4) Acetone (pesticide grade) rinse
5) Total air dry
6) Distilled and deionized (ASTM Type II) water rinse

No confirmatory wipe sampling is required for decontamination of equipment used in areas with PCB concentrations less than 1 mg/kg.

## 7. Investigation-Derived Waste Management

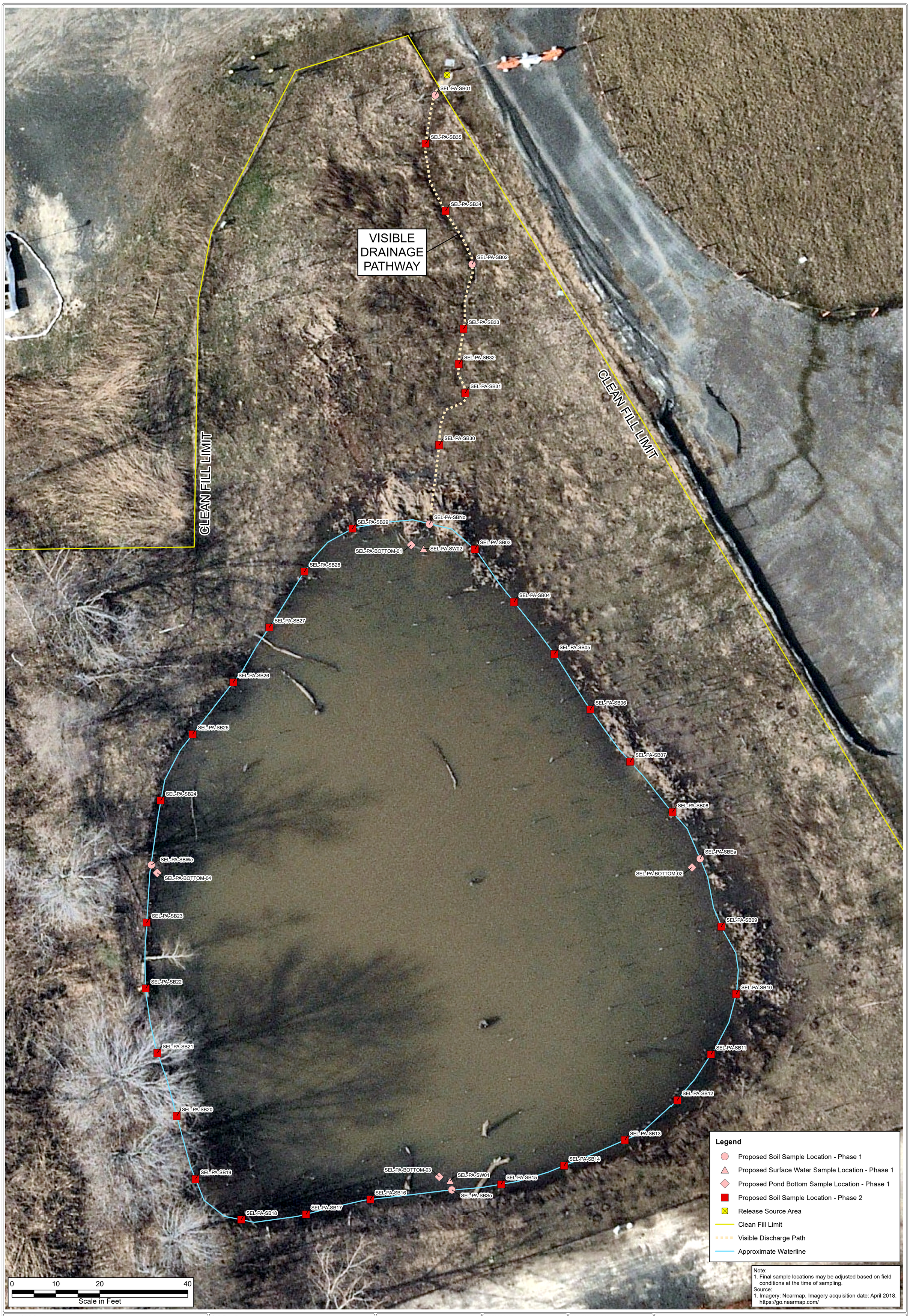
Investigation-derived waste generated during sampling activities will be containerized and temporarily staged at the Hatco Site, in 55-gallon drums or other DOT-approved containers and handled in accordance with applicable Federal and State requirements.

## FIGURES

Figure 1: Southeast Leg Pond Area Sewer Line Release Sampling
Figure 2: Site Map and Areas of Concern

## TABLES

Table 1: Site-Specific Direct Contact Soil Remediation Criteria
Table 2: Field Sampling Plan
Table 3: Sample Summary
Table 4: Sample Preservation




Note:
1. Final sample locations may be adjusted based on field conditions at the time of sampling.

Source:
1. Imagery: Nearmap, Imagery acquisition date: April 2018. https://go.nearmap.com/

| | | | | | |
|---|---|---|---|---|---|
| DRAWING TITLE: Southeast Leg Pond Area Sewer Line Release Sampling | CLIENT NAME: Hatco | N W E S | REPORT DATE: February 2020 | PROJECT MANAGER: J. Schindler | WESTON SOLUTIONS SM |
| | PROJECT NAME: SEL Pond Restoration | | DRAWING: 25193_SEL_Pond_FSP_Phase1_2_Rev1.mxd PATH: P:\Hatco\GIS\MXD\2019_10_SEL_Pond_FSP\ | CHECKED BY: C. Devorak | |
| | | | REVISION No. 0 | CONTRACT No. DELIVERY ORDER NO. | |
| FIGURE: 1 / SCALE: 1 " = 10 ' / DATE: February 2020 | | | WORK ORDER No. 13067.001.004.8003 | DRAWN/MODIFIED BY: H. Bravo-Ruiz DATE CREATED: 10/18/2019 | Weston Solutions, Inc. |

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N W E S

| | | | |
|---|---|---|---|
| REPORT DATE: February 2020 | PROJECT MANAGER: J. Schindler | CLIENT NAME: Hatco Corporation | DRAWING TITLE: SITE MAP AND AREAS OF CONCERN |
| DRAWING: 25206_Areas_of_Concern_Aerial.mxd PATH: P:\Hatco\GIS\MXD\2017_02_SEL_RAPR\ | CHECKED BY: C. Devorak | | |
| REVISION No. 0 | CONTRACT No. DELIVERY ORDER NO. | PROJECT NAME: Hatco Remediation | |
| WORK ORDER No. 13067.001.004.8003 | DRAWN/MODIFIED BY: J. Gardner DATE CREATED: 2/19/2020 | | FIGURE: 2 / SCALE: 1" =80' / DATE: 2/19/2020 |

Table 1. Site-Specific Direct Contact Soil Remediation Criteria
Discharge to Restored Wetland
Southeast Leg Remediation Area
Hatco Remediation Project

| Contaminant | CASRN | Site Specific RDC | Note | Site Specific NRDC | Note |
|---|---|---|---|---|---|
| Volatile Organic Compounds | | | | | |
| Acetone (2-propanone) | 67-64-1 | 70000 | (4) | NA | (6) |
| Acrolein | 107-02-8 | 0.5 | (5) | 1 | (5) |
| Acrylonitrile | 107-13-1 | 1 | (2) | 5 | (2) |
| Benzene | 71-43-2 | 3 | (2) | 13 | (2) |
| Bromodichloromethane (Dichlorobromomethane) | 75-27-4 | 1 | (1) | 3 | (1) |
| Bromoform | 75-25-2 | 86 | (2) | 370 | (2) |
| Bromomethane (Methyl bromide) | 74-83-9 | 79 | (2) | 59 | (1) |
| 2-Butanone (Methyl ethyl ketone) (MEK) | 78-93-3 | 3100 | (4) | 44000 | (4) |
| Carbon disulfide | 75-15-0 | 7800 | (5) | 110000 | (5) |
| Carbon tetrachloride | 56-23-5 | 2 | (2) | 4 | (2) |
| Chlorobenzene | 108-90-7 | 510 | (4) | 7400 | (4) |
| Chloroethane (Ethyl chloride) | 75-00-3 | 220 | (5) | 1100 | (5) |
| Chloroform | 67-66-3 | 0.6 | (1) | 2 | (1) |
| Chloromethane (Methyl chloride) | 74-87-3 | 4 | (1) | 12 | (1) |
| 1,2-Dibromo-3-chloropropane | 96-12-8 | 0.08 | (5) | 0.2 | (5) |
| Dibromochloromethane (Chlorodibromomethane) | 124-48-1 | 3 | (1) | 8 | (1) |
| 1,2-Dibromoethane | 106-93-4 | 0.008 | (5) | 0.04 | (5) |
| 1,3-Dichlorobenzene (m-Dichlorobenzene) | 541-73-1 | 5300 | (4) | 59000 | (4) |
| 1,2-Dichlorobenzene (o-Dichlorobenzene) | 95-50-1 | 5300 | (4) | 59000 | (4) |
| 1,4-Dichlorobenzene (p-Dichlorobenzene) | 106-46-7 | 5 | (1) | 13 | (1) |
| Dichlorodifluoromethane | 75-71-8 | 490 | (5) | 230000 | (5) |
| 1,1-Dichloroethane | 75-34-3 | 8 | (1) | 24 | (1) |
| 1,2-Dichloroethane | 107-06-2 | 6 | (2) | 24 | (2) |
| 1,1-Dichloroethene | 75-35-4 | 11 | (4) | 150 | (2) |
| 1,2-Dichloroethene (cis) (c-1,2-Dichloroethylene) | 156-59-2 | 230 | (4) | 1000 | (2) |
| 1,2-Dichloroethene (trans) (t-1,2-Dichloroethylene) | 156-60-5 | 1000 | (2) | 1000 | (2) |
| 1,2-Dichloropropane | 78-87-5 | 10 | (2) | 43 | (2) |
| 1,3-Dichloropropene (cis and trans) | 542-75-6 | 4 | (2) | 7 | (4) |
| Ethyl benzene | 100-41-4 | 7800 | (4) | 110000 | (4) |
| Methyl acetate | 79-20-9 | 78000 | (5) | NA | (6) |
| Methyl tert-butyl ether (MTBE) | 1634-04-4 | 110 | (5) | 320 | (5) |
| 4-Methyl-2-pentanone (MIBK) | 108-10-1 | NA | (6) | NA | (6) |
| Methylene chloride (Dichloromethane) | 75-09-2 | 49 | (2) | 230 | (4) |
| Styrene | 100-42-5 | 90 | (4) | 260 | (4) |
| Tertiary butyl alcohol (TBA) | 75-65-0 | 1400 | (5) | 11000 | (5) |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 1 | (1) | 1 | (1) |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 1 | (1) | 3 | (1) |
| Tetrachloroethene (PCE) (Tetrachloroethylene) | 127-18-4 | 43 | (4) | 1500 | (4) |
| Toluene | 108-88-3 | 6300 | (4) | 91000 | (4) |
| 1,2,4-Trichlorobenzene | 120-82-1 | 73 | (4) | 1200 | (2) |
| 1,1,1-Trichloroethane | 71-55-6 | NA | (3) | NA | (3) |
| 1,1,2-Trichloroethane | 79-00-5 | 2 | (1) | 6 | (1) |
| Trichloroethene (Trichloroethylene) (TCE) | 79-01-6 | 23 | (2) | 54 | (2) |
| Trichlorofluoromethane | 75-69-4 | 23000 | (5) | 340000 | (5) |
| Vinyl chloride | 75-01-4 | 2 | (2) | 7 | (2) |
| Xylenes (Total) | 1330-20-7 | 12000 | (4) | 170000 | (4) |

Table 1. Site-Specific Direct Contact Soil Remediation Criteria
Discharge to Restored Wetland
Southeast Leg Remediation Area
Hatco Remediation Project

| Contaminant | CASRN | Site Specific RDC | Note | Site Specific NRDC | Note |
|---|---|---|---|---|---|
| Semi-Volatile Organic Compounds | | | | | |
| Acenaphthene | 83-32-9 | 3400 | (2) | 37000 | (4) |
| Acenaphthylene | 208-96-8 | NA | (6) | 300000 | (5) |
| Acetophenone | 98-86-2 | 2 | (5) | 5 | (5) |
| Anthracene | 120-12-7 | 17000 | (4) | 30000 | (4) |
| Atrazine | 1912-24-9 | 210 | (5) | 2400 | (5) |
| Benzaldehyde | 100-52-7 | 6100 | (5) | 68000 | (5) |
| Benzidine | 92-87-5 | 0.7 | (5) | 0.7 | (5) |
| Benzo(a)anthracene (1,2-Benzanthracene) | 56-55-3 | 5 | (4) | 17 | (4) |
| Benzo(a)pyrene (BaP) | 50-32-8 | 0.66 | (2) | 2 | (4) |
| Benzo(b)fluoranthene (3,4-Benzofluoranthene) | 205-99-2 | 5 | (4) | 17 | (4) |
| Benzo(ghi)perylene | 191-24-2 | 380000 | (5) | 30000 | (5) |
| Benzo(k)fluoranthene | 207-08-9 | 45 | (4) | 170 | (4) |
| Benzyl Alcohol | 100-51-6 | NA | (6) | NA | (6) |
| 1,1'-Biphenyl | 92-52-4 | 61 | (5) | 240 | (5) |
| Bis(2-chloroethyl)ether | 111-44-4 | 0.66 | (2) | 3 | (2) |
| Bis(2-chloroisopropyl)ether | 108-60-1 | 23 | (1) | 67 | (1) |
| Bis(2-ethylhexyl) phthalate | 117-81-7 | 49 | (2) | 210 | (2) |
| Butyl benzyl phthalate | 85-68-7 | 1200 | (4) | 14000 | (4) |
| Caprolactam | 105-60-2 | 31000 | (5) | 340000 | (5) |
| Carbazole | 86-74-8 | 24 | (5) | 96 | (5) |
| 4-Chloro-3-methyl phenol (p-Chloro-m-cresol) | 59-50-7 | NA | (6) | NA | (6) |
| 4-Chloroaniline (p-Chloroaniline) | 106-47-8 | NA | (6) | NA | (6) |
| 2-Chlorophenol (o-Chlorophenol) | 95-57-8 | 310 | (4) | 5200 | (2) |
| Dibenz(a,h)anthracene | 53-70-3 | 0.66 | (2) | 2 | (4) |
| 3,3'-Dichlorobenzidine | 91-94-1 | 2 | (2) | 6 | (2) |
| 2,4-Dichlorophenol | 120-83-2 | 180 | (4) | 3100 | (2) |
| Diethyl phthalate | 84-66-2 | 49000 | (4) | 550000 | (4) |
| 2,4-Dimethyl phenol | 105-67-9 | 1200 | (4) | 14000 | (4) |
| Dimethyl phthalate | 131-11-3 | NA | (6) | NA | (6) |
| Di-n-butyl phthalate | 84-74-2 | 6100 | (4) | 68000 | (4) |
| 4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol) | 534-52-1 | 6 | (5) | 68 | (5) |
| 2,4-Dinitrophenol | 51-28-5 | 120 | (4) | 2100 | (2) |
| 2,6-Dinitrotoluene | 606-20-2 | 0.7 | (5) | 3 | (5) |
| 2,4-Dinitrotoluene | 121-14-2 | 0.7 | (5) | 3 | (5) |
| 2,4-Dinitrotoluene/2,6-Dinitrotoluene (mixture) | 25321-14-6 | 1 | (2) | 4 | (2) |
| Di-n-octyl phthalate | 117-84-0 | 2400 | (4) | 27000 | (4) |
| 1,2-Diphenylhydrazine | 122-66-7 | 0.7 | (5) | 2 | (5) |
| Fluoranthene | 206-44-0 | 2300 | (2) | 24000 | (4) |
| Fluorene | 86-73-7 | 2300 | (2) | 24000 | (4) |
| Hexachloro-1,3-butadiene | 87-68-3 | 6 | (4) | 25 | (4) |
| Hexachlorobenzene | 118-74-1 | 0.66 | (2) | 2 | (2) |
| Hexachlorocyclopentadiene | 77-47-4 | 400 | (2) | 110 | (1) |
| Hexachloroethane | 67-72-1 | 12 | (4) | 100 | (2) |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | 5 | (4) | 17 | (4) |
| Isophorone | 78-59-1 | 1100 | (2) | 10000 | (2) |
| 2-Methylnaphthalene | 91-57-6 | 230 | (5) | 2400 | (5) |
| 2-Methylphenol (o-creosol) | 95-48-7 | 310 | (1) | 10000 | (2) |

Table 1. Site-Specific Direct Contact Soil Remediation Criteria
Discharge to Restored Wetland
Southeast Leg Remediation Area
Hatco Remediation Project

| Contaminant | CASRN | Site Specific RDC | Note | Site Specific NRDC | Note |
|---|---|---|---|---|---|
| 4-Methylphenol (p-creosol) | 106-44-5 | 31 | (1) | 340 | (1) |
| Naphthalene | 91-20-3 | 6 | (1) | 17 | (1) |
| 2-Nitroaniline | 88-74-4 | 39 | (5) | 23000 | (5) |
| Nitrobenzene | 98-95-3 | 28 | (2) | 14 | (1) |
| N-Nitrosodimethylamine | 62-75-9 | 0.7 | (5) | 0.7 | (5) |
| N-Nitrosodi-n-propylamine | 621-64-7 | 0.66 | (2) | 0.66 | (2) |
| N-Nitrosodiphenylamine | 86-30-6 | 140 | (2) | 600 | (2) |
| Pentachlorophenol | 87-86-5 | 6 | (2) | 24 | (2) |
| Phenanthrene | 85-01-8 | NA | (6) | 300000 | (5) |
| Phenol | 108-95-2 | 18000 | (4) | 210000 | (4) |
| Pyrene | 129-00-0 | 1700 | (2) | 18000 | (4) |
| 2,4,5-Trichlorophenol | 95-95-4 | 6100 | (4) | 68000 | (4) |
| 2,4,6-Trichlorophenol | 88-06-2 | 62 | (2) | 270 | (2) |
| Pesticides and PCBs | | | | | |
| Aldrin | 309-00-2 | 0.04 | (2) | 0.2 | (4) |
| Chlordane (alpha and gamma) | 57-74-9 | 0.2 | (5) | 1 | (5) |
| 4,4'-DDD (p,p'-TDE) | 72-54-8 | 3 | (2) | 13 | (4) |
| 4,4'-DDE (p,p'-DDX) | 72-55-9 | 2 | (2) | 9 | (2) |
| 4,4'-DDT | 50-29-3 | 2 | (2) | 9 | (2) |
| Dieldrin | 60-57-1 | 0.042 | (2) | 0.2 | (4) |
| Endosulfan I and Endosulfan II (alpha and beta) | 115-29-7 | 470 | (4) | 6800 | (4) |
| Endosulfan sulfate | 1031-07-8 | 470 | (5) | 6800 | (5) |
| Endrin | 72-20-8 | 23 | (4) | 340 | (4) |
| alpha-HCH (alpha-BHC) | 319-84-6 | 0.1 | (5) | 0.5 | (5) |
| beta-HCH (beta-BHC) | 319-85-7 | 0.4 | (5) | 2 | (5) |
| Heptachlor | 76-44-8 | 0.15 | (2) | 0.7 | (4) |
| Heptachlor epoxide | 1024-57-3 | 0.07 | (5) | 0.3 | (5) |
| Lindane (gamma-HCH) (gamma-BHC) | 58-89-9 | 0.52 | (2) | 2.2 | (2) |
| Methoxychlor | 72-43-5 | 390 | (4) | 5700 | (4) |
| Polychlorinated biphenyls (PCBs) | 1336-36-3 | 0.49 | (2) | 2 | (2) |
| Toxaphene | 8001-35-2 | 0.6 | (4) | 3 | (4) |
| Inorganics | | | | | |
| Aluminum | 7429-90-5 | 78000 | (5) | NA | (6) |
| Antimony | 7440-36-0 | 31 | (4) | 450 | (4) |
| Arsenic | 7440-38-2 | 20 | (2) | 20 | (2) |
| Barium | 7440-39-3 | 16000 | (4) | 59000 | (4) |
| Beryllium | 7440-41-7 | 16 | (4) | 140 | (4) |
| Cadmium | 7440-43-9 | 78 | (4) | 100 | (2) |
| Chromium – hexavalent (VI) | 18540-29-9 | NA | (6) | NA | (6) |
| Chromium – trivalent (III) | 16065-83-1 | NA | (6) | NA | (6) |
| Chrysene | 218-01-9 | 450 | (4) | 1700 | (4) |
| Cobalt | 7440-48-4 | 1600 | (5) | 590 | (5) |
| Copper | 7440-50-8 | 3100 | (4) | 45000 | (4) |
| Cyanide | 57-12-5 | 47 | (1) | 680 | (1) |
| Lead | 7439-92-1 | 400 | (2) | 800 | (4) |
| Manganese | 7439-96-5 | 11000 | (5) | 5900 | (5) |
| Mercury | 7439-97-6 | 23 | (4) | 270 | (2) |
| Nickel (Soluble salts) | 7440-02-0 | 1600 | (4) | 23000 | (4) |

Table 1. Site-Specific Direct Contact Soil Remediation Criteria
Discharge to Restored Wetland
Southeast Leg Remediation Area
Hatco Remediation Project

| Contaminant | CASRN | Site Specific RDC | Note | Site Specific NRDC | Note |
|---|---|---|---|---|---|
| Selenium | 7782-49-2 | 390 | (4) | 5700 | (4) |
| Silver | 7440-22-4 | 390 | (4) | 5700 | (4) |
| Thallium | 7440-28-0 | NA | (3) | NA | (6) |
| Vanadium | 7440-62-2 | 370 | (2) | 7100 | (2) |
| Zinc | 7440-66-6 | 23000 | (4) | 110000 | (4) |

Notes:
All criteria in milligrams per kilogram dry weight basis
NA: Not applicable
CASRN: Chemical Abstracts Service Registry Number
NRDC: Non-Residential Direct Contact
RDC: Residential Direct Contact
SCC: Soil Cleanup Criteria
SRS: Soil Remediation Standard
(1): Change to SRS greater than one order of magnitude; SRS applies.
(2): Change to SRS less than one order of magnitude; SCC retained.
(3): Contaminant no longer regulated
(4): Less stringent SRS standard applied
(5): No applicable SCC, SRS applied
(6): Not a suspected site-related contaminant, no current SRS

L:\13067 Hatco\12.0 Preliminary Documents\2019-11 SEL Pond Restoration Planning\Field Sampling Plan\[2019-12-12 SEL Pond FSP Table 1-Soil Crite

Table 2. Field Sampling Plan
Discharge to Restored Wetland
Southeast Leg Remediation Area
Hatco Remediation Project

| Sampling Phase | Target Northing | Target Easting | Location | Target Sample Depth (feet) | | | Sample ID | Sampling Objective |
|---|---|---|---|---|---|---|---|---|
| Phase 1 | 614514 | 542588 | SEL-PA-SB01 | 0 | - | 0.5 | SEL-PA-SB01-A-B-0-MoDaYr | Surface soil/Sewer release pathway |
| | 614476 | 542597 | SEL-PA-SB02 | 0 | - | 0.5 | SEL-PA-SB02-A-B-0-MoDaYr | Surface soil/Sewer release pathway |
| | 614340 | 542648 | SEL-PA-SBNo | 0 | - | 0.5 | SEL-PA-SBNo-A-B-0-MoDaYr | Surface soil |
| | 614417 | 542587 | SEL-PA-SBEa | 0 | - | 0.5 | SEL-PA-SBEa-A-B-0-MoDaYr | Surface soil |
| | 614265 | 542592 | SEL-PA-SBSo | 0 | - | 0.5 | SEL-PA-SBSo-A-B-0-MoDaYr | Surface soil |
| | 614339 | 542524 | SEL-PA-SBWe | 0 | - | 0.5 | SEL-PA-SBWe-A-B-0-MoDaYr | Surface soil |
| | 614412 | 542583 | SEL-PA-Bottom-01 | 0 | - | 0.5 | SEL-PA-Bottom-01-A-B-0-MoDaYr | Pond bottom |
| | 614338 | 542647 | SEL-PA-Bottom-02 | 0 | - | 0.5 | SEL-PA-Bottom-02-A-B-0-MoDaYr | Pond bottom |
| | 614268 | 542589 | SEL-PA-Bottom-03 | 0 | - | 0.5 | SEL-PA-Bottom-03-A-B-0-MoDaYr | Pond bottom |
| | 614337 | 542525 | SEL-PA-Bottom-04 | 0 | - | 0.5 | SEL-PA-Bottom-04-A-B-0-MoDaYr | Pond bottom |
| | 614267 | 542592 | SEL-PA-SW01 | NA | | | SEL-PA-SW01-0-MoDaYr | Surface water sample |
| | 614411 | 542585 | SEL-PA-SW02 | NA | | | SEL-PA-SW02-0-MoDaYr | Surface water sample |
| Phase 2 | 614411 | 542597 | SEL-PA-SB03 | 0 | - | 0.5 | SEL-PA-SB03-A-B-0-MoDaYr | Surface soil |
| | 614399 | 542606 | SEL-PA-SB04 | 0 | - | 0.5 | SEL-PA-SB04-A-B-0-MoDaYr | Surface soil |
| | 614387 | 542615 | SEL-PA-SB05 | 0 | - | 0.5 | SEL-PA-SB05-A-B-0-MoDaYr | Surface soil |
| | 614374 | 542623 | SEL-PA-SB06 | 0 | - | 0.5 | SEL-PA-SB06-A-B-0-MoDaYr | Surface soil |
| | 614362 | 542633 | SEL-PA-SB07 | 0 | - | 0.5 | SEL-PA-SB07-A-B-0-MoDaYr | Surface soil |
| | 614351 | 542642 | SEL-PA-SB08 | 0 | - | 0.5 | SEL-PA-SB08-A-B-0-MoDaYr | Surface soil |
| | 614325 | 542653 | SEL-PA-SB09 | 0 | - | 0.5 | SEL-PA-SB09-A-B-0-MoDaYr | Surface soil |
| | 614310 | 542657 | SEL-PA-SB10 | 0 | - | 0.5 | SEL-PA-SB10-A-B-0-MoDaYr | Surface soil |
| | 614296 | 542651 | SEL-PA-SB11 | 0 | - | 0.5 | SEL-PA-SB11-A-B-0-MoDaYr | Surface soil |
| | 614285 | 542643 | SEL-PA-SB12 | 0 | - | 0.5 | SEL-PA-SB12-A-B-0-MoDaYr | Surface soil |
| | 614276 | 542631 | SEL-PA-SB13 | 0 | - | 0.5 | SEL-PA-SB13-A-B-0-MoDaYr | Surface soil |
| | 614271 | 542617 | SEL-PA-SB14 | 0 | - | 0.5 | SEL-PA-SB14-A-B-0-MoDaYr | Surface soil |
| | 614266 | 542603 | SEL-PA-SB15 | 0 | - | 0.5 | SEL-PA-SB15-A-B-0-MoDaYr | Surface soil |
| | 614263 | 542573 | SEL-PA-SB16 | 0 | - | 0.5 | SEL-PA-SB16-A-B-0-MoDaYr | Surface soil |
| | 614259 | 542559 | SEL-PA-SB17 | 0 | - | 0.5 | SEL-PA-SB17-A-B-0-MoDaYr | Surface soil |
| | 614258 | 542544 | SEL-PA-SB18 | 0 | - | 0.5 | SEL-PA-SB18-A-B-0-MoDaYr | Surface soil |
| | 614267 | 542534 | SEL-PA-SB19 | 0 | - | 0.5 | SEL-PA-SB19-A-B-0-MoDaYr | Surface soil |
| | 614282 | 542529 | SEL-PA-SB20 | 0 | - | 0.5 | SEL-PA-SB20-A-B-0-MoDaYr | Surface soil |
| | 614296 | 542525 | SEL-PA-SB21 | 0 | - | 0.5 | SEL-PA-SB21-A-B-0-MoDaYr | Surface soil |
| | 614311 | 542522 | SEL-PA-SB22 | 0 | - | 0.5 | SEL-PA-SB22-A-B-0-MoDaYr | Surface soil |
| | 614326 | 542522 | SEL-PA-SB23 | 0 | - | 0.5 | SEL-PA-SB23-A-B-0-MoDaYr | Surface soil |
| | 614354 | 542526 | SEL-PA-SB24 | 0 | - | 0.5 | SEL-PA-SB24-A-B-0-MoDaYr | Surface soil |
| | 614369 | 542533 | SEL-PA-SB25 | 0 | - | 0.5 | SEL-PA-SB25-A-B-0-MoDaYr | Surface soil |
| | 614381 | 542542 | SEL-PA-SB26 | 0 | - | 0.5 | SEL-PA-SB26-A-B-0-MoDaYr | Surface soil |
| | 614393 | 542550 | SEL-PA-SB27 | 0 | - | 0.5 | SEL-PA-SB27-A-B-0-MoDaYr | Surface soil |
| | 614406 | 542558 | SEL-PA-SB28 | 0 | - | 0.5 | SEL-PA-SB28-A-B-0-MoDaYr | Surface soil |
| | 614416 | 542569 | SEL-PA-SB29 | 0 | - | 0.5 | SEL-PA-SB29-A-B-0-MoDaYr | Surface soil |
| | 614435 | 542589 | SEL-PA-SB30 | 0 | - | 0.5 | SEL-PA-SB30-A-B-0-MoDaYr | Surface soil/Sewer release pathway |
| | 614446 | 542595 | SEL-PA-SB31 | 0 | - | 0.5 | SEL-PA-SB31-A-B-0-MoDaYr | Surface soil/Sewer release pathway |
| | 614453 | 542594 | SEL-PA-SB32 | 0 | - | 0.5 | SEL-PA-SB32-A-B-0-MoDaYr | Surface soil/Sewer release pathway |
| | 614461 | 542595 | SEL-PA-SB33 | 0 | - | 0.5 | SEL-PA-SB33-A-B-0-MoDaYr | Surface soil/Sewer release pathway |
| | 614488 | 542591 | SEL-PA-SB34 | 0 | - | 0.5 | SEL-PA-SB34-A-B-0-MoDaYr | Surface soil/Sewer release pathway |
| | 614503 | 542586 | SEL-PA-SB35 | 0 | - | 0.5 | SEL-PA-SB35-A-B-0-MoDaYr | Surface soil/Sewer release pathway |

Notes:

Target Northing and Easting in New Jersey State Plane Coordinates

Table 3. Sample Summary Table
Discharge to Restored Wetland
Southeast Leg Remediaton Area
Hatco Remediation Project

| Matrix | Analytical Method | Parameter | No. of Samples | No. of Trip Blanks | Frequency of Trip Blanks | No. of Field Blanks[a] | Frequency of Field Blanks | No. of Laboratory-Blind Duplicate Samples[b] | Frequency of Laboratory-Blind Duplicate Samples | No. of MS/MSD Samples | Frequency of MS/MSD Samples | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phase 1 - Surface Water | 245.1 | Mercury | 2 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 335.4 | Cyanide, Total | 2 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 335.4 | Cyanide amenable | 2 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 6020B | TAL Metals | 2 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 8081B | TCL Pesticides | 2 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 8151A | TCL Herbicides | 2 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 8082A | PCBs | 2 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 8260D | TCL VOCs + TICs | 2 | 1 | 1 per sample shipment | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 8270E_SIM | SVOC - SIM Analytes | 2 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 8270E | TCL SVOC + TICs | 2 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 218.6 / 7196A / 7199 | Hexavalent Chromium | 2 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 8015B(M) | EPH | 2 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | Field measurement | pH | 2 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| Phase 1 - Soil | 8082A | PCBs | 6 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 6010D | TAL Metals | 6 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 8081B | TCL Pesticides | 6 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 8151A | TCL Herbicides | 6 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 7471B | Mercury | 6 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 8260D | TCL VOCs + TICS | 6 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 8270E | TCL SVOCs + TICs | 6 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 9012B | Cyanide | 6 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 7199 / 3060A | Hexavalent Chromium | 6 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 8015B(M) | EPH | 6 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 9045D | pH | 6 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| Phase 1 - Pond Bottom | 8082A | PCBs | 4 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 6010D | TAL Metals | 4 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 8081B | TCL Pesticides | 4 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 8151A | TCL Herbicides | 4 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 7471B | Mercury | 4 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 8260D | TCL VOCs + TICS | 4 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 8270E | TCL SVOCs + TICs | 4 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 9012B | Cyanide | 4 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 9060A | Total Organic Carbon | 4 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 7199 / 3060A | Hexavalent Chromium | 4 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 8015B(M) | EPH | 4 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| | 9045D | pH | 4 | 0 | | 1 | 1 per day | 1 | 1 per 20 analyzed | 1 | 1 per batch of 20 samples | Analyze immediately |
| Phase 2 - Soil (collect if exceedance(s) in Phase 1 samples) | 8082A | PCBs | 33 | 0 | | 2 | 1 per day | 2 | 1 per 20 analyzed | 2 | 1 per batch of 20 samples | Analyses to be determined by Phase 1 results |
| | 6010D | TAL Metals | 33 | 0 | | 2 | 1 per day | 2 | 1 per 20 analyzed | 2 | 1 per batch of 20 samples | |
| | 8081B | TCL Pesticides | 33 | 0 | | 2 | 1 per day | 2 | 1 per 20 analyzed | 2 | 1 per batch of 20 samples | |
| | 8151A | TCL Herbicides | 33 | 0 | | 2 | 1 per day | 2 | 1 per 20 analyzed | 2 | 1 per batch of 20 samples | |
| | 7471B | Mercury | 33 | 0 | | 2 | 1 per day | 2 | 1 per 20 analyzed | 2 | 1 per batch of 20 samples | |
| | 8260D | TCL VOCs + TICS | 33 | 0 | | 2 | 1 per day | 2 | 1 per 20 analyzed | 2 | 1 per batch of 20 samples | |
| | 8270E | TCL SVOCs + TICs | 33 | 0 | | 2 | 1 per day | 2 | 1 per 20 analyzed | 2 | 1 per batch of 20 samples | |
| | 9010C | Cyanide | 33 | 0 | | 2 | 1 per day | 2 | 1 per 20 analyzed | 2 | 1 per batch of 20 samples | |
| | 7199 / 3060A | Hexavalent Chromium | 33 | 0 | | 2 | 1 per day | 2 | 1 per 20 analyzed | 2 | 1 per batch of 20 samples | |
| | 8015B(M) | EPH | 33 | 0 | | 2 | 1 per day | 2 | 1 per 20 analyzed | 2 | 1 per batch of 20 samples | |
| | 9045D | pH | 33 | 0 | | 2 | 1 per day | 2 | 1 per 20 analyzed | 2 | 1 per batch of 20 samples | |

Notes:

A trip blank will accompany the surface water sample for VOC analysis.

[a] Total number of field blanks is dependent upon the duration of the sampling event.

| | |
|---|---|
| °C | Degrees Celsius |
| EPH | Extractable petroleum hydrocarbons |
| g | gram |
| mL | milliliter |
| MS/MSD | Matrix spike/matrix spike duplicate sample |
| oz | ounce |
| PCBs | Total Polychlorinated Biphenyls |
| SIM | Selected-Ion Monitoring |
| SVOCs | Semi-Volatile Organic Compounds |
| TAL | Target Analyte List |
| TCL | Target Compound List |
| TICs | Tentatively Identified Compounds |
| VOCs | Volatile Organic Compounds |

Table 4. Sample Preservation Table
Discharge to Restored Wetland
Southeast Leg Remediation Area
Hatco Remediation Project

| Matrix | Parameters | Sample Container* | Minimum Mass (g) | Analytical Method | Sample Preservation | Holding Time |
|---|---|---|---|---|---|---|
| Surface Water | Mercury | 250 mL HDPE | 100 | 245.1 | $HNO_3$ to pH < 2 | 28 days |
| | Cyanide-total | 1 L HPDE | 500 | SM4500-$CN^-$ C/E | Cool to 4°C ± 2°C, NaOH to pH > 12, 0.6g ascorbic acid | 14 days |
| | Cyanide amenable | 1 L HPDE | 500 | SM4500-$CN^-$ G | Cool to 4°C ± 2°C, NaOH to pH > 12, 0.6g ascorbic acid | 14 days |
| | TAL Metals | 250 mL HDPE | 100 | 6020B | Ultra $HNO_3$ to pH < 2 | 180 days |
| | TCL Pesticides | 1 L amber glass | 1000 | 8081B | Cool to 4°C ± 2°C | 7 days to extraction; 40 days from extraction to analysis |
| | TCL Herbicides | 1 L amber glass | 1000 | 8151A | Cool to 4°C ± 2°C | 7 days to extraction; 40 days from extraction to analysis |
| | PCBs | 1 L amber glass | 1000 | 8082A | Cool to 4°C ± 2°C | 7 days to extraction; 40 days from extraction to analysis |
| | TCL VOCs + TICs | 3 x 40 mL VOA vials | 40 | 8260D | Cool to 4°C ± 2°C, HCl to pH < 2 (no headspace) | 14 days |
| | SVOC - SIM Analytes | 1 L amber glass | 1000 | 8270E_SIM | Cool to 4°C ± 2°C | 7 days to extraction; 40 days from extraction to analysis |
| | TCL SVOCs + TICs | 1 L amber glass | 1000 | 8270E | Cool to 4°C ± 2°C | 7 days to extraction; 40 days from extraction to analysis |
| | Hexavalent Chromium | 250 mL HDPE | 200 | 218.6 / 7196A / 7199 | Cool to 4°C ± 2°C | 24 hours |
| | EPH | 500 mL amber glass | 500 | 8015B(M) | Cool to 4°C ± 2°C, $H_2SO_4$ | 14 days to extraction; 40 days from extraction to analysis |
| | pH | field measurement | 50 | field measurement | field measurement | 15 minutes |
| Soil | PCBs | 4 oz glass w/Teflon lid | 20 | 8082A | Cool to 4°C ± 2°C | 14 days to extraction; 40 days from extraction to analysis |
| | TAL Metals | 4 oz glass w/Teflon lid | 2 | 6010D | None | 180 days |
| | TCL Pesticides | 4 oz glass w/Teflon lid | 20 | 8081B | Cool to 4°C ± 2°C | 14 days to extraction; 40 days from extraction to analysis |
| | TCL Herbicides | 4 oz glass w/Teflon lid | 50 | 8151A | Cool to 4°C ± 2°C | 14 days to extraction; 40 days from extraction to analysis |
| | Mercury | 4 oz glass w/Teflon lid | 28 | 7471B | None | 28 days |
| | TCL VOCs + TICs | 3 EnCore® Samplers | 3/sample | 8260D | Cool to 4°C ± 2°C | 48 hours for extraction; 14 days for analysis |
| | TCL SVOCs + TICs | 4 oz glass w/Teflon lid | 20 | 8270E | Cool to 4°C ± 2°C | 14 days to extraction; 40 days from extraction to analysis |
| | Cyanide | 4 oz glass w/Teflon lid | 10 | 9010C | Cool to 4°C ± 2°C | 14 days |
| | Hexavalent Chromium | 4 oz glass w/Teflon lid | 10 | 7199 / 3060A | Cool to 4°C ± 2°C | 30 days |
| | Total Organic Carbon | 4 oz glass w/Teflon lid | 2 | 9060A | Cool to 4°C ± 2°C | 28 days |
| | EPH | 4 oz glass w/Teflon lid | 10 | 8015B(M) | Cool to 4°C ± 2°C | 14 days to extraction; 40 days from extraction to analysis |
| | pH | 4 oz glass w/Teflon lid | 20 | 9045D | Cool to 4°C ± 2°C | 24 Hours |

Notes:

* Coordinate with laboratory regarding use of discrete sample aliquots for multiple analyses.

| | | | |
|---|---|---|---|
| °C | Degrees Celsius | oz | ounce |
| g | gram | NaOH | Sodium hydroxide |
| EPH | Extractable petroleum hydrocarbons | PCBs | Total Polychlorinated Biphenyls |
| HDPE | high density polyethylene | SIM | Selected-Ion Monitoring |
| $HNO_3$ | Nitric acid | SVOCs | Semi-Volatile Organic Compounds |
| $H_2SO_4$ | Sulfuric acid | TAL | Target Analyte List |
| L | liter | TCL | Target Compound List |
| mL | milliliter | TICs | Tentatively Identified Compounds |
| | | VOCs | Volatile Organic Compounds |

# Appendix B

# Data Usability Assessment

# DATA VALIDATION REPORT

**Project:** Hatco-Phase 1 SEL Preliminary Assessment

**Laboratory Report No.:** 460-207545

**Laboratory**: Eurofins TestAmerica, Edison, NJ

**Analysis/Method:** Volatile Organic Analysis (VOA)/SW846 8260C
Semi-Volatile Organic Analysis (SVOA)/SW846 8270D
Pesticides/SW846 8081B
Polychlorinated Biphenyls (PCBs)/SW-846 8082A
Chlorinated Herbicides/SW846 8151A
Extractable Petroleum Hydrocarbons (EPH)/NJDEP EPH*
Metals/SW846 6010D & 6020B
Hexavalent Chromium [Cr(VI)]/SW846 7196A
Mercury/SW846 7470A & 7471B; Cyanide/SW846 9012B
Total Organic Carbon (TOC)/Lloyd Kahn
pH/SW846 9045D

**Data Validation Level:** Limited

**Prepared By:** Yunru Yang/Weston Solutions, Inc. **Completed on:** 5/20/2020

As specified in the Quality Assurance Project Plan (QAPP) (Weston, 2007), Weston Solutions, Inc. performed a limited data validation of the laboratory data packages for the requested analyses. The following USEPA Region 2 data validation standard operating procedures (SOPs) were used for data validation.

- USEPA Region 2 Hazardous Waste Support Section SOP No. HW-24, Revision 4 (October 2014), Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B and 8260C.
- USEPA Region 2 Hazardous Waste Support Section SOP No. HW-22, Revision 5 (December 2010), Validating Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8270D.
- USEPA Region 2 Hazardous Waste Support Section SOP No. HW-44, Revision 1.1 (December 2010), Validating Pesticide Compounds by Gas Chromatography SW-846 Method 8081B.
- USEPA Region 2 Hazardous Waste Support Section SOP No. HW-37A, Revision 0 (June 2015), Polychlorinated Biphenyl (PCB) Aroclor Data Validation.

*New Jersey Department of Environmental Protection, *Analysis of Extractable Petroleum Hydrocarbon Compounds (EPH) in Aqueous and Soil/Sediment/Sludge Matrices,* Revision 3, August 2010.

In addition to these SOPs, the data qualification principles outlined in National Functional Guidelines for Organic Superfund Methods Data Review, January 2017 were used to review herbicides and EPH data. It should be noted that SOP No. HW-37A was prescribed for analytical

data generated through the USEPA Contract Laboratory Program (CLP) Statement of Work (SOW) for Multi-Media, Multi-Concentration Organics Analysis (SOM02.2) which modeled SW846 Method 8082. The data qualification principles outlined in National Functional Guidelines for Inorganic Superfund Methods Data Review, January 2017 were followed to review all inorganic data including metals, mercury, cyanide, Cr(VI), TOC, and pH. For data validation performed for this project, the quality control (QC) requirements outlined in various SW846 methods and the QAPP were followed when applying data qualifiers, where applicable.

The results of QC data analyzed with site samples were used to assess the overall data reliability. The information specified in the QAPP, which are summarized below, were reviewed as applicable; however, this report only documents anomalies and/or non-compliant QC results observed during the data validation process.

- Review of chain-of-custody documents to verify sample identities.
- Review of sample log-in documents to identify any potential problems with custody seals, container integrity, sample preservation, labeling, etc.
- Review of sample analysis holding times.
- Review of field blank and trip blank (where applicable) data to identify any potential problems with sampling devices contamination, sample container contamination, preservative contamination, laboratory reagent water contamination, or cross-contamination between samples during transport.
- Review of method blank data to determine the presence or absence of any sources of contamination in the analytical process.
- Review of MS/MSD results (if performed) to evaluate the potential matrix effects on analytical accuracy (in terms of percent recovery) and precision (in terms of relative percent difference; PRD). MS/MSD results will be compared to laboratory-established acceptance.
- Review of blank spike and blank spike duplicate (BS/BSD) data (if required) as a measure of analytical accuracy and as a measure of analytical precision. BS/BSD data will be compared to laboratory-established acceptance criteria.
- Review of LCS data (if required) as a measure of analytical accuracy. LCS data will be compared to the certified acceptable ranges of analytical values.
- Review of sample and sample duplicate data (if available) as a measure of sample homogeneity and as a measure of analytical precision. The RPDs will be calculated by the data reviewer and will be compared to the acceptance limits established in the USEPA National Functional Guidelines for Data Validations.
- Review of surrogate recovery data (organic data only) to assess analytical performance. The laboratory-established control limits will be used for evaluation.

Where applicable, data qualification flags were applied to sample results as follows due to non-compliance with one or more of the aforementioned parameters. All results can be used for decision-making except for those qualified with the R-flags.

- J – Indicates that the concentration is an estimated value.
- R – Reported value is rejected due to serious QC deficiencies. The data are unusable. The analyte may or may not be present in the sample.
- U – The analyte was analyzed for but not detected at or above the corresponding value.
- UJ – The analyte was not detected at or above the estimated corresponding value.

The samples listed below were collected by Weston Solutions, Inc. on April 23, 2020 for the requested analyses.

| Field Sample ID | Laboratory ID | Matrix | Analysis |
|---|---|---|---|
| SEL-PA-SW03-0-042320 | 460-207545-1 | Aqueous | Core, Amenable CN, SVOA-SIM |
| SEL-PA-SW02-1-042320[1] | 460-207545-2 | Aqueous | Core, Amenable CN, SVOA-SIM |
| SEL-PA-SW02-0-042320 | 460-207545-3 | Aqueous | Core, Amenable CN, SVOA-SIM |
| SEL-PA-SW01-0-042320 | 460-207545-4 | Aqueous | Core, Amenable CN, SVOA-SIM |
| SEL-PA-SW04-0-042320 | 460-207545-5 | Aqueous | Core, Amenable CN, SVOA-SIM |
| SEL-PA-SED03-A-B-0-042320 | 460-207545-6 | Solid | Core, TOC, pH |
| SEL-PA-FB-042320[2] | 460-207545-7 | Aqueous | Core |
| SEL-PA-SBSo-A-B-0-042320 | 460-207545-8 | Solid | Core, TOC, pH |
| SEL-PA-SED02-A-B-0-042320 | 460-207545-9 | Solid | Core, TOC, pH |
| SEL-PA-SED04-A-B-0-042320 | 460-207545-10 | Solid | Core, TOC, pH |
| SEL-PA-SED01-A-B-0-042320 | 460-207545-11 | Solid | Core, TOC, pH |
| SEL-PA-SBEa-A-B-0-042320 | 460-207545-12 | Solid | Core, TOC, pH |
| SEL-PA-SBNo-A-B-0-042320 | 460-207545-13 | Solid | Core, TOC, pH |
| SEL-PA-SB02-A-B-0-042320 | 460-207545-14 | Solid | Core, TOC, pH |
| SEL-PA-SB01-A-B-0-042320 | 460-207545-15 | Solid | Core, TOC, pH |
| SEL-PA-SB02-A-B-1-042320[3] | 460-207545-16 | Solid | Core, TOC, pH |
| SEL-PA-SBWe-A-B-0-042320 | 460-207545-17 | Solid | Core, TOC, pH |
| SEL-PA-Wipe-CORE-042320 | 460-207545-18 | Wipe | PCB |

[1]Field duplicate of SEL-PA-SW02-0-042320
[2]Field blank
[3]Field duplicate of SEL-PA-SB02-A-B-0-042320
Core Analyses: VOC, SVOC, Pesticides, PCB, Herbicides, EPH, Metals (total), Mercury (total), Cyanide (total), & Cr(VI)
CN – Cyanide
SIM – Selected Ion Monitoring

## General Comments

The laboratory submitted a NJDEP full data deliverable which contains all required elements for the requested analyses. The laboratory documentation showed all samples were received intact and the cooler temperatures ranged from 0.3°C to 1.9°C.

Field sample identifications were incorrectly logged in by the laboratory for laboratory samples 460-207545-6 and 460-207545-8. Upon request, the laboratory revised the report with correct field samples identification SEL-PA-SED03-A-B-0-042320 and SEL-PA-SBSo-A-B-0-042320, respectively. Correct field samples identifications are referenced in the table above and throughout this document.

Since a limited data validation was conducted, the presence or absence of the target analytes was not reviewed, and the quantification results (positive concentration and/or the reporting limit) were not verified.

Based on available QC results, data qualifications were applied to some sample results due to QC result outages as outlined in subsequent discussions.

**VOA**

Aqueous and solid sample analyses were performed within required 14-day holding times and without dilutions.

All associated method blanks were free of target and non-target analyte contamination. The field blank (SEL-PA-FB-042320), which was associated with sediment samples only, contained methylene chloride at a concentration less than two times the reporting limit (RL) and acetone at a concentration greater than the two times the RL. Since methylene chloride was not detected in any sediment samples, data qualification action was not required. The positive acetone result was qualified as non-detect (U) at the reported concentration for sample SEL-PA-SED03-A-B-0-042320 as its concentration was less than that of the field blank. Data qualification action was not required for positive acetone results reported for the other three sediment samples (SEL-PA-SED02-A-B-0-042320, SEL-PA-SED04-A-B-0-042320, and SEL-PA-SED01-A-B-0-042320) as their concentrations were greater than two times the RLs and two times the field blank concentration.

The following sample results were qualified due to their recoveries failed the laboratory-established QC limits for laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) analyses.

- LCS/LCSD 460-690171 yielded low recoveries for 2-butanone and 1,4-dioxane and a high recovery for 1,1,2,2-tetrachloroethane. The positive and non-detect 2-butanone and 1,4-dioxane results were estimated (J and UJ, respectively) for samples SEL-PA-SED03-A-B-0-042320, SEL-PA-SBSo-A-B-0-042320, SEL-PA-SED02-A-B-0-042320, and SEL-PA-SED04-A-B-0-042320. Since 1,1,2,2-tetrachloroethane was not detected in these samples, data qualification action was not required.

NOTE: The analysis of LCS 460-690242 yielded high recoveries for 1,1,2,2-tetrachloroethane, cis-1,3-dichloropropene, trans-1,3-dichloropropene, and 2-methyl-2-propanole. However, data qualification action was not required as these analytes were not detected in the associated samples (SEL-PA-SBEa-A-B-0-042320, SEL-PA-SBNo-A-B-0-042320, SEL-PA-SB02-A-B-0-042320, SEL-PA-SB01-A-B-0-042320, SEL-PA-SB02-A-B-1-0423203. And SEL-PA-SBWe-A-B-0-042320). The asterisk (*) applied by the laboratory to these results were removed.

NOTE: The analyses of LCS and LCSD yielded high recoveries for 1,1,2-trichlorethane and 1,1,2,2-tetrachloroethane. However, data qualification action was not required as these analytes were not detected in the associated sample SEL-PA-SED01-A-B-0-042320. The asterisk (*) applied by the laboratory to these results were removed.

The aqueous MS/MSD analyses were performed on sample SEL-PA-SW01-0-042320 and yielded acceptable recoveries and relative percent difference (RPD).

The solid MS/MSD analyses were performed on sample SEL-PA-SB02-A-B-0-042320 and yielded low recoveries for 1,2,3-trichlorobenzene; 1,2,4-trichlorobenzene; 1,2-dichlorobenzene; 1,4-dichlorobenzene; 2-butanone; chlorobenzene; chlorobromomethane; cis-1,2-dichloroethene; cyclohexane; ethylbenzene; ethylene dibromide; isopropylbenzene; methylcyclohexane; m-xylene & p-xylene; o-xylene; styrene; tetrachloroethene; trichloroethene; and 1,2-

dichlorobenzene. The RPDs of these analytes were within laboratory-established control limits. The non-detects of these analytes were estimated (UJ) for sample SEL-PA-SB02-A-B-0-042320.

Aqueous sample SEL-PA-SW02-1-042320 is the field duplicate of SEL-PA-SW02-0-042320. Their analyses yielded incomparable acetone results with a RPD of 43%, greater than 35% when both results were greater than five times the RLs.

Solid sample SEL-PA-SB02-A-B-1-042320 is the field duplicate of SEL-PA-SB02-A-B-0-042320 and yielded comparable VOA results. Note that although acetone was detected in parent sample SEL-PA-SB02-A-B-0-042320 (9.6 microgram per kilogram, µg/kg) but not field duplicate SEL-PA-SB02-A-B-1-042320 (8.3 U), the absolute difference of the two values was less than two times the RL thus considered comparable results.

**VOA-SIM**

The SIM analysis was to achieve lower RLs for 1,2-dibromo-3-chloropropane; 1,4-dioxnae; and ethylene dibromide in aqueous samples except for field blank sample.

The only failed QC results were the high recoveries of ethylene dibromide from the MS/MSD analyses performed on sample SEL-PA-SW01-0-042320. Since ethylene dibromide was not detected in sample SEL-PA-SW01-0-042320, data qualification action was not required. The F1-flag applied by the laboratory was removed.

**SOVA**

Samples extractions and analyses were performed within technical holding times.

Method blanks and field blank were free of target and non-target analyte contamination.

The LCS/LCSD analyses (460-690071) associated with aqueous samples yielded high recoveries for atrazine, benzaldehyde, and benzidine. Since these analytes were not detected in any aqueous samples, data qualification action was not required.

The LCS/LCSD analyses (460-689972) associated with solid samples yielded acceptable results for recoveries and RPDs.

The aqueous MS/MSD analyses were performed on sample SEL-PA-SW01-0-042320 and yielded high recoveries for 2-chloronaphthalene, dimethylphthalate, acenaphthylene, dibenzofuran, diethylphthalate, fluorene, 1,1'-biphenyl, benzaldehyde, and atrazine. The non-detects of these analytes were estimated (UJ) for sample SEL-PA-SW01-0-042320. The RPDs of benzidine and atrazine were greater than 30%. However, since both analytes were not detected in sample SEL-PA-SW01-0-042320, further action was not required.

The solid MS/MSD analyses were performed on sample SEL-PA-SB02-A-B-0-042320 and yielded low recoveries for all analytes except for 3,3'-dichlorobenzidine, 3-nitroaniline, 4-chloroaniline, 4-nitrophenol, atrazine, benzaldehyde, and pentachlorophenol. With the exception of these analytes, positive and non-detect target analytes were estimated (J and UJ, respectively) for sample SEL-PA-SB02-A-B-0-042320. The RPDs of bis(2-ethylhexyl)phthalate, di-n-octylphthalate, and hexachlorocyclopentadiene were greater than 30%. Since bis(2-ethylhexyl)phthalate result has already been estimated, and di-n-octylphthalate and hexachlorocyclopentadiene were not detected in sample SEL-PA-SB02-A-B-0-042320, further data qualification was not required.

Aqueous sample SEL-PA-SW02-1-042320 is the field duplicate of SEL-PA-SW02-0-042320, and both were free of target analytes.

Solid sample SEL-PA-SB02-A-B-1-042320 is the field duplicate of SEL-PA-SB02-A-B-0-042320, and their analyses yielded incomparable SVOA results as noted below. The results are considered comparable when one of the following conditions was met.

- When either result was less than five times the RL or not detected, the absolute difference (Δ) of the two values (or the RL if not detected) was less than two times the RL.
- When both results were greater than or equal to five times the RL, the RPD was 50% or less.

The table below summarized results found in SEL-PA-SB02-A-B-0-042320 and SEL-PA-SB02-A-B-1-042320 and their data qualification action where applicable.

| Analyte Result | SEL-PA-SB02-A-B-0* | | SEL-PA-SB02-A-B-1* | | Δ** or RPD | Action |
|---|---|---|---|---|---|---|
| | µg/kg | RL | µg/kg | RL | | |
| benzo(a)anthracene | 670 | 89 | 320 | 47 | 70.7% | J |
| bis(2-ethylhexyl)phthalate | 13000 | 890 | 2200 | 470 | 10800 | J |
| fluoranthene | 1700 | 890 | 480 | 470 | 1220 | J |
| ideno(1,2,3-cd)pyrene | 310 | 89 | 190 | 47 | 120 | J |
| phenanthrene | 1700 | 890 | 290 J | 470 | 1410 | J |

* SEL-PA-SB02-A-B-0 was analyzed with a 2-fold dilution but SEL-PA-SB02-A-B-1 was not.

**Compared to the lower value of the two RLs

The following samples were diluted to bring the concentration of target analytes within the calibration range: SEL-PA-SE03-A-B-0-042320, SEL-PA-SED04-A-B-0-042320, and SEL-PA-SB02-A-B-0-042320, thus elevated RLs.

**SVOA-SIM**

The SIM analysis was to achieve lower RLs for benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, bis(2-chloroethyl)ether, hexachlorobenzene, n-nitrosodimethlyamine, and pentachlorophenol in aqueous samples except for field blank.

Samples extraction and analyses were performed within technical holding times.

Method blank was free of target analyte contamination. The LCS/LCSD analyses yielded acceptable recoveries and RPDs.

The laboratory did not provide surrogate recoveries and the results of MS/MSD analyses for SIM analyses. These results can be found in the discussion of full-scan analysis.

Aqueous sample SEL-PA-SW02-1-042320 is the field duplicate of SEL-PA-SW02-0-042320, and their analyses yielded comparable results for benzo(a)anthracene, benzo(a)pyrene, and benzo(b)fluoranthene. Bis(2-chloroethyl)ether, hexachlorobenzene, n-nitrosodimethlyamine, and pentachlorophenol were not detected in these two samples, therefore the comparison was required.

**Pesticides**

Samples extractions and analyses were performed within technical holding times.

Method blanks and field blank were free of pesticides contamination.

The recoveries of surrogate compound tetrachloro-m-xylene exceeded the laboratory-established control limits (high biased) on one of the two analytical columns for solid samples SEL-PA-SED02-A-B-0-042320 and SEL-PA-SED04-A-B-0-042320. Since tetrachloro-m-xylene recoveries were within acceptance limits on the other column, indicating in-control sample extraction, the data qualification action was not required.

The MS/MSD analyses on aqueous sample SEL-PA-SW01-0-042320 yielded acceptable recoveries and RPDs for all pesticides.

The solid MS/MSD analyses were performed on sample SEL-PA-SB02-A-B-0-042320 and yielded acceptable recoveries and RPDs for all pesticides with one exception. The MSD analysis yielded a slightly high methoxychlor recovery (137%) on one analytical column. Since its recovery from the other column was within the laboratory-established control limits (57-135%), and since methoxychlor was not detected in sample SEL-PA-SB02-A-B-0-042320, data qualification action was not required.

Pesticides were not detected in any aqueous and solid samples. Therefore, the field duplicate results were not compared.

**PCBs (as Aroclors)**

Samples extractions and analyses were performed within technical holding times.

Method blanks and field blank were free of pesticides contamination.

Aroclors were not detected in aqueous and wipe samples.

The recovery of surrogate compound decachlorobiphenyl exceeded the laboratory-established control limits (high biased) on one of the two analytical columns for solid sample SEL-PA-SED04-A-B-0-042320. Since the decachlorobiphenyl recovery was within acceptance limits on the other column, indicating that the extraction process was in control, data qualification action was not required.

The MS/MSD analyses on aqueous sample SEL-PA-SW01-0-042320 yielded acceptable Aroclor-1016 recoveries but low Aroclor-1260 recoveries on both analytical columns. The RPDs were acceptable for both Aroclor-1016 and Aroclor-1260. The non-detect of Aroclor-1260 was estimated (UJ) for sample SEL-PA-SW01-0-042320.

The solid MS/MSD analyses were performed on sample SEL-PA-SB02-A-B-0-042320 and yielded high recoveries for Arochlor-1016, acceptable recoveries for Aroclor-1260, and the acceptable RPDs for Aroclor-1016 and Aroclor-1260. Since Aroclor-1016 was not detected in sample SEL-PA-SB02-A-B-0-042320, data qualification action was not required.

The Aroclor results were not compared between aqueous samples SEL-PA-SW02-0-042320 and its field duplicate of SEL-PA-SW02-1-042320 as none was detected.

The analyses of sample SEL-PA-SB02-A-B-0-042320 and its field duplicate SEL-PA-SB02-A-B-1-042320 yielded comparable Aroclor-1248 results: 850 µg/kg and 680 µg/kg, respectively, with an RPD of 22.2%.

A 10-fold dilution was performed for sample SEL-PA-SED04-A-B-0-042320, thus elevated RLs.

Note that for positive Aroclor results, the laboratory used the higher concentration between two analytical columns for reporting purpose as prescribed by Method 8082A.

**Herbicides**

The analysis was or chlorinated herbicides 2,4-D; 2,4-T; and 2,4,5-TP (Silvex) only. Samples extractions and analyses were performed within technical holding times.

Method blanks and field blank were free of herbicides contamination.

The MS/MSD analyses on aqueous sample SEL-PA-SW01-0-042320 yielded acceptable recoveries and RPDs.

The solid MS/MSD analyses were performed on sample SEL-PA-SB02-A-B-0-042320 and yielded acceptable recoveries and RPDs with one exception. The RPD of 2,4,5-T was 43%, greater than the maximum 30% limit, on one of two analytical columns. Since 2,4,5-T was not detected in sample SEL-PA-SB02-A-B-0-042320, data qualification action was not required.

Herbicides were not detected in any aqueous and solid samples. Therefore, the field duplicate results were not compared.

**Total EPH**

Samples extractions and analyses were performed within technical holding times.

Method blanks and field blank were free of contamination.

The recovery of surrogate compound 1-Chlorooctadecane failed high for the matrix spike analysis of aqueous sample SEL-PA-SW01-0-042320. Data qualification action was not required. The recovery of surrogate compound 1-Chlorooctadecane failed low for SEL-PA-SE03-A-B-0-042320. The positive total EPH result was estimated (J) for potential low bias.

The MS/MSD analyses on aqueous sample SEL-PA-SW01-0-042320 yielded acceptable recoveries and RPDs.

The solid MS/MSD analyses were performed on sample SEL-PA-SB02-A-B-0-042320 and yielded a high recovery (212%) in the MS analysis. The MS/MSD analyses also yielded a RPD of 40%, exceeding the laboratory control limit of 30%. The positive total EPH result was estimated (J) for sample SEL-PA-SB02-A-B-0-042320 for unknown bias.

Total EPH was not detected in any aqueous samples. Therefore, the field duplicate results were not compared.

The analyses of sample SEL-PA-SB02-A-B-0-042320 and its field duplicate SEL-PA-SB02-A-B-1-042320 yielded incomparable total EPH results: 48 µg/kg and 300 µg/kg, respectively, with an RPD of 145%. The total EPH results were estimated (J) for both samples.

**Metals**

Samples digestions and analyses were performed within technical holding times. The aqueous samples were analyzed by SW846 method 6020B, and the solid sample were analyzed by method 6010D.

The aqueous method blank was free of metal contamination.

Selenium was detected in the method blank associated with solid samples at a concentration (0.74 milligram per kilogram, mg/kg) less than the RL. Since the positive selenium results in samples SEL-PA-SED03-A-B-0-042320, SEL-PA-SB02-A-B-0-042320, and SEL-PA-SB01-A-B-0-042320 were also less than the RLs, they were qualified as non-detects (U) at corresponding RLs.

Aluminum was detected in field blank at a concentration (348 microgram per liter, µg/L) greater than the RL. Since aluminum concentrations in all associated sediment samples were greater than RLs and greater than 10 times that of the field blank, data qualification action was not required.

Although the antimony recovery (45%) from the solid reference material (SRM) analysis was within control limits of 4.8-195%, professional judgment was exercised to estimate non-detect antimony results (UJ) for all solid samples as the range was too wide for acceptance.

The matrix spike analysis on aqueous sample SEL-PA-SW01-0-042320 yielded acceptable recoveries except for calcium and sodium. Since the calcium and sodium concentrations in sample SEL-PA-SW01-0-042320 were more than four times the spiked concentrations, their recoveries were not used for data assessment.

The matrix spike analysis on solid sample SEL-PA-SB02-A-B-0-042320 yielded high recoveries for calcium, copper, and magnesium and low recoveries for silver, chromium, antimony, and selenium. The post-digestion spike analysis yielded acceptable recoveries for these analytes. For sample SEL-PA-SB02-A-B-0-042320, the positive calcium, copper, and magnesium results were estimated (J) for potential high bias, and positive and non-detect results of silver, chromium, antimony, and selenium were estimated (J and UJ, respectively) for potential low bias.

The laboratory duplicate analysis on aqueous sample SEL-PA-SW01-0-042320 yielded acceptable RPDs for all analytes.

The laboratory duplicate analysis on solid sample SEL-PA-SB02-A-B-0-042320 yielded incomparable results (RPD greater than 35%) for chromium (76%), manganese (69%), and lead (37%). The chromium, manganese, and lead results were estimated (J) for sample SEL-PA-SB02-A-B-0-042320. The direction of bias is unknown.

The analyses of aqueous sample SEL-PA-SW02-0-042320 and its field duplicate SEL-PA-SW02-1-042320 yielded comparable metal results.

Solid sample SEL-PA-SB02-A-B-1-042320 is the field duplicate of SEL-PA-SB02-A-B-0-042320, and their analyses yielded incomparable metal results as noted below. The results are considered comparable when one of the following conditions was met.

- When either result was less than five times the RL or not detected, the absolute difference ($\Delta$) of the two values (or the RL if not detected) was less than two time the RL.

- When both results were greater than or equal to five times the RL, the RPD was 50% or less.

The table below summarized results found in SEL-PA-SB02-A-B-0-042320 and SEL-PA-SB02-A-B-1-042320 and their data qualification action where applicable.

| Analyte Result | SEL-PA-SB02-A-B-0 | | SEL-PA-SB02-A-B-1 | | Δ* | RPD (%) | Action |
|---|---|---|---|---|---|---|---|
| | mg/kg | RL | mg/kg | RL | | | |
| Aluminum | 5750 | 50.7 | 10900 | 53.4 | -- | 61.9 | J |
| Calcium | 2940 | 1270 | 7510 | 1340 | 4570 | -- | J |
| Chromium | 61.7 | 2.5 | 20.3 | 2.7 | -- | 101.0 | J |
| Copper | 25 | 6.3 | 50.1 | 6.7 | 25.1 | -- | J |
| Iron | 9920 | 38 | 19900 | 40.1 | -- | 66.9 | J |
| Magnesium | 1450 | 1270 | 7450 | 1340 | 6000 | -- | J |
| Lead | 19.4 | 2.5 | 45.4 | 2.7 | -- | 80.2 | J |
| Zinc | 28.7 | 7.6 | 104 | 8.0 | 75.3 | -- | J |

*Compared to the lower value of the two RLs

The solid content of solid sample SEL-PA-SBSo-A-B-0-042320 (49.8%), slightly less than 50%. The positive and non-detect metal results were estimated (J and UJ, respectively).

**Mercury**

Samples digestions and analyses were performed within technical holding times. The aqueous samples were analyzed by SW846 method 7470A, and the solid sample were analyzed by method 7471B.

The aqueous method and field blanks were free of mercury contamination. The LCS recovery was acceptable. The matrix spike and laboratory duplicate analyses performed on sample SEL-PA-SW01-0-042320 yielded acceptable recovery and RPD. Mercury was not detected in aqueous sample SEL-PA-SW02-0-042320 and its field duplicate SEL-PA-SW02-1-042320. Data qualification actions were not required for aqueous samples.

The method blank associated with solid samples was free of mercury contamination. The LCS recovery was acceptable.

The matrix spike and laboratory duplicate analyses performed on sample SEL-PA-SB02-A-B-0-042320 yielded a low recovery (22%) but an acceptable RPD. The positive mercury result was estimated (J) for potential low bias for sample SEL-PA-SB02-A-B-0-042320.

The analyses of solid sample SEL-PA-SB02-A-B-0-042320 and its field duplicate SEL-PA-SB02-A-B-1-042320 yielded comparable mercury results: 0.12 mg/kg and 0.029 mg/kg, respectively, with a Δ of 0.029 mg/kg, less than two times the RL of 0.021 mg/kg.

The solid content of solid sample SEL-PA-SBSo-A-B-0-042320 (49.8%), slightly less than 50%. Its positive mercury result was estimated (J).

**Cyanide (Total & Amenable)**

Total cyanide analyses of aqueous and solid samples were performed within the technical holding times. The aqueous and solid method blanks and field blanks were free of total cyanide contamination. Total cyanide was not detected in any aqueous and solid samples.

Although the cyanide recoveries (42.2% and 37.9%) from two SRM analyses were within control limits of 9.6-115.3%, professional judgment was exercised to estimate non-detect cyanide results (UJ) for all solid samples as the range was too wide for acceptance.

The MS/MSD analyses performed on aqueous sample SEL-PA-SW01-0-042320 yielded a cyanide recovery (117%), exceeding the laboratory control limit of 90-110%. Since this recovery was less than the technical control limit of 75-125% and cyanide was not detected in sample SEL-SEL-PA-SW01-0-042320, data qualification action was not required.

Cyanide results were not compared between field duplicate pairs SEL-PA-SW02-0-042320 & SEL-PA-SW02-1-042320 for aqueous matrix and SEL-PA-SB02-A-B-0-042320 & SEL-PA-SB02-A-B-0-042320 for solid matrix as cyanide was not detected in any of these samples.

The aqueous samples was also requested for amenable cyanide analysis. The difference of total cyanide in the chlorinated and unchlorinated samples is the cyanide amenable to chlorination. Since total cyanide was not detected in any of the unchlorinated aqueous samples, there was no amenable cyanide in any of the aqueous samples.

The solid content of solid sample SEL-PA-SBSo-A-B-0-042320 (49.8%), slightly less than 50%. The non-detect cyanide result was estimated (UJ).

**Hexavalent Chromium [Cr(VI)]**

Aqueous sample were analyzed within 24 hours of collection. Hexavalent chromium was not detected in any aqueous samples, therefore their results were not compared between sample SEL-PA-SW02-0-042320 and its field duplicate SEL-PA-SW02-1-042320. All other QC analyses yielded acceptable results. Data qualification actions were not required.

Solid samples were analyzed within analytical holding times. The SRM analyses yielded acceptable recoveries for soluble and insoluble Cr(VI) recoveries.

Hexavalent chromium was not detected in solid sample SEL-PA-SB02-A-B-0-042320 and its laboratory duplicate (LD) analysis.

The matrix spike (MS) analyses were performed on solid sample SEL-PA-SB02-A-B-0-042320 for both soluble and insoluble Cr(VI) and yielded a low recovery (56%) for soluble Cr(VI) but an acceptable insoluble Cr(VI) recovery (82%). The post-digestion spike analysis yielded an acceptable recovery (108%). The non-detect of Cr(VI) result was estimated (UJ) for solid sample SEL-PA-SB02-A-B-0-042320.

Due to low soluble Cr(VI) recovery, the laboratory re-digested and reanalyzed sample SEL-PA-SB02-A-B-0-042320 and its associated QC samples (i.e. LD, MS, and post-digestion spike) on April 30, 2020. These analyses yielded non-detects in sample SEL-PA-SB02-A-B-0-042320 and LD and an acceptable post-digestion recovery (92%) for Cr(VI). However, the re-digested MS analyses yielded low recoveries for both soluble (37%) and insoluble (52%) Cr(VI). Since the MS

recoveries did not improve in the re-analyses, the initial analysis of SEL-PA-SB02-A-B-0-042320 was used for reporting purpose.

The Cr(VI) results were not compared between sample SEL-PA-SB02-A-B-0-042320 and its field duplicate SEL-PA-SB02-A-B-0-042320 as Cr(VI) was not detected.

The solid content of solid sample SEL-PA-SBSo-A-B-0-042320 (49.8%), slightly less than 50%. The non-detect Cr(VI) result was estimated (UJ).

**TOC**

The TOC analysis was requested for solid samples and was performed within the technical holding time of 14 days of sample collection.

The analyses of sample SEL-PA-SB02-A-B-0-042320 and its field duplicate SEL-PA-SB02-A-B-0-042320 yielded incomparable TOC results: 9410 mg/kg and 22500 mg/kg, respectively, with an RPD of 82%, exceeding the 50% requirement. Both TOC results were estimated (J).

**pH**

Data flag “HF” was applied by the laboratory to all pH results because the pH was not determined three days after sample collection. Since it was impossible to verify that the readings were not made within 15 minutes of leaching preparation of solid samples, professional judgment was exercised not to qualify the pH results. The laboratory-applied HF-flags were removed during data review process.

Note that the laboratory also reported the pH results as corrosivity which was not a requested analysis, thus removed from each solid sample results summary form.

**Data Usability Assessment**

One acetone result was negated for one sediment sample due to field blank contamination. Some VOA results for solid samples were estimated (J/UJ) due to recoveries in the LCS/LCSD and/or MS/MSD analyses failed low. The positive acetone results in two aqueous samples were estimated (J) due to low field duplicate precision. None of the VOA results were rejected.

For SVOA data, some non-detected results were estimated (UJ) for aqueous sample SEL-PA-SW01-0-042320 due to low MS/MSD recoveries. The majority of the results were qualified (J/UJ) for solid sample SEL-PA-SB02-A-B-0-042320 due to low MS/MSD recoveries. The selected results were estimated (J) for incomparable field duplicate results between solid samples SEL-PA-SB02-A-B-0-042320 and SEL-PA-SB02-A-B-1-042320. None of the SVOA results were rejected.

Data qualification action was not required for pesticide and herbicide results.

The non-detect Aroclor-1260 result was estimated (UJ) for one solid sample due to low MS/MSD recoveries. None of the Aroclor results were rejected.

The positive total EPH result was estimated (J) for one solid sample for potential high bias due to high MS/MSD recovery. Two positive total EPH results were estimated (J) for poor field duplicate precision; the direction of bias could not be determined.

Positive selenium results were qualified as non-detects (U) for three solid samples due to method blank contamination. The non-detects of antimony were estimated (UJ) for all solid samples due to low recovery in the SRM analysis. For sample SEL-PA-SB02-A-B-0-042320, the results of silver, chromium, antimony, and selenium were estimated (J/UJ) for potential low bias due to low matrix spike recoveries. Its calcium, copper, and magnesium results were estimated (J) for potential high bias due to high matrix spike recoveries. Due to incomparable laboratory duplicate analysis, the manganese and lead results, in addition to chromium result, were also estimated (J). Note that the final bias direction is unknown for chromium. All metal results were estimated (J/UJ) for solid sample SEL-PA-SBSo-A-B-0-042320 due to low solid content (less than 50%).

The mercury result of SEL-PA-SB02-A-B-0-042320 was estimated (J) for low bias due to low matrix spike recovery (22%). The mercury results for solid sample SEL-PA-SBSo-A-B-0-042320 was estimated (J) due to low solid content (less than 50%).

The non-detect cyanide results were estimated (UJ) for all solid samples for low recoveries in the SRM analyses.

Two non-detect Cr(VI) results were estimated (UJ) due to low MS recovery and low solid content of one solid sample.

Two TOC results were estimated (J) due to incomparable field duplicate results.

Data qualification action was not required for pH results.

**Conclusion**

Since none of the sample results were rejected for gross QC failure, all results can be used as reported and for decision-making.

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SW03-0-042320

**Lab Sample ID: 460-207545-1**

**Date Collected: 04/23/20 09:00**
**Matrix: Water**
**Date Received: 04/23/20 18:06**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromo-3-Chloropropane | 0.010 | U | 0.020 | 0.010 | ug/L | | | 04/29/20 12:49 | 1 |
| **1,4-Dioxane** | **0.54** | | 0.40 | 0.33 | ug/L | | | 04/29/20 12:49 | 1 |
| Ethylene Dibromide | 0.0079 | U | 0.020 | 0.0079 | ug/L | | | 04/29/20 12:49 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *104* | | *52 - 137* | | *04/29/20 12:49* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloromethane | 0.40 | U | 1.0 | 0.40 | ug/L | | | 04/25/20 16:00 | 1 |
| Bromomethane | 0.55 | U | 1.0 | 0.55 | ug/L | | | 04/25/20 16:00 | 1 |
| Vinyl chloride | 0.17 | U | 1.0 | 0.17 | ug/L | | | 04/25/20 16:00 | 1 |
| Chloroethane | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 16:00 | 1 |
| Methylene Chloride | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 16:00 | 1 |
| Acetone | 4.4 | U | 5.0 | 4.4 | ug/L | | | 04/25/20 16:00 | 1 |
| Carbon disulfide | 0.82 | U | 1.0 | 0.82 | ug/L | | | 04/25/20 16:00 | 1 |
| Trichlorofluoromethane | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 16:00 | 1 |
| 1,1-Dichloroethene | 0.26 | U | 1.0 | 0.26 | ug/L | | | 04/25/20 16:00 | 1 |
| 1,1-Dichloroethane | 0.26 | U | 1.0 | 0.26 | ug/L | | | 04/25/20 16:00 | 1 |
| trans-1,2-Dichloroethene | 0.24 | U | 1.0 | 0.24 | ug/L | | | 04/25/20 16:00 | 1 |
| cis-1,2-Dichloroethene | 0.22 | U | 1.0 | 0.22 | ug/L | | | 04/25/20 16:00 | 1 |
| Chloroform | 0.33 | U | 1.0 | 0.33 | ug/L | | | 04/25/20 16:00 | 1 |
| 1,2-Dichloroethane | 0.43 | U | 1.0 | 0.43 | ug/L | | | 04/25/20 16:00 | 1 |
| 2-Butanone (MEK) | 1.9 | U | 5.0 | 1.9 | ug/L | | | 04/25/20 16:00 | 1 |
| 1,1,1-Trichloroethane | 0.24 | U | 1.0 | 0.24 | ug/L | | | 04/25/20 16:00 | 1 |
| Carbon tetrachloride | 0.21 | U | 1.0 | 0.21 | ug/L | | | 04/25/20 16:00 | 1 |
| Dichlorobromomethane | 0.34 | U | 1.0 | 0.34 | ug/L | | | 04/25/20 16:00 | 1 |
| 1,2-Dichloropropane | 0.35 | U | 1.0 | 0.35 | ug/L | | | 04/25/20 16:00 | 1 |
| cis-1,3-Dichloropropene | 0.22 | U | 1.0 | 0.22 | ug/L | | | 04/25/20 16:00 | 1 |
| Trichloroethene | 0.31 | U | 1.0 | 0.31 | ug/L | | | 04/25/20 16:00 | 1 |
| Chlorodibromomethane | 0.28 | U | 1.0 | 0.28 | ug/L | | | 04/25/20 16:00 | 1 |
| 1,1,2-Trichloroethane | 0.43 | U | 1.0 | 0.43 | ug/L | | | 04/25/20 16:00 | 1 |
| Benzene | 0.20 | U | 1.0 | 0.20 | ug/L | | | 04/25/20 16:00 | 1 |
| trans-1,3-Dichloropropene | 0.49 | U | 1.0 | 0.49 | ug/L | | | 04/25/20 16:00 | 1 |
| Bromoform | 0.54 | U | 1.0 | 0.54 | ug/L | | | 04/25/20 16:00 | 1 |
| 4-Methyl-2-pentanone (MIBK) | 1.3 | U | 5.0 | 1.3 | ug/L | | | 04/25/20 16:00 | 1 |
| 2-Hexanone | 1.1 | U | 5.0 | 1.1 | ug/L | | | 04/25/20 16:00 | 1 |
| Tetrachloroethene | 0.25 | U | 1.0 | 0.25 | ug/L | | | 04/25/20 16:00 | 1 |
| 1,1,2,2-Tetrachloroethane | 0.37 | U | 1.0 | 0.37 | ug/L | | | 04/25/20 16:00 | 1 |
| Toluene | 0.38 | U | 1.0 | 0.38 | ug/L | | | 04/25/20 16:00 | 1 |
| Chlorobenzene | 0.38 | U | 1.0 | 0.38 | ug/L | | | 04/25/20 16:00 | 1 |
| Ethylbenzene | 0.30 | U | 1.0 | 0.30 | ug/L | | | 04/25/20 16:00 | 1 |
| Styrene | 0.42 | U | 1.0 | 0.42 | ug/L | | | 04/25/20 16:00 | 1 |
| m-Xylene & p-Xylene | 0.30 | U | 1.0 | 0.30 | ug/L | | | 04/25/20 16:00 | 1 |
| o-Xylene | 0.36 | U | 1.0 | 0.36 | ug/L | | | 04/25/20 16:00 | 1 |
| Acrolein | 1.1 | U | 4.0 | 1.1 | ug/L | | | 04/25/20 16:00 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.31 | U | 1.0 | 0.31 | ug/L | | | 04/25/20 16:00 | 1 |
| 2-Methyl-2-propanol | 8.3 | U | 10 | 8.3 | ug/L | | | 04/25/20 16:00 | 1 |
| Acrylonitrile | 0.77 | U | 2.0 | 0.77 | ug/L | | | 04/25/20 16:00 | 1 |
| Methyl tert-butyl ether | 0.47 | U | 1.0 | 0.47 | ug/L | | | 04/25/20 16:00 | 1 |

## Client Sample ID: SEL-PA-SW03-0-042320

**Lab Sample ID: 460-207545-1**

**Date Collected: 04/23/20 09:00**
**Date Received: 04/23/20 18:06**

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyclohexane | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 16:00 | 1 |
| 1,3-Dichlorobenzene | 0.34 | U | 1.0 | 0.34 | ug/L | | | 04/25/20 16:00 | 1 |
| 1,4-Dichlorobenzene | 0.33 | U | 1.0 | 0.33 | ug/L | | | 04/25/20 16:00 | 1 |
| 1,2-Dichlorobenzene | 0.43 | U | 1.0 | 0.43 | ug/L | | | 04/25/20 16:00 | 1 |
| Dichlorodifluoromethane | 0.31 | U | 1.0 | 0.31 | ug/L | | | 04/25/20 16:00 | 1 |
| 1,2,4-Trichlorobenzene | 0.37 | U | 1.0 | 0.37 | ug/L | | | 04/25/20 16:00 | 1 |
| 1,2,3-Trichlorobenzene | 0.36 | U | 1.0 | 0.36 | ug/L | | | 04/25/20 16:00 | 1 |
| 1,2,4-Trimethylbenzene | 0.37 | U | 1.0 | 0.37 | ug/L | | | 04/25/20 16:00 | 1 |
| 1,3,5-Trimethylbenzene | 0.33 | U | 1.0 | 0.33 | ug/L | | | 04/25/20 16:00 | 1 |
| Chlorobromomethane | 0.41 | U | 1.0 | 0.41 | ug/L | | | 04/25/20 16:00 | 1 |
| Isopropylbenzene | 0.34 | U | 1.0 | 0.34 | ug/L | | | 04/25/20 16:00 | 1 |
| N-Propylbenzene | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 16:00 | 1 |
| sec-Butylbenzene | 0.37 | U | 1.0 | 0.37 | ug/L | | | 04/25/20 16:00 | 1 |
| tert-Butylbenzene | 0.34 | U | 1.0 | 0.34 | ug/L | | | 04/25/20 16:00 | 1 |
| n-Butylbenzene | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 16:00 | 1 |
| Methyl acetate | 0.79 | U | 5.0 | 0.79 | ug/L | | | 04/25/20 16:00 | 1 |
| Methylcyclohexane | 0.26 | U | 1.0 | 0.26 | ug/L | | | 04/25/20 16:00 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Tentatively Identified Compound* | *None* | | *ug/L* | | | | | *04/25/20 16:00* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *95* | | *75 - 123* | | *04/25/20 16:00* | *1* |
| *Toluene-d8 (Surr)* | *89* | | *80 - 120* | | *04/25/20 16:00* | *1* |
| *4-Bromofluorobenzene* | *95* | | *76 - 120* | | *04/25/20 16:00* | *1* |
| *Dibromofluoromethane (Surr)* | *99* | | *77 - 124* | | *04/25/20 16:00* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Benzo[a]anthracene** | **0.049** | **J** | 0.050 | 0.016 | ug/L | | 04/25/20 07:13 | 04/27/20 08:14 | 1 |
| **Benzo[a]pyrene** | **0.029** | **J** | 0.050 | 0.022 | ug/L | | 04/25/20 07:13 | 04/27/20 08:14 | 1 |
| **Benzo[b]fluoranthene** | **0.036** | **J** | 0.050 | 0.024 | ug/L | | 04/25/20 07:13 | 04/27/20 08:14 | 1 |
| Bis(2-chloroethyl)ether | 0.026 | U | 0.030 | 0.026 | ug/L | | 04/25/20 07:13 | 04/27/20 08:14 | 1 |
| **Hexachlorobenzene** | **0.019** | **J** | 0.020 | 0.013 | ug/L | | 04/25/20 07:13 | 04/27/20 08:14 | 1 |
| N-Nitrosodimethylamine | 0.12 | U | 0.20 | 0.12 | ug/L | | 04/25/20 07:13 | 04/27/20 08:14 | 1 |
| Pentachlorophenol | 0.15 | U | 0.20 | 0.15 | ug/L | | 04/25/20 07:13 | 04/27/20 08:14 | 1 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Phenol | 0.29 | U | 10 | 0.29 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 2-Chlorophenol | 0.38 | U | 10 | 0.38 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 2-Methylphenol | 0.67 | U | 10 | 0.67 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 4-Methylphenol | 0.65 | U | 10 | 0.65 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 2-Nitrophenol | 0.75 | U | 10 | 0.75 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 2,4-Dimethylphenol | 0.62 | U | 10 | 0.62 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 2,4-Dichlorophenol | 1.1 | U | 10 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 4-Chloro-3-methylphenol | 0.58 | U | 10 | 0.58 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 2,4,6-Trichlorophenol | 0.86 | U | 10 | 0.86 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 2,4,5-Trichlorophenol | 0.88 | U | 10 | 0.88 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 2,4-Dinitrotoluene | 1.0 | U | 2.0 | 1.0 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SW03-0-042320

**Lab Sample ID: 460-207545-1**

**Date Collected: 04/23/20 09:00**
**Matrix: Water**
**Date Received: 04/23/20 18:06**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4-Nitrophenol | 4.0 | U | 20 | 4.0 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 4,6-Dinitro-2-methylphenol | 13 | U | 20 | 13 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| N-Nitrosodimethylamine | 0.45 | U | 10 | 0.45 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| N-Nitrosodi-n-propylamine | 0.43 | U | 1.0 | 0.43 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Hexachloroethane | 0.80 | U | 2.0 | 0.80 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Nitrobenzene | 0.57 | U | 1.0 | 0.57 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Isophorone | 0.80 | U | 10 | 0.80 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Naphthalene | 1.1 | U | 2.0 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 4-Chloroaniline | 1.9 | U | 10 | 1.9 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Hexachlorobutadiene | 0.78 | U | 1.0 | 0.78 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 2-Methylnaphthalene | 1.1 | U | 10 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Hexachlorocyclopentadiene | 3.6 | U | 10 | 3.6 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 2-Chloronaphthalene | 1.2 | U | 10 | 1.2 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 2-Nitroaniline | 0.47 | U | 10 | 0.47 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Dimethyl phthalate | 0.77 | U | 10 | 0.77 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Acenaphthylene | 0.82 | U | 10 | 0.82 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 2,6-Dinitrotoluene | 0.83 | U | 2.0 | 0.83 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 3-Nitroaniline | 1.9 | U | 10 | 1.9 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Acenaphthene | 1.1 | U | 10 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Dibenzofuran | 1.1 | U | 10 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 2,4-Dinitrophenol | 14 | U | 20 | 14 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Diethyl phthalate | 0.98 | U | 10 | 0.98 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 4-Chlorophenyl phenyl ether | 1.3 | U | 10 | 1.3 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Fluorene | 0.91 | U | 10 | 0.91 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 4-Nitroaniline | 1.2 | U | 10 | 1.2 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| N-Nitrosodiphenylamine | 0.89 | U | 10 | 0.89 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 4-Bromophenyl phenyl ether | 0.75 | U | 10 | 0.75 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Phenanthrene | 0.58 | U | 10 | 0.58 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Anthracene | 0.63 | U | 10 | 0.63 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Carbazole | 0.68 | U | 10 | 0.68 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Di-n-butyl phthalate | 0.84 | U | 10 | 0.84 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Fluoranthene | 0.84 | U | 10 | 0.84 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Pyrene | 1.6 | U | 10 | 1.6 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Benzidine | 11 | U | 20 | 11 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Butyl benzyl phthalate | 0.85 | U | 10 | 0.85 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Chrysene | 0.91 | U | 2.0 | 0.91 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Bis(2-ethylhexyl) phthalate | 1.7 | U | 2.0 | 1.7 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Di-n-octyl phthalate | 4.8 | U | 10 | 4.8 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Benzo[k]fluoranthene | 0.67 | U | 1.0 | 0.67 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.94 | U | 2.0 | 0.94 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Dibenz(a,h)anthracene | 0.72 | U | 1.0 | 0.72 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Benzo[g,h,i]perylene | 1.4 | U | 10 | 1.4 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 1,2-Diphenylhydrazine | 0.79 | U | 10 | 0.79 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 1,1'-Biphenyl | 1.2 | U | 10 | 1.2 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Acetophenone | 2.3 | U | 10 | 2.3 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Benzaldehyde | 2.1 | U | 10 | 2.1 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Caprolactam | 0.68 | U | 10 | 0.68 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Atrazine | 1.3 | U | 2.0 | 1.3 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 2,2'-oxybis[1-chloropropane] | 0.63 | U | 10 | 0.63 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SW03-0-042320

**Lab Sample ID: 460-207545-1**

**Date Collected: 04/23/20 09:00**
**Date Received: 04/23/20 18:06**

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4,5-Tetrachlorobenzene | 1.2 | U | 10 | 1.2 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 2,3,4,6-Tetrachlorophenol | 0.75 | U | 10 | 0.75 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| 3,3'-Dichlorobenzidine | 1.4 | U | 10 | 1.4 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |
| Bis(2-chloroethoxy)methane | 0.59 | U | 10 | 0.59 | ug/L | | 04/25/20 07:13 | 04/26/20 02:27 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Tentatively Identified Compound* | *None* | | *ug/L* | | | | *04/25/20 07:13* | *04/26/20 02:27* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5 (Surr)* | *96* | | *46 - 137* | *04/25/20 07:13* | *04/26/20 02:27* | *1* |
| *Phenol-d5 (Surr)* | *30* | | *10 - 50* | *04/25/20 07:13* | *04/26/20 02:27* | *1* |
| *Terphenyl-d14 (Surr)* | *98* | | *39 - 150* | *04/25/20 07:13* | *04/26/20 02:27* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *95* | | *36 - 159* | *04/25/20 07:13* | *04/26/20 02:27* | *1* |
| *2-Fluorophenol (Surr)* | *50* | | *18 - 72* | *04/25/20 07:13* | *04/26/20 02:27* | *1* |
| *2-Fluorobiphenyl* | *92* | | *42 - 127* | *04/25/20 07:13* | *04/26/20 02:27* | *1* |

### Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | 0.0030 | U | 0.020 | 0.0030 | ug/L | | 04/25/20 15:03 | 04/27/20 06:28 | 1 |
| alpha-BHC | 0.0070 | U | 0.020 | 0.0070 | ug/L | | 04/25/20 15:03 | 04/27/20 06:28 | 1 |
| beta-BHC | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 06:28 | 1 |
| delta-BHC | 0.0050 | U | 0.020 | 0.0050 | ug/L | | 04/25/20 15:03 | 04/27/20 06:28 | 1 |
| gamma-BHC (Lindane) | 0.012 | U | 0.020 | 0.012 | ug/L | | 04/25/20 15:03 | 04/27/20 06:28 | 1 |
| Chlordane (technical) | 0.055 | U | 0.50 | 0.055 | ug/L | | 04/25/20 15:03 | 04/27/20 06:28 | 1 |
| 4,4'-DDD | 0.0060 | U | 0.020 | 0.0060 | ug/L | | 04/25/20 15:03 | 04/27/20 06:28 | 1 |
| 4,4'-DDE | 0.0020 | U | 0.020 | 0.0020 | ug/L | | 04/25/20 15:03 | 04/27/20 06:28 | 1 |
| 4,4'-DDT | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 06:28 | 1 |
| Dieldrin | 0.0030 | U | 0.020 | 0.0030 | ug/L | | 04/25/20 15:03 | 04/27/20 06:28 | 1 |
| Endosulfan I | 0.0020 | U | 0.020 | 0.0020 | ug/L | | 04/25/20 15:03 | 04/27/20 06:28 | 1 |
| Endosulfan II | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 06:28 | 1 |
| Endosulfan sulfate | 0.0060 | U | 0.020 | 0.0060 | ug/L | | 04/25/20 15:03 | 04/27/20 06:28 | 1 |
| Endrin | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 06:28 | 1 |
| Endrin aldehyde | 0.0080 | U | 0.020 | 0.0080 | ug/L | | 04/25/20 15:03 | 04/27/20 06:28 | 1 |
| Endrin ketone | 0.0080 | U | 0.020 | 0.0080 | ug/L | | 04/25/20 15:03 | 04/27/20 06:28 | 1 |
| Heptachlor | 0.0030 | U | 0.020 | 0.0030 | ug/L | | 04/25/20 15:03 | 04/27/20 06:28 | 1 |
| Heptachlor epoxide | 0.0050 | U | 0.020 | 0.0050 | ug/L | | 04/25/20 15:03 | 04/27/20 06:28 | 1 |
| Methoxychlor | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 06:28 | 1 |
| Toxaphene | 0.11 | U | 0.50 | 0.11 | ug/L | | 04/25/20 15:03 | 04/27/20 06:28 | 1 |
| trans-Chlordane | 0.0030 | U | 0.020 | 0.0030 | ug/L | | 04/25/20 15:03 | 04/27/20 06:28 | 1 |
| cis-Chlordane | 0.0020 | U | 0.020 | 0.0020 | ug/L | | 04/25/20 15:03 | 04/27/20 06:28 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *52* | | *10 - 150* | *04/25/20 15:03* | *04/27/20 06:28* | *1* |
| *Tetrachloro-m-xylene* | *50* | | *10 - 150* | *04/25/20 15:03* | *04/27/20 06:28* | *1* |
| *DCB Decachlorobiphenyl* | *41* | | *10 - 132* | *04/25/20 15:03* | *04/27/20 06:28* | *1* |
| *DCB Decachlorobiphenyl* | *43* | | *10 - 132* | *04/25/20 15:03* | *04/27/20 06:28* | *1* |

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 10:51 | 1 |
| Aroclor 1221 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 10:51 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SW03-0-042320

**Lab Sample ID: 460-207545-1**

**Date Collected: 04/23/20 09:00**
**Matrix: Water**
**Date Received: 04/23/20 18:06**

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1232 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 10:51 | 1 |
| Aroclor 1242 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 10:51 | 1 |
| Aroclor 1248 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 10:51 | 1 |
| Aroclor 1254 | 0.11 | U | 0.40 | 0.11 | ug/L | | 04/25/20 15:00 | 04/27/20 10:51 | 1 |
| Aroclor 1260 | 0.11 | U | 0.40 | 0.11 | ug/L | | 04/25/20 15:00 | 04/27/20 10:51 | 1 |
| Aroclor-1262 | 0.11 | U | 0.40 | 0.11 | ug/L | | 04/25/20 15:00 | 04/27/20 10:51 | 1 |
| Aroclor 1268 | 0.11 | U | 0.40 | 0.11 | ug/L | | 04/25/20 15:00 | 04/27/20 10:51 | 1 |
| Polychlorinated biphenyls, Total | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 10:51 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *37* | | *10 - 150* | *04/25/20 15:00* | *04/27/20 10:51* | *1* |
| *DCB Decachlorobiphenyl* | *40* | | *10 - 150* | *04/25/20 15:00* | *04/27/20 10:51* | *1* |
| *Tetrachloro-m-xylene* | *50* | | *48 - 125* | *04/25/20 15:00* | *04/27/20 10:51* | *1* |
| *Tetrachloro-m-xylene* | *61* | | *48 - 125* | *04/25/20 15:00* | *04/27/20 10:51* | *1* |

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4-D | 0.13 | U | 1.2 | 0.13 | ug/L | | 04/25/20 00:02 | 04/25/20 17:15 | 1 |
| Silvex (2,4,5-TP) | 0.11 | U | 1.2 | 0.11 | ug/L | | 04/25/20 00:02 | 04/25/20 17:15 | 1 |
| 2,4,5-T | 0.12 | U | 1.2 | 0.12 | ug/L | | 04/25/20 00:02 | 04/25/20 17:15 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *81* | | *39 - 145* | *04/25/20 00:02* | *04/25/20 17:15* | *1* |
| *2,4-Dichlorophenylacetic acid* | *110* | | *39 - 145* | *04/25/20 00:02* | *04/25/20 17:15* | *1* |

### Method: NJDEP EPH - New Jersey Extractable Petroleum Hydrocarbons

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total EPH (C9-C40) | 0.10 | U | 0.10 | 0.10 | mg/L | | 04/25/20 15:09 | 04/26/20 18:16 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *107* | | *40 - 140* | *04/25/20 15:09* | *04/26/20 18:16* | *1* |
| *1-Chlorooctadecane* | *102* | | *40 - 140* | *04/25/20 15:09* | *04/26/20 18:16* | *1* |

### Method: 6020B - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Silver | 0.59 | U | 2.0 | 0.59 | ug/L | | 04/25/20 21:20 | 04/26/20 12:27 | 2 |
| **Aluminum** | **143** | | 40.0 | 18.8 | ug/L | | 04/25/20 21:20 | 04/26/20 12:27 | 2 |
| **Arsenic** | **1.0** | **J** | 2.0 | 0.73 | ug/L | | 04/25/20 21:20 | 04/26/20 12:27 | 2 |
| **Barium** | **57.5** | | 4.0 | 1.2 | ug/L | | 04/25/20 21:20 | 04/26/20 12:27 | 2 |
| Beryllium | 0.25 | U | 0.80 | 0.25 | ug/L | | 04/25/20 21:20 | 04/26/20 12:27 | 2 |
| **Calcium** | **44900** | | 200 | 98.8 | ug/L | | 04/25/20 21:20 | 04/26/20 12:27 | 2 |
| Cadmium | 0.81 | U | 2.0 | 0.81 | ug/L | | 04/25/20 21:20 | 04/26/20 12:27 | 2 |
| Cobalt | 1.6 | U | 4.0 | 1.6 | ug/L | | 04/25/20 21:20 | 04/26/20 12:27 | 2 |
| Chromium | 2.3 | U | 4.0 | 2.3 | ug/L | | 04/25/20 21:20 | 04/26/20 12:27 | 2 |
| Copper | 2.0 | U | 4.0 | 2.0 | ug/L | | 04/25/20 21:20 | 04/26/20 12:27 | 2 |
| **Iron** | **2990** | | 120 | 51.1 | ug/L | | 04/25/20 21:20 | 04/26/20 12:27 | 2 |
| **Potassium** | **10600** | | 200 | 86.7 | ug/L | | 04/25/20 21:20 | 04/26/20 12:27 | 2 |
| **Magnesium** | **9530** | | 200 | 73.7 | ug/L | | 04/25/20 21:20 | 04/26/20 12:27 | 2 |
| **Manganese** | **162** | | 8.0 | 2.9 | ug/L | | 04/25/20 21:20 | 04/26/20 12:27 | 2 |
| **Sodium** | **59600** | | 200 | 128 | ug/L | | 04/25/20 21:20 | 04/26/20 12:27 | 2 |
| Nickel | 2.4 | U | 4.0 | 2.4 | ug/L | | 04/25/20 21:20 | 04/26/20 12:27 | 2 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SW03-0-042320

**Lab Sample ID: 460-207545-1**

**Date Collected: 04/23/20 09:00**
**Date Received: 04/23/20 18:06**

**Matrix: Water**

### Method: 6020B - Metals (ICP/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Lead** | **1.2** | | 1.2 | 0.55 | ug/L | | 04/25/20 21:20 | 04/26/20 12:27 | 2 |
| **Antimony** | **0.63** | **J** | 2.0 | 0.40 | ug/L | | 04/25/20 21:20 | 04/26/20 12:27 | 2 |
| Selenium | 5.4 | U | 10.0 | 5.4 | ug/L | | 04/25/20 21:20 | 04/26/20 12:27 | 2 |
| Thallium | 0.16 | U | 0.80 | 0.16 | ug/L | | 04/25/20 21:20 | 04/26/20 12:27 | 2 |
| **Vanadium** | **1.2** | **J** | 4.0 | 1.1 | ug/L | | 04/25/20 21:20 | 04/26/20 12:27 | 2 |
| Zinc | 11.1 | U | 16.0 | 11.1 | ug/L | | 04/25/20 21:20 | 04/26/20 12:27 | 2 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.091 | U | 0.20 | 0.091 | ug/L | | 04/27/20 11:43 | 04/27/20 13:43 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cr (VI) | 8.1 | U | 10.0 | 8.1 | ug/L | | | 04/24/20 08:57 | 1 |
| Cyanide, Total | 0.0040 | U | 0.010 | 0.0040 | mg/L | | 04/26/20 13:26 | 04/27/20 09:24 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Amenable | 0.010 | U | 0.010 | 0.010 | mg/L | | | 04/28/20 17:00 | 1 |

## Client Sample ID: SEL-PA-SW02-1-042320

**Lab Sample ID: 460-207545-2**

**Date Collected: 04/23/20 09:20**
**Date Received: 04/23/20 18:06**

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromo-3-Chloropropane | 0.010 | U | 0.020 | 0.010 | ug/L | | | 04/29/20 13:14 | 1 |
| **1,4-Dioxane** | **0.39** | **J** | 0.40 | 0.33 | ug/L | | | 04/29/20 13:14 | 1 |
| Ethylene Dibromide | 0.0079 | U | 0.020 | 0.0079 | ug/L | | | 04/29/20 13:14 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *101* | | *52 - 137* | | *04/29/20 13:14* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloromethane | 0.40 | U | 1.0 | 0.40 | ug/L | | | 04/25/20 16:25 | 1 |
| Bromomethane | 0.55 | U | 1.0 | 0.55 | ug/L | | | 04/25/20 16:25 | 1 |
| Vinyl chloride | 0.17 | U | 1.0 | 0.17 | ug/L | | | 04/25/20 16:25 | 1 |
| Chloroethane | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 16:25 | 1 |
| Methylene Chloride | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 16:25 | 1 |
| **Acetone** | **54** | J | 5.0 | 4.4 | ug/L | | | 04/25/20 16:25 | 1 |
| Carbon disulfide | 0.82 | U | 1.0 | 0.82 | ug/L | | | 04/25/20 16:25 | 1 |
| Trichlorofluoromethane | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 16:25 | 1 |
| 1,1-Dichloroethene | 0.26 | U | 1.0 | 0.26 | ug/L | | | 04/25/20 16:25 | 1 |
| 1,1-Dichloroethane | 0.26 | U | 1.0 | 0.26 | ug/L | | | 04/25/20 16:25 | 1 |
| trans-1,2-Dichloroethene | 0.24 | U | 1.0 | 0.24 | ug/L | | | 04/25/20 16:25 | 1 |
| cis-1,2-Dichloroethene | 0.22 | U | 1.0 | 0.22 | ug/L | | | 04/25/20 16:25 | 1 |
| Chloroform | 0.33 | U | 1.0 | 0.33 | ug/L | | | 04/25/20 16:25 | 1 |
| 1,2-Dichloroethane | 0.43 | U | 1.0 | 0.43 | ug/L | | | 04/25/20 16:25 | 1 |
| 2-Butanone (MEK) | 1.9 | U | 5.0 | 1.9 | ug/L | | | 04/25/20 16:25 | 1 |
| 1,1,1-Trichloroethane | 0.24 | U | 1.0 | 0.24 | ug/L | | | 04/25/20 16:25 | 1 |
| Carbon tetrachloride | 0.21 | U | 1.0 | 0.21 | ug/L | | | 04/25/20 16:25 | 1 |
| Dichlorobromomethane | 0.34 | U | 1.0 | 0.34 | ug/L | | | 04/25/20 16:25 | 1 |



yy 5/11/2020 05/05/2020

## Client Sample ID: SEL-PA-SW02-1-042320

**Lab Sample ID: 460-207545-2**

**Date Collected: 04/23/20 09:20**
**Matrix: Water**
**Date Received: 04/23/20 18:06**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloropropane | 0.35 | U | 1.0 | 0.35 | ug/L | | | 04/25/20 16:25 | 1 |
| cis-1,3-Dichloropropene | 0.22 | U | 1.0 | 0.22 | ug/L | | | 04/25/20 16:25 | 1 |
| Trichloroethene | 0.31 | U | 1.0 | 0.31 | ug/L | | | 04/25/20 16:25 | 1 |
| Chlorodibromomethane | 0.28 | U | 1.0 | 0.28 | ug/L | | | 04/25/20 16:25 | 1 |
| 1,1,2-Trichloroethane | 0.43 | U | 1.0 | 0.43 | ug/L | | | 04/25/20 16:25 | 1 |
| Benzene | 0.20 | U | 1.0 | 0.20 | ug/L | | | 04/25/20 16:25 | 1 |
| trans-1,3-Dichloropropene | 0.49 | U | 1.0 | 0.49 | ug/L | | | 04/25/20 16:25 | 1 |
| Bromoform | 0.54 | U | 1.0 | 0.54 | ug/L | | | 04/25/20 16:25 | 1 |
| 4-Methyl-2-pentanone (MIBK) | 1.3 | U | 5.0 | 1.3 | ug/L | | | 04/25/20 16:25 | 1 |
| 2-Hexanone | 1.1 | U | 5.0 | 1.1 | ug/L | | | 04/25/20 16:25 | 1 |
| Tetrachloroethene | 0.25 | U | 1.0 | 0.25 | ug/L | | | 04/25/20 16:25 | 1 |
| 1,1,2,2-Tetrachloroethane | 0.37 | U | 1.0 | 0.37 | ug/L | | | 04/25/20 16:25 | 1 |
| Toluene | 0.38 | U | 1.0 | 0.38 | ug/L | | | 04/25/20 16:25 | 1 |
| Chlorobenzene | 0.38 | U | 1.0 | 0.38 | ug/L | | | 04/25/20 16:25 | 1 |
| Ethylbenzene | 0.30 | U | 1.0 | 0.30 | ug/L | | | 04/25/20 16:25 | 1 |
| Styrene | 0.42 | U | 1.0 | 0.42 | ug/L | | | 04/25/20 16:25 | 1 |
| m-Xylene & p-Xylene | 0.30 | U | 1.0 | 0.30 | ug/L | | | 04/25/20 16:25 | 1 |
| o-Xylene | 0.36 | U | 1.0 | 0.36 | ug/L | | | 04/25/20 16:25 | 1 |
| Acrolein | 1.1 | U | 4.0 | 1.1 | ug/L | | | 04/25/20 16:25 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.31 | U | 1.0 | 0.31 | ug/L | | | 04/25/20 16:25 | 1 |
| 2-Methyl-2-propanol | 8.3 | U | 10 | 8.3 | ug/L | | | 04/25/20 16:25 | 1 |
| Acrylonitrile | 0.77 | U | 2.0 | 0.77 | ug/L | | | 04/25/20 16:25 | 1 |
| Methyl tert-butyl ether | 0.47 | U | 1.0 | 0.47 | ug/L | | | 04/25/20 16:25 | 1 |
| Cyclohexane | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 16:25 | 1 |
| 1,3-Dichlorobenzene | 0.34 | U | 1.0 | 0.34 | ug/L | | | 04/25/20 16:25 | 1 |
| 1,4-Dichlorobenzene | 0.33 | U | 1.0 | 0.33 | ug/L | | | 04/25/20 16:25 | 1 |
| 1,2-Dichlorobenzene | 0.43 | U | 1.0 | 0.43 | ug/L | | | 04/25/20 16:25 | 1 |
| Dichlorodifluoromethane | 0.31 | U | 1.0 | 0.31 | ug/L | | | 04/25/20 16:25 | 1 |
| 1,2,4-Trichlorobenzene | 0.37 | U | 1.0 | 0.37 | ug/L | | | 04/25/20 16:25 | 1 |
| 1,2,3-Trichlorobenzene | 0.36 | U | 1.0 | 0.36 | ug/L | | | 04/25/20 16:25 | 1 |
| 1,2,4-Trimethylbenzene | 0.37 | U | 1.0 | 0.37 | ug/L | | | 04/25/20 16:25 | 1 |
| 1,3,5-Trimethylbenzene | 0.33 | U | 1.0 | 0.33 | ug/L | | | 04/25/20 16:25 | 1 |
| Chlorobromomethane | 0.41 | U | 1.0 | 0.41 | ug/L | | | 04/25/20 16:25 | 1 |
| Isopropylbenzene | 0.34 | U | 1.0 | 0.34 | ug/L | | | 04/25/20 16:25 | 1 |
| N-Propylbenzene | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 16:25 | 1 |
| sec-Butylbenzene | 0.37 | U | 1.0 | 0.37 | ug/L | | | 04/25/20 16:25 | 1 |
| tert-Butylbenzene | 0.34 | U | 1.0 | 0.34 | ug/L | | | 04/25/20 16:25 | 1 |
| n-Butylbenzene | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 16:25 | 1 |
| Methyl acetate | 0.79 | U | 5.0 | 0.79 | ug/L | | | 04/25/20 16:25 | 1 |
| Methylcyclohexane | 0.26 | U | 1.0 | 0.26 | ug/L | | | 04/25/20 16:25 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Tentatively Identified Compound* | *None* | | *ug/L* | | | | | *04/25/20 16:25* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *92* | | *75 - 123* | | *04/25/20 16:25* | *1* |
| *Toluene-d8 (Surr)* | *90* | | *80 - 120* | | *04/25/20 16:25* | *1* |
| *4-Bromofluorobenzene* | *93* | | *76 - 120* | | *04/25/20 16:25* | *1* |
| *Dibromofluoromethane (Surr)* | *98* | | *77 - 124* | | *04/25/20 16:25* | *1* |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SW02-1-042320

**Lab Sample ID: 460-207545-2**

**Date Collected: 04/23/20 09:20**
**Date Received: 04/23/20 18:06**

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Benzo[a]anthracene** | **0.027** | **J** | 0.050 | 0.016 | ug/L | | 04/25/20 07:13 | 04/27/20 08:35 | 1 |
| **Benzo[a]pyrene** | **0.024** | **J** | 0.050 | 0.022 | ug/L | | 04/25/20 07:13 | 04/27/20 08:35 | 1 |
| **Benzo[b]fluoranthene** | **0.034** | **J** | 0.050 | 0.024 | ug/L | | 04/25/20 07:13 | 04/27/20 08:35 | 1 |
| Bis(2-chloroethyl)ether | 0.026 | U | 0.030 | 0.026 | ug/L | | 04/25/20 07:13 | 04/27/20 08:35 | 1 |
| Hexachlorobenzene | 0.013 | U | 0.020 | 0.013 | ug/L | | 04/25/20 07:13 | 04/27/20 08:35 | 1 |
| N-Nitrosodimethylamine | 0.12 | U | 0.20 | 0.12 | ug/L | | 04/25/20 07:13 | 04/27/20 08:35 | 1 |
| Pentachlorophenol | 0.15 | U | 0.20 | 0.15 | ug/L | | 04/25/20 07:13 | 04/27/20 08:35 | 1 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Phenol | 0.29 | U | 10 | 0.29 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 2-Chlorophenol | 0.38 | U | 10 | 0.38 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 2-Methylphenol | 0.67 | U | 10 | 0.67 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 4-Methylphenol | 0.65 | U | 10 | 0.65 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 2-Nitrophenol | 0.75 | U | 10 | 0.75 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 2,4-Dimethylphenol | 0.62 | U | 10 | 0.62 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 2,4-Dichlorophenol | 1.1 | U | 10 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 4-Chloro-3-methylphenol | 0.58 | U | 10 | 0.58 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 2,4,6-Trichlorophenol | 0.86 | U | 10 | 0.86 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 2,4,5-Trichlorophenol | 0.88 | U | 10 | 0.88 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 2,4-Dinitrotoluene | 1.0 | U | 2.0 | 1.0 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 4-Nitrophenol | 4.0 | U | 20 | 4.0 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 4,6-Dinitro-2-methylphenol | 13 | U | 20 | 13 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| N-Nitrosodimethylamine | 0.45 | U | 10 | 0.45 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| N-Nitrosodi-n-propylamine | 0.43 | U | 1.0 | 0.43 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Hexachloroethane | 0.80 | U | 2.0 | 0.80 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Nitrobenzene | 0.57 | U | 1.0 | 0.57 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Isophorone | 0.80 | U | 10 | 0.80 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Naphthalene | 1.1 | U | 2.0 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 4-Chloroaniline | 1.9 | U | 10 | 1.9 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Hexachlorobutadiene | 0.78 | U | 1.0 | 0.78 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 2-Methylnaphthalene | 1.1 | U | 10 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Hexachlorocyclopentadiene | 3.6 | U | 10 | 3.6 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 2-Chloronaphthalene | 1.2 | U | 10 | 1.2 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 2-Nitroaniline | 0.47 | U | 10 | 0.47 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Dimethyl phthalate | 0.77 | U | 10 | 0.77 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Acenaphthylene | 0.82 | U | 10 | 0.82 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 2,6-Dinitrotoluene | 0.83 | U | 2.0 | 0.83 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 3-Nitroaniline | 1.9 | U | 10 | 1.9 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Acenaphthene | 1.1 | U | 10 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Dibenzofuran | 1.1 | U | 10 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 2,4-Dinitrophenol | 14 | U | 20 | 14 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Diethyl phthalate | 0.98 | U | 10 | 0.98 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 4-Chlorophenyl phenyl ether | 1.3 | U | 10 | 1.3 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Fluorene | 0.91 | U | 10 | 0.91 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 4-Nitroaniline | 1.2 | U | 10 | 1.2 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| N-Nitrosodiphenylamine | 0.89 | U | 10 | 0.89 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 4-Bromophenyl phenyl ether | 0.75 | U | 10 | 0.75 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Phenanthrene | 0.58 | U | 10 | 0.58 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Anthracene | 0.63 | U | 10 | 0.63 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SW02-1-042320

**Lab Sample ID: 460-207545-2**

**Date Collected: 04/23/20 09:20**
**Date Received: 04/23/20 18:06**

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbazole | 0.68 | U | 10 | 0.68 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Di-n-butyl phthalate | 0.84 | U | 10 | 0.84 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Fluoranthene | 0.84 | U | 10 | 0.84 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Pyrene | 1.6 | U | 10 | 1.6 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Benzidine | 11 | U | 20 | 11 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Butyl benzyl phthalate | 0.85 | U | 10 | 0.85 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Chrysene | 0.91 | U | 2.0 | 0.91 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Bis(2-ethylhexyl) phthalate | 1.7 | U | 2.0 | 1.7 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Di-n-octyl phthalate | 4.8 | U | 10 | 4.8 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Benzo[k]fluoranthene | 0.67 | U | 1.0 | 0.67 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.94 | U | 2.0 | 0.94 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Dibenz(a,h)anthracene | 0.72 | U | 1.0 | 0.72 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Benzo[g,h,i]perylene | 1.4 | U | 10 | 1.4 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 1,2-Diphenylhydrazine | 0.79 | U | 10 | 0.79 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 1,1'-Biphenyl | 1.2 | U | 10 | 1.2 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Acetophenone | 2.3 | U | 10 | 2.3 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Benzaldehyde | 2.1 | U | 10 | 2.1 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Caprolactam | 0.68 | U | 10 | 0.68 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Atrazine | 1.3 | U | 2.0 | 1.3 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 2,2'-oxybis[1-chloropropane] | 0.63 | U | 10 | 0.63 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 1,2,4,5-Tetrachlorobenzene | 1.2 | U | 10 | 1.2 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 2,3,4,6-Tetrachlorophenol | 0.75 | U | 10 | 0.75 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| 3,3'-Dichlorobenzidine | 1.4 | U | 10 | 1.4 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |
| Bis(2-chloroethoxy)methane | 0.59 | U | 10 | 0.59 | ug/L | | 04/25/20 07:13 | 04/26/20 02:48 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Tentatively Identified Compound* | *None* | | *ug/L* | | | | *04/25/20 07:13* | *04/26/20 02:48* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5 (Surr)* | *82* | | *46 - 137* | *04/25/20 07:13* | *04/26/20 02:48* | *1* |
| *Phenol-d5 (Surr)* | *24* | | *10 - 50* | *04/25/20 07:13* | *04/26/20 02:48* | *1* |
| *Terphenyl-d14 (Surr)* | *83* | | *39 - 150* | *04/25/20 07:13* | *04/26/20 02:48* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *79* | | *36 - 159* | *04/25/20 07:13* | *04/26/20 02:48* | *1* |
| *2-Fluorophenol (Surr)* | *40* | | *18 - 72* | *04/25/20 07:13* | *04/26/20 02:48* | *1* |
| *2-Fluorobiphenyl* | *80* | | *42 - 127* | *04/25/20 07:13* | *04/26/20 02:48* | *1* |

### Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | 0.0030 | U | 0.020 | 0.0030 | ug/L | | 04/25/20 15:03 | 04/27/20 06:42 | 1 |
| alpha-BHC | 0.0070 | U | 0.020 | 0.0070 | ug/L | | 04/25/20 15:03 | 04/27/20 06:42 | 1 |
| beta-BHC | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 06:42 | 1 |
| delta-BHC | 0.0050 | U | 0.020 | 0.0050 | ug/L | | 04/25/20 15:03 | 04/27/20 06:42 | 1 |
| gamma-BHC (Lindane) | 0.012 | U | 0.020 | 0.012 | ug/L | | 04/25/20 15:03 | 04/27/20 06:42 | 1 |
| Chlordane (technical) | 0.055 | U | 0.50 | 0.055 | ug/L | | 04/25/20 15:03 | 04/27/20 06:42 | 1 |
| 4,4'-DDD | 0.0060 | U | 0.020 | 0.0060 | ug/L | | 04/25/20 15:03 | 04/27/20 06:42 | 1 |
| 4,4'-DDE | 0.0020 | U | 0.020 | 0.0020 | ug/L | | 04/25/20 15:03 | 04/27/20 06:42 | 1 |
| 4,4'-DDT | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 06:42 | 1 |
| Dieldrin | 0.0030 | U | 0.020 | 0.0030 | ug/L | | 04/25/20 15:03 | 04/27/20 06:42 | 1 |
| Endosulfan I | 0.0020 | U | 0.020 | 0.0020 | ug/L | | 04/25/20 15:03 | 04/27/20 06:42 | 1 |
| Endosulfan II | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 06:42 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SW02-1-042320

**Date Collected: 04/23/20 09:20**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-2

**Matrix: Water**

### Method: 8081B - Organochlorine Pesticides (GC) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Endosulfan sulfate | 0.0060 | U | 0.020 | 0.0060 | ug/L | | 04/25/20 15:03 | 04/27/20 06:42 | 1 |
| Endrin | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 06:42 | 1 |
| Endrin aldehyde | 0.0080 | U | 0.020 | 0.0080 | ug/L | | 04/25/20 15:03 | 04/27/20 06:42 | 1 |
| Endrin ketone | 0.0080 | U | 0.020 | 0.0080 | ug/L | | 04/25/20 15:03 | 04/27/20 06:42 | 1 |
| Heptachlor | 0.0030 | U | 0.020 | 0.0030 | ug/L | | 04/25/20 15:03 | 04/27/20 06:42 | 1 |
| Heptachlor epoxide | 0.0050 | U | 0.020 | 0.0050 | ug/L | | 04/25/20 15:03 | 04/27/20 06:42 | 1 |
| Methoxychlor | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 06:42 | 1 |
| Toxaphene | 0.11 | U | 0.50 | 0.11 | ug/L | | 04/25/20 15:03 | 04/27/20 06:42 | 1 |
| trans-Chlordane | 0.0030 | U | 0.020 | 0.0030 | ug/L | | 04/25/20 15:03 | 04/27/20 06:42 | 1 |
| cis-Chlordane | 0.0020 | U | 0.020 | 0.0020 | ug/L | | 04/25/20 15:03 | 04/27/20 06:42 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *50* | | *10 - 150* | *04/25/20 15:03* | *04/27/20 06:42* | *1* |
| *Tetrachloro-m-xylene* | *50* | | *10 - 150* | *04/25/20 15:03* | *04/27/20 06:42* | *1* |
| *DCB Decachlorobiphenyl* | *34* | | *10 - 132* | *04/25/20 15:03* | *04/27/20 06:42* | *1* |
| *DCB Decachlorobiphenyl* | *41* | | *10 - 132* | *04/25/20 15:03* | *04/27/20 06:42* | *1* |

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 11:11 | 1 |
| Aroclor 1221 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 11:11 | 1 |
| Aroclor 1232 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 11:11 | 1 |
| Aroclor 1242 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 11:11 | 1 |
| Aroclor 1248 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 11:11 | 1 |
| Aroclor 1254 | 0.11 | U | 0.40 | 0.11 | ug/L | | 04/25/20 15:00 | 04/27/20 11:11 | 1 |
| Aroclor 1260 | 0.11 | U | 0.40 | 0.11 | ug/L | | 04/25/20 15:00 | 04/27/20 11:11 | 1 |
| Aroclor-1262 | 0.11 | U | 0.40 | 0.11 | ug/L | | 04/25/20 15:00 | 04/27/20 11:11 | 1 |
| Aroclor 1268 | 0.11 | U | 0.40 | 0.11 | ug/L | | 04/25/20 15:00 | 04/27/20 11:11 | 1 |
| Polychlorinated biphenyls, Total | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 11:11 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *34* | | *10 - 150* | *04/25/20 15:00* | *04/27/20 11:11* | *1* |
| *DCB Decachlorobiphenyl* | *36* | | *10 - 150* | *04/25/20 15:00* | *04/27/20 11:11* | *1* |
| *Tetrachloro-m-xylene* | *49* | | *48 - 125* | *04/25/20 15:00* | *04/27/20 11:11* | *1* |
| *Tetrachloro-m-xylene* | *63* | | *48 - 125* | *04/25/20 15:00* | *04/27/20 11:11* | *1* |

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4-D | 0.13 | U | 1.2 | 0.13 | ug/L | | 04/25/20 00:02 | 04/25/20 17:28 | 1 |
| Silvex (2,4,5-TP) | 0.11 | U | 1.2 | 0.11 | ug/L | | 04/25/20 00:02 | 04/25/20 17:28 | 1 |
| 2,4,5-T | 0.12 | U | 1.2 | 0.12 | ug/L | | 04/25/20 00:02 | 04/25/20 17:28 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *90* | | *39 - 145* | *04/25/20 00:02* | *04/25/20 17:28* | *1* |
| *2,4-Dichlorophenylacetic acid* | *116* | | *39 - 145* | *04/25/20 00:02* | *04/25/20 17:28* | *1* |

### Method: NJDEP EPH - New Jersey Extractable Petroleum Hydrocarbons

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total EPH (C9-C40) | 0.10 | U | 0.10 | 0.10 | mg/L | | 04/25/20 15:09 | 04/26/20 18:29 | 1 |



YY 5/14/2020

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SW02-1-042320

**Lab Sample ID: 460-207545-2**

**Date Collected: 04/23/20 09:20**
**Date Received: 04/23/20 18:06**

**Matrix: Water**

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *103* | | *40 - 140* | *04/25/20 15:09* | *04/26/20 18:29* | *1* |
| *1-Chlorooctadecane* | *98* | | *40 - 140* | *04/25/20 15:09* | *04/26/20 18:29* | *1* |

### Method: 6020B - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Silver | 0.59 | U | 2.0 | 0.59 | ug/L | | 04/25/20 21:20 | 04/26/20 12:30 | 2 |
| **Aluminum** | **2650** | | 40.0 | 18.8 | ug/L | | 04/25/20 21:20 | 04/26/20 12:30 | 2 |
| **Arsenic** | **1.5** | **J** | 2.0 | 0.73 | ug/L | | 04/25/20 21:20 | 04/26/20 12:30 | 2 |
| **Barium** | **69.3** | | 4.0 | 1.2 | ug/L | | 04/25/20 21:20 | 04/26/20 12:30 | 2 |
| Beryllium | 0.25 | U | 0.80 | 0.25 | ug/L | | 04/25/20 21:20 | 04/26/20 12:30 | 2 |
| **Calcium** | **45100** | | 200 | 98.8 | ug/L | | 04/25/20 21:20 | 04/26/20 12:30 | 2 |
| Cadmium | 0.81 | U | 2.0 | 0.81 | ug/L | | 04/25/20 21:20 | 04/26/20 12:30 | 2 |
| **Cobalt** | **2.8** | **J** | 4.0 | 1.6 | ug/L | | 04/25/20 21:20 | 04/26/20 12:30 | 2 |
| **Chromium** | **4.6** | | 4.0 | 2.3 | ug/L | | 04/25/20 21:20 | 04/26/20 12:30 | 2 |
| **Copper** | **9.7** | | 4.0 | 2.0 | ug/L | | 04/25/20 21:20 | 04/26/20 12:30 | 2 |
| **Iron** | **7920** | | 120 | 51.1 | ug/L | | 04/25/20 21:20 | 04/26/20 12:30 | 2 |
| **Potassium** | **10200** | | 200 | 86.7 | ug/L | | 04/25/20 21:20 | 04/26/20 12:30 | 2 |
| **Magnesium** | **11400** | | 200 | 73.7 | ug/L | | 04/25/20 21:20 | 04/26/20 12:30 | 2 |
| **Manganese** | **390** | | 8.0 | 2.9 | ug/L | | 04/25/20 21:20 | 04/26/20 12:30 | 2 |
| **Sodium** | **55600** | | 200 | 128 | ug/L | | 04/25/20 21:20 | 04/26/20 12:30 | 2 |
| **Nickel** | **6.1** | | 4.0 | 2.4 | ug/L | | 04/25/20 21:20 | 04/26/20 12:30 | 2 |
| **Lead** | **8.4** | | 1.2 | 0.55 | ug/L | | 04/25/20 21:20 | 04/26/20 12:30 | 2 |
| **Antimony** | **0.99** | **J** | 2.0 | 0.40 | ug/L | | 04/25/20 21:20 | 04/26/20 12:30 | 2 |
| Selenium | 5.4 | U | 10.0 | 5.4 | ug/L | | 04/25/20 21:20 | 04/26/20 12:30 | 2 |
| Thallium | 0.16 | U | 0.80 | 0.16 | ug/L | | 04/25/20 21:20 | 04/26/20 12:30 | 2 |
| **Vanadium** | **7.8** | | 4.0 | 1.1 | ug/L | | 04/25/20 21:20 | 04/26/20 12:30 | 2 |
| **Zinc** | **18.1** | | 16.0 | 11.1 | ug/L | | 04/25/20 21:20 | 04/26/20 12:30 | 2 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.091 | U | 0.20 | 0.091 | ug/L | | 04/27/20 11:43 | 04/27/20 13:45 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cr (VI) | 8.1 | U | 10.0 | 8.1 | ug/L | | | 04/24/20 08:57 | 1 |
| Cyanide, Total | 0.0040 | U | 0.010 | 0.0040 | mg/L | | 04/26/20 13:26 | 04/27/20 09:25 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Amenable | 0.010 | U | 0.010 | 0.010 | mg/L | | | 04/28/20 17:00 | 1 |

## Client Sample ID: SEL-PA-SW02-0-042320

**Lab Sample ID: 460-207545-3**

**Date Collected: 04/23/20 09:20**
**Date Received: 04/23/20 18:06**

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromo-3-Chloropropane | 0.010 | U | 0.020 | 0.010 | ug/L | | | 04/29/20 13:39 | 1 |
| **1,4-Dioxane** | **0.44** | | 0.40 | 0.33 | ug/L | | | 04/29/20 13:39 | 1 |
| Ethylene Dibromide | 0.0079 | U | 0.020 | 0.0079 | ug/L | | | 04/29/20 13:39 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *102* | | *52 - 137* | | *04/29/20 13:39* | *1* |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SW02-0-042320

**Lab Sample ID: 460-207545-3**

**Date Collected: 04/23/20 09:20**
**Date Received: 04/23/20 18:06**

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloromethane | 0.40 | U | 1.0 | 0.40 | ug/L | | | 04/25/20 16:50 | 1 |
| Bromomethane | 0.55 | U | 1.0 | 0.55 | ug/L | | | 04/25/20 16:50 | 1 |
| Vinyl chloride | 0.17 | U | 1.0 | 0.17 | ug/L | | | 04/25/20 16:50 | 1 |
| Chloroethane | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 16:50 | 1 |
| Methylene Chloride | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 16:50 | 1 |
| **Acetone** | **35** | J | 5.0 | 4.4 | ug/L | | | 04/25/20 16:50 | 1 |
| Carbon disulfide | 0.82 | U | 1.0 | 0.82 | ug/L | | | 04/25/20 16:50 | 1 |
| Trichlorofluoromethane | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 16:50 | 1 |
| 1,1-Dichloroethene | 0.26 | U | 1.0 | 0.26 | ug/L | | | 04/25/20 16:50 | 1 |
| 1,1-Dichloroethane | 0.26 | U | 1.0 | 0.26 | ug/L | | | 04/25/20 16:50 | 1 |
| trans-1,2-Dichloroethene | 0.24 | U | 1.0 | 0.24 | ug/L | | | 04/25/20 16:50 | 1 |
| cis-1,2-Dichloroethene | 0.22 | U | 1.0 | 0.22 | ug/L | | | 04/25/20 16:50 | 1 |
| Chloroform | 0.33 | U | 1.0 | 0.33 | ug/L | | | 04/25/20 16:50 | 1 |
| 1,2-Dichloroethane | 0.43 | U | 1.0 | 0.43 | ug/L | | | 04/25/20 16:50 | 1 |
| 2-Butanone (MEK) | 1.9 | U | 5.0 | 1.9 | ug/L | | | 04/25/20 16:50 | 1 |
| 1,1,1-Trichloroethane | 0.24 | U | 1.0 | 0.24 | ug/L | | | 04/25/20 16:50 | 1 |
| Carbon tetrachloride | 0.21 | U | 1.0 | 0.21 | ug/L | | | 04/25/20 16:50 | 1 |
| Dichlorobromomethane | 0.34 | U | 1.0 | 0.34 | ug/L | | | 04/25/20 16:50 | 1 |
| 1,2-Dichloropropane | 0.35 | U | 1.0 | 0.35 | ug/L | | | 04/25/20 16:50 | 1 |
| cis-1,3-Dichloropropene | 0.22 | U | 1.0 | 0.22 | ug/L | | | 04/25/20 16:50 | 1 |
| Trichloroethene | 0.31 | U | 1.0 | 0.31 | ug/L | | | 04/25/20 16:50 | 1 |
| Chlorodibromomethane | 0.28 | U | 1.0 | 0.28 | ug/L | | | 04/25/20 16:50 | 1 |
| 1,1,2-Trichloroethane | 0.43 | U | 1.0 | 0.43 | ug/L | | | 04/25/20 16:50 | 1 |
| Benzene | 0.20 | U | 1.0 | 0.20 | ug/L | | | 04/25/20 16:50 | 1 |
| trans-1,3-Dichloropropene | 0.49 | U | 1.0 | 0.49 | ug/L | | | 04/25/20 16:50 | 1 |
| Bromoform | 0.54 | U | 1.0 | 0.54 | ug/L | | | 04/25/20 16:50 | 1 |
| 4-Methyl-2-pentanone (MIBK) | 1.3 | U | 5.0 | 1.3 | ug/L | | | 04/25/20 16:50 | 1 |
| 2-Hexanone | 1.1 | U | 5.0 | 1.1 | ug/L | | | 04/25/20 16:50 | 1 |
| Tetrachloroethene | 0.25 | U | 1.0 | 0.25 | ug/L | | | 04/25/20 16:50 | 1 |
| 1,1,2,2-Tetrachloroethane | 0.37 | U | 1.0 | 0.37 | ug/L | | | 04/25/20 16:50 | 1 |
| Toluene | 0.38 | U | 1.0 | 0.38 | ug/L | | | 04/25/20 16:50 | 1 |
| Chlorobenzene | 0.38 | U | 1.0 | 0.38 | ug/L | | | 04/25/20 16:50 | 1 |
| Ethylbenzene | 0.30 | U | 1.0 | 0.30 | ug/L | | | 04/25/20 16:50 | 1 |
| Styrene | 0.42 | U | 1.0 | 0.42 | ug/L | | | 04/25/20 16:50 | 1 |
| m-Xylene & p-Xylene | 0.30 | U | 1.0 | 0.30 | ug/L | | | 04/25/20 16:50 | 1 |
| o-Xylene | 0.36 | U | 1.0 | 0.36 | ug/L | | | 04/25/20 16:50 | 1 |
| Acrolein | 1.1 | U | 4.0 | 1.1 | ug/L | | | 04/25/20 16:50 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.31 | U | 1.0 | 0.31 | ug/L | | | 04/25/20 16:50 | 1 |
| 2-Methyl-2-propanol | 8.3 | U | 10 | 8.3 | ug/L | | | 04/25/20 16:50 | 1 |
| Acrylonitrile | 0.77 | U | 2.0 | 0.77 | ug/L | | | 04/25/20 16:50 | 1 |
| Methyl tert-butyl ether | 0.47 | U | 1.0 | 0.47 | ug/L | | | 04/25/20 16:50 | 1 |
| Cyclohexane | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 16:50 | 1 |
| 1,3-Dichlorobenzene | 0.34 | U | 1.0 | 0.34 | ug/L | | | 04/25/20 16:50 | 1 |
| 1,4-Dichlorobenzene | 0.33 | U | 1.0 | 0.33 | ug/L | | | 04/25/20 16:50 | 1 |
| 1,2-Dichlorobenzene | 0.43 | U | 1.0 | 0.43 | ug/L | | | 04/25/20 16:50 | 1 |
| Dichlorodifluoromethane | 0.31 | U | 1.0 | 0.31 | ug/L | | | 04/25/20 16:50 | 1 |
| 1,2,4-Trichlorobenzene | 0.37 | U | 1.0 | 0.37 | ug/L | | | 04/25/20 16:50 | 1 |
| 1,2,3-Trichlorobenzene | 0.36 | U | 1.0 | 0.36 | ug/L | | | 04/25/20 16:50 | 1 |
| 1,2,4-Trimethylbenzene | 0.37 | U | 1.0 | 0.37 | ug/L | | | 04/25/20 16:50 | 1 |



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# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SW02-0-042320

**Lab Sample ID: 460-207545-3**

**Date Collected: 04/23/20 09:20**
**Date Received: 04/23/20 18:06**

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,3,5-Trimethylbenzene | 0.33 | U | 1.0 | 0.33 | ug/L | | | 04/25/20 16:50 | 1 |
| Chlorobromomethane | 0.41 | U | 1.0 | 0.41 | ug/L | | | 04/25/20 16:50 | 1 |
| Isopropylbenzene | 0.34 | U | 1.0 | 0.34 | ug/L | | | 04/25/20 16:50 | 1 |
| N-Propylbenzene | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 16:50 | 1 |
| sec-Butylbenzene | 0.37 | U | 1.0 | 0.37 | ug/L | | | 04/25/20 16:50 | 1 |
| tert-Butylbenzene | 0.34 | U | 1.0 | 0.34 | ug/L | | | 04/25/20 16:50 | 1 |
| n-Butylbenzene | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 16:50 | 1 |
| Methyl acetate | 0.79 | U | 5.0 | 0.79 | ug/L | | | 04/25/20 16:50 | 1 |
| Methylcyclohexane | 0.26 | U | 1.0 | 0.26 | ug/L | | | 04/25/20 16:50 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Tentatively Identified Compound* | *None* | | *ug/L* | | | | | *04/25/20 16:50* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *96* | | *75 - 123* | | *04/25/20 16:50* | *1* |
| *Toluene-d8 (Surr)* | *89* | | *80 - 120* | | *04/25/20 16:50* | *1* |
| *4-Bromofluorobenzene* | *97* | | *76 - 120* | | *04/25/20 16:50* | *1* |
| *Dibromofluoromethane (Surr)* | *101* | | *77 - 124* | | *04/25/20 16:50* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Benzo[a]anthracene** | **0.054** | | 0.050 | 0.016 | ug/L | | 04/25/20 07:13 | 04/27/20 08:57 | 1 |
| **Benzo[a]pyrene** | **0.060** | | 0.050 | 0.022 | ug/L | | 04/25/20 07:13 | 04/27/20 08:57 | 1 |
| **Benzo[b]fluoranthene** | **0.063** | | 0.050 | 0.024 | ug/L | | 04/25/20 07:13 | 04/27/20 08:57 | 1 |
| Bis(2-chloroethyl)ether | 0.026 | U | 0.030 | 0.026 | ug/L | | 04/25/20 07:13 | 04/27/20 08:57 | 1 |
| Hexachlorobenzene | 0.013 | U | 0.020 | 0.013 | ug/L | | 04/25/20 07:13 | 04/27/20 08:57 | 1 |
| N-Nitrosodimethylamine | 0.12 | U | 0.20 | 0.12 | ug/L | | 04/25/20 07:13 | 04/27/20 08:57 | 1 |
| Pentachlorophenol | 0.15 | U | 0.20 | 0.15 | ug/L | | 04/25/20 07:13 | 04/27/20 08:57 | 1 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Phenol | 0.29 | U | 10 | 0.29 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 2-Chlorophenol | 0.38 | U | 10 | 0.38 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 2-Methylphenol | 0.67 | U | 10 | 0.67 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 4-Methylphenol | 0.65 | U | 10 | 0.65 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 2-Nitrophenol | 0.75 | U | 10 | 0.75 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 2,4-Dimethylphenol | 0.62 | U | 10 | 0.62 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 2,4-Dichlorophenol | 1.1 | U | 10 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 4-Chloro-3-methylphenol | 0.58 | U | 10 | 0.58 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 2,4,6-Trichlorophenol | 0.86 | U | 10 | 0.86 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 2,4,5-Trichlorophenol | 0.88 | U | 10 | 0.88 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 2,4-Dinitrotoluene | 1.0 | U | 2.0 | 1.0 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 4-Nitrophenol | 4.0 | U | 20 | 4.0 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 4,6-Dinitro-2-methylphenol | 13 | U | 20 | 13 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| N-Nitrosodimethylamine | 0.45 | U | 10 | 0.45 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| N-Nitrosodi-n-propylamine | 0.43 | U | 1.0 | 0.43 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Hexachloroethane | 0.80 | U | 2.0 | 0.80 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Nitrobenzene | 0.57 | U | 1.0 | 0.57 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Isophorone | 0.80 | U | 10 | 0.80 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Naphthalene | 1.1 | U | 2.0 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SW02-0-042320

**Lab Sample ID: 460-207545-3**

**Date Collected: 04/23/20 09:20**
**Date Received: 04/23/20 18:06**

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4-Chloroaniline | 1.9 | U | 10 | 1.9 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Hexachlorobutadiene | 0.78 | U | 1.0 | 0.78 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 2-Methylnaphthalene | 1.1 | U | 10 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Hexachlorocyclopentadiene | 3.6 | U | 10 | 3.6 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 2-Chloronaphthalene | 1.2 | U | 10 | 1.2 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 2-Nitroaniline | 0.47 | U | 10 | 0.47 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Dimethyl phthalate | 0.77 | U | 10 | 0.77 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Acenaphthylene | 0.82 | U | 10 | 0.82 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 2,6-Dinitrotoluene | 0.83 | U | 2.0 | 0.83 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 3-Nitroaniline | 1.9 | U | 10 | 1.9 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Acenaphthene | 1.1 | U | 10 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Dibenzofuran | 1.1 | U | 10 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 2,4-Dinitrophenol | 14 | U | 20 | 14 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Diethyl phthalate | 0.98 | U | 10 | 0.98 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 4-Chlorophenyl phenyl ether | 1.3 | U | 10 | 1.3 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Fluorene | 0.91 | U | 10 | 0.91 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 4-Nitroaniline | 1.2 | U | 10 | 1.2 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| N-Nitrosodiphenylamine | 0.89 | U | 10 | 0.89 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 4-Bromophenyl phenyl ether | 0.75 | U | 10 | 0.75 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Phenanthrene | 0.58 | U | 10 | 0.58 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Anthracene | 0.63 | U | 10 | 0.63 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Carbazole | 0.68 | U | 10 | 0.68 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Di-n-butyl phthalate | 0.84 | U | 10 | 0.84 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Fluoranthene | 0.84 | U | 10 | 0.84 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Pyrene | 1.6 | U | 10 | 1.6 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Benzidine | 11 | U | 20 | 11 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Butyl benzyl phthalate | 0.85 | U | 10 | 0.85 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Chrysene | 0.91 | U | 2.0 | 0.91 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Bis(2-ethylhexyl) phthalate | 1.7 | U | 2.0 | 1.7 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Di-n-octyl phthalate | 4.8 | U | 10 | 4.8 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Benzo[k]fluoranthene | 0.67 | U | 1.0 | 0.67 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.94 | U | 2.0 | 0.94 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Dibenz(a,h)anthracene | 0.72 | U | 1.0 | 0.72 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Benzo[g,h,i]perylene | 1.4 | U | 10 | 1.4 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 1,2-Diphenylhydrazine | 0.79 | U | 10 | 0.79 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 1,1'-Biphenyl | 1.2 | U | 10 | 1.2 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Acetophenone | 2.3 | U | 10 | 2.3 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Benzaldehyde | 2.1 | U | 10 | 2.1 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Caprolactam | 0.68 | U | 10 | 0.68 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Atrazine | 1.3 | U | 2.0 | 1.3 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 2,2'-oxybis[1-chloropropane] | 0.63 | U | 10 | 0.63 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 1,2,4,5-Tetrachlorobenzene | 1.2 | U | 10 | 1.2 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 2,3,4,6-Tetrachlorophenol | 0.75 | U | 10 | 0.75 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 3,3'-Dichlorobenzidine | 1.4 | U | 10 | 1.4 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Bis(2-chloroethoxy)methane | 0.59 | U | 10 | 0.59 | ug/L | | 04/25/20 07:13 | 04/26/20 03:09 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Tentatively Identified Compound* | *None* | | *ug/L* | | | | *04/25/20 07:13* | *04/26/20 03:09* | *1* |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SW02-0-042320

**Lab Sample ID: 460-207545-3**

**Date Collected: 04/23/20 09:20**
**Date Received: 04/23/20 18:06**

**Matrix: Water**

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Nitrobenzene-d5 (Surr) | 83 | | 46 - 137 | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Phenol-d5 (Surr) | 25 | | 10 - 50 | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| Terphenyl-d14 (Surr) | 88 | | 39 - 150 | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 2,4,6-Tribromophenol (Surr) | 83 | | 36 - 159 | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 2-Fluorophenol (Surr) | 42 | | 18 - 72 | 04/25/20 07:13 | 04/26/20 03:09 | 1 |
| 2-Fluorobiphenyl | 81 | | 42 - 127 | 04/25/20 07:13 | 04/26/20 03:09 | 1 |

### Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | 0.0030 | U | 0.020 | 0.0030 | ug/L | | 04/25/20 15:03 | 04/27/20 06:57 | 1 |
| alpha-BHC | 0.0070 | U | 0.020 | 0.0070 | ug/L | | 04/25/20 15:03 | 04/27/20 06:57 | 1 |
| beta-BHC | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 06:57 | 1 |
| delta-BHC | 0.0050 | U | 0.020 | 0.0050 | ug/L | | 04/25/20 15:03 | 04/27/20 06:57 | 1 |
| gamma-BHC (Lindane) | 0.012 | U | 0.020 | 0.012 | ug/L | | 04/25/20 15:03 | 04/27/20 06:57 | 1 |
| Chlordane (technical) | 0.055 | U | 0.50 | 0.055 | ug/L | | 04/25/20 15:03 | 04/27/20 06:57 | 1 |
| 4,4'-DDD | 0.0060 | U | 0.020 | 0.0060 | ug/L | | 04/25/20 15:03 | 04/27/20 06:57 | 1 |
| 4,4'-DDE | 0.0020 | U | 0.020 | 0.0020 | ug/L | | 04/25/20 15:03 | 04/27/20 06:57 | 1 |
| 4,4'-DDT | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 06:57 | 1 |
| Dieldrin | 0.0030 | U | 0.020 | 0.0030 | ug/L | | 04/25/20 15:03 | 04/27/20 06:57 | 1 |
| Endosulfan I | 0.0020 | U | 0.020 | 0.0020 | ug/L | | 04/25/20 15:03 | 04/27/20 06:57 | 1 |
| Endosulfan II | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 06:57 | 1 |
| Endosulfan sulfate | 0.0060 | U | 0.020 | 0.0060 | ug/L | | 04/25/20 15:03 | 04/27/20 06:57 | 1 |
| Endrin | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 06:57 | 1 |
| Endrin aldehyde | 0.0080 | U | 0.020 | 0.0080 | ug/L | | 04/25/20 15:03 | 04/27/20 06:57 | 1 |
| Endrin ketone | 0.0080 | U | 0.020 | 0.0080 | ug/L | | 04/25/20 15:03 | 04/27/20 06:57 | 1 |
| Heptachlor | 0.0030 | U | 0.020 | 0.0030 | ug/L | | 04/25/20 15:03 | 04/27/20 06:57 | 1 |
| Heptachlor epoxide | 0.0050 | U | 0.020 | 0.0050 | ug/L | | 04/25/20 15:03 | 04/27/20 06:57 | 1 |
| Methoxychlor | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 06:57 | 1 |
| Toxaphene | 0.11 | U | 0.50 | 0.11 | ug/L | | 04/25/20 15:03 | 04/27/20 06:57 | 1 |
| trans-Chlordane | 0.0030 | U | 0.020 | 0.0030 | ug/L | | 04/25/20 15:03 | 04/27/20 06:57 | 1 |
| cis-Chlordane | 0.0020 | U | 0.020 | 0.0020 | ug/L | | 04/25/20 15:03 | 04/27/20 06:57 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Tetrachloro-m-xylene | 54 | | 10 - 150 | 04/25/20 15:03 | 04/27/20 06:57 | 1 |
| Tetrachloro-m-xylene | 55 | | 10 - 150 | 04/25/20 15:03 | 04/27/20 06:57 | 1 |
| DCB Decachlorobiphenyl | 38 | | 10 - 132 | 04/25/20 15:03 | 04/27/20 06:57 | 1 |
| DCB Decachlorobiphenyl | 45 | | 10 - 132 | 04/25/20 15:03 | 04/27/20 06:57 | 1 |

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 11:32 | 1 |
| Aroclor 1221 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 11:32 | 1 |
| Aroclor 1232 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 11:32 | 1 |
| Aroclor 1242 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 11:32 | 1 |
| Aroclor 1248 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 11:32 | 1 |
| Aroclor 1254 | 0.11 | U | 0.40 | 0.11 | ug/L | | 04/25/20 15:00 | 04/27/20 11:32 | 1 |
| Aroclor 1260 | 0.11 | U | 0.40 | 0.11 | ug/L | | 04/25/20 15:00 | 04/27/20 11:32 | 1 |
| Aroclor-1262 | 0.11 | U | 0.40 | 0.11 | ug/L | | 04/25/20 15:00 | 04/27/20 11:32 | 1 |
| Aroclor 1268 | 0.11 | U | 0.40 | 0.11 | ug/L | | 04/25/20 15:00 | 04/27/20 11:32 | 1 |
| Polychlorinated biphenyls, Total | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 11:32 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SW02-0-042320

**Lab Sample ID: 460-207545-3**

**Date Collected: 04/23/20 09:20**
**Date Received: 04/23/20 18:06**

**Matrix: Water**

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| DCB Decachlorobiphenyl | 33 | | 10 - 150 | 04/25/20 15:00 | 04/27/20 11:32 | 1 |
| DCB Decachlorobiphenyl | 35 | | 10 - 150 | 04/25/20 15:00 | 04/27/20 11:32 | 1 |
| Tetrachloro-m-xylene | 50 | | 48 - 125 | 04/25/20 15:00 | 04/27/20 11:32 | 1 |
| Tetrachloro-m-xylene | 63 | | 48 - 125 | 04/25/20 15:00 | 04/27/20 11:32 | 1 |

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4-D | 0.13 | U | 1.2 | 0.13 | ug/L | | 04/25/20 00:02 | 04/25/20 17:42 | 1 |
| Silvex (2,4,5-TP) | 0.11 | U | 1.2 | 0.11 | ug/L | | 04/25/20 00:02 | 04/25/20 17:42 | 1 |
| 2,4,5-T | 0.12 | U | 1.2 | 0.12 | ug/L | | 04/25/20 00:02 | 04/25/20 17:42 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 2,4-Dichlorophenylacetic acid | 87 | | 39 - 145 | 04/25/20 00:02 | 04/25/20 17:42 | 1 |
| 2,4-Dichlorophenylacetic acid | 110 | | 39 - 145 | 04/25/20 00:02 | 04/25/20 17:42 | 1 |

### Method: NJDEP EPH - New Jersey Extractable Petroleum Hydrocarbons

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total EPH (C9-C40) | 0.10 | U | 0.10 | 0.10 | mg/L | | 04/25/20 15:09 | 04/26/20 18:42 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| o-Terphenyl | 116 | | 40 - 140 | 04/25/20 15:09 | 04/26/20 18:42 | 1 |
| 1-Chlorooctadecane | 110 | | 40 - 140 | 04/25/20 15:09 | 04/26/20 18:42 | 1 |

### Method: 6020B - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Silver | 0.59 | U | 2.0 | 0.59 | ug/L | | 04/25/20 21:20 | 04/26/20 12:32 | 2 |
| **Aluminum** | **2450** | | 40.0 | 18.8 | ug/L | | 04/25/20 21:20 | 04/26/20 12:32 | 2 |
| **Arsenic** | **1.1** | **J** | 2.0 | 0.73 | ug/L | | 04/25/20 21:20 | 04/26/20 12:32 | 2 |
| **Barium** | **69.1** | | 4.0 | 1.2 | ug/L | | 04/25/20 21:20 | 04/26/20 12:32 | 2 |
| Beryllium | 0.25 | U | 0.80 | 0.25 | ug/L | | 04/25/20 21:20 | 04/26/20 12:32 | 2 |
| **Calcium** | **45400** | | 200 | 98.8 | ug/L | | 04/25/20 21:20 | 04/26/20 12:32 | 2 |
| Cadmium | 0.81 | U | 2.0 | 0.81 | ug/L | | 04/25/20 21:20 | 04/26/20 12:32 | 2 |
| **Cobalt** | **2.6** | **J** | 4.0 | 1.6 | ug/L | | 04/25/20 21:20 | 04/26/20 12:32 | 2 |
| **Chromium** | **4.4** | | 4.0 | 2.3 | ug/L | | 04/25/20 21:20 | 04/26/20 12:32 | 2 |
| **Copper** | **9.4** | | 4.0 | 2.0 | ug/L | | 04/25/20 21:20 | 04/26/20 12:32 | 2 |
| **Iron** | **7540** | | 120 | 51.1 | ug/L | | 04/25/20 21:20 | 04/26/20 12:32 | 2 |
| **Potassium** | **10100** | | 200 | 86.7 | ug/L | | 04/25/20 21:20 | 04/26/20 12:32 | 2 |
| **Magnesium** | **11100** | | 200 | 73.7 | ug/L | | 04/25/20 21:20 | 04/26/20 12:32 | 2 |
| **Manganese** | **357** | | 8.0 | 2.9 | ug/L | | 04/25/20 21:20 | 04/26/20 12:32 | 2 |
| **Sodium** | **54900** | | 200 | 128 | ug/L | | 04/25/20 21:20 | 04/26/20 12:32 | 2 |
| **Nickel** | **5.9** | | 4.0 | 2.4 | ug/L | | 04/25/20 21:20 | 04/26/20 12:32 | 2 |
| **Lead** | **8.6** | | 1.2 | 0.55 | ug/L | | 04/25/20 21:20 | 04/26/20 12:32 | 2 |
| **Antimony** | **0.92** | **J** | 2.0 | 0.40 | ug/L | | 04/25/20 21:20 | 04/26/20 12:32 | 2 |
| Selenium | 5.4 | U | 10.0 | 5.4 | ug/L | | 04/25/20 21:20 | 04/26/20 12:32 | 2 |
| Thallium | 0.16 | U | 0.80 | 0.16 | ug/L | | 04/25/20 21:20 | 04/26/20 12:32 | 2 |
| **Vanadium** | **7.2** | | 4.0 | 1.1 | ug/L | | 04/25/20 21:20 | 04/26/20 12:32 | 2 |
| **Zinc** | **18.3** | | 16.0 | 11.1 | ug/L | | 04/25/20 21:20 | 04/26/20 12:32 | 2 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.091 | U | 0.20 | 0.091 | ug/L | | 04/27/20 11:43 | 04/27/20 13:50 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SW02-0-042320

**Lab Sample ID: 460-207545-3**

**Date Collected: 04/23/20 09:20**
**Date Received: 04/23/20 18:06**

**Matrix: Water**

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cr (VI) | 8.1 | U | 10.0 | 8.1 | ug/L | | | 04/24/20 08:57 | 1 |
| Cyanide, Total | 0.0040 | U | 0.010 | 0.0040 | mg/L | | 04/26/20 13:26 | 04/27/20 09:26 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Amenable | 0.010 | U | 0.010 | 0.010 | mg/L | | | 04/28/20 17:00 | 1 |

## Client Sample ID: SEL-PA-SW01-0-042320

**Lab Sample ID: 460-207545-4**

**Date Collected: 04/23/20 09:55**
**Date Received: 04/23/20 18:06**

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromo-3-Chloropropane | 0.010 | U | 0.020 | 0.010 | ug/L | | | 04/29/20 12:24 | 1 |
| **1,4-Dioxane** | **0.36** | **J** | 0.40 | 0.33 | ug/L | | | 04/29/20 12:24 | 1 |
| Ethylene Dibromide | 0.0079 | U ~~F1~~ | 0.020 | 0.0079 | ug/L | | | 04/29/20 12:24 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *100* | | *52 - 137* | | *04/29/20 12:24* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloromethane | 0.40 | U | 1.0 | 0.40 | ug/L | | | 04/25/20 15:34 | 1 |
| Bromomethane | 0.55 | U | 1.0 | 0.55 | ug/L | | | 04/25/20 15:34 | 1 |
| Vinyl chloride | 0.17 | U | 1.0 | 0.17 | ug/L | | | 04/25/20 15:34 | 1 |
| Chloroethane | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 15:34 | 1 |
| Methylene Chloride | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 15:34 | 1 |
| **Acetone** | **5.1** | | 5.0 | 4.4 | ug/L | | | 04/25/20 15:34 | 1 |
| Carbon disulfide | 0.82 | U | 1.0 | 0.82 | ug/L | | | 04/25/20 15:34 | 1 |
| Trichlorofluoromethane | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 15:34 | 1 |
| 1,1-Dichloroethene | 0.26 | U | 1.0 | 0.26 | ug/L | | | 04/25/20 15:34 | 1 |
| 1,1-Dichloroethane | 0.26 | U | 1.0 | 0.26 | ug/L | | | 04/25/20 15:34 | 1 |
| trans-1,2-Dichloroethene | 0.24 | U | 1.0 | 0.24 | ug/L | | | 04/25/20 15:34 | 1 |
| cis-1,2-Dichloroethene | 0.22 | U | 1.0 | 0.22 | ug/L | | | 04/25/20 15:34 | 1 |
| Chloroform | 0.33 | U | 1.0 | 0.33 | ug/L | | | 04/25/20 15:34 | 1 |
| 1,2-Dichloroethane | 0.43 | U | 1.0 | 0.43 | ug/L | | | 04/25/20 15:34 | 1 |
| 2-Butanone (MEK) | 1.9 | U | 5.0 | 1.9 | ug/L | | | 04/25/20 15:34 | 1 |
| 1,1,1-Trichloroethane | 0.24 | U | 1.0 | 0.24 | ug/L | | | 04/25/20 15:34 | 1 |
| Carbon tetrachloride | 0.21 | U | 1.0 | 0.21 | ug/L | | | 04/25/20 15:34 | 1 |
| Dichlorobromomethane | 0.34 | U | 1.0 | 0.34 | ug/L | | | 04/25/20 15:34 | 1 |
| 1,2-Dichloropropane | 0.35 | U | 1.0 | 0.35 | ug/L | | | 04/25/20 15:34 | 1 |
| cis-1,3-Dichloropropene | 0.22 | U | 1.0 | 0.22 | ug/L | | | 04/25/20 15:34 | 1 |
| Trichloroethene | 0.31 | U | 1.0 | 0.31 | ug/L | | | 04/25/20 15:34 | 1 |
| Chlorodibromomethane | 0.28 | U | 1.0 | 0.28 | ug/L | | | 04/25/20 15:34 | 1 |
| 1,1,2-Trichloroethane | 0.43 | U | 1.0 | 0.43 | ug/L | | | 04/25/20 15:34 | 1 |
| Benzene | 0.20 | U | 1.0 | 0.20 | ug/L | | | 04/25/20 15:34 | 1 |
| trans-1,3-Dichloropropene | 0.49 | U | 1.0 | 0.49 | ug/L | | | 04/25/20 15:34 | 1 |
| Bromoform | 0.54 | U | 1.0 | 0.54 | ug/L | | | 04/25/20 15:34 | 1 |
| 4-Methyl-2-pentanone (MIBK) | 1.3 | U | 5.0 | 1.3 | ug/L | | | 04/25/20 15:34 | 1 |
| 2-Hexanone | 1.1 | U | 5.0 | 1.1 | ug/L | | | 04/25/20 15:34 | 1 |
| Tetrachloroethene | 0.25 | U | 1.0 | 0.25 | ug/L | | | 04/25/20 15:34 | 1 |
| 1,1,2,2-Tetrachloroethane | 0.37 | U | 1.0 | 0.37 | ug/L | | | 04/25/20 15:34 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SW01-0-042320

**Lab Sample ID: 460-207545-4**

**Date Collected: 04/23/20 09:55**
**Date Received: 04/23/20 18:06**

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Toluene | 0.38 | U | 1.0 | 0.38 | ug/L | | | 04/25/20 15:34 | 1 |
| Chlorobenzene | 0.38 | U | 1.0 | 0.38 | ug/L | | | 04/25/20 15:34 | 1 |
| Ethylbenzene | 0.30 | U | 1.0 | 0.30 | ug/L | | | 04/25/20 15:34 | 1 |
| Styrene | 0.42 | U | 1.0 | 0.42 | ug/L | | | 04/25/20 15:34 | 1 |
| m-Xylene & p-Xylene | 0.30 | U | 1.0 | 0.30 | ug/L | | | 04/25/20 15:34 | 1 |
| o-Xylene | 0.36 | U | 1.0 | 0.36 | ug/L | | | 04/25/20 15:34 | 1 |
| Acrolein | 1.1 | U | 4.0 | 1.1 | ug/L | | | 04/25/20 15:34 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.31 | U | 1.0 | 0.31 | ug/L | | | 04/25/20 15:34 | 1 |
| 2-Methyl-2-propanol | 8.3 | U | 10 | 8.3 | ug/L | | | 04/25/20 15:34 | 1 |
| Acrylonitrile | 0.77 | U | 2.0 | 0.77 | ug/L | | | 04/25/20 15:34 | 1 |
| Methyl tert-butyl ether | 0.47 | U | 1.0 | 0.47 | ug/L | | | 04/25/20 15:34 | 1 |
| Cyclohexane | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 15:34 | 1 |
| 1,3-Dichlorobenzene | 0.34 | U | 1.0 | 0.34 | ug/L | | | 04/25/20 15:34 | 1 |
| 1,4-Dichlorobenzene | 0.33 | U | 1.0 | 0.33 | ug/L | | | 04/25/20 15:34 | 1 |
| 1,2-Dichlorobenzene | 0.43 | U | 1.0 | 0.43 | ug/L | | | 04/25/20 15:34 | 1 |
| Dichlorodifluoromethane | 0.31 | U | 1.0 | 0.31 | ug/L | | | 04/25/20 15:34 | 1 |
| 1,2,4-Trichlorobenzene | 0.37 | U | 1.0 | 0.37 | ug/L | | | 04/25/20 15:34 | 1 |
| 1,2,3-Trichlorobenzene | 0.36 | U | 1.0 | 0.36 | ug/L | | | 04/25/20 15:34 | 1 |
| 1,2,4-Trimethylbenzene | 0.37 | U | 1.0 | 0.37 | ug/L | | | 04/25/20 15:34 | 1 |
| 1,3,5-Trimethylbenzene | 0.33 | U | 1.0 | 0.33 | ug/L | | | 04/25/20 15:34 | 1 |
| Chlorobromomethane | 0.41 | U | 1.0 | 0.41 | ug/L | | | 04/25/20 15:34 | 1 |
| Isopropylbenzene | 0.34 | U | 1.0 | 0.34 | ug/L | | | 04/25/20 15:34 | 1 |
| N-Propylbenzene | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 15:34 | 1 |
| sec-Butylbenzene | 0.37 | U | 1.0 | 0.37 | ug/L | | | 04/25/20 15:34 | 1 |
| tert-Butylbenzene | 0.34 | U | 1.0 | 0.34 | ug/L | | | 04/25/20 15:34 | 1 |
| n-Butylbenzene | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 15:34 | 1 |
| Methyl acetate | 0.79 | U | 5.0 | 0.79 | ug/L | | | 04/25/20 15:34 | 1 |
| Methylcyclohexane | 0.26 | U | 1.0 | 0.26 | ug/L | | | 04/25/20 15:34 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Tentatively Identified Compound* | *None* | | *ug/L* | | | | | *04/25/20 15:34* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *93* | | *75 - 123* | | *04/25/20 15:34* | *1* |
| *Toluene-d8 (Surr)* | *88* | | *80 - 120* | | *04/25/20 15:34* | *1* |
| *4-Bromofluorobenzene* | *97* | | *76 - 120* | | *04/25/20 15:34* | *1* |
| *Dibromofluoromethane (Surr)* | *99* | | *77 - 124* | | *04/25/20 15:34* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Benzo[a]anthracene** | **0.054** | | 0.050 | 0.016 | ug/L | | 04/25/20 07:13 | 04/27/20 10:47 | 1 |
| **Benzo[a]pyrene** | **0.031** | **J** | 0.050 | 0.022 | ug/L | | 04/25/20 07:13 | 04/27/20 10:47 | 1 |
| **Benzo[b]fluoranthene** | **0.042** | **J** | 0.050 | 0.024 | ug/L | | 04/25/20 07:13 | 04/27/20 10:47 | 1 |
| Bis(2-chloroethyl)ether | 0.026 | U | 0.030 | 0.026 | ug/L | | 04/25/20 07:13 | 04/27/20 10:47 | 1 |
| Hexachlorobenzene | 0.013 | U | 0.020 | 0.013 | ug/L | | 04/25/20 07:13 | 04/27/20 10:47 | 1 |
| **N-Nitrosodimethylamine** | **0.23** | | 0.20 | 0.12 | ug/L | | 04/25/20 07:13 | 04/27/20 10:47 | 1 |
| Pentachlorophenol | 0.15 | U | 0.20 | 0.15 | ug/L | | 04/25/20 07:13 | 04/27/20 10:47 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SW01-0-042320

**Lab Sample ID: 460-207545-4**

**Date Collected: 04/23/20 09:55**
**Matrix: Water**
**Date Received: 04/23/20 18:06**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Phenol | 0.29 | U | 10 | 0.29 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 2-Chlorophenol | 0.38 | U | 10 | 0.38 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 2-Methylphenol | 0.67 | U | 10 | 0.67 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 4-Methylphenol | 0.65 | U | 10 | 0.65 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 2-Nitrophenol | 0.75 | U | 10 | 0.75 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 2,4-Dimethylphenol | 0.62 | U | 10 | 0.62 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 2,4-Dichlorophenol | 1.1 | U | 10 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 4-Chloro-3-methylphenol | 0.58 | U | 10 | 0.58 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 2,4,6-Trichlorophenol | 0.86 | U | 10 | 0.86 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 2,4,5-Trichlorophenol | 0.88 | U | 10 | 0.88 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 2,4-Dinitrotoluene | 1.0 | U | 2.0 | 1.0 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 4-Nitrophenol | 4.0 | U | 20 | 4.0 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 4,6-Dinitro-2-methylphenol | 13 | U | 20 | 13 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| N-Nitrosodimethylamine | 0.45 | U | 10 | 0.45 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| N-Nitrosodi-n-propylamine | 0.43 | U | 1.0 | 0.43 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Hexachloroethane | 0.80 | U | 2.0 | 0.80 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Nitrobenzene | 0.57 | U | 1.0 | 0.57 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Isophorone | 0.80 | U | 10 | 0.80 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Naphthalene | 1.1 | U | 2.0 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 4-Chloroaniline | 1.9 | U | 10 | 1.9 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Hexachlorobutadiene | 0.78 | U | 1.0 | 0.78 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 2-Methylnaphthalene | 1.1 | U | 10 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Hexachlorocyclopentadiene | 3.6 | U | 10 | 3.6 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 2-Chloronaphthalene | 1.2 | ~~U F1~~ UJ | 10 | 1.2 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 2-Nitroaniline | 0.47 | U | 10 | 0.47 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Dimethyl phthalate | 0.77 | ~~U F1~~ UJ | 10 | 0.77 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Acenaphthylene | 0.82 | ~~U F1~~ UJ | 10 | 0.82 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 2,6-Dinitrotoluene | 0.83 | U | 2.0 | 0.83 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 3-Nitroaniline | 1.9 | U | 10 | 1.9 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Acenaphthene | 1.1 | U | 10 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Dibenzofuran | 1.1 | ~~U F1~~ UJ | 10 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 2,4-Dinitrophenol | 14 | U | 20 | 14 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Diethyl phthalate | 0.98 | ~~U F1~~ UJ | 10 | 0.98 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 4-Chlorophenyl phenyl ether | 1.3 | U | 10 | 1.3 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Fluorene | 0.91 | ~~U F1~~ UJ | 10 | 0.91 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 4-Nitroaniline | 1.2 | U | 10 | 1.2 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| N-Nitrosodiphenylamine | 0.89 | U | 10 | 0.89 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 4-Bromophenyl phenyl ether | 0.75 | U | 10 | 0.75 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Phenanthrene | 0.58 | U | 10 | 0.58 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Anthracene | 0.63 | U | 10 | 0.63 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Carbazole | 0.68 | U | 10 | 0.68 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Di-n-butyl phthalate | 0.84 | U | 10 | 0.84 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Fluoranthene | 0.84 | U | 10 | 0.84 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Pyrene | 1.6 | U | 10 | 1.6 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Benzidine | 11 | U ~~F2~~ | 20 | 11 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Butyl benzyl phthalate | 0.85 | U | 10 | 0.85 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Chrysene | 0.91 | U | 2.0 | 0.91 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Bis(2-ethylhexyl) phthalate | 1.7 | U | 2.0 | 1.7 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Di-n-octyl phthalate | 4.8 | U | 10 | 4.8 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SW01-0-042320

**Lab Sample ID: 460-207545-4**

**Date Collected: 04/23/20 09:55**
**Date Received: 04/23/20 18:06**

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzo[k]fluoranthene | 0.67 | U | 1.0 | 0.67 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.94 | U | 2.0 | 0.94 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Dibenz(a,h)anthracene | 0.72 | U | 1.0 | 0.72 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Benzo[g,h,i]perylene | 1.4 | U | 10 | 1.4 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 1,2-Diphenylhydrazine | 0.79 | U | 10 | 0.79 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 1,1'-Biphenyl | 1.2 | ~~U F1~~ UJ | 10 | 1.2 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Acetophenone | 2.3 | U | 10 | 2.3 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Benzaldehyde | 2.1 | ~~U F1~~ UJ | 10 | 2.1 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Caprolactam | 0.68 | U | 10 | 0.68 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Atrazine | 1.3 | ~~U F1 F2~~ UJ | 2.0 | 1.3 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 2,2'-oxybis[1-chloropropane] | 0.63 | U | 10 | 0.63 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 1,2,4,5-Tetrachlorobenzene | 1.2 | U | 10 | 1.2 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 2,3,4,6-Tetrachlorophenol | 0.75 | U | 10 | 0.75 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| 3,3'-Dichlorobenzidine | 1.4 | U | 10 | 1.4 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |
| Bis(2-chloroethoxy)methane | 0.59 | U | 10 | 0.59 | ug/L | | 04/25/20 07:13 | 04/26/20 01:25 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Tentatively Identified Compound* | *None* | | *ug/L* | | | | *04/25/20 07:13* | *04/26/20 01:25* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5 (Surr)* | *102* | | *46 - 137* | *04/25/20 07:13* | *04/26/20 01:25* | *1* |
| *Phenol-d5 (Surr)* | *30* | | *10 - 50* | *04/25/20 07:13* | *04/26/20 01:25* | *1* |
| *Terphenyl-d14 (Surr)* | *102* | | *39 - 150* | *04/25/20 07:13* | *04/26/20 01:25* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *102* | | *36 - 159* | *04/25/20 07:13* | *04/26/20 01:25* | *1* |
| *2-Fluorophenol (Surr)* | *51* | | *18 - 72* | *04/25/20 07:13* | *04/26/20 01:25* | *1* |
| *2-Fluorobiphenyl* | *96* | | *42 - 127* | *04/25/20 07:13* | *04/26/20 01:25* | *1* |

### Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | 0.0030 | U | 0.020 | 0.0030 | ug/L | | 04/25/20 15:03 | 04/27/20 06:13 | 1 |
| alpha-BHC | 0.0070 | U | 0.020 | 0.0070 | ug/L | | 04/25/20 15:03 | 04/27/20 06:13 | 1 |
| beta-BHC | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 06:13 | 1 |
| delta-BHC | 0.0050 | U | 0.020 | 0.0050 | ug/L | | 04/25/20 15:03 | 04/27/20 06:13 | 1 |
| gamma-BHC (Lindane) | 0.012 | U | 0.020 | 0.012 | ug/L | | 04/25/20 15:03 | 04/27/20 06:13 | 1 |
| Chlordane (technical) | 0.055 | U | 0.50 | 0.055 | ug/L | | 04/25/20 15:03 | 04/27/20 06:13 | 1 |
| 4,4'-DDD | 0.0060 | U | 0.020 | 0.0060 | ug/L | | 04/25/20 15:03 | 04/27/20 06:13 | 1 |
| 4,4'-DDE | 0.0020 | U | 0.020 | 0.0020 | ug/L | | 04/25/20 15:03 | 04/27/20 06:13 | 1 |
| 4,4'-DDT | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 06:13 | 1 |
| Dieldrin | 0.0030 | U | 0.020 | 0.0030 | ug/L | | 04/25/20 15:03 | 04/27/20 06:13 | 1 |
| Endosulfan I | 0.0020 | U | 0.020 | 0.0020 | ug/L | | 04/25/20 15:03 | 04/27/20 06:13 | 1 |
| Endosulfan II | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 06:13 | 1 |
| Endosulfan sulfate | 0.0060 | U | 0.020 | 0.0060 | ug/L | | 04/25/20 15:03 | 04/27/20 06:13 | 1 |
| Endrin | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 06:13 | 1 |
| Endrin aldehyde | 0.0080 | U | 0.020 | 0.0080 | ug/L | | 04/25/20 15:03 | 04/27/20 06:13 | 1 |
| Endrin ketone | 0.0080 | U | 0.020 | 0.0080 | ug/L | | 04/25/20 15:03 | 04/27/20 06:13 | 1 |
| Heptachlor | 0.0030 | U | 0.020 | 0.0030 | ug/L | | 04/25/20 15:03 | 04/27/20 06:13 | 1 |
| Heptachlor epoxide | 0.0050 | U | 0.020 | 0.0050 | ug/L | | 04/25/20 15:03 | 04/27/20 06:13 | 1 |
| Methoxychlor | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 06:13 | 1 |
| Toxaphene | 0.11 | U | 0.50 | 0.11 | ug/L | | 04/25/20 15:03 | 04/27/20 06:13 | 1 |
| trans-Chlordane | 0.0030 | U | 0.020 | 0.0030 | ug/L | | 04/25/20 15:03 | 04/27/20 06:13 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SW01-0-042320

**Lab Sample ID: 460-207545-4**

**Date Collected: 04/23/20 09:55**
**Matrix: Water**
**Date Received: 04/23/20 18:06**

### Method: 8081B - Organochlorine Pesticides (GC) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| cis-Chlordane | 0.0020 | U | 0.020 | 0.0020 | ug/L | | 04/25/20 15:03 | 04/27/20 06:13 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *55* | | *10 - 150* | *04/25/20 15:03* | *04/27/20 06:13* | *1* |
| *Tetrachloro-m-xylene* | *52* | | *10 - 150* | *04/25/20 15:03* | *04/27/20 06:13* | *1* |
| *DCB Decachlorobiphenyl* | *39* | | *10 - 132* | *04/25/20 15:03* | *04/27/20 06:13* | *1* |
| *DCB Decachlorobiphenyl* | *40* | | *10 - 132* | *04/25/20 15:03* | *04/27/20 06:13* | *1* |

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 09:49 | 1 |
| Aroclor 1221 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 09:49 | 1 |
| Aroclor 1232 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 09:49 | 1 |
| Aroclor 1242 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 09:49 | 1 |
| Aroclor 1248 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 09:49 | 1 |
| Aroclor 1254 | 0.11 | U | 0.40 | 0.11 | ug/L | | 04/25/20 15:00 | 04/27/20 09:49 | 1 |
| Aroclor 1260 | 0.11 | ~~U F1~~ UJ | 0.40 | 0.11 | ug/L | | 04/25/20 15:00 | 04/27/20 09:49 | 1 |
| Aroclor-1262 | 0.11 | U | 0.40 | 0.11 | ug/L | | 04/25/20 15:00 | 04/27/20 09:49 | 1 |
| Aroclor 1268 | 0.11 | U | 0.40 | 0.11 | ug/L | | 04/25/20 15:00 | 04/27/20 09:49 | 1 |
| Polychlorinated biphenyls, Total | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 09:49 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *41* | | *10 - 150* | *04/25/20 15:00* | *04/27/20 09:49* | *1* |
| *DCB Decachlorobiphenyl* | *44* | | *10 - 150* | *04/25/20 15:00* | *04/27/20 09:49* | *1* |
| *Tetrachloro-m-xylene* | *63* | | *48 - 125* | *04/25/20 15:00* | *04/27/20 09:49* | *1* |
| *Tetrachloro-m-xylene* | *69* | | *48 - 125* | *04/25/20 15:00* | *04/27/20 09:49* | *1* |

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4-D | 0.13 | U | 1.2 | 0.13 | ug/L | | 04/25/20 00:02 | 04/25/20 16:19 | 1 |
| Silvex (2,4,5-TP) | 0.11 | U | 1.2 | 0.11 | ug/L | | 04/25/20 00:02 | 04/25/20 16:19 | 1 |
| 2,4,5-T | 0.12 | U | 1.2 | 0.12 | ug/L | | 04/25/20 00:02 | 04/25/20 16:19 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *81* | | *39 - 145* | *04/25/20 00:02* | *04/25/20 16:19* | *1* |
| *2,4-Dichlorophenylacetic acid* | *98* | | *39 - 145* | *04/25/20 00:02* | *04/25/20 16:19* | *1* |

### Method: NJDEP EPH - New Jersey Extractable Petroleum Hydrocarbons

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total EPH (C9-C40) | 0.10 | U | 0.10 | 0.10 | mg/L | | 04/25/20 15:09 | 04/26/20 18:03 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *107* | | *40 - 140* | *04/25/20 15:09* | *04/26/20 18:03* | *1* |
| *1-Chlorooctadecane* | *102* | | *40 - 140* | *04/25/20 15:09* | *04/26/20 18:03* | *1* |

### Method: 6020B - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Silver | 0.59 | U | 2.0 | 0.59 | ug/L | | 04/25/20 21:20 | 04/26/20 12:09 | 2 |
| **Aluminum** | **216** | | 40.0 | 18.8 | ug/L | | 04/25/20 21:20 | 04/26/20 12:09 | 2 |
| **Arsenic** | **0.97** | **J** | 2.0 | 0.73 | ug/L | | 04/25/20 21:20 | 04/26/20 12:09 | 2 |
| **Barium** | **53.2** | | 4.0 | 1.2 | ug/L | | 04/25/20 21:20 | 04/26/20 12:09 | 2 |

## Client Sample ID: SEL-PA-SW01-0-042320

**Lab Sample ID: 460-207545-4**

**Date Collected: 04/23/20 09:55**
**Matrix: Water**
**Date Received: 04/23/20 18:06**

### Method: 6020B - Metals (ICP/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Beryllium | 0.25 | U | 0.80 | 0.25 | ug/L | | 04/25/20 21:20 | 04/26/20 12:09 | 2 |
| **Calcium** | **45500** | | 200 | 98.8 | ug/L | | 04/25/20 21:20 | 04/26/20 12:09 | 2 |
| Cadmium | 0.81 | U | 2.0 | 0.81 | ug/L | | 04/25/20 21:20 | 04/26/20 12:09 | 2 |
| Cobalt | 1.6 | U | 4.0 | 1.6 | ug/L | | 04/25/20 21:20 | 04/26/20 12:09 | 2 |
| Chromium | 2.3 | U | 4.0 | 2.3 | ug/L | | 04/25/20 21:20 | 04/26/20 12:09 | 2 |
| Copper | 2.0 | U | 4.0 | 2.0 | ug/L | | 04/25/20 21:20 | 04/26/20 12:09 | 2 |
| **Iron** | **3490** | | 120 | 51.1 | ug/L | | 04/25/20 21:20 | 04/26/20 12:09 | 2 |
| **Potassium** | **10300** | | 200 | 86.7 | ug/L | | 04/25/20 21:20 | 04/26/20 12:09 | 2 |
| **Magnesium** | **9290** | | 200 | 73.7 | ug/L | | 04/25/20 21:20 | 04/26/20 12:09 | 2 |
| **Manganese** | **189** | | 8.0 | 2.9 | ug/L | | 04/25/20 21:20 | 04/26/20 12:09 | 2 |
| **Sodium** | **58800** | | 200 | 128 | ug/L | | 04/25/20 21:20 | 04/26/20 12:09 | 2 |
| Nickel | 2.4 | U | 4.0 | 2.4 | ug/L | | 04/25/20 21:20 | 04/26/20 12:09 | 2 |
| **Lead** | **1.2** | | 1.2 | 0.55 | ug/L | | 04/25/20 21:20 | 04/26/20 12:09 | 2 |
| **Antimony** | **0.90** | **J** | 2.0 | 0.40 | ug/L | | 04/25/20 21:20 | 04/26/20 12:09 | 2 |
| Selenium | 5.4 | U | 10.0 | 5.4 | ug/L | | 04/25/20 21:20 | 04/26/20 12:09 | 2 |
| Thallium | 0.16 | U | 0.80 | 0.16 | ug/L | | 04/25/20 21:20 | 04/26/20 12:09 | 2 |
| **Vanadium** | **1.4** | **J** | 4.0 | 1.1 | ug/L | | 04/25/20 21:20 | 04/26/20 12:09 | 2 |
| Zinc | 11.1 | U | 16.0 | 11.1 | ug/L | | 04/25/20 21:20 | 04/26/20 12:09 | 2 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.091 | U | 0.20 | 0.091 | ug/L | | 04/27/20 11:43 | 04/27/20 13:33 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cr (VI) | 8.1 | U | 10.0 | 8.1 | ug/L | | | 04/24/20 09:52 | 1 |
| Cyanide, Total | 0.0040 | U ~~F1~~ | 0.010 | 0.0040 | mg/L | | 04/26/20 13:26 | 04/27/20 09:22 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Amenable | 0.010 | U | 0.010 | 0.010 | mg/L | | | 04/28/20 17:00 | 1 |

## Client Sample ID: SEL-PA-SW04-0-042320

**Lab Sample ID: 460-207545-5**

**Date Collected: 04/23/20 10:50**
**Matrix: Water**
**Date Received: 04/23/20 18:06**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromo-3-Chloropropane | 0.010 | U | 0.020 | 0.010 | ug/L | | | 05/01/20 15:11 | 1 |
| **1,4-Dioxane** | **0.60** | | 0.40 | 0.33 | ug/L | | | 05/01/20 15:11 | 1 |
| Ethylene Dibromide | 0.0079 | U | 0.020 | 0.0079 | ug/L | | | 05/01/20 15:11 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene* | *99* | | *52 - 137* | | *05/01/20 15:11* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloromethane | 0.40 | U | 1.0 | 0.40 | ug/L | | | 04/25/20 17:16 | 1 |
| Bromomethane | 0.55 | U | 1.0 | 0.55 | ug/L | | | 04/25/20 17:16 | 1 |
| Vinyl chloride | 0.17 | U | 1.0 | 0.17 | ug/L | | | 04/25/20 17:16 | 1 |
| Chloroethane | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 17:16 | 1 |
| Methylene Chloride | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 17:16 | 1 |
| Acetone | 4.4 | U | 5.0 | 4.4 | ug/L | | | 04/25/20 17:16 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SW04-0-042320

**Lab Sample ID: 460-207545-5**

**Date Collected: 04/23/20 10:50**
**Matrix: Water**
**Date Received: 04/23/20 18:06**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbon disulfide | 0.82 | U | 1.0 | 0.82 | ug/L | | | 04/25/20 17:16 | 1 |
| Trichlorofluoromethane | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 17:16 | 1 |
| 1,1-Dichloroethene | 0.26 | U | 1.0 | 0.26 | ug/L | | | 04/25/20 17:16 | 1 |
| 1,1-Dichloroethane | 0.26 | U | 1.0 | 0.26 | ug/L | | | 04/25/20 17:16 | 1 |
| trans-1,2-Dichloroethene | 0.24 | U | 1.0 | 0.24 | ug/L | | | 04/25/20 17:16 | 1 |
| cis-1,2-Dichloroethene | 0.22 | U | 1.0 | 0.22 | ug/L | | | 04/25/20 17:16 | 1 |
| Chloroform | 0.33 | U | 1.0 | 0.33 | ug/L | | | 04/25/20 17:16 | 1 |
| 1,2-Dichloroethane | 0.43 | U | 1.0 | 0.43 | ug/L | | | 04/25/20 17:16 | 1 |
| 2-Butanone (MEK) | 1.9 | U | 5.0 | 1.9 | ug/L | | | 04/25/20 17:16 | 1 |
| 1,1,1-Trichloroethane | 0.24 | U | 1.0 | 0.24 | ug/L | | | 04/25/20 17:16 | 1 |
| Carbon tetrachloride | 0.21 | U | 1.0 | 0.21 | ug/L | | | 04/25/20 17:16 | 1 |
| Dichlorobromomethane | 0.34 | U | 1.0 | 0.34 | ug/L | | | 04/25/20 17:16 | 1 |
| 1,2-Dichloropropane | 0.35 | U | 1.0 | 0.35 | ug/L | | | 04/25/20 17:16 | 1 |
| cis-1,3-Dichloropropene | 0.22 | U | 1.0 | 0.22 | ug/L | | | 04/25/20 17:16 | 1 |
| Trichloroethene | 0.31 | U | 1.0 | 0.31 | ug/L | | | 04/25/20 17:16 | 1 |
| Chlorodibromomethane | 0.28 | U | 1.0 | 0.28 | ug/L | | | 04/25/20 17:16 | 1 |
| 1,1,2-Trichloroethane | 0.43 | U | 1.0 | 0.43 | ug/L | | | 04/25/20 17:16 | 1 |
| Benzene | 0.20 | U | 1.0 | 0.20 | ug/L | | | 04/25/20 17:16 | 1 |
| trans-1,3-Dichloropropene | 0.49 | U | 1.0 | 0.49 | ug/L | | | 04/25/20 17:16 | 1 |
| Bromoform | 0.54 | U | 1.0 | 0.54 | ug/L | | | 04/25/20 17:16 | 1 |
| 4-Methyl-2-pentanone (MIBK) | 1.3 | U | 5.0 | 1.3 | ug/L | | | 04/25/20 17:16 | 1 |
| 2-Hexanone | 1.1 | U | 5.0 | 1.1 | ug/L | | | 04/25/20 17:16 | 1 |
| Tetrachloroethene | 0.25 | U | 1.0 | 0.25 | ug/L | | | 04/25/20 17:16 | 1 |
| 1,1,2,2-Tetrachloroethane | 0.37 | U | 1.0 | 0.37 | ug/L | | | 04/25/20 17:16 | 1 |
| Toluene | 0.38 | U | 1.0 | 0.38 | ug/L | | | 04/25/20 17:16 | 1 |
| Chlorobenzene | 0.38 | U | 1.0 | 0.38 | ug/L | | | 04/25/20 17:16 | 1 |
| Ethylbenzene | 0.30 | U | 1.0 | 0.30 | ug/L | | | 04/25/20 17:16 | 1 |
| Styrene | 0.42 | U | 1.0 | 0.42 | ug/L | | | 04/25/20 17:16 | 1 |
| m-Xylene & p-Xylene | 0.30 | U | 1.0 | 0.30 | ug/L | | | 04/25/20 17:16 | 1 |
| o-Xylene | 0.36 | U | 1.0 | 0.36 | ug/L | | | 04/25/20 17:16 | 1 |
| Acrolein | 1.1 | U | 4.0 | 1.1 | ug/L | | | 04/25/20 17:16 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.31 | U | 1.0 | 0.31 | ug/L | | | 04/25/20 17:16 | 1 |
| 2-Methyl-2-propanol | 8.3 | U | 10 | 8.3 | ug/L | | | 04/25/20 17:16 | 1 |
| Acrylonitrile | 0.77 | U | 2.0 | 0.77 | ug/L | | | 04/25/20 17:16 | 1 |
| Methyl tert-butyl ether | 0.47 | U | 1.0 | 0.47 | ug/L | | | 04/25/20 17:16 | 1 |
| Cyclohexane | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 17:16 | 1 |
| 1,3-Dichlorobenzene | 0.34 | U | 1.0 | 0.34 | ug/L | | | 04/25/20 17:16 | 1 |
| 1,4-Dichlorobenzene | 0.33 | U | 1.0 | 0.33 | ug/L | | | 04/25/20 17:16 | 1 |
| 1,2-Dichlorobenzene | 0.43 | U | 1.0 | 0.43 | ug/L | | | 04/25/20 17:16 | 1 |
| Dichlorodifluoromethane | 0.31 | U | 1.0 | 0.31 | ug/L | | | 04/25/20 17:16 | 1 |
| 1,2,4-Trichlorobenzene | 0.37 | U | 1.0 | 0.37 | ug/L | | | 04/25/20 17:16 | 1 |
| 1,2,3-Trichlorobenzene | 0.36 | U | 1.0 | 0.36 | ug/L | | | 04/25/20 17:16 | 1 |
| 1,2,4-Trimethylbenzene | 0.37 | U | 1.0 | 0.37 | ug/L | | | 04/25/20 17:16 | 1 |
| 1,3,5-Trimethylbenzene | 0.33 | U | 1.0 | 0.33 | ug/L | | | 04/25/20 17:16 | 1 |
| Chlorobromomethane | 0.41 | U | 1.0 | 0.41 | ug/L | | | 04/25/20 17:16 | 1 |
| Isopropylbenzene | 0.34 | U | 1.0 | 0.34 | ug/L | | | 04/25/20 17:16 | 1 |
| N-Propylbenzene | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 17:16 | 1 |
| sec-Butylbenzene | 0.37 | U | 1.0 | 0.37 | ug/L | | | 04/25/20 17:16 | 1 |
| tert-Butylbenzene | 0.34 | U | 1.0 | 0.34 | ug/L | | | 04/25/20 17:16 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SW04-0-042320

**Lab Sample ID: 460-207545-5**

**Date Collected: 04/23/20 10:50**
**Date Received: 04/23/20 18:06**

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| n-Butylbenzene | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 17:16 | 1 |
| Methyl acetate | 0.79 | U | 5.0 | 0.79 | ug/L | | | 04/25/20 17:16 | 1 |
| Methylcyclohexane | 0.26 | U | 1.0 | 0.26 | ug/L | | | 04/25/20 17:16 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Tentatively Identified Compound* | *None* | | *ug/L* | | | | | *04/25/20 17:16* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *95* | | *75 - 123* | | *04/25/20 17:16* | *1* |
| *Toluene-d8 (Surr)* | *91* | | *80 - 120* | | *04/25/20 17:16* | *1* |
| *4-Bromofluorobenzene* | *95* | | *76 - 120* | | *04/25/20 17:16* | *1* |
| *Dibromofluoromethane (Surr)* | *102* | | *77 - 124* | | *04/25/20 17:16* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzo[a]anthracene | 0.016 | U | 0.050 | 0.016 | ug/L | | 04/25/20 07:13 | 04/27/20 11:08 | 1 |
| Benzo[a]pyrene | 0.022 | U | 0.050 | 0.022 | ug/L | | 04/25/20 07:13 | 04/27/20 11:08 | 1 |
| Benzo[b]fluoranthene | 0.024 | U | 0.050 | 0.024 | ug/L | | 04/25/20 07:13 | 04/27/20 11:08 | 1 |
| Bis(2-chloroethyl)ether | 0.026 | U | 0.030 | 0.026 | ug/L | | 04/25/20 07:13 | 04/27/20 11:08 | 1 |
| Hexachlorobenzene | 0.013 | U | 0.020 | 0.013 | ug/L | | 04/25/20 07:13 | 04/27/20 11:08 | 1 |
| N-Nitrosodimethylamine | 0.12 | U | 0.20 | 0.12 | ug/L | | 04/25/20 07:13 | 04/27/20 11:08 | 1 |
| Pentachlorophenol | 0.15 | U | 0.20 | 0.15 | ug/L | | 04/25/20 07:13 | 04/27/20 11:08 | 1 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Phenol | 0.29 | U | 10 | 0.29 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 2-Chlorophenol | 0.38 | U | 10 | 0.38 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 2-Methylphenol | 0.67 | U | 10 | 0.67 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 4-Methylphenol | 0.65 | U | 10 | 0.65 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 2-Nitrophenol | 0.75 | U | 10 | 0.75 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 2,4-Dimethylphenol | 0.62 | U | 10 | 0.62 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 2,4-Dichlorophenol | 1.1 | U | 10 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 4-Chloro-3-methylphenol | 0.58 | U | 10 | 0.58 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 2,4,6-Trichlorophenol | 0.86 | U | 10 | 0.86 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 2,4,5-Trichlorophenol | 0.88 | U | 10 | 0.88 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 2,4-Dinitrotoluene | 1.0 | U | 2.0 | 1.0 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 4-Nitrophenol | 4.0 | U | 20 | 4.0 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 4,6-Dinitro-2-methylphenol | 13 | U | 20 | 13 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| N-Nitrosodimethylamine | 0.45 | U | 10 | 0.45 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| N-Nitrosodi-n-propylamine | 0.43 | U | 1.0 | 0.43 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Hexachloroethane | 0.80 | U | 2.0 | 0.80 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Nitrobenzene | 0.57 | U | 1.0 | 0.57 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Isophorone | 0.80 | U | 10 | 0.80 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Naphthalene | 1.1 | U | 2.0 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 4-Chloroaniline | 1.9 | U | 10 | 1.9 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Hexachlorobutadiene | 0.78 | U | 1.0 | 0.78 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 2-Methylnaphthalene | 1.1 | U | 10 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Hexachlorocyclopentadiene | 3.6 | U | 10 | 3.6 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 2-Chloronaphthalene | 1.2 | U | 10 | 1.2 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 2-Nitroaniline | 0.47 | U | 10 | 0.47 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SW04-0-042320

**Lab Sample ID: 460-207545-5**

**Date Collected: 04/23/20 10:50**
**Matrix: Water**
**Date Received: 04/23/20 18:06**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dimethyl phthalate | 0.77 | U | 10 | 0.77 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Acenaphthylene | 0.82 | U | 10 | 0.82 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 2,6-Dinitrotoluene | 0.83 | U | 2.0 | 0.83 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 3-Nitroaniline | 1.9 | U | 10 | 1.9 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Acenaphthene | 1.1 | U | 10 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Dibenzofuran | 1.1 | U | 10 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 2,4-Dinitrophenol | 14 | U | 20 | 14 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Diethyl phthalate | 0.98 | U | 10 | 0.98 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 4-Chlorophenyl phenyl ether | 1.3 | U | 10 | 1.3 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Fluorene | 0.91 | U | 10 | 0.91 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 4-Nitroaniline | 1.2 | U | 10 | 1.2 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| N-Nitrosodiphenylamine | 0.89 | U | 10 | 0.89 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 4-Bromophenyl phenyl ether | 0.75 | U | 10 | 0.75 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Phenanthrene | 0.58 | U | 10 | 0.58 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Anthracene | 0.63 | U | 10 | 0.63 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Carbazole | 0.68 | U | 10 | 0.68 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Di-n-butyl phthalate | 0.84 | U | 10 | 0.84 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Fluoranthene | 0.84 | U | 10 | 0.84 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Pyrene | 1.6 | U | 10 | 1.6 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Benzidine | 11 | U | 20 | 11 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Butyl benzyl phthalate | 0.85 | U | 10 | 0.85 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Chrysene | 0.91 | U | 2.0 | 0.91 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Bis(2-ethylhexyl) phthalate | 1.7 | U | 2.0 | 1.7 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Di-n-octyl phthalate | 4.8 | U | 10 | 4.8 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Benzo[k]fluoranthene | 0.67 | U | 1.0 | 0.67 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.94 | U | 2.0 | 0.94 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Dibenz(a,h)anthracene | 0.72 | U | 1.0 | 0.72 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Benzo[g,h,i]perylene | 1.4 | U | 10 | 1.4 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 1,2-Diphenylhydrazine | 0.79 | U | 10 | 0.79 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 1,1'-Biphenyl | 1.2 | U | 10 | 1.2 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Acetophenone | 2.3 | U | 10 | 2.3 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Benzaldehyde | 2.1 | U | 10 | 2.1 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Caprolactam | 0.68 | U | 10 | 0.68 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Atrazine | 1.3 | U | 2.0 | 1.3 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 2,2'-oxybis[1-chloropropane] | 0.63 | U | 10 | 0.63 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 1,2,4,5-Tetrachlorobenzene | 1.2 | U | 10 | 1.2 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 2,3,4,6-Tetrachlorophenol | 0.75 | U | 10 | 0.75 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| 3,3'-Dichlorobenzidine | 1.4 | U | 10 | 1.4 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |
| Bis(2-chloroethoxy)methane | 0.59 | U | 10 | 0.59 | ug/L | | 04/25/20 07:13 | 04/26/20 03:30 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Tentatively Identified Compound* | *None* | | *ug/L* | | | | *04/25/20 07:13* | *04/26/20 03:30* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5 (Surr)* | *88* | | *46 - 137* | *04/25/20 07:13* | *04/26/20 03:30* | *1* |
| *Phenol-d5 (Surr)* | *26* | | *10 - 50* | *04/25/20 07:13* | *04/26/20 03:30* | *1* |
| *Terphenyl-d14 (Surr)* | *96* | | *39 - 150* | *04/25/20 07:13* | *04/26/20 03:30* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *87* | | *36 - 159* | *04/25/20 07:13* | *04/26/20 03:30* | *1* |
| *2-Fluorophenol (Surr)* | *43* | | *18 - 72* | *04/25/20 07:13* | *04/26/20 03:30* | *1* |
| *2-Fluorobiphenyl* | *84* | | *42 - 127* | *04/25/20 07:13* | *04/26/20 03:30* | *1* |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SW04-0-042320

**Lab Sample ID: 460-207545-5**

**Date Collected: 04/23/20 10:50**
**Matrix: Water**
**Date Received: 04/23/20 18:06**

### Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | 0.0030 | U | 0.020 | 0.0030 | ug/L | | 04/25/20 15:03 | 04/27/20 07:12 | 1 |
| alpha-BHC | 0.0070 | U | 0.020 | 0.0070 | ug/L | | 04/25/20 15:03 | 04/27/20 07:12 | 1 |
| beta-BHC | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 07:12 | 1 |
| delta-BHC | 0.0050 | U | 0.020 | 0.0050 | ug/L | | 04/25/20 15:03 | 04/27/20 07:12 | 1 |
| gamma-BHC (Lindane) | 0.012 | U | 0.020 | 0.012 | ug/L | | 04/25/20 15:03 | 04/27/20 07:12 | 1 |
| Chlordane (technical) | 0.055 | U | 0.50 | 0.055 | ug/L | | 04/25/20 15:03 | 04/27/20 07:12 | 1 |
| 4,4'-DDD | 0.0060 | U | 0.020 | 0.0060 | ug/L | | 04/25/20 15:03 | 04/27/20 07:12 | 1 |
| 4,4'-DDE | 0.0020 | U | 0.020 | 0.0020 | ug/L | | 04/25/20 15:03 | 04/27/20 07:12 | 1 |
| 4,4'-DDT | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 07:12 | 1 |
| Dieldrin | 0.0030 | U | 0.020 | 0.0030 | ug/L | | 04/25/20 15:03 | 04/27/20 07:12 | 1 |
| Endosulfan I | 0.0020 | U | 0.020 | 0.0020 | ug/L | | 04/25/20 15:03 | 04/27/20 07:12 | 1 |
| Endosulfan II | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 07:12 | 1 |
| Endosulfan sulfate | 0.0060 | U | 0.020 | 0.0060 | ug/L | | 04/25/20 15:03 | 04/27/20 07:12 | 1 |
| Endrin | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 07:12 | 1 |
| Endrin aldehyde | 0.0080 | U | 0.020 | 0.0080 | ug/L | | 04/25/20 15:03 | 04/27/20 07:12 | 1 |
| Endrin ketone | 0.0080 | U | 0.020 | 0.0080 | ug/L | | 04/25/20 15:03 | 04/27/20 07:12 | 1 |
| Heptachlor | 0.0030 | U | 0.020 | 0.0030 | ug/L | | 04/25/20 15:03 | 04/27/20 07:12 | 1 |
| Heptachlor epoxide | 0.0050 | U | 0.020 | 0.0050 | ug/L | | 04/25/20 15:03 | 04/27/20 07:12 | 1 |
| Methoxychlor | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 07:12 | 1 |
| Toxaphene | 0.11 | U | 0.50 | 0.11 | ug/L | | 04/25/20 15:03 | 04/27/20 07:12 | 1 |
| trans-Chlordane | 0.0030 | U | 0.020 | 0.0030 | ug/L | | 04/25/20 15:03 | 04/27/20 07:12 | 1 |
| cis-Chlordane | 0.0020 | U | 0.020 | 0.0020 | ug/L | | 04/25/20 15:03 | 04/27/20 07:12 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *52* | | *10 - 150* | *04/25/20 15:03* | *04/27/20 07:12* | *1* |
| *Tetrachloro-m-xylene* | *51* | | *10 - 150* | *04/25/20 15:03* | *04/27/20 07:12* | *1* |
| *DCB Decachlorobiphenyl* | *37* | | *10 - 132* | *04/25/20 15:03* | *04/27/20 07:12* | *1* |
| *DCB Decachlorobiphenyl* | *42* | | *10 - 132* | *04/25/20 15:03* | *04/27/20 07:12* | *1* |

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 11:52 | 1 |
| Aroclor 1221 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 11:52 | 1 |
| Aroclor 1232 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 11:52 | 1 |
| Aroclor 1242 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 11:52 | 1 |
| Aroclor 1248 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 11:52 | 1 |
| Aroclor 1254 | 0.11 | U | 0.40 | 0.11 | ug/L | | 04/25/20 15:00 | 04/27/20 11:52 | 1 |
| Aroclor 1260 | 0.11 | U | 0.40 | 0.11 | ug/L | | 04/25/20 15:00 | 04/27/20 11:52 | 1 |
| Aroclor-1262 | 0.11 | U | 0.40 | 0.11 | ug/L | | 04/25/20 15:00 | 04/27/20 11:52 | 1 |
| Aroclor 1268 | 0.11 | U | 0.40 | 0.11 | ug/L | | 04/25/20 15:00 | 04/27/20 11:52 | 1 |
| Polychlorinated biphenyls, Total | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 11:52 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *42* | | *10 - 150* | *04/25/20 15:00* | *04/27/20 11:52* | *1* |
| *DCB Decachlorobiphenyl* | *42* | | *10 - 150* | *04/25/20 15:00* | *04/27/20 11:52* | *1* |
| *Tetrachloro-m-xylene* | *60* | | *48 - 125* | *04/25/20 15:00* | *04/27/20 11:52* | *1* |
| *Tetrachloro-m-xylene* | *65* | | *48 - 125* | *04/25/20 15:00* | *04/27/20 11:52* | *1* |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SW04-0-042320

**Lab Sample ID: 460-207545-5**

**Date Collected: 04/23/20 10:50**
**Date Received: 04/23/20 18:06**

**Matrix: Water**

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4-D | 0.13 | U | 1.2 | 0.13 | ug/L | | 04/25/20 00:02 | 04/25/20 17:56 | 1 |
| Silvex (2,4,5-TP) | 0.11 | U | 1.2 | 0.11 | ug/L | | 04/25/20 00:02 | 04/25/20 17:56 | 1 |
| 2,4,5-T | 0.12 | U | 1.2 | 0.12 | ug/L | | 04/25/20 00:02 | 04/25/20 17:56 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *80* | | *39 - 145* | *04/25/20 00:02* | *04/25/20 17:56* | *1* |
| *2,4-Dichlorophenylacetic acid* | *105* | | *39 - 145* | *04/25/20 00:02* | *04/25/20 17:56* | *1* |

### Method: NJDEP EPH - New Jersey Extractable Petroleum Hydrocarbons

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total EPH (C9-C40) | 0.10 | U | 0.10 | 0.10 | mg/L | | 04/25/20 15:09 | 04/26/20 18:58 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *104* | | *40 - 140* | *04/25/20 15:09* | *04/26/20 18:58* | *1* |
| *1-Chlorooctadecane* | *99* | | *40 - 140* | *04/25/20 15:09* | *04/26/20 18:58* | *1* |

### Method: 6020B - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Silver | 0.59 | U | 2.0 | 0.59 | ug/L | | 04/25/20 21:20 | 04/26/20 12:35 | 2 |
| **Aluminum** | **134** | | 40.0 | 18.8 | ug/L | | 04/25/20 21:20 | 04/26/20 12:35 | 2 |
| **Arsenic** | **1.1** | **J** | 2.0 | 0.73 | ug/L | | 04/25/20 21:20 | 04/26/20 12:35 | 2 |
| **Barium** | **49.2** | | 4.0 | 1.2 | ug/L | | 04/25/20 21:20 | 04/26/20 12:35 | 2 |
| Beryllium | 0.25 | U | 0.80 | 0.25 | ug/L | | 04/25/20 21:20 | 04/26/20 12:35 | 2 |
| **Calcium** | **43800** | | 200 | 98.8 | ug/L | | 04/25/20 21:20 | 04/26/20 12:35 | 2 |
| Cadmium | 0.81 | U | 2.0 | 0.81 | ug/L | | 04/25/20 21:20 | 04/26/20 12:35 | 2 |
| Cobalt | 1.6 | U | 4.0 | 1.6 | ug/L | | 04/25/20 21:20 | 04/26/20 12:35 | 2 |
| Chromium | 2.3 | U | 4.0 | 2.3 | ug/L | | 04/25/20 21:20 | 04/26/20 12:35 | 2 |
| Copper | 2.0 | U | 4.0 | 2.0 | ug/L | | 04/25/20 21:20 | 04/26/20 12:35 | 2 |
| **Iron** | **2850** | | 120 | 51.1 | ug/L | | 04/25/20 21:20 | 04/26/20 12:35 | 2 |
| **Potassium** | **9760** | | 200 | 86.7 | ug/L | | 04/25/20 21:20 | 04/26/20 12:35 | 2 |
| **Magnesium** | **8850** | | 200 | 73.7 | ug/L | | 04/25/20 21:20 | 04/26/20 12:35 | 2 |
| **Manganese** | **314** | | 8.0 | 2.9 | ug/L | | 04/25/20 21:20 | 04/26/20 12:35 | 2 |
| **Sodium** | **56000** | | 200 | 128 | ug/L | | 04/25/20 21:20 | 04/26/20 12:35 | 2 |
| Nickel | 2.4 | U | 4.0 | 2.4 | ug/L | | 04/25/20 21:20 | 04/26/20 12:35 | 2 |
| **Lead** | **0.99** | **J** | 1.2 | 0.55 | ug/L | | 04/25/20 21:20 | 04/26/20 12:35 | 2 |
| **Antimony** | **0.94** | **J** | 2.0 | 0.40 | ug/L | | 04/25/20 21:20 | 04/26/20 12:35 | 2 |
| Selenium | 5.4 | U | 10.0 | 5.4 | ug/L | | 04/25/20 21:20 | 04/26/20 12:35 | 2 |
| Thallium | 0.16 | U | 0.80 | 0.16 | ug/L | | 04/25/20 21:20 | 04/26/20 12:35 | 2 |
| **Vanadium** | **1.1** | **J** | 4.0 | 1.1 | ug/L | | 04/25/20 21:20 | 04/26/20 12:35 | 2 |
| Zinc | 11.1 | U | 16.0 | 11.1 | ug/L | | 04/25/20 21:20 | 04/26/20 12:35 | 2 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.091 | U | 0.20 | 0.091 | ug/L | | 04/27/20 11:43 | 04/27/20 13:52 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cr (VI) | 8.1 | U | 10.0 | 8.1 | ug/L | | | 04/24/20 10:18 | 1 |
| Cyanide, Total | 0.0040 | U | 0.010 | 0.0040 | mg/L | | 04/26/20 13:26 | 04/27/20 09:30 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Amenable | 0.010 | U | 0.010 | 0.010 | mg/L | | | 04/28/20 17:00 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

SED

## Client Sample ID: SEL-PA-~~SE~~03-A-B-0-042320

**Lab Sample ID: 460-207545-6**

**Date Collected: 04/23/20 11:20**
**Matrix: Solid**
**Date Received: 04/23/20 18:06**

### General Chemistry

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| pH | 7.4 | ~~HF~~ | 0.1 | 0.1 | SU | | | 04/26/20 11:02 | 1 |
| ~~Corrosivity~~ | ~~7.4~~ | ~~HF~~ | ~~0.1~~ | ~~0.1~~ | ~~SU~~ | | | ~~04/26/20 11:~~02 | 1 |

SED

## Client Sample ID: SEL-PA-~~SE~~03-A-B-0-042320

**Lab Sample ID: 460-207545-6**

**Date Collected: 04/23/20 11:20**
**Matrix: Solid**
**Date Received: 04/23/20 18:06**
**Percent Solids: 78.7**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.23 | U | 0.98 | 0.23 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| 1,1,2,2-Tetrachloroethane | 0.21 | U~~*~~ | 0.98 | 0.21 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.29 | U | 0.98 | 0.29 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| 1,1,2-Trichloroethane | 0.17 | U | 0.98 | 0.17 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| 1,1-Dichloroethane | 0.20 | U | 0.98 | 0.20 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| 1,1-Dichloroethene | 0.22 | U | 0.98 | 0.22 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| 1,2,3-Trichlorobenzene | 0.18 | U | 0.98 | 0.18 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| 1,2,4-Trichlorobenzene | 0.35 | U | 0.98 | 0.35 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| 1,2-Dichloropropane | 0.41 | U | 0.98 | 0.41 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| 1,3-Dichlorobenzene | 0.16 | U | 0.98 | 0.16 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| 1,4-Dichlorobenzene | 0.22 | U | 0.98 | 0.22 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| 1,4-Dioxane | 9.0 | ~~U*~~ UJ | 20 | 9.0 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| 2-Butanone (MEK) | 2.6 | ~~U*~~ UJ | 4.9 | 2.6 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| 2-Hexanone | 1.7 | U | 4.9 | 1.7 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| 4-Methyl-2-pentanone (MIBK) | 1.5 | U | 4.9 | 1.5 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Acetone | 11 | J | 5.9 | 5.6 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Benzene | 2.1 | | 0.98 | 0.25 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Bromoform | 0.42 | U | 0.98 | 0.42 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Bromomethane | 0.46 | U | 0.98 | 0.46 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Carbon disulfide | 0.26 | U | 0.98 | 0.26 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Carbon tetrachloride | 0.38 | U | 0.98 | 0.38 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Chlorobenzene | 0.17 | U | 0.98 | 0.17 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Chlorobromomethane | 0.27 | U | 0.98 | 0.27 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Chlorodibromomethane | 0.19 | U | 0.98 | 0.19 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Chloroethane | 0.51 | U | 0.98 | 0.51 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Chloroform | 0.31 | U | 0.98 | 0.31 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Chloromethane | 0.43 | U | 0.98 | 0.43 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| cis-1,2-Dichloroethene | 0.15 | U | 0.98 | 0.15 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| cis-1,3-Dichloropropene | 0.27 | U | 0.98 | 0.27 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Cyclohexane | 0.22 | U | 0.98 | 0.22 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Dichlorobromomethane | 0.25 | U | 0.98 | 0.25 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Dichlorodifluoromethane | 0.33 | U | 0.98 | 0.33 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Ethylbenzene | 0.19 | U | 0.98 | 0.19 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Ethylene Dibromide | 0.18 | U | 0.98 | 0.18 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Isopropylbenzene | 0.12 | U | 0.98 | 0.12 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Methyl acetate | 4.2 | U | 4.9 | 4.2 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Methyl tert-butyl ether | 0.12 | U | 0.98 | 0.12 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Methylcyclohexane | 3.3 | | 0.98 | 0.49 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Methylene Chloride | 0.45 | U | 0.98 | 0.45 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| m-Xylene & p-Xylene | 0.17 | U | 0.98 | 0.17 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| o-Xylene | 0.19 | U | 0.98 | 0.19 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |



YY 5/11/2020

05/05/2020

# Client Sample Results

Client: Weston Solutions, Inc. Job ID: 460-207545-1
Project/Site: Hatco SED

**Client Sample ID: SEL-PA-~~SE~~03-A-B-0-042320** **Lab Sample ID: 460-207545-6**
**Date Collected: 04/23/20 11:20** **Matrix: Solid**
**Date Received: 04/23/20 18:06** **Percent Solids: 78.7**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Styrene | 0.27 | U | 0.98 | 0.27 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Tetrachloroethene | 0.14 | U | 0.98 | 0.14 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Toluene | 0.23 | U | 0.98 | 0.23 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| trans-1,2-Dichloroethene | 0.24 | U | 0.98 | 0.24 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| 2-Methyl-2-propanol | 3.2 | U | 9.8 | 3.2 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| trans-1,3-Dichloropropene | 0.26 | U | 0.98 | 0.26 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Trichloroethene | 0.14 | U | 0.98 | 0.14 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Trichlorofluoromethane | 0.40 | U | 0.98 | 0.40 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| Vinyl chloride | 0.53 | U | 0.98 | 0.53 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| 1,2-Dichloroethane | 0.29 | U | 0.98 | 0.29 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| 1,2-Dichlorobenzene | 0.14 | U | 0.98 | 0.14 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| 1,2-Dibromo-3-Chloropropane | 0.45 | U | 0.98 | 0.45 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |
| 1,1,1,2-Tetrachloroethane | 0.19 | U | 0.98 | 0.19 | ug/Kg | ☼ | 04/24/20 11:13 | 04/26/20 07:21 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Unknown* | *7.4* | *J* | *ug/Kg* | ☼ | *13.10* | | *04/24/20 11:13* | *04/26/20 07:21* | *1* |
| *Unknown* | *6.5* | *J* | *ug/Kg* | ☼ | *13.31* | | *04/24/20 11:13* | *04/26/20 07:21* | *1* |
| *Unknown* | *16* | *J* | *ug/Kg* | ☼ | *13.53* | | *04/24/20 11:13* | *04/26/20 07:21* | *1* |
| *Unknown* | *5.4* | *J* | *ug/Kg* | ☼ | *15.01* | | *04/24/20 11:13* | *04/26/20 07:21* | *1* |
| *Unknown* | *11* | *J* | *ug/Kg* | ☼ | *15.10* | | *04/24/20 11:13* | *04/26/20 07:21* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *110* | | *77 - 145* | *04/24/20 11:13* | *04/26/20 07:21* | *1* |
| *4-Bromofluorobenzene* | *93* | | *79 - 125* | *04/24/20 11:13* | *04/26/20 07:21* | *1* |
| *Dibromofluoromethane (Surr)* | *107* | | *48 - 150* | *04/24/20 11:13* | *04/26/20 07:21* | *1* |
| *Toluene-d8 (Surr)* | *105* | | *80 - 120* | *04/24/20 11:13* | *04/26/20 07:21* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1'-Biphenyl | 11 | U | 840 | 11 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| 1,2,4,5-Tetrachlorobenzene | 26 | U | 840 | 26 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| 2,2'-oxybis[1-chloropropane] | 15 | U | 840 | 15 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| 2,3,4,6-Tetrachlorophenol | 57 | U | 840 | 57 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| 2,4,5-Trichlorophenol | 86 | U | 840 | 86 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| 2,4,6-Trichlorophenol | 110 | U | 340 | 110 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| 2,4-Dichlorophenol | 54 | U | 340 | 54 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| 2,4-Dimethylphenol | 37 | U | 840 | 37 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| 2,4-Dinitrophenol | 410 | U | 680 | 410 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| 2,4-Dinitrotoluene | 90 | U | 170 | 90 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| 2,6-Dinitrotoluene | 61 | U | 170 | 61 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| 2-Chloronaphthalene | 39 | U | 840 | 39 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| 2-Chlorophenol | 30 | U | 840 | 30 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| 2-Methylnaphthalene | 24 | U | 840 | 24 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| 2-Methylphenol | 31 | U | 840 | 31 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| 2-Nitroaniline | 31 | U | 840 | 31 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| 2-Nitrophenol | 84 | U | 840 | 84 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| 3,3'-Dichlorobenzidine | 130 | U | 340 | 130 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| 3-Nitroaniline | 95 | U | 840 | 95 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| 4,6-Dinitro-2-methylphenol | 140 | U | 680 | 140 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| 4-Bromophenyl phenyl ether | 33 | U | 840 | 33 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

SED

**Client Sample ID: SEL-PA-~~SE~~03-A-B-0-042320**
**Date Collected: 04/23/20 11:20**
**Date Received: 04/23/20 18:06**

**Lab Sample ID: 460-207545-6**
**Matrix: Solid**
**Percent Solids: 78.7**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4-Chloro-3-methylphenol | 47 | U | 840 | 47 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| 4-Chloroaniline | 59 | U | 840 | 59 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| 4-Chlorophenyl phenyl ether | 30 | U | 840 | 30 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| 4-Methylphenol | 53 | U | 840 | 53 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| 4-Nitroaniline | 97 | U | 840 | 97 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| 4-Nitrophenol | 140 | U | 1700 | 140 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Acenaphthene | 61 | U | 840 | 61 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Acenaphthylene | 8.7 | U | 840 | 8.7 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Acetophenone | 41 | U | 840 | 41 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Anthracene | 26 | U | 840 | 26 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Atrazine | 21 | U | 340 | 21 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Benzaldehyde | 37 | U | 840 | 37 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| **Benzo[a]anthracene** | **77** | **J** | 84 | 29 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| **Benzo[a]pyrene** | **54** | **J** | 84 | 22 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| **Benzo[b]fluoranthene** | **70** | **J** | 84 | 22 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Benzo[g,h,i]perylene | 25 | U | 840 | 25 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| **Benzo[k]fluoranthene** | **29** | **J** | 84 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Bis(2-chloroethoxy)methane | 65 | U | 840 | 65 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Bis(2-chloroethyl)ether | 29 | U | 84 | 29 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| **Bis(2-ethylhexyl) phthalate** | **15000** | | 840 | 44 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Butyl benzyl phthalate | 39 | U | 840 | 39 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Caprolactam | 130 | U | 840 | 130 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Carbazole | 32 | U | 840 | 32 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| **Chrysene** | **66** | **J** | 840 | 14 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Dibenz(a,h)anthracene | 36 | U | 84 | 36 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Dibenzofuran | 12 | U | 840 | 12 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Diethyl phthalate | 12 | U | 840 | 12 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Dimethyl phthalate | 190 | U | 840 | 190 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Di-n-butyl phthalate | 150 | U | 840 | 150 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Di-n-octyl phthalate | 45 | U | 840 | 45 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| **Fluoranthene** | **140** | **J** | 840 | 29 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Fluorene | 11 | U | 840 | 11 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Hexachlorobenzene | 40 | U | 84 | 40 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Hexachlorobutadiene | 18 | U | 170 | 18 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Hexachlorocyclopentadiene | 74 | U | 840 | 74 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Hexachloroethane | 29 | U | 84 | 29 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| **Indeno[1,2,3-cd]pyrene** | **73** | **J** | 84 | 33 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Isophorone | 240 | U | 340 | 240 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| **Naphthalene** | **110** | **J** | 840 | 15 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Nitrobenzene | 20 | U | 84 | 20 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| N-Nitrosodi-n-propylamine | 61 | U | 84 | 61 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| N-Nitrosodiphenylamine | 16 | U | 840 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Pentachlorophenol | 170 | U | 680 | 170 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| **Phenanthrene** | **120** | **J** | 840 | 15 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Phenol | 31 | U | 840 | 31 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| **Pyrene** | **140** | **J** | 840 | 21 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:10 | 2 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4,6-Tribromophenol (Surr)* | *51* | | *10 - 123* | *04/24/20 16:16* | *04/26/20 02:10* | *2* |
| *2-Fluorobiphenyl* | *50* | | *25 - 104* | *04/24/20 16:16* | *04/26/20 02:10* | *2* |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

SED

**Client Sample ID: SEL-PA-~~SE~~03-A-B-0-042320**
**Date Collected: 04/23/20 11:20**
**Date Received: 04/23/20 18:06**

**Lab Sample ID: 460-207545-6**
**Matrix: Solid**
**Percent Solids: 78.7**

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

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 2-Fluorophenol (Surr) | 55 | | 18 - 106 | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Nitrobenzene-d5 (Surr) | 51 | | 19 - 105 | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Phenol-d5 (Surr) | 51 | | 26 - 101 | 04/24/20 16:16 | 04/26/20 02:10 | 2 |
| Terphenyl-d14 (Surr) | 61 | | 25 - 127 | 04/24/20 16:16 | 04/26/20 02:10 | 2 |

## Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | 1.4 | U | 8.5 | 1.4 | ug/Kg | ☼ | 04/24/20 19:58 | 04/25/20 21:38 | 1 |
| 4,4'-DDE | 1.0 | U | 8.5 | 1.0 | ug/Kg | ☼ | 04/24/20 19:58 | 04/25/20 21:38 | 1 |
| 4,4'-DDT | 1.6 | U | 8.5 | 1.6 | ug/Kg | ☼ | 04/24/20 19:58 | 04/25/20 21:38 | 1 |
| Aldrin | 1.3 | U | 8.5 | 1.3 | ug/Kg | ☼ | 04/24/20 19:58 | 04/25/20 21:38 | 1 |
| alpha-BHC | 0.86 | U | 2.5 | 0.86 | ug/Kg | ☼ | 04/24/20 19:58 | 04/25/20 21:38 | 1 |
| beta-BHC | 0.95 | U | 2.5 | 0.95 | ug/Kg | ☼ | 04/24/20 19:58 | 04/25/20 21:38 | 1 |
| Chlordane (technical) | 21 | U | 85 | 21 | ug/Kg | ☼ | 04/24/20 19:58 | 04/25/20 21:38 | 1 |
| delta-BHC | 0.52 | U | 2.5 | 0.52 | ug/Kg | ☼ | 04/24/20 19:58 | 04/25/20 21:38 | 1 |
| Dieldrin | 1.1 | U | 2.5 | 1.1 | ug/Kg | ☼ | 04/24/20 19:58 | 04/25/20 21:38 | 1 |
| Endosulfan I | 1.3 | U | 8.5 | 1.3 | ug/Kg | ☼ | 04/24/20 19:58 | 04/25/20 21:38 | 1 |
| Endosulfan II | 2.2 | U | 8.5 | 2.2 | ug/Kg | ☼ | 04/24/20 19:58 | 04/25/20 21:38 | 1 |
| Endosulfan sulfate | 1.1 | U | 8.5 | 1.1 | ug/Kg | ☼ | 04/24/20 19:58 | 04/25/20 21:38 | 1 |
| Endrin | 1.2 | U | 8.5 | 1.2 | ug/Kg | ☼ | 04/24/20 19:58 | 04/25/20 21:38 | 1 |
| Endrin aldehyde | 2.0 | U | 8.5 | 2.0 | ug/Kg | ☼ | 04/24/20 19:58 | 04/25/20 21:38 | 1 |
| Endrin ketone | 1.7 | U | 8.5 | 1.7 | ug/Kg | ☼ | 04/24/20 19:58 | 04/25/20 21:38 | 1 |
| gamma-BHC (Lindane) | 0.79 | U | 2.5 | 0.79 | ug/Kg | ☼ | 04/24/20 19:58 | 04/25/20 21:38 | 1 |
| Heptachlor | 1.0 | U | 8.5 | 1.0 | ug/Kg | ☼ | 04/24/20 19:58 | 04/25/20 21:38 | 1 |
| Heptachlor epoxide | 1.3 | U | 8.5 | 1.3 | ug/Kg | ☼ | 04/24/20 19:58 | 04/25/20 21:38 | 1 |
| Methoxychlor | 1.9 | U | 8.5 | 1.9 | ug/Kg | ☼ | 04/24/20 19:58 | 04/25/20 21:38 | 1 |
| Toxaphene | 31 | U | 85 | 31 | ug/Kg | ☼ | 04/24/20 19:58 | 04/25/20 21:38 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| DCB Decachlorobiphenyl | 108 | | 28 - 148 | 04/24/20 19:58 | 04/25/20 21:38 | 1 |
| DCB Decachlorobiphenyl | 113 | | 28 - 148 | 04/24/20 19:58 | 04/25/20 21:38 | 1 |
| Tetrachloro-m-xylene | 98 | | 34 - 118 | 04/24/20 19:58 | 04/25/20 21:38 | 1 |
| Tetrachloro-m-xylene | 94 | | 34 - 118 | 04/24/20 19:58 | 04/25/20 21:38 | 1 |

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 11 | U | 85 | 11 | ug/Kg | ☼ | 04/24/20 20:26 | 04/25/20 22:06 | 1 |
| Aroclor 1221 | 11 | U | 85 | 11 | ug/Kg | ☼ | 04/24/20 20:26 | 04/25/20 22:06 | 1 |
| Aroclor 1232 | 11 | U | 85 | 11 | ug/Kg | ☼ | 04/24/20 20:26 | 04/25/20 22:06 | 1 |
| Aroclor 1242 | 11 | U | 85 | 11 | ug/Kg | ☼ | 04/24/20 20:26 | 04/25/20 22:06 | 1 |
| **Aroclor 1248** | **390** | | 85 | 11 | ug/Kg | ☼ | 04/24/20 20:26 | 04/25/20 22:06 | 1 |
| Aroclor 1254 | 12 | U | 85 | 12 | ug/Kg | ☼ | 04/24/20 20:26 | 04/25/20 22:06 | 1 |
| Aroclor 1260 | 12 | U | 85 | 12 | ug/Kg | ☼ | 04/24/20 20:26 | 04/25/20 22:06 | 1 |
| Aroclor-1262 | 12 | U | 85 | 12 | ug/Kg | ☼ | 04/24/20 20:26 | 04/25/20 22:06 | 1 |
| Aroclor 1268 | 12 | U | 85 | 12 | ug/Kg | ☼ | 04/24/20 20:26 | 04/25/20 22:06 | 1 |
| **Polychlorinated biphenyls, Total** | **390** | | 85 | 12 | ug/Kg | ☼ | 04/24/20 20:26 | 04/25/20 22:06 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| DCB Decachlorobiphenyl | 112 | | 10 - 150 | 04/24/20 20:26 | 04/25/20 22:06 | 1 |
| DCB Decachlorobiphenyl | 121 | | 10 - 150 | 04/24/20 20:26 | 04/25/20 22:06 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

SED

**Client Sample ID: SEL-PA-~~SE~~03-A-B-0-042320**
**Date Collected: 04/23/20 11:20**
**Date Received: 04/23/20 18:06**

**Lab Sample ID: 460-207545-6**
**Matrix: Solid**
**Percent Solids: 78.7**

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *105* | | *58 - 145* | *04/24/20 20:26* | *04/25/20 22:06* | *1* |
| *Tetrachloro-m-xylene* | *114* | | *58 - 145* | *04/24/20 20:26* | *04/25/20 22:06* | *1* |

## Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4-D | 15 | U | 42 | 15 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 18:47 | 1 |
| Silvex (2,4,5-TP) | 4.4 | U | 42 | 4.4 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 18:47 | 1 |
| 2,4,5-T | 9.0 | U | 42 | 9.0 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 18:47 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *116* | | *30 - 150* | *04/25/20 00:04* | *04/25/20 18:47* | *1* |
| *2,4-Dichlorophenylacetic acid* | *97* | | *30 - 150* | *04/25/20 00:04* | *04/25/20 18:47* | *1* |

## Method: NJDEP EPH - New Jersey Extractable Petroleum Hydrocarbons

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total EPH (C9-C40)** | **34** | J | 2.5 | 2.5 | mg/Kg | ☼ | 04/24/20 20:38 | 04/26/20 17:39 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *40* | | *40 - 140* | *04/24/20 20:38* | *04/26/20 17:39* | *1* |
| *1-Chlorooctadecane* | *39* | *X* | *40 - 140* | *04/24/20 20:38* | *04/26/20 17:39* | *1* |

## Method: 6010D - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Silver | 1.4 | U | 2.4 | 1.4 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:16 | 2 |
| **Aluminum** | **5610** | | 48.4 | 6.8 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:16 | 2 |
| **Arsenic** | **3.3** | **J** | 3.6 | 0.74 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:16 | 2 |
| **Barium** | **28.7** | **J** | 48.4 | 4.7 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:16 | 2 |
| **Beryllium** | **0.27** | **J** | 0.48 | 0.077 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:16 | 2 |
| **Calcium** | **3000** | | 1210 | 89.4 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:16 | 2 |
| Cadmium | 0.083 | U | 0.97 | 0.083 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:16 | 2 |
| **Cobalt** | **3.6** | **J** | 12.1 | 0.67 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:16 | 2 |
| **Chromium** | **29.9** | | 2.4 | 1.7 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:16 | 2 |
| **Copper** | **18.2** | | 6.0 | 1.5 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:16 | 2 |
| **Iron** | **10700** | | 36.3 | 24.9 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:16 | 2 |
| **Potassium** | **412** | **J** | 1210 | 74.3 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:16 | 2 |
| **Magnesium** | **1480** | | 1210 | 81.9 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:16 | 2 |
| **Manganese** | **250** | | 3.6 | 0.27 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:16 | 2 |
| **Sodium** | **113** | **J** | 1210 | 105 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:16 | 2 |
| **Nickel** | **6.7** | **J** | 9.7 | 0.64 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:16 | 2 |
| **Lead** | **23.3** | | 2.4 | 0.39 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:16 | 2 |
| Antimony | 1.4 | U J | 4.8 | 1.4 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:16 | 2 |
| **Selenium** | 4.8 ~~**0.33**~~ | ~~**J B**~~ U | 4.8 | 0.82 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:16 | 2 |
| Thallium | 0.75 | U | 4.8 | 0.75 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:16 | 2 |
| **Vanadium** | **38.9** | | 12.1 | 1.1 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:16 | 2 |
| **Zinc** | **32.0** | | 7.3 | 1.3 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:16 | 2 |

## Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Mercury** | **0.025** | | 0.020 | 0.0048 | mg/Kg | ☼ | 04/27/20 04:28 | 04/27/20 09:26 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

SED

## Client Sample ID: SEL-PA-~~SE~~03-A-B-0-042320

**Lab Sample ID: 460-207545-6**

**Date Collected: 04/23/20 11:20**
**Date Received: 04/23/20 18:06**

**Matrix: Solid**
**Percent Solids: 78.7**

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cr (VI) | 0.45 | U | 2.6 | 0.45 | mg/Kg | ☼ | 04/27/20 08:07 | 04/27/20 14:31 | 1 |
| Cyanide, Total | 0.16 | UJ | 0.30 | 0.16 | mg/Kg | ☼ | 04/28/20 07:18 | 04/28/20 13:19 | 1 |
| **TOC Result 1** | **9320** | | 127 | 103 | mg/Kg | ☼ | | 04/28/20 12:32 | 1 |

## Client Sample ID: SEL-PA-FB-042320

**Lab Sample ID: 460-207545-7**

**Date Collected: 04/23/20 13:20**
**Date Received: 04/23/20 18:06**

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloromethane | 0.40 | U | 1.0 | 0.40 | ug/L | | | 04/25/20 15:09 | 1 |
| Bromomethane | 0.55 | U | 1.0 | 0.55 | ug/L | | | 04/25/20 15:09 | 1 |
| Vinyl chloride | 0.17 | U | 1.0 | 0.17 | ug/L | | | 04/25/20 15:09 | 1 |
| Chloroethane | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 15:09 | 1 |
| **Methylene Chloride** | **1.5** | | 1.0 | 0.32 | ug/L | | | 04/25/20 15:09 | 1 |
| **Acetone** | **15** | | 5.0 | 4.4 | ug/L | | | 04/25/20 15:09 | 1 |
| Carbon disulfide | 0.82 | U | 1.0 | 0.82 | ug/L | | | 04/25/20 15:09 | 1 |
| Trichlorofluoromethane | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 15:09 | 1 |
| 1,1-Dichloroethene | 0.26 | U | 1.0 | 0.26 | ug/L | | | 04/25/20 15:09 | 1 |
| 1,1-Dichloroethane | 0.26 | U | 1.0 | 0.26 | ug/L | | | 04/25/20 15:09 | 1 |
| trans-1,2-Dichloroethene | 0.24 | U | 1.0 | 0.24 | ug/L | | | 04/25/20 15:09 | 1 |
| cis-1,2-Dichloroethene | 0.22 | U | 1.0 | 0.22 | ug/L | | | 04/25/20 15:09 | 1 |
| Chloroform | 0.33 | U | 1.0 | 0.33 | ug/L | | | 04/25/20 15:09 | 1 |
| 1,2-Dichloroethane | 0.43 | U | 1.0 | 0.43 | ug/L | | | 04/25/20 15:09 | 1 |
| 2-Butanone (MEK) | 1.9 | U | 5.0 | 1.9 | ug/L | | | 04/25/20 15:09 | 1 |
| 1,1,1-Trichloroethane | 0.24 | U | 1.0 | 0.24 | ug/L | | | 04/25/20 15:09 | 1 |
| Carbon tetrachloride | 0.21 | U | 1.0 | 0.21 | ug/L | | | 04/25/20 15:09 | 1 |
| Dichlorobromomethane | 0.34 | U | 1.0 | 0.34 | ug/L | | | 04/25/20 15:09 | 1 |
| 1,2-Dichloropropane | 0.35 | U | 1.0 | 0.35 | ug/L | | | 04/25/20 15:09 | 1 |
| cis-1,3-Dichloropropene | 0.22 | U | 1.0 | 0.22 | ug/L | | | 04/25/20 15:09 | 1 |
| Trichloroethene | 0.31 | U | 1.0 | 0.31 | ug/L | | | 04/25/20 15:09 | 1 |
| Chlorodibromomethane | 0.28 | U | 1.0 | 0.28 | ug/L | | | 04/25/20 15:09 | 1 |
| 1,1,2-Trichloroethane | 0.43 | U | 1.0 | 0.43 | ug/L | | | 04/25/20 15:09 | 1 |
| Benzene | 0.20 | U | 1.0 | 0.20 | ug/L | | | 04/25/20 15:09 | 1 |
| trans-1,3-Dichloropropene | 0.49 | U | 1.0 | 0.49 | ug/L | | | 04/25/20 15:09 | 1 |
| Bromoform | 0.54 | U | 1.0 | 0.54 | ug/L | | | 04/25/20 15:09 | 1 |
| 4-Methyl-2-pentanone (MIBK) | 1.3 | U | 5.0 | 1.3 | ug/L | | | 04/25/20 15:09 | 1 |
| 2-Hexanone | 1.1 | U | 5.0 | 1.1 | ug/L | | | 04/25/20 15:09 | 1 |
| Tetrachloroethene | 0.25 | U | 1.0 | 0.25 | ug/L | | | 04/25/20 15:09 | 1 |
| 1,1,2,2-Tetrachloroethane | 0.37 | U | 1.0 | 0.37 | ug/L | | | 04/25/20 15:09 | 1 |
| Toluene | 0.38 | U | 1.0 | 0.38 | ug/L | | | 04/25/20 15:09 | 1 |
| Chlorobenzene | 0.38 | U | 1.0 | 0.38 | ug/L | | | 04/25/20 15:09 | 1 |
| Ethylbenzene | 0.30 | U | 1.0 | 0.30 | ug/L | | | 04/25/20 15:09 | 1 |
| Styrene | 0.42 | U | 1.0 | 0.42 | ug/L | | | 04/25/20 15:09 | 1 |
| m-Xylene & p-Xylene | 0.30 | U | 1.0 | 0.30 | ug/L | | | 04/25/20 15:09 | 1 |
| o-Xylene | 0.36 | U | 1.0 | 0.36 | ug/L | | | 04/25/20 15:09 | 1 |
| Acrolein | 1.1 | U | 4.0 | 1.1 | ug/L | | | 04/25/20 15:09 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.31 | U | 1.0 | 0.31 | ug/L | | | 04/25/20 15:09 | 1 |
| 2-Methyl-2-propanol | 8.3 | U | 10 | 8.3 | ug/L | | | 04/25/20 15:09 | 1 |
| Acrylonitrile | 0.77 | U | 2.0 | 0.77 | ug/L | | | 04/25/20 15:09 | 1 |

## Client Sample ID: SEL-PA-FB-042320

**Lab Sample ID: 460-207545-7**

**Date Collected: 04/23/20 13:20**
**Matrix: Water**
**Date Received: 04/23/20 18:06**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | 0.47 | U | 1.0 | 0.47 | ug/L | | | 04/25/20 15:09 | 1 |
| Cyclohexane | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 15:09 | 1 |
| Ethylene Dibromide | 0.50 | U | 1.0 | 0.50 | ug/L | | | 04/25/20 15:09 | 1 |
| 1,3-Dichlorobenzene | 0.34 | U | 1.0 | 0.34 | ug/L | | | 04/25/20 15:09 | 1 |
| 1,4-Dichlorobenzene | 0.33 | U | 1.0 | 0.33 | ug/L | | | 04/25/20 15:09 | 1 |
| 1,2-Dichlorobenzene | 0.43 | U | 1.0 | 0.43 | ug/L | | | 04/25/20 15:09 | 1 |
| Dichlorodifluoromethane | 0.31 | U | 1.0 | 0.31 | ug/L | | | 04/25/20 15:09 | 1 |
| 1,2,4-Trichlorobenzene | 0.37 | U | 1.0 | 0.37 | ug/L | | | 04/25/20 15:09 | 1 |
| 1,4-Dioxane | 28 | U | 50 | 28 | ug/L | | | 04/25/20 15:09 | 1 |
| 1,2,3-Trichlorobenzene | 0.36 | U | 1.0 | 0.36 | ug/L | | | 04/25/20 15:09 | 1 |
| 1,2,4-Trimethylbenzene | 0.37 | U | 1.0 | 0.37 | ug/L | | | 04/25/20 15:09 | 1 |
| 1,2-Dibromo-3-Chloropropane | 0.38 | U | 1.0 | 0.38 | ug/L | | | 04/25/20 15:09 | 1 |
| 1,3,5-Trimethylbenzene | 0.33 | U | 1.0 | 0.33 | ug/L | | | 04/25/20 15:09 | 1 |
| Chlorobromomethane | 0.41 | U | 1.0 | 0.41 | ug/L | | | 04/25/20 15:09 | 1 |
| Isopropylbenzene | 0.34 | U | 1.0 | 0.34 | ug/L | | | 04/25/20 15:09 | 1 |
| N-Propylbenzene | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 15:09 | 1 |
| sec-Butylbenzene | 0.37 | U | 1.0 | 0.37 | ug/L | | | 04/25/20 15:09 | 1 |
| tert-Butylbenzene | 0.34 | U | 1.0 | 0.34 | ug/L | | | 04/25/20 15:09 | 1 |
| n-Butylbenzene | 0.32 | U | 1.0 | 0.32 | ug/L | | | 04/25/20 15:09 | 1 |
| Methyl acetate | 0.79 | U | 5.0 | 0.79 | ug/L | | | 04/25/20 15:09 | 1 |
| Methylcyclohexane | 0.26 | U | 1.0 | 0.26 | ug/L | | | 04/25/20 15:09 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Tentatively Identified Compound* | *None* | | *ug/L* | | | | | *04/25/20 15:09* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *92* | | *75 - 123* | | *04/25/20 15:09* | *1* |
| *Toluene-d8 (Surr)* | *88* | | *80 - 120* | | *04/25/20 15:09* | *1* |
| *4-Bromofluorobenzene* | *98* | | *76 - 120* | | *04/25/20 15:09* | *1* |
| *Dibromofluoromethane (Surr)* | *97* | | *77 - 124* | | *04/25/20 15:09* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Phenol | 0.29 | U | 10 | 0.29 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 2-Chlorophenol | 0.38 | U | 10 | 0.38 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 2-Methylphenol | 0.67 | U | 10 | 0.67 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 4-Methylphenol | 0.65 | U | 10 | 0.65 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 2-Nitrophenol | 0.75 | U | 10 | 0.75 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 2,4-Dimethylphenol | 0.62 | U | 10 | 0.62 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 2,4-Dichlorophenol | 1.1 | U | 10 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 4-Chloro-3-methylphenol | 0.58 | U | 10 | 0.58 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 2,4,6-Trichlorophenol | 0.86 | U | 10 | 0.86 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 2,4,5-Trichlorophenol | 0.88 | U | 10 | 0.88 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 2,4-Dinitrotoluene | 1.0 | U | 2.0 | 1.0 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 4-Nitrophenol | 4.0 | U | 20 | 4.0 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 4,6-Dinitro-2-methylphenol | 13 | U | 20 | 13 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| N-Nitrosodimethylamine | 0.45 | U | 10 | 0.45 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| N-Nitrosodi-n-propylamine | 0.43 | U | 1.0 | 0.43 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Hexachloroethane | 0.80 | U | 2.0 | 0.80 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Nitrobenzene | 0.57 | U | 1.0 | 0.57 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-FB-042320

**Lab Sample ID: 460-207545-7**

**Date Collected: 04/23/20 13:20**
**Date Received: 04/23/20 18:06**

**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Isophorone | 0.80 | U | 10 | 0.80 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Naphthalene | 1.1 | U | 2.0 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 4-Chloroaniline | 1.9 | U | 10 | 1.9 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Hexachlorobutadiene | 0.78 | U | 1.0 | 0.78 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 2-Methylnaphthalene | 1.1 | U | 10 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Hexachlorocyclopentadiene | 3.6 | U | 10 | 3.6 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 2-Chloronaphthalene | 1.2 | U | 10 | 1.2 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 2-Nitroaniline | 0.47 | U | 10 | 0.47 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Dimethyl phthalate | 0.77 | U | 10 | 0.77 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Acenaphthylene | 0.82 | U | 10 | 0.82 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 2,6-Dinitrotoluene | 0.83 | U | 2.0 | 0.83 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 3-Nitroaniline | 1.9 | U | 10 | 1.9 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Acenaphthene | 1.1 | U | 10 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Dibenzofuran | 1.1 | U | 10 | 1.1 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 2,4-Dinitrophenol | 14 | U | 20 | 14 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Diethyl phthalate | 0.98 | U | 10 | 0.98 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 4-Chlorophenyl phenyl ether | 1.3 | U | 10 | 1.3 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Fluorene | 0.91 | U | 10 | 0.91 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 4-Nitroaniline | 1.2 | U | 10 | 1.2 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| N-Nitrosodiphenylamine | 0.89 | U | 10 | 0.89 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 4-Bromophenyl phenyl ether | 0.75 | U | 10 | 0.75 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Phenanthrene | 0.58 | U | 10 | 0.58 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Anthracene | 0.63 | U | 10 | 0.63 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Carbazole | 0.68 | U | 10 | 0.68 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Di-n-butyl phthalate | 0.84 | U | 10 | 0.84 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Fluoranthene | 0.84 | U | 10 | 0.84 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Pyrene | 1.6 | U | 10 | 1.6 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Benzidine | 11 | U * | 20 | 11 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Butyl benzyl phthalate | 0.85 | U | 10 | 0.85 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Chrysene | 0.91 | U | 2.0 | 0.91 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Bis(2-ethylhexyl) phthalate | 1.7 | U | 2.0 | 1.7 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Di-n-octyl phthalate | 4.8 | U | 10 | 4.8 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Benzo[k]fluoranthene | 0.67 | U | 1.0 | 0.67 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Indeno[1,2,3-cd]pyrene | 0.94 | U | 2.0 | 0.94 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Dibenz(a,h)anthracene | 0.72 | U | 1.0 | 0.72 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Benzo[g,h,i]perylene | 1.4 | U | 10 | 1.4 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 1,2-Diphenylhydrazine | 0.79 | U | 10 | 0.79 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 1,1'-Biphenyl | 1.2 | U | 10 | 1.2 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Acetophenone | 2.3 | U | 10 | 2.3 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Benzaldehyde | 2.1 | U * | 10 | 2.1 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Caprolactam | 0.68 | U | 10 | 0.68 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Atrazine | 1.3 | U * | 2.0 | 1.3 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 2,2'-oxybis[1-chloropropane] | 0.63 | U | 10 | 0.63 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 1,2,4,5-Tetrachlorobenzene | 1.2 | U | 10 | 1.2 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 2,3,4,6-Tetrachlorophenol | 0.75 | U | 10 | 0.75 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| 3,3'-Dichlorobenzidine | 1.4 | U | 10 | 1.4 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |
| Bis(2-chloroethoxy)methane | 0.59 | U | 10 | 0.59 | ug/L | | 04/25/20 07:13 | 04/26/20 03:51 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Tentatively Identified Compound* | *None* | | *ug/L* | | | | *04/25/20 07:13* | *04/26/20 03:51* | *1* |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-FB-042320

**Date Collected: 04/23/20 13:20**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-7

**Matrix: Water**

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5 (Surr)* | *108* | | *46 - 137* | *04/25/20 07:13* | *04/26/20 03:51* | *1* |
| *Phenol-d5 (Surr)* | *35* | | *10 - 50* | *04/25/20 07:13* | *04/26/20 03:51* | *1* |
| *Terphenyl-d14 (Surr)* | *124* | | *39 - 150* | *04/25/20 07:13* | *04/26/20 03:51* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *107* | | *36 - 159* | *04/25/20 07:13* | *04/26/20 03:51* | *1* |
| *2-Fluorophenol (Surr)* | *58* | | *18 - 72* | *04/25/20 07:13* | *04/26/20 03:51* | *1* |
| *2-Fluorobiphenyl* | *106* | | *42 - 127* | *04/25/20 07:13* | *04/26/20 03:51* | *1* |

### Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aldrin | 0.0030 | U | 0.020 | 0.0030 | ug/L | | 04/25/20 15:03 | 04/27/20 07:26 | 1 |
| alpha-BHC | 0.0070 | U | 0.020 | 0.0070 | ug/L | | 04/25/20 15:03 | 04/27/20 07:26 | 1 |
| beta-BHC | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 07:26 | 1 |
| delta-BHC | 0.0050 | U | 0.020 | 0.0050 | ug/L | | 04/25/20 15:03 | 04/27/20 07:26 | 1 |
| gamma-BHC (Lindane) | 0.012 | U | 0.020 | 0.012 | ug/L | | 04/25/20 15:03 | 04/27/20 07:26 | 1 |
| Chlordane (technical) | 0.055 | U | 0.50 | 0.055 | ug/L | | 04/25/20 15:03 | 04/27/20 07:26 | 1 |
| 4,4'-DDD | 0.0060 | U | 0.020 | 0.0060 | ug/L | | 04/25/20 15:03 | 04/27/20 07:26 | 1 |
| 4,4'-DDE | 0.0020 | U | 0.020 | 0.0020 | ug/L | | 04/25/20 15:03 | 04/27/20 07:26 | 1 |
| 4,4'-DDT | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 07:26 | 1 |
| Dieldrin | 0.0030 | U | 0.020 | 0.0030 | ug/L | | 04/25/20 15:03 | 04/27/20 07:26 | 1 |
| Endosulfan I | 0.0020 | U | 0.020 | 0.0020 | ug/L | | 04/25/20 15:03 | 04/27/20 07:26 | 1 |
| Endosulfan II | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 07:26 | 1 |
| Endosulfan sulfate | 0.0060 | U | 0.020 | 0.0060 | ug/L | | 04/25/20 15:03 | 04/27/20 07:26 | 1 |
| Endrin | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 07:26 | 1 |
| Endrin aldehyde | 0.0080 | U | 0.020 | 0.0080 | ug/L | | 04/25/20 15:03 | 04/27/20 07:26 | 1 |
| Endrin ketone | 0.0080 | U | 0.020 | 0.0080 | ug/L | | 04/25/20 15:03 | 04/27/20 07:26 | 1 |
| Heptachlor | 0.0030 | U | 0.020 | 0.0030 | ug/L | | 04/25/20 15:03 | 04/27/20 07:26 | 1 |
| Heptachlor epoxide | 0.0050 | U | 0.020 | 0.0050 | ug/L | | 04/25/20 15:03 | 04/27/20 07:26 | 1 |
| Methoxychlor | 0.0040 | U | 0.020 | 0.0040 | ug/L | | 04/25/20 15:03 | 04/27/20 07:26 | 1 |
| Toxaphene | 0.11 | U | 0.50 | 0.11 | ug/L | | 04/25/20 15:03 | 04/27/20 07:26 | 1 |
| trans-Chlordane | 0.0030 | U | 0.020 | 0.0030 | ug/L | | 04/25/20 15:03 | 04/27/20 07:26 | 1 |
| cis-Chlordane | 0.0020 | U | 0.020 | 0.0020 | ug/L | | 04/25/20 15:03 | 04/27/20 07:26 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *55* | | *10 - 150* | *04/25/20 15:03* | *04/27/20 07:26* | *1* |
| *Tetrachloro-m-xylene* | *56* | | *10 - 150* | *04/25/20 15:03* | *04/27/20 07:26* | *1* |
| *DCB Decachlorobiphenyl* | *42* | | *10 - 132* | *04/25/20 15:03* | *04/27/20 07:26* | *1* |
| *DCB Decachlorobiphenyl* | *45* | | *10 - 132* | *04/25/20 15:03* | *04/27/20 07:26* | *1* |

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 12:13 | 1 |
| Aroclor 1221 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 12:13 | 1 |
| Aroclor 1232 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 12:13 | 1 |
| Aroclor 1242 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 12:13 | 1 |
| Aroclor 1248 | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 12:13 | 1 |
| Aroclor 1254 | 0.11 | U | 0.40 | 0.11 | ug/L | | 04/25/20 15:00 | 04/27/20 12:13 | 1 |
| Aroclor 1260 | 0.11 | U | 0.40 | 0.11 | ug/L | | 04/25/20 15:00 | 04/27/20 12:13 | 1 |
| Aroclor-1262 | 0.11 | U | 0.40 | 0.11 | ug/L | | 04/25/20 15:00 | 04/27/20 12:13 | 1 |
| Aroclor 1268 | 0.11 | U | 0.40 | 0.11 | ug/L | | 04/25/20 15:00 | 04/27/20 12:13 | 1 |
| Polychlorinated biphenyls, Total | 0.12 | U | 0.40 | 0.12 | ug/L | | 04/25/20 15:00 | 04/27/20 12:13 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-FB-042320

**Date Collected: 04/23/20 13:20**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-7

**Matrix: Water**

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *40* | | *10 - 150* | *04/25/20 15:00* | *04/27/20 12:13* | *1* |
| *DCB Decachlorobiphenyl* | *42* | | *10 - 150* | *04/25/20 15:00* | *04/27/20 12:13* | *1* |
| *Tetrachloro-m-xylene* | *58* | | *48 - 125* | *04/25/20 15:00* | *04/27/20 12:13* | *1* |
| *Tetrachloro-m-xylene* | *58* | | *48 - 125* | *04/25/20 15:00* | *04/27/20 12:13* | *1* |

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4-D | 0.13 | U | 1.2 | 0.13 | ug/L | | 04/25/20 00:02 | 04/25/20 18:10 | 1 |
| Silvex (2,4,5-TP) | 0.11 | U | 1.2 | 0.11 | ug/L | | 04/25/20 00:02 | 04/25/20 18:10 | 1 |
| 2,4,5-T | 0.12 | U | 1.2 | 0.12 | ug/L | | 04/25/20 00:02 | 04/25/20 18:10 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *83* | | *39 - 145* | *04/25/20 00:02* | *04/25/20 18:10* | *1* |
| *2,4-Dichlorophenylacetic acid* | *108* | | *39 - 145* | *04/25/20 00:02* | *04/25/20 18:10* | *1* |

### Method: NJDEP EPH - New Jersey Extractable Petroleum Hydrocarbons

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total EPH (C9-C40) | 0.10 | U | 0.10 | 0.10 | mg/L | | 04/25/20 15:09 | 04/26/20 19:11 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *106* | | *40 - 140* | *04/25/20 15:09* | *04/26/20 19:11* | *1* |
| *1-Chlorooctadecane* | *102* | | *40 - 140* | *04/25/20 15:09* | *04/26/20 19:11* | *1* |

### Method: 6020B - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Silver | 0.59 | U | 2.0 | 0.59 | ug/L | | 04/25/20 21:20 | 04/26/20 11:51 | 2 |
| **Aluminum** | **348** | | 40.0 | 18.8 | ug/L | | 04/25/20 21:20 | 04/26/20 11:51 | 2 |
| Arsenic | 0.73 | U | 2.0 | 0.73 | ug/L | | 04/25/20 21:20 | 04/26/20 11:51 | 2 |
| Barium | 1.2 | U | 4.0 | 1.2 | ug/L | | 04/25/20 21:20 | 04/26/20 11:51 | 2 |
| Beryllium | 0.25 | U | 0.80 | 0.25 | ug/L | | 04/25/20 21:20 | 04/26/20 11:51 | 2 |
| Calcium | 98.8 | U | 200 | 98.8 | ug/L | | 04/25/20 21:20 | 04/26/20 11:51 | 2 |
| Cadmium | 0.81 | U | 2.0 | 0.81 | ug/L | | 04/25/20 21:20 | 04/26/20 11:51 | 2 |
| Cobalt | 1.6 | U | 4.0 | 1.6 | ug/L | | 04/25/20 21:20 | 04/26/20 11:51 | 2 |
| Chromium | 2.3 | U | 4.0 | 2.3 | ug/L | | 04/25/20 21:20 | 04/26/20 11:51 | 2 |
| Copper | 2.0 | U | 4.0 | 2.0 | ug/L | | 04/25/20 21:20 | 04/26/20 11:51 | 2 |
| Iron | 51.1 | U | 120 | 51.1 | ug/L | | 04/25/20 21:20 | 04/26/20 12:22 | 2 |
| Potassium | 86.7 | U | 200 | 86.7 | ug/L | | 04/25/20 21:20 | 04/26/20 11:51 | 2 |
| Magnesium | 73.7 | U | 200 | 73.7 | ug/L | | 04/25/20 21:20 | 04/26/20 11:51 | 2 |
| Manganese | 2.9 | U | 8.0 | 2.9 | ug/L | | 04/25/20 21:20 | 04/26/20 11:51 | 2 |
| Sodium | 128 | U | 200 | 128 | ug/L | | 04/25/20 21:20 | 04/26/20 11:51 | 2 |
| Nickel | 2.4 | U | 4.0 | 2.4 | ug/L | | 04/25/20 21:20 | 04/26/20 11:51 | 2 |
| Lead | 0.55 | U | 1.2 | 0.55 | ug/L | | 04/25/20 21:20 | 04/26/20 11:51 | 2 |
| Antimony | 0.40 | U | 2.0 | 0.40 | ug/L | | 04/25/20 21:20 | 04/26/20 12:22 | 2 |
| Selenium | 5.4 | U | 10.0 | 5.4 | ug/L | | 04/25/20 21:20 | 04/26/20 11:51 | 2 |
| Thallium | 0.16 | U | 0.80 | 0.16 | ug/L | | 04/25/20 21:20 | 04/26/20 11:51 | 2 |
| Vanadium | 1.1 | U | 4.0 | 1.1 | ug/L | | 04/25/20 21:20 | 04/26/20 11:51 | 2 |
| Zinc | 11.1 | U | 16.0 | 11.1 | ug/L | | 04/25/20 21:20 | 04/26/20 11:51 | 2 |

### Method: 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.091 | U | 0.20 | 0.091 | ug/L | | 04/27/20 11:43 | 04/27/20 13:53 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-FB-042320

**Lab Sample ID: 460-207545-7**
**Date Collected: 04/23/20 13:20**
**Matrix: Water**
**Date Received: 04/23/20 18:06**

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cr (VI) | 8.1 | U | 10.0 | 8.1 | ug/L | | | 04/24/20 11:05 | 1 |
| Cyanide, Total | 0.0040 | U | 0.010 | 0.0040 | mg/L | | 04/26/20 13:26 | 04/27/20 09:31 | 1 |

## Client Sample ID: SEL-PA-SBSO-A-B-0-042320

**Lab Sample ID: 460-207545-8**
**Date Collected: 04/23/20 15:00**
**Matrix: Solid**
**Date Received: 04/23/20 18:06**

### General Chemistry

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| pH | 7.3 | ~~HF~~ | 0.1 | 0.1 | SU | | | 04/26/20 11:03 | 1 |
| ~~Corrosivity~~ | ~~7.3~~ | ~~HF~~ | ~~0.1~~ | ~~0.1~~ | ~~SU~~ | | | ~~04/26/20 11:03~~ | 1 |

## Client Sample ID: SEL-PA-SBSO-A-B-0-042320

**Lab Sample ID: 460-207545-8**
**Date Collected: 04/23/20 15:00**
**Matrix: Solid**
**Date Received: 04/23/20 18:06**
**Percent Solids: 49.8**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.68 | U | 2.9 | 0.68 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| 1,1,2,2-Tetrachloroethane | 0.62 | U ~~*~~ | 2.9 | 0.62 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.88 | U | 2.9 | 0.88 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| 1,1,2-Trichloroethane | 0.52 | U | 2.9 | 0.52 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| 1,1-Dichloroethane | 0.60 | U | 2.9 | 0.60 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| 1,1-Dichloroethene | 0.66 | U | 2.9 | 0.66 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| 1,2,3-Trichlorobenzene | 0.53 | U | 2.9 | 0.53 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| 1,2,4-Trichlorobenzene | 1.0 | U | 2.9 | 1.0 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| 1,2-Dichloropropane | 1.2 | U | 2.9 | 1.2 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| 1,3-Dichlorobenzene | 0.46 | U | 2.9 | 0.46 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| 1,4-Dichlorobenzene | 0.66 | U | 2.9 | 0.66 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| 1,4-Dioxane | 27 | ~~U *~~ UJ | 58 | 27 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| **2-Butanone (MEK)** | **15** | ~~*~~ J | 15 | 7.9 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| 2-Hexanone | 5.0 | U | 15 | 5.0 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| 4-Methyl-2-pentanone (MIBK) | 4.5 | U | 15 | 4.5 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| **Acetone** | **52** | | 17 | 17 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| **Benzene** | **1.1** | **J** | 2.9 | 0.75 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| Bromoform | 1.2 | U | 2.9 | 1.2 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| Bromomethane | 1.4 | U | 2.9 | 1.4 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| Carbon disulfide | 0.78 | U | 2.9 | 0.78 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| Carbon tetrachloride | 1.1 | U | 2.9 | 1.1 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| Chlorobenzene | 0.52 | U | 2.9 | 0.52 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| Chlorobromomethane | 0.82 | U | 2.9 | 0.82 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| Chlorodibromomethane | 0.57 | U | 2.9 | 0.57 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| Chloroethane | 1.5 | U | 2.9 | 1.5 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| Chloroform | 0.93 | U | 2.9 | 0.93 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| Chloromethane | 1.3 | U | 2.9 | 1.3 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| cis-1,2-Dichloroethene | 0.44 | U | 2.9 | 0.44 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| cis-1,3-Dichloropropene | 0.80 | U | 2.9 | 0.80 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| Cyclohexane | 0.64 | U | 2.9 | 0.64 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| Dichlorobromomethane | 0.75 | U | 2.9 | 0.75 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| Dichlorodifluoromethane | 0.99 | U | 2.9 | 0.99 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SBSO-A-B-0-042320

**Lab Sample ID: 460-207545-8**

**Date Collected: 04/23/20 15:00**
**Date Received: 04/23/20 18:06**

**Matrix: Solid**
**Percent Solids: 49.8**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Ethylbenzene | 0.58 | U | 2.9 | 0.58 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| Ethylene Dibromide | 0.52 | U | 2.9 | 0.52 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| Isopropylbenzene | 0.37 | U | 2.9 | 0.37 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| Methyl acetate | 13 | U | 15 | 13 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| Methyl tert-butyl ether | 0.36 | U | 2.9 | 0.36 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| Methylcyclohexane | 1.5 | U | 2.9 | 1.5 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| Methylene Chloride | 1.4 | U | 2.9 | 1.4 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| m-Xylene & p-Xylene | 0.51 | U | 2.9 | 0.51 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| o-Xylene | 0.57 | U | 2.9 | 0.57 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| Styrene | 0.81 | U | 2.9 | 0.81 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| Tetrachloroethene | 0.42 | U | 2.9 | 0.42 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| **Toluene** | **2.1** | **J** | 2.9 | 0.68 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| trans-1,2-Dichloroethene | 0.72 | U | 2.9 | 0.72 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| 2-Methyl-2-propanol | 9.6 | U | 29 | 9.6 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| trans-1,3-Dichloropropene | 0.78 | U | 2.9 | 0.78 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| Trichloroethene | 0.42 | U | 2.9 | 0.42 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| Trichlorofluoromethane | 1.2 | U | 2.9 | 1.2 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| Vinyl chloride | 1.6 | U | 2.9 | 1.6 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| 1,2-Dichloroethane | 0.86 | U | 2.9 | 0.86 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| 1,2-Dichlorobenzene | 0.42 | U | 2.9 | 0.42 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| 1,2-Dibromo-3-Chloropropane | 1.3 | U | 2.9 | 1.3 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |
| 1,1,1,2-Tetrachloroethane | 0.55 | U | 2.9 | 0.55 | ug/Kg | ☼ | 04/24/20 11:14 | 04/26/20 07:47 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *1,3,5-Trimethylbenzene* | *0.76* | *J* | *ug/Kg* | ☼ | *10.58* | *108-67-8* | *04/24/20 11:14* | *04/26/20 07:47* | *1* |
| *1,2,4-Trimethylbenzene* | *1.6* | *J* | *ug/Kg* | ☼ | *10.95* | *95-63-6* | *04/24/20 11:14* | *04/26/20 07:47* | *1* |
| *Unknown* | *20* | *J* | *ug/Kg* | ☼ | *13.09* | | *04/24/20 11:14* | *04/26/20 07:47* | *1* |
| *Unknown* | *35* | *J* | *ug/Kg* | ☼ | *13.51* | | *04/24/20 11:14* | *04/26/20 07:47* | *1* |
| *Unknown* | *25* | *J* | *ug/Kg* | ☼ | *14.74* | | *04/24/20 11:14* | *04/26/20 07:47* | *1* |
| *Unknown* | *23* | *J* | *ug/Kg* | ☼ | *14.95* | | *04/24/20 11:14* | *04/26/20 07:47* | *1* |
| *Unknown* | *27* | *J* | *ug/Kg* | ☼ | *15.04* | | *04/24/20 11:14* | *04/26/20 07:47* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *114* | | *77 - 145* | *04/24/20 11:14* | *04/26/20 07:47* | *1* |
| *4-Bromofluorobenzene* | *93* | | *79 - 125* | *04/24/20 11:14* | *04/26/20 07:47* | *1* |
| *Dibromofluoromethane (Surr)* | *106* | | *48 - 150* | *04/24/20 11:14* | *04/26/20 07:47* | *1* |
| *Toluene-d8 (Surr)* | *104* | | *80 - 120* | *04/24/20 11:14* | *04/26/20 07:47* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1'-Biphenyl | 8.8 | U | 660 | 8.8 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| 1,2,4,5-Tetrachlorobenzene | 21 | U | 660 | 21 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| 2,2'-oxybis[1-chloropropane] | 12 | U | 660 | 12 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| 2,3,4,6-Tetrachlorophenol | 45 | U | 660 | 45 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| 2,4,5-Trichlorophenol | 68 | U | 660 | 68 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| 2,4,6-Trichlorophenol | 85 | U | 270 | 85 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| 2,4-Dichlorophenol | 43 | U | 270 | 43 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| 2,4-Dimethylphenol | 29 | U | 660 | 29 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| 2,4-Dinitrophenol | 330 | U | 530 | 330 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| 2,4-Dinitrotoluene | 71 | U | 130 | 71 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SBSO-A-B-0-042320

**Date Collected: 04/23/20 15:00**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-8

**Matrix: Solid**
**Percent Solids: 49.8**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,6-Dinitrotoluene | 48 | U | 130 | 48 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| 2-Chloronaphthalene | 31 | U | 660 | 31 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| 2-Chlorophenol | 24 | U | 660 | 24 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| **2-Methylnaphthalene** | **52** | **J** | 660 | 19 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| 2-Methylphenol | 25 | U | 660 | 25 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| 2-Nitroaniline | 25 | U | 660 | 25 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| 2-Nitrophenol | 66 | U | 660 | 66 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| 3,3'-Dichlorobenzidine | 100 | U | 270 | 100 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| 3-Nitroaniline | 75 | U | 660 | 75 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| 4,6-Dinitro-2-methylphenol | 110 | U | 530 | 110 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| 4-Bromophenyl phenyl ether | 26 | U | 660 | 26 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| 4-Chloro-3-methylphenol | 37 | U | 660 | 37 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| 4-Chloroaniline | 46 | U | 660 | 46 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| 4-Chlorophenyl phenyl ether | 23 | U | 660 | 23 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| 4-Methylphenol | 41 | U | 660 | 41 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| 4-Nitroaniline | 76 | U | 660 | 76 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| 4-Nitrophenol | 110 | U | 1300 | 110 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| **Acenaphthene** | **56** | **J** | 660 | 48 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| **Acenaphthylene** | **42** | **J** | 660 | 6.9 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| Acetophenone | 33 | U | 660 | 33 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| **Anthracene** | **210** | **J** | 660 | 20 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| Atrazine | 17 | U | 270 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| **Benzaldehyde** | **31** | **J** | 660 | 29 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| **Benzo[a]anthracene** | **970** | | 66 | 23 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| **Benzo[a]pyrene** | **950** | | 66 | 18 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| **Benzo[b]fluoranthene** | **1200** | | 66 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| **Benzo[g,h,i]perylene** | **400** | **J** | 660 | 20 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| **Benzo[k]fluoranthene** | **400** | | 66 | 13 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| Bis(2-chloroethoxy)methane | 52 | U | 660 | 52 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| Bis(2-chloroethyl)ether | 23 | U | 66 | 23 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| **Bis(2-ethylhexyl) phthalate** | **9300** | | 660 | 35 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| Butyl benzyl phthalate | 31 | U | 660 | 31 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| Caprolactam | 100 | U | 660 | 100 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| **Carbazole** | **99** | **J** | 660 | 25 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| **Chrysene** | **1000** | | 660 | 11 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| **Dibenz(a,h)anthracene** | **140** | | 66 | 29 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| **Dibenzofuran** | **48** | **J** | 660 | 9.3 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| **Diethyl phthalate** | **30** | **J** | 660 | 9.6 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| Dimethyl phthalate | 150 | U | 660 | 150 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| Di-n-butyl phthalate | 120 | U | 660 | 120 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| Di-n-octyl phthalate | 35 | U | 660 | 35 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| **Fluoranthene** | **1600** | | 660 | 23 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| **Fluorene** | **83** | **J** | 660 | 9.0 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| Hexachlorobenzene | 32 | U | 66 | 32 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| Hexachlorobutadiene | 14 | U | 130 | 14 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| Hexachlorocyclopentadiene | 58 | U | 660 | 58 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| Hexachloroethane | 23 | U | 66 | 23 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| **Indeno[1,2,3-cd]pyrene** | **470** | | 66 | 26 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| Isophorone | 190 | U | 270 | 190 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SBSO-A-B-0-042320

**Lab Sample ID: 460-207545-8**

**Date Collected: 04/23/20 15:00**
**Date Received: 04/23/20 18:06**

**Matrix: Solid**
**Percent Solids: 49.8**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Naphthalene** | **91** | **J** | 660 | 11 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| Nitrobenzene | 16 | U | 66 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| N-Nitrosodi-n-propylamine | 48 | U | 66 | 48 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| N-Nitrosodiphenylamine | 13 | U | 660 | 13 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| Pentachlorophenol | 140 | U | 530 | 140 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| **Phenanthrene** | **950** | | 660 | 12 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| Phenol | 24 | U | 660 | 24 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |
| **Pyrene** | **2000** | | 660 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 10:06 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4,6-Tribromophenol (Surr)* | *43* | | *10 - 123* | *04/24/20 16:16* | *04/25/20 10:06* | *1* |
| *2-Fluorobiphenyl* | *53* | | *25 - 104* | *04/24/20 16:16* | *04/25/20 10:06* | *1* |
| *2-Fluorophenol (Surr)* | *49* | | *18 - 106* | *04/24/20 16:16* | *04/25/20 10:06* | *1* |
| *Nitrobenzene-d5 (Surr)* | *46* | | *19 - 105* | *04/24/20 16:16* | *04/25/20 10:06* | *1* |
| *Phenol-d5 (Surr)* | *44* | | *26 - 101* | *04/24/20 16:16* | *04/25/20 10:06* | *1* |
| *Terphenyl-d14 (Surr)* | *61* | | *25 - 127* | *04/24/20 16:16* | *04/25/20 10:06* | *1* |

### Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | 2.3 | U | 13 | 2.3 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:01 | 1 |
| 4,4'-DDE | 1.6 | U | 13 | 1.6 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:01 | 1 |
| 4,4'-DDT | 2.5 | U | 13 | 2.5 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:01 | 1 |
| Aldrin | 2.0 | U | 13 | 2.0 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:01 | 1 |
| alpha-BHC | 1.4 | U | 4.0 | 1.4 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:01 | 1 |
| beta-BHC | 1.5 | U | 4.0 | 1.5 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:01 | 1 |
| Chlordane (technical) | 32 | U | 130 | 32 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:01 | 1 |
| delta-BHC | 0.82 | U | 4.0 | 0.82 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:01 | 1 |
| Dieldrin | 1.7 | U | 4.0 | 1.7 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:01 | 1 |
| Endosulfan I | 2.0 | U | 13 | 2.0 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:01 | 1 |
| Endosulfan II | 3.5 | U | 13 | 3.5 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:01 | 1 |
| Endosulfan sulfate | 1.7 | U | 13 | 1.7 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:01 | 1 |
| Endrin | 1.9 | U | 13 | 1.9 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:01 | 1 |
| Endrin aldehyde | 3.2 | U | 13 | 3.2 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:01 | 1 |
| Endrin ketone | 2.6 | U | 13 | 2.6 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:01 | 1 |
| gamma-BHC (Lindane) | 1.2 | U | 4.0 | 1.2 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:01 | 1 |
| Heptachlor | 1.6 | U | 13 | 1.6 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:01 | 1 |
| Heptachlor epoxide | 2.0 | U | 13 | 2.0 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:01 | 1 |
| Methoxychlor | 3.1 | U | 13 | 3.1 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:01 | 1 |
| Toxaphene | 49 | U | 130 | 49 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:01 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *100* | | *28 - 148* | *04/24/20 20:04* | *04/25/20 18:01* | *1* |
| *DCB Decachlorobiphenyl* | *106* | | *28 - 148* | *04/24/20 20:04* | *04/25/20 18:01* | *1* |
| *Tetrachloro-m-xylene* | *99* | | *34 - 118* | *04/24/20 20:04* | *04/25/20 18:01* | *1* |
| *Tetrachloro-m-xylene* | *107* | | *34 - 118* | *04/24/20 20:04* | *04/25/20 18:01* | *1* |

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 18 | U | 130 | 18 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 17:42 | 1 |
| Aroclor 1221 | 18 | U | 130 | 18 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 17:42 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SBSO-A-B-0-042320

**Date Collected: 04/23/20 15:00**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-8

**Matrix: Solid**
**Percent Solids: 49.8**

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1232 | 18 | U | 130 | 18 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 17:42 | 1 |
| Aroclor 1242 | 18 | U | 130 | 18 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 17:42 | 1 |
| **Aroclor 1248** | **530** | | 130 | 18 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 17:42 | 1 |
| Aroclor 1254 | 18 | U | 130 | 18 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 17:42 | 1 |
| Aroclor 1260 | 18 | U | 130 | 18 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 17:42 | 1 |
| Aroclor-1262 | 18 | U | 130 | 18 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 17:42 | 1 |
| Aroclor 1268 | 18 | U | 130 | 18 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 17:42 | 1 |
| **Polychlorinated biphenyls, Total** | **530** | | 130 | 18 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 17:42 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *96* | | *10 - 150* | *04/24/20 20:32* | *04/25/20 17:42* | *1* |
| *DCB Decachlorobiphenyl* | *94* | | *10 - 150* | *04/24/20 20:32* | *04/25/20 17:42* | *1* |
| *Tetrachloro-m-xylene* | *97* | | *58 - 145* | *04/24/20 20:32* | *04/25/20 17:42* | *1* |
| *Tetrachloro-m-xylene* | *92* | | *58 - 145* | *04/24/20 20:32* | *04/25/20 17:42* | *1* |

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4-D | 24 | U | 67 | 24 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 19:02 | 1 |
| Silvex (2,4,5-TP) | 7.0 | U | 67 | 7.0 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 19:02 | 1 |
| 2,4,5-T | 14 | U | 67 | 14 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 19:02 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *99* | | *30 - 150* | *04/25/20 00:04* | *04/25/20 19:02* | *1* |
| *2,4-Dichlorophenylacetic acid* | *100* | | *30 - 150* | *04/25/20 00:04* | *04/25/20 19:02* | *1* |

### Method: NJDEP EPH - New Jersey Extractable Petroleum Hydrocarbons

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total EPH (C9-C40)** | **220** | | 4.0 | 4.0 | mg/Kg | ☼ | 04/24/20 20:38 | 04/26/20 17:53 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *69* | | *40 - 140* | *04/24/20 20:38* | *04/26/20 17:53* | *1* |
| *1-Chlorooctadecane* | *76* | | *40 - 140* | *04/24/20 20:38* | *04/26/20 17:53* | *1* |

### Method: 6010D - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Silver | 2.1 | U J | 3.8 | 2.1 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:20 | 2 |
| **Aluminum** | **6380** | J | 75.7 | 10.7 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:20 | 2 |
| **Arsenic** | **6.5** | J | 5.7 | 1.2 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:20 | 2 |
| **Barium** | **70.1** | **J** | 75.7 | 7.3 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:20 | 2 |
| Beryllium | 0.12 | U J | 0.76 | 0.12 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:20 | 2 |
| **Calcium** | **9890** | J | 1890 | 140 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:20 | 2 |
| Cadmium | 0.13 | U J | 1.5 | 0.13 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:20 | 2 |
| **Cobalt** | **6.2** | **J** | 18.9 | 1.0 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:20 | 2 |
| **Chromium** | **15.2** | J | 3.8 | 2.7 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:20 | 2 |
| **Copper** | **34.6** | J | 9.5 | 2.4 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:20 | 2 |
| **Iron** | **13300** | J | 56.8 | 39.0 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:20 | 2 |
| **Potassium** | **968** | **J** | 1890 | 116 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:20 | 2 |
| **Magnesium** | **2390** | J | 1890 | 128 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:20 | 2 |
| **Manganese** | **648** | J | 5.7 | 0.43 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:20 | 2 |
| **Sodium** | **252** | **J** | 1890 | 165 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:20 | 2 |
| **Nickel** | **10.3** | **J** | 15.1 | 1.0 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:20 | 2 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SBSO-A-B-0-042320

**Lab Sample ID: 460-207545-8**
**Date Collected: 04/23/20 15:00**
**Matrix: Solid**
**Date Received: 04/23/20 18:06**
**Percent Solids: 49.8**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Lead** | **43.5** | J | 3.8 | 0.61 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:20 | 2 |
| Antimony | 2.2 | UJ | 7.6 | 2.2 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:20 | 2 |
| Selenium | 1.3 | UJ | 7.6 | 1.3 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:20 | 2 |
| Thallium | 1.2 | UJ | 7.6 | 1.2 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:20 | 2 |
| **Vanadium** | **22.3** | J | 18.9 | 1.8 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:20 | 2 |
| **Zinc** | **111** | J | 11.4 | 2.1 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:20 | 2 |

### Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Mercury** | **0.087** | J | 0.031 | 0.0074 | mg/Kg | ☼ | 04/27/20 04:28 | 04/27/20 09:28 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cr (VI) | 0.71 | UJ | 4.0 | 0.71 | mg/Kg | ☼ | 04/27/20 08:07 | 04/27/20 14:31 | 1 |
| Cyanide, Total | 0.25 | UJ | 0.48 | 0.25 | mg/Kg | ☼ | 04/28/20 07:18 | 04/28/20 13:20 | 1 |
| **TOC Result 1** | **49300** | J | 201 | 163 | mg/Kg | ☼ | | 04/28/20 12:40 | 1 |

## Client Sample ID: SEL-PA-SED02-A-B-0-042320

**Lab Sample ID: 460-207545-9**
**Date Collected: 04/23/20 13:37**
**Matrix: Solid**
**Date Received: 04/23/20 18:06**

### General Chemistry

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **pH** | **7.1** | ~~HF~~ | 0.1 | 0.1 | SU | | | 04/26/20 11:06 | 1 |
| ~~**Corrosivity**~~ | ~~**7.1**~~ | ~~HF~~ | ~~0.1~~ | ~~0.1~~ | ~~SU~~ | | | ~~04/26/20 11:06~~ | ~~1~~ |

## Client Sample ID: SEL-PA-SED02-A-B-0-042320

**Lab Sample ID: 460-207545-9**
**Date Collected: 04/23/20 13:37**
**Matrix: Solid**
**Date Received: 04/23/20 18:06**
**Percent Solids: 76.4**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.31 | U | 1.3 | 0.31 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| 1,1,2,2-Tetrachloroethane | 0.28 | U* | 1.3 | 0.28 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.40 | U | 1.3 | 0.40 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| 1,1,2-Trichloroethane | 0.24 | U | 1.3 | 0.24 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| 1,1-Dichloroethane | 0.27 | U | 1.3 | 0.27 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| 1,1-Dichloroethene | 0.30 | U | 1.3 | 0.30 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| 1,2,3-Trichlorobenzene | 0.24 | U | 1.3 | 0.24 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| 1,2,4-Trichlorobenzene | 0.47 | U | 1.3 | 0.47 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| 1,2-Dichloropropane | 0.56 | U | 1.3 | 0.56 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| 1,3-Dichlorobenzene | 0.21 | U | 1.3 | 0.21 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| 1,4-Dichlorobenzene | 0.30 | U | 1.3 | 0.30 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| 1,4-Dioxane | 12 | ~~U*~~ UJ | 26 | 12 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| **2-Butanone (MEK)** | **5.5** | J* | 6.6 | 3.6 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| 2-Hexanone | 2.3 | U | 6.6 | 2.3 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| 4-Methyl-2-pentanone (MIBK) | 2.1 | U | 6.6 | 2.1 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| **Acetone** | **24** | | 7.9 | 7.6 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| **Benzene** | **1.1** | J | 1.3 | 0.34 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| Bromoform | 0.56 | U | 1.3 | 0.56 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| Bromomethane | 0.63 | U | 1.3 | 0.63 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SED02-A-B-0-042320

**Date Collected: 04/23/20 13:37**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-9

**Matrix: Solid**
**Percent Solids: 76.4**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbon disulfide | 0.35 | U | 1.3 | 0.35 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| Carbon tetrachloride | 0.51 | U | 1.3 | 0.51 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| Chlorobenzene | 0.23 | U | 1.3 | 0.23 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| Chlorobromomethane | 0.37 | U | 1.3 | 0.37 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| Chlorodibromomethane | 0.26 | U | 1.3 | 0.26 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| Chloroethane | 0.69 | U | 1.3 | 0.69 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| Chloroform | 0.42 | U | 1.3 | 0.42 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| Chloromethane | 0.58 | U | 1.3 | 0.58 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| cis-1,2-Dichloroethene | 0.20 | U | 1.3 | 0.20 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| cis-1,3-Dichloropropene | 0.36 | U | 1.3 | 0.36 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| Cyclohexane | 0.29 | U | 1.3 | 0.29 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| Dichlorobromomethane | 0.34 | U | 1.3 | 0.34 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| Dichlorodifluoromethane | 0.45 | U | 1.3 | 0.45 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| **Ethylbenzene** | **0.29** | **J** | 1.3 | 0.26 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| Ethylene Dibromide | 0.24 | U | 1.3 | 0.24 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| Isopropylbenzene | 0.17 | U | 1.3 | 0.17 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| Methyl acetate | 5.7 | U | 6.6 | 5.7 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| Methyl tert-butyl ether | 0.17 | U | 1.3 | 0.17 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| Methylcyclohexane | 0.66 | U | 1.3 | 0.66 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| Methylene Chloride | 0.61 | U | 1.3 | 0.61 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| m-Xylene & p-Xylene | 0.23 | U | 1.3 | 0.23 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| o-Xylene | 0.26 | U | 1.3 | 0.26 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| Styrene | 0.37 | U | 1.3 | 0.37 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| Tetrachloroethene | 0.19 | U | 1.3 | 0.19 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| **Toluene** | **0.80** | **J** | 1.3 | 0.31 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| trans-1,2-Dichloroethene | 0.33 | U | 1.3 | 0.33 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| 2-Methyl-2-propanol | 4.4 | U | 13 | 4.4 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| trans-1,3-Dichloropropene | 0.35 | U | 1.3 | 0.35 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| Trichloroethene | 0.19 | U | 1.3 | 0.19 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| Trichlorofluoromethane | 0.54 | U | 1.3 | 0.54 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| Vinyl chloride | 0.72 | U | 1.3 | 0.72 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| 1,2-Dichloroethane | 0.39 | U | 1.3 | 0.39 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| 1,2-Dichlorobenzene | 0.19 | U | 1.3 | 0.19 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| 1,2-Dibromo-3-Chloropropane | 0.61 | U | 1.3 | 0.61 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |
| 1,1,1,2-Tetrachloroethane | 0.25 | U | 1.3 | 0.25 | ug/Kg | ☼ | 04/24/20 11:15 | 04/26/20 08:12 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Naphthalene* | *26* | *J N* | *ug/Kg* | ☼ | *13.14* | *91-20-3* | *04/24/20 11:15* | *04/26/20 08:12* | *1* |
| *Unknown* | *37* | *J* | *ug/Kg* | ☼ | *13.33* | | *04/24/20 11:15* | *04/26/20 08:12* | *1* |
| *Unknown* | *7.9* | *J* | *ug/Kg* | ☼ | *13.55* | | *04/24/20 11:15* | *04/26/20 08:12* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *113* | | *77 - 145* | *04/24/20 11:15* | *04/26/20 08:12* | *1* |
| *4-Bromofluorobenzene* | *95* | | *79 - 125* | *04/24/20 11:15* | *04/26/20 08:12* | *1* |
| *Dibromofluoromethane (Surr)* | *109* | | *48 - 150* | *04/24/20 11:15* | *04/26/20 08:12* | *1* |
| *Toluene-d8 (Surr)* | *109* | | *80 - 120* | *04/24/20 11:15* | *04/26/20 08:12* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1'-Biphenyl | 5.8 | U | 430 | 5.8 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SED02-A-B-0-042320

**Date Collected: 04/23/20 13:37**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-9

**Matrix: Solid**
**Percent Solids: 76.4**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4,5-Tetrachlorobenzene | 14 | U | 430 | 14 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| 2,2'-oxybis[1-chloropropane] | 7.8 | U | 430 | 7.8 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| 2,3,4,6-Tetrachlorophenol | 29 | U | 430 | 29 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| 2,4,5-Trichlorophenol | 44 | U | 430 | 44 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| 2,4,6-Trichlorophenol | 56 | U | 170 | 56 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| 2,4-Dichlorophenol | 28 | U | 170 | 28 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| 2,4-Dimethylphenol | 19 | U | 430 | 19 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| 2,4-Dinitrophenol | 210 | U | 350 | 210 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| 2,4-Dinitrotoluene | 47 | U | 88 | 47 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| 2,6-Dinitrotoluene | 31 | U | 88 | 31 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| 2-Chloronaphthalene | 20 | U | 430 | 20 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| 2-Chlorophenol | 15 | U | 430 | 15 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| **2-Methylnaphthalene** | **29** | **J** | 430 | 12 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| 2-Methylphenol | 16 | U | 430 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| 2-Nitroaniline | 16 | U | 430 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| 2-Nitrophenol | 43 | U | 430 | 43 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| 3,3'-Dichlorobenzidine | 65 | U | 170 | 65 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| 3-Nitroaniline | 49 | U | 430 | 49 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| 4,6-Dinitro-2-methylphenol | 70 | U | 350 | 70 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| 4-Bromophenyl phenyl ether | 17 | U | 430 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| 4-Chloro-3-methylphenol | 24 | U | 430 | 24 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| 4-Chloroaniline | 30 | U | 430 | 30 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| 4-Chlorophenyl phenyl ether | 15 | U | 430 | 15 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| 4-Methylphenol | 27 | U | 430 | 27 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| 4-Nitroaniline | 50 | U | 430 | 50 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| 4-Nitrophenol | 71 | U | 880 | 71 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| **Acenaphthene** | **35** | **J** | 430 | 32 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| Acenaphthylene | 4.5 | U | 430 | 4.5 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| Acetophenone | 21 | U | 430 | 21 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| **Anthracene** | **62** | **J** | 430 | 13 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| Atrazine | 11 | U | 170 | 11 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| Benzaldehyde | 19 | U | 430 | 19 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| **Benzo[a]anthracene** | **210** | | 43 | 15 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| **Benzo[a]pyrene** | **210** | | 43 | 12 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| **Benzo[b]fluoranthene** | **250** | | 43 | 11 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| **Benzo[g,h,i]perylene** | **100** | **J** | 430 | 13 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| **Benzo[k]fluoranthene** | **85** | | 43 | 8.5 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| Bis(2-chloroethoxy)methane | 34 | U | 430 | 34 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| Bis(2-chloroethyl)ether | 15 | U | 43 | 15 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| **Bis(2-ethylhexyl) phthalate** | **8400** | | 430 | 23 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| **Butyl benzyl phthalate** | **39** | **J** | 430 | 20 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| Caprolactam | 67 | U | 430 | 67 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| **Carbazole** | **23** | **J** | 430 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| **Chrysene** | **240** | **J** | 430 | 7.3 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| **Dibenz(a,h)anthracene** | **36** | **J** | 43 | 19 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| **Dibenzofuran** | **25** | **J** | 430 | 6.1 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| Diethyl phthalate | 6.3 | U | 430 | 6.3 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| Dimethyl phthalate | 98 | U | 430 | 98 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| Di-n-butyl phthalate | 76 | U | 430 | 76 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SED02-A-B-0-042320

**Date Collected: 04/23/20 13:37**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-9

**Matrix: Solid**
**Percent Solids: 76.4**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Di-n-octyl phthalate | 23 | U | 430 | 23 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| **Fluoranthene** | **360** | **J** | 430 | 15 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| **Fluorene** | **80** | **J** | 430 | 5.9 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| Hexachlorobenzene | 21 | U | 43 | 21 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| Hexachlorobutadiene | 9.2 | U | 88 | 9.2 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| Hexachlorocyclopentadiene | 38 | U | 430 | 38 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| Hexachloroethane | 15 | U | 43 | 15 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| **Indeno[1,2,3-cd]pyrene** | **110** | | 43 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| Isophorone | 130 | U | 170 | 130 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| **Naphthalene** | **110** | **J** | 430 | 7.5 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| Nitrobenzene | 10 | U | 43 | 10 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| N-Nitrosodi-n-propylamine | 31 | U | 43 | 31 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| N-Nitrosodiphenylamine | 8.3 | U | 430 | 8.3 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| Pentachlorophenol | 89 | U | 350 | 89 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| **Phenanthrene** | **380** | **J** | 430 | 7.6 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| Phenol | 16 | U | 430 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |
| **Pyrene** | **560** | | 430 | 11 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 06:59 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4,6-Tribromophenol (Surr)* | *52* | | *10 - 123* | *04/24/20 16:16* | *04/25/20 06:59* | *1* |
| *2-Fluorobiphenyl* | *51* | | *25 - 104* | *04/24/20 16:16* | *04/25/20 06:59* | *1* |
| *2-Fluorophenol (Surr)* | *65* | | *18 - 106* | *04/24/20 16:16* | *04/25/20 06:59* | *1* |
| *Nitrobenzene-d5 (Surr)* | *51* | | *19 - 105* | *04/24/20 16:16* | *04/25/20 06:59* | *1* |
| *Phenol-d5 (Surr)* | *61* | | *26 - 101* | *04/24/20 16:16* | *04/25/20 06:59* | *1* |
| *Terphenyl-d14 (Surr)* | *67* | | *25 - 127* | *04/24/20 16:16* | *04/25/20 06:59* | *1* |

### Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | 1.5 | U | 8.8 | 1.5 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:13 | 1 |
| 4,4'-DDE | 1.0 | U | 8.8 | 1.0 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:13 | 1 |
| 4,4'-DDT | 1.6 | U | 8.8 | 1.6 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:13 | 1 |
| Aldrin | 1.3 | U | 8.8 | 1.3 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:13 | 1 |
| alpha-BHC | 0.89 | U | 2.6 | 0.89 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:13 | 1 |
| beta-BHC | 0.98 | U | 2.6 | 0.98 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:13 | 1 |
| Chlordane (technical) | 21 | U | 88 | 21 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:13 | 1 |
| delta-BHC | 0.54 | U | 2.6 | 0.54 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:13 | 1 |
| Dieldrin | 1.1 | U | 2.6 | 1.1 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:13 | 1 |
| Endosulfan I | 1.3 | U | 8.8 | 1.3 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:13 | 1 |
| Endosulfan II | 2.3 | U | 8.8 | 2.3 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:13 | 1 |
| Endosulfan sulfate | 1.1 | U | 8.8 | 1.1 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:13 | 1 |
| Endrin | 1.3 | U | 8.8 | 1.3 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:13 | 1 |
| Endrin aldehyde | 2.1 | U | 8.8 | 2.1 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:13 | 1 |
| Endrin ketone | 1.7 | U | 8.8 | 1.7 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:13 | 1 |
| gamma-BHC (Lindane) | 0.81 | U | 2.6 | 0.81 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:13 | 1 |
| Heptachlor | 1.0 | U | 8.8 | 1.0 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:13 | 1 |
| Heptachlor epoxide | 1.3 | U | 8.8 | 1.3 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:13 | 1 |
| Methoxychlor | 2.0 | U | 8.8 | 2.0 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:13 | 1 |
| Toxaphene | 32 | U | 88 | 32 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:13 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SED02-A-B-0-042320

**Date Collected: 04/23/20 13:37**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-9

**Matrix: Solid**
**Percent Solids: 76.4**

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| DCB Decachlorobiphenyl | 120 | | 28 - 148 | 04/24/20 20:04 | 04/25/20 18:13 | 1 |
| DCB Decachlorobiphenyl | 117 | | 28 - 148 | 04/24/20 20:04 | 04/25/20 18:13 | 1 |
| Tetrachloro-m-xylene | 118 | | 34 - 118 | 04/24/20 20:04 | 04/25/20 18:13 | 1 |
| Tetrachloro-m-xylene | 122 | X | 34 - 118 | 04/24/20 20:04 | 04/25/20 18:13 | 1 |

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 12 | U | 88 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 17:58 | 1 |
| Aroclor 1221 | 12 | U | 88 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 17:58 | 1 |
| Aroclor 1232 | 12 | U | 88 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 17:58 | 1 |
| Aroclor 1242 | 12 | U | 88 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 17:58 | 1 |
| **Aroclor 1248** | **460** | | 88 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 17:58 | 1 |
| Aroclor 1254 | 12 | U | 88 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 17:58 | 1 |
| Aroclor 1260 | 12 | U | 88 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 17:58 | 1 |
| Aroclor-1262 | 12 | U | 88 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 17:58 | 1 |
| Aroclor 1268 | 12 | U | 88 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 17:58 | 1 |
| **Polychlorinated biphenyls, Total** | **460** | | 88 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 17:58 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| DCB Decachlorobiphenyl | 107 | | 10 - 150 | 04/24/20 20:32 | 04/25/20 17:58 | 1 |
| DCB Decachlorobiphenyl | 106 | | 10 - 150 | 04/24/20 20:32 | 04/25/20 17:58 | 1 |
| Tetrachloro-m-xylene | 108 | | 58 - 145 | 04/24/20 20:32 | 04/25/20 17:58 | 1 |
| Tetrachloro-m-xylene | 102 | | 58 - 145 | 04/24/20 20:32 | 04/25/20 17:58 | 1 |

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4-D | 16 | U | 44 | 16 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 19:45 | 1 |
| Silvex (2,4,5-TP) | 4.5 | U | 44 | 4.5 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 19:45 | 1 |
| 2,4,5-T | 9.3 | U | 44 | 9.3 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 19:45 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 2,4-Dichlorophenylacetic acid | 125 | | 30 - 150 | 04/25/20 00:04 | 04/25/20 19:45 | 1 |
| 2,4-Dichlorophenylacetic acid | 109 | | 30 - 150 | 04/25/20 00:04 | 04/25/20 19:45 | 1 |

### Method: NJDEP EPH - New Jersey Extractable Petroleum Hydrocarbons

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total EPH (C9-C40)** | **140** | | 2.6 | 2.6 | mg/Kg | ☼ | 04/24/20 20:38 | 04/26/20 18:10 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| o-Terphenyl | 52 | | 40 - 140 | 04/24/20 20:38 | 04/26/20 18:10 | 1 |
| 1-Chlorooctadecane | 53 | | 40 - 140 | 04/24/20 20:38 | 04/26/20 18:10 | 1 |

### Method: 6010D - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Silver | 1.4 | U | 2.4 | 1.4 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:24 | 2 |
| **Aluminum** | **5960** | | 49.0 | 6.9 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:24 | 2 |
| **Arsenic** | **3.8** | | 3.7 | 0.75 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:24 | 2 |
| **Barium** | **39.4** | **J** | 49.0 | 4.7 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:24 | 2 |
| **Beryllium** | **0.29** | **J** | 0.49 | 0.078 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:24 | 2 |
| **Calcium** | **4350** | | 1220 | 90.5 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:24 | 2 |
| Cadmium | 0.084 | U | 0.98 | 0.084 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:24 | 2 |
| **Cobalt** | **7.2** | **J** | 12.2 | 0.68 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:24 | 2 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SED02-A-B-0-042320

**Lab Sample ID: 460-207545-9**
**Date Collected: 04/23/20 13:37**
**Matrix: Solid**
**Date Received: 04/23/20 18:06**
**Percent Solids: 76.4**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chromium | 44.9 | | 2.4 | 1.7 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:24 | 2 |
| Copper | 30.3 | | 6.1 | 1.5 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:24 | 2 |
| Iron | 15900 | | 36.7 | 25.2 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:24 | 2 |
| Potassium | 439 | J | 1220 | 75.2 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:24 | 2 |
| Magnesium | 2010 | | 1220 | 82.9 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:24 | 2 |
| Manganese | 276 | | 3.7 | 0.28 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:24 | 2 |
| Sodium | 238 | J | 1220 | 106 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:24 | 2 |
| Nickel | 12.5 | | 9.8 | 0.64 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:24 | 2 |
| Lead | 19.1 | | 2.4 | 0.40 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:24 | 2 |
| Antimony | 1.4 | UJ | 4.9 | 1.4 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:24 | 2 |
| Selenium | 0.83 | U | 4.9 | 0.83 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:24 | 2 |
| Thallium | 0.76 | U | 4.9 | 0.76 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:24 | 2 |
| Vanadium | 47.5 | | 12.2 | 1.1 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:24 | 2 |
| Zinc | 25.9 | | 7.3 | 1.3 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:24 | 2 |

### Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.020 | J | 0.022 | 0.0051 | mg/Kg | ☼ | 04/27/20 04:28 | 04/27/20 09:29 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cr (VI) | 0.46 | U | 2.6 | 0.46 | mg/Kg | ☼ | 04/27/20 08:07 | 04/27/20 14:31 | 1 |
| Cyanide, Total | 0.16 | UJ | 0.31 | 0.16 | mg/Kg | ☼ | 04/28/20 07:18 | 04/28/20 13:24 | 1 |
| TOC Result 1 | 16800 | | 131 | 106 | mg/Kg | ☼ | | 04/28/20 12:47 | 1 |

## Client Sample ID: SEL-PA-SED04-A-B-0-042320

**Lab Sample ID: 460-207545-10**
**Date Collected: 04/23/20 15:15**
**Matrix: Solid**
**Date Received: 04/23/20 18:06**

### General Chemistry

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| pH | 7.1 | ~~HF~~ | 0.1 | 0.1 | SU | | | 04/26/20 11:07 | 1 |
| ~~Corrosivity~~ | ~~7.1~~ | ~~HF~~ | ~~0.1~~ | ~~0.1~~ | ~~SU~~ | | | ~~04/26/20 11:07~~ | ~~1~~ |

## Client Sample ID: SEL-PA-SED04-A-B-0-042320

**Lab Sample ID: 460-207545-10**
**Date Collected: 04/23/20 15:15**
**Matrix: Solid**
**Date Received: 04/23/20 18:06**
**Percent Solids: 64.7**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.33 | U | 1.4 | 0.33 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| 1,1,2,2-Tetrachloroethane | 0.30 | U* | 1.4 | 0.30 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.42 | U | 1.4 | 0.42 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| 1,1,2-Trichloroethane | 0.25 | U | 1.4 | 0.25 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| 1,1-Dichloroethane | 0.29 | U | 1.4 | 0.29 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| 1,1-Dichloroethene | 0.31 | U | 1.4 | 0.31 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| 1,2,3-Trichlorobenzene | 0.25 | U | 1.4 | 0.25 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| 1,2,4-Trichlorobenzene | 0.50 | U | 1.4 | 0.50 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| 1,2-Dichloropropane | 0.59 | U | 1.4 | 0.59 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| 1,3-Dichlorobenzene | 0.22 | U | 1.4 | 0.22 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| 1,4-Dichlorobenzene | 0.31 | U | 1.4 | 0.31 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SED04-A-B-0-042320

**Date Collected: 04/23/20 15:15**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-10

**Matrix: Solid**
**Percent Solids: 64.7**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 13 | ~~U~~ UJ | 28 | 13 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| **2-Butanone (MEK)** | **6.7** | **J** | 7.0 | 3.8 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| 2-Hexanone | 2.4 | U | 7.0 | 2.4 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| 4-Methyl-2-pentanone (MIBK) | 2.2 | U | 7.0 | 2.2 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| **Acetone** | **160** | | 8.4 | 8.0 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| **Benzene** | **13** | | 1.4 | 0.36 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Bromoform | 0.59 | U | 1.4 | 0.59 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Bromomethane | 0.66 | U | 1.4 | 0.66 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Carbon disulfide | 0.37 | U | 1.4 | 0.37 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Carbon tetrachloride | 0.54 | U | 1.4 | 0.54 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Chlorobenzene | 0.25 | U | 1.4 | 0.25 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Chlorobromomethane | 0.39 | U | 1.4 | 0.39 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Chlorodibromomethane | 0.27 | U | 1.4 | 0.27 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Chloroethane | 0.73 | U | 1.4 | 0.73 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Chloroform | 0.45 | U | 1.4 | 0.45 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Chloromethane | 0.61 | U | 1.4 | 0.61 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| **cis-1,2-Dichloroethene** | **0.28** | **J** | 1.4 | 0.21 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| cis-1,3-Dichloropropene | 0.38 | U | 1.4 | 0.38 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Cyclohexane | 0.31 | U | 1.4 | 0.31 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Dichlorobromomethane | 0.36 | U | 1.4 | 0.36 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Dichlorodifluoromethane | 0.47 | U | 1.4 | 0.47 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| **Ethylbenzene** | **0.53** | **J** | 1.4 | 0.28 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Ethylene Dibromide | 0.25 | U | 1.4 | 0.25 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| **Isopropylbenzene** | **0.39** | **J** | 1.4 | 0.18 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Methyl acetate | 6.0 | U | 7.0 | 6.0 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Methyl tert-butyl ether | 0.17 | U | 1.4 | 0.17 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| **Methylcyclohexane** | **5.3** | | 1.4 | 0.70 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Methylene Chloride | 0.65 | U | 1.4 | 0.65 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| **m-Xylene & p-Xylene** | **1.2** | **J** | 1.4 | 0.24 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| **o-Xylene** | **1.7** | | 1.4 | 0.27 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Styrene | 0.39 | U | 1.4 | 0.39 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Tetrachloroethene | 0.20 | U | 1.4 | 0.20 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| **Toluene** | **1.1** | **J** | 1.4 | 0.33 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| trans-1,2-Dichloroethene | 0.34 | U | 1.4 | 0.34 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| **2-Methyl-2-propanol** | **8.6** | **J** | 14 | 4.6 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| trans-1,3-Dichloropropene | 0.37 | U | 1.4 | 0.37 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Trichloroethene | 0.20 | U | 1.4 | 0.20 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Trichlorofluoromethane | 0.57 | U | 1.4 | 0.57 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Vinyl chloride | 0.76 | U | 1.4 | 0.76 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| 1,2-Dichloroethane | 0.41 | U | 1.4 | 0.41 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| 1,2-Dichlorobenzene | 0.20 | U | 1.4 | 0.20 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| 1,2-Dibromo-3-Chloropropane | 0.64 | U | 1.4 | 0.64 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| 1,1,1,2-Tetrachloroethane | 0.27 | U | 1.4 | 0.27 | ug/Kg | ☼ | 04/24/20 11:16 | 04/26/20 08:38 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Benzene, 1-chloro-2-methyl-* | *41* | *J N* | *ug/Kg* | ☼ | *10.51* | *95-49-8* | *04/24/20 11:16* | *04/26/20 08:38* | *1* |
| *Benzene, 1,2,4-trimethyl-* | *21* | *J N* | *ug/Kg* | ☼ | *10.95* | *95-63-6* | *04/24/20 11:16* | *04/26/20 08:38* | *1* |
| *Benzene, 1,2,3-trimethyl-* | *15* | *J N* | *ug/Kg* | ☼ | *11.34* | *526-73-8* | *04/24/20 11:16* | *04/26/20 08:38* | *1* |
| *Unknown* | *19* | *J* | *ug/Kg* | ☼ | *11.78* | | *04/24/20 11:16* | *04/26/20 08:38* | *1* |
| *Unknown* | *24* | *J* | *ug/Kg* | ☼ | *11.84* | | *04/24/20 11:16* | *04/26/20 08:38* | *1* |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SED04-A-B-0-042320

**Date Collected: 04/23/20 15:15**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-10

**Matrix: Solid**
**Percent Solids: 64.7**

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

| Tentatively Identified Compound | Est. Result | Qualifier | Unit | D | RT | CAS No. | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | 2200 | J N | ug/Kg | ☼ | 13.15 | 91-20-3 | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| 2-Benzothiophene # | 28 | J N | ug/Kg | ☼ | 13.25 | 270-82-6 | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Benzene, (butoxymethyl)- | 150 | J N | ug/Kg | ☼ | 13.34 | 588-67-0 | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Unknown | 44 | J | ug/Kg | ☼ | 13.56 | | 04/24/20 11:16 | 04/26/20 08:38 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 113 | | 77 - 145 | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| 4-Bromofluorobenzene | 94 | | 79 - 125 | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Dibromofluoromethane (Surr) | 107 | | 48 - 150 | 04/24/20 11:16 | 04/26/20 08:38 | 1 |
| Toluene-d8 (Surr) | 108 | | 80 - 120 | 04/24/20 11:16 | 04/26/20 08:38 | 1 |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1'-Biphenyl | 14 | U | 1000 | 14 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| 1,2,4,5-Tetrachlorobenzene | 32 | U | 1000 | 32 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| 2,2'-oxybis[1-chloropropane] | 19 | U | 1000 | 19 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| 2,3,4,6-Tetrachlorophenol | 69 | U | 1000 | 69 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| 2,4,5-Trichlorophenol | 100 | U | 1000 | 100 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| 2,4,6-Trichlorophenol | 130 | U | 410 | 130 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| 2,4-Dichlorophenol | 66 | U | 410 | 66 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| 2,4-Dimethylphenol | 45 | U | 1000 | 45 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| 2,4-Dinitrophenol | 500 | U | 820 | 500 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| 2,4-Dinitrotoluene | 110 | U | 210 | 110 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| 2,6-Dinitrotoluene | 74 | U | 210 | 74 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| 2-Chloronaphthalene | 47 | U | 1000 | 47 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| 2-Chlorophenol | 36 | U | 1000 | 36 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| **2-Methylnaphthalene** | **37** | **J** | 1000 | 29 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| 2-Methylphenol | 38 | U | 1000 | 38 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| 2-Nitroaniline | 38 | U | 1000 | 38 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| 2-Nitrophenol | 100 | U | 1000 | 100 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| 3,3'-Dichlorobenzidine | 150 | U | 410 | 150 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| 3-Nitroaniline | 120 | U | 1000 | 120 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| 4,6-Dinitro-2-methylphenol | 170 | U | 820 | 170 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| 4-Bromophenyl phenyl ether | 41 | U | 1000 | 41 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| 4-Chloro-3-methylphenol | 57 | U | 1000 | 57 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| 4-Chloroaniline | 72 | U | 1000 | 72 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| 4-Chlorophenyl phenyl ether | 36 | U | 1000 | 36 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| 4-Methylphenol | 64 | U | 1000 | 64 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| 4-Nitroaniline | 120 | U | 1000 | 120 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| 4-Nitrophenol | 170 | U | 2100 | 170 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| Acenaphthene | 74 | U | 1000 | 74 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| Acenaphthylene | 11 | U | 1000 | 11 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| Acetophenone | 50 | U | 1000 | 50 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| **Anthracene** | **67** | **J** | 1000 | 31 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| Atrazine | 26 | U | 410 | 26 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| Benzaldehyde | 45 | U | 1000 | 45 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| **Benzo[a]anthracene** | **250** | | 100 | 36 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| **Benzo[a]pyrene** | **200** | | 100 | 27 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| **Benzo[b]fluoranthene** | **250** | | 100 | 26 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SED04-A-B-0-042320

**Date Collected: 04/23/20 15:15**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-10

**Matrix: Solid**
**Percent Solids: 64.7**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Benzo[g,h,i]perylene** | **110** | **J** | 1000 | 30 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| **Benzo[k]fluoranthene** | **98** | **J** | 100 | 20 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| Bis(2-chloroethoxy)methane | 80 | U | 1000 | 80 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| Bis(2-chloroethyl)ether | 36 | U | 100 | 36 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| **Bis(2-ethylhexyl) phthalate** | **20000** | | 1000 | 54 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| Butyl benzyl phthalate | 48 | U | 1000 | 48 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| Caprolactam | 160 | U | 1000 | 160 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| Carbazole | 39 | U | 1000 | 39 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| **Chrysene** | **260** | **J** | 1000 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| Dibenz(a,h)anthracene | 44 | U | 100 | 44 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| **Dibenzofuran** | **36** | **J** | 1000 | 14 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| Diethyl phthalate | 15 | U | 1000 | 15 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| Dimethyl phthalate | 230 | U | 1000 | 230 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| Di-n-butyl phthalate | 180 | U | 1000 | 180 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| Di-n-octyl phthalate | 54 | U | 1000 | 54 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| **Fluoranthene** | **510** | **J** | 1000 | 36 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| **Fluorene** | **67** | **J** | 1000 | 14 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| Hexachlorobenzene | 49 | U | 100 | 49 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| Hexachlorobutadiene | 22 | U | 210 | 22 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| Hexachlorocyclopentadiene | 90 | U | 1000 | 90 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| Hexachloroethane | 35 | U | 100 | 35 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| **Indeno[1,2,3-cd]pyrene** | **160** | | 100 | 40 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| Isophorone | 300 | U | 410 | 300 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| **Naphthalene** | **10000** | | 1000 | 18 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| Nitrobenzene | 25 | U | 100 | 25 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| N-Nitrosodi-n-propylamine | 74 | U | 100 | 74 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| N-Nitrosodiphenylamine | 20 | U | 1000 | 20 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| Pentachlorophenol | 210 | U | 820 | 210 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| **Phenanthrene** | **320** | **J** | 1000 | 18 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| Phenol | 38 | U | 1000 | 38 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |
| **Pyrene** | **510** | **J** | 1000 | 25 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 02:27 | 2 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4,6-Tribromophenol (Surr)* | *49* | | *10 - 123* | *04/24/20 16:16* | *04/26/20 02:27* | *2* |
| *2-Fluorobiphenyl* | *53* | | *25 - 104* | *04/24/20 16:16* | *04/26/20 02:27* | *2* |
| *2-Fluorophenol (Surr)* | *60* | | *18 - 106* | *04/24/20 16:16* | *04/26/20 02:27* | *2* |
| *Nitrobenzene-d5 (Surr)* | *52* | | *19 - 105* | *04/24/20 16:16* | *04/26/20 02:27* | *2* |
| *Phenol-d5 (Surr)* | *56* | | *26 - 101* | *04/24/20 16:16* | *04/26/20 02:27* | *2* |
| *Terphenyl-d14 (Surr)* | *63* | | *25 - 127* | *04/24/20 16:16* | *04/26/20 02:27* | *2* |

### Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | 1.8 | U | 10 | 1.8 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:26 | 1 |
| 4,4'-DDE | 1.2 | U | 10 | 1.2 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:26 | 1 |
| 4,4'-DDT | 1.9 | U | 10 | 1.9 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:26 | 1 |
| Aldrin | 1.6 | U | 10 | 1.6 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:26 | 1 |
| alpha-BHC | 1.1 | U | 3.1 | 1.1 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:26 | 1 |
| beta-BHC | 1.2 | U | 3.1 | 1.2 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:26 | 1 |
| Chlordane (technical) | 25 | U | 100 | 25 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:26 | 1 |
| delta-BHC | 0.63 | U | 3.1 | 0.63 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:26 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SED04-A-B-0-042320

**Date Collected: 04/23/20 15:15**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-10

**Matrix: Solid**
**Percent Solids: 64.7**

### Method: 8081B - Organochlorine Pesticides (GC) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dieldrin | 1.3 | U | 3.1 | 1.3 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:26 | 1 |
| Endosulfan I | 1.6 | U | 10 | 1.6 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:26 | 1 |
| Endosulfan II | 2.7 | U | 10 | 2.7 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:26 | 1 |
| Endosulfan sulfate | 1.3 | U | 10 | 1.3 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:26 | 1 |
| Endrin | 1.5 | U | 10 | 1.5 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:26 | 1 |
| Endrin aldehyde | 2.4 | U | 10 | 2.4 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:26 | 1 |
| Endrin ketone | 2.0 | U | 10 | 2.0 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:26 | 1 |
| gamma-BHC (Lindane) | 0.96 | U | 3.1 | 0.96 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:26 | 1 |
| Heptachlor | 1.2 | U | 10 | 1.2 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:26 | 1 |
| Heptachlor epoxide | 1.5 | U | 10 | 1.5 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:26 | 1 |
| Methoxychlor | 2.4 | U | 10 | 2.4 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:26 | 1 |
| Toxaphene | 37 | U | 100 | 37 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:26 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *122* | | *28 - 148* | *04/24/20 20:04* | *04/25/20 18:26* | *1* |
| *DCB Decachlorobiphenyl* | *122* | | *28 - 148* | *04/24/20 20:04* | *04/25/20 18:26* | *1* |
| *Tetrachloro-m-xylene* | *112* | | *34 - 118* | *04/24/20 20:04* | *04/25/20 18:26* | *1* |
| *Tetrachloro-m-xylene* | *165* | *X* | *34 - 118* | *04/24/20 20:04* | *04/25/20 18:26* | *1* |

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 140 | U | 1000 | 140 | ug/Kg | ☼ | 04/24/20 20:32 | 04/27/20 11:10 | 10 |
| Aroclor 1221 | 140 | U | 1000 | 140 | ug/Kg | ☼ | 04/24/20 20:32 | 04/27/20 11:10 | 10 |
| Aroclor 1232 | 140 | U | 1000 | 140 | ug/Kg | ☼ | 04/24/20 20:32 | 04/27/20 11:10 | 10 |
| Aroclor 1242 | 140 | U | 1000 | 140 | ug/Kg | ☼ | 04/24/20 20:32 | 04/27/20 11:10 | 10 |
| **Aroclor 1248** | **18000** | | 1000 | 140 | ug/Kg | ☼ | 04/24/20 20:32 | 04/27/20 11:10 | 10 |
| Aroclor 1254 | 140 | U | 1000 | 140 | ug/Kg | ☼ | 04/24/20 20:32 | 04/27/20 11:10 | 10 |
| Aroclor 1260 | 140 | U | 1000 | 140 | ug/Kg | ☼ | 04/24/20 20:32 | 04/27/20 11:10 | 10 |
| Aroclor-1262 | 140 | U | 1000 | 140 | ug/Kg | ☼ | 04/24/20 20:32 | 04/27/20 11:10 | 10 |
| Aroclor 1268 | 140 | U | 1000 | 140 | ug/Kg | ☼ | 04/24/20 20:32 | 04/27/20 11:10 | 10 |
| **Polychlorinated biphenyls, Total** | **18000** | | 1000 | 140 | ug/Kg | ☼ | 04/24/20 20:32 | 04/27/20 11:10 | 10 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *138* | | *10 - 150* | *04/24/20 20:32* | *04/27/20 11:10* | *10* |
| *DCB Decachlorobiphenyl* | *163* | *X* | *10 - 150* | *04/24/20 20:32* | *04/27/20 11:10* | *10* |
| *Tetrachloro-m-xylene* | *117* | | *58 - 145* | *04/24/20 20:32* | *04/27/20 11:10* | *10* |
| *Tetrachloro-m-xylene* | *144* | | *58 - 145* | *04/24/20 20:32* | *04/27/20 11:10* | *10* |

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4-D | 19 | U | 52 | 19 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 20:00 | 1 |
| Silvex (2,4,5-TP) | 5.4 | U | 52 | 5.4 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 20:00 | 1 |
| 2,4,5-T | 11 | U | 52 | 11 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 20:00 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *106* | | *30 - 150* | *04/25/20 00:04* | *04/25/20 20:00* | *1* |
| *2,4-Dichlorophenylacetic acid* | *107* | | *30 - 150* | *04/25/20 00:04* | *04/25/20 20:00* | *1* |

### Method: NJDEP EPH - New Jersey Extractable Petroleum Hydrocarbons

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total EPH (C9-C40)** | **500** | | 3.1 | 3.1 | mg/Kg | ☼ | 04/24/20 20:38 | 04/26/20 18:23 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SED04-A-B-0-042320

**Lab Sample ID: 460-207545-10**

**Date Collected: 04/23/20 15:15**
**Date Received: 04/23/20 18:06**

**Matrix: Solid**
**Percent Solids: 64.7**

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *53* | | *40 - 140* | *04/24/20 20:38* | *04/26/20 18:23* | *1* |
| *1-Chlorooctadecane* | *55* | | *40 - 140* | *04/24/20 20:38* | *04/26/20 18:23* | *1* |

### Method: 6010D - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Silver | 1.6 | U | 2.9 | 1.6 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:28 | 2 |
| **Aluminum** | **9440** | | 57.3 | 8.1 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:28 | 2 |
| **Arsenic** | **5.4** | | 4.3 | 0.88 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:28 | 2 |
| **Barium** | **60.5** | | 57.3 | 5.5 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:28 | 2 |
| **Beryllium** | **0.17** | **J** | 0.57 | 0.092 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:28 | 2 |
| **Calcium** | **5570** | | 1430 | 106 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:28 | 2 |
| **Cadmium** | **0.14** | **J** | 1.1 | 0.099 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:28 | 2 |
| **Cobalt** | **8.7** | **J** | 14.3 | 0.79 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:28 | 2 |
| **Chromium** | **27.8** | | 2.9 | 2.0 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:28 | 2 |
| **Copper** | **33.6** | | 7.2 | 1.8 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:28 | 2 |
| **Iron** | **16400** | | 43.0 | 29.5 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:28 | 2 |
| **Potassium** | **934** | **J** | 1430 | 87.9 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:28 | 2 |
| **Magnesium** | **3040** | | 1430 | 96.9 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:28 | 2 |
| **Manganese** | **387** | | 4.3 | 0.32 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:28 | 2 |
| **Sodium** | **329** | **J** | 1430 | 125 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:28 | 2 |
| **Nickel** | **15.3** | | 11.5 | 0.75 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:28 | 2 |
| **Lead** | **64.6** | | 2.9 | 0.46 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:28 | 2 |
| Antimony | 1.6 | U J | 5.7 | 1.6 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:28 | 2 |
| Selenium | 0.97 | U | 5.7 | 0.97 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:28 | 2 |
| Thallium | 0.89 | U | 5.7 | 0.89 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:28 | 2 |
| **Vanadium** | **33.8** | | 14.3 | 1.3 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:28 | 2 |
| **Zinc** | **74.1** | | 8.6 | 1.6 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:28 | 2 |

### Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Mercury** | **0.094** | | 0.023 | 0.0055 | mg/Kg | ☼ | 04/27/20 04:28 | 04/27/20 09:31 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cr (VI) | 0.54 | U | 3.1 | 0.54 | mg/Kg | ☼ | 04/27/20 08:07 | 04/27/20 14:31 | 1 |
| Cyanide, Total | 0.19 | U J | 0.37 | 0.19 | mg/Kg | ☼ | 04/28/20 07:18 | 04/28/20 13:25 | 1 |
| **TOC Result 1** | **29700** | | 155 | 126 | mg/Kg | ☼ | | 04/28/20 13:15 | 1 |

## Client Sample ID: SEL-PA-SED01-A-B-0-042320

**Lab Sample ID: 460-207545-11**

**Date Collected: 04/23/20 14:25**
**Date Received: 04/23/20 18:06**

**Matrix: Solid**

### General Chemistry

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **pH** | **7.0** | ~~HF~~ | 0.1 | 0.1 | SU | | | 04/26/20 11:08 | 1 |
| ~~**Corrosivity**~~ | ~~**7.0**~~ | ~~HF~~ | ~~0.1~~ | ~~0.1~~ | ~~SU~~ | | | ~~04/26/20 11:08~~ | ~~1~~ |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SED01-A-B-0-042320

**Date Collected: 04/23/20 14:25**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-11

**Matrix: Solid**
**Percent Solids: 72.7**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.26 | U | 1.1 | 0.26 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| 1,1,2,2-Tetrachloroethane | 0.24 | U* | 1.1 | 0.24 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.33 | U | 1.1 | 0.33 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| 1,1,2-Trichloroethane | 0.20 | U* | 1.1 | 0.20 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| 1,1-Dichloroethane | 0.23 | U | 1.1 | 0.23 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| 1,1-Dichloroethene | 0.25 | U | 1.1 | 0.25 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| 1,2,3-Trichlorobenzene | 0.20 | U | 1.1 | 0.20 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| 1,2,4-Trichlorobenzene | 0.40 | U | 1.1 | 0.40 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| 1,2-Dichloropropane | 0.47 | U | 1.1 | 0.47 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| 1,3-Dichlorobenzene | 0.18 | U | 1.1 | 0.18 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| 1,4-Dichlorobenzene | 0.25 | U | 1.1 | 0.25 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| 1,4-Dioxane | 10 | U | 22 | 10 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| 2-Butanone (MEK) | 3.0 | U | 5.6 | 3.0 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| 2-Hexanone | 1.9 | U | 5.6 | 1.9 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| 4-Methyl-2-pentanone (MIBK) | 1.7 | U | 5.6 | 1.7 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| **Acetone** | **270** | | 6.7 | 6.4 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Benzene | 0.29 | U | 1.1 | 0.29 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Bromoform | 0.47 | U | 1.1 | 0.47 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Bromomethane | 0.53 | U | 1.1 | 0.53 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Carbon disulfide | 0.30 | U | 1.1 | 0.30 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Carbon tetrachloride | 0.43 | U | 1.1 | 0.43 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Chlorobenzene | 0.20 | U | 1.1 | 0.20 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Chlorobromomethane | 0.31 | U | 1.1 | 0.31 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Chlorodibromomethane | 0.22 | U | 1.1 | 0.22 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Chloroethane | 0.58 | U | 1.1 | 0.58 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Chloroform | 0.35 | U | 1.1 | 0.35 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Chloromethane | 0.48 | U | 1.1 | 0.48 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| cis-1,2-Dichloroethene | 0.17 | U | 1.1 | 0.17 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| cis-1,3-Dichloropropene | 0.30 | U | 1.1 | 0.30 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Cyclohexane | 0.25 | U | 1.1 | 0.25 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Dichlorobromomethane | 0.29 | U | 1.1 | 0.29 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Dichlorodifluoromethane | 0.38 | U | 1.1 | 0.38 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Ethylbenzene | 0.22 | U | 1.1 | 0.22 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Ethylene Dibromide | 0.20 | U | 1.1 | 0.20 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Isopropylbenzene | 0.14 | U | 1.1 | 0.14 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Methyl acetate | 4.8 | U | 5.6 | 4.8 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Methyl tert-butyl ether | 0.14 | U | 1.1 | 0.14 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Methylcyclohexane | 0.55 | U | 1.1 | 0.55 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Methylene Chloride | 0.52 | U | 1.1 | 0.52 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| m-Xylene & p-Xylene | 0.19 | U | 1.1 | 0.19 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| o-Xylene | 0.22 | U | 1.1 | 0.22 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Styrene | 0.31 | U | 1.1 | 0.31 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Tetrachloroethene | 0.16 | U | 1.1 | 0.16 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Toluene | 0.26 | U | 1.1 | 0.26 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| trans-1,2-Dichloroethene | 0.27 | U | 1.1 | 0.27 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| 2-Methyl-2-propanol | 3.7 | U | 11 | 3.7 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| trans-1,3-Dichloropropene | 0.30 | U | 1.1 | 0.30 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Trichloroethene | 0.16 | U | 1.1 | 0.16 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| Trichlorofluoromethane | 0.45 | U | 1.1 | 0.45 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |



YY 5/11/2020

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SED01-A-B-0-042320

**Date Collected: 04/23/20 14:25**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-11

**Matrix: Solid**
**Percent Solids: 72.7**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Vinyl chloride | 0.61 | U | 1.1 | 0.61 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| 1,2-Dichloroethane | 0.33 | U | 1.1 | 0.33 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| 1,2-Dichlorobenzene | 0.16 | U | 1.1 | 0.16 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| 1,2-Dibromo-3-Chloropropane | 0.51 | U | 1.1 | 0.51 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |
| 1,1,1,2-Tetrachloroethane | 0.21 | U | 1.1 | 0.21 | ug/Kg | ☼ | 04/24/20 11:18 | 04/27/20 09:21 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Tentatively Identified Compound* | *None* | | *ug/Kg* | ☼ | | | *04/24/20 11:18* | *04/27/20 09:21* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *115* | | *77 - 145* | *04/24/20 11:18* | *04/27/20 09:21* | *1* |
| *4-Bromofluorobenzene* | *90* | | *79 - 125* | *04/24/20 11:18* | *04/27/20 09:21* | *1* |
| *Dibromofluoromethane (Surr)* | *109* | | *48 - 150* | *04/24/20 11:18* | *04/27/20 09:21* | *1* |
| *Toluene-d8 (Surr)* | *110* | | *80 - 120* | *04/24/20 11:18* | *04/27/20 09:21* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1'-Biphenyl | 6.0 | U | 450 | 6.0 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| 1,2,4,5-Tetrachlorobenzene | 14 | U | 450 | 14 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| 2,2'-oxybis[1-chloropropane] | 8.2 | U | 450 | 8.2 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| 2,3,4,6-Tetrachlorophenol | 31 | U | 450 | 31 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| 2,4,5-Trichlorophenol | 46 | U | 450 | 46 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| 2,4,6-Trichlorophenol | 58 | U | 180 | 58 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| 2,4-Dichlorophenol | 29 | U | 180 | 29 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| 2,4-Dimethylphenol | 20 | U | 450 | 20 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| 2,4-Dinitrophenol | 220 | U | 370 | 220 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| 2,4-Dinitrotoluene | 49 | U | 92 | 49 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| 2,6-Dinitrotoluene | 33 | U | 92 | 33 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| 2-Chloronaphthalene | 21 | U | 450 | 21 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| 2-Chlorophenol | 16 | U | 450 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| **2-Methylnaphthalene** | **34** | **J** | 450 | 13 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| 2-Methylphenol | 17 | U | 450 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| 2-Nitroaniline | 17 | U | 450 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| 2-Nitrophenol | 46 | U | 450 | 46 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| 3,3'-Dichlorobenzidine | 69 | U | 180 | 69 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| 3-Nitroaniline | 51 | U | 450 | 51 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| 4,6-Dinitro-2-methylphenol | 74 | U | 370 | 74 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| 4-Bromophenyl phenyl ether | 18 | U | 450 | 18 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| 4-Chloro-3-methylphenol | 26 | U | 450 | 26 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| 4-Chloroaniline | 32 | U | 450 | 32 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| 4-Chlorophenyl phenyl ether | 16 | U | 450 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| 4-Methylphenol | 28 | U | 450 | 28 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| 4-Nitroaniline | 52 | U | 450 | 52 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| 4-Nitrophenol | 74 | U | 920 | 74 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| **Acenaphthene** | **43** | **J** | 450 | 33 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| Acenaphthylene | 4.7 | U | 450 | 4.7 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| Acetophenone | 22 | U | 450 | 22 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| **Anthracene** | **82** | **J** | 450 | 14 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| Atrazine | 11 | U | 180 | 11 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| Benzaldehyde | 20 | U | 450 | 20 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SED01-A-B-0-042320

**Date Collected: 04/23/20 14:25**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-11

**Matrix: Solid**
**Percent Solids: 72.7**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Benzo[a]anthracene** | **310** | | 45 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| **Benzo[a]pyrene** | **270** | | 45 | 12 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| **Benzo[b]fluoranthene** | **340** | | 45 | 12 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| **Benzo[g,h,i]perylene** | **130** | **J** | 450 | 13 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| **Benzo[k]fluoranthene** | **140** | | 45 | 8.9 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| Bis(2-chloroethoxy)methane | 35 | U | 450 | 35 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| Bis(2-chloroethyl)ether | 16 | U | 45 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| **Bis(2-ethylhexyl) phthalate** | **8900** | | 450 | 24 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| **Butyl benzyl phthalate** | **29** | **J** | 450 | 21 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| Caprolactam | 71 | U | 450 | 71 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| **Carbazole** | **28** | **J** | 450 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| **Chrysene** | **300** | **J** | 450 | 7.7 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| **Dibenz(a,h)anthracene** | **42** | **J** | 45 | 20 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| **Dibenzofuran** | **39** | **J** | 450 | 6.4 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| Diethyl phthalate | 6.6 | U | 450 | 6.6 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| Dimethyl phthalate | 100 | U | 450 | 100 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| Di-n-butyl phthalate | 80 | U | 450 | 80 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| Di-n-octyl phthalate | 24 | U | 450 | 24 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| **Fluoranthene** | **480** | | 450 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| **Fluorene** | **88** | **J** | 450 | 6.2 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| Hexachlorobenzene | 22 | U | 45 | 22 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| Hexachlorobutadiene | 9.7 | U | 92 | 9.7 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| Hexachlorocyclopentadiene | 40 | U | 450 | 40 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| Hexachloroethane | 16 | U | 45 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| **Indeno[1,2,3-cd]pyrene** | **150** | | 45 | 18 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| Isophorone | 130 | U | 180 | 130 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| **Naphthalene** | **180** | **J** | 450 | 7.9 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| Nitrobenzene | 11 | U | 45 | 11 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| N-Nitrosodi-n-propylamine | 33 | U | 45 | 33 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| N-Nitrosodiphenylamine | 8.7 | U | 450 | 8.7 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| Pentachlorophenol | 93 | U | 370 | 93 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| **Phenanthrene** | **440** | **J** | 450 | 8.0 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| Phenol | 17 | U | 450 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |
| **Pyrene** | **690** | | 450 | 11 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 07:46 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4,6-Tribromophenol (Surr)* | *50* | | *10 - 123* | *04/24/20 16:16* | *04/25/20 07:46* | *1* |
| *2-Fluorobiphenyl* | *52* | | *25 - 104* | *04/24/20 16:16* | *04/25/20 07:46* | *1* |
| *2-Fluorophenol (Surr)* | *50* | | *18 - 106* | *04/24/20 16:16* | *04/25/20 07:46* | *1* |
| *Nitrobenzene-d5 (Surr)* | *44* | | *19 - 105* | *04/24/20 16:16* | *04/25/20 07:46* | *1* |
| *Phenol-d5 (Surr)* | *47* | | *26 - 101* | *04/24/20 16:16* | *04/25/20 07:46* | *1* |
| *Terphenyl-d14 (Surr)* | *71* | | *25 - 127* | *04/24/20 16:16* | *04/25/20 07:46* | *1* |

### Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | 1.6 | U | 9.2 | 1.6 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:38 | 1 |
| 4,4'-DDE | 1.1 | U | 9.2 | 1.1 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:38 | 1 |
| 4,4'-DDT | 1.7 | U | 9.2 | 1.7 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:38 | 1 |
| Aldrin | 1.4 | U | 9.2 | 1.4 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:38 | 1 |
| alpha-BHC | 0.94 | U | 2.8 | 0.94 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:38 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SED01-A-B-0-042320

**Date Collected: 04/23/20 14:25**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-11

**Matrix: Solid**
**Percent Solids: 72.7**

### Method: 8081B - Organochlorine Pesticides (GC) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| beta-BHC | 1.0 | U | 2.8 | 1.0 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:38 | 1 |
| Chlordane (technical) | 22 | U | 92 | 22 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:38 | 1 |
| delta-BHC | 0.56 | U | 2.8 | 0.56 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:38 | 1 |
| Dieldrin | 1.2 | U | 2.8 | 1.2 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:38 | 1 |
| Endosulfan I | 1.4 | U | 9.2 | 1.4 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:38 | 1 |
| Endosulfan II | 2.4 | U | 9.2 | 2.4 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:38 | 1 |
| Endosulfan sulfate | 1.2 | U | 9.2 | 1.2 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:38 | 1 |
| Endrin | 1.3 | U | 9.2 | 1.3 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:38 | 1 |
| Endrin aldehyde | 2.2 | U | 9.2 | 2.2 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:38 | 1 |
| Endrin ketone | 1.8 | U | 9.2 | 1.8 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:38 | 1 |
| gamma-BHC (Lindane) | 0.85 | U | 2.8 | 0.85 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:38 | 1 |
| Heptachlor | 1.1 | U | 9.2 | 1.1 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:38 | 1 |
| Heptachlor epoxide | 1.4 | U | 9.2 | 1.4 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:38 | 1 |
| Methoxychlor | 2.1 | U | 9.2 | 2.1 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:38 | 1 |
| Toxaphene | 33 | U | 92 | 33 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:38 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *110* | | *28 - 148* | *04/24/20 20:04* | *04/25/20 18:38* | *1* |
| *DCB Decachlorobiphenyl* | *108* | | *28 - 148* | *04/24/20 20:04* | *04/25/20 18:38* | *1* |
| *Tetrachloro-m-xylene* | *105* | | *34 - 118* | *04/24/20 20:04* | *04/25/20 18:38* | *1* |
| *Tetrachloro-m-xylene* | *104* | | *34 - 118* | *04/24/20 20:04* | *04/25/20 18:38* | *1* |

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 12 | U | 92 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 18:31 | 1 |
| Aroclor 1221 | 12 | U | 92 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 18:31 | 1 |
| Aroclor 1232 | 12 | U | 92 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 18:31 | 1 |
| Aroclor 1242 | 12 | U | 92 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 18:31 | 1 |
| **Aroclor 1248** | **270** | | 92 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 18:31 | 1 |
| Aroclor 1254 | 13 | U | 92 | 13 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 18:31 | 1 |
| Aroclor 1260 | 13 | U | 92 | 13 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 18:31 | 1 |
| Aroclor-1262 | 13 | U | 92 | 13 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 18:31 | 1 |
| Aroclor 1268 | 13 | U | 92 | 13 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 18:31 | 1 |
| **Polychlorinated biphenyls, Total** | **270** | | 92 | 13 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 18:31 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *101* | | *10 - 150* | *04/24/20 20:32* | *04/25/20 18:31* | *1* |
| *DCB Decachlorobiphenyl* | *102* | | *10 - 150* | *04/24/20 20:32* | *04/25/20 18:31* | *1* |
| *Tetrachloro-m-xylene* | *100* | | *58 - 145* | *04/24/20 20:32* | *04/25/20 18:31* | *1* |
| *Tetrachloro-m-xylene* | *99* | | *58 - 145* | *04/24/20 20:32* | *04/25/20 18:31* | *1* |

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4-D | 17 | U | 46 | 17 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 20:15 | 1 |
| Silvex (2,4,5-TP) | 4.8 | U | 46 | 4.8 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 20:15 | 1 |
| 2,4,5-T | 9.7 | U | 46 | 9.7 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 20:15 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *99* | | *30 - 150* | *04/25/20 00:04* | *04/25/20 20:15* | *1* |
| *2,4-Dichlorophenylacetic acid* | *103* | | *30 - 150* | *04/25/20 00:04* | *04/25/20 20:15* | *1* |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SED01-A-B-0-042320

**Lab Sample ID: 460-207545-11**
**Date Collected: 04/23/20 14:25**
**Matrix: Solid**
**Date Received: 04/23/20 18:06**
**Percent Solids: 72.7**

### Method: NJDEP EPH - New Jersey Extractable Petroleum Hydrocarbons

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total EPH (C9-C40) | 120 | | 2.8 | 2.8 | mg/Kg | ☼ | 04/24/20 20:38 | 04/26/20 18:36 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *56* | | *40 - 140* | *04/24/20 20:38* | *04/26/20 18:36* | *1* |
| *1-Chlorooctadecane* | *57* | | *40 - 140* | *04/24/20 20:38* | *04/26/20 18:36* | *1* |

### Method: 6010D - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Silver | 1.4 | U | 2.5 | 1.4 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:40 | 2 |
| Aluminum | 7730 | | 50.5 | 7.1 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:40 | 2 |
| Arsenic | 5.4 | | 3.8 | 0.78 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:40 | 2 |
| Barium | 51.5 | | 50.5 | 4.9 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:40 | 2 |
| Beryllium | 0.52 | | 0.50 | 0.081 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:40 | 2 |
| Calcium | 4950 | | 1260 | 93.2 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:40 | 2 |
| Cadmium | 0.087 | U | 1.0 | 0.087 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:40 | 2 |
| Cobalt | 6.2 | J | 12.6 | 0.70 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:40 | 2 |
| Chromium | 63.5 | | 2.5 | 1.8 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:40 | 2 |
| Copper | 50.7 | | 6.3 | 1.6 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:40 | 2 |
| Iron | 18900 | | 37.8 | 26.0 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:40 | 2 |
| Potassium | 566 | J | 1260 | 77.5 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:40 | 2 |
| Magnesium | 2100 | | 1260 | 85.4 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:40 | 2 |
| Manganese | 418 | | 3.8 | 0.28 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:40 | 2 |
| Sodium | 220 | J | 1260 | 110 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:40 | 2 |
| Nickel | 10.6 | | 10.1 | 0.66 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:40 | 2 |
| Lead | 34.4 | | 2.5 | 0.41 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:40 | 2 |
| Antimony | 1.5 | UJ | 5.0 | 1.5 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:40 | 2 |
| Selenium | 0.86 | U | 5.0 | 0.86 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:40 | 2 |
| Thallium | 0.78 | U | 5.0 | 0.78 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:40 | 2 |
| Vanadium | 61.8 | | 12.6 | 1.2 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:40 | 2 |
| Zinc | 35.3 | | 7.6 | 1.4 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:40 | 2 |

### Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.076 | | 0.022 | 0.0052 | mg/Kg | ☼ | 04/27/20 04:28 | 04/27/20 09:36 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cr (VI) | 0.48 | U | 2.8 | 0.48 | mg/Kg | ☼ | 04/27/20 08:07 | 04/27/20 14:31 | 1 |
| Cyanide, Total | 0.17 | UJ | 0.33 | 0.17 | mg/Kg | ☼ | 04/28/20 07:18 | 04/28/20 13:26 | 1 |
| TOC Result 1 | 16800 | | 138 | 112 | mg/Kg | ☼ | | 04/28/20 13:23 | 1 |

## Client Sample ID: SEL-PA-SBEa-A-B-0-042320

**Lab Sample ID: 460-207545-12**
**Date Collected: 04/23/20 15:35**
**Matrix: Solid**
**Date Received: 04/23/20 18:06**

### General Chemistry

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| pH | 7.3 | ~~HF~~ | 0.1 | 0.1 | SU | | | 04/26/20 11:09 | 1 |
| ~~Corrosivity~~ | ~~7.3~~ | ~~HF~~ | ~~0.1~~ | ~~0.1~~ | ~~SU~~ | | | ~~04/26/20 11:09~~ | ~~1~~ |



YY 5/14/2020

05/05/2020

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SBEa-A-B-0-042320

**Date Collected: 04/23/20 15:35**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-12

**Matrix: Solid**
**Percent Solids: 63.9**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.36 | U | 1.5 | 0.36 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| 1,1,2,2-Tetrachloroethane | 0.33 | U* | 1.5 | 0.33 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.46 | U | 1.5 | 0.46 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| 1,1,2-Trichloroethane | 0.27 | U | 1.5 | 0.27 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| 1,1-Dichloroethane | 0.32 | U | 1.5 | 0.32 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| 1,1-Dichloroethene | 0.34 | U | 1.5 | 0.34 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| 1,2,3-Trichlorobenzene | 0.28 | U | 1.5 | 0.28 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| 1,2,4-Trichlorobenzene | 0.55 | U | 1.5 | 0.55 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| 1,2-Dichloropropane | 0.65 | U | 1.5 | 0.65 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| 1,3-Dichlorobenzene | 0.24 | U | 1.5 | 0.24 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| 1,4-Dichlorobenzene | 0.34 | U | 1.5 | 0.34 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| 1,4-Dioxane | 14 | U | 31 | 14 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| **2-Butanone (MEK)** | **5.3** | **J** | 7.7 | 4.1 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| 2-Hexanone | 2.6 | U | 7.7 | 2.6 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| 4-Methyl-2-pentanone (MIBK) | 2.4 | U | 7.7 | 2.4 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| **Acetone** | **22** | | 9.2 | 8.8 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| **Benzene** | **0.76** | **J** | 1.5 | 0.39 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| Bromoform | 0.65 | U | 1.5 | 0.65 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| Bromomethane | 0.73 | U | 1.5 | 0.73 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| Carbon disulfide | 0.41 | U | 1.5 | 0.41 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| Carbon tetrachloride | 0.59 | U | 1.5 | 0.59 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| Chlorobenzene | 0.27 | U | 1.5 | 0.27 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| Chlorobromomethane | 0.43 | U | 1.5 | 0.43 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| Chlorodibromomethane | 0.30 | U | 1.5 | 0.30 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| Chloroethane | 0.80 | U | 1.5 | 0.80 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| Chloroform | 0.49 | U | 1.5 | 0.49 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| Chloromethane | 0.67 | U | 1.5 | 0.67 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| cis-1,2-Dichloroethene | 0.23 | U | 1.5 | 0.23 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| cis-1,3-Dichloropropene | 0.42 | U* | 1.5 | 0.42 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| Cyclohexane | 0.34 | U | 1.5 | 0.34 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| Dichlorobromomethane | 0.39 | U | 1.5 | 0.39 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| Dichlorodifluoromethane | 0.52 | U | 1.5 | 0.52 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| Ethylbenzene | 0.30 | U | 1.5 | 0.30 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| Ethylene Dibromide | 0.28 | U | 1.5 | 0.28 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| Isopropylbenzene | 0.19 | U | 1.5 | 0.19 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| Methyl acetate | 6.6 | U | 7.7 | 6.6 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| Methyl tert-butyl ether | 0.19 | U | 1.5 | 0.19 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| Methylcyclohexane | 0.76 | U | 1.5 | 0.76 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| Methylene Chloride | 0.71 | U | 1.5 | 0.71 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| m-Xylene & p-Xylene | 0.27 | U | 1.5 | 0.27 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| o-Xylene | 0.30 | U | 1.5 | 0.30 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| Styrene | 0.43 | U | 1.5 | 0.43 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| Tetrachloroethene | 0.22 | U | 1.5 | 0.22 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| Toluene | 0.36 | U | 1.5 | 0.36 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| trans-1,2-Dichloroethene | 0.38 | U | 1.5 | 0.38 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| 2-Methyl-2-propanol | 5.1 | U* | 15 | 5.1 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| trans-1,3-Dichloropropene | 0.41 | U* | 1.5 | 0.41 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| Trichloroethene | 0.22 | U | 1.5 | 0.22 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| Trichlorofluoromethane | 0.62 | U | 1.5 | 0.62 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |



YY 5/11/2020

05/05/2020

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SBEa-A-B-0-042320

**Date Collected: 04/23/20 15:35**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-12

**Matrix: Solid**
**Percent Solids: 63.9**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Vinyl chloride | 0.84 | U | 1.5 | 0.84 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| 1,2-Dichloroethane | 0.45 | U | 1.5 | 0.45 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| 1,2-Dichlorobenzene | 0.22 | U | 1.5 | 0.22 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| 1,2-Dibromo-3-Chloropropane | 0.70 | U | 1.5 | 0.70 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |
| 1,1,1,2-Tetrachloroethane | 0.29 | U | 1.5 | 0.29 | ug/Kg | ☼ | 04/24/20 11:19 | 04/26/20 14:38 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Tentatively Identified Compound* | *None* | | *ug/Kg* | ☼ | | | *04/24/20 11:19* | *04/26/20 14:38* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *118* | | *77 - 145* | *04/24/20 11:19* | *04/26/20 14:38* | *1* |
| *4-Bromofluorobenzene* | *93* | | *79 - 125* | *04/24/20 11:19* | *04/26/20 14:38* | *1* |
| *Dibromofluoromethane (Surr)* | *112* | | *48 - 150* | *04/24/20 11:19* | *04/26/20 14:38* | *1* |
| *Toluene-d8 (Surr)* | *110* | | *80 - 120* | *04/24/20 11:19* | *04/26/20 14:38* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1'-Biphenyl | 6.9 | U | 520 | 6.9 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| 1,2,4,5-Tetrachlorobenzene | 16 | U | 520 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| 2,2'-oxybis[1-chloropropane] | 9.4 | U | 520 | 9.4 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| 2,3,4,6-Tetrachlorophenol | 35 | U | 520 | 35 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| 2,4,5-Trichlorophenol | 53 | U | 520 | 53 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| 2,4,6-Trichlorophenol | 66 | U | 210 | 66 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| 2,4-Dichlorophenol | 33 | U | 210 | 33 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| 2,4-Dimethylphenol | 23 | U | 520 | 23 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| 2,4-Dinitrophenol | 250 | U | 420 | 250 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| 2,4-Dinitrotoluene | 56 | U | 100 | 56 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| 2,6-Dinitrotoluene | 37 | U | 100 | 37 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| 2-Chloronaphthalene | 24 | U | 520 | 24 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| 2-Chlorophenol | 18 | U | 520 | 18 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| 2-Methylnaphthalene | 14 | U | 520 | 14 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| 2-Methylphenol | 19 | U | 520 | 19 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| 2-Nitroaniline | 19 | U | 520 | 19 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| 2-Nitrophenol | 52 | U | 520 | 52 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| 3,3'-Dichlorobenzidine | 78 | U | 210 | 78 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| 3-Nitroaniline | 58 | U | 520 | 58 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| 4,6-Dinitro-2-methylphenol | 84 | U | 420 | 84 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| 4-Bromophenyl phenyl ether | 21 | U | 520 | 21 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| 4-Chloro-3-methylphenol | 29 | U | 520 | 29 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| 4-Chloroaniline | 36 | U | 520 | 36 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| 4-Chlorophenyl phenyl ether | 18 | U | 520 | 18 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| **4-Methylphenol** | **130** | **J** | 520 | 32 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| 4-Nitroaniline | 59 | U | 520 | 59 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| 4-Nitrophenol | 84 | U | 1000 | 84 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| Acenaphthene | 38 | U | 520 | 38 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| **Acenaphthylene** | **17** | **J** | 520 | 5.4 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| Acetophenone | 25 | U | 520 | 25 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| **Anthracene** | **58** | **J** | 520 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| Atrazine | 13 | U | 210 | 13 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| **Benzaldehyde** | **30** | **J** | 520 | 23 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SBEa-A-B-0-042320

**Lab Sample ID: 460-207545-12**

**Date Collected: 04/23/20 15:35**
**Date Received: 04/23/20 18:06**

**Matrix: Solid**
**Percent Solids: 63.9**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Benzo[a]anthracene** | **360** | | 52 | 18 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| **Benzo[a]pyrene** | **370** | | 52 | 14 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| **Benzo[b]fluoranthene** | **530** | | 52 | 13 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| **Benzo[g,h,i]perylene** | **200** | **J** | 520 | 15 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| **Benzo[k]fluoranthene** | **200** | | 52 | 10 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| Bis(2-chloroethoxy)methane | 40 | U | 520 | 40 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| Bis(2-chloroethyl)ether | 18 | U | 52 | 18 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| **Bis(2-ethylhexyl) phthalate** | **83** | **J** | 520 | 27 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| Butyl benzyl phthalate | 24 | U | 520 | 24 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| Caprolactam | 81 | U | 520 | 81 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| **Carbazole** | **37** | **J** | 520 | 20 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| **Chrysene** | **340** | **J** | 520 | 8.7 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| **Dibenz(a,h)anthracene** | **65** | | 52 | 22 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| Dibenzofuran | 7.3 | U | 520 | 7.3 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| Diethyl phthalate | 7.5 | U | 520 | 7.5 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| Dimethyl phthalate | 120 | U | 520 | 120 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| Di-n-butyl phthalate | 91 | U | 520 | 91 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| Di-n-octyl phthalate | 27 | U | 520 | 27 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| **Fluoranthene** | **450** | **J** | 520 | 18 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| **Fluorene** | **22** | **J** | 520 | 7.0 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| Hexachlorobenzene | 25 | U | 52 | 25 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| Hexachlorobutadiene | 11 | U | 100 | 11 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| Hexachlorocyclopentadiene | 45 | U | 520 | 45 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| Hexachloroethane | 18 | U | 52 | 18 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| **Indeno[1,2,3-cd]pyrene** | **230** | | 52 | 20 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| Isophorone | 150 | U | 210 | 150 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| **Naphthalene** | **20** | **J** | 520 | 8.9 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| Nitrobenzene | 12 | U | 52 | 12 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| N-Nitrosodi-n-propylamine | 38 | U | 52 | 38 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| N-Nitrosodiphenylamine | 9.9 | U | 520 | 9.9 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| Pentachlorophenol | 110 | U | 420 | 110 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| **Phenanthrene** | **270** | **J** | 520 | 9.1 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| Phenol | 19 | U | 520 | 19 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |
| **Pyrene** | **670** | | 520 | 13 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:09 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4,6-Tribromophenol (Surr)* | *43* | | *10 - 123* | *04/24/20 16:16* | *04/25/20 08:09* | *1* |
| *2-Fluorobiphenyl* | *49* | | *25 - 104* | *04/24/20 16:16* | *04/25/20 08:09* | *1* |
| *2-Fluorophenol (Surr)* | *50* | | *18 - 106* | *04/24/20 16:16* | *04/25/20 08:09* | *1* |
| *Nitrobenzene-d5 (Surr)* | *46* | | *19 - 105* | *04/24/20 16:16* | *04/25/20 08:09* | *1* |
| *Phenol-d5 (Surr)* | *44* | | *26 - 101* | *04/24/20 16:16* | *04/25/20 08:09* | *1* |
| *Terphenyl-d14 (Surr)* | *62* | | *25 - 127* | *04/24/20 16:16* | *04/25/20 08:09* | *1* |

### Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | 1.8 | U | 10 | 1.8 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:50 | 1 |
| 4,4'-DDE | 1.2 | U | 10 | 1.2 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:50 | 1 |
| 4,4'-DDT | 1.9 | U | 10 | 1.9 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:50 | 1 |
| Aldrin | 1.6 | U | 10 | 1.6 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:50 | 1 |
| alpha-BHC | 1.1 | U | 3.1 | 1.1 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:50 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SBEa-A-B-0-042320

**Date Collected: 04/23/20 15:35**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-12

**Matrix: Solid**
**Percent Solids: 63.9**

### Method: 8081B - Organochlorine Pesticides (GC) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| beta-BHC | 1.2 | U | 3.1 | 1.2 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:50 | 1 |
| Chlordane (technical) | 25 | U | 100 | 25 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:50 | 1 |
| delta-BHC | 0.64 | U | 3.1 | 0.64 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:50 | 1 |
| Dieldrin | 1.4 | U | 3.1 | 1.4 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:50 | 1 |
| Endosulfan I | 1.6 | U | 10 | 1.6 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:50 | 1 |
| Endosulfan II | 2.7 | U | 10 | 2.7 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:50 | 1 |
| Endosulfan sulfate | 1.3 | U | 10 | 1.3 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:50 | 1 |
| Endrin | 1.5 | U | 10 | 1.5 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:50 | 1 |
| Endrin aldehyde | 2.5 | U | 10 | 2.5 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:50 | 1 |
| Endrin ketone | 2.0 | U | 10 | 2.0 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:50 | 1 |
| gamma-BHC (Lindane) | 0.97 | U | 3.1 | 0.97 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:50 | 1 |
| Heptachlor | 1.2 | U | 10 | 1.2 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:50 | 1 |
| Heptachlor epoxide | 1.6 | U | 10 | 1.6 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:50 | 1 |
| Methoxychlor | 2.4 | U | 10 | 2.4 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:50 | 1 |
| Toxaphene | 38 | U | 100 | 38 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 18:50 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *107* | | *28 - 148* | *04/24/20 20:04* | *04/25/20 18:50* | *1* |
| *DCB Decachlorobiphenyl* | *106* | | *28 - 148* | *04/24/20 20:04* | *04/25/20 18:50* | *1* |
| *Tetrachloro-m-xylene* | *106* | | *34 - 118* | *04/24/20 20:04* | *04/25/20 18:50* | *1* |
| *Tetrachloro-m-xylene* | *108* | | *34 - 118* | *04/24/20 20:04* | *04/25/20 18:50* | *1* |

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 14 | U | 100 | 14 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 18:48 | 1 |
| Aroclor 1221 | 14 | U | 100 | 14 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 18:48 | 1 |
| Aroclor 1232 | 14 | U | 100 | 14 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 18:48 | 1 |
| Aroclor 1242 | 14 | U | 100 | 14 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 18:48 | 1 |
| Aroclor 1248 | 14 | U | 100 | 14 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 18:48 | 1 |
| Aroclor 1254 | 14 | U | 100 | 14 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 18:48 | 1 |
| Aroclor 1260 | 14 | U | 100 | 14 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 18:48 | 1 |
| Aroclor-1262 | 14 | U | 100 | 14 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 18:48 | 1 |
| Aroclor 1268 | 14 | U | 100 | 14 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 18:48 | 1 |
| Polychlorinated biphenyls, Total | 14 | U | 100 | 14 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 18:48 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *100* | | *10 - 150* | *04/24/20 20:32* | *04/25/20 18:48* | *1* |
| *DCB Decachlorobiphenyl* | *98* | | *10 - 150* | *04/24/20 20:32* | *04/25/20 18:48* | *1* |
| *Tetrachloro-m-xylene* | *101* | | *58 - 145* | *04/24/20 20:32* | *04/25/20 18:48* | *1* |
| *Tetrachloro-m-xylene* | *96* | | *58 - 145* | *04/24/20 20:32* | *04/25/20 18:48* | *1* |

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4-D | 19 | U | 52 | 19 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 20:29 | 1 |
| Silvex (2,4,5-TP) | 5.4 | U | 52 | 5.4 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 20:29 | 1 |
| 2,4,5-T | 11 | U | 52 | 11 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 20:29 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *117* | | *30 - 150* | *04/25/20 00:04* | *04/25/20 20:29* | *1* |
| *2,4-Dichlorophenylacetic acid* | *103* | | *30 - 150* | *04/25/20 00:04* | *04/25/20 20:29* | *1* |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SBEa-A-B-0-042320

**Lab Sample ID: 460-207545-12**
**Date Collected: 04/23/20 15:35**
**Matrix: Solid**
**Date Received: 04/23/20 18:06**
**Percent Solids: 63.9**

### Method: NJDEP EPH - New Jersey Extractable Petroleum Hydrocarbons

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total EPH (C9-C40) | 140 | | 3.1 | 3.1 | mg/Kg | ☼ | 04/24/20 20:38 | 04/26/20 18:49 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *65* | | *40 - 140* | *04/24/20 20:38* | *04/26/20 18:49* | *1* |
| *1-Chlorooctadecane* | *72* | | *40 - 140* | *04/24/20 20:38* | *04/26/20 18:49* | *1* |

### Method: 6010D - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Silver | 1.6 | U | 2.9 | 1.6 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:44 | 2 |
| Aluminum | 9670 | | 57.9 | 8.2 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:44 | 2 |
| Arsenic | 5.2 | | 4.3 | 0.89 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:44 | 2 |
| Barium | 74.7 | | 57.9 | 5.6 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:44 | 2 |
| Beryllium | 0.093 | U | 0.58 | 0.093 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:44 | 2 |
| Calcium | 8940 | | 1450 | 107 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:44 | 2 |
| Cadmium | 0.19 | J | 1.2 | 0.10 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:44 | 2 |
| Cobalt | 9.7 | J | 14.5 | 0.80 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:44 | 2 |
| Chromium | 19.4 | | 2.9 | 2.1 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:44 | 2 |
| Copper | 39.7 | | 7.2 | 1.8 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:44 | 2 |
| Iron | 18200 | | 43.5 | 29.8 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:44 | 2 |
| Potassium | 1230 | J | 1450 | 88.9 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:44 | 2 |
| Magnesium | 4770 | | 1450 | 98.1 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:44 | 2 |
| Manganese | 453 | | 4.3 | 0.33 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:44 | 2 |
| Sodium | 492 | J | 1450 | 126 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:44 | 2 |
| Nickel | 18.7 | | 11.6 | 0.76 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:44 | 2 |
| Lead | 56.6 | | 2.9 | 0.47 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:44 | 2 |
| Antimony | 1.7 | UJ | 5.8 | 1.7 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:44 | 2 |
| Selenium | 0.98 | U | 5.8 | 0.98 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:44 | 2 |
| Thallium | 0.90 | U | 5.8 | 0.90 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:44 | 2 |
| Vanadium | 29.5 | | 14.5 | 1.3 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:44 | 2 |
| Zinc | 108 | | 8.7 | 1.6 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:44 | 2 |

### Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.18 | | 0.027 | 0.0063 | mg/Kg | ☼ | 04/27/20 04:28 | 04/27/20 09:38 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cr (VI) | 0.55 | U | 3.2 | 0.55 | mg/Kg | ☼ | 04/27/20 08:07 | 04/27/20 14:31 | 1 |
| Cyanide, Total | 0.19 | UJ | 0.38 | 0.19 | mg/Kg | ☼ | 04/28/20 07:18 | 04/28/20 13:27 | 1 |
| TOC Result 1 | 29900 | | 156 | 127 | mg/Kg | ☼ | | 04/28/20 13:30 | 1 |

## Client Sample ID: SEL-PA-SBNo-A-B-0-042320

**Lab Sample ID: 460-207545-13**
**Date Collected: 04/23/20 15:55**
**Matrix: Solid**
**Date Received: 04/23/20 18:06**

### General Chemistry

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| pH | 7.2 | ~~HF~~ | 0.1 | 0.1 | SU | | | 04/26/20 11:10 | 1 |
| ~~Corrosivity~~ | ~~7.2~~ | ~~HF~~ | ~~0.1~~ | ~~0.1~~ | ~~SU~~ | | | ~~04/26/20 11:10~~ | ~~1~~ |



yy 5/14/2020

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SBNo-A-B-0-042320

**Date Collected: 04/23/20 15:55**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-13

**Matrix: Solid**
**Percent Solids: 52.2**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.50 | U | 2.1 | 0.50 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| 1,1,2,2-Tetrachloroethane | 0.46 | U* | 2.1 | 0.46 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.64 | U | 2.1 | 0.64 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| 1,1,2-Trichloroethane | 0.38 | U | 2.1 | 0.38 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| 1,1-Dichloroethane | 0.44 | U | 2.1 | 0.44 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| 1,1-Dichloroethene | 0.48 | U | 2.1 | 0.48 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| 1,2,3-Trichlorobenzene | 0.39 | U | 2.1 | 0.39 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| 1,2,4-Trichlorobenzene | 0.77 | U | 2.1 | 0.77 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| 1,2-Dichloropropane | 0.91 | U | 2.1 | 0.91 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| 1,3-Dichlorobenzene | 0.34 | U | 2.1 | 0.34 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| 1,4-Dichlorobenzene | 0.48 | U | 2.1 | 0.48 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| 1,4-Dioxane | 20 | U | 43 | 20 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| **2-Butanone (MEK)** | **7.7** | **J** | 11 | 5.8 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| 2-Hexanone | 3.7 | U | 11 | 3.7 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| 4-Methyl-2-pentanone (MIBK) | 3.3 | U | 11 | 3.3 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| **Acetone** | **23** | | 13 | 12 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Benzene | 0.55 | U | 2.1 | 0.55 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Bromoform | 0.91 | U | 2.1 | 0.91 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Bromomethane | 1.0 | U | 2.1 | 1.0 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Carbon disulfide | 0.57 | U | 2.1 | 0.57 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Carbon tetrachloride | 0.83 | U | 2.1 | 0.83 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Chlorobenzene | 0.38 | U | 2.1 | 0.38 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Chlorobromomethane | 0.60 | U | 2.1 | 0.60 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Chlorodibromomethane | 0.42 | U | 2.1 | 0.42 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Chloroethane | 1.1 | U | 2.1 | 1.1 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Chloroform | 0.68 | U | 2.1 | 0.68 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Chloromethane | 0.93 | U | 2.1 | 0.93 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| cis-1,2-Dichloroethene | 0.33 | U | 2.1 | 0.33 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| cis-1,3-Dichloropropene | 0.58 | U* | 2.1 | 0.58 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Cyclohexane | 0.47 | U | 2.1 | 0.47 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Dichlorobromomethane | 0.55 | U | 2.1 | 0.55 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Dichlorodifluoromethane | 0.72 | U | 2.1 | 0.72 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Ethylbenzene | 0.43 | U | 2.1 | 0.43 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Ethylene Dibromide | 0.39 | U | 2.1 | 0.39 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Isopropylbenzene | 0.27 | U | 2.1 | 0.27 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Methyl acetate | 9.2 | U | 11 | 9.2 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Methyl tert-butyl ether | 0.27 | U | 2.1 | 0.27 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Methylcyclohexane | 1.1 | U | 2.1 | 1.1 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Methylene Chloride | 0.99 | U | 2.1 | 0.99 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| m-Xylene & p-Xylene | 0.37 | U | 2.1 | 0.37 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| o-Xylene | 0.42 | U | 2.1 | 0.42 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Styrene | 0.60 | U | 2.1 | 0.60 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Tetrachloroethene | 0.31 | U | 2.1 | 0.31 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Toluene | 0.50 | U | 2.1 | 0.50 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| trans-1,2-Dichloroethene | 0.53 | U | 2.1 | 0.53 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| 2-Methyl-2-propanol | 7.1 | U* | 21 | 7.1 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| trans-1,3-Dichloropropene | 0.57 | U* | 2.1 | 0.57 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Trichloroethene | 0.31 | U | 2.1 | 0.31 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| Trichlorofluoromethane | 0.87 | U | 2.1 | 0.87 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SBNo-A-B-0-042320

**Date Collected: 04/23/20 15:55**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-13

**Matrix: Solid**
**Percent Solids: 52.2**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Vinyl chloride | 1.2 | U | 2.1 | 1.2 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| 1,2-Dichloroethane | 0.63 | U | 2.1 | 0.63 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| 1,2-Dichlorobenzene | 0.31 | U | 2.1 | 0.31 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| 1,2-Dibromo-3-Chloropropane | 0.98 | U | 2.1 | 0.98 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |
| 1,1,1,2-Tetrachloroethane | 0.41 | U | 2.1 | 0.41 | ug/Kg | ☼ | 04/24/20 11:20 | 04/26/20 15:04 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Tentatively Identified Compound* | *None* | | *ug/Kg* | ☼ | | | *04/24/20 11:20* | *04/26/20 15:04* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *115* | | *77 - 145* | *04/24/20 11:20* | *04/26/20 15:04* | *1* |
| *4-Bromofluorobenzene* | *89* | | *79 - 125* | *04/24/20 11:20* | *04/26/20 15:04* | *1* |
| *Dibromofluoromethane (Surr)* | *108* | | *48 - 150* | *04/24/20 11:20* | *04/26/20 15:04* | *1* |
| *Toluene-d8 (Surr)* | *108* | | *80 - 120* | *04/24/20 11:20* | *04/26/20 15:04* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1'-Biphenyl | 8.4 | U | 630 | 8.4 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 1,2,4,5-Tetrachlorobenzene | 20 | U | 630 | 20 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 2,2'-oxybis[1-chloropropane] | 11 | U | 630 | 11 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 2,3,4,6-Tetrachlorophenol | 43 | U | 630 | 43 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 2,4,5-Trichlorophenol | 64 | U | 630 | 64 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 2,4,6-Trichlorophenol | 81 | U | 250 | 81 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 2,4-Dichlorophenol | 41 | U | 250 | 41 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 2,4-Dimethylphenol | 28 | U | 630 | 28 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 2,4-Dinitrophenol | 310 | U | 510 | 310 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 2,4-Dinitrotoluene | 68 | U | 130 | 68 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 2,6-Dinitrotoluene | 46 | U | 130 | 46 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 2-Chloronaphthalene | 29 | U | 630 | 29 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 2-Chlorophenol | 23 | U | 630 | 23 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 2-Methylnaphthalene | 18 | U | 630 | 18 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 2-Methylphenol | 24 | U | 630 | 24 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 2-Nitroaniline | 24 | U | 630 | 24 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 2-Nitrophenol | 63 | U | 630 | 63 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 3,3'-Dichlorobenzidine | 96 | U | 250 | 96 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 3-Nitroaniline | 71 | U | 630 | 71 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 4,6-Dinitro-2-methylphenol | 100 | U | 510 | 100 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 4-Bromophenyl phenyl ether | 25 | U | 630 | 25 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 4-Chloro-3-methylphenol | 36 | U | 630 | 36 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 4-Chloroaniline | 44 | U | 630 | 44 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 4-Chlorophenyl phenyl ether | 22 | U | 630 | 22 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 4-Methylphenol | 40 | U | 630 | 40 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 4-Nitroaniline | 73 | U | 630 | 73 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| 4-Nitrophenol | 100 | U | 1300 | 100 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| Acenaphthene | 46 | U | 630 | 46 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| Acenaphthylene | 6.5 | U | 630 | 6.5 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| Acetophenone | 31 | U | 630 | 31 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| Anthracene | 19 | U | 630 | 19 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| Atrazine | 16 | U | 250 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| Benzaldehyde | 28 | U | 630 | 28 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SBNo-A-B-0-042320

**Date Collected: 04/23/20 15:55**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-13

**Matrix: Solid**
**Percent Solids: 52.2**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Benzo[a]anthracene** | **260** | | 63 | 22 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| **Benzo[a]pyrene** | **260** | | 63 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| **Benzo[b]fluoranthene** | **320** | | 63 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| **Benzo[g,h,i]perylene** | **140** | **J** | 630 | 19 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| **Benzo[k]fluoranthene** | **120** | | 63 | 12 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| Bis(2-chloroethoxy)methane | 49 | U | 630 | 49 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| Bis(2-chloroethyl)ether | 22 | U | 63 | 22 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| **Bis(2-ethylhexyl) phthalate** | **2000** | | 630 | 33 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| Butyl benzyl phthalate | 30 | U | 630 | 30 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| Caprolactam | 99 | U | 630 | 99 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| Carbazole | 24 | U | 630 | 24 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| **Chrysene** | **270** | **J** | 630 | 11 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| **Dibenz(a,h)anthracene** | **47** | **J** | 63 | 27 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| Dibenzofuran | 8.9 | U | 630 | 8.9 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| Diethyl phthalate | 9.2 | U | 630 | 9.2 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| Dimethyl phthalate | 140 | U | 630 | 140 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| Di-n-butyl phthalate | 110 | U | 630 | 110 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| Di-n-octyl phthalate | 34 | U | 630 | 34 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| **Fluoranthene** | **330** | **J** | 630 | 22 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| **Fluorene** | **18** | **J** | 630 | 8.6 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| Hexachlorobenzene | 30 | U | 63 | 30 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| Hexachlorobutadiene | 13 | U | 130 | 13 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| Hexachlorocyclopentadiene | 56 | U | 630 | 56 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| Hexachloroethane | 22 | U | 63 | 22 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| **Indeno[1,2,3-cd]pyrene** | **150** | | 63 | 25 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| Isophorone | 180 | U | 250 | 180 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| **Naphthalene** | **25** | **J** | 630 | 11 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| Nitrobenzene | 15 | U | 63 | 15 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| N-Nitrosodi-n-propylamine | 46 | U | 63 | 46 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| N-Nitrosodiphenylamine | 12 | U | 630 | 12 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| Pentachlorophenol | 130 | U | 510 | 130 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| **Phenanthrene** | **200** | **J** | 630 | 11 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| Phenol | 23 | U | 630 | 23 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |
| **Pyrene** | **470** | **J** | 630 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:33 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4,6-Tribromophenol (Surr)* | *52* | | *10 - 123* | *04/24/20 16:16* | *04/25/20 08:33* | *1* |
| *2-Fluorobiphenyl* | *58* | | *25 - 104* | *04/24/20 16:16* | *04/25/20 08:33* | *1* |
| *2-Fluorophenol (Surr)* | *55* | | *18 - 106* | *04/24/20 16:16* | *04/25/20 08:33* | *1* |
| *Nitrobenzene-d5 (Surr)* | *50* | | *19 - 105* | *04/24/20 16:16* | *04/25/20 08:33* | *1* |
| *Phenol-d5 (Surr)* | *50* | | *26 - 101* | *04/24/20 16:16* | *04/25/20 08:33* | *1* |
| *Terphenyl-d14 (Surr)* | *76* | | *25 - 127* | *04/24/20 16:16* | *04/25/20 08:33* | *1* |

### Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | 2.2 | U | 13 | 2.2 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:03 | 1 |
| 4,4'-DDE | 1.5 | U | 13 | 1.5 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:03 | 1 |
| 4,4'-DDT | 2.4 | U | 13 | 2.4 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:03 | 1 |
| Aldrin | 1.9 | U | 13 | 1.9 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:03 | 1 |
| alpha-BHC | 1.3 | U | 3.8 | 1.3 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:03 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SBNo-A-B-0-042320

**Date Collected: 04/23/20 15:55**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-13

**Matrix: Solid**
**Percent Solids: 52.2**

### Method: 8081B - Organochlorine Pesticides (GC) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| beta-BHC | 1.4 | U | 3.8 | 1.4 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:03 | 1 |
| Chlordane (technical) | 31 | U | 130 | 31 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:03 | 1 |
| delta-BHC | 0.78 | U | 3.8 | 0.78 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:03 | 1 |
| Dieldrin | 1.7 | U | 3.8 | 1.7 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:03 | 1 |
| Endosulfan I | 2.0 | U | 13 | 2.0 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:03 | 1 |
| Endosulfan II | 3.3 | U | 13 | 3.3 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:03 | 1 |
| Endosulfan sulfate | 1.6 | U | 13 | 1.6 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:03 | 1 |
| Endrin | 1.8 | U | 13 | 1.8 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:03 | 1 |
| Endrin aldehyde | 3.0 | U | 13 | 3.0 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:03 | 1 |
| Endrin ketone | 2.5 | U | 13 | 2.5 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:03 | 1 |
| gamma-BHC (Lindane) | 1.2 | U | 3.8 | 1.2 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:03 | 1 |
| Heptachlor | 1.5 | U | 13 | 1.5 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:03 | 1 |
| Heptachlor epoxide | 1.9 | U | 13 | 1.9 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:03 | 1 |
| Methoxychlor | 2.9 | U | 13 | 2.9 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:03 | 1 |
| Toxaphene | 46 | U | 130 | 46 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:03 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *105* | | *28 - 148* | *04/24/20 20:04* | *04/25/20 19:03* | *1* |
| *DCB Decachlorobiphenyl* | *91* | | *28 - 148* | *04/24/20 20:04* | *04/25/20 19:03* | *1* |
| *Tetrachloro-m-xylene* | *103* | | *34 - 118* | *04/24/20 20:04* | *04/25/20 19:03* | *1* |
| *Tetrachloro-m-xylene* | *91* | | *34 - 118* | *04/24/20 20:04* | *04/25/20 19:03* | *1* |

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 17 | U | 130 | 17 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:04 | 1 |
| Aroclor 1221 | 17 | U | 130 | 17 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:04 | 1 |
| Aroclor 1232 | 17 | U | 130 | 17 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:04 | 1 |
| Aroclor 1242 | 17 | U | 130 | 17 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:04 | 1 |
| **Aroclor 1248** | **760** | | 130 | 17 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:04 | 1 |
| Aroclor 1254 | 18 | U | 130 | 18 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:04 | 1 |
| Aroclor 1260 | 18 | U | 130 | 18 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:04 | 1 |
| Aroclor-1262 | 18 | U | 130 | 18 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:04 | 1 |
| Aroclor 1268 | 18 | U | 130 | 18 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:04 | 1 |
| **Polychlorinated biphenyls, Total** | **760** | | 130 | 18 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:04 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *97* | | *10 - 150* | *04/24/20 20:32* | *04/25/20 19:04* | *1* |
| *DCB Decachlorobiphenyl* | *96* | | *10 - 150* | *04/24/20 20:32* | *04/25/20 19:04* | *1* |
| *Tetrachloro-m-xylene* | *99* | | *58 - 145* | *04/24/20 20:32* | *04/25/20 19:04* | *1* |
| *Tetrachloro-m-xylene* | *95* | | *58 - 145* | *04/24/20 20:32* | *04/25/20 19:04* | *1* |

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4-D | 23 | U | 64 | 23 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 20:44 | 1 |
| Silvex (2,4,5-TP) | 6.6 | U | 64 | 6.6 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 20:44 | 1 |
| 2,4,5-T | 14 | U | 64 | 14 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 20:44 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *116* | | *30 - 150* | *04/25/20 00:04* | *04/25/20 20:44* | *1* |
| *2,4-Dichlorophenylacetic acid* | *108* | | *30 - 150* | *04/25/20 00:04* | *04/25/20 20:44* | *1* |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SBNo-A-B-0-042320

**Lab Sample ID: 460-207545-13**
**Date Collected: 04/23/20 15:55**
**Matrix: Solid**
**Date Received: 04/23/20 18:06**
**Percent Solids: 52.2**

### Method: NJDEP EPH - New Jersey Extractable Petroleum Hydrocarbons

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total EPH (C9-C40) | 280 | | 3.8 | 3.8 | mg/Kg | ☼ | 04/24/20 20:38 | 04/26/20 19:05 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *69* | | *40 - 140* | *04/24/20 20:38* | *04/26/20 19:05* | *1* |
| *1-Chlorooctadecane* | *76* | | *40 - 140* | *04/24/20 20:38* | *04/26/20 19:05* | *1* |

### Method: 6010D - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Silver | 2.0 | U | 3.5 | 2.0 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:48 | 2 |
| Aluminum | 11900 | | 70.2 | 9.9 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:48 | 2 |
| Arsenic | 5.4 | | 5.3 | 1.1 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:48 | 2 |
| Barium | 81.9 | | 70.2 | 6.8 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:48 | 2 |
| Beryllium | 0.11 | U | 0.70 | 0.11 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:48 | 2 |
| Calcium | 12700 | | 1760 | 130 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:48 | 2 |
| Cadmium | 0.12 | U | 1.4 | 0.12 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:48 | 2 |
| Cobalt | 10.5 | J | 17.6 | 0.97 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:48 | 2 |
| Chromium | 35.2 | | 3.5 | 2.5 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:48 | 2 |
| Copper | 50.5 | | 8.8 | 2.2 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:48 | 2 |
| Iron | 23400 | | 52.7 | 36.2 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:48 | 2 |
| Potassium | 1150 | J | 1760 | 108 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:48 | 2 |
| Magnesium | 7020 | | 1760 | 119 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:48 | 2 |
| Manganese | 543 | | 5.3 | 0.40 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:48 | 2 |
| Sodium | 506 | J | 1760 | 153 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:48 | 2 |
| Nickel | 20.0 | | 14.0 | 0.92 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:48 | 2 |
| Lead | 66.8 | | 3.5 | 0.57 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:48 | 2 |
| Antimony | 2.0 | UJ | 7.0 | 2.0 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:48 | 2 |
| Selenium | 1.2 | U | 7.0 | 1.2 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:48 | 2 |
| Thallium | 1.1 | U | 7.0 | 1.1 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:48 | 2 |
| Vanadium | 45.8 | | 17.6 | 1.6 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:48 | 2 |
| Zinc | 107 | | 10.5 | 1.9 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:48 | 2 |

### Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.27 | | 0.031 | 0.0072 | mg/Kg | ☼ | 04/27/20 04:28 | 04/27/20 09:40 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cr (VI) | 0.67 | U | 3.9 | 0.67 | mg/Kg | ☼ | 04/27/20 08:07 | 04/27/20 14:31 | 1 |
| Cyanide, Total | 0.24 | UJ | 0.46 | 0.24 | mg/Kg | ☼ | 04/28/20 07:18 | 04/28/20 13:27 | 1 |
| TOC Result 1 | 34000 | | 191 | 156 | mg/Kg | ☼ | | 04/28/20 13:38 | 1 |

## Client Sample ID: SEL-PA-SB02-A-B-0-042320

**Lab Sample ID: 460-207545-14**
**Date Collected: 04/23/20 16:15**
**Matrix: Solid**
**Date Received: 04/23/20 18:06**

### General Chemistry

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| pH | 7.5 | ~~HF~~ | 0.1 | 0.1 | SU | | | 04/26/20 10:56 | 1 |
| ~~Corrosivity~~ | ~~7.5~~ | ~~HF~~ | ~~0.1~~ | ~~0.1~~ | ~~SU~~ | | | ~~04/26/20 10:56~~ | ~~1~~ |



YY 5/14/2020

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SB02-A-B-0-042320

**Date Collected: 04/23/20 16:15**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-14

**Matrix: Solid**
**Percent Solids: 74.4**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.31 | U | 1.3 | 0.31 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| 1,1,2,2-Tetrachloroethane | 0.28 | U* | 1.3 | 0.28 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.40 | U | 1.3 | 0.40 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| 1,1,2-Trichloroethane | 0.24 | U | 1.3 | 0.24 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| 1,1-Dichloroethane | 0.27 | U | 1.3 | 0.27 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| 1,1-Dichloroethene | 0.30 | U | 1.3 | 0.30 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| 1,2,3-Trichlorobenzene | 0.24 | ~~U F1~~ UJ | 1.3 | 0.24 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| 1,2,4-Trichlorobenzene | 0.47 | ~~U F1~~ UJ | 1.3 | 0.47 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| 1,2-Dichloropropane | 0.56 | U | 1.3 | 0.56 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| 1,3-Dichlorobenzene | 0.21 | ~~U F1~~ UJ | 1.3 | 0.21 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| 1,4-Dichlorobenzene | 0.30 | ~~U F1~~ UJ | 1.3 | 0.30 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| 1,4-Dioxane | 12 | U | 26 | 12 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| 2-Butanone (MEK) | 3.6 | ~~U F1~~ UJ | 6.6 | 3.6 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| 2-Hexanone | 2.3 | U | 6.6 | 2.3 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| 4-Methyl-2-pentanone (MIBK) | 2.1 | U | 6.6 | 2.1 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| **Acetone** | **9.6** | | 7.9 | 7.6 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Benzene | 0.34 | U | 1.3 | 0.34 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Bromoform | 0.56 | U | 1.3 | 0.56 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Bromomethane | 0.63 | U | 1.3 | 0.63 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Carbon disulfide | 0.35 | U | 1.3 | 0.35 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Carbon tetrachloride | 0.51 | U | 1.3 | 0.51 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Chlorobenzene | 0.23 | ~~U F1~~ UJ | 1.3 | 0.23 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Chlorobromomethane | 0.37 | ~~U F1~~ UJ | 1.3 | 0.37 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Chlorodibromomethane | 0.26 | U | 1.3 | 0.26 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Chloroethane | 0.69 | U | 1.3 | 0.69 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Chloroform | 0.42 | U | 1.3 | 0.42 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Chloromethane | 0.58 | U | 1.3 | 0.58 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| cis-1,2-Dichloroethene | 0.20 | ~~U F1~~ UJ | 1.3 | 0.20 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| cis-1,3-Dichloropropene | 0.36 | U* | 1.3 | 0.36 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Cyclohexane | 0.29 | ~~U F1~~ UJ | 1.3 | 0.29 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Dichlorobromomethane | 0.34 | U | 1.3 | 0.34 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Dichlorodifluoromethane | 0.45 | U | 1.3 | 0.45 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Ethylbenzene | 0.26 | ~~U F1~~ UJ | 1.3 | 0.26 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Ethylene Dibromide | 0.24 | ~~U F1~~ UJ | 1.3 | 0.24 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Isopropylbenzene | 0.17 | ~~U F1~~ UJ | 1.3 | 0.17 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Methyl acetate | 5.7 | ~~U F1~~ UJ | 6.6 | 5.7 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Methyl tert-butyl ether | 0.17 | U | 1.3 | 0.17 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Methylcyclohexane | 0.66 | ~~U F1~~ UJ | 1.3 | 0.66 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Methylene Chloride | 0.61 | U | 1.3 | 0.61 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| m-Xylene & p-Xylene | 0.23 | ~~U F1~~ UJ | 1.3 | 0.23 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| o-Xylene | 0.26 | ~~U F1~~ UJ | 1.3 | 0.26 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Styrene | 0.37 | ~~U F1~~ UJ | 1.3 | 0.37 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Tetrachloroethene | 0.19 | ~~U F1~~ UJ | 1.3 | 0.19 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Toluene | 0.31 | U | 1.3 | 0.31 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| trans-1,2-Dichloroethene | 0.33 | U | 1.3 | 0.33 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| 2-Methyl-2-propanol | 4.4 | U* | 13 | 4.4 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| trans-1,3-Dichloropropene | 0.35 | U* | 1.3 | 0.35 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Trichloroethene | 0.19 | ~~U F1~~ UJ | 1.3 | 0.19 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| Trichlorofluoromethane | 0.54 | U | 1.3 | 0.54 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SB02-A-B-0-042320

**Date Collected: 04/23/20 16:15**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-14

**Matrix: Solid**
**Percent Solids: 74.4**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Vinyl chloride | 0.72 | U | 1.3 | 0.72 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| 1,2-Dichloroethane | 0.39 | U | 1.3 | 0.39 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| 1,2-Dichlorobenzene | 0.19 | ~~U F1~~ UJ | 1.3 | 0.19 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| 1,2-Dibromo-3-Chloropropane | 0.61 | U | 1.3 | 0.61 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |
| 1,1,1,2-Tetrachloroethane | 0.25 | U | 1.3 | 0.25 | ug/Kg | ☼ | 04/24/20 11:21 | 04/26/20 14:12 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Tentatively Identified Compound* | *None* | | *ug/Kg* | ☼ | | | *04/24/20 11:21* | *04/26/20 14:12* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *113* | | *77 - 145* | *04/24/20 11:21* | *04/26/20 14:12* | *1* |
| *4-Bromofluorobenzene* | *96* | | *79 - 125* | *04/24/20 11:21* | *04/26/20 14:12* | *1* |
| *Dibromofluoromethane (Surr)* | *111* | | *48 - 150* | *04/24/20 11:21* | *04/26/20 14:12* | *1* |
| *Toluene-d8 (Surr)* | *110* | | *80 - 120* | *04/24/20 11:21* | *04/26/20 14:12* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1'-Biphenyl | 12 | ~~U F1~~ UJ | 890 | 12 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 1,2,4,5-Tetrachlorobenzene | 28 | ~~U F1~~ UJ | 890 | 28 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 2,2'-oxybis[1-chloropropane] | 16 | ~~U F1~~ UJ | 890 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 2,3,4,6-Tetrachlorophenol | 60 | ~~U F1~~ UJ | 890 | 60 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 2,4,5-Trichlorophenol | 91 | ~~U F1~~ UJ | 890 | 91 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 2,4,6-Trichlorophenol | 110 | ~~U F1~~ UJ | 360 | 110 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 2,4-Dichlorophenol | 57 | ~~U F1~~ UJ | 360 | 57 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 2,4-Dimethylphenol | 39 | ~~U F1~~ UJ | 890 | 39 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 2,4-Dinitrophenol | 440 | ~~U F1~~ UJ | 710 | 440 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 2,4-Dinitrotoluene | 96 | ~~U F1~~ UJ | 180 | 96 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 2,6-Dinitrotoluene | 64 | ~~U F1~~ UJ | 180 | 64 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 2-Chloronaphthalene | 41 | ~~U F1~~ UJ | 890 | 41 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 2-Chlorophenol | 32 | ~~U F1~~ UJ | 890 | 32 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 2-Methylnaphthalene | 25 | ~~U F1~~ UJ | 890 | 25 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 2-Methylphenol | 33 | ~~U F1~~ UJ | 890 | 33 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 2-Nitroaniline | 33 | ~~U F1~~ UJ | 890 | 33 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 2-Nitrophenol | 89 | ~~U F1~~ UJ | 890 | 89 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 3,3'-Dichlorobenzidine | 130 | U | 360 | 130 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 3-Nitroaniline | 100 | U | 890 | 100 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 4,6-Dinitro-2-methylphenol | 140 | ~~U F1~~ UJ | 710 | 140 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 4-Bromophenyl phenyl ether | 35 | ~~U F1~~ UJ | 890 | 35 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 4-Chloro-3-methylphenol | 50 | ~~U F1~~ UJ | 890 | 50 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 4-Chloroaniline | 62 | U | 890 | 62 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 4-Chlorophenyl phenyl ether | 31 | ~~U F1~~ UJ | 890 | 31 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 4-Methylphenol | 56 | ~~U F1~~ UJ | 890 | 56 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 4-Nitroaniline | 100 | U | 890 | 100 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| 4-Nitrophenol | 140 | U | 1800 | 140 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| **Acenaphthene** | **85** | **J ~~F1~~** | 890 | 65 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| **Acenaphthylene** | **41** | **J ~~F1~~** | 890 | 9.2 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Acetophenone | 44 | ~~U F1~~ UJ | 890 | 44 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| **Anthracene** | **300** | **J ~~F1~~** | 890 | 27 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Atrazine | 22 | U | 360 | 22 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Benzaldehyde | 39 | U | 890 | 39 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SB02-A-B-0-042320

**Date Collected: 04/23/20 16:15**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-14

**Matrix: Solid**
**Percent Solids: 74.4**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzo[a]anthracene | 670 | ~~F1~~ J | 89 | 31 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Benzo[a]pyrene | 490 | ~~F1~~ J | 89 | 24 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Benzo[b]fluoranthene | 610 | ~~F1~~ J | 89 | 23 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Benzo[g,h,i]perylene | 250 | J ~~F1~~ | 890 | 26 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Benzo[k]fluoranthene | 230 | ~~F1~~ J | 89 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Bis(2-chloroethoxy)methane | 69 | ~~U F1~~ UJ | 890 | 69 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Bis(2-chloroethyl)ether | 31 | ~~U F1~~ UJ | 89 | 31 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Bis(2-ethylhexyl) phthalate | 13000 | ~~F1 F2~~ J | 890 | 47 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Butyl benzyl phthalate | 42 | ~~U F1~~ UJ | 890 | 42 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Caprolactam | 140 | ~~U F1~~ UJ | 890 | 140 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Carbazole | 170 | J ~~F1~~ | 890 | 34 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Chrysene | 680 | J ~~F1~~ | 890 | 15 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Dibenz(a,h)anthracene | 98 | ~~F1~~ J | 89 | 38 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Dibenzofuran | 68 | J ~~F1~~ | 890 | 12 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Diethyl phthalate | 13 | ~~U F1~~ UJ | 890 | 13 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Dimethyl phthalate | 200 | ~~U F1~~ UJ | 890 | 200 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Di-n-butyl phthalate | 160 | ~~U F1~~ UJ | 890 | 160 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Di-n-octyl phthalate | 47 | ~~U F1 F2~~ UJ | 890 | 47 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Fluoranthene | 1700 | ~~F1~~ J | 890 | 31 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Fluorene | 140 | J ~~F1~~ | 890 | 12 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Hexachlorobenzene | 42 | ~~U F1~~ UJ | 89 | 42 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Hexachlorobutadiene | 19 | ~~U F1~~ UJ | 180 | 19 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Hexachlorocyclopentadiene | 78 | ~~U F1 F2~~ UJ | 890 | 78 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Hexachloroethane | 31 | ~~U F1~~ UJ | 89 | 31 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Indeno[1,2,3-cd]pyrene | 310 | ~~F1~~ J | 89 | 35 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Isophorone | 260 | ~~U F1~~ UJ | 360 | 260 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Naphthalene | 140 | J ~~F1~~ | 890 | 15 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Nitrobenzene | 21 | ~~U F1~~ UJ | 89 | 21 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| N-Nitrosodi-n-propylamine | 65 | ~~U F1~~ UJ | 89 | 65 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| N-Nitrosodiphenylamine | 17 | ~~U F1~~ UJ | 890 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Pentachlorophenol | 180 | U | 710 | 180 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Phenanthrene | 1700 | ~~F1~~ J | 890 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Phenol | 33 | ~~U F1~~ UJ | 890 | 33 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |
| Pyrene | 1500 | ~~F1~~ J | 890 | 22 | ug/Kg | ☼ | 04/24/20 16:16 | 04/26/20 01:20 | 2 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4,6-Tribromophenol (Surr)* | *45* | | *10 - 123* | *04/24/20 16:16* | *04/26/20 01:20* | *2* |
| *2-Fluorobiphenyl* | *46* | | *25 - 104* | *04/24/20 16:16* | *04/26/20 01:20* | *2* |
| *2-Fluorophenol (Surr)* | *50* | | *18 - 106* | *04/24/20 16:16* | *04/26/20 01:20* | *2* |
| *Nitrobenzene-d5 (Surr)* | *44* | | *19 - 105* | *04/24/20 16:16* | *04/26/20 01:20* | *2* |
| *Phenol-d5 (Surr)* | *49* | | *26 - 101* | *04/24/20 16:16* | *04/26/20 01:20* | *2* |
| *Terphenyl-d14 (Surr)* | *58* | | *25 - 127* | *04/24/20 16:16* | *04/26/20 01:20* | *2* |

### Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | 1.5 | U | 9.0 | 1.5 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 17:24 | 1 |
| 4,4'-DDE | 1.1 | U | 9.0 | 1.1 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 17:24 | 1 |
| 4,4'-DDT | 1.7 | U | 9.0 | 1.7 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 17:24 | 1 |
| Aldrin | 1.4 | U | 9.0 | 1.4 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 17:24 | 1 |
| alpha-BHC | 0.91 | U | 2.7 | 0.91 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 17:24 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SB02-A-B-0-042320

**Date Collected: 04/23/20 16:15**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-14

**Matrix: Solid**
**Percent Solids: 74.4**

### Method: 8081B - Organochlorine Pesticides (GC) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| beta-BHC | 1.0 | U | 2.7 | 1.0 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 17:24 | 1 |
| Chlordane (technical) | 22 | U | 90 | 22 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 17:24 | 1 |
| delta-BHC | 0.55 | U | 2.7 | 0.55 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 17:24 | 1 |
| Dieldrin | 1.2 | U | 2.7 | 1.2 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 17:24 | 1 |
| Endosulfan I | 1.4 | U | 9.0 | 1.4 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 17:24 | 1 |
| Endosulfan II | 2.3 | U | 9.0 | 2.3 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 17:24 | 1 |
| Endosulfan sulfate | 1.1 | U | 9.0 | 1.1 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 17:24 | 1 |
| Endrin | 1.3 | U | 9.0 | 1.3 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 17:24 | 1 |
| Endrin aldehyde | 2.1 | U | 9.0 | 2.1 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 17:24 | 1 |
| Endrin ketone | 1.7 | U | 9.0 | 1.7 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 17:24 | 1 |
| gamma-BHC (Lindane) | 0.83 | U | 2.7 | 0.83 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 17:24 | 1 |
| Heptachlor | 1.1 | U | 9.0 | 1.1 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 17:24 | 1 |
| Heptachlor epoxide | 1.3 | U | 9.0 | 1.3 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 17:24 | 1 |
| Methoxychlor | 2.1 | U | 9.0 | 2.1 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 17:24 | 1 |
| Toxaphene | 33 | U | 90 | 33 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 17:24 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *116* | | *28 - 148* | *04/24/20 20:04* | *04/25/20 17:24* | *1* |
| *DCB Decachlorobiphenyl* | *96* | | *28 - 148* | *04/24/20 20:04* | *04/25/20 17:24* | *1* |
| *Tetrachloro-m-xylene* | *96* | | *34 - 118* | *04/24/20 20:04* | *04/25/20 17:24* | *1* |
| *Tetrachloro-m-xylene* | *77* | | *34 - 118* | *04/24/20 20:04* | *04/25/20 17:24* | *1* |

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 12 | U ~~F1~~ | 90 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 16:52 | 1 |
| Aroclor 1221 | 12 | U | 90 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 16:52 | 1 |
| Aroclor 1232 | 12 | U | 90 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 16:52 | 1 |
| Aroclor 1242 | 12 | U | 90 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 16:52 | 1 |
| **Aroclor 1248** | **850** | | 90 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 16:52 | 1 |
| Aroclor 1254 | 12 | U | 90 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 16:52 | 1 |
| Aroclor 1260 | 12 | U | 90 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 16:52 | 1 |
| Aroclor-1262 | 12 | U | 90 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 16:52 | 1 |
| Aroclor 1268 | 12 | U | 90 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 16:52 | 1 |
| **Polychlorinated biphenyls, Total** | **850** | | 90 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 16:52 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *107* | | *10 - 150* | *04/24/20 20:32* | *04/25/20 16:52* | *1* |
| *DCB Decachlorobiphenyl* | *107* | | *10 - 150* | *04/24/20 20:32* | *04/25/20 16:52* | *1* |
| *Tetrachloro-m-xylene* | *105* | | *58 - 145* | *04/24/20 20:32* | *04/25/20 16:52* | *1* |
| *Tetrachloro-m-xylene* | *102* | | *58 - 145* | *04/24/20 20:32* | *04/25/20 16:52* | *1* |

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4-D | 16 | U | 45 | 16 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 17:05 | 1 |
| Silvex (2,4,5-TP) | 4.7 | U | 45 | 4.7 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 17:05 | 1 |
| 2,4,5-T | 9.5 | U ~~F2~~ | 45 | 9.5 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 17:05 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *132* | | *30 - 150* | *04/25/20 00:04* | *04/25/20 17:05* | *1* |
| *2,4-Dichlorophenylacetic acid* | *105* | | *30 - 150* | *04/25/20 00:04* | *04/25/20 17:05* | *1* |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SB02-A-B-0-042320

**Lab Sample ID: 460-207545-14**
**Date Collected: 04/23/20 16:15**
**Matrix: Solid**
**Date Received: 04/23/20 18:06**
**Percent Solids: 74.4**

### Method: NJDEP EPH - New Jersey Extractable Petroleum Hydrocarbons

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total EPH (C9-C40) | 48 | ~~F1 F2~~ J | 2.7 | 2.7 | mg/Kg | ☼ | 04/24/20 20:38 | 04/26/20 17:26 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *66* | | *40 - 140* | *04/24/20 20:38* | *04/26/20 17:26* | *1* |
| *1-Chlorooctadecane* | *71* | | *40 - 140* | *04/24/20 20:38* | *04/26/20 17:26* | *1* |

### Method: 6010D - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Silver | 1.4 | ~~U F1~~ UJ | 2.5 | 1.4 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:08 | 2 |
| Aluminum | 5750 | J | 50.7 | 7.2 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:08 | 2 |
| Arsenic | 2.7 | J | 3.8 | 0.78 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:08 | 2 |
| Barium | 28.2 | J | 50.7 | 4.9 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:08 | 2 |
| Beryllium | 0.25 | J | 0.51 | 0.081 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:08 | 2 |
| Calcium | 2940 | ~~F1~~ J | 1270 | 93.7 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:08 | 2 |
| Cadmium | 0.087 | U | 1.0 | 0.087 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:08 | 2 |
| Cobalt | 5.1 | J | 12.7 | 0.70 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:08 | 2 |
| Chromium | 61.7 | ~~F1~~ J | 2.5 | 1.8 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:08 | 2 |
| Copper | 25.0 | ~~F1~~ J | 6.3 | 1.6 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:08 | 2 |
| Iron | 9920 | J | 38.0 | 26.1 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:08 | 2 |
| Potassium | 350 | J | 1270 | 77.8 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:08 | 2 |
| Magnesium | 1450 | ~~F1~~ J | 1270 | 85.8 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:08 | 2 |
| Manganese | 374 | J | 3.8 | 0.29 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:08 | 2 |
| Sodium | 127 | J | 1270 | 110 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:08 | 2 |
| Nickel | 7.7 | J | 10.1 | 0.67 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:08 | 2 |
| Lead | 19.4 | J | 2.5 | 0.41 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:08 | 2 |
| Antimony | 1.5 | ~~U F1~~ UJ | 5.1 | 1.5 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:08 | 2 |
| Selenium | 5.1 ~~1.1~~ | ~~J B F1~~ UJ | 5.1 | 0.86 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:08 | 2 |
| Thallium | 0.79 | U | 5.1 | 0.79 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:08 | 2 |
| Vanadium | 32.4 | | 12.7 | 1.2 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:08 | 2 |
| Zinc | 28.7 | J | 7.6 | 1.4 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:08 | 2 |

### Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.12 | ~~F1~~ J | 0.021 | 0.0050 | mg/Kg | ☼ | 04/27/20 04:28 | 04/27/20 09:19 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cr (VI) | 0.47 | ~~U F1~~ UJ | 2.7 | 0.47 | mg/Kg | ☼ | 04/27/20 08:07 | 04/27/20 13:53 | 1 |
| ~~Cr (VI)~~ | ~~0.47~~ | ~~U F1~~ | ~~2.7~~ | ~~0.47~~ | ~~mg/Kg~~ | ☼ | ~~04/28/20 08:15~~ | ~~04/28/20 14:00~~ | ~~1~~ |
| Cyanide, Total | 0.17 | U J | 0.32 | 0.17 | mg/Kg | ☼ | 04/28/20 07:18 | 04/28/20 13:28 | 1 |
| TOC Result 1 | 9410 | J | 134 | 109 | mg/Kg | ☼ | | 04/28/20 11:31 | 1 |

## Client Sample ID: SEL-PA-SB01-A-B-0-042320

**Lab Sample ID: 460-207545-15**
**Date Collected: 04/23/20 16:30**
**Matrix: Solid**
**Date Received: 04/23/20 18:06**

### General Chemistry

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| pH | 7.4 | ~~HF~~ | 0.1 | 0.1 | SU | | | 04/26/20 10:59 | 1 |
| ~~Corrosivity~~ | ~~7.4~~ | ~~HF~~ | ~~0.1~~ | ~~0.1~~ | ~~SU~~ | | | ~~04/26/20 10:59~~ | ~~1~~ |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SB01-A-B-0-042320

**Date Collected: 04/23/20 16:30**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-15

**Matrix: Solid**
**Percent Solids: 69.5**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.34 | U | 1.5 | 0.34 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| 1,1,2,2-Tetrachloroethane | 0.31 | U* | 1.5 | 0.31 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.44 | U | 1.5 | 0.44 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| 1,1,2-Trichloroethane | 0.26 | U | 1.5 | 0.26 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| 1,1-Dichloroethane | 0.30 | U | 1.5 | 0.30 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| 1,1-Dichloroethene | 0.33 | U | 1.5 | 0.33 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| 1,2,3-Trichlorobenzene | 0.26 | U | 1.5 | 0.26 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| 1,2,4-Trichlorobenzene | 0.52 | U | 1.5 | 0.52 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| 1,2-Dichloropropane | 0.62 | U | 1.5 | 0.62 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| 1,3-Dichlorobenzene | 0.23 | U | 1.5 | 0.23 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| 1,4-Dichlorobenzene | 0.33 | U | 1.5 | 0.33 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| 1,4-Dioxane | 13 | U | 29 | 13 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| 2-Butanone (MEK) | 4.0 | U | 7.3 | 4.0 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| 2-Hexanone | 2.5 | U | 7.3 | 2.5 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| 4-Methyl-2-pentanone (MIBK) | 2.3 | U | 7.3 | 2.3 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Acetone | 8.4 | U | 8.8 | 8.4 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Benzene | 0.38 | U | 1.5 | 0.38 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Bromoform | 0.62 | U | 1.5 | 0.62 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Bromomethane | 0.69 | U | 1.5 | 0.69 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Carbon disulfide | 0.39 | U | 1.5 | 0.39 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Carbon tetrachloride | 0.57 | U | 1.5 | 0.57 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Chlorobenzene | 0.26 | U | 1.5 | 0.26 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Chlorobromomethane | 0.41 | U | 1.5 | 0.41 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Chlorodibromomethane | 0.28 | U | 1.5 | 0.28 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Chloroethane | 0.76 | U | 1.5 | 0.76 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Chloroform | 0.47 | U | 1.5 | 0.47 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Chloromethane | 0.64 | U | 1.5 | 0.64 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| cis-1,2-Dichloroethene | 0.22 | U | 1.5 | 0.22 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| cis-1,3-Dichloropropene | 0.40 | U* | 1.5 | 0.40 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Cyclohexane | 0.32 | U | 1.5 | 0.32 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Dichlorobromomethane | 0.38 | U | 1.5 | 0.38 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Dichlorodifluoromethane | 0.49 | U | 1.5 | 0.49 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Ethylbenzene | 0.29 | U | 1.5 | 0.29 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Ethylene Dibromide | 0.26 | U | 1.5 | 0.26 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Isopropylbenzene | 0.18 | U | 1.5 | 0.18 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Methyl acetate | 6.3 | U | 7.3 | 6.3 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Methyl tert-butyl ether | 0.18 | U | 1.5 | 0.18 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Methylcyclohexane | 0.73 | U | 1.5 | 0.73 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Methylene Chloride | 0.68 | U | 1.5 | 0.68 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| m-Xylene & p-Xylene | 0.25 | U | 1.5 | 0.25 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| o-Xylene | 0.28 | U | 1.5 | 0.28 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Styrene | 0.41 | U | 1.5 | 0.41 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Tetrachloroethene | 0.21 | U | 1.5 | 0.21 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Toluene | 0.34 | U | 1.5 | 0.34 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| trans-1,2-Dichloroethene | 0.36 | U | 1.5 | 0.36 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| 2-Methyl-2-propanol | 4.8 | U* | 15 | 4.8 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| trans-1,3-Dichloropropene | 0.39 | U* | 1.5 | 0.39 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Trichloroethene | 0.21 | U | 1.5 | 0.21 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| Trichlorofluoromethane | 0.59 | U | 1.5 | 0.59 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |



YY 5/11/2020

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SB01-A-B-0-042320

**Date Collected: 04/23/20 16:30**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-15

**Matrix: Solid**
**Percent Solids: 69.5**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Vinyl chloride | 0.80 | U | 1.5 | 0.80 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| 1,2-Dichloroethane | 0.43 | U | 1.5 | 0.43 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| 1,2-Dichlorobenzene | 0.21 | U | 1.5 | 0.21 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| 1,2-Dibromo-3-Chloropropane | 0.67 | U | 1.5 | 0.67 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |
| 1,1,1,2-Tetrachloroethane | 0.28 | U | 1.5 | 0.28 | ug/Kg | ☼ | 04/24/20 11:25 | 04/26/20 15:29 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Tentatively Identified Compound* | *None* | | *ug/Kg* | ☼ | | | *04/24/20 11:25* | *04/26/20 15:29* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *115* | | *77 - 145* | *04/24/20 11:25* | *04/26/20 15:29* | *1* |
| *4-Bromofluorobenzene* | *93* | | *79 - 125* | *04/24/20 11:25* | *04/26/20 15:29* | *1* |
| *Dibromofluoromethane (Surr)* | *110* | | *48 - 150* | *04/24/20 11:25* | *04/26/20 15:29* | *1* |
| *Toluene-d8 (Surr)* | *108* | | *80 - 120* | *04/24/20 11:25* | *04/26/20 15:29* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1'-Biphenyl | 6.3 | U | 470 | 6.3 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 1,2,4,5-Tetrachlorobenzene | 15 | U | 470 | 15 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 2,2'-oxybis[1-chloropropane] | 8.6 | U | 470 | 8.6 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 2,3,4,6-Tetrachlorophenol | 32 | U | 470 | 32 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 2,4,5-Trichlorophenol | 48 | U | 470 | 48 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 2,4,6-Trichlorophenol | 61 | U | 190 | 61 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 2,4-Dichlorophenol | 31 | U | 190 | 31 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 2,4-Dimethylphenol | 21 | U | 470 | 21 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 2,4-Dinitrophenol | 230 | U | 380 | 230 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 2,4-Dinitrotoluene | 51 | U | 96 | 51 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 2,6-Dinitrotoluene | 34 | U | 96 | 34 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 2-Chloronaphthalene | 22 | U | 470 | 22 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 2-Chlorophenol | 17 | U | 470 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 2-Methylnaphthalene | 13 | U | 470 | 13 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 2-Methylphenol | 18 | U | 470 | 18 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 2-Nitroaniline | 18 | U | 470 | 18 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 2-Nitrophenol | 48 | U | 470 | 48 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 3,3'-Dichlorobenzidine | 72 | U | 190 | 72 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 3-Nitroaniline | 54 | U | 470 | 54 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 4,6-Dinitro-2-methylphenol | 77 | U | 380 | 77 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 4-Bromophenyl phenyl ether | 19 | U | 470 | 19 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 4-Chloro-3-methylphenol | 27 | U | 470 | 27 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 4-Chloroaniline | 33 | U | 470 | 33 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 4-Chlorophenyl phenyl ether | 17 | U | 470 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 4-Methylphenol | 30 | U | 470 | 30 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 4-Nitroaniline | 55 | U | 470 | 55 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| 4-Nitrophenol | 78 | U | 960 | 78 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| Acenaphthene | 35 | U | 470 | 35 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| **Acenaphthylene** | **13** | **J** | 470 | 4.9 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| Acetophenone | 23 | U | 470 | 23 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| Anthracene | 14 | U | 470 | 14 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| Atrazine | 12 | U | 190 | 12 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| Benzaldehyde | 21 | U | 470 | 21 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SB01-A-B-0-042320

**Date Collected: 04/23/20 16:30**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-15

**Matrix: Solid**
**Percent Solids: 69.5**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Benzo[a]anthracene** | **270** | | 47 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| **Benzo[a]pyrene** | **290** | | 47 | 13 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| **Benzo[b]fluoranthene** | **400** | | 47 | 12 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| **Benzo[g,h,i]perylene** | **160** | **J** | 470 | 14 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| **Benzo[k]fluoranthene** | **150** | | 47 | 9.3 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| Bis(2-chloroethoxy)methane | 37 | U | 470 | 37 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| Bis(2-chloroethyl)ether | 17 | U | 47 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| **Bis(2-ethylhexyl) phthalate** | **1600** | | 470 | 25 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| Butyl benzyl phthalate | 22 | U | 470 | 22 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| Caprolactam | 74 | U | 470 | 74 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| Carbazole | 18 | U | 470 | 18 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| **Chrysene** | **290** | **J** | 470 | 8.0 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| **Dibenz(a,h)anthracene** | **50** | | 47 | 21 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| Dibenzofuran | 6.7 | U | 470 | 6.7 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| Diethyl phthalate | 6.9 | U | 470 | 6.9 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| Dimethyl phthalate | 110 | U | 470 | 110 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| Di-n-butyl phthalate | 84 | U | 470 | 84 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| **Di-n-octyl phthalate** | **42** | **J** | 470 | 25 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| **Fluoranthene** | **340** | **J** | 470 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| **Fluorene** | **13** | **J** | 470 | 6.5 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| Hexachlorobenzene | 23 | U | 47 | 23 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| Hexachlorobutadiene | 10 | U | 96 | 10 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| Hexachlorocyclopentadiene | 42 | U | 470 | 42 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| Hexachloroethane | 16 | U | 47 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| **Indeno[1,2,3-cd]pyrene** | **190** | | 47 | 19 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| Isophorone | 140 | U | 190 | 140 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| **Naphthalene** | **18** | **J** | 470 | 8.2 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| Nitrobenzene | 11 | U | 47 | 11 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| N-Nitrosodi-n-propylamine | 35 | U | 47 | 35 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| N-Nitrosodiphenylamine | 9.1 | U | 470 | 9.1 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| Pentachlorophenol | 98 | U | 380 | 98 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| **Phenanthrene** | **170** | **J** | 470 | 8.4 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| Phenol | 17 | U | 470 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |
| **Pyrene** | **470** | | 470 | 12 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 08:56 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4,6-Tribromophenol (Surr)* | *37* | | *10 - 123* | *04/24/20 16:16* | *04/25/20 08:56* | *1* |
| *2-Fluorobiphenyl* | *45* | | *25 - 104* | *04/24/20 16:16* | *04/25/20 08:56* | *1* |
| *2-Fluorophenol (Surr)* | *44* | | *18 - 106* | *04/24/20 16:16* | *04/25/20 08:56* | *1* |
| *Nitrobenzene-d5 (Surr)* | *42* | | *19 - 105* | *04/24/20 16:16* | *04/25/20 08:56* | *1* |
| *Phenol-d5 (Surr)* | *38* | | *26 - 101* | *04/24/20 16:16* | *04/25/20 08:56* | *1* |
| *Terphenyl-d14 (Surr)* | *59* | | *25 - 127* | *04/24/20 16:16* | *04/25/20 08:56* | *1* |

### Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | 1.6 | U | 9.6 | 1.6 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:15 | 1 |
| 4,4'-DDE | 1.1 | U | 9.6 | 1.1 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:15 | 1 |
| 4,4'-DDT | 1.8 | U | 9.6 | 1.8 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:15 | 1 |
| Aldrin | 1.5 | U | 9.6 | 1.5 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:15 | 1 |
| alpha-BHC | 0.98 | U | 2.9 | 0.98 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:15 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SB01-A-B-0-042320

**Date Collected: 04/23/20 16:30**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-15

**Matrix: Solid**
**Percent Solids: 69.5**

### Method: 8081B - Organochlorine Pesticides (GC) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| beta-BHC | 1.1 | U | 2.9 | 1.1 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:15 | 1 |
| Chlordane (technical) | 23 | U | 96 | 23 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:15 | 1 |
| delta-BHC | 0.59 | U | 2.9 | 0.59 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:15 | 1 |
| Dieldrin | 1.3 | U | 2.9 | 1.3 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:15 | 1 |
| Endosulfan I | 1.5 | U | 9.6 | 1.5 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:15 | 1 |
| Endosulfan II | 2.5 | U | 9.6 | 2.5 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:15 | 1 |
| Endosulfan sulfate | 1.2 | U | 9.6 | 1.2 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:15 | 1 |
| Endrin | 1.4 | U | 9.6 | 1.4 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:15 | 1 |
| Endrin aldehyde | 2.3 | U | 9.6 | 2.3 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:15 | 1 |
| Endrin ketone | 1.9 | U | 9.6 | 1.9 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:15 | 1 |
| gamma-BHC (Lindane) | 0.89 | U | 2.9 | 0.89 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:15 | 1 |
| Heptachlor | 1.1 | U | 9.6 | 1.1 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:15 | 1 |
| Heptachlor epoxide | 1.4 | U | 9.6 | 1.4 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:15 | 1 |
| Methoxychlor | 2.2 | U | 9.6 | 2.2 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:15 | 1 |
| Toxaphene | 35 | U | 96 | 35 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:15 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *119* | | *28 - 148* | *04/24/20 20:04* | *04/25/20 19:15* | *1* |
| *DCB Decachlorobiphenyl* | *120* | | *28 - 148* | *04/24/20 20:04* | *04/25/20 19:15* | *1* |
| *Tetrachloro-m-xylene* | *116* | | *34 - 118* | *04/24/20 20:04* | *04/25/20 19:15* | *1* |
| *Tetrachloro-m-xylene* | *118* | | *34 - 118* | *04/24/20 20:04* | *04/25/20 19:15* | *1* |

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 13 | U | 96 | 13 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:21 | 1 |
| Aroclor 1221 | 13 | U | 96 | 13 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:21 | 1 |
| Aroclor 1232 | 13 | U | 96 | 13 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:21 | 1 |
| Aroclor 1242 | 13 | U | 96 | 13 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:21 | 1 |
| **Aroclor 1248** | **640** | | 96 | 13 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:21 | 1 |
| Aroclor 1254 | 13 | U | 96 | 13 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:21 | 1 |
| Aroclor 1260 | 13 | U | 96 | 13 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:21 | 1 |
| Aroclor-1262 | 13 | U | 96 | 13 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:21 | 1 |
| Aroclor 1268 | 13 | U | 96 | 13 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:21 | 1 |
| **Polychlorinated biphenyls, Total** | **640** | | 96 | 13 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:21 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *100* | | *10 - 150* | *04/24/20 20:32* | *04/25/20 19:21* | *1* |
| *DCB Decachlorobiphenyl* | *95* | | *10 - 150* | *04/24/20 20:32* | *04/25/20 19:21* | *1* |
| *Tetrachloro-m-xylene* | *99* | | *58 - 145* | *04/24/20 20:32* | *04/25/20 19:21* | *1* |
| *Tetrachloro-m-xylene* | *95* | | *58 - 145* | *04/24/20 20:32* | *04/25/20 19:21* | *1* |

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4-D | 17 | U | 48 | 17 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 20:59 | 1 |
| Silvex (2,4,5-TP) | 5.0 | U | 48 | 5.0 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 20:59 | 1 |
| 2,4,5-T | 10 | U | 48 | 10 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 20:59 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *103* | | *30 - 150* | *04/25/20 00:04* | *04/25/20 20:59* | *1* |
| *2,4-Dichlorophenylacetic acid* | *104* | | *30 - 150* | *04/25/20 00:04* | *04/25/20 20:59* | *1* |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SB01-A-B-0-042320

**Lab Sample ID: 460-207545-15**

**Date Collected: 04/23/20 16:30**
**Date Received: 04/23/20 18:06**

**Matrix: Solid**
**Percent Solids: 69.5**

### Method: NJDEP EPH - New Jersey Extractable Petroleum Hydrocarbons

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total EPH (C9-C40) | 560 | | 2.9 | 2.9 | mg/Kg | ☼ | 04/24/20 20:38 | 04/26/20 19:19 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *66* | | *40 - 140* | *04/24/20 20:38* | *04/26/20 19:19* | *1* |
| *1-Chlorooctadecane* | *68* | | *40 - 140* | *04/24/20 20:38* | *04/26/20 19:19* | *1* |

### Method: 6010D - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Silver | 1.5 | U | 2.6 | 1.5 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:52 | 2 |
| Aluminum | 9250 | | 51.8 | 7.3 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:52 | 2 |
| Arsenic | 3.6 | J | 3.9 | 0.80 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:52 | 2 |
| Barium | 57.3 | | 51.8 | 5.0 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:52 | 2 |
| Beryllium | 0.083 | J | 0.52 | 0.083 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:52 | 2 |
| Calcium | 5160 | | 1300 | 95.8 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:52 | 2 |
| Cadmium | 0.089 | U | 1.0 | 0.089 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:52 | 2 |
| Cobalt | 7.3 | J | 13.0 | 0.72 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:52 | 2 |
| Chromium | 18.3 | | 2.6 | 1.8 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:52 | 2 |
| Copper | 38.6 | | 6.5 | 1.6 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:52 | 2 |
| Iron | 15500 | | 38.9 | 26.7 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:52 | 2 |
| Potassium | 910 | J | 1300 | 79.6 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:52 | 2 |
| Magnesium | 3580 | | 1300 | 87.7 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:52 | 2 |
| Manganese | 229 | | 3.9 | 0.29 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:52 | 2 |
| Sodium | 237 | J | 1300 | 113 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:52 | 2 |
| Nickel | 16.9 | | 10.4 | 0.68 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:52 | 2 |
| Lead | 59.0 | | 2.6 | 0.42 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:52 | 2 |
| Antimony | 1.5 | UJ | 5.2 | 1.5 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:52 | 2 |
| Selenium | 5.2 ~~0.91~~ | ~~J B~~ U | 5.2 | 0.88 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:52 | 2 |
| Thallium | 0.80 | U | 5.2 | 0.80 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:52 | 2 |
| Vanadium | 26.3 | | 13.0 | 1.2 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:52 | 2 |
| Zinc | 83.4 | | 7.8 | 1.4 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:52 | 2 |

### Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.10 | | 0.023 | 0.0053 | mg/Kg | ☼ | 04/27/20 04:28 | 04/27/20 09:41 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cr (VI) | 0.51 | U | 2.9 | 0.51 | mg/Kg | ☼ | 04/27/20 08:07 | 04/27/20 14:31 | 1 |
| Cyanide, Total | 0.18 | UJ | 0.35 | 0.18 | mg/Kg | ☼ | 04/28/20 09:04 | 04/28/20 13:36 | 1 |
| TOC Result 1 | 26300 | | 144 | 117 | mg/Kg | ☼ | | 04/28/20 13:45 | 1 |

## Client Sample ID: SEL-PA-SB02-A-B-1-042320

**Lab Sample ID: 460-207545-16**

**Date Collected: 04/23/20 16:30**
**Date Received: 04/23/20 18:06**

**Matrix: Solid**

### General Chemistry

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| pH | 7.4 | ~~HF~~ | 0.1 | 0.1 | SU | | | 04/26/20 11:00 | 1 |
| ~~Corrosivity~~ | ~~7.4~~ | ~~HF~~ | ~~0.1~~ | ~~0.1~~ | ~~SU~~ | | | ~~04/26/20 11:00~~ | ~~1~~ |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SB02-A-B-1-042320

**Date Collected: 04/23/20 16:30**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-16

**Matrix: Solid**
**Percent Solids: 70.6**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.34 | U | 1.4 | 0.34 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| 1,1,2,2-Tetrachloroethane | 0.31 | U* | 1.4 | 0.31 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.44 | U | 1.4 | 0.44 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| 1,1,2-Trichloroethane | 0.26 | U | 1.4 | 0.26 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| 1,1-Dichloroethane | 0.30 | U | 1.4 | 0.30 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| 1,1-Dichloroethene | 0.33 | U | 1.4 | 0.33 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| 1,2,3-Trichlorobenzene | 0.26 | U | 1.4 | 0.26 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| 1,2,4-Trichlorobenzene | 0.52 | U | 1.4 | 0.52 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| 1,2-Dichloropropane | 0.61 | U | 1.4 | 0.61 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| 1,3-Dichlorobenzene | 0.23 | U | 1.4 | 0.23 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| 1,4-Dichlorobenzene | 0.33 | U | 1.4 | 0.33 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| 1,4-Dioxane | 13 | U | 29 | 13 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| 2-Butanone (MEK) | 3.9 | U | 7.2 | 3.9 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| 2-Hexanone | 2.5 | U | 7.2 | 2.5 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| 4-Methyl-2-pentanone (MIBK) | 2.3 | U | 7.2 | 2.3 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Acetone | 8.3 | U | 8.7 | 8.3 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Benzene | 0.37 | U | 1.4 | 0.37 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Bromoform | 0.62 | U | 1.4 | 0.62 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Bromomethane | 0.69 | U | 1.4 | 0.69 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Carbon disulfide | 0.39 | U | 1.4 | 0.39 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Carbon tetrachloride | 0.56 | U | 1.4 | 0.56 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Chlorobenzene | 0.26 | U | 1.4 | 0.26 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Chlorobromomethane | 0.41 | U | 1.4 | 0.41 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Chlorodibromomethane | 0.28 | U | 1.4 | 0.28 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Chloroethane | 0.76 | U | 1.4 | 0.76 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Chloroform | 0.46 | U | 1.4 | 0.46 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Chloromethane | 0.63 | U | 1.4 | 0.63 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| cis-1,2-Dichloroethene | 0.22 | U | 1.4 | 0.22 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| cis-1,3-Dichloropropene | 0.40 | U* | 1.4 | 0.40 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Cyclohexane | 0.32 | U | 1.4 | 0.32 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Dichlorobromomethane | 0.37 | U | 1.4 | 0.37 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Dichlorodifluoromethane | 0.49 | U | 1.4 | 0.49 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Ethylbenzene | 0.29 | U | 1.4 | 0.29 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Ethylene Dibromide | 0.26 | U | 1.4 | 0.26 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Isopropylbenzene | 0.18 | U | 1.4 | 0.18 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Methyl acetate | 6.2 | U | 7.2 | 6.2 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Methyl tert-butyl ether | 0.18 | U | 1.4 | 0.18 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Methylcyclohexane | 0.72 | U | 1.4 | 0.72 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Methylene Chloride | 0.67 | U | 1.4 | 0.67 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| m-Xylene & p-Xylene | 0.25 | U | 1.4 | 0.25 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| o-Xylene | 0.28 | U | 1.4 | 0.28 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Styrene | 0.40 | U | 1.4 | 0.40 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Tetrachloroethene | 0.21 | U | 1.4 | 0.21 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Toluene | 0.34 | U | 1.4 | 0.34 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| trans-1,2-Dichloroethene | 0.36 | U | 1.4 | 0.36 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| 2-Methyl-2-propanol | 4.8 | U* | 14 | 4.8 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| trans-1,3-Dichloropropene | 0.39 | U* | 1.4 | 0.39 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Trichloroethene | 0.21 | U | 1.4 | 0.21 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| Trichlorofluoromethane | 0.59 | U | 1.4 | 0.59 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SB02-A-B-1-042320

**Lab Sample ID: 460-207545-16**

**Date Collected: 04/23/20 16:30**
**Date Received: 04/23/20 18:06**

**Matrix: Solid**
**Percent Solids: 70.6**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Vinyl chloride | 0.79 | U | 1.4 | 0.79 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| 1,2-Dichloroethane | 0.43 | U | 1.4 | 0.43 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| 1,2-Dichlorobenzene | 0.21 | U | 1.4 | 0.21 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| 1,2-Dibromo-3-Chloropropane | 0.67 | U | 1.4 | 0.67 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |
| 1,1,1,2-Tetrachloroethane | 0.28 | U | 1.4 | 0.28 | ug/Kg | ☼ | 04/24/20 11:26 | 04/26/20 15:55 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Tentatively Identified Compound* | *None* | | *ug/Kg* | ☼ | | | *04/24/20 11:26* | *04/26/20 15:55* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *118* | | *77 - 145* | *04/24/20 11:26* | *04/26/20 15:55* | *1* |
| *4-Bromofluorobenzene* | *94* | | *79 - 125* | *04/24/20 11:26* | *04/26/20 15:55* | *1* |
| *Dibromofluoromethane (Surr)* | *110* | | *48 - 150* | *04/24/20 11:26* | *04/26/20 15:55* | *1* |
| *Toluene-d8 (Surr)* | *109* | | *80 - 120* | *04/24/20 11:26* | *04/26/20 15:55* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1'-Biphenyl | 6.2 | U | 470 | 6.2 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 1,2,4,5-Tetrachlorobenzene | 15 | U | 470 | 15 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 2,2'-oxybis[1-chloropropane] | 8.5 | U | 470 | 8.5 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 2,3,4,6-Tetrachlorophenol | 32 | U | 470 | 32 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 2,4,5-Trichlorophenol | 48 | U | 470 | 48 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 2,4,6-Trichlorophenol | 60 | U | 190 | 60 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 2,4-Dichlorophenol | 30 | U | 190 | 30 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 2,4-Dimethylphenol | 21 | U | 470 | 21 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 2,4-Dinitrophenol | 230 | U | 380 | 230 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 2,4-Dinitrotoluene | 50 | U | 95 | 50 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 2,6-Dinitrotoluene | 34 | U | 95 | 34 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 2-Chloronaphthalene | 22 | U | 470 | 22 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 2-Chlorophenol | 17 | U | 470 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 2-Methylnaphthalene | 13 | U | 470 | 13 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 2-Methylphenol | 17 | U | 470 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 2-Nitroaniline | 18 | U | 470 | 18 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 2-Nitrophenol | 47 | U | 470 | 47 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 3,3'-Dichlorobenzidine | 71 | U | 190 | 71 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 3-Nitroaniline | 53 | U | 470 | 53 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 4,6-Dinitro-2-methylphenol | 76 | U | 380 | 76 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 4-Bromophenyl phenyl ether | 19 | U | 470 | 19 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 4-Chloro-3-methylphenol | 26 | U | 470 | 26 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 4-Chloroaniline | 33 | U | 470 | 33 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 4-Chlorophenyl phenyl ether | 17 | U | 470 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 4-Methylphenol | 29 | U | 470 | 29 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 4-Nitroaniline | 54 | U | 470 | 54 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| 4-Nitrophenol | 76 | U | 950 | 76 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Acenaphthene | 34 | U | 470 | 34 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| **Acenaphthylene** | **13** | **J** | 470 | 4.8 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Acetophenone | 23 | U | 470 | 23 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| **Anthracene** | **80** | **J** | 470 | 14 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Atrazine | 12 | U | 190 | 12 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| **Benzaldehyde** | **21** | **J** | 470 | 20 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SB02-A-B-1-042320

**Lab Sample ID: 460-207545-16**

**Date Collected: 04/23/20 16:30**
**Date Received: 04/23/20 18:06**

**Matrix: Solid**
**Percent Solids: 70.6**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzo[a]anthracene | 320 | J | 47 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Benzo[a]pyrene | 340 | | 47 | 12 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Benzo[b]fluoranthene | 460 | | 47 | 12 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Benzo[g,h,i]perylene | 180 | J | 470 | 14 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Benzo[k]fluoranthene | 180 | | 47 | 9.2 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Bis(2-chloroethoxy)methane | 36 | U | 470 | 36 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Bis(2-chloroethyl)ether | 16 | U | 47 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Bis(2-ethylhexyl) phthalate | 2200 | J | 470 | 25 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Butyl benzyl phthalate | 27 | J | 470 | 22 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Caprolactam | 73 | U | 470 | 73 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Carbazole | 24 | J | 470 | 18 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Chrysene | 330 | J | 470 | 7.9 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Dibenz(a,h)anthracene | 55 | | 47 | 20 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Dibenzofuran | 14 | J | 470 | 6.6 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Diethyl phthalate | 6.8 | U | 470 | 6.8 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Dimethyl phthalate | 110 | U | 470 | 110 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Di-n-butyl phthalate | 83 | U | 470 | 83 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Di-n-octyl phthalate | 25 | U | 470 | 25 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Fluoranthene | 480 | J | 470 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Fluorene | 29 | J | 470 | 6.4 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Hexachlorobenzene | 22 | U | 47 | 22 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Hexachlorobutadiene | 10 | U | 95 | 10 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Hexachlorocyclopentadiene | 41 | U | 470 | 41 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Hexachloroethane | 16 | U | 47 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Indeno[1,2,3-cd]pyrene | 190 | J | 47 | 18 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Isophorone | 140 | U | 190 | 140 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Naphthalene | 21 | J | 470 | 8.1 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Nitrobenzene | 11 | U | 47 | 11 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| N-Nitrosodi-n-propylamine | 34 | U | 47 | 34 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| N-Nitrosodiphenylamine | 9.0 | U | 470 | 9.0 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Pentachlorophenol | 96 | U | 380 | 96 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Phenanthrene | 290 | J | 470 | 8.2 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Phenol | 17 | U | 470 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |
| Pyrene | 620 | | 470 | 12 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:42 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4,6-Tribromophenol (Surr)* | *42* | | *10 - 123* | *04/24/20 16:16* | *04/25/20 09:42* | *1* |
| *2-Fluorobiphenyl* | *51* | | *25 - 104* | *04/24/20 16:16* | *04/25/20 09:42* | *1* |
| *2-Fluorophenol (Surr)* | *47* | | *18 - 106* | *04/24/20 16:16* | *04/25/20 09:42* | *1* |
| *Nitrobenzene-d5 (Surr)* | *46* | | *19 - 105* | *04/24/20 16:16* | *04/25/20 09:42* | *1* |
| *Phenol-d5 (Surr)* | *41* | | *26 - 101* | *04/24/20 16:16* | *04/25/20 09:42* | *1* |
| *Terphenyl-d14 (Surr)* | *62* | | *25 - 127* | *04/24/20 16:16* | *04/25/20 09:42* | *1* |

### Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | 1.6 | U | 9.5 | 1.6 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:27 | 1 |
| 4,4'-DDE | 1.1 | U | 9.5 | 1.1 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:27 | 1 |
| 4,4'-DDT | 1.7 | U | 9.5 | 1.7 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:27 | 1 |
| Aldrin | 1.4 | U | 9.5 | 1.4 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:27 | 1 |
| alpha-BHC | 0.96 | U | 2.8 | 0.96 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:27 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SB02-A-B-1-042320

**Date Collected: 04/23/20 16:30**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-16

**Matrix: Solid**
**Percent Solids: 70.6**

### Method: 8081B - Organochlorine Pesticides (GC) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| beta-BHC | 1.1 | U | 2.8 | 1.1 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:27 | 1 |
| Chlordane (technical) | 23 | U | 95 | 23 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:27 | 1 |
| delta-BHC | 0.58 | U | 2.8 | 0.58 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:27 | 1 |
| Dieldrin | 1.2 | U | 2.8 | 1.2 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:27 | 1 |
| Endosulfan I | 1.4 | U | 9.5 | 1.4 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:27 | 1 |
| Endosulfan II | 2.4 | U | 9.5 | 2.4 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:27 | 1 |
| Endosulfan sulfate | 1.2 | U | 9.5 | 1.2 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:27 | 1 |
| Endrin | 1.4 | U | 9.5 | 1.4 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:27 | 1 |
| Endrin aldehyde | 2.2 | U | 9.5 | 2.2 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:27 | 1 |
| Endrin ketone | 1.8 | U | 9.5 | 1.8 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:27 | 1 |
| gamma-BHC (Lindane) | 0.88 | U | 2.8 | 0.88 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:27 | 1 |
| Heptachlor | 1.1 | U | 9.5 | 1.1 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:27 | 1 |
| Heptachlor epoxide | 1.4 | U | 9.5 | 1.4 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:27 | 1 |
| Methoxychlor | 2.2 | U | 9.5 | 2.2 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:27 | 1 |
| Toxaphene | 34 | U | 95 | 34 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:27 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *112* | | *28 - 148* | *04/24/20 20:04* | *04/25/20 19:27* | *1* |
| *DCB Decachlorobiphenyl* | *109* | | *28 - 148* | *04/24/20 20:04* | *04/25/20 19:27* | *1* |
| *Tetrachloro-m-xylene* | *108* | | *34 - 118* | *04/24/20 20:04* | *04/25/20 19:27* | *1* |
| *Tetrachloro-m-xylene* | *108* | | *34 - 118* | *04/24/20 20:04* | *04/25/20 19:27* | *1* |

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 13 | U | 95 | 13 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:38 | 1 |
| Aroclor 1221 | 13 | U | 95 | 13 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:38 | 1 |
| Aroclor 1232 | 13 | U | 95 | 13 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:38 | 1 |
| Aroclor 1242 | 13 | U | 95 | 13 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:38 | 1 |
| **Aroclor 1248** | **680** | | 95 | 13 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:38 | 1 |
| Aroclor 1254 | 13 | U | 95 | 13 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:38 | 1 |
| Aroclor 1260 | 13 | U | 95 | 13 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:38 | 1 |
| Aroclor-1262 | 13 | U | 95 | 13 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:38 | 1 |
| Aroclor 1268 | 13 | U | 95 | 13 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:38 | 1 |
| **Polychlorinated biphenyls, Total** | **680** | | 95 | 13 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:38 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *96* | | *10 - 150* | *04/24/20 20:32* | *04/25/20 19:38* | *1* |
| *DCB Decachlorobiphenyl* | *94* | | *10 - 150* | *04/24/20 20:32* | *04/25/20 19:38* | *1* |
| *Tetrachloro-m-xylene* | *97* | | *58 - 145* | *04/24/20 20:32* | *04/25/20 19:38* | *1* |
| *Tetrachloro-m-xylene* | *93* | | *58 - 145* | *04/24/20 20:32* | *04/25/20 19:38* | *1* |

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4-D | 17 | U | 47 | 17 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 21:13 | 1 |
| Silvex (2,4,5-TP) | 4.9 | U | 47 | 4.9 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 21:13 | 1 |
| 2,4,5-T | 10 | U | 47 | 10 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 21:13 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *109* | | *30 - 150* | *04/25/20 00:04* | *04/25/20 21:13* | *1* |
| *2,4-Dichlorophenylacetic acid* | *111* | | *30 - 150* | *04/25/20 00:04* | *04/25/20 21:13* | *1* |



yy 5/14/2020

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SB02-A-B-1-042320

**Lab Sample ID: 460-207545-16**
**Date Collected: 04/23/20 16:30**
**Matrix: Solid**
**Date Received: 04/23/20 18:06**
**Percent Solids: 70.6**

### Method: NJDEP EPH - New Jersey Extractable Petroleum Hydrocarbons

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total EPH (C9-C40) | 300 | J | 2.8 | 2.8 | mg/Kg | ☼ | 04/24/20 20:38 | 04/26/20 19:33 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *54* | | *40 - 140* | *04/24/20 20:38* | *04/26/20 19:33* | *1* |
| *1-Chlorooctadecane* | *56* | | *40 - 140* | *04/24/20 20:38* | *04/26/20 19:33* | *1* |

### Method: 6010D - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Silver | 1.5 | U | 2.7 | 1.5 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:56 | 2 |
| Aluminum | 10900 | J | 53.4 | 7.6 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:56 | 2 |
| Arsenic | 3.5 | J | 4.0 | 0.82 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:56 | 2 |
| Barium | 52.0 | J | 53.4 | 5.2 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:56 | 2 |
| Beryllium | 0.085 | U | 0.53 | 0.085 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:56 | 2 |
| Calcium | 7510 | J | 1340 | 98.7 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:56 | 2 |
| Cadmium | 0.092 | U | 1.1 | 0.092 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:56 | 2 |
| Cobalt | 10.5 | J | 13.4 | 0.74 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:56 | 2 |
| Chromium | 20.3 | J | 2.7 | 1.9 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:56 | 2 |
| Copper | 50.1 | J | 6.7 | 1.7 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:56 | 2 |
| Iron | 19900 | J | 40.1 | 27.5 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:56 | 2 |
| Potassium | 913 | J | 1340 | 82.0 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:56 | 2 |
| Magnesium | 7450 | J | 1340 | 90.4 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:56 | 2 |
| Manganese | 371 | | 4.0 | 0.30 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:56 | 2 |
| Sodium | 433 | J | 1340 | 116 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:56 | 2 |
| Nickel | 20.5 | | 10.7 | 0.70 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:56 | 2 |
| Lead | 45.4 | J | 2.7 | 0.43 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:56 | 2 |
| Antimony | 1.5 | U J | 5.3 | 1.5 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:56 | 2 |
| Selenium | 0.91 | U | 5.3 | 0.91 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:56 | 2 |
| Thallium | 0.83 | U | 5.3 | 0.83 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:56 | 2 |
| Vanadium | 36.0 | | 13.4 | 1.2 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:56 | 2 |
| Zinc | 104 | J | 8.0 | 1.5 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 15:56 | 2 |

### Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.091 | | 0.021 | 0.0050 | mg/Kg | ☼ | 04/27/20 04:28 | 04/27/20 09:43 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cr (VI) | 0.49 | U | 2.8 | 0.49 | mg/Kg | ☼ | 04/27/20 08:07 | 04/27/20 14:31 | 1 |
| Cyanide, Total | 0.17 | U | 0.34 | 0.17 | mg/Kg | ☼ | 04/28/20 09:04 | 04/28/20 13:39 | 1 |
| TOC Result 1 | 22500 | J | 142 | 115 | mg/Kg | ☼ | | 04/28/20 13:53 | 1 |

## Client Sample ID: SEL-PA-SBWe-A-B-0-042320

**Lab Sample ID: 460-207545-17**
**Date Collected: 04/23/20 16:40**
**Matrix: Solid**
**Date Received: 04/23/20 18:06**

### General Chemistry

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| pH | 7.5 | ~~HF~~ | 0.1 | 0.1 | SU | | | 04/26/20 11:01 | 1 |
| ~~Corrosivity~~ | ~~7.5~~ | ~~HF~~ | ~~0.1~~ | ~~0.1~~ | ~~SU~~ | | | ~~04/26/20 11:01~~ | ~~1~~ |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SBWe-A-B-0-042320

**Date Collected: 04/23/20 16:40**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-17

**Matrix: Solid**
**Percent Solids: 75.4**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.27 | U | 1.2 | 0.27 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| 1,1,2,2-Tetrachloroethane | 0.25 | U | 1.2 | 0.25 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.35 | U | 1.2 | 0.35 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| 1,1,2-Trichloroethane | 0.21 | U | 1.2 | 0.21 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| 1,1-Dichloroethane | 0.24 | U | 1.2 | 0.24 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| 1,1-Dichloroethene | 0.26 | U | 1.2 | 0.26 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| 1,2,3-Trichlorobenzene | 0.21 | U | 1.2 | 0.21 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| 1,2,4-Trichlorobenzene | 0.42 | U | 1.2 | 0.42 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| 1,2-Dichloropropane | 0.49 | U | 1.2 | 0.49 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| 1,3-Dichlorobenzene | 0.18 | U | 1.2 | 0.18 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| 1,4-Dichlorobenzene | 0.26 | U | 1.2 | 0.26 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| 1,4-Dioxane | 11 | U | 23 | 11 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| 2-Butanone (MEK) | 3.1 | U | 5.8 | 3.1 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| 2-Hexanone | 2.0 | U | 5.8 | 2.0 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| 4-Methyl-2-pentanone (MIBK) | 1.8 | U | 5.8 | 1.8 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Acetone | 6.6 | U | 7.0 | 6.6 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Benzene | 0.30 | U | 1.2 | 0.30 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Bromoform | 0.49 | U | 1.2 | 0.49 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Bromomethane | 0.55 | U | 1.2 | 0.55 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Carbon disulfide | 0.31 | U | 1.2 | 0.31 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Carbon tetrachloride | 0.45 | U | 1.2 | 0.45 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Chlorobenzene | 0.21 | U | 1.2 | 0.21 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Chlorobromomethane | 0.33 | U | 1.2 | 0.33 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Chlorodibromomethane | 0.23 | U | 1.2 | 0.23 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Chloroethane | 0.61 | U | 1.2 | 0.61 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Chloroform | 0.37 | U | 1.2 | 0.37 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Chloromethane | 0.51 | U | 1.2 | 0.51 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| cis-1,2-Dichloroethene | 0.18 | U | 1.2 | 0.18 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| cis-1,3-Dichloropropene | 0.32 | U | 1.2 | 0.32 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Cyclohexane | 0.26 | U | 1.2 | 0.26 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Dichlorobromomethane | 0.30 | U | 1.2 | 0.30 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Dichlorodifluoromethane | 0.39 | U | 1.2 | 0.39 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Ethylbenzene | 0.23 | U | 1.2 | 0.23 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Ethylene Dibromide | 0.21 | U | 1.2 | 0.21 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Isopropylbenzene | 0.15 | U | 1.2 | 0.15 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Methyl acetate | 5.0 | U | 5.8 | 5.0 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Methyl tert-butyl ether | 0.15 | U | 1.2 | 0.15 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Methylcyclohexane | 0.58 | U | 1.2 | 0.58 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Methylene Chloride | 0.54 | U | 1.2 | 0.54 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| m-Xylene & p-Xylene | 0.20 | U | 1.2 | 0.20 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| o-Xylene | 0.23 | U | 1.2 | 0.23 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| **Styrene** | **0.34** | **J** | 1.2 | 0.32 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Tetrachloroethene | 0.17 | U | 1.2 | 0.17 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Toluene | 0.27 | U | 1.2 | 0.27 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| trans-1,2-Dichloroethene | 0.29 | U | 1.2 | 0.29 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| 2-Methyl-2-propanol | 3.8 | U | 12 | 3.8 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| trans-1,3-Dichloropropene | 0.31 | U | 1.2 | 0.31 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Trichloroethene | 0.17 | U | 1.2 | 0.17 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| Trichlorofluoromethane | 0.47 | U | 1.2 | 0.47 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |



YY 5/11/2020

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SBWe-A-B-0-042320

**Lab Sample ID: 460-207545-17**

**Date Collected: 04/23/20 16:40**
**Date Received: 04/23/20 18:06**

**Matrix: Solid**
**Percent Solids: 75.4**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Vinyl chloride | 0.63 | U | 1.2 | 0.63 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| 1,2-Dichloroethane | 0.34 | U | 1.2 | 0.34 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| 1,2-Dichlorobenzene | 0.17 | U | 1.2 | 0.17 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| 1,2-Dibromo-3-Chloropropane | 0.53 | U | 1.2 | 0.53 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |
| 1,1,1,2-Tetrachloroethane | 0.22 | U | 1.2 | 0.22 | ug/Kg | ☼ | 04/24/20 11:27 | 04/26/20 16:21 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *1R-.alpha.-Pinene* | *120* | *J N* | *ug/Kg* | ☼ | *9.89* | *7785-70-8* | *04/24/20 11:27* | *04/26/20 16:21* | *1* |
| *.beta.-Pinene* | *8.4* | *J N* | *ug/Kg* | ☼ | *10.60* | *127-91-3* | *04/24/20 11:27* | *04/26/20 16:21* | *1* |
| *D-Limonene* | *7.9* | *J N* | *ug/Kg* | ☼ | *11.17* | *5989-27-5* | *04/24/20 11:27* | *04/26/20 16:21* | *1* |
| *3a,7-Methano-3aH-cyclopentacycloo ctene, 1,4,5,6,7,8,9,9a-oct* | *20* | *J N* | *ug/Kg* | ☼ | *14.48* | *469-92-1* | *04/24/20 11:27* | *04/26/20 16:21* | *1* |
| *Unknown* | *5.9* | *J* | *ug/Kg* | ☼ | *14.81* | | *04/24/20 11:27* | *04/26/20 16:21* | *1* |
| *Bicyclo[7.2.0]undec-4-ene, 4,11,11-trimethyl-8-methylene-* | *8.9* | *J N* | *ug/Kg* | ☼ | *14.87* | *13877-93-5* | *04/24/20 11:27* | *04/26/20 16:21* | *1* |
| *Unknown* | *29* | *J* | *ug/Kg* | ☼ | *15.02* | | *04/24/20 11:27* | *04/26/20 16:21* | *1* |
| *Bicyclo[5.2.0]nonane, 2-methylene-4,8,8-trimethyl-4-vinyl-* | *67* | *J N* | *ug/Kg* | ☼ | *15.08* | *242794-76-9* | *04/24/20 11:27* | *04/26/20 16:21* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *114* | | *77 - 145* | *04/24/20 11:27* | *04/26/20 16:21* | *1* |
| *4-Bromofluorobenzene* | *94* | | *79 - 125* | *04/24/20 11:27* | *04/26/20 16:21* | *1* |
| *Dibromofluoromethane (Surr)* | *109* | | *48 - 150* | *04/24/20 11:27* | *04/26/20 16:21* | *1* |
| *Toluene-d8 (Surr)* | *106* | | *80 - 120* | *04/24/20 11:27* | *04/26/20 16:21* | *1* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1'-Biphenyl | 5.8 | U | 440 | 5.8 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| 1,2,4,5-Tetrachlorobenzene | 14 | U | 440 | 14 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| 2,2'-oxybis[1-chloropropane] | 7.9 | U | 440 | 7.9 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| 2,3,4,6-Tetrachlorophenol | 30 | U | 440 | 30 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| 2,4,5-Trichlorophenol | 45 | U | 440 | 45 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| 2,4,6-Trichlorophenol | 56 | U | 180 | 56 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| 2,4-Dichlorophenol | 28 | U | 180 | 28 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| 2,4-Dimethylphenol | 19 | U | 440 | 19 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| 2,4-Dinitrophenol | 220 | U | 350 | 220 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| 2,4-Dinitrotoluene | 47 | U | 89 | 47 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| 2,6-Dinitrotoluene | 32 | U | 89 | 32 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| 2-Chloronaphthalene | 20 | U | 440 | 20 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| 2-Chlorophenol | 16 | U | 440 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| 2-Methylnaphthalene | 12 | U | 440 | 12 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| 2-Methylphenol | 16 | U | 440 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| 2-Nitroaniline | 16 | U | 440 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| 2-Nitrophenol | 44 | U | 440 | 44 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| 3,3'-Dichlorobenzidine | 66 | U | 180 | 66 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| 3-Nitroaniline | 49 | U | 440 | 49 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| 4,6-Dinitro-2-methylphenol | 71 | U | 350 | 71 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| 4-Bromophenyl phenyl ether | 17 | U | 440 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| 4-Chloro-3-methylphenol | 25 | U | 440 | 25 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| 4-Chloroaniline | 31 | U | 440 | 31 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| 4-Chlorophenyl phenyl ether | 15 | U | 440 | 15 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SBWe-A-B-0-042320

**Date Collected: 04/23/20 16:40**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-17

**Matrix: Solid**
**Percent Solids: 75.4**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4-Methylphenol | 27 | U | 440 | 27 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| 4-Nitroaniline | 50 | U | 440 | 50 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| 4-Nitrophenol | 72 | U | 890 | 72 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| Acenaphthene | 32 | U | 440 | 32 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| Acenaphthylene | 4.5 | U | 440 | 4.5 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| Acetophenone | 22 | U | 440 | 22 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| Anthracene | 13 | U | 440 | 13 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| Atrazine | 11 | U | 180 | 11 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| Benzaldehyde | 19 | U | 440 | 19 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| **Benzo[a]anthracene** | **130** | | 44 | 15 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| **Benzo[a]pyrene** | **120** | | 44 | 12 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| **Benzo[b]fluoranthene** | **150** | | 44 | 11 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| **Benzo[g,h,i]perylene** | **66** | **J** | 440 | 13 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| **Benzo[k]fluoranthene** | **67** | | 44 | 8.6 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| Bis(2-chloroethoxy)methane | 34 | U | 440 | 34 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| Bis(2-chloroethyl)ether | 15 | U | 44 | 15 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| **Bis(2-ethylhexyl) phthalate** | **8100** | | 440 | 23 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| **Butyl benzyl phthalate** | **54** | **J** | 440 | 21 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| Caprolactam | 68 | U | 440 | 68 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| Carbazole | 17 | U | 440 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| **Chrysene** | **120** | **J** | 440 | 7.4 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| **Dibenz(a,h)anthracene** | **29** | **J** | 44 | 19 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| Dibenzofuran | 6.2 | U | 440 | 6.2 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| **Diethyl phthalate** | **37** | **J** | 440 | 6.4 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| Dimethyl phthalate | 100 | U | 440 | 100 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| Di-n-butyl phthalate | 77 | U | 440 | 77 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| Di-n-octyl phthalate | 23 | U | 440 | 23 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| **Fluoranthene** | **150** | **J** | 440 | 15 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| **Fluorene** | **10** | **J** | 440 | 6.0 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| Hexachlorobenzene | 21 | U | 44 | 21 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| Hexachlorobutadiene | 9.3 | U | 89 | 9.3 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| Hexachlorocyclopentadiene | 38 | U | 440 | 38 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| Hexachloroethane | 15 | U | 44 | 15 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| **Indeno[1,2,3-cd]pyrene** | **76** | | 44 | 17 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| Isophorone | 130 | U | 180 | 130 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| **Naphthalene** | **220** | **J** | 440 | 7.6 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| Nitrobenzene | 11 | U | 44 | 11 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| N-Nitrosodi-n-propylamine | 32 | U | 44 | 32 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| N-Nitrosodiphenylamine | 8.4 | U | 440 | 8.4 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| Pentachlorophenol | 90 | U | 350 | 90 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| **Phenanthrene** | **86** | **J** | 440 | 7.7 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| Phenol | 16 | U | 440 | 16 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |
| **Pyrene** | **240** | **J** | 440 | 11 | ug/Kg | ☼ | 04/24/20 16:16 | 04/25/20 09:19 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4,6-Tribromophenol (Surr)* | *39* | | *10 - 123* | *04/24/20 16:16* | *04/25/20 09:19* | *1* |
| *2-Fluorobiphenyl* | *43* | | *25 - 104* | *04/24/20 16:16* | *04/25/20 09:19* | *1* |
| *2-Fluorophenol (Surr)* | *58* | | *18 - 106* | *04/24/20 16:16* | *04/25/20 09:19* | *1* |
| *Nitrobenzene-d5 (Surr)* | *47* | | *19 - 105* | *04/24/20 16:16* | *04/25/20 09:19* | *1* |
| *Phenol-d5 (Surr)* | *52* | | *26 - 101* | *04/24/20 16:16* | *04/25/20 09:19* | *1* |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SBWe-A-B-0-042320

**Date Collected: 04/23/20 16:40**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-17

**Matrix: Solid**
**Percent Solids: 75.4**

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

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *Terphenyl-d14 (Surr)* | *54* | | *25 - 127* | *04/24/20 16:16* | *04/25/20 09:19* | *1* |

### Method: 8081B - Organochlorine Pesticides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4,4'-DDD | 1.5 | U | 8.9 | 1.5 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:40 | 1 |
| 4,4'-DDE | 1.0 | U | 8.9 | 1.0 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:40 | 1 |
| 4,4'-DDT | 1.6 | U | 8.9 | 1.6 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:40 | 1 |
| Aldrin | 1.3 | U | 8.9 | 1.3 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:40 | 1 |
| alpha-BHC | 0.90 | U | 2.7 | 0.90 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:40 | 1 |
| beta-BHC | 0.99 | U | 2.7 | 0.99 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:40 | 1 |
| Chlordane (technical) | 21 | U | 89 | 21 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:40 | 1 |
| delta-BHC | 0.54 | U | 2.7 | 0.54 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:40 | 1 |
| Dieldrin | 1.2 | U | 2.7 | 1.2 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:40 | 1 |
| Endosulfan I | 1.4 | U | 8.9 | 1.4 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:40 | 1 |
| Endosulfan II | 2.3 | U | 8.9 | 2.3 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:40 | 1 |
| Endosulfan sulfate | 1.1 | U | 8.9 | 1.1 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:40 | 1 |
| Endrin | 1.3 | U | 8.9 | 1.3 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:40 | 1 |
| Endrin aldehyde | 2.1 | U | 8.9 | 2.1 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:40 | 1 |
| Endrin ketone | 1.7 | U | 8.9 | 1.7 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:40 | 1 |
| gamma-BHC (Lindane) | 0.82 | U | 2.7 | 0.82 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:40 | 1 |
| Heptachlor | 1.0 | U | 8.9 | 1.0 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:40 | 1 |
| Heptachlor epoxide | 1.3 | U | 8.9 | 1.3 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:40 | 1 |
| Methoxychlor | 2.0 | U | 8.9 | 2.0 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:40 | 1 |
| Toxaphene | 32 | U | 89 | 32 | ug/Kg | ☼ | 04/24/20 20:04 | 04/25/20 19:40 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *101* | | *28 - 148* | *04/24/20 20:04* | *04/25/20 19:40* | *1* |
| *DCB Decachlorobiphenyl* | *99* | | *28 - 148* | *04/24/20 20:04* | *04/25/20 19:40* | *1* |
| *Tetrachloro-m-xylene* | *96* | | *34 - 118* | *04/24/20 20:04* | *04/25/20 19:40* | *1* |
| *Tetrachloro-m-xylene* | *100* | | *34 - 118* | *04/24/20 20:04* | *04/25/20 19:40* | *1* |

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 12 | U | 89 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:54 | 1 |
| Aroclor 1221 | 12 | U | 89 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:54 | 1 |
| Aroclor 1232 | 12 | U | 89 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:54 | 1 |
| Aroclor 1242 | 12 | U | 89 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:54 | 1 |
| **Aroclor 1248** | **1200** | | 89 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:54 | 1 |
| Aroclor 1254 | 12 | U | 89 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:54 | 1 |
| Aroclor 1260 | 12 | U | 89 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:54 | 1 |
| Aroclor-1262 | 12 | U | 89 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:54 | 1 |
| Aroclor 1268 | 12 | U | 89 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:54 | 1 |
| **Polychlorinated biphenyls, Total** | **1200** | | 89 | 12 | ug/Kg | ☼ | 04/24/20 20:32 | 04/25/20 19:54 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *89* | | *10 - 150* | *04/24/20 20:32* | *04/25/20 19:54* | *1* |
| *DCB Decachlorobiphenyl* | *91* | | *10 - 150* | *04/24/20 20:32* | *04/25/20 19:54* | *1* |
| *Tetrachloro-m-xylene* | *91* | | *58 - 145* | *04/24/20 20:32* | *04/25/20 19:54* | *1* |
| *Tetrachloro-m-xylene* | *88* | | *58 - 145* | *04/24/20 20:32* | *04/25/20 19:54* | *1* |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-SBWe-A-B-0-042320

**Date Collected: 04/23/20 16:40**
**Date Received: 04/23/20 18:06**

## Lab Sample ID: 460-207545-17

**Matrix: Solid**
**Percent Solids: 75.4**

### Method: 8151A - Herbicides (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4-D | 16 | U | 44 | 16 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 21:28 | 1 |
| Silvex (2,4,5-TP) | 4.6 | U | 44 | 4.6 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 21:28 | 1 |
| 2,4,5-T | 9.4 | U | 44 | 9.4 | ug/Kg | ☼ | 04/25/20 00:04 | 04/25/20 21:28 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2,4-Dichlorophenylacetic acid* | *104* | | *30 - 150* | *04/25/20 00:04* | *04/25/20 21:28* | *1* |
| *2,4-Dichlorophenylacetic acid* | *102* | | *30 - 150* | *04/25/20 00:04* | *04/25/20 21:28* | *1* |

### Method: NJDEP EPH - New Jersey Extractable Petroleum Hydrocarbons

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total EPH (C9-C40)** | **140** | | 2.7 | 2.7 | mg/Kg | ☼ | 04/24/20 20:38 | 04/26/20 19:46 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *o-Terphenyl* | *61* | | *40 - 140* | *04/24/20 20:38* | *04/26/20 19:46* | *1* |
| *1-Chlorooctadecane* | *66* | | *40 - 140* | *04/24/20 20:38* | *04/26/20 19:46* | *1* |

### Method: 6010D - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Silver | 1.4 | U | 2.5 | 1.4 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 16:00 | 2 |
| **Aluminum** | **12100** | | 49.6 | 7.0 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 16:00 | 2 |
| **Arsenic** | **6.5** | | 3.7 | 0.76 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 16:00 | 2 |
| **Barium** | **78.3** | | 49.6 | 4.8 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 16:00 | 2 |
| **Beryllium** | **0.34** | **J** | 0.50 | 0.079 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 16:00 | 2 |
| **Calcium** | **30000** | | 1240 | 91.6 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 16:00 | 2 |
| **Cadmium** | **0.19** | **J** | 0.99 | 0.086 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 16:00 | 2 |
| **Cobalt** | **9.5** | **J** | 12.4 | 0.69 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 16:00 | 2 |
| **Chromium** | **29.9** | | 2.5 | 1.8 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 16:00 | 2 |
| **Copper** | **46.7** | | 6.2 | 1.5 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 16:00 | 2 |
| **Iron** | **20900** | | 37.2 | 25.5 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 16:00 | 2 |
| **Potassium** | **1060** | **J** | 1240 | 76.1 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 16:00 | 2 |
| **Magnesium** | **17300** | | 1240 | 83.9 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 16:00 | 2 |
| **Manganese** | **580** | | 3.7 | 0.28 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 16:00 | 2 |
| **Sodium** | **247** | **J** | 1240 | 108 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 16:00 | 2 |
| **Nickel** | **19.9** | | 9.9 | 0.65 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 16:00 | 2 |
| **Lead** | **74.8** | | 2.5 | 0.40 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 16:00 | 2 |
| Antimony | 1.4 | U J | 5.0 | 1.4 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 16:00 | 2 |
| Selenium | 0.84 | U | 5.0 | 0.84 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 16:00 | 2 |
| Thallium | 0.77 | U | 5.0 | 0.77 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 16:00 | 2 |
| **Vanadium** | **41.1** | | 12.4 | 1.2 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 16:00 | 2 |
| **Zinc** | **117** | | 7.4 | 1.4 | mg/Kg | ☼ | 04/24/20 22:00 | 04/25/20 16:00 | 2 |

### Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Mercury** | **0.065** | | 0.021 | 0.0051 | mg/Kg | ☼ | 04/27/20 04:28 | 04/27/20 09:45 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cr (VI) | 0.46 | U | 2.7 | 0.46 | mg/Kg | ☼ | 04/27/20 08:07 | 04/27/20 14:31 | 1 |
| Cyanide, Total | 0.16 | U J | 0.32 | 0.16 | mg/Kg | ☼ | 04/28/20 09:04 | 04/28/20 13:40 | 1 |
| **TOC Result 1** | **24800** | | 133 | 108 | mg/Kg | ☼ | | 04/28/20 14:00 | 1 |

# Client Sample Results

Client: Weston Solutions, Inc.
Project/Site: Hatco

Job ID: 460-207545-1

## Client Sample ID: SEL-PA-Wipe-CORE-042320

**Lab Sample ID: 460-207545-18**

**Date Collected: 04/23/20 17:00**
**Matrix: Wipe**
**Date Received: 04/23/20 18:06**

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 0.048 | U | 0.40 | 0.048 | ug/Wipe | | 04/24/20 13:06 | 04/24/20 14:09 | 1 |
| Aroclor 1221 | 0.064 | U | 0.40 | 0.064 | ug/Wipe | | 04/24/20 13:06 | 04/24/20 14:09 | 1 |
| Aroclor 1232 | 0.11 | U | 0.40 | 0.11 | ug/Wipe | | 04/24/20 13:06 | 04/24/20 14:09 | 1 |
| Aroclor 1242 | 0.041 | U | 0.40 | 0.041 | ug/Wipe | | 04/24/20 13:06 | 04/24/20 14:09 | 1 |
| Aroclor 1248 | 0.11 | U | 0.40 | 0.11 | ug/Wipe | | 04/24/20 13:06 | 04/24/20 14:09 | 1 |
| Aroclor 1254 | 0.11 | U | 0.40 | 0.11 | ug/Wipe | | 04/24/20 13:06 | 04/24/20 14:09 | 1 |
| Aroclor 1260 | 0.057 | U | 0.40 | 0.057 | ug/Wipe | | 04/24/20 13:06 | 04/24/20 14:09 | 1 |
| Aroclor-1262 | 0.043 | U | 0.40 | 0.043 | ug/Wipe | | 04/24/20 13:06 | 04/24/20 14:09 | 1 |
| Aroclor 1268 | 0.043 | U | 0.40 | 0.043 | ug/Wipe | | 04/24/20 13:06 | 04/24/20 14:09 | 1 |
| Polychlorinated biphenyls, Total | 0.041 | U | 0.40 | 0.041 | ug/Wipe | | 04/24/20 13:06 | 04/24/20 14:09 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *99* | | *35 - 143* | *04/24/20 13:06* | *04/24/20 14:09* | *1* |
| *DCB Decachlorobiphenyl* | *96* | | *35 - 143* | *04/24/20 13:06* | *04/24/20 14:09* | *1* |
| *Tetrachloro-m-xylene* | *103* | | *10 - 128* | *04/24/20 13:06* | *04/24/20 14:09* | *1* |
| *Tetrachloro-m-xylene* | *97* | | *10 - 128* | *04/24/20 13:06* | *04/24/20 14:09* | *1* |

YY 5/14/2020

# Appendix C

# Clean Fill Data

**VIASANT, LLC.**
606 East Baltimore Pike, Fl3
Media, PA 19063
(484) 443-4250

# Letter of Transmittal

## Weston Solutions, Inc.
## Hatco Site
## Southeast Leg Remediation
## Fords, New Jersey

| | |
|---|---|
| **VIASANT Submittal(s) Number:** | **S-025** |
| **VIASANT Project Number:** | **VPR-14156** |
| **Submittal Title :** | Clean Fill Sources & Analytical Results |
| **Submittal Date:** | November 10, 2014 |
| **Date(s) of Previous Submissions:** | N/A |
| **To:**<br><br><br><br><br>**Cc:** | Jason Schindler, Weston<br>Coleen Devorak, Weston<br>Diann Porto, Weston<br>Ryan Beachner, Weston<br><br>Jon Lovenduski, VIASANT |
| **From:** | Robin White |
| **Reference Specification Section:** | 02150.1.3, 02300.1.4A |

**Contractor's Submittal Section:**

**We are sending:**

☐ Shop Drawing ☒ Product Data ☐ Sample ☐ Schedule ☐ Record ☐ Plan

☐ Certificate ☐ Report ☐ Permit ☐ Other

| # of Copies | As Requested | For Review | For Approval | For Your File | Deviations from Specification |
|---|---|---|---|---|---|
| 1 | X | X | X | | See Below |

**COMMENTS:**

This submittal package includes analytical results for the proposed clean fill sources: BUCH Construction Macy Site (primary source) and the Almasi pit (secondary source), both located in Raritan Center in Edison, NJ.

***Buch/Macy Source (401 Clearview Road, Raritan Center, Edison, NJ)***
The BUCH source is not an undisturbed geologic formation; therefore, Table 2 of the NJDEP SRP Alternative and Clean Fill Guidance will be followed for the Reduced Sampling Scheme sampling frequency. This package includes results for the following 13 samples:

| Sampled By/Laboratory | Boring/Sample ID | Summary/Notes |
|---|---|---|
| VIASANT/Chemtech | CF-BUCH-01 | Sample @ 2.5' with no exceedance for the default Impact to Groundwater (IGW ) criteria |

| | | |
|---|---|---|
| EnviroTrac/Accutest | ET-TP7 | Sample @ 4.5' with no exceedance for the default IGW. Note only TCL & TAL analytes reported. |
| EnviroTrac/Accutest | ET-TP7 | Sample @ 11' with no exceedance for the default IGW. Note only TCL & TAL analytes reported. |
| EnviroTrac/Accutest | ET-BS22 | Sample @ 5' with no exceedance for the default IGW. Note only TCL & TAL analytes reported. |
| EnviroTrac/Accutest | ET-BS22 | Sample @ 9' with no exceedance for the default IGW. Note only TCL & TAL analytes reported. |
| EnviroTrac/Accutest | ET-BS23 | Sample @ 5' with no exceedance for the default IGW. Note only TCL & TAL analytes reported. |
| EnviroTrac/Accutest | ET-BS24 | Sample @ 5' with no exceedance for the default IGW. Note only TCL & TAL analytes reported. |
| **Historical Data** | | |
| GES/APL | AS_SB-1 | Geotechnical Boring<br>Sample @ 0.5' no exceedances, incomplete analyte suite for IGW |
| GES/APL | GES_SB2 | Geotechnical Boring<br>Sample @ 0.5' incomplete analyte suite for IGW<br>Mn (Secondary Drinking Water Constituent) exceedance for default IGW, no SPLP required |
| GES/APL | GES_SB3 | Geotechnical Boring<br>Sample @ 0.5' no exceedances, incomplete analyte suite for IGW |
| GES/APL | GES_TP4 | Geotechnical Boring log<br>Sample @ 2.5 no exceedances, incomplete analyte suite for IGW |
| GES/APL | GES_TP7 | Geotechnical Boring log<br>Sample @ 0.5' no exceedances, incomplete analyte suite for IGW |
| GES/APL | GES_TP15 | Geotechnical Boring log<br>Sample @ 0.5' incomplete analyte suite for IGW<br>Al (Secondary Drinking Water Constituent) exceedance for default IGW, no SPLP required<br>Be (Primary Drinking Water Constituent) exceedance for default IGW. Additional SPLP analysis conducted. NJDEP IGW Site-Specific level recalculated to 1.9mg/kg.<br>Sample @ 1.5 no exceedances, incomplete analyte suite for IGW |

The 7 primary samples (Chemtech & Accutest results) included with this submittal package are for approval of 1,000CY of this material. Upon approval of the intial 1,000CY, additional supplementary sampling will be conducted by VIASANT to meet the reduced sampling frequency for up to 8,000CY (7 more samples). Tentative sample locations are shown on the attached figure.

***Almasi Source (King George Post Road, Raritan Center, Edison, NJ)***

The Almasi source is an undisturbed geologic formation; therefore, the one representative sample provided is sufficient to satisfy the NJDEP SRP Alternative and Clean Fill Guidance for SRP Sites (Section 6.3). The attached summary comparison table and laboratory reports exhibit acceptable results against Impact to Groundwater default screening criteria per the current regulations. An exceedance of Manganese (secondary drinking water constituent) is reported, however, additional analysis not required (Section 6.6).

**VIASANT, LLC.**
606 East Baltimore Pike, Fl3
Media, PA 19063
(484) 443-4250

Geotechnical laboratory results for specific fill types (i.e. clay mixture, clay, sandy fill, etc.) will be provided as a separate submittal.

***Robin White: November 19, 2014***
Contractor's Signature and Date

**Engineer's Review & Comments Section:**

**This Submittal has been:**

☐ Approved ☐ Approved as Noted ☐ Revise and Resubmit ☐ Rejected

**Comments:**

Engineer's Signature, Date and Stamp (Stamp if applicable)

# IMPORT MATERIAL SOURCES
# ANALYTICAL RESULTS SUMMARY TABLE

**Table 1. VIASANT Sample Evaluation Against NJDEP Regulations**

| | | | | | | Primary Source (Buch) | | | | | | | Primary Source (Buch) Historical Data | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Fill Source | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill |
| | | | | | Location | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ |
| | | | | | Sample ID | CF-BUCH-01 | ET-TP7 (4.5-5) | ET-TP7 (11-11.5) | ET-BS22 (5-5.5) | ET-BS22 (9-9.5) | ET-BS23 (5-5.5) | ET-BS24 (5-5.5) | GES_SB3_0.5 | GES_TP4_0.5 | GES_TP7_0.5 | GES_TP15_0.5 | GES_SB2_0.5 |
| | | | | | Sample Date | 11/5/14 | 10/8/14 | 10/8/14 | 10/9/14 | 10/9/14 | 10/9/14 | 10/9/14 | 6/24/14 | 6/25/14 | 6/25/14 | 6/25/14 | 6/26/14 |
| | | | | | Laboratory | Chemtech | Accutest | Accutest | Accutest | Accutest | Accutest | Accutest | APL | APL | APL | APL | APL |
| | | | | | Data Package | | JB78845 | JB78845 | JB78959 | JB78959 | JB78959 | JB78959 | 4060795 | 4060831 | 4060831 | 4060831 | 4060880 |
| **Analytical Method** | **Constituent** | **CAS Number** | **RDCSRS** | **NRDCSRS** | **IGWSRS 11/2013** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** |
| ***Semi-volatile Organic Compounds (ug/kg)*** | | | | | | | | | | | | | | | | | |
| SW8270C | 1,1-Biphenyl | 92-52-4 | 31,000,000 | 34,000,000 | 140,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260C | 1,2,4-Trichlorobenzene | 120-82-1 | 73,000 | 820,000 | 700 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260C | 1,2-Dichlorobenzene (o-Dichlorobenzene) | 95-50-1 | 5,300,000 | 59,000,000 | 17,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | 1,2-Diphenylhydrazine (Azobenzene under GC) | 122-66-7 | 700 | 2,000 | 700 | ND | --- | --- | --- | --- | --- | --- | --- | ND | ND | ND | --- |
| SW8260C | 1,3-Dichlorobenzene (m-Dichlorobenzene) | 541-73-1 | 5,300,000 | 59,000,000 | 19,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260C | 1,4-Dichlorobenzene (p-Dichlorobenzene) | 106-46-7 | 5,000 | 13,000 | 2,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | 2,4,5-Trichlorophenol | 95-95-4 | 6,100,000 | 68,000,000 | 68,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | 2,4,6-Trichlorophenol | 88-06-2 | 19,000 | 74,000 | 200 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | 2,4/2,6 Dinitrotoluene (mix) | 25321-14-6 | 700 | 3,000 | 200 | ND | ND | ND | ND | ND | ND | ND | --- | ND | --- | --- | --- |
| SW8270C | 2,4-Dichlorophenol | 120-83-2 | 180,000 | 2,100,000 | 200 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | 2,4-Dimethylphenol | 105-67-9 | 1,200,000 | 14,000,000 | 1,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | 2,4-Dinitrophenol | 51-28-5 | 120,000 | 1,400,000 | 300 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | 2,4-Dinitrotoluene | 121-14-2 | 700 | 3,000 | NA | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | 2,6-Dinitrotoluene | 606-20-2 | 700 | 3,000 | NA | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | 2-Chlorophenol (o-Chlorophenol) | 95-57-8 | 310,000 | 2,200,000 | 800 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | 2-Methylnaphthalene | 91-57-6 | 230,000 | 2,400,000 | 8,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | 2-Methylphenol (o-cresol) | 95-48-7 | 310,000 | 3,400,000 | NA | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | 2-Nitroaniline | 88-74-4 | 39,000 | 23,000,000 | NA | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | 2-Nitrophenol | 88-75-5 | --- | --- | --- | --- | ND | ND | ND | ND | ND | ND | --- | ND | --- | --- | --- |
| SW8270C | 3&4-Methylphenol (m&p-cresol) | 106-44-5 | 31,000 | 340,000 | NA | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | 3,3'-Dichlorobenzidine | 91-94-1 | 1,000 | 4,000 | 200 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | 4,6-Dinitro-o-cresol (4,6-Dinitro-2-methylphenol) | 534-52-1 | 6,000 | 68,000 | 300 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | Acenaphthene | 83-32-9 | 3,400,000 | 37,000,000 | 110,000 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| SW8270C | Acenaphthylene | 208-96-8 | NA | 300,000,000 | NA | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| SW8270C | Acetophenone | 98-86-2 | 2,000 | 5,000 | 3,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | Anthracene | 120-12-7 | 1.70E+07 | 3.00E+07 | 2.40E+06 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 35.9 |
| SW8270C | Atrazine | 1912-24-9 | 210,000 | 2,400,000 | 200 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | Benzaldehyde | 100-52-7 | 6,100,000 | 68,000,000 | NA | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | Benzidine | 92-87-5 | 700 | 700 | 700 | ND | --- | --- | --- | --- | --- | --- | --- | ND | ND | ND | --- |
| SW8270C | Benzo(a)anthracene (1,2-Benzanthracene) | 56-55-3 | 200 | 2,000 | 800 | ND | ND | ND | 18.1 | ND | ND | ND | 50.9 | ND | 85.8 | 48.5 | 61.2 |
| SW8270C | Benzo(a)pyrene | 50-32-8 | 200 | 200 | 200 | ND | ND | ND | ND | ND | ND | ND | ND | ND | 57.5 | ND | 57.7 |
| SW8270C | Benzo(b)fluoranthene (3,4-Benzofluoranthene) | 205-99-2 | 600 | 2,000 | 2,000 | ND | ND | ND | 16.6 | ND | ND | ND | 52.3 | ND | 73.5 | ND | 92.1 |
| SW8270C | Benzo(g,h,i)perylene | 191-24-2 | 380,000,000 | 30,000,000 | NA | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 36.6 |
| SW8270C | Benzo(k)fluoranthene | 207-08-9 | 6,000 | 23,000 | 25,000 | ND | ND | ND | ND | ND | ND | ND | ND | ND | 37.8 | ND | 37.3 |
| SW8270C | bis(2-Chloroethyl)ether | 111-44-4 | 400 | 2,000 | 200 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | bis(2-chloroisopropyl)ether (2,2-oxybis[1-Chloroprop | 108-60-1 | 23,000 | 67,000 | 5,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | bis(2-Ethylhexyl)phthalate | 117-81-7 | 35,000 | 140,000 | 1,200,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | 52.4 | ND | --- |
| SW8270C | Butyl benzyl phthalate | 85-68-7 | 1,200,000 | 14,000,000 | 2.30E+05 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | Caprolactam | 105-60-2 | 31,000,000 | 340,000,000 | 12,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | Carbazole | 86-74-8 | 24,000 | 96,000 | NA | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | Chrysene | 218-01-9 | 62,000 | 230,000 | 80,000 | ND | ND | ND | 17.8 | ND | ND | ND | 10.1 | ND | 61.8 | 45.5 | 80.2 |
| SW8270C | Dibenzo(a,h)anthracene | 53-70-3 | 200 | 200 | 800 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| SW8270C | Diethyl phthalate | 84-66-2 | 49,000,000 | 550,000,000 | 88,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | Di-n-butyl phthalate | 84-74-2 | 6,100,000 | 68,000,000 | 760,000 | ND | ND | ND | ND | 72.1 | 74.3 | ND | --- | ND | ND | ND | --- |
| SW8270C | Di-n-octyl phthalate | 117-84-0 | 2,400,000 | 27,000,000 | 3,300,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | Fluoranthene | 206-44-0 | 2,300,000 | 24,000,000 | 1,300,000 | ND | ND | ND | 27.5 | ND | ND | ND | 79.5 | 45.2 | 118 | 65.6 | 120 |
| SW8270C | Fluorene | 86-73-7 | 2,300,000 | 24,000,000 | 170,000 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| SW8270C | Hexachloro(-1,3-)butadiene | 87-68-3 | 6,000 | 25,000 | 900 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | Hexachlorobenzene | 118-74-1 | 300 | 1,000 | 200 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | Hexachlorocyclopentadiene | 77-47-4 | 6,000 | 110,000 | 320,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | Hexachloroethane | 67-72-1 | 45,000 | 140,000 | 200 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | Indeno(1,2,3-cd)pyrene | 193-39-5 | 600 | 2,000 | 7,000 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| SW8270C | Isophorone | 78-59-1 | 510,000 | 2,000,000 | 200 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | Naphthalene | 91-20-3 | 6,000 | 17,000 | 25,000 | ND | ND | ND | ND | ND | ND | 79.1 | ND | ND | ND | ND | ND |
| SW8270C | Nitrobenzene | 98-95-3 | 31,000 | 340,000 | 200 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | N-Nitrosodimethylamine | 62-75-9 | 700 | 700 | 700 | ND | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SW8270C | N-Nitroso-di-n-propylamine | 621-64-7 | 200 | 300 | 200 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | N-Nitrosodiphenylamine | 86-30-6 | 99,000 | 390,000 | 400 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | Pentachlorophenol | 87-86-5 | 3,000 | 10,000 | 300 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | Phenanthrene | 85-01-8 | NA | 300,000,000 | NA | ND | ND | ND | 17.8 | ND | ND | ND | 47.3 | ND | 64 | ND | 49.9 |
| SW8270C | Phenol | 108-95-2 | 18,000,000 | 210,000,000 | 8,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8270C | Pyrene | 129-00-0 | 1,700,000 | 18,000,000 | 840,000 | ND | ND | ND | 29.0 | ND | ND | ND | 65.2 | 44.5 | 112 | 60.4 | 110 |

**Table 1. VIASANT Sample Evaluation Against NJDEP Regulations**

| | | | | | | Primary Source (Buch) | | | | | | | Primary Source (Buch) Historical Data | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Fill Source | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill |
| | | | | | Location | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ |
| | | | | | Sample ID | CF-BUCH-01 | ET-TP7 (4.5-5) | ET-TP7 (11-11.5) | ET-BS22 (5-5.5) | ET-BS22 (9-9.5) | ET-BS23 (5-5.5) | ET-BS24 (5-5.5) | GES_SB3_0.5 | GES_TP4_0.5 | GES_TP7_0.5 | GES_TP15_0.5 | GES_SB2_0.5 |
| | | | | | Sample Date | 11/5/14 | 10/8/14 | 10/8/14 | 10/9/14 | 10/9/14 | 10/9/14 | 10/9/14 | 6/24/14 | 6/25/14 | 6/25/14 | 6/25/14 | 6/26/14 |
| | | | | | Laboratory | Chemtech | Accutest | Accutest | Accutest | Accutest | Accutest | Accutest | APL | APL | APL | APL | APL |
| | | | | | Data Package | | JB78845 | JB78845 | JB78959 | JB78959 | JB78959 | JB78959 | 4060795 | 4060831 | 4060831 | 4060831 | 4060880 |
| **Analytical Method** | **Constituent** | **CAS Number** | **RDCSRS** | **NRDCSRS** | **IGWSRS 11/2013** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** |
| ***Metals (mg/kg)*** | | | | | | | | | | | | | | | | | |
| SW6010B | Aluminum | 7429-90-5 | 78,000 | NA | 6,000 | 330 | 1,990 | 476 | 3,270 | 595 | 265 | 387 | 2,520 | 1,400 | 2,560 | **6,220** | 3,590 |
| SW6010B | Antimony | 7440-36-0 | 31 | 450 | 6.0 | ND | <2.3 | <2.3 | <2.2 | <2.1 | <2.4 | <2.4 | <0.537 | <0.565 | <0.545 | <0.559 | <0.527 |
| SW6010B | Arsenic | 7440-38-2 | 19 | 19 | 19.0 | 1.64 | 3.7 | <2.3 | <2.2 | 3.8 | <2.4 | <2.4 | 1.73 | 0.624 | 1.94 | 9.53 | 1.7 |
| SW6010B | Barium | 7440-39-3 | 16,000 | 59,000 | 2,100 | 4.16 | <23.0 | <23 | <22.0 | <21.0 | <24.0 | <24.0 | 14.3 | 5.44 | 14.4 | 92.6 | 19.1 |
| SW6010B | Beryllium | 7440-41-7 | 16 | 140 | 0.7 | 0.091 | <0.23 | <0.23 | <0.22 | <0.21 | <0.24 | <0.24 | 0.21 | 0.077 | 0.209 | **1.13** | 0.139 |
| SW6010B | Cadmium | 7440-43-9 | 78 | 78 | 2.0 | ND | <0.57 | <0.57 | <0.55 | <0.51 | <0.61 | <0.61 | 0.0598 | <0.0565 | <0.0545 | 0.216 | <0.0527 |
| SW3060 | Chromium, Hexavalent | 18540-29-9 | --- | --- | --- | --- | <570 | --- | --- | --- | --- | --- | --- | <0.452 | <0.436 | <0.447 | --- |
| SW6010B | Cobalt | 7440-48-4 | 1,600 | 590 | 90 | 0.558 | <5.7 | <5.7 | <5.5 | <5.1 | <6.1 | <6.1 | 0.955 | 1.22 | 1.3 | 4.79 | 1.62 |
| SW6010B | Copper | 7440-50-8 | 3,100 | 45,000 | 11,000 | 3.48 | 46.7 | 3.8 | 7.5 | <2.6 | 7.3 | 4.1 | 9.6 | 6.52 | 8.49 | 23.8 | 13.8 |
| SW6010B | Lead | 7439-92-1 | 400 | 800 | 90 | 2.55 | 10.2 | 2.3 | 7.6 | <2.1 | 3.1 | <2.4 | 5.95 | 3.23 | 6.04 | 11.3 | 7.71 |
| SW6010B | Manganese | 7439-96-5 | 11,000 | 5,900 | 65 | 2.6 | 5.4 | 2.6 | 9.7 | 2.4 | 2.1 | <1.8 | 15.6 | 7.07 | 13.6 | 51.2 | **205** |
| SW7471 | Mercury | 7439-97-6 | 23 | 65 | 0.1 | 0.015 | <0.037 | <0.034 | <0.033 | <0.035 | <0.040 | <0.038 | <0.0223 | <0.0235 | 0.0262 | 0.0559 | <0.0219 |
| SW6010B | Nickel (solube salts) | 7440-02-0 | 1,600 | 23,000 | 48 | 0.746 | <4.6 | <4.6 | <4.4 | <4.1 | <4.9 | <4.9 | 2.09 | 1.22 | 2.25 | 9.99 | 2.57 |
| SW6010B | Selenium | 7782-49-2 | 390 | 5,700 | 11.0 | ND | <2.3 | <2.3 | <2.2 | <2.1 | <2.4 | <2.4 | <0.672 | <0.706 | <0.682 | 0.909 | <0.659 |
| SW6010B | Silver | 7440-22-4 | 390 | 5,700 | 1.0 | ND | <0.57 | <0.57 | <0.55 | <0.51 | <0.61 | <0.61 | <0.537 | <0.565 | <0.545 | <0.559 | <0.527 |
| SW6010B | Thallium | 7440-28-0 | 5 | 79 | 3.0 | ND | <1.1 | <1.1 | <1.1 | <1.0 | <1.2 | <1.2 | <0.537 | <0.565 | <0.545 | 1.41 | 0.77 |
| SW6010B | Vanadium | 7440-62-2 | 78 | 1,100 | NA | 21.5 | 56.5 | 16.3 | 24.7 | 5.4 | 28.8 | 11.2 | 16.1 | 21.7 | 16.7 | 35 | 28.3 |
| SW6010B | Zinc | 7440-66-6 | 23,000 | 110,000 | 930 | 1.49 | <5.7 | <5.7 | 7.2 | <5.1 | <6.1 | <6.1 | 8.24 | 3.87 | 8.68 | 20.7 | 8.66 |
| ***Organochlorine Pesticides (ug/kg)*** | | | | | | | | | | | | | | | | | |
| SW8081 | 4,4'-DDD | 72-54-8 | 3,000 | 13,000 | 4,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8081 | 4,4'-DDE | 72-55-9 | 2,000 | 9,000 | 18,000 | ND | ND | ND | 0.87 | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8081 | 4,4'-DDT | 50-29-3 | 2,000 | 8,000 | 11,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8081 | Aldrin | 309-00-2 | 40 | 200 | 200 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8081 | alpha & gamma-Chlordane | 57-74-9 | 200 | 1,000 | 50 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8081 | alpha-BHC (Alpha-HCH) | 319-84-6 | 100 | 500 | 2.0 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8081 | beta-BHC (Beta-HCH) | 319-85-7 | 400 | 2,000 | 2.0 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8081 | delta-BHC (delta-HCH) | 319-86-8 | --- | --- | --- | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8081 | Dieldrin | 60-57-1 | 40 | 200 | 3.0 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8081 | Endosulfan sulfate | 1031-07-8 | 470,000 | 6,800,000 | 2,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8081 | Endosulfan-I (alpha & beta) | 115-29-7 | 470,000 | 6,800,000 | 4,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8081 | Endrin | 72-20-8 | 23,000 | 340,000 | 1,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8081 | gamma-BHC (Lindane/gamma-HCH) | 58-89-9 | 400 | 2,000 | 2.0 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8081 | Heptachlor | 76-44-8 | 100 | 700 | 500 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8081 | Heptachlor epoxide | 1024-57-3 | 70 | 300 | 10 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8081 | Methoxychlor | 72-43-5 | 390,000 | 5,700,000 | 160,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8081 | Toxaphene | 8001-35-2 | 600 | 3,000 | 300 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| ***Polychlorinated Biphenyls (ug/kg)*** | | | | | | | | | | | | | | | | | |
| SW8082 | Aroclor 1016 | 1336-36-3 | 200 | 1,000 | 200 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8082 | Aroclor 1221 | 1336-36-3 | 200 | 1,000 | 200 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8082 | Aroclor 1232 | 1336-36-3 | 200 | 1,000 | 200 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8082 | Aroclor 1242 | 1336-36-3 | 200 | 1,000 | 200 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8082 | Aroclor 1248 | 1336-36-3 | 200 | 1,000 | 200 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8082 | Aroclor 1254 | 1336-36-3 | 200 | 1,000 | 200 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8082 | Aroclor 1260 | 1336-36-3 | 200 | 1,000 | 200 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| ***Volatile Organic Compounds (ug/kg)*** | | | | | | | | | | | | | | | | | |
| SW8260B | 1,1,1-Trichloroethane | 71-55-6 | 290,000 | 4,200,000 | 300 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | 1,1,2,2-Tetrachloroethane | 79-34-5 | 1,000 | 3,000 | 7.0 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | 1,1,2-Trichloroethane | 79-00-5 | 2,000 | 6,000 | 20 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | 1,1-Dichloroethane | 75-34-3 | 8,000 | 24,000 | 200 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | 1,1-Dichloroethene (1,1-Dichloroethylene) | 75-35-4 | 11,000 | 150,000 | 8.0 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | 1,2-Dibromo-3-chloropropane | 96-12-8 | 80 | 200 | 5.0 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | 1,2-Dibromoethane (ethylene dibromide) (EDB) | 106-93-4 | 8 | 40 | 5.0 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | 1,2-Dichloroethane (EDC) | 107-06-2 | 900 | 3,000 | 5.0 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | 1,2-Dichloroethene (cis) (c-1,2-Dichloroethylene) | 156-59-2 | 530,000 | 1,280,000 | 300 | ND | ND | ND | ND | ND | ND | ND | --- | ND | --- | --- | --- |
| SW8260B | 1,2-Dichloroethene (trans) | 156-60-5 | 300,000 | 720,000 | 600 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | 1,2-Dichloroethene (total) | --- | 530,000 | 1,280,000 | 300 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | 1,2-Dichloropropane | 78-87-5 | 2,000 | 5,000 | 5.0 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | 1,3-Dichloropropene (cis & trans sum) | 542-75-6 | 2,000 | 7,000 | 5.0 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | 2-Butanone (MEK) | 78-93-3 | 3,100,000 | 44,000,000 | 900 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | Acetone (2-propanone) | 67-64-1 | 70,000,000 | NA | 19,000 | ND | 23.4 | ND | ND | 24.4 | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | Acrolein | 107-02-8 | 500 | 1,000 | 500 | ND | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SW8260B | Acrylonitrile | 107-13-1 | 900 | 3,000 | 500 | ND | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SW8260B | Benzene | 71-43-2 | 2,000 | 5,000 | 5.0 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | Bromodichloromethane (Dichlorobromomethane) | 75-27-4 | 1,000 | 3,000 | 5.0 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | Bromoform | 75-25-2 | 81,000 | 280,000 | 30 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | Bromomethane (Methyl bromide) | 74-83-9 | 25,000 | 59,000 | 40 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | Carbon disulfide | 75-15-0 | 7,800,000 | 110,000,000 | 6,000 | ND | 1.3 | ND | 0.89 | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | Carbon tetrachloride | 53-23-5 | 600 | 2,000 | 5.0 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |

**Table 1. VIASANT Sample Evaluation Against NJDEP Regulations**

| | | | | | | Primary Source (Buch) | | | | | | | Primary Source (Buch) Historical Data | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Fill Source | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill | BUCH Fill |
| | | | | | Location | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ | Edison, NJ |
| | | | | | Sample ID | CF-BUCH-01 | ET-TP7 (4.5-5) | ET-TP7 (11-11.5) | ET-BS22 (5-5.5) | ET-BS22 (9-9.5) | ET-BS23 (5-5.5) | ET-BS24 (5-5.5) | GES_SB3_0.5 | GES_TP4_0.5 | GES_TP7_0.5 | GES_TP15_0.5 | GES_SB2_0.5 |
| | | | | | Sample Date | 11/5/14 | 10/8/14 | 10/8/14 | 10/9/14 | 10/9/14 | 10/9/14 | 10/9/14 | 6/24/14 | 6/25/14 | 6/25/14 | 6/25/14 | 6/26/14 |
| | | | | | Laboratory | Chemtech | Accutest | Accutest | Accutest | Accutest | Accutest | Accutest | APL | APL | APL | APL | APL |
| | | | | | Data Package | | JB78845 | JB78845 | JB78959 | JB78959 | JB78959 | JB78959 | 4060795 | 4060831 | 4060831 | 4060831 | 4060880 |
| **Analytical Method** | **Constituent** | **CAS Number** | **RDCSRS** | **NRDCSRS** | **IGWSRS 11/2013** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** | **Result** |
| SW8260B | Chlorobenzene | 108-90-7 | 510,000 | 7,400,000 | 600 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | Chloroethane (Ethyl chloride) | 75-00-3 | 220,000 | 1 | NA | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | Chloroform | 67-66-3 | 600 | 2,000 | 400 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | Chloromethane (Methyl chloride) | 74-87-3 | 4,000 | 12,000 | NA | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | Dibromochloromethane (Chlorodibromomethane) | 124-48-1 | 3,000 | 8,000 | 5.0 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | Dichlorodifluoromethane | 75-71-8 | 490,000 | 230,000,000 | 39,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | Ethylbenzene | 100-41-4 | 7,800,000 | 110,000,000 | 13,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | Methyl Acetate | 79-20-9 | 78,000,000 | NA | 22,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | Methyl tert-butyl ether (MTBE) | 1634-04-4 | 110,000 | 17,000 | 200 | ND | ND | ND | ND | ND | 0.5 | ND | --- | ND | ND | ND | --- |
| SW8260B | Methylene chloride (Dichloromethane) | 75-09-2 | 34,000 | 97,000 | 10 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | Styrene | 100-42-5 | 90,000 | 260,000 | 3,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | Tertiary butyl alcohol (TBA) | 75-65-0 | 1,400,000 | 11,000,000 | 300 | ND | --- | --- | --- | --- | --- | --- | --- | ND | ND | ND | --- |
| SW8260B | Tetrachloroethene (PCE) (Tetrachloroethylene) | 127-18-4 | 2,000 | 5,000 | 5.0 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | Toluene | 108-88-3 | 6,300,000 | 91,000,000 | 7,000 | ND | ND | ND | ND | ND | ND | ND | --- | 0.647 | ND | ND | --- |
| SW8260B | Trichloroethene (TCE) (Trichloroethylene) | 79-01-6 | 7,000 | 20,000 | 10 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | Trichlorofluoromethane | 75-69-4 | 23,000,000 | 340,000,000 | 34,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | Vinyl chloride | 75-01-4 | 700 | 2,000 | 5.0 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| SW8260B | Xylene (total) | 1330-20-7 | 12,000,000 | 170,000,000 | 19,000 | ND | ND | ND | ND | ND | ND | ND | --- | ND | ND | ND | --- |
| ***Miscellaneous*** | | | | | | | | | | | | | | | | | |
| SW9012 | Cyanide (mg/kg) | 57-12-5 | 2 | 23 | 20 | ND | <0.26 | <0.27 | <0.24 | <0.23 | <0.28 | <0.29 | --- | <0.283 | <0.273 | <0.280 | --- |
| NJEPHme | EPH (mg/kg) | --- | 5,100 | 54,000 | --- | 2.91 | ND | ND | 36.50 | ND | ND | ND | --- | ND | ND | ND | --- |
| SW9045 | pH (su) | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 3.7 | 5.5 | 7.8 | --- |
| %Solids | Solids (Percent) (%) | --- | --- | --- | --- | 91.60% | 89.00% | 86.60% | 90.80% | 94.40% | 83.30% | 82.20% | 93.10% | 88.50% | 91.70% | 89.40% | 94.80% |

Notes
IGWSRS - Impact to Groundwater Soil Remediation Standards from November 2013 NJDEP Guidance
RDCSRS - Residential Direct Contact Health Based Criteria and Soil Remediation Standards
NRDCSRS - Non-residential Direct Contact Health Based Criteria and Soil Remediation Standards
CAS - Chemical Abstract Service
NA - Standard not available
ND - Not detected in sample
mg/kg - Milligrams per kilogram
ug/kg - Micrograms per kilogram
--- = Not Analyzed
**33,100 -** Bold and shaded value indicates constituent was detected above the most stringent soil screening criteria.
TCL SVOC & VOC does not include 1,2-Diphenylhydrazine, Benzidine, N-Nitrosodimethylamine, Acrolein, Acrylonitrile, and Tertiary butyl alcohol.
1,2-Diphenlyhydrazine decomposes into Azobenzene under GC (gas chromatograpy) conditions

**Table 1. VIASANT Sample Evaluation Against NJDEP Regulations**

| | | | | | | Primary Source (Buch) Historical Data (Cont'd) | | Secondary Source (Almasi) | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Fill Source | BUCH Fill | BUCH Fill | Almasi | Almasi |
| | | | | | Location | Edison, NJ | Edison, NJ | Raritan Center | Raritan Center |
| | | | | | Sample ID | GES_TP15_1.5 | AS_SB-1_0.5 | 14103-CF-02/03 | 1400101-03 |
| | | | | | Sample Date | 6/26/14 | 7/10/14 | 3/5/14 | 1/17/14 |
| | | | | | Laboratory | APL | APL | Chemtech | AAR |
| | | | | | Data Package | 4060880 | 4070365 | F1563 | 1400103 |
| **Analytical Method** | **Constituent** | **CAS Number** | **RDCSRS** | **NRDCSRS** | **IGWSRS 11/2013** | **Result** | **Result** | **Result** | **Result** |
| ***Semi-volatile Organic Compounds (ug/kg)*** | | | | | | | | | |
| SW8270C | 1,1-Biphenyl | 92-52-4 | 31,000,000 | 34,000,000 | 140,000 | ND | --- | ND | -- |
| SW8260C | 1,2,4-Trichlorobenzene | 120-82-1 | 73,000 | 820,000 | 700 | ND | --- | ND | ND |
| SW8260C | 1,2-Dichlorobenzene (o-Dichlorobenzene) | 95-50-1 | 5,300,000 | 59,000,000 | 17,000 | ND | --- | ND | ND |
| SW8270C | 1,2-Diphenylhydrazine (Azobenzene under GC) | 122-66-7 | 700 | 2,000 | 700 | ND | --- | ND | -- |
| SW8260C | 1,3-Dichlorobenzene (m-Dichlorobenzene) | 541-73-1 | 5,300,000 | 59,000,000 | 19,000 | ND | --- | ND | ND |
| SW8260C | 1,4-Dichlorobenzene (p-Dichlorobenzene) | 106-46-7 | 5,000 | 13,000 | 2,000 | ND | --- | ND | ND |
| SW8270C | 2,4,5-Trichlorophenol | 95-95-4 | 6,100,000 | 68,000,000 | 68,000 | ND | --- | ND | ND |
| SW8270C | 2,4,6-Trichlorophenol | 88-06-2 | 19,000 | 74,000 | 200 | ND | --- | ND | ND |
| SW8270C | 2,4/2,6 Dinitrotoluene (mix) | 25321-14-6 | 700 | 3,000 | 200 | | --- | ND | -- |
| SW8270C | 2,4-Dichlorophenol | 120-83-2 | 180,000 | 2,100,000 | 200 | ND | --- | ND | ND |
| SW8270C | 2,4-Dimethylphenol | 105-67-9 | 1,200,000 | 14,000,000 | 1,000 | ND | --- | ND | ND |
| SW8270C | 2,4-Dinitrophenol | 51-28-5 | 120,000 | 1,400,000 | 300 | ND | --- | ND | ND |
| SW8270C | 2,4-Dinitrotoluene | 121-14-2 | 700 | 3,000 | NA | ND | --- | ND | ND |
| SW8270C | 2,6-Dinitrotoluene | 606-20-2 | 700 | 3,000 | NA | ND | --- | ND | ND |
| SW8270C | 2-Chlorophenol (o-Chlorophenol) | 95-57-8 | 310,000 | 2,200,000 | 800 | ND | --- | ND | ND |
| SW8270C | 2-Methylnaphthalene | 91-57-6 | 230,000 | 2,400,000 | 8,000 | ND | --- | ND | ND |
| SW8270C | 2-Methylphenol (o-cresol) | 95-48-7 | 310,000 | 3,400,000 | NA | ND | --- | ND | ND |
| SW8270C | 2-Nitroaniline | 88-74-4 | 39,000 | 23,000,000 | NA | ND | --- | ND | ND |
| SW8270C | 2-Nitrophenol | 88-75-5 | --- | --- | --- | | --- | ND | ND |
| SW8270C | 3&4-Methylphenol (m&p-cresol) | 106-44-5 | 31,000 | 340,000 | NA | ND | --- | ND | ND |
| SW8270C | 3,3'-Dichlorobenzidine | 91-94-1 | 1,000 | 4,000 | 200 | ND | --- | ND | ND |
| SW8270C | 4,6-Dinitro-o-cresol (4,6-Dinitro-2-methylphenol) | 534-52-1 | 6,000 | 68,000 | 300 | ND | --- | ND | ND |
| SW8270C | Acenaphthene | 83-32-9 | 3,400,000 | 37,000,000 | 110,000 | ND | ND | ND | ND |
| SW8270C | Acenaphthylene | 208-96-8 | NA | 300,000,000 | NA | ND | ND | ND | ND |
| SW8270C | Acetophenone | 98-86-2 | 2,000 | 5,000 | 3,000 | ND | --- | ND | -- |
| SW8270C | Anthracene | 120-12-7 | 1.70E+07 | 3.00E+07 | 2.40E+06 | ND | ND | ND | ND |
| SW8270C | Atrazine | 1912-24-9 | 210,000 | 2,400,000 | 200 | ND | --- | ND | -- |
| SW8270C | Benzaldehyde | 100-52-7 | 6,100,000 | 68,000,000 | NA | ND | --- | ND | -- |
| SW8270C | Benzidine | 92-87-5 | 700 | 700 | 700 | ND | --- | ND | -- |
| SW8270C | Benzo(a)anthracene (1,2-Benzanthracene) | 56-55-3 | 200 | 2,000 | 800 | ND | ND | ND | ND |
| SW8270C | Benzo(a)pyrene | 50-32-8 | 200 | 200 | 200 | ND | ND | ND | ND |
| SW8270C | Benzo(b)fluoranthene (3,4-Benzofluoranthene) | 205-99-2 | 600 | 2,000 | 2,000 | ND | ND | ND | ND |
| SW8270C | Benzo(g,h,i)perylene | 191-24-2 | 380,000,000 | 30,000,000 | NA | ND | ND | ND | ND |
| SW8270C | Benzo(k)fluoranthene | 207-08-9 | 6,000 | 23,000 | 25,000 | ND | ND | ND | ND |
| SW8270C | bis(2-Chloroethyl)ether | 111-44-4 | 400 | 2,000 | 200 | ND | --- | ND | ND |
| SW8270C | bis(2-chloroisopropyl)ether (2,2-oxybis[1-Chloroprop | 108-60-1 | 23,000 | 67,000 | 5,000 | ND | --- | ND | ND |
| SW8270C | bis(2-Ethylhexyl)phthalate | 117-81-7 | 35,000 | 140,000 | 1,200,000 | ND | --- | ND | ND |
| SW8270C | Butyl benzyl phthalate | 85-68-7 | 1,200,000 | 14,000,000 | 2.30E+05 | ND | --- | ND | ND |
| SW8270C | Caprolactam | 105-60-2 | 31,000,000 | 340,000,000 | 12,000 | ND | --- | ND | -- |
| SW8270C | Carbazole | 86-74-8 | 24,000 | 96,000 | NA | ND | --- | ND | -- |
| SW8270C | Chrysene | 218-01-9 | 62,000 | 230,000 | 80,000 | ND | ND | ND | ND |
| SW8270C | Dibenzo(a,h)anthracene | 53-70-3 | 200 | 200 | 800 | ND | ND | ND | ND |
| SW8270C | Diethyl phthalate | 84-66-2 | 49,000,000 | 550,000,000 | 88,000 | ND | --- | 0.15 | ND |
| SW8270C | Di-n-butyl phthalate | 84-74-2 | 6,100,000 | 68,000,000 | 760,000 | ND | --- | ND | ND |
| SW8270C | Di-n-octyl phthalate | 117-84-0 | 2,400,000 | 27,000,000 | 3,300,000 | ND | --- | ND | ND |
| SW8270C | Fluoranthene | 206-44-0 | 2,300,000 | 24,000,000 | 1,300,000 | ND | ND | ND | ND |
| SW8270C | Fluorene | 86-73-7 | 2,300,000 | 24,000,000 | 170,000 | ND | ND | ND | ND |
| SW8270C | Hexachloro(-1,3-)butadiene | 87-68-3 | 6,000 | 25,000 | 900 | ND | --- | ND | ND |
| SW8270C | Hexachlorobenzene | 118-74-1 | 300 | 1,000 | 200 | ND | --- | ND | ND |
| SW8270C | Hexachlorocyclopentadiene | 77-47-4 | 6,000 | 110,000 | 320,000 | ND | --- | ND | ND |
| SW8270C | Hexachloroethane | 67-72-1 | 45,000 | 140,000 | 200 | ND | --- | ND | ND |
| SW8270C | Indeno(1,2,3-cd)pyrene | 193-39-5 | 600 | 2,000 | 7,000 | ND | ND | ND | ND |
| SW8270C | Isophorone | 78-59-1 | 510,000 | 2,000,000 | 200 | ND | --- | ND | ND |
| SW8270C | Naphthalene | 91-20-3 | 6,000 | 17,000 | 25,000 | ND | ND | ND | ND |
| SW8270C | Nitrobenzene | 98-95-3 | 31,000 | 340,000 | 200 | ND | --- | ND | ND |
| SW8270C | N-Nitrosodimethylamine | 62-75-9 | 700 | 700 | 700 | --- | --- | ND | ND |
| SW8270C | N-Nitroso-di-n-propylamine | 621-64-7 | 200 | 300 | 200 | ND | --- | ND | ND |
| SW8270C | N-Nitrosodiphenylamine | 86-30-6 | 99,000 | 390,000 | 400 | ND | --- | ND | ND |
| SW8270C | Pentachlorophenol | 87-86-5 | 3,000 | 10,000 | 300 | ND | --- | ND | ND |
| SW8270C | Phenanthrene | 85-01-8 | NA | 300,000,000 | NA | ND | ND | ND | ND |
| SW8270C | Phenol | 108-95-2 | 18,000,000 | 210,000,000 | 8,000 | ND | --- | ND | ND |
| SW8270C | Pyrene | 129-00-0 | 1,700,000 | 18,000,000 | 840,000 | ND | ND | ND | ND |

**Table 1. VIASANT Sample Evaluation Against NJDEP Regulations**

| | | | | | | Primary Source (Buch) Historical Data (Cont'd) | | Secondary Source (Almasi) | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Fill Source | BUCH Fill | BUCH Fill | Almasi | Almasi |
| | | | | | Location | Edison, NJ | Edison, NJ | Raritan Center | Raritan Center |
| | | | | | Sample ID | GES_TP15_1.5 | AS_SB-1_0.5 | 14103-CF-02/03 | 1400101-03 |
| | | | | | Sample Date | 6/26/14 | 7/10/14 | 3/5/14 | 1/17/14 |
| | | | | | Laboratory | APL | APL | Chemtech | AAR |
| | | | | | Data Package | 4060880 | 4070365 | F1563 | 1400103 |
| **Analytical Method** | **Constituent** | **CAS Number** | **RDCSRS** | **NRDCSRS** | **IGWSRS 11/2013** | **Result** | **Result** | **Result** | **Result** |
| ***Metals (mg/kg)*** | | | | | | | | | |
| SW6010B | Aluminum | 7429-90-5 | 78,000 | NA | 6,000 | 584 | 678 | -- | 2,170 |
| SW6010B | Antimony | 7440-36-0 | 31 | 450 | 6.0 | <0.568 | <0.531 | -- | ND |
| SW6010B | Arsenic | 7440-38-2 | 19 | 19 | 19.0 | <0.568 | <0.531 | -- | 2.26 |
| SW6010B | Barium | 7440-39-3 | 16,000 | 59,000 | 2,100 | 0.879 | 2.5 | -- | 31.1 |
| SW6010B | Beryllium | 7440-41-7 | 16 | 140 | 0.7 | <0.0284 | 0.0419 | -- | ND |
| SW6010B | Cadmium | 7440-43-9 | 78 | 78 | 2.0 | <0.0568 | <0.0531 | -- | ND |
| SW3060 | Chromium, Hexavalent | 18540-29-9 | --- | --- | --- | --- | --- | ND | --- |
| SW6010B | Cobalt | 7440-48-4 | 1,600 | 590 | 90 | <0.227 | 0.273 | -- | ND |
| SW6010B | Copper | 7440-50-8 | 3,100 | 45,000 | 11,000 | 1.37 | 3.01 | -- | 14.9 |
| SW6010B | Lead | 7439-92-1 | 400 | 800 | 90 | 0.857 | 1.44 | -- | 7.46 |
| SW6010B | Manganese | 7439-96-5 | 11,000 | 5,900 | 65 | 0.609 | 9.67 | -- | **514** |
| SW7471 | Mercury | 7439-97-6 | 23 | 65 | 0.1 | <0.0236 | <0.0221 | -- | ND |
| SW6010B | Nickel (solube salts) | 7440-02-0 | 1,600 | 23,000 | 48 | 0.173 | 0.575 | -- | ND |
| SW6010B | Selenium | 7782-49-2 | 390 | 5,700 | 11.0 | <0.710 | <0.664 | -- | ND |
| SW6010B | Silver | 7440-22-4 | 390 | 5,700 | 1.0 | <0.568 | <0.531 | -- | ND |
| SW6010B | Thallium | 7440-28-0 | 5 | 79 | 3.0 | <0.568 | <0.531 | -- | ND |
| SW6010B | Vanadium | 7440-62-2 | 78 | 1,100 | NA | 12.3 | 5.2 | -- | 26.1 |
| SW6010B | Zinc | 7440-66-6 | 23,000 | 110,000 | 930 | <0.852 | 2.8 | -- | 12 |
| ***Organochlorine Pesticides (ug/kg)*** | | | | | | | | | |
| SW8081 | 4,4'-DDD | 72-54-8 | 3,000 | 13,000 | 4,000 | ND | --- | -- | ND |
| SW8081 | 4,4'-DDE | 72-55-9 | 2,000 | 9,000 | 18,000 | ND | --- | -- | ND |
| SW8081 | 4,4'-DDT | 50-29-3 | 2,000 | 8,000 | 11,000 | ND | --- | -- | ND |
| SW8081 | Aldrin | 309-00-2 | 40 | 200 | 200 | ND | --- | -- | ND |
| SW8081 | alpha & gamma-Chlordane | 57-74-9 | 200 | 1,000 | 50 | ND | --- | -- | ND |
| SW8081 | alpha-BHC (Alpha-HCH) | 319-84-6 | 100 | 500 | 2.0 | ND | --- | -- | ND |
| SW8081 | beta-BHC (Beta-HCH) | 319-85-7 | 400 | 2,000 | 2.0 | ND | --- | -- | ND |
| SW8081 | delta-BHC (delta-HCH) | 319-86-8 | --- | --- | --- | ND | --- | -- | ND |
| SW8081 | Dieldrin | 60-57-1 | 40 | 200 | 3.0 | ND | --- | -- | ND |
| SW8081 | Endosulfan sulfate | 1031-07-8 | 470,000 | 6,800,000 | 2,000 | ND | --- | -- | ND |
| SW8081 | Endosulfan-I (alpha & beta) | 115-29-7 | 470,000 | 6,800,000 | 4,000 | ND | --- | -- | ND |
| SW8081 | Endrin | 72-20-8 | 23,000 | 340,000 | 1,000 | ND | --- | -- | ND |
| SW8081 | gamma-BHC (Lindane/gamma-HCH) | 58-89-9 | 400 | 2,000 | 2.0 | ND | --- | -- | ND |
| SW8081 | Heptachlor | 76-44-8 | 100 | 700 | 500 | ND | --- | -- | ND |
| SW8081 | Heptachlor epoxide | 1024-57-3 | 70 | 300 | 10 | ND | --- | -- | ND |
| SW8081 | Methoxychlor | 72-43-5 | 390,000 | 5,700,000 | 160,000 | ND | --- | -- | ND |
| SW8081 | Toxaphene | 8001-35-2 | 600 | 3,000 | 300 | ND | --- | -- | ND |
| ***Polychlorinated Biphenyls (ug/kg)*** | | | | | | | | | |
| SW8082 | Aroclor 1016 | 1336-36-3 | 200 | 1,000 | 200 | ND | --- | -- | ND |
| SW8082 | Aroclor 1221 | 1336-36-3 | 200 | 1,000 | 200 | ND | --- | -- | ND |
| SW8082 | Aroclor 1232 | 1336-36-3 | 200 | 1,000 | 200 | ND | --- | -- | ND |
| SW8082 | Aroclor 1242 | 1336-36-3 | 200 | 1,000 | 200 | ND | --- | -- | ND |
| SW8082 | Aroclor 1248 | 1336-36-3 | 200 | 1,000 | 200 | ND | --- | -- | ND |
| SW8082 | Aroclor 1254 | 1336-36-3 | 200 | 1,000 | 200 | ND | --- | -- | ND |
| SW8082 | Aroclor 1260 | 1336-36-3 | 200 | 1,000 | 200 | ND | --- | -- | ND |
| ***Volatile Organic Compounds (ug/kg)*** | | | | | | | | | |
| SW8260B | 1,1,1-Trichloroethane | 71-55-6 | 290,000 | 4,200,000 | 300 | ND | --- | ND | ND |
| SW8260B | 1,1,2,2-Tetrachloroethane | 79-34-5 | 1,000 | 3,000 | 7.0 | ND | --- | ND | ND |
| SW8260B | 1,1,2-Trichloroethane | 79-00-5 | 2,000 | 6,000 | 20 | ND | --- | ND | ND |
| SW8260B | 1,1-Dichloroethane | 75-34-3 | 8,000 | 24,000 | 200 | ND | --- | ND | ND |
| SW8260B | 1,1-Dichloroethene (1,1-Dichloroethylene) | 75-35-4 | 11,000 | 150,000 | 8.0 | ND | --- | ND | ND |
| SW8260B | 1,2-Dibromo-3-chloropropane | 96-12-8 | 80 | 200 | 5.0 | ND | --- | ND | ND |
| SW8260B | 1,2-Dibromoethane (ethylene dibromide) (EDB) | 106-93-4 | 8 | 40 | 5.0 | ND | --- | ND | ND |
| SW8260B | 1,2-Dichloroethane (EDC) | 107-06-2 | 900 | 3,000 | 5.0 | ND | --- | ND | ND |
| SW8260B | 1,2-Dichloroethene (cis) (c-1,2-Dichloroethylene) | 156-59-2 | 530,000 | 1,280,000 | 300 | --- | --- | ND | ND |
| SW8260B | 1,2-Dichloroethene (trans) | 156-60-5 | 300,000 | 720,000 | 600 | ND | --- | ND | ND |
| SW8260B | 1,2-Dichloroethene (total) | --- | 530,000 | 1,280,000 | 300 | ND | --- | ND | ND |
| SW8260B | 1,2-Dichloropropane | 78-87-5 | 2,000 | 5,000 | 5.0 | ND | --- | ND | ND |
| SW8260B | 1,3-Dichloropropene (cis & trans sum) | 542-75-6 | 2,000 | 7,000 | 5.0 | ND | --- | ND | ND |
| SW8260B | 2-Butanone (MEK) | 78-93-3 | 3,100,000 | 44,000,000 | 900 | ND | --- | ND | ND |
| SW8260B | Acetone (2-propanone) | 67-64-1 | 70,000,000 | NA | 19,000 | ND | --- | ND | ND |
| SW8260B | Acrolein | 107-02-8 | 500 | 1,000 | 500 | --- | --- | ND | ND |
| SW8260B | Acrylonitrile | 107-13-1 | 900 | 3,000 | 500 | --- | --- | ND | ND |
| SW8260B | Benzene | 71-43-2 | 2,000 | 5,000 | 5.0 | ND | --- | ND | ND |
| SW8260B | Bromodichloromethane (Dichlorobromomethane) | 75-27-4 | 1,000 | 3,000 | 5.0 | ND | --- | ND | ND |
| SW8260B | Bromoform | 75-25-2 | 81,000 | 280,000 | 30 | ND | --- | ND | ND |
| SW8260B | Bromomethane (Methyl bromide) | 74-83-9 | 25,000 | 59,000 | 40 | ND | --- | ND | ND |
| SW8260B | Carbon disulfide | 75-15-0 | 7,800,000 | 110,000,000 | 6,000 | ND | --- | ND | ND |
| SW8260B | Carbon tetrachloride | 53-23-5 | 600 | 2,000 | 5.0 | ND | --- | ND | ND |

**Table 1. VIASANT Sample Evaluation Against NJDEP Regulations**

| | | | | | | Primary Source (Buch) Historical Data (Cont'd) | | Secondary Source (Almasi) | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Fill Source | BUCH Fill | BUCH Fill | Almasi | Almasi |
| | | | | | Location | Edison, NJ | Edison, NJ | Raritan Center | Raritan Center |
| | | | | | Sample ID | GES_TP15_1.5 | AS_SB-1_0.5 | 14103-CF-02/03 | 1400101-03 |
| | | | | | Sample Date | 6/26/14 | 7/10/14 | 3/5/14 | 1/17/14 |
| | | | | | Laboratory | APL | APL | Chemtech | AAR |
| | | | | | Data Package | 4060880 | 4070365 | F1563 | 1400103 |
| **Analytical Method** | **Constituent** | **CAS Number** | **RDCSRS** | **NRDCSRS** | **IGWSRS 11/2013** | **Result** | **Result** | **Result** | **Result** |
| SW8260B | Chlorobenzene | 108-90-7 | 510,000 | 7,400,000 | 600 | ND | --- | ND | ND |
| SW8260B | Chloroethane (Ethyl chloride) | 75-00-3 | 220,000 | 1 | NA | ND | --- | ND | ND |
| SW8260B | Chloroform | 67-66-3 | 600 | 2,000 | 400 | ND | --- | ND | ND |
| SW8260B | Chloromethane (Methyl chloride) | 74-87-3 | 4,000 | 12,000 | NA | ND | --- | ND | ND |
| SW8260B | Dibromochloromethane (Chlorodibromomethane) | 124-48-1 | 3,000 | 8,000 | 5.0 | ND | --- | ND | ND |
| SW8260B | Dichlorodifluoromethane | 75-71-8 | 490,000 | 230,000,000 | 39,000 | ND | --- | ND | ND |
| SW8260B | Ethylbenzene | 100-41-4 | 7,800,000 | 110,000,000 | 13,000 | ND | --- | ND | -- |
| SW8260B | Methyl Acetate | 79-20-9 | 78,000,000 | NA | 22,000 | ND | --- | ND | -- |
| SW8260B | Methyl tert-butyl ether (MTBE) | 1634-04-4 | 110,000 | 17,000 | 200 | ND | --- | ND | ND |
| SW8260B | Methylene chloride (Dichloromethane) | 75-09-2 | 34,000 | 97,000 | 10 | ND | --- | ND | ND |
| SW8260B | Styrene | 100-42-5 | 90,000 | 260,000 | 3,000 | ND | --- | ND | -- |
| SW8260B | Tertiary butyl alcohol (TBA) | 75-65-0 | 1,400,000 | 11,000,000 | 300 | ND | --- | ND | ND |
| SW8260B | Tetrachloroethene (PCE) (Tetrachloroethylene) | 127-18-4 | 2,000 | 5,000 | 5.0 | ND | --- | ND | ND |
| SW8260B | Toluene | 108-88-3 | 6,300,000 | 91,000,000 | 7,000 | ND | --- | ND | ND |
| SW8260B | Trichloroethene (TCE) (Trichloroethylene) | 79-01-6 | 7,000 | 20,000 | 10 | ND | --- | ND | ND |
| SW8260B | Trichlorofluoromethane | 75-69-4 | 23,000,000 | 340,000,000 | 34,000 | ND | --- | ND | ND |
| SW8260B | Vinyl chloride | 75-01-4 | 700 | 2,000 | 5.0 | ND | --- | ND | ND |
| SW8260B | Xylene (total) | 1330-20-7 | 12,000,000 | 170,000,000 | 19,000 | ND | --- | ND | ND |
| ***Miscellaneous*** | | | | | | | | | |
| SW9012 | Cyanide (mg/kg) | 57-12-5 | 2 | 23 | 20 | <0.284 | --- | -- | ND |
| NJEPHme | EPH (mg/kg) | --- | 5,100 | 54,000 | --- | ND | --- | 3.64 | -- |
| SW9045 | pH (su) | --- | --- | --- | --- | 4.0 | --- | 5.14 | -- |
| %Solids | Solids (Percent) (%) | --- | --- | --- | --- | 88.00% | 94.10% | 99.91% | 84.40% |

Notes
IGWSRS - Impact to Groundwater Soil Remediation Standards from November 2013 NJDEP Guidance
RDCSRS - Residential Direct Contact Health Based Criteria and Soil Remediation Standards
NRDCSRS - Non-residential Direct Contact Health Based Criteria and Soil Remediation Standards
CAS - Chemical Abstract Service
NA - Standard not available
ND - Not detected in sample
mg/kg - Milligrams per kilogram
ug/kg - Micrograms per kilogram
--- = Not Analyzed
**33,100 -** Bold and shaded value indicates constituent was detected above the most stringent soil screening criteria.
TCL SVOC & VOC does not include 1,2-Diphenylhydrazine, Benzidine, N-Nitrosodimethylamine, Acrolein, Acrylonitrile, and Tertiary 1,2-Diphenlyhydrazine decomposes into Azobenzene under GC (gas chromatograpy) conditions

**Primary Source (Buch/Macy)**
**Results**

**Legend**

- Historic Soil Boring
- EnviroTrac Soil Boring
- Location of Historical and ET Soil Boring
- Proposed Paved Area Limits
- Proposed Buildings
- Parcel Lines
- VIASANT Borrow Area
- VIASANT Sample Point
- VIASANT Tentative Sample Point

Location On-Site (Extent in Solid RED)

NOTES:
1. AERIAL IMAGERY FROM NJGIN, 2012-2013 HIGH RESOLUTION ORTHOPHOTOGRAPHY, 2012.
2. AERIAL IMAGERY MAY NOT REFLECT CURRENT SITE CONDITIONS AND FEATURES.
3. PROPOSED SITE FEATURES FROM PROPOSED BUILDING ADDITION PLAN PREPARED BY MEH CONSULTING ENGINEERS, 2014.

| | |
|---|---|
| DRAFTED BY: AGS | Warehouse Addition<br>Boring Location Map |
| CHECKED BY: | MACY'S EDISON<br>401 CLEARVIEW RD<br>EDISON, NJ 08837<br>40.513680 N, 74.333325 W |
| REVIEWED BY: | |
| | EnviroTrac<br>176 THORN HILL ROAD, WARRENDALE, PA 15086 |
| N | SCALE: 0 50 100 Feet<br>DATE: 10/16/2014 |

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

# DATA FOR

## VOLATILE ORGANICS

## SEMI-VOLATILE ORGANICS

## GC SEMI-VOLATILES

## METALS

## GENERAL CHEMISTRY

**PROJECT NAME : WESTON HATCO SOUTHEAST LEG PROJECT**

**VIASANT, LLC**

**606 East Baltimore Pike, Floor 3**

**Media, PA - 19063**

**Phone No: 484-427-2960**

**ORDER ID : F4620**

**ATTENTION : Robin White**

ACCREDITED IN ACCORDANCE WITH nelac

DoD ELAP

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Date : 11/07/2014

Dear Robin White,

**1** soil samples for the **Weston Hatco Southeast Leg Project** project were received on **11/05/2014.** The analytical fax results for those samples requested for an expedited turn around time may be seen in this report. Please contact me if you have any questions or concerns regarding this report.

The invoice for this workorder is also attached to the e-mail.

Regards,

Snehal Mehta

908-728-3149

snehal@chemtech.net

# CHEMTECH
## CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO.
QUOTE NO. Q1409084
COC Number 032916

**CLIENT INFORMATION** (REPORT TO BE SENT TO)

COMPANY: VIASANT
ADDRESS: 1001 E Baltimore Pk F13
CITY: Media STATE: PA ZIP: 19063
ATTENTION: Robin White
PHONE: 443-309-9084 FAX: 484-444-0703

**CLIENT PROJECT INFORMATION**

PROJECT NAME: Weston Hatco
PROJECT NO. VPR-14150 LOCATION: Fords, NJ
PROJECT MANAGER: Jon Lovenduski
e-mail: rwhite@viasant.com
PHONE: — FAX: —

**CLIENT BILLING INFORMATION**

BILL TO: VIASANT PO#: VPR-14150
ADDRESS: 854 E Algonquin Rd
CITY: Schaumburg STATE: IL ZIP: 60173
ATTENTION: D. Marion PHONE: 847-956-2000

**DATA TURNAROUND INFORMATION**

FAX: 24hr DAYS *
HARD COPY: DAYS *
EDD: DAYS *
PREAPPROVED TAT: ☐ YES ☐ NO
* STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

**DATA DELIVERABLE INFORMATION**

☐ LEVEL 1: Results only ☐ Others NJ Reduced
☐ LEVEL 2: Results + QC
☐ LEVEL 3: Results (plus results raw data) + QC
☐ LEVEL 4: Results + QC (all raw data)
☐ EDD Format:

**ANALYSIS**

1 TCL VOC - NJ IGW
2 TCL SVOC - NJ IGW
3 TAL Metals + CN - NJ IGW
4 PCB
5 EPH Cat 2 NF
6
7
8
9

**PRESERVATIVES**

| CHEMTECH SAMPLE ID | PROJECT SAMPLE IDENTIFICATION | SAMPLE MATRIX | SAMPLE TYPE COMP | SAMPLE TYPE GRAB | SAMPLE COLLECTION DATE | SAMPLE COLLECTION TIME | # OF BOTTLES | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | E | E | E | E | E | | | | | ← Specify Preservatives A-HCl B-HNO3 C-H2SO4 D-NaOH E-ICE F-Other |
| 1. | CF-BUCH-01 | S | X | X | 11/5/14 | 12:55 | 6 | X | X | X | X | X | | | | | NJDEP Clean Fill |
| 2. | | | | | | | | | | | | | | | | | |
| 3. | | | | | | | | | | | | | | | | | |
| 4. | | | | | | | | | | | | | | | | | |
| 5. | | | | | | | | | | | | | | | | | |
| 6. | | | | | | | | | | | | | | | | | |
| 7. | | | | | | | | | | | | | | | | | |
| 8. | | | | | | | | | | | | | | | | | |
| 9. | | | | | | | | | | | | | | | | | |
| 10. | | | | | | | | | | | | | | | | | |

**SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY**

| RELINQUISHED BY SAMPLER: | DATE/TIME: | RECEIVED BY: |
|---|---|---|
| 1. Robin White | 11/5/14 | 1. |
| RELINQUISHED BY: 2. | DATE/TIME: | RECEIVED BY: 2. |
| RELINQUISHED BY: 3. | DATE/TIME: | RECEIVED FOR LAB BY: 3. |

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant
Cooler Temp.
MeOH extraction requires an additional 4 oz jar for percent solid.
Ice in Cooler?:
Comments:

Page 1 of 1

SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☐ OVERNIGHT
CHEMTECH: ☐ PICKED UP ☐ OVERNIGHT

Shipment Comp ☐ YES ☐ N

Revision 8/2007

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | VIASANT, LLC | Date Collected: | 11/05/14 12:55 |
| Project: | Weston Hatco Southeast Leg Project | Date Received: | 11/05/14 |
| Client Sample ID: | CF-BUCH-01 | SDG No.: | F4620 |
| Lab Sample ID: | F4620-01 | Matrix: | SOIL |
| | | % Solid: | 91.6 |

| Parameter | Conc. | Qua. | DF | MDL | LOD | LOQ / CRQL | Units(Dry Weight) | Prep Date | Date Ana. | Ana Met. |
|---|---|---|---|---|---|---|---|---|---|---|
| Cyanide | 0.132 | U | 1 | 0.035 | 0.132 | 0.265 | mg/Kg | 11/07/14 08:00 | 11/07/14 11:01 | 9012B |

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

CHEMTECH 284 Sheffield Street, Mountainside NJ 07092 Phone: 908 789 8900 Fax : 908 789 8922

# Report of Analysis

| | | | | | |
|---|---|---|---|---|---|
| Client: | VIASANT, LLC | | | Date Collected: | 11/05/14 |
| Project: | Weston Hatco Southeast Leg Project | | | Date Received: | 11/05/14 |
| Client Sample ID: | CF-BUCH-01 | | | SDG No.: | F4620 |
| Lab Sample ID: | F4620-01 | | | Matrix: | Solid |
| Analytical Method: | NJEPH | | | % Moisture: | 8.4 |
| Sample Wt/Vol: | 30.04 | Units: | g | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | | | uL | Test: | EPH |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FC014542.D | 1 | 11/06/14 | 11/06/14 | PB80142 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| Aromatic C10-C12 | Aromatic C10-C12 | 0.364 | U | 0.158 | 0.364 | 0.727 | mg/kg |
| Aromatic C12-C16 | Aromatic C12-C16 | 0.545 | U | 0.115 | 0.545 | 1.09 | mg/kg |
| Aromatic C16-C21 | Aromatic C16-C21 | 0.91 | U | 0.166 | 0.91 | 1.82 | mg/kg |
| Aromatic C21-C36 | Aromatic C21-C36 | 1 | J | 0.678 | 1.455 | 2.91 | mg/kg |
| **SURROGATES** | | | | | | | |
| 2-Bromonaphthalene (SURR) | 2-Bromonaphthalene (SURR) | 48.7 | | 40 - 140 | | 97.36% | SPK: 50 |
| 2-Flurobiphenyl (SURR) | 2-Flurobiphenyl (SURR) | 41.5 | | 40 - 140 | | 82.98% | SPK: 50 |
| ortho-Terphenyl (SURR) | ortho-Terphenyl (SURR) | 41.8 | | 40 - 140 | | 83.52% | SPK: 50 |

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# Report of Analysis

| | | | | | |
|---|---|---|---|---|---|
| Client: | VIASANT, LLC | | | Date Collected: | 11/05/14 |
| Project: | Weston Hatco Southeast Leg Project | | | Date Received: | 11/05/14 |
| Client Sample ID: | CF-BUCH-01 | | | SDG No.: | F4620 |
| Lab Sample ID: | F4620-01 | | | Matrix: | Solid |
| Analytical Method: | NJEPH | | | % Moisture: | 8.4 |
| Sample Wt/Vol: | 30.04 | Units: | g | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | | | uL | Test: | EPH |

| File ID : | Dilution: | Prep Date : | Date Analyzed : | Prep Batch ID |
|---|---|---|---|---|
| FC014557.D | 1 | 11/06/14 | 11/07/14 | PB80142 |

| CAS Number | Parameter | | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | | |
| Aliphatic C9-C12 | | Aliphatic C9-C12 | 0.545 | U | 0.326 | 0.545 | 1.09 | mg/kg |
| Aliphatic C12-C16 | | Aliphatic C12-C16 | 1.06 | | 0.264 | 0.364 | 0.727 | mg/kg |
| Aliphatic C16-C21 | | Aliphatic C16-C21 | 0.851 | J | 0.455 | 0.545 | 1.09 | mg/kg |
| Aliphatic C21-C28 | | Aliphatic C21-C28 | 0.725 | U | 0.582 | 0.725 | 1.45 | mg/kg |
| Aliphatic C28-C40 | | Aliphatic C28-C40 | 1.09 | U | 0.874 | 1.09 | 2.18 | mg/kg |
| **SURROGATES** | | | | | | | | |
| 1-chlorooctadecane (SURR) | | 1-chlorooctadecane (SURR) | 35.5 | | 40 - 140 | | 71.02% | SPK: 50 |
| ortho-Terphenyl (SURR) | | ortho-Terphenyl (SURR) | 0 | | 40 - 140 | | 0% | SPK: 50 |

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | VIASANT, LLC | Date Collected: | 11/05/14 |
| Project: | Weston Hatco Southeast Leg Project | Date Received: | 11/05/14 |
| Client Sample ID: | CF-BUCH-01 | SDG No.: | F4620 |
| Lab Sample ID: | F4620-01 | Matrix: | SOIL |
| Level (low/med): | low | % Solid: | 91.6 |

| Cas | Parameter | Conc. | Qua. | DF | MDL | LOD | LOQ / CRQL | Units(Dry Weight) | Prep Date | Date Ana. | Ana Met. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 3300 | | 1 | 0.784 | 1.17 | 4.67 | mg/Kg | 11/06/14 08:00 | 11/06/14 15:41 | SW6010 |
| 7440-36-0 | Antimony | 0.583 | U | 1 | 0.523 | 0.583 | 2.33 | mg/Kg | 11/06/14 08:00 | 11/06/14 15:41 | SW6010 |
| 7440-38-2 | Arsenic | 1.64 | | 1 | 0.233 | 0.233 | 0.933 | mg/Kg | 11/06/14 08:00 | 11/06/14 15:41 | SW6010 |
| 7440-39-3 | Barium | 4.16 | J | 1 | 0.373 | 1.17 | 4.67 | mg/Kg | 11/06/14 08:00 | 11/06/14 15:41 | SW6010 |
| 7440-41-7 | Beryllium | 0.091 | J | 1 | 0.056 | 0.07 | 0.28 | mg/Kg | 11/06/14 08:00 | 11/06/14 15:41 | SW6010 |
| 7440-43-9 | Cadmium | 0.07 | U | 1 | 0.056 | 0.07 | 0.28 | mg/Kg | 11/06/14 08:00 | 11/06/14 15:41 | SW6010 |
| 7440-48-4 | Cobalt | 0.558 | J | 1 | 0.35 | 0.35 | 1.4 | mg/Kg | 11/06/14 08:00 | 11/06/14 15:41 | SW6010 |
| 7440-50-8 | Copper | 3.48 | | 1 | 0.233 | 0.233 | 0.933 | mg/Kg | 11/06/14 08:00 | 11/06/14 15:41 | SW6010 |
| 7439-92-1 | Lead | 2.55 | | 1 | 0.112 | 0.233 | 0.56 | mg/Kg | 11/06/14 08:00 | 11/06/14 15:41 | SW6010 |
| 7439-96-5 | Manganese | 2.6 | | 1 | 0.177 | 0.233 | 0.933 | mg/Kg | 11/06/14 08:00 | 11/06/14 15:41 | SW6010 |
| 7439-97-6 | Mercury | 0.015 | | 1 | 0.005 | 0.005 | 0.01 | mg/Kg | 11/05/14 08:00 | 11/06/14 19:44 | SW7471A |
| 7440-02-0 | Nickel | 0.746 | J | 1 | 0.429 | 0.467 | 1.87 | mg/Kg | 11/06/14 08:00 | 11/06/14 15:41 | SW6010 |
| 7782-49-2 | Selenium | 0.233 | U | 1 | 0.233 | 0.233 | 0.933 | mg/Kg | 11/06/14 08:00 | 11/06/14 15:41 | SW6010 |
| 7440-22-4 | Silver | 0.117 | U | 1 | 0.117 | 0.117 | 0.467 | mg/Kg | 11/06/14 08:00 | 11/06/14 15:41 | SW6010 |
| 7440-28-0 | Thallium | 0.467 | U | 1 | 0.252 | 0.467 | 1.87 | mg/Kg | 11/06/14 08:00 | 11/06/14 15:41 | SW6010 |
| 7440-62-2 | Vanadium | 21.5 | | 1 | 0.467 | 0.467 | 1.87 | mg/Kg | 11/06/14 08:00 | 11/06/14 15:41 | SW6010 |
| 7440-66-6 | Zinc | 1.49 | J | 1 | 0.467 | 0.467 | 1.87 | mg/Kg | 11/06/14 08:00 | 11/06/14 15:41 | SW6010 |

| | | | | | |
|---|---|---|---|---|---|
| Color Before: | Brown | Clarity Before: | | Texture: | Medium |
| Color After: | Yellow | Clarity After: | | Artifacts: | No |
| Comments: | Mercury | | | | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | VIASANT, LLC | Date Collected: | 11/05/14 |
| Project: | Weston Hatco Southeast Leg Project | Date Received: | 11/05/14 |
| Client Sample ID: | CF-BUCH-01 | SDG No.: | F4620 |
| Lab Sample ID: | F4620-01 | Matrix: | SOIL |
| Analytical Method: | SW8082A | % Moisture: | 8.4 Decanted: |
| Sample Wt/Vol: | 30.08 Units: g | Final Vol: | 10000 uL |
| Soil Aliquot Vol: | uL | Test: | PCB |
| Extraction Type: | | Injection Volume : | |
| GPC Factor : | 1.0 PH : | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| PB012584.D | 1 | 11/06/14 08:00 | 11/07/14 05:23 | PB80162 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units(Dry Weight) |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| 12674-11-2 | Aroclor-1016 | 3.6 | U | 3.6 | 3.6 | 18.5 | ug/kg |
| 11104-28-2 | Aroclor-1221 | 3.6 | U | 3.6 | 3.6 | 18.5 | ug/kg |
| 11141-16-5 | Aroclor-1232 | 3.6 | U | 3.6 | 3.6 | 18.5 | ug/kg |
| 53469-21-9 | Aroclor-1242 | 3.6 | U | 3.6 | 3.6 | 18.5 | ug/kg |
| 12672-29-6 | Aroclor-1248 | 3.6 | U | 3.6 | 3.6 | 18.5 | ug/kg |
| 11097-69-1 | Aroclor-1254 | 3.6 | U | 1.6 | 3.6 | 18.5 | ug/kg |
| 11096-82-5 | Aroclor-1260 | 3.6 | U | 3.6 | 3.6 | 18.5 | ug/kg |
| **SURROGATES** | | | | | | | |
| 877-09-8 | Tetrachloro-m-xylene | 14.8 | | 10 - 166 | | 74% | SPK: 20 |
| 2051-24-3 | Decachlorobiphenyl | 15.4 | | 60 - 125 | | 77% | SPK: 20 |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | VIASANT, LLC | Date Collected: | 11/05/14 |
| Project: | Weston Hatco Southeast Leg Project | Date Received: | 11/05/14 |
| Client Sample ID: | CF-BUCH-01 | SDG No.: | F4620 |
| Lab Sample ID: | F4620-01 | Matrix: | SOIL |
| Analytical Method: | SW8081 | % Moisture: | 8.4 Decanted: |
| Sample Wt/Vol: | 30 Units: g | Final Vol: | 10000 uL |
| Soil Aliquot Vol: | uL | Test: | PESTICIDE NJCLEAN Group New |
| Extraction Type: | | Injection Volume : | |
| GPC Factor : | 1.0 PH : | | |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| PL010591.D | 1 | 11/06/14 08:00 | 11/07/14 11:25 | PB80163 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units(Dry Weight) |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| 319-84-6 | alpha-BHC | 0.36 | U | 0.142 | 0.36 | 1.9 | ug/kg |
| 319-85-7 | beta-BHC | 0.36 | U | 0.197 | 0.36 | 1.9 | ug/kg |
| 58-89-9 | gamma-BHC (Lindane) | 0.36 | U | 0.164 | 0.36 | 1.9 | ug/kg |
| 76-44-8 | Heptachlor | 0.36 | U | 0.153 | 0.36 | 1.9 | ug/kg |
| 309-00-2 | Aldrin | 0.36 | U | 0.109 | 0.36 | 1.9 | ug/kg |
| 1024-57-3 | Heptachlor epoxide | 0.36 | U | 0.175 | 0.36 | 1.9 | ug/kg |
| 959-98-8 | Endosulfan I | 0.36 | U | 0.164 | 0.36 | 1.9 | ug/kg |
| 60-57-1 | Dieldrin | 0.36 | U | 0.142 | 0.36 | 1.9 | ug/kg |
| 72-55-9 | 4,4-DDE | 0.36 | U | 0.218 | 0.36 | 1.9 | ug/kg |
| 72-20-8 | Endrin | 0.36 | U | 0.197 | 0.36 | 1.9 | ug/kg |
| 33213-65-9 | Endosulfan II | 0.36 | U | 0.153 | 0.36 | 1.9 | ug/kg |
| 72-54-8 | 4,4-DDD | 0.36 | U | 0.186 | 0.36 | 1.9 | ug/kg |
| 1031-07-8 | Endosulfan Sulfate | 0.36 | U | 0.164 | 0.36 | 1.9 | ug/kg |
| 50-29-3 | 4,4-DDT | 0.36 | U | 0.153 | 0.36 | 1.9 | ug/kg |
| 72-43-5 | Methoxychlor | 0.36 | U | 0.186 | 0.36 | 1.9 | ug/kg |
| 5103-71-9 | alpha-Chlordane | 0.36 | U | 0.153 | 0.36 | 1.9 | ug/kg |
| 5103-74-2 | gamma-Chlordane | 0.36 | U | 0.142 | 0.36 | 1.9 | ug/kg |
| 8001-35-2 | Toxaphene | 3.6 | U | 3.6 | 3.6 | 18.6 | ug/kg |
| **SURROGATES** | | | | | | | |
| 2051-24-3 | Decachlorobiphenyl | 26.3 | | 10 - 169 | | 132% | SPK: 20 |
| 877-09-8 | Tetrachloro-m-xylene | 28.2 | | 31 - 151 | | 141% | SPK: 20 |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | VIASANT, LLC | Date Collected: | 11/05/14 |
| Project: | Weston Hatco Southeast Leg Project | Date Received: | 11/05/14 |
| Client Sample ID: | CF-BUCH-01 | SDG No.: | F4620 |
| Lab Sample ID: | F4620-01 | Matrix: | SOIL |
| Analytical Method: | SW8270 | % Moisture: | 8.4 |
| Sample Wt/Vol: | 30.02 Units: g | Final Vol: | 1000 uL |
| Soil Aliquot Vol: | uL | Test: | SVOCMS Group1 |
| Extraction Type : | Decanted : N | Level : | LOW |
| Injection Volume : | GPC Factor : 1.0 | GPC Cleanup : | N PH : |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| BF075279.D | 1 | 11/05/14 08:00 | 11/07/14 17:41 | PB80102 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units(Dry Weight) |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| 62-75-9 | n-Nitrosodimethylamine | 72.7 | U | 18.7 | 72.7 | 360 | ug/Kg |
| 100-52-7 | Benzaldehyde | 36.4 | U | 19 | 36.4 | 360 | ug/Kg |
| 108-95-2 | Phenol | 36.4 | U | 8.4 | 36.4 | 360 | ug/Kg |
| 111-44-4 | bis(2-Chloroethyl)ether | 36.4 | U | 17.5 | 36.4 | 360 | ug/Kg |
| 95-57-8 | 2-Chlorophenol | 36.4 | U | 19.2 | 36.4 | 360 | ug/Kg |
| 95-48-7 | 2-Methylphenol | 36.4 | U | 19.7 | 36.4 | 360 | ug/Kg |
| 108-60-1 | 2,2-oxybis(1-Chloropropane) | 36.4 | U | 15.1 | 36.4 | 360 | ug/Kg |
| 98-86-2 | Acetophenone | 36.4 | U | 11.1 | 36.4 | 360 | ug/Kg |
| 65794-96-9 | 3+4-Methylphenols | 36.4 | U | 18.9 | 36.4 | 360 | ug/Kg |
| 621-64-7 | n-Nitroso-di-n-propylamine | 36.4 | U | 18.3 | 36.4 | 360 | ug/Kg |
| 67-72-1 | Hexachloroethane | 36.4 | U | 16.3 | 36.4 | 360 | ug/Kg |
| 98-95-3 | Nitrobenzene | 36.4 | U | 13.7 | 36.4 | 360 | ug/Kg |
| 78-59-1 | Isophorone | 36.4 | U | 12 | 36.4 | 360 | ug/Kg |
| 105-67-9 | 2,4-Dimethylphenol | 36.4 | U | 20.6 | 36.4 | 360 | ug/Kg |
| 120-83-2 | 2,4-Dichlorophenol | 36.4 | U | 13.9 | 36.4 | 360 | ug/Kg |
| 91-20-3 | Naphthalene | 36.4 | U | 12.5 | 36.4 | 360 | ug/Kg |
| 87-68-3 | Hexachlorobutadiene | 36.4 | U | 13.2 | 36.4 | 360 | ug/Kg |
| 105-60-2 | Caprolactam | 72.7 | U | 16.9 | 72.7 | 360 | ug/Kg |
| 91-57-6 | 2-Methylnaphthalene | 36.4 | U | 9.2 | 36.4 | 360 | ug/Kg |
| 77-47-4 | Hexachlorocyclopentadiene | 36.4 | U | 8.8 | 36.4 | 360 | ug/Kg |
| 88-06-2 | 2,4,6-Trichlorophenol | 36.4 | U | 11.1 | 36.4 | 360 | ug/Kg |
| 95-95-4 | 2,4,5-Trichlorophenol | 36.4 | U | 25.5 | 36.4 | 360 | ug/Kg |
| 92-52-4 | 1,1-Biphenyl | 36.4 | U | 13.7 | 36.4 | 360 | ug/Kg |
| 88-74-4 | 2-Nitroaniline | 36.4 | U | 16.1 | 36.4 | 360 | ug/Kg |
| 208-96-8 | Acenaphthylene | 36.4 | U | 9.2 | 36.4 | 360 | ug/Kg |
| 606-20-2 | 2,6-Dinitrotoluene | 36.4 | U | 14.8 | 36.4 | 360 | ug/Kg |
| 83-32-9 | Acenaphthene | 36.4 | U | 10.3 | 36.4 | 360 | ug/Kg |
| 51-28-5 | 2,4-Dinitrophenol | 290 | U | 37 | 290 | 360 | ug/Kg |
| 121-14-2 | 2,4-Dinitrotoluene | 36.4 | U | 10.9 | 36.4 | 360 | ug/Kg |
| 84-66-2 | Diethylphthalate | 36.4 | U | 5.7 | 36.4 | 360 | ug/Kg |
| 86-73-7 | Fluorene | 36.4 | U | 13.7 | 36.4 | 360 | ug/Kg |

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | VIASANT, LLC | Date Collected: | 11/05/14 |
| Project: | Weston Hatco Southeast Leg Project | Date Received: | 11/05/14 |
| Client Sample ID: | CF-BUCH-01 | SDG No.: | F4620 |
| Lab Sample ID: | F4620-01 | Matrix: | SOIL |
| Analytical Method: | SW8270 | % Moisture: | 8.4 |
| Sample Wt/Vol: | 30.02 Units: g | Final Vol: | 1000 uL |
| Soil Aliquot Vol: | uL | Test: | SVOCMS Group1 |
| Extraction Type : | Decanted : N | Level : | LOW |
| Injection Volume : | GPC Factor : 1.0 | GPC Cleanup : | N PH : |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| BF075279.D | 1 | 11/05/14 08:00 | 11/07/14 17:41 | PB80102 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units(Dry Weight) |
|---|---|---|---|---|---|---|---|
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 180 | U | 20.8 | 180 | 360 | ug/Kg |
| 86-30-6 | n-Nitrosodiphenylamine | 36.4 | U | 8.7 | 36.4 | 360 | ug/Kg |
| 103-33-3 | Azobenzene | 36.4 | U | 8.5 | 36.4 | 360 | ug/Kg |
| 118-74-1 | Hexachlorobenzene | 36.4 | U | 14.8 | 36.4 | 360 | ug/Kg |
| 1912-24-9 | Atrazine | 36.4 | U | 19.2 | 36.4 | 360 | ug/Kg |
| 87-86-5 | Pentachlorophenol | 36.4 | U | 24.9 | 36.4 | 360 | ug/Kg |
| 85-01-8 | Phenanthrene | 36.4 | U | 9.8 | 36.4 | 360 | ug/Kg |
| 120-12-7 | Anthracene | 36.4 | U | 7.4 | 36.4 | 360 | ug/Kg |
| 86-74-8 | Carbazole | 36.4 | U | 8 | 36.4 | 360 | ug/Kg |
| 84-74-2 | Di-n-butylphthalate | 36.4 | U | 28.6 | 36.4 | 360 | ug/Kg |
| 206-44-0 | Fluoranthene | 36.4 | U | 7.3 | 36.4 | 360 | ug/Kg |
| 92-87-5 | Benzidine | 72.7 | U | 36.5 | 72.7 | 360 | ug/Kg |
| 129-00-0 | Pyrene | 36.4 | U | 8.7 | 36.4 | 360 | ug/Kg |
| 85-68-7 | Butylbenzylphthalate | 36.4 | U | 17.5 | 36.4 | 360 | ug/Kg |
| 91-94-1 | 3,3-Dichlorobenzidine | 36.4 | U | 23.3 | 36.4 | 360 | ug/Kg |
| 56-55-3 | Benzo(a)anthracene | 36.4 | U | 17.3 | 36.4 | 360 | ug/Kg |
| 218-01-9 | Chrysene | 36.4 | U | 16.5 | 36.4 | 360 | ug/Kg |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | 36.4 | U | 12.9 | 36.4 | 360 | ug/Kg |
| 117-84-0 | Di-n-octyl phthalate | 36.4 | U | 4.1 | 36.4 | 360 | ug/Kg |
| 205-99-2 | Benzo(b)fluoranthene | 36.4 | U | 11.9 | 36.4 | 360 | ug/Kg |
| 207-08-9 | Benzo(k)fluoranthene | 36.4 | U | 17.1 | 36.4 | 360 | ug/Kg |
| 50-32-8 | Benzo(a)pyrene | 36.4 | U | 7.9 | 36.4 | 360 | ug/Kg |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 36.4 | U | 12.1 | 36.4 | 360 | ug/Kg |
| 53-70-3 | Dibenzo(a,h)anthracene | 36.4 | U | 10.5 | 36.4 | 360 | ug/Kg |
| 191-24-2 | Benzo(g,h,i)perylene | 36.4 | U | 14.7 | 36.4 | 360 | ug/Kg |
| **SURROGATES** | | | | | | | |
| 367-12-4 | 2-Fluorophenol | 110 | | 28 - 127 | | 74% | SPK: 150 |
| 13127-88-3 | Phenol-d6 | 88.4 | | 34 - 127 | | 59% | SPK: 150 |
| 4165-60-0 | Nitrobenzene-d5 | 68.8 | | 31 - 132 | | 69% | SPK: 100 |
| 321-60-8 | 2-Fluorobiphenyl | 63.1 | | 39 - 123 | | 63% | SPK: 100 |
| 118-79-6 | 2,4,6-Tribromophenol | 89.5 | | 30 - 133 | | 60% | SPK: 150 |
| 1718-51-0 | Terphenyl-d14 | 60.5 | | 37 - 115 | | 61% | SPK: 100 |

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | VIASANT, LLC | Date Collected: | 11/05/14 |
| Project: | Weston Hatco Southeast Leg Project | Date Received: | 11/05/14 |
| Client Sample ID: | CF-BUCH-01 | SDG No.: | F4620 |
| Lab Sample ID: | F4620-01 | Matrix: | SOIL |
| Analytical Method: | SW8270 | % Moisture: | 8.4 |
| Sample Wt/Vol: | 30.02 Units: g | Final Vol: | 1000 uL |
| Soil Aliquot Vol: | uL | Test: | SVOCMS Group1 |
| Extraction Type : | Decanted : N | Level : | LOW |
| Injection Volume : | GPC Factor : 1.0 | GPC Cleanup : | N PH : |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| BF075279.D | 1 | 11/05/14 08:00 | 11/07/14 17:41 | PB80102 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **INTERNAL STANDARDS** | | | | | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 112656 | 7.72 | | | | |
| 1146-65-2 | Naphthalene-d8 | 442834 | 10.72 | | | | |
| 15067-26-2 | Acenaphthene-d10 | 243805 | 14.85 | | | | |
| 1517-22-2 | Phenanthrene-d10 | 442362 | 17.48 | | | | |
| 1719-03-5 | Chrysene-d12 | 418001 | 20.91 | | | | |
| 1520-96-3 | Perylene-d12 | 411923 | 22.53 | | | | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | VIASANT, LLC | Date Collected: | 11/05/14 |
| Project: | Weston Hatco Southeast Leg Project | Date Received: | 11/05/14 |
| Client Sample ID: | CF-BUCH-01 | SDG No.: | F4620 |
| Lab Sample ID: | F4620-01 | Matrix: | SOIL |
| Analytical Method: | SW8260 | % Moisture: | 8.4 |
| Sample Wt/Vol: | 5.47 Units: g | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group1 |
| GC Column: | RTX-VMS ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VF043549.D | 1 | | 11/05/14 17:09 | VF110514 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units(Dry Weight) |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 74-87-3 | Chloromethane | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 75-01-4 | Vinyl Chloride | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 74-83-9 | Bromomethane | 1 | U | 1 | 1 | 5 | ug/Kg |
| 75-00-3 | Chloroethane | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 75-69-4 | Trichlorofluoromethane | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 75-65-0 | Tert butyl alcohol | 24.9 | U | 7.4 | 24.9 | 24.9 | ug/Kg |
| 75-35-4 | 1,1-Dichloroethene | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 107-02-8 | Acrolein | 24.9 | U | 4 | 24.9 | 24.9 | ug/Kg |
| 107-13-1 | Acrylonitrile | 2.5 | U | 2.5 | 2.5 | 24.9 | ug/Kg |
| 67-64-1 | Acetone | 2.5 | U | 2.5 | 2.5 | 24.9 | ug/Kg |
| 75-15-0 | Carbon Disulfide | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 1634-04-4 | Methyl tert-butyl Ether | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 79-20-9 | Methyl Acetate | 1 | U | 1 | 1 | 5 | ug/Kg |
| 75-09-2 | Methylene Chloride | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 156-60-5 | trans-1,2-Dichloroethene | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 75-34-3 | 1,1-Dichloroethane | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 78-93-3 | 2-Butanone | 7.5 | U | 3.1 | 7.5 | 24.9 | ug/Kg |
| 56-23-5 | Carbon Tetrachloride | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 156-59-2 | cis-1,2-Dichloroethene | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 67-66-3 | Chloroform | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 71-55-6 | 1,1,1-Trichloroethane | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 71-43-2 | Benzene | 0.5 | U | 0.38 | 0.5 | 5 | ug/Kg |
| 107-06-2 | 1,2-Dichloroethane | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 79-01-6 | Trichloroethene | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 78-87-5 | 1,2-Dichloropropane | 0.5 | U | 0.26 | 0.5 | 5 | ug/Kg |
| 75-27-4 | Bromodichloromethane | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 108-10-1 | 4-Methyl-2-Pentanone | 2.5 | U | 2.5 | 2.5 | 24.9 | ug/Kg |
| 108-88-3 | Toluene | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 10061-02-6 | t-1,3-Dichloropropene | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | VIASANT, LLC | Date Collected: | 11/05/14 |
| Project: | Weston Hatco Southeast Leg Project | Date Received: | 11/05/14 |
| Client Sample ID: | CF-BUCH-01 | SDG No.: | F4620 |
| Lab Sample ID: | F4620-01 | Matrix: | SOIL |
| Analytical Method: | SW8260 | % Moisture: | 8.4 |
| Sample Wt/Vol: | 5.47 Units: g | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group1 |
| GC Column: | RTX-VMS ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VF043549.D | 1 | | 11/05/14 17:09 | VF110514 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units(Dry Weight) |
|---|---|---|---|---|---|---|---|
| 79-00-5 | 1,1,2-Trichloroethane | 1 | U | 0.9 | 1 | 5 | ug/Kg |
| 124-48-1 | Dibromochloromethane | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 106-93-4 | 1,2-Dibromoethane | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 127-18-4 | Tetrachloroethene | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 108-90-7 | Chlorobenzene | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 100-41-4 | Ethyl Benzene | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 179601-23-1 | m/p-Xylenes | 1 | U | 0.72 | 1 | 10 | ug/Kg |
| 1330-20-7 | Total Xylenes | 1.5 | U | 1.22 | 1.5 | 15 | ug/Kg |
| 95-47-6 | o-Xylene | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 100-42-5 | Styrene | 0.5 | U | 0.45 | 0.5 | 5 | ug/Kg |
| 75-25-2 | Bromoform | 1.5 | U | 0.74 | 1.5 | 5 | ug/Kg |
| 98-82-8 | Isopropylbenzene | 0.5 | U | 0.48 | 0.5 | 5 | ug/Kg |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.5 | U | 0.46 | 0.5 | 5 | ug/Kg |
| 541-73-1 | 1,3-Dichlorobenzene | 0.5 | U | 0.37 | 0.5 | 5 | ug/Kg |
| 106-46-7 | 1,4-Dichlorobenzene | 0.5 | U | 0.41 | 0.5 | 5 | ug/Kg |
| 95-50-1 | 1,2-Dichlorobenzene | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 5 | U | 0.87 | 5 | 5 | ug/Kg |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.5 | U | 0.5 | 0.5 | 5 | ug/Kg |
| **SURROGATES** | | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 41.9 | | 56 - 120 | | 84% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 45.3 | | 57 - 135 | | 91% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 46.4 | | 67 - 123 | | 93% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 41.9 | | 33 - 141 | | 84% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | | |
| 363-72-4 | Pentafluorobenzene | 373891 | 4.82 | | | | |
| 540-36-3 | 1,4-Difluorobenzene | 578203 | 5.55 | | | | |
| 3114-55-4 | Chlorobenzene-d5 | 463271 | 9.69 | | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 174560 | 12.48 | | | | |

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# Report of Analysis

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|---|---|---|---|
| Client: | VIASANT, LLC | Date Collected: | 11/05/14 |
| Project: | Weston Hatco Southeast Leg Project | Date Received: | 11/05/14 |
| Client Sample ID: | CF-BUCH-01 | SDG No.: | F4620 |
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| Sample Wt/Vol: | 5.47 Units: g | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCMS Group1 |
| GC Column: | RTX-VMS ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VF043549.D | 1 | | 11/05/14 17:09 | VF110514 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

# Clean Fill Description Report

**Macy's Corporate Services, Inc.**
**Block 390-C, Lot 20 Edison Township**
**Block 74.01, Lot 1.02 Woodbridge Township**
**401 Clearview Rd., Edison, NJ 08837**
**October 30, 2014**

Macy's Corporate Services, Inc. (Macy) is constructing additions to an existing Distribution Center in Edison, NJ. The additions will comprise a 356,000 square feet warehouse space, a 40,000 square feet terminal area, and ancillary site improvements (parking, driveways, infiltration basins). The construction requires removal of 170,000 cubic yards (CY) of Clean Fill from the site. The Clean Fill to be removed will meet New Jersey Department of Environmental Protection (NJDEP) standards for Clean Fill that can be used at any site in the state of New Jersey. The soils are tested and shown to comply with requirements for use as Clean Fill in accordance to the December 29, 2011 guidance document Alternative and Clean Fill Guidance for Site Remediation Program Sites (Fill Guidance). A letter attesting to Clean Fill qualification and signed by the NJDEP Licensed Site Remediation Professional (LSRP) retained by Macy for the site will be supplied with the Clean Fill.

Note that construction of Phase 1 of the Warehouse Addition Area began on October 13, 2014. Soils beneath that area are not included in the Clean Fill.

Enclosed is are brief summaries of the site history, soils investigations, and laboratory reports that apply to the Clean Fill.

**Site History**: Prior to Macy occupation the site was used as a sand or clay quarry. The exact dates of this usage are not known. Prior to the construction of the current Macy facility the quarry area was filled. The fill operations left a surface with three roughly parallel hills separated by two lower areas trending east west. Since 1974, when the Macy facility was constructed the Warehouse Addition Area has lain fallow. The Terminal Building Area has been an asphalt-paved truck parking lot. Aerial photographs that confirm this history are enclosed in Attachment A.

**Soils Investigations**: During August 2014 Macy retained Groundwater Environmental Services (GES) to assess environmental conditions in the Warehouse Addition Area. GES collected and analyzed 46 soil samples from the site. The soil samples were collected to assess site conditions (43 samples) and to determine soil disposal classification (3 samples). The GES investigation was primarily surficial in nature and indicated there were locations that exceeded default NJDEP soil standards for Semi-Volatile Compounds (SVOCs), all polycyclic Aromatic Hydrocarbons (PAHs), In addition a few samples exceeded the default NJDEP Impact to Groundwater Soil Screening levels (IGW) for Beryllium (2 samples), mercury (one sample), and Thallium (one sample). The waste classification testing indicated that no samples are considered hazardous.

EnviroTrac LTD (EnviroTrac) was retained by the Macy Construction Manager Buch Construction (Buch) to review the GES data and formulate a plan for addressing the soil conditions present at the site. Review of the site history and GES data indicated the impacted material is Historic Fill as per NJDEP definition. Therefore the impacted material can legally remain on site under NJDEP regulations. Because the impacted soil will be kept on site by Macy the waste classification testing is not cogent to the Clean Fill discussion. In addition, preliminary indications from the GES data were that impacted Historic Fill was limited to near surface and comprised between 30,000 to 40,000 CY. A plan to over-excavate beneath the Warehouse Addition Area and the Terminal Area, move the impacted Historic Fill to these over-excavated areas, and properly cap the material with the impermeable surfaces of the new construction was formulated.

During October 2014 EnviroTrac collected and analyzed 145 soil samples to confirm the soils to be excavated from beneath the Historic Fill met NJDEP Clean Fill standards. Soil samples were collected to:

1) Delineate the horizontal and vertical extent of Historic Fill:
2) Confirm the Clean Fill met NJDEP standards: and
3) Confirm the Clean Fill extended to 6-feet below the finish grade required for construction.

EnviroTrac borings were conducted at various specific and random locations. Borings were co-located for vertical delineation at locations within the Warehouse Building Area where GES samples had indicated exceedance of NJDEP standards in the shallow Historic Fill, in the Terminal Area beneath the proposed building and parking area footprint, and randomly throughout the Warehouse Building Area.

The locations of GES and EnviroTrac samples for the Warehouse Addition Area and the Terminal Area are shown on the figures included in Attachment B. Test pit and soil boring logs are included in Attachment C. EnviroTrac logs include color coded soil sample designations to indicate Clean Fill (green) and impacted Historic Fill (red) samples. These include the GES samples for co-located borings.

**Laboratory Results**: Tabulated laboratory data for GES and EnviroTrac samples is included in Attachment D. Site Specific IGW have been developed for Beryllium and Mercury via the SPLP method. The NJDEP spreadsheets for those are enclosed in Attachment E. The full electronic laboratory reports for all tabulated data are available. Please forward a preferred delivery e-mail address to eliizaK@envirotrac.com and a link to a File Transfer site will be provided. Please cite Macy Lab Reports as the subject.

**Geotechnical Assessment**: Geotechnical assessment of the site materials is being conducted by Atlantic Engineering Laboratories (AEL) in Rahway, NJ. AEL has subjected a representative sample of the Clean Fill to testing for grain size distribution and compaction testing. AEL has concluded the Clean Fill is “well suited for use as structural fill or backfill”. A copy of the AEL laboratory data is enclosed in Attachment F.

**Discussion**: The analytical results demonstrate that large areas of the site contain no exceedances of the default or site specific IGW from the ground surface through total boring depth. These areas are shown in green on the maps included in Attachment B. The impacted Historic Fill outside of these green areas is found at the ground surface

and is delineated. This can be seen by review of the color coded boring logs in Attachment C. The only exception is the location of ET-TP10.at the crest of one of the aforementioned hills. The impact Historic Fill volumes are delineated, will be removed, and will not be included in the Clean Fill.

Beryllium exceeds the Site Specific IGW at only one location, GES_SB5. This area is delineated and will be removed and included with the impacted Historic Fill. Mercury does not exceed the site specific IGW at any location. Thallium was detected in only one sample during the entire GES and EnviroTrac program, GES_SB10. This exceedance of the default IGW has been delineated. This occurrence is within an otherwise Clean Fill zone. It will be removed for inclusion with the impacted Historic Fill.

In summary 188 soil samples have been collected from the site. There were 18 exceedances of default or site specific IGW for PAHs, one for Thallium, and one for Beryllium. These contribute to the delineation of the impacted Historic Fill.

There are 151 samples that have been analyzed for the full suite required by the Fill Guidance (EPH and TCL/TCL+30) and do not exceed the default or site specific IGW. Another 17 samples that were analyzed for PAH only do not exceed the default IGW. The site history and analytical results have been discussed with the NJDEP designated contact for the Fill Guidance, David Barskey. According to Mr. Barskey the results presented herein meet the NJDEP guidance for designation of 170,000CY of soil as Clean Fill.

David J. Carlson
**EnviroTrac, Ltd.**
NJDEP LSRP # 581780

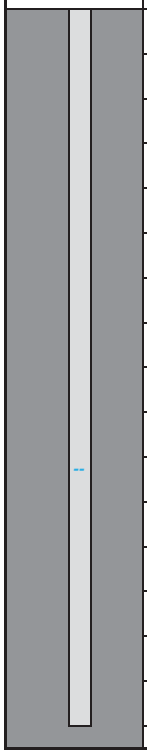
***SOIL BORING LOG***
**Boring Name: ET-TP7**

**Permit No: N/A**

EnviroTrac Environmental Services

| Client: | Site Name: | Depth to Water | |
|---|---|---|---|
| **Buch Construction** | **Macy's Edison** | **NA** | |
| Address: **401 Clearview Rd, Edison NJ** | | | Latitude **40° 31' 0.88"** |
| Drilling Company: **Active Environmental Technologies, Inc.** | Method: **Geoprobe / Acetate Sleeve** | | Longitude **74° 20' 04.2"** |
| Start Date: **10/8/14** / Completion Date: **10/8/14** | Boring Diameter **2"** | | |
| Completion Depth: **16.0'** | Hydrogeologist/Engineer **Eliza Kobsar / EnviroTrac** | | Site Elevation **21.95'** |

SOIL BORING ET-TP7 (Not To Scale)



| DEPTH (ft. bg) | SAMPLES ID | SAMPLES Depth | PID | SOIL DESCRIPTION |
|---|---|---|---|---|
| 0 | | | 0.0 | (0.0-0.5') TOPSOIL (Brown fine silty SAND, some gravel) |
| | | | 0.0 | (0.5-1.0') Light brown fine silty SAND |
| 1 | | **GES_TP7_0.5** | 0.0 | (1.0-3.0') Brown fine to medium silty SAND, some gravel |
| 2 | | | | |
| 3 | | | 0.0 | (3.0-4.0') Brown fine to medium silty SAND, 1" of asphal |
| 4 | ET-TP7 | **(4.0-4.5') JB78845-16** | 0.0 | (4.0-5.0') Tan medium to coarse silty SAND |
| 5 | | | 0.0 | (5.0-8.0') Brown coarse clayey SAND |
| 6 | | | | |
| 7 | | | | |
| 8 | | | 0.0 | (8.0-10.0') Tan coarse clayey SAND |
| 9 | | | | |
| 10 | | | 0.0 | (10.0-12.0') Gray medium clayey SAND, trace silt |
| 11 | ET-TP7 | **(11.0-11.5') JB78845-17** | | |
| 12 | | | 0.0 | (12.0-14.0') Gray dense clayey SAND |
| 13 | | | | |
| 14 | | | 0.0 | (14.0-16.0') Gray medium to coarse clayey SAND |
| 15 | | | | |
| 16 | | | | |

-- Approx. Water Level

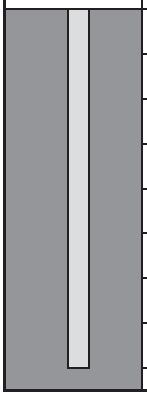
***SOIL BORING LOG***

**Boring Name: ET-BS24**

**Permit No: N/A**

EnviroTrac Environmental Services

| | | | |
|---|---|---|---|
| Client: **Macy's** | Site Name: **Macy's Edison** | Depth to Water **N/A** | |
| Address: **401 Clearview Rd, Edison NJ** | | | Latitude **40° 31' 0.91"** |
| Drilling Company: **Active Environmental Technologies, Inc.** | Method: **Geoprobe / Acetate Sleeve** | | Longitude **74° 20' 3.38"** |
| Start Date: **10/9/14** Completion Date: **10/9/14** | Boring Diameter **2"** | | |
| Completion Depth: **8.0'** | Hydrogeologist **Eliza Kobsar / EnviroTrac** | | Site Elevation **21.61'** |

| SOIL BORING ET-BS24 (Not To Scale) | DEPTH (ft. bg) | SAMPLES ID | SAMPLES Depth | SAMPLES PID | SOIL DESCRIPTION |
|---|---|---|---|---|---|
|  | 0 | | | 0.0 | (0.0-0.5') TOPSOIL (Brown fine silty SAND, roots) |
| | | | | 0.0 | (0.5-2.0') FILL (Tan coarse SAND and GRAVEL) |
| | 1 | | | | |
| | 2 | | | 0.0 | (2.0-3.0') FILL (Orange coarse silty SAND) |
| | 3 | | | 0.0 | (3.0-8.0') FILL (Gray fine silty SAND) |
| | 4 | | | | |
| | 5 | ET-BS24 | **(5.0-5.5')** **JB78959-8** | | |
| | 6 | | | | |
| | 7 | | | | |
| | 8 | | | | |

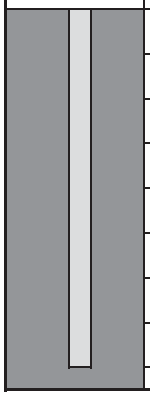
-- Approx. Water Level

***SOIL BORING LOG***

**Boring Name: ET-BS23**

**Permit No: N/A**

| | | | |
|---|---|---|---|
| Client: **Buch Construction** | Site Name: **Macy's Edison** | Depth to Water **N/A** | |
| Address: **401 Clearview Rd, Edison NJ** | | | Latitude **40° 31' 1.59"** |
| Drilling Company: **Active Environmental Technologies, Inc.** | Method: **Geoprobe / Acetate Sleeve** | | Longitude **74° 20' 3.16"** |
| Start Date: **10/9/14** Completion Date: **10/9/14** | Boring Diameter **2"** | | |
| Completion Depth: **8.0'** | Hydrogeologist **Eliza Kobsar / EnviroTrac** | | Site Elevation **23.89'** |

| SOIL BORING ET-BS23 (Not To Scale) | DEPTH (ft. bg) | SAMPLES ID | SAMPLES Depth | SAMPLES PID | SOIL DESCRIPTION |
|---|---|---|---|---|---|
|  | 0 | | | 0.0 | (0.0-0.5') Gray fine SAND |
| | | | GES_TP15_0.5 | 0.0 | (0.5-3.0') Gray medium SAND |
| | 1 | | | | |
| | 2 | | GES_TP15_1.5 | | |
| | 3 | | | 0.0 | (3.0-4.0') Gray and brown fine SAND |
| | 4 | | | 0.0 | (4.0-8.0')Gray fine SAND |
| | 5 | ET-BS23 | (5.0-5.5') JB78959-9 | | |
| | 6 | | | | |
| | 7 | | | | |
| | 8 | | | | |

-- Approx. Water Level

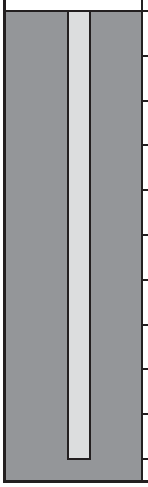
***SOIL BORING LOG***

**Boring Name: ET-BS22**

**Permit No: N/A**

EnviroTrac Environmental Services

| | | | |
|---|---|---|---|
| Client: **Buch Construction** | Site Name: **Macy's Edison** | Depth to Water **N/A** | |
| Address: **401 Clearview Rd, Edison NJ** | | | Latitude **40° 31' 1.76"** |
| Drilling Company: **Active Environmental Technologies, Inc.** | Method: **Geoprobe / Acetate Sleeve** | | Longitude **74° 20' 0.71"** |
| Start Date: **10/9/14** Completion Date: **10/9/14** | Boring Diameter **2"** | | |
| Completion Depth: **16.0'** | Hydrogeologist **Eliza Kobsar / EnviroTrac** | | Site Elevation **31.7'** |

| SOIL BORING ET-BS22 (Not To Scale) | DEPTH (ft. bg) | SAMPLES ID | SAMPLES Depth | SAMPLES PID | SOIL DESCRIPTION |
|---|---|---|---|---|---|
|  | 0 | | | 0.0 | (0.0-0.5') TOPSOIL (Brown fine silty SAND, some quarts fragments) |
| | | | | 0.0 | (0.5-3.0') Brown fine silty SAND |
| | 1 | | | | |
| | 2 | | | | |
| | 3 | | | 0.0 | (3.0-4.0') Brown fine clayey SAND |
| | 4 | | | 0.0 | (4.0-5.0') Brown fine SAND |
| | 5 | ET-BS22 | **(5.0-5.5') JB78959-34** | 0.0 | (5.0-9.0') Gray dense CLAY, trace sand |
| | 6 | | | | |
| | 7 | | | | |
| | 8 | | | | |
| | 9 | ET-BS22 | **(9.5-10.0') JB78959-35** | 0.0 | (9.0-10.0') Orange coarse SAND |
| | 10 | | | | |

-- Approx. Water Level

| Mercury | 7439-97-6 | ug/l | - | <0.20 | - | - | - | - | - | - | - | - |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | |
| **Client Sample ID:** | | | **NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 11/13)** | **ET-TP6 (11.5-12)** | **ET-TP7 (4.5-5)** | **ET-TP7 (11-11.5)** | **ET-BS1 (2.5-3)** | **ET-BS7 (15.5-16)** | **ET-BS2 (4-4.5)** | **ET-BS2 (4-4.5)** | **ET-BS2 (8-8.5)** | **ET-BS2 (15.5-16)** |
| **Lab Sample ID:** | | | | **JB78845-15** | **JB78845-16** | **JB78845-17** | **JB78845-18** | **JB78845-19** | **JB78845-20** | **JB78845-20T** | **JB78845-21** | **JB78845-22** |
| **Date Sampled:** | | | | **10/8/2014** | **10/8/2014** | **10/8/2014** | **10/8/2014** | **10/8/2014** | **10/8/2014** | **10/8/2014** | **10/8/2014** | **10/8/2014** |
| **Matrix:** | **CAS#** | | | **Soil** | **Soil** | **Soil** | **Soil** | **Soil** | **Soil** | **Soil** | **Soil** | **Soil** |
| | | | | | | | | | | | | |
| **GC/MS Volatiles (SW846 8260B)** | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Acetone | 67-64-1 | ug/kg | 19000 | 21.9 | 23.4 | ND (11) | 13.3 | ND (11) | ND (12) | - | ND (11) | ND (12) |
| Benzene | 71-43-2 | ug/kg | 5 | ND (0.56) | ND (0.49) | ND (0.53) | ND (0.65) | ND (0.53) | ND (0.61) | - | ND (0.53) | ND (0.59) |
| Bromochloromethane | 74-97-5 | ug/kg | - | ND (5.6) | ND (4.9) | ND (5.3) | ND (6.5) | ND (5.3) | ND (6.1) | - | ND (5.3) | ND (5.9) |
| Bromodichloromethane | 75-27-4 | ug/kg | 5 | ND (2.3) | ND (2.0) | ND (2.1) | ND (2.6) | ND (2.1) | ND (2.4) | - | ND (2.1) | ND (2.4) |
| Bromoform | 75-25-2 | ug/kg | 30 | ND (5.6) | ND (4.9) | ND (5.3) | ND (6.5) | ND (5.3) | ND (6.1) | - | ND (5.3) | ND (5.9) |
| Bromomethane | 74-83-9 | ug/kg | 40 | ND (5.6) | ND (4.9) | ND (5.3) | ND (6.5) | ND (5.3) | ND (6.1) | - | ND (5.3) | ND (5.9) |
| 2-Butanone (MEK) | 78-93-3 | ug/kg | 900 | ND (11) | ND (9.9) | ND (11) | ND (13) | ND (11) | ND (12) | - | ND (11) | ND (12) |
| Carbon disulfide | 75-15-0 | ug/kg | 6000 | ND (2.3) | 1.3 J | ND (2.1) | ND (2.6) | 1.0 J | ND (2.4) | - | ND (2.1) | ND (2.4) |
| Carbon tetrachloride | 56-23-5 | ug/kg | 5 | ND (2.3) | ND (2.0) | ND (2.1) | ND (2.6) | ND (2.1) | ND (2.4) | - | ND (2.1) | ND (2.4) |
| Chlorobenzene | 108-90-7 | ug/kg | 600 | ND (2.3) | ND (2.0) | ND (2.1) | ND (2.6) | ND (2.1) | ND (2.4) | - | ND (2.1) | ND (2.4) |
| Chloroethane | 75-00-3 | ug/kg | NA | ND (5.6) | ND (4.9) | ND (5.3) | ND (6.5) | ND (5.3) | ND (6.1) | - | ND (5.3) | ND (5.9) |
| Chloroform | 67-66-3 | ug/kg | 400 | ND (2.3) | ND (2.0) | ND (2.1) | ND (2.6) | ND (2.1) | ND (2.4) | - | ND (2.1) | ND (2.4) |
| Chloromethane | 74-87-3 | ug/kg | NA | ND (5.6) | ND (4.9) | ND (5.3) | ND (6.5) | ND (5.3) | ND (6.1) | - | ND (5.3) | ND (5.9) |
| Cyclohexane | 110-82-7 | ug/kg | - | ND (2.3) | ND (2.0) | ND (2.1) | ND (2.6) | ND (2.1) | ND (2.4) | - | ND (2.1) | ND (2.4) |
| 1,2-Dibromo-3-chloropropane | 96-12-8 | ug/kg | 5 | ND (5.6) | ND (4.9) | ND (5.3) | ND (6.5) | ND (5.3) | ND (6.1) | - | ND (5.3) | ND (5.9) |
| Dibromochloromethane | 124-48-1 | ug/kg | 5 | ND (2.3) | ND (2.0) | ND (2.1) | ND (2.6) | ND (2.1) | ND (2.4) | - | ND (2.1) | ND (2.4) |
| 1,2-Dibromoethane | 106-93-4 | ug/kg | 5 | ND (1.1) | ND (0.99) | ND (1.1) | ND (1.3) | ND (1.1) | ND (1.2) | - | ND (1.1) | ND (1.2) |
| 1,2-Dichlorobenzene | 95-50-1 | ug/kg | 17000 | ND (1.1) | ND (0.99) | ND (1.1) | ND (1.3) | ND (1.1) | ND (1.2) | - | ND (1.1) | ND (1.2) |
| 1,3-Dichlorobenzene | 541-73-1 | ug/kg | 19000 | ND (1.1) | ND (0.99) | ND (1.1) | ND (1.3) | ND (1.1) | ND (1.2) | - | ND (1.1) | ND (1.2) |
| 1,4-Dichlorobenzene | 106-46-7 | ug/kg | 2000 | ND (1.1) | ND (0.99) | ND (1.1) | ND (1.3) | ND (1.1) | ND (1.2) | - | ND (1.1) | ND (1.2) |
| Dichlorodifluoromethane | 75-71-8 | ug/kg | 39000 | ND (5.6) | ND (4.9) | ND (5.3) | ND (6.5) | ND (5.3) | ND (6.1) | - | ND (5.3) | ND (5.9) |
| 1,1-Dichloroethane | 75-34-3 | ug/kg | 200 | ND (1.1) | ND (0.99) | ND (1.1) | ND (1.3) | ND (1.1) | ND (1.2) | - | ND (1.1) | ND (1.2) |
| 1,2-Dichloroethane | 107-06-2 | ug/kg | 5 | ND (1.1) | ND (0.99) | ND (1.1) | ND (1.3) | ND (1.1) | ND (1.2) | - | ND (1.1) | ND (1.2) |
| 1,1-Dichloroethene | 75-35-4 | ug/kg | 8 | ND (1.1) | ND (0.99) | ND (1.1) | ND (1.3) | ND (1.1) | ND (1.2) | - | ND (1.1) | ND (1.2) |
| cis-1,2-Dichloroethene | 156-59-2 | ug/kg | 300 | ND (1.1) | ND (0.99) | ND (1.1) | ND (1.3) | ND (1.1) | ND (1.2) | - | ND (1.1) | ND (1.2) |
| trans-1,2-Dichloroethene | 156-60-5 | ug/kg | 600 | ND (1.1) | ND (0.99) | ND (1.1) | ND (1.3) | ND (1.1) | ND (1.2) | - | ND (1.1) | ND (1.2) |
| 1,2-Dichloropropane | 78-87-5 | ug/kg | 5 | ND (2.3) | ND (2.0) | ND (2.1) | ND (2.6) | ND (2.1) | ND (2.4) | - | ND (2.1) | ND (2.4) |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/kg | 5 | ND (2.3) | ND (2.0) | ND (2.1) | ND (2.6) | ND (2.1) | ND (2.4) | - | ND (2.1) | ND (2.4) |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/kg | 5 | ND (2.3) | ND (2.0) | ND (2.1) | ND (2.6) | ND (2.1) | ND (2.4) | - | ND (2.1) | ND (2.4) |
| Ethylbenzene | 100-41-4 | ug/kg | 13000 | ND (1.1) | ND (0.99) | ND (1.1) | ND (1.3) | ND (1.1) | ND (1.2) | - | ND (1.1) | ND (1.2) |
| Freon 113 | 76-13-1 | ug/kg | - | ND (5.6) | ND (4.9) | ND (5.3) | ND (6.5) | ND (5.3) | ND (6.1) | - | ND (5.3) | ND (5.9) |
| 2-Hexanone | 591-78-6 | ug/kg | - | ND (5.6) | ND (4.9) | ND (5.3) | ND (6.5) | ND (5.3) | ND (6.1) | - | ND (5.3) | ND (5.9) |
| Isopropylbenzene | 98-82-8 | ug/kg | - | ND (5.6) | ND (4.9) | ND (5.3) | ND (6.5) | ND (5.3) | ND (6.1) | - | ND (5.3) | ND (5.9) |
| Methyl Acetate | 79-20-9 | ug/kg | 22000 | ND (5.6) | ND (4.9) | ND (5.3) | ND (6.5) | ND (5.3) | ND (6.1) | - | ND (5.3) | ND (5.9) |
| Methylcyclohexane | 108-87-2 | ug/kg | - | ND (2.3) | ND (2.0) | ND (2.1) | ND (2.6) | ND (2.1) | ND (2.4) | - | ND (2.1) | ND (2.4) |
| Methyl Tert Butyl Ether | 1634-04-4 | ug/kg | 200 | ND (1.1) | ND (0.99) | ND (1.1) | ND (1.3) | ND (1.1) | ND (1.2) | - | ND (1.1) | ND (1.2) |
| 4-Methyl-2-pentanone(MIBK) | 108-10-1 | ug/kg | - | ND (5.6) | ND (4.9) | ND (5.3) | ND (6.5) | ND (5.3) | ND (6.1) | - | ND (5.3) | ND (5.9) |
| Methylene chloride | 75-09-2 | ug/kg | 10 | ND (5.6) | ND (4.9) | ND (5.3) | ND (6.5) | ND (5.3) | ND (6.1) | - | ND (5.3) | ND (5.9) |
| Styrene | 100-42-5 | ug/kg | 3000 | ND (2.3) | ND (2.0) | ND (2.1) | ND (2.6) | ND (2.1) | ND (2.4) | - | ND (2.1) | ND (2.4) |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/kg | 7 | ND (2.3) | ND (2.0) | ND (2.1) | ND (2.6) | ND (2.1) | ND (2.4) | - | ND (2.1) | ND (2.4) |
| Tetrachloroethene | 127-18-4 | ug/kg | 5 | ND (1.1) | ND (0.99) | ND (1.1) | ND (1.3) | ND (1.1) | ND (1.2) | - | ND (1.1) | ND (1.2) |
| Toluene | 108-88-3 | ug/kg | 7000 | ND (1.1) | ND (0.99) | ND (1.1) | ND (1.3) | ND (1.1) | ND (1.2) | - | ND (1.1) | ND (1.2) |
| 1,2,3-Trichlorobenzene | 87-61-6 | ug/kg | - | ND (5.6) | ND (4.9) | ND (5.3) | ND (6.5) | ND (5.3) | ND (6.1) | - | ND (5.3) | ND (5.9) |
| 1,2,4-Trichlorobenzene | 120-82-1 | ug/kg | 700 | ND (5.6) | ND (4.9) | ND (5.3) | ND (6.5) | ND (5.3) | ND (6.1) | - | ND (5.3) | ND (5.9) |
| 1,1,1-Trichloroethane | 71-55-6 | ug/kg | 300 | ND (2.3) | ND (2.0) | ND (2.1) | ND (2.6) | ND (2.1) | ND (2.4) | - | ND (2.1) | ND (2.4) |
| 1,1,2-Trichloroethane | 79-00-5 | ug/kg | 20 | ND (2.3) | ND (2.0) | ND (2.1) | ND (2.6) | ND (2.1) | ND (2.4) | - | ND (2.1) | ND (2.4) |
| Trichloroethene | 79-01-6 | ug/kg | 10 | ND (1.1) | ND (0.99) | ND (1.1) | ND (1.3) | ND (1.1) | ND (1.2) | - | ND (1.1) | ND (1.2) |
| Trichlorofluoromethane | 75-69-4 | ug/kg | 34000 | ND (5.6) | ND (4.9) | ND (5.3) | ND (6.5) | ND (5.3) | ND (6.1) | - | ND (5.3) | ND (5.9) |
| Vinyl chloride | 75-01-4 | ug/kg | 5 | ND (2.3) | ND (2.0) | ND (2.1) | ND (2.6) | ND (2.1) | ND (2.4) | - | ND (2.1) | ND (2.4) |
| m,p-Xylene | | ug/kg | 19000 | ND (1.1) | ND (0.99) | ND (1.1) | ND (1.3) | ND (1.1) | ND (1.2) | - | ND (1.1) | ND (1.2) |
| o-Xylene | 95-47-6 | ug/kg | 19000 | ND (1.1) | ND (0.99) | ND (1.1) | ND (1.3) | ND (1.1) | 0.32 J | - | ND (1.1) | ND (1.2) |
| Xylene (total) | 1330-20-7 | ug/kg | 19000 | ND (1.1) | ND (0.99) | ND (1.1) | ND (1.3) | ND (1.1) | 0.32 J | - | ND (1.1) | ND (1.2) |
| | | | | | | | | | | | | |
| **GC/MS Volatile TIC** | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Total TIC, Volatile | | ug/kg | - | 0 | 0 | 0 | 0 | 0 | 93 J | - | 0 | 0 |
| Total Alkanes | | ug/kg | - | 0 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| | | | | | | | | | | | | |
| **GC/MS Semi-volatiles (SW846 8270D)** | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| 2-Chlorophenol | 95-57-8 | ug/kg | 800 | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | ND (130) | - | ND (75) | ND (71) |
| 4-Chloro-3-methyl phenol | 59-50-7 | ug/kg | - | ND (190) | ND (180) | ND (170) | ND (170) | ND (180) | ND (340) | - | ND (190) | ND (180) |
| 2,4-Dichlorophenol | 120-83-2 | ug/kg | 200 | ND (190) | ND (180) | ND (170) | ND (170) | ND (180) | ND (340) | - | ND (190) | ND (180) |
| 2,4-Dimethylphenol | 105-67-9 | ug/kg | 1000 | ND (190) | ND (180) | ND (170) | ND (170) | ND (180) | ND (340) | - | ND (190) | ND (180) |
| 2,4-Dinitrophenol | 51-28-5 | ug/kg | 300 | ND (760) | ND (710) | ND (700) | ND (670) | ND (740) | ND (1300) | - | ND (750) | ND (710) |
| 4,6-Dinitro-o-cresol | 534-52-1 | ug/kg | 300 | ND (760) | ND (710) | ND (700) | ND (670) | ND (740) | ND (1300) | - | ND (750) | ND (710) |
| 2-Methylphenol | 95-48-7 | ug/kg | NA | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | ND (130) | - | ND (75) | ND (71) |
| 3&4-Methylphenol | | ug/kg | - | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | ND (130) | - | ND (75) | ND (71) |
| 2-Nitrophenol | 88-75-5 | ug/kg | - | ND (190) | ND (180) | ND (170) | ND (170) | ND (180) | ND (340) | - | ND (190) | ND (180) |
| 4-Nitrophenol | 100-02-7 | ug/kg | - | ND (380) | ND (350) | ND (350) | ND (330) | ND (370) | ND (670) | - | ND (370) | ND (360) |
| Pentachlorophenol | 87-86-5 | ug/kg | 300 | ND (380) | ND (350) | ND (350) | ND (330) | ND (370) | ND (670) | - | ND (370) | ND (360) |
| Phenol | 108-95-2 | ug/kg | 8000 | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | ND (130) | - | ND (75) | ND (71) |
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | ug/kg | - | ND (190) | ND (180) | ND (170) | ND (170) | ND (180) | ND (340) | - | ND (190) | ND (180) |
| 2,4,5-Trichlorophenol | 95-95-4 | ug/kg | 68000 | ND (190) | ND (180) | ND (170) | ND (170) | ND (180) | ND (340) | - | ND (190) | ND (180) |
| 2,4,6-Trichlorophenol | 88-06-2 | ug/kg | 200 | ND (190) | ND (180) | ND (170) | ND (170) | ND (180) | ND (340) | - | ND (190) | ND (180) |
| Acenaphthene | 83-32-9 | ug/kg | 110000 | ND (38) | ND (35) | ND (35) | ND (33) | ND (37) | 126 | - | ND (37) | 21.4 J |
| Acenaphthylene | 208-96-8 | ug/kg | NA | ND (38) | ND (35) | ND (35) | ND (33) | ND (37) | 151 | - | ND (37) | 13.8 J |
| Acetophenone | 98-86-2 | ug/kg | 3000 | ND (190) | ND (180) | ND (170) | ND (170) | ND (180) | ND (340) | - | ND (190) | ND (180) |
| Anthracene | 120-12-7 | ug/kg | 2400000 | ND (38) | ND (35) | ND (35) | ND (33) | ND (37) | 507 | - | ND (37) | 101 |
| Atrazine | 1912-24-9 | ug/kg | 200 | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | ND (130) | - | ND (75) | ND (71) |
| Benzo(a)anthracene | 56-55-3 | ug/kg | 800 | ND (38) | ND (35) | ND (35) | ND (33) | ND (37) | **1410** | - | ND (37) | 200 |
| Benzo(a)pyrene | 50-32-8 | ug/kg | 200 | ND (38) | ND (35) | ND (35) | ND (33) | ND (37) | **1170** | - | ND (37) | 121 |
| Benzo(b)fluoranthene | 205-99-2 | ug/kg | 2000 | ND (38) | ND (35) | ND (35) | ND (33) | ND (37) | 1150 | - | ND (37) | 173 |
| Benzo(g,h,i)perylene | 191-24-2 | ug/kg | NA | ND (38) | ND (35) | ND (35) | ND (33) | ND (37) | 633 | - | ND (37) | 68.3 |
| Benzo(k)fluoranthene | 207-08-9 | ug/kg | 25000 | ND (38) | ND (35) | ND (35) | ND (33) | ND (37) | 417 | - | ND (37) | 70.4 |
| 4-Bromophenyl phenyl ether | 101-55-3 | ug/kg | - | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | ND (130) | - | ND (75) | ND (71) |
| Butyl benzyl phthalate | 85-68-7 | ug/kg | 230000 | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | ND (130) | - | ND (75) | ND (71) |
| 1,1'-Biphenyl | 92-52-4 | ug/kg | 140000 | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | ND (130) | - | ND (75) | ND (71) |
| Benzaldehyde | 100-52-7 | ug/kg | NA | ND (190) | ND (180) | ND (170) | ND (170) | ND (180) | ND (340) | - | ND (190) | ND (180) |
| 2-Chloronaphthalene | 91-58-7 | ug/kg | - | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | ND (130) | - | ND (75) | ND (71) |
| 4-Chloroaniline | 106-47-8 | ug/kg | - | ND (190) | ND (180) | ND (170) | ND (170) | ND (180) | ND (340) | - | ND (190) | ND (180) |
| Carbazole | 86-74-8 | ug/kg | NA | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | ND (130) | - | ND (75) | 48.9 J |
| Caprolactam | 105-60-2 | ug/kg | 12000 | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | ND (130) | - | ND (75) | ND (71) |
| Chrysene | 218-01-9 | ug/kg | 80000 | ND (38) | ND (35) | ND (35) | ND (33) | ND (37) | 1490 | - | ND (37) | 234 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| bis(2-Chloroethoxy)methane | 111-91-1 | ug/kg | - | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | ND (130) | - | ND (75) | ND (71) |
| bis(2-Chloroethyl)ether | 111-44-4 | ug/kg | 200 | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | ND (130) | - | ND (75) | ND (71) |
| bis(2-Chloroisopropyl)ether | 108-60-1 | ug/kg | 5000 | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | ND (130) | - | ND (75) | ND (71) |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | ug/kg | - | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | ND (130) | - | ND (75) | ND (71) |
| 2,4-Dinitrotoluene | 121-14-2 | ug/kg | NA | ND (38) | ND (35) | ND (35) | ND (33) | ND (37) | ND (67) | - | ND (37) | ND (36) |
| 2,6-Dinitrotoluene | 606-20-2 | ug/kg | NA | ND (38) | ND (35) | ND (35) | ND (33) | ND (37) | ND (67) | - | ND (37) | ND (36) |
| 3,3'-Dichlorobenzidine | 91-94-1 | ug/kg | 200 | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | ND (130) | - | ND (75) | ND (71) |
| 1,4-Dioxane | 123-91-1 | ug/kg | - | ND (38) | ND (35) | ND (35) | ND (33) | ND (37) | ND (67) | - | ND (37) | ND (36) |
| Dibenzo(a,h)anthracene | 53-70-3 | ug/kg | 800 | ND (38) | ND (35) | ND (35) | ND (33) | ND (37) | 162 | - | ND (37) | 21.4 J |
| Dibenzofuran | 132-64-9 | ug/kg | - | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | 43.3 J | - | ND (75) | 37.7 J |
| Di-n-butyl phthalate | 84-74-2 | ug/kg | 760000 | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | ND (130) | - | 82.9 | 60.1 J |
| Di-n-octyl phthalate | 117-84-0 | ug/kg | 3300000 | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | ND (130) | - | ND (75) | ND (71) |
| Diethyl phthalate | 84-66-2 | ug/kg | 88000 | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | ND (130) | - | ND (75) | ND (71) |
| Dimethyl phthalate | 131-11-3 | ug/kg | - | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | ND (130) | - | ND (75) | ND (71) |
| bis(2-Ethylhexyl)phthalate | 117-81-7 | ug/kg | 1200000 | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | ND (130) | - | ND (75) | ND (71) |
| Fluoranthene | 206-44-0 | ug/kg | 1300000 | ND (38) | ND (35) | ND (35) | ND (33) | ND (37) | 2430 | - | ND (37) | 547 |
| Fluorene | 86-73-7 | ug/kg | 170000 | ND (38) | ND (35) | ND (35) | ND (33) | ND (37) | 334 | - | ND (37) | 26.1 J |
| Hexachlorobenzene | 118-74-1 | ug/kg | 200 | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | ND (130) | - | ND (75) | ND (71) |
| Hexachlorobutadiene | 87-68-3 | ug/kg | 900 | ND (38) | ND (35) | ND (35) | ND (33) | ND (37) | ND (67) | - | ND (37) | ND (36) |
| Hexachlorocyclopentadiene | 77-47-4 | ug/kg | 320000 | ND (380) | ND (350) | ND (350) | ND (330) | ND (370) | ND (670) | - | ND (370) | ND (360) |
| Hexachloroethane | 67-72-1 | ug/kg | 200 | ND (190) | ND (180) | ND (170) | ND (170) | ND (180) | ND (340) | - | ND (190) | ND (180) |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | ug/kg | 7000 | ND (38) | ND (35) | ND (35) | ND (33) | ND (37) | 558 | - | ND (37) | 74.7 |
| Isophorone | 78-59-1 | ug/kg | 200 | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | ND (130) | - | ND (75) | ND (71) |
| 2-Methylnaphthalene | 91-57-6 | ug/kg | 8000 | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | 78.8 J | - | ND (75) | ND (71) |
| 2-Nitroaniline | 88-74-4 | ug/kg | NA | ND (190) | ND (180) | ND (170) | ND (170) | ND (180) | ND (340) | - | ND (190) | ND (180) |
| 3-Nitroaniline | 99-09-2 | ug/kg | - | ND (190) | ND (180) | ND (170) | ND (170) | ND (180) | ND (340) | - | ND (190) | ND (180) |
| 4-Nitroaniline | 100-01-6 | ug/kg | - | ND (190) | ND (180) | ND (170) | ND (170) | ND (180) | ND (340) | - | ND (190) | ND (180) |
| Naphthalene | 91-20-3 | ug/kg | 25000 | ND (38) | ND (35) | ND (35) | ND (33) | ND (37) | 32.4 J | - | ND (37) | ND (36) |
| Nitrobenzene | 98-95-3 | ug/kg | 200 | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | ND (130) | - | ND (75) | ND (71) |
| N-Nitroso-di-n-propylamine | 621-64-7 | ug/kg | 200 | ND (76) | ND (71) | ND (70) | ND (67) | ND (74) | ND (130) | - | ND (75) | ND (71) |
| N-Nitrosodiphenylamine | 86-30-6 | ug/kg | 400 | ND (190) | ND (180) | ND (170) | ND (170) | ND (180) | ND (340) | - | ND (190) | ND (180) |
| Phenanthrene | 85-01-8 | ug/kg | NA | ND (38) | ND (35) | ND (35) | ND (33) | ND (37) | 1960 | - | ND (37) | 664 |
| Pyrene | 129-00-0 | ug/kg | 840000 | ND (38) | ND (35) | ND (35) | ND (33) | ND (37) | 3490 | - | ND (37) | 439 |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | ug/kg | - | ND (190) | ND (180) | ND (170) | ND (170) | ND (180) | ND (340) | - | ND (190) | ND (180) |
| | | | | | | | | | | | | |
| **GC/MS Semi-volatile TIC** | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Total TIC, Semi-Volatile | | ug/kg | - | 0 | 220 J | 170 J | 630 J | 0 | 10420 J | - | 0 | 0 |
| Total Alkanes | | ug/kg | - | 0 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| | | | | | | | | | | | | |
| **GC Semi-volatiles (NJDEP EPH)** | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| EPH (C9-C28) | | mg/kg | - | ND (7.8) | ND (7.1) | ND (7.7) | ND (6.6) | ND (7.0) | 259 | - | ND (7.0) | ND (7.3) |
| EPH (>C28-C40) | | mg/kg | - | ND (7.8) | ND (7.1) | ND (7.7) | ND (6.6) | ND (7.0) | 115 | - | ND (7.0) | ND (7.3) |
| Total EPH (C9-C40) | | mg/kg | - | ND (7.8) | ND (7.1) | ND (7.7) | ND (6.6) | ND (7.0) | 374 | - | ND (7.0) | ND (7.3) |
| | | | | | | | | | | | | |
| **GC Semi-volatiles (SW846 8081B)** | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Aldrin | 309-00-2 | ug/kg | 200 | ND (0.77) | ND (0.69) | ND (0.74) | ND (0.65) | ND (0.69) | ND (0.65) | - | ND (0.73) | ND (0.68) |
| alpha-BHC | 319-84-6 | ug/kg | 2 | ND (0.77) | ND (0.69) | ND (0.74) | ND (0.65) | ND (0.69) | ND (0.65) | - | ND (0.73) | ND (0.68) |
| beta-BHC | 319-85-7 | ug/kg | 2 | ND (0.77) | ND (0.69) | ND (0.74) | ND (0.65) | ND (0.69) | ND (0.65) | - | ND (0.73) | ND (0.68) |
| delta-BHC | 319-86-8 | ug/kg | - | ND (0.77) | ND (0.69) | ND (0.74) | ND (0.65) | ND (0.69) | ND (0.65) | - | ND (0.73) | ND (0.68) |
| gamma-BHC (Lindane) | 58-89-9 | ug/kg | 2 | ND (0.77) | ND (0.69) | ND (0.74) | ND (0.65) | ND (0.69) | ND (0.65) | - | ND (0.73) | ND (0.68) |
| alpha-Chlordane | 5103-71-9 | ug/kg | 50 | ND (0.77) | ND (0.69) | ND (0.74) | ND (0.65) | ND (0.69) | ND (0.65) | - | ND (0.73) | ND (0.68) |
| gamma-Chlordane | 5103-74-2 | ug/kg | 50 | ND (0.77) | ND (0.69) | ND (0.74) | ND (0.65) | ND (0.69) | ND (0.65) | - | ND (0.73) | ND (0.68) |
| Chlordane (alpha and gamma) | 57-74-9 | ug/kg | 50 | ND (0.77) | ND (0.69) | ND (0.74) | ND (0.65) | ND (0.69) | ND (0.65) | - | ND (0.73) | ND (0.68) |
| Dieldrin | 60-57-1 | ug/kg | 3 | ND (0.77) | ND (0.69) | ND (0.74) | ND (0.65) | ND (0.69) | ND (0.65) | - | ND (0.73) | ND (0.68) |
| 4,4'-DDD | 72-54-8 | ug/kg | 4000 | ND (0.77) | ND (0.69) | ND (0.74) | ND (0.65) | ND (0.69) | ND (0.65) | - | ND (0.73) | ND (0.68) |
| 4,4'-DDE | 72-55-9 | ug/kg | 18000 | ND (0.77) | ND (0.69) | ND (0.74) | ND (0.65) | ND (0.69) | ND (0.65) | - | ND (0.73) | ND (0.68) |
| 4,4'-DDT | 50-29-3 | ug/kg | 11000 | ND (0.77) | ND (0.69) | ND (0.74) | ND (0.65) | ND (0.69) | ND (0.65) | - | ND (0.73) | ND (0.68) |
| Endrin | 72-20-8 | ug/kg | 1000 | ND (0.77) | ND (0.69) | ND (0.74) | ND (0.65) | ND (0.69) | ND (0.65) | - | ND (0.73) | ND (0.68) |
| Endosulfan sulfate | 1031-07-8 | ug/kg | 2000 | ND (0.77) | ND (0.69) | ND (0.74) | ND (0.65) | ND (0.69) | ND (0.65) | - | ND (0.73) | ND (0.68) |
| Endrin aldehyde | 7421-93-4 | ug/kg | - | ND (0.77) | ND (0.69) | ND (0.74) | ND (0.65) | ND (0.69) | ND (0.65) | - | ND (0.73) | ND (0.68) |
| Endosulfan-I | 959-98-8 | ug/kg | 4000 | ND (0.77) | ND (0.69) | ND (0.74) | ND (0.65) | ND (0.69) | ND (0.65) | - | ND (0.73) | ND (0.68) |
| Endosulfan-II | 33213-65-9 | ug/kg | 4000 | ND (0.77) | ND (0.69) | ND (0.74) | ND (0.65) | ND (0.69) | ND (0.65) | - | ND (0.73) | ND (0.68) |
| Heptachlor | 76-44-8 | ug/kg | 500 | ND (0.77) | ND (0.69) | ND (0.74) | ND (0.65) | ND (0.69) | ND (0.65) | - | ND (0.73) | ND (0.68) |
| Heptachlor epoxide | 1024-57-3 | ug/kg | 10 | ND (0.77) | ND (0.69) | ND (0.74) | ND (0.65) | ND (0.69) | ND (0.65) | - | ND (0.73) | ND (0.68) |
| Methoxychlor | 72-43-5 | ug/kg | 160000 | ND (1.5) | ND (1.4) | ND (1.5) | ND (1.3) | ND (1.4) | ND (1.3) | - | ND (1.5) | ND (1.4) |
| Endrin ketone | 53494-70-5 | ug/kg | - | ND (0.77) | ND (0.69) | ND (0.74) | ND (0.65) | ND (0.69) | ND (0.65) | - | ND (0.73) | ND (0.68) |
| Toxaphene | 8001-35-2 | ug/kg | 300 | ND (19) | ND (17) | ND (18) | ND (16) | ND (17) | ND (16) | - | ND (18) | ND (17) |
| | | | | | | | | | | | | |
| **GC Semi-volatiles (SW846 8082A)** | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | ug/kg | 200 | ND (39) | ND (35) | ND (37) | ND (32) | ND (35) | ND (32) | - | ND (37) | ND (34) |
| Aroclor 1221 | 11104-28-2 | ug/kg | 200 | ND (39) | ND (35) | ND (37) | ND (32) | ND (35) | ND (32) | - | ND (37) | ND (34) |
| Aroclor 1232 | 11141-16-5 | ug/kg | 200 | ND (39) | ND (35) | ND (37) | ND (32) | ND (35) | ND (32) | - | ND (37) | ND (34) |
| Aroclor 1242 | 53469-21-9 | ug/kg | 200 | ND (39) | ND (35) | ND (37) | ND (32) | ND (35) | ND (32) | - | ND (37) | ND (34) |
| Aroclor 1248 | 12672-29-6 | ug/kg | 200 | ND (39) | ND (35) | ND (37) | ND (32) | ND (35) | ND (32) | - | ND (37) | ND (34) |
| Aroclor 1254 | 11097-69-1 | ug/kg | 200 | ND (39) | ND (35) | ND (37) | ND (32) | ND (35) | ND (32) | - | ND (37) | ND (34) |
| Aroclor 1260 | 11096-82-5 | ug/kg | 200 | ND (39) | ND (35) | ND (37) | ND (32) | ND (35) | ND (32) | - | ND (37) | ND (34) |
| Aroclor 1268 | 11100-14-4 | ug/kg | 200 | ND (39) | ND (35) | ND (37) | ND (32) | ND (35) | ND (32) | - | ND (37) | ND (34) |
| Aroclor 1262 | 37324-23-5 | ug/kg | 200 | ND (39) | ND (35) | ND (37) | ND (32) | ND (35) | ND (32) | - | ND (37) | ND (34) |
| | | | | | | | | | | | | |
| **Metals Analysis** | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | mg/kg | - | 1690 | 1990 | 476 | 5150 | 1020 | 3700 | - | 2050 | 361 |
| Antimony | 7440-36-0 | mg/kg | 6 | <2.3 | <2.3 | <2.3 | <2.0 | <2.4 | <2.2 | - | <2.3 | <2.3 |
| Arsenic | 7440-38-2 | mg/kg | 19 | <2.3 | 3.7 | <2.3 | 2.1 | <2.4 | <2.2 | - | <2.3 | <2.3 |
| Barium | 7440-39-3 | mg/kg | 2100 | <23 | <23 | <23 | <20 | <24 | <22 | - | <23 | <23 |
| Beryllium | 7440-41-7 | mg/kg | 1.9* | <0.23 | <0.23 | <0.23 | 0.21 | <0.24 | <0.22 | - | <0.23 | <0.23 |
| Cadmium | 7440-43-9 | mg/kg | 2 | <0.59 | <0.57 | <0.57 | <0.51 | <0.59 | <0.55 | - | <0.58 | <0.58 |
| Calcium | 7440-70-2 | mg/kg | - | <590 | <570 | <570 | <510 | <590 | <550 | - | <580 | <580 |
| Chromium | 7440-47-3 | mg/kg | - | 6.2 | 21.9 | 5.9 | 12.4 | 11.8 | 8.4 | - | 5.1 | 7 |
| Cobalt | 7440-48-4 | mg/kg | 90 | <5.9 | <5.7 | <5.7 | <5.1 | 9.1 | <5.5 | - | <5.8 | <5.8 |
| Copper | 7440-50-8 | mg/kg | 11000 | 7.4 | 46.7 | 3.8 | 10 | 4.2 | 3.8 | - | 3 | 3 |
| Iron | 7439-89-6 | mg/kg | - | 595 | 18000 | 1750 | 12900 | 9230 | 7290 | - | 4240 | 1730 |
| Lead | 7439-92-1 | mg/kg | 90 | <2.3 | 10.2 | 2.3 | 8.3 | <2.3 | 4.4 | - | <2.3 | 3.6 |
| Magnesium | 7439-95-4 | mg/kg | - | <590 | <570 | <570 | <510 | <590 | <550 | - | <580 | <580 |
| Manganese | 7439-96-5 | mg/kg | - | 5.4 | 5.4 | 2.6 | 75.1 | 1.8 | 18.1 | - | 4.4 | 2.1 |
| Mercury | 7439-97-6 | mg/kg | 0.13* | <0.035 | <0.037 | <0.034 | <0.033 | <0.037 | <0.034 | - | <0.038 | <0.035 |
| Nickel | 7440-02-0 | mg/kg | 48 | <4.7 | <4.6 | <4.6 | 4.2 | 6.6 | <4.4 | - | <4.7 | <4.6 |
| Potassium | 7440-09-7 | mg/kg | - | <1200 | <1100 | <1100 | <1000 | <1200 | <1100 | - | <1200 | <1200 |
| Selenium | 7782-49-2 | mg/kg | 11 | <2.3 | <2.3 | <2.3 | <2.0 | <2.4 | <2.2 | - | <2.3 | <2.3 |
| Silver | 7440-22-4 | mg/kg | 1 | <0.59 | <0.57 | <0.57 | <0.51 | <0.59 | <0.55 | - | <0.58 | <0.58 |
| Sodium | 7440-23-5 | mg/kg | - | <1200 | <1100 | <1100 | <1000 | <1200 | <1100 | - | <1200 | <1200 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thallium | 7440-28-0 | mg/kg | 3 | <1.2 | <1.1 | <1.1 | <1.0 | <1.2 | <1.1 | - | <1.2 | <1.1 |
| Vanadium | 7440-62-2 | mg/kg | NA | 17.1 | 56.5 | 16.3 | 22.1 | 28.5 | 14.8 | - | 15.9 | 18.7 |
| Zinc | 7440-66-6 | mg/kg | 930 | <5.9 | <5.7 | <5.7 | 12.6 | <5.8 | 8.5 | - | <5.8 | <5.4 |
| **General Chemistry** | | | | | | | | | | | | |
| pH, SPLP Leachate | | su | - | - | - | - | - | - | - | 7.52 | - | - |
| Volume, SPLP Leachate | | l | - | - | - | - | - | - | - | 1.006 | - | - |
| Weight, SPLP Leachate | | kg | - | - | - | - | - | - | - | 0.0503 | - | - |
| Dry Weight, SPLP Leachate | | kg | - | - | - | - | - | - | - | 0.0481 | - | - |
| Cyanide | 57-12-5 | mg/kg | 20 | <0.28 | <0.26 | <0.27 | <0.23 | <0.27 | <0.24 | - | <0.25 | <0.25 |
| Solids, Percent | | % | - | 85.4 | 89 | 86.6 | 96.8 | 86.2 | 95.7 | - | 87.8 | 87.8 |
| **GC/MS Semi-volatiles (SW846 8270D BY SIM)** | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | ug/l | - | - | - | - | - | - | - | 0.914 | - | - |
| Acenaphthylene | 208-96-8 | ug/l | - | - | - | - | - | - | - | ND (0.11) | - | - |
| Anthracene | 120-12-7 | ug/l | - | - | - | - | - | - | - | 0.184 | - | - |
| Benzo(a)anthracene | 56-55-3 | ug/l | - | - | - | - | - | - | - | 0.135 | - | - |
| Benzo(a)pyrene | 50-32-8 | ug/l | - | - | - | - | - | - | - | ND (0.11) | - | - |
| Benzo(b)fluoranthene | 205-99-2 | ug/l | - | - | - | - | - | - | - | ND (0.11) | - | - |
| Benzo(g,h,i)perylene | 191-24-2 | ug/l | - | - | - | - | - | - | - | ND (0.11) | - | - |
| Benzo(k)fluoranthene | 207-08-9 | ug/l | - | - | - | - | - | - | - | ND (0.11) | - | - |
| Chrysene | 218-01-9 | ug/l | - | - | - | - | - | - | - | 0.158 | - | - |
| Dibenzo(a,h)anthracene | 53-70-3 | ug/l | - | - | - | - | - | - | - | ND (0.11) | - | - |
| Fluoranthene | 206-44-0 | ug/l | - | - | - | - | - | - | - | 0.743 | - | - |
| Fluorene | 86-73-7 | ug/l | - | - | - | - | - | - | - | 0.767 | - | - |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | ug/l | - | - | - | - | - | - | - | ND (0.11) | - | - |
| Naphthalene | 91-20-3 | ug/l | - | - | - | - | - | - | - | 0.121 | - | - |
| Phenanthrene | 85-01-8 | ug/l | - | - | - | - | - | - | - | 0.461 | - | - |
| Pyrene | 129-00-0 | ug/l | - | - | - | - | - | - | - | 0.863 | - | - |

| Client Sample ID: | | | NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 11/13) | ET-SB14 (7-7.5) | ET-SB14 (13.5-14) | ET-SB5W (0.5-1) | ET-SB5S (0.5-1) | ET-SB5E (0.5-1) | ET-SB5N (0.5-1) | ET-SB5 (2-2.5) | ET-TP13N (0.5-1) | ET-TP13E (0.5-1) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID: | | | | JB78845-23 | JB78845-24 | JB78933-1 | JB78933-2 | JB78933-3 | JB78933-4 | JB78933-5 | JB78933-6 | JB78933-7 |
| Date Sampled: | | | | 10/8/2014 | 10/8/2014 | 10/10/2014 | 10/10/2014 | 10/10/2014 | 10/10/2014 | 10/10/2014 | 10/10/2014 | 10/10/2014 |
| Matrix: | CAS# | | | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil |
| **GC/MS Volatiles (SW846 8260B)** | | | | | | | | | | | | |
| Acetone | 67-64-1 | ug/kg | 19000 | ND (12) | 9.5 J | - | - | - | - | - | - | - |
| Benzene | 71-43-2 | ug/kg | 5 | ND (0.58) | ND (0.49) | - | - | - | - | - | - | - |
| Bromochloromethane | 74-97-5 | ug/kg | - | ND (5.8) | ND (4.9) | - | - | - | - | - | - | - |
| Bromodichloromethane | 75-27-4 | ug/kg | 5 | ND (2.3) | ND (2.0) | - | - | - | - | - | - | - |
| Bromoform | 75-25-2 | ug/kg | 30 | ND (5.8) | ND (4.9) | - | - | - | - | - | - | - |
| Bromomethane | 74-83-9 | ug/kg | 40 | ND (5.8) | ND (4.9) | - | - | - | - | - | - | - |
| 2-Butanone (MEK) | 78-93-3 | ug/kg | 900 | ND (12) | ND (9.8) | - | - | - | - | - | - | - |
| Carbon disulfide | 75-15-0 | ug/kg | 6000 | ND (2.3) | ND (2.0) | - | - | - | - | - | - | - |
| Carbon tetrachloride | 56-23-5 | ug/kg | 5 | ND (2.3) | ND (2.0) | - | - | - | - | - | - | - |
| Chlorobenzene | 108-90-7 | ug/kg | 600 | ND (2.3) | ND (2.0) | - | - | - | - | - | - | - |
| Chloroethane | 75-00-3 | ug/kg | NA | ND (5.8) | ND (4.9) | - | - | - | - | - | - | - |
| Chloroform | 67-66-3 | ug/kg | 400 | ND (2.3) | ND (2.0) | - | - | - | - | - | - | - |
| Chloromethane | 74-87-3 | ug/kg | NA | ND (5.8) | ND (4.9) | - | - | - | - | - | - | - |
| Cyclohexane | 110-82-7 | ug/kg | - | ND (2.3) | ND (2.0) | - | - | - | - | - | - | - |
| 1,2-Dibromo-3-chloropropane | 96-12-8 | ug/kg | 5 | ND (5.8) | ND (4.9) | - | - | - | - | - | - | - |
| Dibromochloromethane | 124-48-1 | ug/kg | 5 | ND (2.3) | ND (2.0) | - | - | - | - | - | - | - |
| 1,2-Dibromoethane | 106-93-4 | ug/kg | 5 | ND (1.2) | ND (0.98) | - | - | - | - | - | - | - |
| 1,2-Dichlorobenzene | 95-50-1 | ug/kg | 17000 | ND (1.2) | ND (0.98) | - | - | - | - | - | - | - |
| 1,3-Dichlorobenzene | 541-73-1 | ug/kg | 19000 | ND (1.2) | ND (0.98) | - | - | - | - | - | - | - |
| 1,4-Dichlorobenzene | 106-46-7 | ug/kg | 2000 | ND (1.2) | ND (0.98) | - | - | - | - | - | - | - |
| Dichlorodifluoromethane | 75-71-8 | ug/kg | 39000 | ND (5.8) | ND (4.9) | - | - | - | - | - | - | - |
| 1,1-Dichloroethane | 75-34-3 | ug/kg | 200 | ND (1.2) | ND (0.98) | - | - | - | - | - | - | - |
| 1,2-Dichloroethane | 107-06-2 | ug/kg | 5 | ND (1.2) | ND (0.98) | - | - | - | - | - | - | - |
| 1,1-Dichloroethene | 75-35-4 | ug/kg | 8 | ND (1.2) | ND (0.98) | - | - | - | - | - | - | - |
| cis-1,2-Dichloroethene | 156-59-2 | ug/kg | 300 | ND (1.2) | ND (0.98) | - | - | - | - | - | - | - |
| trans-1,2-Dichloroethene | 156-60-5 | ug/kg | 600 | ND (1.2) | ND (0.98) | - | - | - | - | - | - | - |
| 1,2-Dichloropropane | 78-87-5 | ug/kg | 5 | ND (2.3) | ND (2.0) | - | - | - | - | - | - | - |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/kg | 5 | ND (2.3) | ND (2.0) | - | - | - | - | - | - | - |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/kg | 5 | ND (2.3) | ND (2.0) | - | - | - | - | - | - | - |
| Ethylbenzene | 100-41-4 | ug/kg | 13000 | ND (1.2) | ND (0.98) | - | - | - | - | - | - | - |
| Freon 113 | 76-13-1 | ug/kg | - | ND (5.8) | ND (4.9) | - | - | - | - | - | - | - |
| 2-Hexanone | 591-78-6 | ug/kg | - | ND (5.8) | ND (4.9) | - | - | - | - | - | - | - |
| Isopropylbenzene | 98-82-8 | ug/kg | - | ND (5.8) | ND (4.9) | - | - | - | - | - | - | - |
| Methyl Acetate | 79-20-9 | ug/kg | 22000 | ND (5.8) | ND (4.9) | - | - | - | - | - | - | - |
| Methylcyclohexane | 108-87-2 | ug/kg | - | ND (2.3) | ND (2.0) | - | - | - | - | - | - | - |
| Methyl Tert Butyl Ether | 1634-04-4 | ug/kg | 200 | ND (1.2) | ND (0.98) | - | - | - | - | - | - | - |
| 4-Methyl-2-pentanone(MIBK) | 108-10-1 | ug/kg | - | ND (5.8) | ND (4.9) | - | - | - | - | - | - | - |
| Methylene chloride | 75-09-2 | ug/kg | 10 | ND (5.8) | ND (4.9) | - | - | - | - | - | - | - |
| Styrene | 100-42-5 | ug/kg | 3000 | ND (2.3) | ND (2.0) | - | - | - | - | - | - | - |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/kg | 7 | ND (2.3) | ND (2.0) | - | - | - | - | - | - | - |
| Tetrachloroethene | 127-18-4 | ug/kg | 5 | ND (1.2) | ND (0.98) | - | - | - | - | - | - | - |
| Toluene | 108-88-3 | ug/kg | 7000 | ND (1.2) | ND (0.98) | - | - | - | - | - | - | - |
| 1,2,3-Trichlorobenzene | 87-61-6 | ug/kg | - | ND (5.8) | ND (4.9) | - | - | - | - | - | - | - |
| 1,2,4-Trichlorobenzene | 120-82-1 | ug/kg | 700 | ND (5.8) | ND (4.9) | - | - | - | - | - | - | - |
| 1,1,1-Trichloroethane | 71-55-6 | ug/kg | 300 | ND (2.3) | ND (2.0) | - | - | - | - | - | - | - |
| 1,1,2-Trichloroethane | 79-00-5 | ug/kg | 20 | ND (2.3) | ND (2.0) | - | - | - | - | - | - | - |
| Trichloroethene | 79-01-6 | ug/kg | 10 | ND (1.2) | ND (0.98) | - | - | - | - | - | - | - |
| Trichlorofluoromethane | 75-69-4 | ug/kg | 34000 | ND (5.8) | ND (4.9) | - | - | - | - | - | - | - |
| Vinyl chloride | 75-01-4 | ug/kg | 5 | ND (2.3) | ND (2.0) | - | - | - | - | - | - | - |
| m,p-Xylene | | ug/kg | 19000 | ND (1.2) | ND (0.98) | - | - | - | - | - | - | - |
| o-Xylene | 95-47-6 | ug/kg | 19000 | ND (1.2) | ND (0.98) | - | - | - | - | - | - | - |
| Xylene (total) | 1330-20-7 | ug/kg | 19000 | ND (1.2) | ND (0.98) | - | - | - | - | - | - | - |
| **GC/MS Volatile TIC** | | | | | | | | | | | | |
| Total TIC, Volatile | | ug/kg | - | 0 | 13.8 J | - | - | - | - | - | - | - |
| Total Alkanes | | ug/kg | - | 0 | 0 | - | - | - | - | - | - | - |
| **GC/MS Semi-volatiles (SW846 8270D)** | | | | | | | | | | | | |
| 2-Chlorophenol | 95-57-8 | ug/kg | 800 | ND (71) | ND (78) | - | - | - | - | - | - | - |
| 4-Chloro-3-methyl phenol | 59-50-7 | ug/kg | - | ND (180) | ND (200) | - | - | - | - | - | - | - |
| 2,4-Dichlorophenol | 120-83-2 | ug/kg | 200 | ND (180) | ND (200) | - | - | - | - | - | - | - |
| 2,4-Dimethylphenol | 105-67-9 | ug/kg | 1000 | ND (180) | ND (200) | - | - | - | - | - | - | - |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EPH (C9-C28) | | mg/kg | - | 16.6 | - | ND (6.5) | - | 14.3 | ND (7.5) | - | ND (6.4) | ND (7.6) |
| EPH (>C28-C40) | | mg/kg | - | 51.5 | - | ND (6.5) | - | 33.9 | ND (7.5) | - | ND (6.4) | ND (7.6) |
| Total EPH (C9-C40) | | mg/kg | - | 68 | - | ND (6.5) | - | 48.3 | ND (7.5) | - | ND (6.4) | ND (7.6) |
| **GC Semi-volatiles (SW846 8081B)** | | | | | | | | | | | | |
| Aldrin | 309-00-2 | ug/kg | 200 | ND (0.68) | - | ND (0.62) | - | ND (0.71) | ND (0.73) | - | ND (0.65) | ND (0.69) |
| alpha-BHC | 319-84-6 | ug/kg | 2 | ND (0.68) | - | ND (0.62) | - | ND (0.71) | ND (0.73) | - | ND (0.65) | ND (0.69) |
| beta-BHC | 319-85-7 | ug/kg | 2 | ND (0.68) | - | ND (0.62) | - | ND (0.71) | ND (0.73) | - | ND (0.65) | ND (0.69) |
| delta-BHC | 319-86-8 | ug/kg | - | ND (0.68) | - | ND (0.62) | - | ND (0.71) | ND (0.73) | - | ND (0.65) | ND (0.69) |
| gamma-BHC (Lindane) | 58-89-9 | ug/kg | 2 | ND (0.68) | - | ND (0.62) | - | ND (0.71) | ND (0.73) | - | ND (0.65) | ND (0.69) |
| alpha-Chlordane | 5103-71-9 | ug/kg | 50 | ND (0.68) | - | ND (0.62) | - | ND (0.71) | ND (0.73) | - | ND (0.65) | ND (0.69) |
| gamma-Chlordane | 5103-74-2 | ug/kg | 50 | ND (0.68) | - | ND (0.62) | - | ND (0.71) | ND (0.73) | - | ND (0.65) | ND (0.69) |
| Chlordane (alpha and gamma) | 57-74-9 | ug/kg | 50 | ND (0.68) | - | ND (0.62) | - | ND (0.71) | ND (0.73) | - | ND (0.65) | ND (0.69) |
| Dieldrin | 60-57-1 | ug/kg | 3 | ND (0.68) | - | ND (0.62) | - | ND (0.71) | ND (0.73) | - | ND (0.65) | ND (0.69) |
| 4,4'-DDD | 72-54-8 | ug/kg | 4000 | ND (0.68) | - | ND (0.62) | - | ND (0.71) | ND (0.73) | - | ND (0.65) | ND (0.69) |
| 4,4'-DDE | 72-55-9 | ug/kg | 18000 | ND (0.68) | - | ND (0.62) | - | 0.72 [a] | ND (0.73) | - | ND (0.65) | ND (0.69) |
| 4,4'-DDT | 50-29-3 | ug/kg | 11000 | ND (0.68) | - | ND (0.62) | - | ND (0.71) | ND (0.73) | - | ND (0.65) | ND (0.69) |
| Endrin | 72-20-8 | ug/kg | 1000 | ND (0.68) | - | ND (0.62) | - | ND (0.71) | ND (0.73) | - | ND (0.65) | ND (0.69) |
| Endosulfan sulfate | 1031-07-8 | ug/kg | 2000 | ND (0.68) | - | ND (0.62) | - | ND (0.71) | ND (0.73) | - | ND (0.65) | ND (0.69) |
| Endrin aldehyde | 7421-93-4 | ug/kg | - | ND (0.68) | - | ND (0.62) | - | ND (0.71) | ND (0.73) | - | ND (0.65) | ND (0.69) |
| Endosulfan-I | 959-98-8 | ug/kg | 4000 | ND (0.68) | - | ND (0.62) | - | ND (0.71) | ND (0.73) | - | ND (0.65) | ND (0.69) |
| Endosulfan-II | 33213-65-9 | ug/kg | 4000 | ND (0.68) | - | ND (0.62) | - | ND (0.71) | ND (0.73) | - | ND (0.65) | ND (0.69) |
| Heptachlor | 76-44-8 | ug/kg | 500 | ND (0.68) | - | ND (0.62) | - | ND (0.71) | ND (0.73) | - | ND (0.65) | ND (0.69) |
| Heptachlor epoxide | 1024-57-3 | ug/kg | 10 | ND (0.68) | - | ND (0.62) | - | ND (0.71) | ND (0.73) | - | ND (0.65) | ND (0.69) |
| Methoxychlor | 72-43-5 | ug/kg | 160000 | ND (1.4) | - | ND (1.2) | - | ND (1.4) | ND (1.5) | - | ND (1.3) | ND (1.4) |
| Endrin ketone | 53494-70-5 | ug/kg | - | ND (0.68) | - | ND (0.62) | - | ND (0.71) | ND (0.73) | - | ND (0.65) | ND (0.69) |
| Toxaphene | 8001-35-2 | ug/kg | 300 | ND (17) | - | ND (16) | - | ND (18) | ND (18) | - | ND (16) | ND (17) |
| **GC Semi-volatiles (SW846 8082A)** | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | ug/kg | 200 | ND (34) | - | ND (31) | - | ND (36) | ND (36) | - | ND (33) | ND (34) |
| Aroclor 1221 | 11104-28-2 | ug/kg | 200 | ND (34) | - | ND (31) | - | ND (36) | ND (36) | - | ND (33) | ND (34) |
| Aroclor 1232 | 11141-16-5 | ug/kg | 200 | ND (34) | - | ND (31) | - | ND (36) | ND (36) | - | ND (33) | ND (34) |
| Aroclor 1242 | 53469-21-9 | ug/kg | 200 | ND (34) | - | ND (31) | - | ND (36) | ND (36) | - | ND (33) | ND (34) |
| Aroclor 1248 | 12672-29-6 | ug/kg | 200 | ND (34) | - | ND (31) | - | ND (36) | ND (36) | - | ND (33) | ND (34) |
| Aroclor 1254 | 11097-69-1 | ug/kg | 200 | ND (34) | - | ND (31) | - | ND (36) | ND (36) | - | ND (33) | ND (34) |
| Aroclor 1260 | 11096-82-5 | ug/kg | 200 | ND (34) | - | ND (31) | - | ND (36) | ND (36) | - | ND (33) | ND (34) |
| Aroclor 1268 | 11100-14-4 | ug/kg | 200 | ND (34) | - | ND (31) | - | ND (36) | ND (36) | - | ND (33) | ND (34) |
| Aroclor 1262 | 37324-23-5 | ug/kg | 200 | ND (34) | - | ND (31) | - | ND (36) | ND (36) | - | ND (33) | ND (34) |
| **Metals Analysis** | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | mg/kg | - | 6670 | - | 7400 | - | 2500 | 5770 | - | 5650 | 711 |
| Antimony | 7440-36-0 | mg/kg | 6 | <2.2 | - | <2.1 | - | <2.1 | <2.4 | - | <2.2 | <2.3 |
| Arsenic | 7440-38-2 | mg/kg | 19 | 3.6 | - | 2.4 | - | <2.1 | 2.5 | - | 2.2 | <2.3 |
| Barium | 7440-39-3 | mg/kg | 2100 | <22 | - | <21 | - | <21 | <24 | - | <22 | <23 |
| Beryllium | 7440-41-7 | mg/kg | 1.9* | <0.22 | - | <0.21 | - | <0.21 | <0.24 | - | 0.28 | <0.23 |
| Cadmium | 7440-43-9 | mg/kg | 2 | <0.54 | - | <0.52 | - | <0.52 | <0.59 | - | <0.54 | <0.58 |
| Calcium | 7440-70-2 | mg/kg | - | 674 | - | <520 | - | <520 | <590 | - | <540 | <580 |
| Chromium | 7440-47-3 | mg/kg | - | 8.9 | - | 13.6 | - | 9.6 | 26.7 | - | 13.6 | 7.1 |
| Cobalt | 7440-48-4 | mg/kg | 90 | <5.4 | - | <5.2 | - | <5.2 | <5.9 | - | <5.4 | <5.8 |
| Copper | 7440-50-8 | mg/kg | 11000 | 21.1 | - | 3.7 | - | 8 | 4.4 | - | 6.7 | <2.9 |
| Iron | 7439-89-6 | mg/kg | - | 7620 | - | 12200 | - | 3970 | 9680 | - | 11300 | 1400 |
| Lead | 7439-92-1 | mg/kg | 90 | 18.1 | - | 5.1 | - | 7.6 | 6.2 | - | 4.3 | 2.4 |
| Magnesium | 7439-95-4 | mg/kg | - | <540 | - | 641 | - | <520 | <590 | - | 706 | <580 |
| Manganese | 7439-96-5 | mg/kg | - | 18.6 | - | 25.4 | - | 11.3 | 4.9 | - | 39.4 | 3.4 |
| Mercury | 7439-97-6 | mg/kg | 0.13* | 0.058 | - | <0.034 | - | <0.033 | <0.038 | - | <0.031 | <0.036 |
| Nickel | 7440-02-0 | mg/kg | 48 | <4.3 | - | <4.2 | - | <4.2 | <4.8 | - | <4.3 | <4.6 |
| Potassium | 7440-09-7 | mg/kg | - | <1100 | - | <1000 | - | <1000 | <1200 | - | <1100 | <1200 |
| Selenium | 7782-49-2 | mg/kg | 11 | <2.2 | - | <2.1 | - | <2.1 | <2.4 | - | <2.2 | <2.3 |
| Silver | 7440-22-4 | mg/kg | 1 | <0.54 | - | <0.52 | - | <0.52 | <0.59 | - | <0.54 | <0.58 |
| Sodium | 7440-23-5 | mg/kg | - | <1100 | - | <1000 | - | <1000 | <1200 | - | <1100 | <1200 |
| Thallium | 7440-28-0 | mg/kg | 3 | <1.1 | - | <1.0 | - | <1.0 | <1.2 | - | <1.1 | <1.2 |
| Vanadium | 7440-62-2 | mg/kg | NA | 18.6 | - | 28.3 | - | 16.4 | 54.8 | - | 24.2 | 16.9 |
| Zinc | 7440-66-6 | mg/kg | 930 | 17.6 | - | 11.1 | - | <5.2 | <5.9 | - | 14 | <5.8 |
| **General Chemistry** | | | | | | | | | | | | |
| pH, SPLP Leachate | | su | - | - | 8.71 | - | - | - | - | - | - | - |
| Volume, SPLP Leachate | | l | - | - | 1.1 | - | - | - | - | - | - | - |
| Weight, SPLP Leachate | | kg | - | - | 0.055 | - | - | - | - | - | - | - |
| Dry Weight, SPLP Leachate | | kg | - | - | 0.0518 | - | - | - | - | - | - | - |
| Cyanide | 57-12-5 | mg/kg | 20 | <0.24 | - | <0.26 | - | <0.23 | <0.26 | - | <0.23 | <0.25 |
| Solids, Percent | | % | - | 94.2 | - | 95.4 | 94.9 | 92.9 | 85.5 | 91.9 | 96.1 | 85.6 |
| **Metals Analysis - SPLP Extract** | | | | | | | | | | | | |
| Mercury | 7439-97-6 | ug/l | - | - | <0.20 | - | - | - | - | - | - | - |

| Client Sample ID: | | | NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 11/13) | ET-BS12 (13.5-14) | ET-BS17 (5-5.5) | ET-BS17 (10-10.5) | ET-BS17 (15-15.5) | ET-BS9 (3.5-4) | ET-BS24 (5-5.5) | ET-BS23 (5-5.5) | ET-BS14 (5-5.5) | ET-BS14 (10-10.5) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID: | | | | JB78959-3 | JB78959-4 | JB78959-5 | JB78959-6 | JB78959-7 | JB78959-8 | JB78959-9 | JB78959-10 | JB78959-11 |
| Date Sampled: | | | | 10/9/2014 | 10/9/2014 | 10/9/2014 | 10/9/2014 | 10/9/2014 | 10/9/2014 | 10/9/2014 | 10/9/2014 | 10/9/2014 |
| Matrix: | CAS# | | | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil |
| **GC/MS Volatiles (SW846 8260B)** | | | | | | | | | | | | |
| Acetone | 67-64-1 | ug/kg | 19000 | 9.2 J | ND (11) | 10.2 | 21.5 | ND (13) | ND (12) | ND (12) | ND (10) | 18.9 |
| Benzene | 71-43-2 | ug/kg | 5 | ND (0.67) | ND (0.53) | ND (0.50) | ND (0.53) | ND (0.63) | ND (0.62) | ND (0.60) | ND (0.52) | ND (0.52) |
| Bromochloromethane | 74-97-5 | ug/kg | - | ND (6.7) | ND (5.3) | ND (5.0) | ND (5.3) | ND (6.3) | ND (6.2) | ND (6.0) | ND (5.2) | ND (5.2) |
| Bromodichloromethane | 75-27-4 | ug/kg | 5 | ND (2.7) | ND (2.1) | ND (2.0) | ND (2.1) | ND (2.5) | ND (2.5) | ND (2.4) | ND (2.1) | ND (2.1) |
| Bromoform | 75-25-2 | ug/kg | 30 | ND (6.7) | ND (5.3) | ND (5.0) | ND (5.3) | ND (6.3) | ND (6.2) | ND (6.0) | ND (5.2) | ND (5.2) |
| Bromomethane | 74-83-9 | ug/kg | 40 | ND (6.7) | ND (5.3) | ND (5.0) | ND (5.3) | ND (6.3) | ND (6.2) | ND (6.0) | ND (5.2) | ND (5.2) |
| 2-Butanone (MEK) | 78-93-3 | ug/kg | 900 | ND (13) | ND (11) | ND (10) | ND (11) | ND (13) | ND (12) | ND (12) | ND (10) | ND (10) |
| Carbon disulfide | 75-15-0 | ug/kg | 6000 | ND (2.7) | ND (2.1) | ND (2.0) | 0.40 J | ND (2.5) | ND (2.5) | ND (2.4) | ND (2.1) | 2.1 |
| Carbon tetrachloride | 56-23-5 | ug/kg | 5 | ND (2.7) | ND (2.1) | ND (2.0) | ND (2.1) | ND (2.5) | ND (2.5) | ND (2.4) | ND (2.1) | ND (2.1) |
| Chlorobenzene | 108-90-7 | ug/kg | 600 | ND (2.7) | ND (2.1) | ND (2.0) | ND (2.1) | ND (2.5) | ND (2.5) | ND (2.4) | ND (2.1) | ND (2.1) |
| Chloroethane | 75-00-3 | ug/kg | NA | ND (6.7) | ND (5.3) | ND (5.0) | ND (5.3) | ND (6.3) | ND (6.2) | ND (6.0) | ND (5.2) | ND (5.2) |
| Chloroform | 67-66-3 | ug/kg | 400 | ND (2.7) | ND (2.1) | ND (2.0) | ND (2.1) | ND (2.5) | ND (2.5) | ND (2.4) | 1.6 J | ND (2.1) |
| Chloromethane | 74-87-3 | ug/kg | NA | ND (6.7) | ND (5.3) | ND (5.0) | ND (5.3) | ND (6.3) | ND (6.2) | ND (6.0) | ND (5.2) | ND (5.2) |
| Cyclohexane | 110-82-7 | ug/kg | - | ND (2.7) | ND (2.1) | ND (2.0) | ND (2.1) | ND (2.5) | ND (2.5) | ND (2.4) | ND (2.1) | ND (2.1) |
| 1,2-Dibromo-3-chloropropane | 96-12-8 | ug/kg | 5 | ND (6.7) | ND (5.3) | ND (5.0) | ND (5.3) | ND (6.3) | ND (6.2) | ND (6.0) | ND (5.2) | ND (5.2) |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dibromochloromethane | 124-48-1 | ug/kg | 5 | ND (2.7) | ND (2.1) | ND (2.0) | ND (2.1) | ND (2.5) | ND (2.5) | ND (2.4) | ND (2.1) | ND (2.1) |
| 1,2-Dibromoethane | 106-93-4 | ug/kg | 5 | ND (1.3) | ND (1.1) | ND (1.0) | ND (1.1) | ND (1.3) | ND (1.2) | ND (1.2) | ND (1.0) | ND (1.0) |
| 1,2-Dichlorobenzene | 95-50-1 | ug/kg | 17000 | ND (1.3) | ND (1.1) | ND (1.0) | ND (1.1) | ND (1.3) | ND (1.2) | ND (1.2) | ND (1.0) | ND (1.0) |
| 1,3-Dichlorobenzene | 541-73-1 | ug/kg | 19000 | ND (1.3) | ND (1.1) | ND (1.0) | ND (1.1) | ND (1.3) | ND (1.2) | ND (1.2) | ND (1.0) | ND (1.0) |
| 1,4-Dichlorobenzene | 106-46-7 | ug/kg | 2000 | ND (1.3) | ND (1.1) | ND (1.0) | ND (1.1) | ND (1.3) | ND (1.2) | ND (1.2) | ND (1.0) | ND (1.0) |
| Dichlorodifluoromethane | 75-71-8 | ug/kg | 39000 | ND (6.7) | ND (5.3) | ND (5.0) | ND (5.3) | ND (6.3) | ND (6.2) | ND (6.0) | ND (5.2) | ND (5.2) |
| 1,1-Dichloroethane | 75-34-3 | ug/kg | 200 | ND (1.3) | ND (1.1) | ND (1.0) | ND (1.1) | ND (1.3) | ND (1.2) | ND (1.2) | ND (1.0) | ND (1.0) |
| 1,2-Dichloroethane | 107-06-2 | ug/kg | 5 | ND (1.3) | ND (1.1) | ND (1.0) | ND (1.1) | ND (1.3) | ND (1.2) | ND (1.2) | ND (1.0) | ND (1.0) |
| 1,1-Dichloroethene | 75-35-4 | ug/kg | 8 | ND (1.3) | ND (1.1) | ND (1.0) | ND (1.1) | ND (1.3) | ND (1.2) | ND (1.2) | ND (1.0) | ND (1.0) |
| cis-1,2-Dichloroethene | 156-59-2 | ug/kg | 300 | ND (1.3) | ND (1.1) | ND (1.0) | ND (1.1) | ND (1.3) | ND (1.2) | ND (1.2) | ND (1.0) | ND (1.0) |
| trans-1,2-Dichloroethene | 156-60-5 | ug/kg | 600 | ND (1.3) | ND (1.1) | ND (1.0) | ND (1.1) | ND (1.3) | ND (1.2) | ND (1.2) | ND (1.0) | ND (1.0) |
| 1,2-Dichloropropane | 78-87-5 | ug/kg | 5 | ND (2.7) | ND (2.1) | ND (2.0) | ND (2.1) | ND (2.5) | ND (2.5) | ND (2.4) | ND (2.1) | ND (2.1) |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/kg | 5 | ND (2.7) | ND (2.1) | ND (2.0) | ND (2.1) | ND (2.5) | ND (2.5) | ND (2.4) | ND (2.1) | ND (2.1) |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/kg | 5 | ND (2.7) | ND (2.1) | ND (2.0) | ND (2.1) | ND (2.5) | ND (2.5) | ND (2.4) | ND (2.1) | ND (2.1) |
| Ethylbenzene | 100-41-4 | ug/kg | 13000 | ND (1.3) | ND (1.1) | ND (1.0) | ND (1.1) | ND (1.3) | ND (1.2) | ND (1.2) | ND (1.0) | ND (1.0) |
| Freon 113 | 76-13-1 | ug/kg | - | ND (6.7) | ND (5.3) | ND (5.0) | ND (5.3) | ND (6.3) | ND (6.2) | ND (6.0) | ND (5.2) | ND (5.2) |
| 2-Hexanone | 591-78-6 | ug/kg | - | ND (6.7) | ND (5.3) | ND (5.0) | ND (5.3) | ND (6.3) | ND (6.2) | ND (6.0) | ND (5.2) | ND (5.2) |
| Isopropylbenzene | 98-82-8 | ug/kg | - | ND (6.7) | ND (5.3) | ND (5.0) | ND (5.3) | ND (6.3) | ND (6.2) | ND (6.0) | ND (5.2) | ND (5.2) |
| Methyl Acetate | 79-20-9 | ug/kg | 22000 | ND (6.7) | ND (5.3) | ND (5.0) | ND (5.3) | ND (6.3) | ND (6.2) | ND (6.0) | ND (5.2) | ND (5.2) |
| Methylcyclohexane | 108-87-2 | ug/kg | - | ND (2.7) | ND (2.1) | ND (2.0) | ND (2.1) | ND (2.5) | ND (2.5) | ND (2.4) | ND (2.1) | ND (2.1) |
| Methyl Tert Butyl Ether | 1634-04-4 | ug/kg | 200 | ND (1.3) | ND (1.1) | ND (1.0) | ND (1.1) | ND (1.3) | ND (1.2) | 0.50 J | ND (1.0) | ND (1.0) |
| 4-Methyl-2-pentanone(MIBK) | 108-10-1 | ug/kg | - | ND (6.7) | ND (5.3) | ND (5.0) | ND (5.3) | ND (6.3) | ND (6.2) | ND (6.0) | ND (5.2) | ND (5.2) |
| Methylene chloride | 75-09-2 | ug/kg | 10 | ND (6.7) | ND (5.3) | ND (5.0) | ND (5.3) | ND (6.3) | ND (6.2) | ND (6.0) | ND (5.2) | ND (5.2) |
| Styrene | 100-42-5 | ug/kg | 3000 | ND (2.7) | ND (2.1) | ND (2.0) | ND (2.1) | ND (2.5) | ND (2.5) | ND (2.4) | ND (2.1) | ND (2.1) |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/kg | 7 | ND (2.7) | ND (2.1) | ND (2.0) | ND (2.1) | ND (2.5) | ND (2.5) | ND (2.4) | ND (2.1) | ND (2.1) |
| Tetrachloroethene | 127-18-4 | ug/kg | 5 | ND (1.3) | ND (1.1) | ND (1.0) | ND (1.1) | ND (1.3) | ND (1.2) | ND (1.2) | ND (1.0) | ND (1.0) |
| Toluene | 108-88-3 | ug/kg | 7000 | ND (1.3) | ND (1.1) | ND (1.0) | ND (1.1) | ND (1.3) | ND (1.2) | ND (1.2) | ND (1.0) | ND (1.0) |
| 1,2,3-Trichlorobenzene | 87-61-6 | ug/kg | - | ND (6.7) | ND (5.3) | ND (5.0) | ND (5.3) | ND (6.3) | ND (6.2) | ND (6.0) | ND (5.2) | ND (5.2) |
| 1,2,4-Trichlorobenzene | 120-82-1 | ug/kg | 700 | ND (6.7) | ND (5.3) | ND (5.0) | ND (5.3) | ND (6.3) | ND (6.2) | ND (6.0) | ND (5.2) | ND (5.2) |
| 1,1,1-Trichloroethane | 71-55-6 | ug/kg | 300 | ND (2.7) | ND (2.1) | ND (2.0) | ND (2.1) | ND (2.5) | ND (2.5) | ND (2.4) | ND (2.1) | ND (2.1) |
| 1,1,2-Trichloroethane | 79-00-5 | ug/kg | 20 | ND (2.7) | ND (2.1) | ND (2.0) | ND (2.1) | ND (2.5) | ND (2.5) | ND (2.4) | ND (2.1) | ND (2.1) |
| Trichloroethene | 79-01-6 | ug/kg | 10 | ND (1.3) | ND (1.1) | ND (1.0) | ND (1.1) | ND (1.3) | ND (1.2) | ND (1.2) | ND (1.0) | ND (1.0) |
| Trichlorofluoromethane | 75-69-4 | ug/kg | 34000 | ND (6.7) | ND (5.3) | ND (5.0) | ND (5.3) | ND (6.3) | ND (6.2) | ND (6.0) | ND (5.2) | ND (5.2) |
| Vinyl chloride | 75-01-4 | ug/kg | 5 | ND (2.7) | ND (2.1) | ND (2.0) | ND (2.1) | ND (2.5) | ND (2.5) | ND (2.4) | ND (2.1) | ND (2.1) |
| m,p-Xylene | | ug/kg | 19000 | ND (1.3) | ND (1.1) | ND (1.0) | ND (1.1) | ND (1.3) | ND (1.2) | ND (1.2) | ND (1.0) | ND (1.0) |
| o-Xylene | 95-47-6 | ug/kg | 19000 | ND (1.3) | ND (1.1) | ND (1.0) | ND (1.1) | ND (1.3) | ND (1.2) | ND (1.2) | ND (1.0) | ND (1.0) |
| Xylene (total) | 1330-20-7 | ug/kg | 19000 | ND (1.3) | ND (1.1) | ND (1.0) | ND (1.1) | ND (1.3) | ND (1.2) | ND (1.2) | ND (1.0) | ND (1.0) |
| | | | | | | | | | | | | |
| **GC/MS Volatile TIC** | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Total TIC, Volatile | | ug/kg | - | 0 | 10 J | 0 | 0 | 0 | 0 | 0 | 0 | 7 J |
| Total Alkanes | | ug/kg | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | |
| **GC/MS Semi-volatiles (SW846 8270D)** | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| 2-Chlorophenol | 95-57-8 | ug/kg | 800 | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| 4-Chloro-3-methyl phenol | 59-50-7 | ug/kg | - | ND (210) | ND (160) | ND (200) | ND (170) | ND (170) | ND (190) | ND (180) | ND (170) | ND (180) |
| 2,4-Dichlorophenol | 120-83-2 | ug/kg | 200 | ND (210) | ND (160) | ND (200) | ND (170) | ND (170) | ND (190) | ND (180) | ND (170) | ND (180) |
| 2,4-Dimethylphenol | 105-67-9 | ug/kg | 1000 | ND (210) | ND (160) | ND (200) | ND (170) | ND (170) | ND (190) | ND (180) | ND (170) | ND (180) |
| 2,4-Dinitrophenol | 51-28-5 | ug/kg | 300 | ND (820) | ND (640) | ND (780) | ND (680) | ND (670) | ND (750) | ND (740) | ND (700) | ND (700) |
| 4,6-Dinitro-o-cresol | 534-52-1 | ug/kg | 300 | ND (820) | ND (640) | ND (780) | ND (680) | ND (670) | ND (750) | ND (740) | ND (700) | ND (700) |
| 2-Methylphenol | 95-48-7 | ug/kg | NA | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| 3&4-Methylphenol | | ug/kg | - | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| 2-Nitrophenol | 88-75-5 | ug/kg | - | ND (210) | ND (160) | ND (200) | ND (170) | ND (170) | ND (190) | ND (180) | ND (170) | ND (180) |
| 4-Nitrophenol | 100-02-7 | ug/kg | - | ND (410) | ND (320) | ND (390) | ND (340) | ND (330) | ND (380) | ND (370) | ND (350) | ND (350) |
| Pentachlorophenol | 87-86-5 | ug/kg | 300 | ND (410) | ND (320) | ND (390) | ND (340) | ND (330) | ND (380) | ND (370) | ND (350) | ND (350) |
| Phenol | 108-95-2 | ug/kg | 8000 | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | ug/kg | - | ND (210) | ND (160) | ND (200) | ND (170) | ND (170) | ND (190) | ND (180) | ND (170) | ND (180) |
| 2,4,5-Trichlorophenol | 95-95-4 | ug/kg | 68000 | ND (210) | ND (160) | ND (200) | ND (170) | ND (170) | ND (190) | ND (180) | ND (170) | ND (180) |
| 2,4,6-Trichlorophenol | 88-06-2 | ug/kg | 200 | ND (210) | ND (160) | ND (200) | ND (170) | ND (170) | ND (190) | ND (180) | ND (170) | ND (180) |
| Acenaphthene | 83-32-9 | ug/kg | 110000 | ND (41) | ND (32) | ND (39) | ND (34) | ND (33) | ND (38) | ND (37) | ND (35) | ND (35) |
| Acenaphthylene | 208-96-8 | ug/kg | NA | ND (41) | ND (32) | ND (39) | ND (34) | 15.0 J | ND (38) | ND (37) | ND (35) | ND (35) |
| Acetophenone | 98-86-2 | ug/kg | 3000 | ND (210) | ND (160) | ND (200) | ND (170) | ND (170) | ND (190) | ND (180) | ND (170) | ND (180) |
| Anthracene | 120-12-7 | ug/kg | 2400000 | ND (41) | ND (32) | ND (39) | ND (34) | 26.2 J | ND (38) | ND (37) | ND (35) | ND (35) |
| Atrazine | 1912-24-9 | ug/kg | 200 | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| Benzo(a)anthracene | 56-55-3 | ug/kg | 800 | 19.3 J | ND (32) | ND (39) | ND (34) | 68 | ND (38) | ND (37) | ND (35) | ND (35) |
| Benzo(a)pyrene | 50-32-8 | ug/kg | 200 | ND (41) | ND (32) | ND (39) | ND (34) | 62.9 | ND (38) | ND (37) | ND (35) | ND (35) |
| Benzo(b)fluoranthene | 205-99-2 | ug/kg | 2000 | ND (41) | ND (32) | ND (39) | ND (34) | 69.6 | ND (38) | ND (37) | ND (35) | ND (35) |
| Benzo(g,h,i)perylene | 191-24-2 | ug/kg | NA | ND (41) | ND (32) | ND (39) | ND (34) | 43.6 | ND (38) | ND (37) | ND (35) | ND (35) |
| Benzo(k)fluoranthene | 207-08-9 | ug/kg | 25000 | ND (41) | ND (32) | ND (39) | ND (34) | 22.3 J | ND (38) | ND (37) | ND (35) | ND (35) |
| 4-Bromophenyl phenyl ether | 101-55-3 | ug/kg | - | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| Butyl benzyl phthalate | 85-68-7 | ug/kg | 230000 | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| 1,1'-Biphenyl | 92-52-4 | ug/kg | 140000 | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| Benzaldehyde | 100-52-7 | ug/kg | NA | ND (210) | ND (160) | ND (200) | ND (170) | ND (170) | ND (190) | ND (180) | ND (170) | ND (180) |
| 2-Chloronaphthalene | 91-58-7 | ug/kg | - | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| 4-Chloroaniline | 106-47-8 | ug/kg | - | ND (210) | ND (160) | ND (200) | ND (170) | ND (170) | ND (190) | ND (180) | ND (170) | ND (180) |
| Carbazole | 86-74-8 | ug/kg | NA | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| Caprolactam | 105-60-2 | ug/kg | 12000 | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| Chrysene | 218-01-9 | ug/kg | 80000 | ND (41) | ND (32) | ND (39) | ND (34) | 68.7 | ND (38) | ND (37) | ND (35) | ND (35) |
| bis(2-Chloroethoxy)methane | 111-91-1 | ug/kg | - | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| bis(2-Chloroethyl)ether | 111-44-4 | ug/kg | 200 | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| bis(2-Chloroisopropyl)ether | 108-60-1 | ug/kg | 5000 | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | ug/kg | - | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| 2,4-Dinitrotoluene | 121-14-2 | ug/kg | NA | ND (41) | ND (32) | ND (39) | ND (34) | ND (33) | ND (38) | ND (37) | ND (35) | ND (35) |
| 2,6-Dinitrotoluene | 606-20-2 | ug/kg | NA | ND (41) | ND (32) | ND (39) | ND (34) | ND (33) | ND (38) | ND (37) | ND (35) | ND (35) |
| 3,3'-Dichlorobenzidine | 91-94-1 | ug/kg | 200 | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| 1,4-Dioxane | 123-91-1 | ug/kg | - | ND (41) | ND (32) | ND (39) | ND (34) | ND (33) | ND (38) | ND (37) | ND (35) | ND (35) |
| Dibenzo(a,h)anthracene | 53-70-3 | ug/kg | 800 | ND (41) | ND (32) | ND (39) | ND (34) | ND (33) | ND (38) | ND (37) | ND (35) | ND (35) |
| Dibenzofuran | 132-64-9 | ug/kg | - | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| Di-n-butyl phthalate | 84-74-2 | ug/kg | 760000 | 78.7 J | 59.5 J | 106 | 75.9 | 48.6 J | 107 | 74.3 | 58.8 J | ND (70) |
| Di-n-octyl phthalate | 117-84-0 | ug/kg | 3300000 | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| Diethyl phthalate | 84-66-2 | ug/kg | 88000 | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| Dimethyl phthalate | 131-11-3 | ug/kg | - | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| bis(2-Ethylhexyl)phthalate | 117-81-7 | ug/kg | 1200000 | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| Fluoranthene | 206-44-0 | ug/kg | 1300000 | 21.5 J | ND (32) | ND (39) | ND (34) | 113 | ND (38) | ND (37) | ND (35) | ND (35) |
| Fluorene | 86-73-7 | ug/kg | 170000 | ND (41) | ND (32) | ND (39) | ND (34) | ND (33) | ND (38) | ND (37) | ND (35) | ND (35) |
| Hexachlorobenzene | 118-74-1 | ug/kg | 200 | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| Hexachlorobutadiene | 87-68-3 | ug/kg | 900 | ND (41) | ND (32) | ND (39) | ND (34) | ND (33) | ND (38) | ND (37) | ND (35) | ND (35) |
| Hexachlorocyclopentadiene | 77-47-4 | ug/kg | 320000 | ND (410) | ND (320) | ND (390) | ND (340) | ND (330) | ND (380) | ND (370) | ND (350) | ND (350) |
| Hexachloroethane | 67-72-1 | ug/kg | 200 | ND (210) | ND (160) | ND (200) | ND (170) | ND (170) | ND (190) | ND (180) | ND (170) | ND (180) |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | ug/kg | 7000 | ND (41) | ND (32) | ND (39) | ND (34) | 36.8 | ND (38) | ND (37) | ND (35) | ND (35) |
| Isophorone | 78-59-1 | ug/kg | 200 | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| 2-Methylnaphthalene | 91-57-6 | ug/kg | 8000 | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| 2-Nitroaniline | 88-74-4 | ug/kg | NA | ND (210) | ND (160) | ND (200) | ND (170) | ND (170) | ND (190) | ND (180) | ND (170) | ND (180) |
| 3-Nitroaniline | 99-09-2 | ug/kg | - | ND (210) | ND (160) | ND (200) | ND (170) | ND (170) | ND (190) | ND (180) | ND (170) | ND (180) |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4-Nitroaniline | 100-01-6 | ug/kg | - | ND (210) | ND (160) | ND (200) | ND (170) | ND (170) | ND (190) | ND (180) | ND (170) | ND (180) |
| Naphthalene | 91-20-3 | ug/kg | 25000 | 18.2 J | ND (32) | ND (39) | ND (34) | 53.8 | 79.1 | ND (37) | 19.1 J | ND (35) |
| Nitrobenzene | 98-95-3 | ug/kg | 200 | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| N-Nitroso-di-n-propylamine | 621-64-7 | ug/kg | 200 | ND (82) | ND (64) | ND (78) | ND (68) | ND (67) | ND (75) | ND (74) | ND (70) | ND (70) |
| N-Nitrosodiphenylamine | 86-30-6 | ug/kg | 400 | ND (210) | ND (160) | ND (200) | ND (170) | ND (170) | ND (190) | ND (180) | ND (170) | ND (180) |
| Phenanthrene | 85-01-8 | ug/kg | NA | 36.5 J | ND (32) | ND (39) | ND (34) | 75.6 | ND (38) | ND (37) | ND (35) | ND (35) |
| Pyrene | 129-00-0 | ug/kg | 840000 | 33.1 J | ND (32) | ND (39) | ND (34) | 132 | ND (38) | ND (37) | ND (35) | ND (35) |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | ug/kg | - | ND (210) | ND (160) | ND (200) | ND (170) | ND (170) | ND (190) | ND (180) | ND (170) | ND (180) |
| **GC/MS Semi-volatile TIC** | | | | | | | | | | | | |
| Total TIC, Semi-Volatile | | ug/kg | - | 0 | 130 J | 0 | 140 J | 8080 J | 0 | 0 | 600 J | 150 J |
| Total Alkanes | | ug/kg | - | 0 | 0 | 0 | 0 | 540 J | 0 | 0 | 0 | 0 |
| **GC Semi-volatiles (NJDEP EPH)** | | | | | | | | | | | | |
| EPH (C9-C28) | | mg/kg | - | ND (8.0) | ND (6.3) | ND (7.8) | 15.2 | ND (6.5) | ND (7.2) | ND (7.8) | ND (7.4) | ND (7.5) |
| EPH (>C28-C40) | | mg/kg | - | ND (8.0) | ND (6.3) | ND (7.8) | 23.4 | 31.1 | ND (7.2) | ND (7.8) | ND (7.4) | ND (7.5) |
| Total EPH (C9-C40) | | mg/kg | - | ND (8.0) | ND (6.3) | ND (7.8) | 38.6 | 31.1 | ND (7.2) | ND (7.8) | ND (7.4) | ND (7.5) |
| **GC Semi-volatiles (SW846 8081B)** | | | | | | | | | | | | |
| Aldrin | 309-00-2 | ug/kg | 200 | ND (0.76) | ND (0.61) | ND (0.80) | ND (0.73) | ND (0.67) | ND (0.74) | ND (0.79) | ND (0.71) | ND (0.75) |
| alpha-BHC | 319-84-6 | ug/kg | 2 | ND (0.76) | ND (0.61) | ND (0.80) | ND (0.73) | ND (0.67) | ND (0.74) | ND (0.79) | ND (0.71) | ND (0.75) |
| beta-BHC | 319-85-7 | ug/kg | 2 | ND (0.76) | ND (0.61) | ND (0.80) | ND (0.73) | ND (0.67) | ND (0.74) | ND (0.79) | ND (0.71) | ND (0.75) |
| delta-BHC | 319-86-8 | ug/kg | - | ND (0.76) | ND (0.61) | ND (0.80) | ND (0.73) | ND (0.67) | ND (0.74) | ND (0.79) | ND (0.71) | ND (0.75) |
| gamma-BHC (Lindane) | 58-89-9 | ug/kg | 2 | ND (0.76) | ND (0.61) | ND (0.80) | ND (0.73) | ND (0.67) | ND (0.74) | ND (0.79) | ND (0.71) | ND (0.75) |
| alpha-Chlordane | 5103-71-9 | ug/kg | 50 | ND (0.76) | ND (0.61) | ND (0.80) | ND (0.73) | ND (0.67) | ND (0.74) | ND (0.79) | ND (0.71) | ND (0.75) |
| gamma-Chlordane | 5103-74-2 | ug/kg | 50 | ND (0.76) | ND (0.61) | ND (0.80) | ND (0.73) | ND (0.67) | ND (0.74) | ND (0.79) | ND (0.71) | ND (0.75) |
| Chlordane (alpha and gamma) | 57-74-9 | ug/kg | 50 | ND (0.76) | ND (0.61) | ND (0.80) | ND (0.73) | ND (0.67) | ND (0.74) | ND (0.79) | ND (0.71) | ND (0.75) |
| Dieldrin | 60-57-1 | ug/kg | 3 | ND (0.76) | ND (0.61) | ND (0.80) | ND (0.73) | ND (0.67) | ND (0.74) | ND (0.79) | ND (0.71) | ND (0.75) |
| 4,4'-DDD | 72-54-8 | ug/kg | 4000 | ND (0.76) | ND (0.61) | ND (0.80) | ND (0.73) | ND (0.67) | ND (0.74) | ND (0.79) | ND (0.71) | ND (0.75) |
| 4,4'-DDE | 72-55-9 | ug/kg | 18000 | ND (0.76) | ND (0.61) | ND (0.80) | ND (0.73) | ND (0.67) | ND (0.74) | ND (0.79) | ND (0.71) | ND (0.75) |
| 4,4'-DDT | 50-29-3 | ug/kg | 11000 | ND (0.76) | ND (0.61) | ND (0.80) | ND (0.73) | ND (0.67) | ND (0.74) | ND (0.79) | ND (0.71) | ND (0.75) |
| Endrin | 72-20-8 | ug/kg | 1000 | ND (0.76) | ND (0.61) | ND (0.80) | ND (0.73) | ND (0.67) | ND (0.74) | ND (0.79) | ND (0.71) | ND (0.75) |
| Endosulfan sulfate | 1031-07-8 | ug/kg | 2000 | ND (0.76) | ND (0.61) | ND (0.80) | ND (0.73) | ND (0.67) | ND (0.74) | ND (0.79) | ND (0.71) | ND (0.75) |
| Endrin aldehyde | 7421-93-4 | ug/kg | - | ND (0.76) | ND (0.61) | ND (0.80) | ND (0.73) | ND (0.67) | ND (0.74) | ND (0.79) | ND (0.71) | ND (0.75) |
| Endosulfan-I | 959-98-8 | ug/kg | 4000 | ND (0.76) | ND (0.61) | ND (0.80) | ND (0.73) | ND (0.67) | ND (0.74) | ND (0.79) | ND (0.71) | ND (0.75) |
| Endosulfan-II | 33213-65-9 | ug/kg | 4000 | ND (0.76) | ND (0.61) | ND (0.80) | ND (0.73) | ND (0.67) | ND (0.74) | ND (0.79) | ND (0.71) | ND (0.75) |
| Heptachlor | 76-44-8 | ug/kg | 500 | ND (0.76) | ND (0.61) | ND (0.80) | ND (0.73) | ND (0.67) | ND (0.74) | ND (0.79) | ND (0.71) | ND (0.75) |
| Heptachlor epoxide | 1024-57-3 | ug/kg | 10 | ND (0.76) | ND (0.61) | ND (0.80) | ND (0.73) | ND (0.67) | ND (0.74) | ND (0.79) | ND (0.71) | ND (0.75) |
| Methoxychlor | 72-43-5 | ug/kg | 160000 | ND (1.5) | ND (1.2) | ND (1.6) | ND (1.5) | ND (1.3) | ND (1.5) | ND (1.6) | ND (1.4) | ND (1.5) |
| Endrin ketone | 53494-70-5 | ug/kg | - | ND (0.76) | ND (0.61) | ND (0.80) | ND (0.73) | ND (0.67) | ND (0.74) | ND (0.79) | ND (0.71) | ND (0.75) |
| Toxaphene | 8001-35-2 | ug/kg | 300 | ND (19) | ND (15) | ND (20) | ND (18) | ND (17) | ND (18) | ND (20) | ND (18) | ND (19) |
| **GC Semi-volatiles (SW846 8082A)** | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | ug/kg | 200 | ND (38) | ND (31) | ND (40) | ND (37) | ND (33) | ND (37) | ND (39) | ND (36) | ND (37) |
| Aroclor 1221 | 11104-28-2 | ug/kg | 200 | ND (38) | ND (31) | ND (40) | ND (37) | ND (33) | ND (37) | ND (39) | ND (36) | ND (37) |
| Aroclor 1232 | 11141-16-5 | ug/kg | 200 | ND (38) | ND (31) | ND (40) | ND (37) | ND (33) | ND (37) | ND (39) | ND (36) | ND (37) |
| Aroclor 1242 | 53469-21-9 | ug/kg | 200 | ND (38) | ND (31) | ND (40) | ND (37) | ND (33) | ND (37) | ND (39) | ND (36) | ND (37) |
| Aroclor 1248 | 12672-29-6 | ug/kg | 200 | ND (38) | ND (31) | ND (40) | ND (37) | ND (33) | ND (37) | ND (39) | ND (36) | ND (37) |
| Aroclor 1254 | 11097-69-1 | ug/kg | 200 | ND (38) | ND (31) | ND (40) | ND (37) | ND (33) | ND (37) | ND (39) | ND (36) | ND (37) |
| Aroclor 1260 | 11096-82-5 | ug/kg | 200 | ND (38) | ND (31) | ND (40) | ND (37) | ND (33) | ND (37) | ND (39) | ND (36) | ND (37) |
| Aroclor 1268 | 11100-14-4 | ug/kg | 200 | ND (38) | ND (31) | ND (40) | ND (37) | ND (33) | ND (37) | ND (39) | ND (36) | ND (37) |
| Aroclor 1262 | 37324-23-5 | ug/kg | 200 | ND (38) | ND (31) | ND (40) | ND (37) | ND (33) | ND (37) | ND (39) | ND (36) | ND (37) |
| **Metals Analysis** | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | mg/kg | - | 1730 | 478 | 1100 | 969 | 5210 | 387 | 265 | 2840 | 3310 |
| Antimony | 7440-36-0 | mg/kg | 6 | <2.6 | <2.1 | <2.5 | <2.2 | <2.1 | <2.4 | <2.4 | <2.2 | <2.2 |
| Arsenic | 7440-38-2 | mg/kg | 19 | <2.6 | <2.1 | <2.5 | <2.2 | 3.2 | <2.4 | <2.4 | <2.2 | 3.8 |
| Barium | 7440-39-3 | mg/kg | 2100 | <26 | <21 | <25 | <22 | <21 | <24 | <24 | <22 | <22 |
| Beryllium | 7440-41-7 | mg/kg | 1.9* | <0.26 | <0.21 | <0.25 | <0.22 | <0.21 | <0.24 | <0.24 | <0.22 | 0.24 |
| Cadmium | 7440-43-9 | mg/kg | 2 | <0.65 | <0.52 | <0.63 | <0.56 | <0.53 | <0.61 | <0.61 | <0.55 | <0.55 |
| Calcium | 7440-70-2 | mg/kg | - | <650 | <520 | <630 | <560 | <530 | <610 | <610 | <550 | <550 |
| Chromium | 7440-47-3 | mg/kg | - | 8.3 | 2.5 | 12 | 11.6 | 8.6 | 5.9 | 7.2 | 17.5 | 10.4 |
| Cobalt | 7440-48-4 | mg/kg | 90 | <6.5 | <5.2 | <6.3 | <5.6 | <5.3 | <6.1 | <6.1 | <5.5 | 8.4 |
| Copper | 7440-50-8 | mg/kg | 11000 | 5.9 | <2.6 | 4.6 | 4 | 21.5 | 4.1 | 7.3 | 7.6 | 14.4 |
| Iron | 7439-89-6 | mg/kg | - | 1520 | 787 | 636 | 698 | 6720 | 1650 | 3630 | 802 | 618 |
| Lead | 7439-92-1 | mg/kg | 90 | <2.6 | <2.1 | <2.5 | 2.5 | 19 | <2.4 | 3.1 | 4.5 | 8.5 |
| Magnesium | 7439-95-4 | mg/kg | - | <650 | <520 | <630 | <560 | <530 | <610 | <610 | <550 | <550 |
| Manganese | 7439-96-5 | mg/kg | - | 3 | <1.6 | 2.3 | 2.1 | 15.5 | <1.8 | 2.1 | 2.6 | 2 |
| Mercury | 7439-97-6 | mg/kg | 0.13* | <0.041 | <0.032 | <0.037 | <0.035 | 0.047 | <0.038 | <0.040 | <0.035 | <0.035 |
| Nickel | 7440-02-0 | mg/kg | 48 | <5.2 | <4.2 | <5.0 | <4.5 | <4.2 | <4.9 | <4.9 | <4.4 | 6.1 |
| Potassium | 7440-09-7 | mg/kg | - | <1300 | <1000 | <1300 | <1100 | <1100 | <1200 | <1200 | <1100 | <1100 |
| Selenium | 7782-49-2 | mg/kg | 11 | <2.6 | <2.1 | <2.5 | <2.2 | <2.1 | <2.4 | <2.4 | <2.2 | <2.2 |
| Silver | 7440-22-4 | mg/kg | 1 | <0.65 | <0.52 | <0.63 | <0.56 | <0.53 | <0.61 | <0.61 | <0.55 | <0.55 |
| Sodium | 7440-23-5 | mg/kg | - | <1300 | <1000 | <1300 | <1100 | <1100 | <1200 | <1200 | <1100 | <1100 |
| Thallium | 7440-28-0 | mg/kg | 3 | <1.3 | <1.0 | <1.3 | <1.1 | <1.1 | <1.2 | <1.2 | <1.1 | <1.1 |
| Vanadium | 7440-62-2 | mg/kg | NA | 12.2 | <5.2 | 31.8 | 28.2 | 16.9 | 11.2 | 28.8 | 22.4 | 22.6 |
| Zinc | 7440-66-6 | mg/kg | 930 | <6.5 | <5.2 | <6.3 | 7 | 9.8 | <6.1 | <6.1 | <5.5 | 6.4 |
| **General Chemistry** | | | | | | | | | | | | |
| Cyanide | 57-12-5 | mg/kg | 20 | <0.28 | <0.23 | <0.28 | <0.28 | <0.25 | <0.29 | <0.28 | <0.25 | <0.25 |
| Solids, Percent | | % | - | 77.3 | 97.5 | 81.2 | 85.3 | 96.7 | 82.2 | 83.3 | 90.5 | 87.4 |
| **Client Sample ID:** | | | **NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 11/13)** | **ET-BS14 (15-15.5)** | **ET-BS20 (5-5.5)** | **ET-BS20 (10-10.5)** | **ET-BS20 (15-15.5)** | **ET-BS13 (5-5.5)** | **ET-BS13 (10-10.5)** | **ET-BS13 (15-15.5)** | **ET-BS15 (5-5.5)** | **ET-BS15 (10-10.5)** |
| **Lab Sample ID:** | | | | **JB78959-12** | **JB78959-13** | **JB78959-14** | **JB78959-15** | **JB78959-16** | **JB78959-17** | **JB78959-18** | **JB78959-19** | **JB78959-20** |
| **Date Sampled:** | | | | **10/9/2014** | **10/9/2014** | **10/9/2014** | **10/9/2014** | **10/9/2014** | **10/9/2014** | **10/9/2014** | **10/9/2014** | **10/9/2014** |
| **Matrix:** | **CAS#** | | | **Soil** | **Soil** | **Soil** | **Soil** | **Soil** | **Soil** | **Soil** | **Soil** | **Soil** |
| **GC/MS Volatiles (SW846 8260B)** | | | | | | | | | | | | |
| Acetone | 67-64-1 | ug/kg | 19000 | 7.7 J | ND (9.4) | ND (11) | ND (10) | ND (13) | 12.4 | 11.9 J | ND (13) | 33 |
| Benzene | 71-43-2 | ug/kg | 5 | ND (0.62) | ND (0.47) | ND (0.53) | ND (0.52) | ND (0.64) | ND (0.56) | ND (0.66) | ND (0.65) | ND (0.61) |
| Bromochloromethane | 74-97-5 | ug/kg | - | ND (6.2) | ND (4.7) | ND (5.3) | ND (5.2) | ND (6.4) | ND (5.6) | ND (6.6) | ND (6.5) | ND (6.1) |
| Bromodichloromethane | 75-27-4 | ug/kg | 5 | ND (2.5) | ND (1.9) | ND (2.1) | ND (2.1) | ND (2.5) | ND (2.2) | ND (2.6) | ND (2.6) | ND (2.4) |
| Bromoform | 75-25-2 | ug/kg | 30 | ND (6.2) | ND (4.7) | ND (5.3) | ND (5.2) | ND (6.4) | ND (5.6) | ND (6.6) | ND (6.5) | ND (6.1) |
| Bromomethane | 74-83-9 | ug/kg | 40 | ND (6.2) | ND (4.7) | ND (5.3) | ND (5.2) | ND (6.4) | ND (5.6) | ND (6.6) | ND (6.5) | ND (6.1) |
| 2-Butanone (MEK) | 78-93-3 | ug/kg | 900 | ND (12) | ND (9.4) | ND (11) | ND (10) | ND (13) | ND (11) | ND (13) | ND (13) | ND (12) |
| Carbon disulfide | 75-15-0 | ug/kg | 6000 | 1.6 J | ND (1.9) | ND (2.1) | ND (2.1) | ND (2.5) | 1.1 J | 1.9 J | ND (2.6) | 1.4 J |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Diethyl phthalate | 84-66-2 | ug/kg | 88000 | ND (97) | ND (64) | ND (72) | ND (69) | ND (62) | ND (74) | ND (70) | ND (65) | ND (69) |
| Dimethyl phthalate | 131-11-3 | ug/kg | - | ND (97) | ND (64) | ND (72) | ND (69) | ND (62) | ND (74) | ND (70) | ND (65) | ND (69) |
| bis(2-Ethylhexyl)phthalate | 117-81-7 | ug/kg | 1200000 | ND (97) | ND (64) | ND (72) | ND (69) | ND (62) | ND (74) | ND (70) | ND (65) | ND (69) |
| Fluoranthene | 206-44-0 | ug/kg | 1300000 | ND (48) | ND (32) | ND (36) | ND (35) | ND (31) | ND (37) | ND (35) | ND (32) | ND (34) |
| Fluorene | 86-73-7 | ug/kg | 170000 | ND (48) | ND (32) | ND (36) | ND (35) | ND (31) | ND (37) | ND (35) | ND (32) | ND (34) |
| Hexachlorobenzene | 118-74-1 | ug/kg | 200 | ND (97) | ND (64) | ND (72) | ND (69) | ND (62) | ND (74) | ND (70) | ND (65) | ND (69) |
| Hexachlorobutadiene | 87-68-3 | ug/kg | 900 | ND (48) | ND (32) | ND (36) | ND (35) | ND (31) | ND (37) | ND (35) | ND (32) | ND (34) |
| Hexachlorocyclopentadiene | 77-47-4 | ug/kg | 320000 | ND (480) | ND (320) | ND (360) | ND (350) | ND (310) | ND (370) | ND (350) | ND (320) | ND (340) |
| Hexachloroethane | 67-72-1 | ug/kg | 200 | ND (240) | ND (160) | ND (180) | ND (170) | ND (160) | ND (190) | ND (180) | ND (160) | ND (170) |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | ug/kg | 7000 | ND (48) | ND (32) | ND (36) | ND (35) | ND (31) | ND (37) | ND (35) | ND (32) | ND (34) |
| Isophorone | 78-59-1 | ug/kg | 200 | ND (97) | ND (64) | ND (72) | ND (69) | ND (62) | ND (74) | ND (70) | ND (65) | ND (69) |
| 2-Methylnaphthalene | 91-57-6 | ug/kg | 8000 | ND (97) | ND (64) | ND (72) | ND (69) | ND (62) | ND (74) | ND (70) | ND (65) | ND (69) |
| 2-Nitroaniline | 88-74-4 | ug/kg | NA | ND (240) | ND (160) | ND (180) | ND (170) | ND (160) | ND (190) | ND (180) | ND (160) | ND (170) |
| 3-Nitroaniline | 99-09-2 | ug/kg | - | ND (240) | ND (160) | ND (180) | ND (170) | ND (160) | ND (190) | ND (180) | ND (160) | ND (170) |
| 4-Nitroaniline | 100-01-6 | ug/kg | - | ND (240) | ND (160) | ND (180) | ND (170) | ND (160) | ND (190) | ND (180) | ND (160) | ND (170) |
| Naphthalene | 91-20-3 | ug/kg | 25000 | ND (48) | ND (32) | ND (36) | ND (35) | ND (31) | ND (37) | ND (35) | ND (32) | ND (34) |
| Nitrobenzene | 98-95-3 | ug/kg | 200 | ND (97) | ND (64) | ND (72) | ND (69) | ND (62) | ND (74) | ND (70) | ND (65) | ND (69) |
| N-Nitroso-di-n-propylamine | 621-64-7 | ug/kg | 200 | ND (97) | ND (64) | ND (72) | ND (69) | ND (62) | ND (74) | ND (70) | ND (65) | ND (69) |
| N-Nitrosodiphenylamine | 86-30-6 | ug/kg | 400 | ND (240) | ND (160) | ND (180) | ND (170) | ND (160) | ND (190) | ND (180) | ND (160) | ND (170) |
| Phenanthrene | 85-01-8 | ug/kg | NA | ND (48) | ND (32) | ND (36) | ND (35) | ND (31) | ND (37) | ND (35) | ND (32) | ND (34) |
| Pyrene | 129-00-0 | ug/kg | 840000 | ND (48) | ND (32) | ND (36) | ND (35) | ND (31) | ND (37) | ND (35) | ND (32) | ND (34) |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | ug/kg | - | ND (240) | ND (160) | ND (180) | ND (170) | ND (160) | ND (190) | ND (180) | ND (160) | ND (170) |
| **GC/MS Semi-volatile TIC** | | | | | | | | | | | | |
| Total TIC, Semi-Volatile | | ug/kg | - | 350 J | 2500 J | 0 | 180 J | 0 | 0 | 210 J | 0 | 0 |
| Total Alkanes | | ug/kg | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **GC Semi-volatiles (NJDEP EPH)** | | | | | | | | | | | | |
| EPH (C9-C28) | | mg/kg | - | 77.5 | ND (6.2) | ND (7.3) | 26.2 | ND (6.9) | ND (7.9) | ND (7.5) | ND (6.3) | ND (7.0) |
| EPH (>C28-C40) | | mg/kg | - | 107 | ND (6.2) | ND (7.3) | 37.2 | ND (6.9) | 14.8 | ND (7.5) | ND (6.3) | ND (7.0) |
| Total EPH (C9-C40) | | mg/kg | - | 184 | ND (6.2) | ND (7.3) | 63.3 | ND (6.9) | 14.8 | ND (7.5) | ND (6.3) | ND (7.0) |
| **GC Semi-volatiles (SW846 8081B)** | | | | | | | | | | | | |
| Aldrin | 309-00-2 | ug/kg | 200 | ND (0.99) | ND (0.64) | ND (0.74) | ND (0.76) | ND (0.64) | ND (0.74) | ND (0.69) | ND (0.69) | ND (0.76) |
| alpha-BHC | 319-84-6 | ug/kg | 2 | ND (0.99) | ND (0.64) | ND (0.74) | ND (0.76) | ND (0.64) | ND (0.74) | ND (0.69) | ND (0.69) | ND (0.76) |
| beta-BHC | 319-85-7 | ug/kg | 2 | ND (0.99) | ND (0.64) | ND (0.74) | ND (0.76) | ND (0.64) | ND (0.74) | ND (0.69) | ND (0.69) | ND (0.76) |
| delta-BHC | 319-86-8 | ug/kg | - | ND (0.99) | ND (0.64) | ND (0.74) | ND (0.76) | ND (0.64) | ND (0.74) | ND (0.69) | ND (0.69) | ND (0.76) |
| gamma-BHC (Lindane) | 58-89-9 | ug/kg | 2 | ND (0.99) | ND (0.64) | ND (0.74) | ND (0.76) | ND (0.64) | ND (0.74) | ND (0.69) | ND (0.69) | ND (0.76) |
| alpha-Chlordane | 5103-71-9 | ug/kg | 50 | ND (0.99) | ND (0.64) | ND (0.74) | ND (0.76) | ND (0.64) | ND (0.74) | ND (0.69) | ND (0.69) | ND (0.76) |
| gamma-Chlordane | 5103-74-2 | ug/kg | 50 | ND (0.99) | ND (0.64) | ND (0.74) | ND (0.76) | ND (0.64) | ND (0.74) | ND (0.69) | ND (0.69) | ND (0.76) |
| Chlordane (alpha and gamma) | 57-74-9 | ug/kg | 50 | ND (0.99) | ND (0.64) | ND (0.74) | ND (0.76) | ND (0.64) | ND (0.74) | ND (0.69) | ND (0.69) | ND (0.76) |
| Dieldrin | 60-57-1 | ug/kg | 3 | ND (0.99) | ND (0.64) | ND (0.74) | ND (0.76) | ND (0.64) | ND (0.74) | ND (0.69) | ND (0.69) | ND (0.76) |
| 4,4'-DDD | 72-54-8 | ug/kg | 4000 | ND (0.99) | ND (0.64) | ND (0.74) | ND (0.76) | ND (0.64) | ND (0.74) | ND (0.69) | ND (0.69) | ND (0.76) |
| 4,4'-DDE | 72-55-9 | ug/kg | 18000 | ND (0.99) | ND (0.64) | ND (0.74) | ND (0.76) | ND (0.64) | ND (0.74) | ND (0.69) | ND (0.69) | ND (0.76) |
| 4,4'-DDT | 50-29-3 | ug/kg | 11000 | ND (0.99) | ND (0.64) | ND (0.74) | ND (0.76) | ND (0.64) | ND (0.74) | ND (0.69) | ND (0.69) | ND (0.76) |
| Endrin | 72-20-8 | ug/kg | 1000 | ND (0.99) | ND (0.64) | ND (0.74) | ND (0.76) | ND (0.64) | ND (0.74) | ND (0.69) | ND (0.69) | ND (0.76) |
| Endosulfan sulfate | 1031-07-8 | ug/kg | 2000 | ND (0.99) | ND (0.64) | ND (0.74) | ND (0.76) | ND (0.64) | ND (0.74) | ND (0.69) | ND (0.69) | ND (0.76) |
| Endrin aldehyde | 7421-93-4 | ug/kg | - | ND (0.99) | ND (0.64) | ND (0.74) | ND (0.76) | ND (0.64) | ND (0.74) | ND (0.69) | ND (0.69) | ND (0.76) |
| Endosulfan-I | 959-98-8 | ug/kg | 4000 | ND (0.99) | ND (0.64) | ND (0.74) | ND (0.76) | ND (0.64) | ND (0.74) | ND (0.69) | ND (0.69) | ND (0.76) |
| Endosulfan-II | 33213-65-9 | ug/kg | 4000 | ND (0.99) | ND (0.64) | ND (0.74) | ND (0.76) | ND (0.64) | ND (0.74) | ND (0.69) | ND (0.69) | ND (0.76) |
| Heptachlor | 76-44-8 | ug/kg | 500 | ND (0.99) | ND (0.64) | ND (0.74) | ND (0.76) | ND (0.64) | ND (0.74) | ND (0.69) | ND (0.69) | ND (0.76) |
| Heptachlor epoxide | 1024-57-3 | ug/kg | 10 | ND (0.99) | ND (0.64) | ND (0.74) | ND (0.76) | ND (0.64) | ND (0.74) | ND (0.69) | ND (0.69) | ND (0.76) |
| Methoxychlor | 72-43-5 | ug/kg | 160000 | ND (2.0) | ND (1.3) | ND (1.5) | ND (1.5) | ND (1.3) | ND (1.5) | ND (1.4) | ND (1.4) | ND (1.5) |
| Endrin ketone | 53494-70-5 | ug/kg | - | ND (0.99) | ND (0.64) | ND (0.74) | ND (0.76) | ND (0.64) | ND (0.74) | ND (0.69) | ND (0.69) | ND (0.76) |
| Toxaphene | 8001-35-2 | ug/kg | 300 | ND (25) | ND (16) | ND (18) | ND (19) | ND (16) | ND (19) | ND (17) | ND (17) | ND (19) |
| **GC Semi-volatiles (SW846 8082A)** | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | ug/kg | 200 | ND (49) | ND (32) | ND (37) | ND (38) | ND (32) | ND (37) | ND (34) | ND (34) | ND (38) |
| Aroclor 1221 | 11104-28-2 | ug/kg | 200 | ND (49) | ND (32) | ND (37) | ND (38) | ND (32) | ND (37) | ND (34) | ND (34) | ND (38) |
| Aroclor 1232 | 11141-16-5 | ug/kg | 200 | ND (49) | ND (32) | ND (37) | ND (38) | ND (32) | ND (37) | ND (34) | ND (34) | ND (38) |
| Aroclor 1242 | 53469-21-9 | ug/kg | 200 | ND (49) | ND (32) | ND (37) | ND (38) | ND (32) | ND (37) | ND (34) | ND (34) | ND (38) |
| Aroclor 1248 | 12672-29-6 | ug/kg | 200 | ND (49) | ND (32) | ND (37) | ND (38) | ND (32) | ND (37) | ND (34) | ND (34) | ND (38) |
| Aroclor 1254 | 11097-69-1 | ug/kg | 200 | ND (49) | ND (32) | ND (37) | ND (38) | ND (32) | ND (37) | ND (34) | ND (34) | ND (38) |
| Aroclor 1260 | 11096-82-5 | ug/kg | 200 | ND (49) | ND (32) | ND (37) | ND (38) | ND (32) | ND (37) | ND (34) | ND (34) | ND (38) |
| Aroclor 1268 | 11100-14-4 | ug/kg | 200 | ND (49) | ND (32) | ND (37) | ND (38) | ND (32) | ND (37) | ND (34) | ND (34) | ND (38) |
| Aroclor 1262 | 37324-23-5 | ug/kg | 200 | ND (49) | ND (32) | ND (37) | ND (38) | ND (32) | ND (37) | ND (34) | ND (34) | ND (38) |
| **Metals Analysis** | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | mg/kg | - | 1090 | 734 | 1480 | 623 | 2300 | 1170 | 772 | 606 | 878 |
| Antimony | 7440-36-0 | mg/kg | 6 | <3.3 | <2.0 | <2.5 | <2.4 | <2.1 | <2.3 | <2.3 | <2.1 | <2.2 |
| Arsenic | 7440-38-2 | mg/kg | 19 | <3.3 | <2.0 | <2.5 | <2.4 | <2.1 | <2.3 | <2.3 | <2.1 | <2.2 |
| Barium | 7440-39-3 | mg/kg | 2100 | <33 | <20 | <25 | <24 | <21 | <23 | <23 | <21 | <22 |
| Beryllium | 7440-41-7 | mg/kg | 1.9* | <0.33 | <0.20 | <0.25 | <0.24 | <0.21 | <0.23 | <0.23 | <0.21 | <0.22 |
| Cadmium | 7440-43-9 | mg/kg | 2 | <0.82 | <0.49 | <0.62 | <0.60 | <0.52 | <0.57 | <0.57 | <0.53 | <0.55 |
| Calcium | 7440-70-2 | mg/kg | - | <820 | <490 | <620 | <600 | <520 | <570 | <570 | <530 | <550 |
| Chromium | 7440-47-3 | mg/kg | - | 35.1 | 3.3 | 10 | 14.7 | 3.4 | 9.8 | 7.9 | 1.5 | 3.8 |
| Cobalt | 7440-48-4 | mg/kg | 90 | <8.2 | <4.9 | <6.2 | <6.0 | <5.2 | <5.7 | <5.7 | <5.3 | <5.5 |
| Copper | 7440-50-8 | mg/kg | 11000 | 100 | <2.5 | 6.1 | 7.1 | <2.6 | 4.8 | 2.9 | <2.6 | <2.8 |
| Iron | 7439-89-6 | mg/kg | - | 6240 | 963 | 1910 | 4470 | 1870 | 912 | 2410 | 939 | 3890 |
| Lead | 7439-92-1 | mg/kg | 90 | 4 | <2.0 | 3.8 | 3.2 | <2.1 | 3.1 | 2.3 | <2.1 | <2.2 |
| Magnesium | 7439-95-4 | mg/kg | - | <820 | <490 | <620 | <600 | <520 | <570 | <570 | <530 | <550 |
| Manganese | 7439-96-5 | mg/kg | - | <2.5 | 2.3 | 3 | 2.4 | 3.4 | 3.5 | 2.1 | <1.6 | 2.7 |
| Mercury | 7439-97-6 | mg/kg | 0.13* | <0.048 | <0.030 | <0.036 | <0.038 | <0.030 | <0.038 | <0.035 | <0.034 | <0.033 |
| Nickel | 7440-02-0 | mg/kg | 48 | <6.6 | <4.0 | 4.9 | <4.8 | <4.1 | <4.6 | <4.5 | <4.2 | <4.4 |
| Potassium | 7440-09-7 | mg/kg | - | <1600 | <990 | <1200 | <1200 | <1000 | <1100 | <1100 | <1100 | <1100 |
| Selenium | 7782-49-2 | mg/kg | 11 | <3.3 | <2.0 | <2.5 | <2.4 | <2.1 | <2.3 | <2.3 | <2.1 | <2.2 |
| Silver | 7440-22-4 | mg/kg | 1 | <0.82 | <0.49 | <0.62 | <0.60 | <0.52 | <0.57 | <0.57 | <0.53 | <0.55 |
| Sodium | 7440-23-5 | mg/kg | - | <1600 | <990 | <1200 | <1200 | <1000 | <1100 | <1100 | <1100 | <1100 |
| Thallium | 7440-28-0 | mg/kg | 3 | <1.6 | <0.99 | <1.2 | <1.2 | <1.0 | <1.1 | <1.1 | <1.1 | <1.1 |
| Vanadium | 7440-62-2 | mg/kg | NA | 86.6 | 5.8 | 31 | 28.2 | 6.3 | 29 | 20.9 | <5.3 | 8.3 |
| Zinc | 7440-66-6 | mg/kg | 930 | <8.2 | <4.9 | <6.2 | <6.0 | <5.2 | <5.7 | <5.7 | <5.3 | <5.5 |
| **General Chemistry** | | | | | | | | | | | | |
| Cyanide | 57-12-5 | mg/kg | 20 | <0.35 | <0.24 | <0.27 | <0.27 | <0.23 | <0.26 | <0.26 | <0.23 | <0.27 |
| Solids, Percent | | % | - | 61.6 | 99.2 | 84.2 | 87.4 | 96.9 | 84.5 | 86.5 | 96.7 | 88.2 |
| **Client Sample ID:** | | | **NJ Default Impact to Groundwater** | **ET-BS25 (15-15.5)** | **ET-BS21 (5-5.5)** | **ET-BS21 (10-10.5)** | **ET-BS21 (10-10.5)** | **ET-BS21 (15-15.5)** | **ET-BS22 (5-5.5)** | **ET-BS22 (9-9.5)** | **ET-BS19 (3.5-4)** | **ET-BS8 (5-5.5)** |

| Lab Sample ID: | | | Soil Screening | JB78959-30 | JB78959-31 | JB78959-32 | JB78959-32R | JB78959-33 | JB78959-34 | JB78959-35 | JB78959-36 | JB78959-37 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date Sampled: | | | (NJAC 7:26D | 10/9/2014 | 10/9/2014 | 10/9/2014 | 10/9/2014 | 10/9/2014 | 10/9/2014 | 10/9/2014 | 10/9/2014 | 10/9/2014 |
| Matrix: | CAS# | | 11/13) | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil |
| **GC/MS Volatiles (SW846 8260B)** | | | | | | | | | | | | |
| Acetone | 67-64-1 | ug/kg | 19000 | ND (12) | ND (13) | 14 | - | ND (11) | 16.9 | 24.4 | ND (12) | ND (11) |
| Benzene | 71-43-2 | ug/kg | 5 | ND (0.61) | ND (0.63) | ND (0.58) | - | ND (0.55) | ND (0.43) | ND (0.62) | ND (0.58) | ND (0.56) |
| Bromochloromethane | 74-97-5 | ug/kg | - | ND (6.1) | ND (6.3) | ND (5.8) | - | ND (5.5) | ND (4.3) | ND (6.2) | ND (5.8) | ND (5.6) |
| Bromodichloromethane | 75-27-4 | ug/kg | 5 | ND (2.4) | ND (2.5) | ND (2.3) | - | ND (2.2) | ND (1.7) | ND (2.5) | ND (2.3) | ND (2.3) |
| Bromoform | 75-25-2 | ug/kg | 30 | ND (6.1) | ND (6.3) | ND (5.8) | - | ND (5.5) | ND (4.3) | ND (6.2) | ND (5.8) | ND (5.6) |
| Bromomethane | 74-83-9 | ug/kg | 40 | ND (6.1) | ND (6.3) | ND (5.8) | - | ND (5.5) | ND (4.3) | ND (6.2) | ND (5.8) | ND (5.6) |
| 2-Butanone (MEK) | 78-93-3 | ug/kg | 900 | ND (12) | ND (13) | ND (12) | - | ND (11) | ND (8.6) | ND (12) | ND (12) | ND (11) |
| Carbon disulfide | 75-15-0 | ug/kg | 6000 | ND (2.4) | ND (2.5) | ND (2.3) | - | 0.52 J | 0.89 J | ND (2.5) | ND (2.3) | ND (2.3) |
| Carbon tetrachloride | 56-23-5 | ug/kg | 5 | ND (2.4) | ND (2.5) | ND (2.3) | - | ND (2.2) | ND (1.7) | ND (2.5) | ND (2.3) | ND (2.3) |
| Chlorobenzene | 108-90-7 | ug/kg | 600 | ND (2.4) | ND (2.5) | ND (2.3) | - | ND (2.2) | ND (1.7) | ND (2.5) | ND (2.3) | ND (2.3) |
| Chloroethane | 75-00-3 | ug/kg | NA | ND (6.1) | ND (6.3) | ND (5.8) | - | ND (5.5) | ND (4.3) | ND (6.2) | ND (5.8) | ND (5.6) |
| Chloroform | 67-66-3 | ug/kg | 400 | ND (2.4) | ND (2.5) | ND (2.3) | - | ND (2.2) | ND (1.7) | ND (2.5) | ND (2.3) | ND (2.3) |
| Chloromethane | 74-87-3 | ug/kg | NA | ND (6.1) | ND (6.3) | ND (5.8) | - | ND (5.5) | ND (4.3) | ND (6.2) | ND (5.8) | ND (5.6) |
| Cyclohexane | 110-82-7 | ug/kg | - | ND (2.4) | ND (2.5) | ND (2.3) | - | ND (2.2) | ND (1.7) | ND (2.5) | ND (2.3) | ND (2.3) |
| 1,2-Dibromo-3-chloropropane | 96-12-8 | ug/kg | 5 | ND (6.1) | ND (6.3) | ND (5.8) | - | ND (5.5) | ND (4.3) | ND (6.2) | ND (5.8) | ND (5.6) |
| Dibromochloromethane | 124-48-1 | ug/kg | 5 | ND (2.4) | ND (2.5) | ND (2.3) | - | ND (2.2) | ND (1.7) | ND (2.5) | ND (2.3) | ND (2.3) |
| 1,2-Dibromoethane | 106-93-4 | ug/kg | 5 | ND (1.2) | ND (1.3) | ND (1.2) | - | ND (1.1) | ND (0.86) | ND (1.2) | ND (1.2) | ND (1.1) |
| 1,2-Dichlorobenzene | 95-50-1 | ug/kg | 17000 | ND (1.2) | ND (1.3) | ND (1.2) | - | ND (1.1) | ND (0.86) | ND (1.2) | ND (1.2) | ND (1.1) |
| 1,3-Dichlorobenzene | 541-73-1 | ug/kg | 19000 | ND (1.2) | ND (1.3) | ND (1.2) | - | ND (1.1) | ND (0.86) | ND (1.2) | ND (1.2) | ND (1.1) |
| 1,4-Dichlorobenzene | 106-46-7 | ug/kg | 2000 | ND (1.2) | ND (1.3) | ND (1.2) | - | ND (1.1) | ND (0.86) | ND (1.2) | ND (1.2) | ND (1.1) |
| Dichlorodifluoromethane | 75-71-8 | ug/kg | 39000 | ND (6.1) | ND (6.3) | ND (5.8) | - | ND (5.5) | ND (4.3) | ND (6.2) | ND (5.8) | ND (5.6) |
| 1,1-Dichloroethane | 75-34-3 | ug/kg | 200 | ND (1.2) | ND (1.3) | ND (1.2) | - | ND (1.1) | ND (0.86) | ND (1.2) | ND (1.2) | ND (1.1) |
| 1,2-Dichloroethane | 107-06-2 | ug/kg | 5 | ND (1.2) | ND (1.3) | ND (1.2) | - | ND (1.1) | ND (0.86) | ND (1.2) | ND (1.2) | ND (1.1) |
| 1,1-Dichloroethene | 75-35-4 | ug/kg | 8 | ND (1.2) | ND (1.3) | ND (1.2) | - | ND (1.1) | ND (0.86) | ND (1.2) | ND (1.2) | ND (1.1) |
| cis-1,2-Dichloroethene | 156-59-2 | ug/kg | 300 | ND (1.2) | ND (1.3) | ND (1.2) | - | ND (1.1) | ND (0.86) | ND (1.2) | ND (1.2) | ND (1.1) |
| trans-1,2-Dichloroethene | 156-60-5 | ug/kg | 600 | ND (1.2) | ND (1.3) | ND (1.2) | - | ND (1.1) | ND (0.86) | ND (1.2) | ND (1.2) | ND (1.1) |
| 1,2-Dichloropropane | 78-87-5 | ug/kg | 5 | ND (2.4) | ND (2.5) | ND (2.3) | - | ND (2.2) | ND (1.7) | ND (2.5) | ND (2.3) | ND (2.3) |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/kg | 5 | ND (2.4) | ND (2.5) | ND (2.3) | - | ND (2.2) | ND (1.7) | ND (2.5) | ND (2.3) | ND (2.3) |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/kg | 5 | ND (2.4) | ND (2.5) | ND (2.3) | - | ND (2.2) | ND (1.7) | ND (2.5) | ND (2.3) | ND (2.3) |
| Ethylbenzene | 100-41-4 | ug/kg | 13000 | ND (1.2) | ND (1.3) | ND (1.2) | - | ND (1.1) | ND (0.86) | ND (1.2) | ND (1.2) | ND (1.1) |
| Freon 113 | 76-13-1 | ug/kg | - | ND (6.1) | ND (6.3) | ND (5.8) | - | ND (5.5) | ND (4.3) | ND (6.2) | ND (5.8) | ND (5.6) |
| 2-Hexanone | 591-78-6 | ug/kg | - | ND (6.1) | ND (6.3) | ND (5.8) | - | ND (5.5) | ND (4.3) | ND (6.2) | ND (5.8) | ND (5.6) |
| Isopropylbenzene | 98-82-8 | ug/kg | - | ND (6.1) | ND (6.3) | ND (5.8) | - | ND (5.5) | ND (4.3) | ND (6.2) | ND (5.8) | ND (5.6) |
| Methyl Acetate | 79-20-9 | ug/kg | 22000 | ND (6.1) | ND (6.3) | ND (5.8) | - | ND (5.5) | ND (4.3) | ND (6.2) | ND (5.8) | ND (5.6) |
| Methylcyclohexane | 108-87-2 | ug/kg | - | ND (2.4) | ND (2.5) | ND (2.3) | - | ND (2.2) | ND (1.7) | ND (2.5) | ND (2.3) | ND (2.3) |
| Methyl Tert Butyl Ether | 1634-04-4 | ug/kg | 200 | ND (1.2) | ND (1.3) | ND (1.2) | - | ND (1.1) | ND (0.86) | ND (1.2) | ND (1.2) | ND (1.1) |
| 4-Methyl-2-pentanone(MIBK) | 108-10-1 | ug/kg | - | ND (6.1) | ND (6.3) | ND (5.8) | - | ND (5.5) | ND (4.3) | ND (6.2) | ND (5.8) | ND (5.6) |
| Methylene chloride | 75-09-2 | ug/kg | 10 | ND (6.1) | ND (6.3) | ND (5.8) | - | ND (5.5) | ND (4.3) | ND (6.2) | ND (5.8) | ND (5.6) |
| Styrene | 100-42-5 | ug/kg | 3000 | ND (2.4) | ND (2.5) | ND (2.3) | - | ND (2.2) | ND (1.7) | ND (2.5) | ND (2.3) | ND (2.3) |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/kg | 7 | ND (2.4) | ND (2.5) | ND (2.3) | - | ND (2.2) | ND (1.7) | ND (2.5) | ND (2.3) | ND (2.3) |
| Tetrachloroethene | 127-18-4 | ug/kg | 5 | ND (1.2) | ND (1.3) | ND (1.2) | - | ND (1.1) | ND (0.86) | ND (1.2) | ND (1.2) | ND (1.1) |
| Toluene | 108-88-3 | ug/kg | 7000 | ND (1.2) | ND (1.3) | ND (1.2) | - | ND (1.1) | ND (0.86) | ND (1.2) | ND (1.2) | ND (1.1) |
| 1,2,3-Trichlorobenzene | 87-61-6 | ug/kg | - | ND (6.1) | ND (6.3) | ND (5.8) | - | ND (5.5) | ND (4.3) | ND (6.2) | ND (5.8) | ND (5.6) |
| 1,2,4-Trichlorobenzene | 120-82-1 | ug/kg | 700 | ND (6.1) | ND (6.3) | ND (5.8) | - | ND (5.5) | ND (4.3) | ND (6.2) | ND (5.8) | ND (5.6) |
| 1,1,1-Trichloroethane | 71-55-6 | ug/kg | 300 | ND (2.4) | ND (2.5) | ND (2.3) | - | ND (2.2) | ND (1.7) | ND (2.5) | ND (2.3) | ND (2.3) |
| 1,1,2-Trichloroethane | 79-00-5 | ug/kg | 20 | ND (2.4) | ND (2.5) | ND (2.3) | - | ND (2.2) | ND (1.7) | ND (2.5) | ND (2.3) | ND (2.3) |
| Trichloroethene | 79-01-6 | ug/kg | 10 | ND (1.2) | ND (1.3) | ND (1.2) | - | ND (1.1) | ND (0.86) | ND (1.2) | ND (1.2) | ND (1.1) |
| Trichlorofluoromethane | 75-69-4 | ug/kg | 34000 | ND (6.1) | ND (6.3) | ND (5.8) | - | ND (5.5) | ND (4.3) | ND (6.2) | ND (5.8) | ND (5.6) |
| Vinyl chloride | 75-01-4 | ug/kg | 5 | ND (2.4) | ND (2.5) | ND (2.3) | - | ND (2.2) | ND (1.7) | ND (2.5) | ND (2.3) | ND (2.3) |
| m,p-Xylene | | ug/kg | 19000 | ND (1.2) | ND (1.3) | ND (1.2) | - | ND (1.1) | ND (0.86) | ND (1.2) | ND (1.2) | ND (1.1) |
| o-Xylene | 95-47-6 | ug/kg | 19000 | ND (1.2) | ND (1.3) | ND (1.2) | - | ND (1.1) | ND (0.86) | ND (1.2) | ND (1.2) | ND (1.1) |
| Xylene (total) | 1330-20-7 | ug/kg | 19000 | ND (1.2) | ND (1.3) | ND (1.2) | - | ND (1.1) | ND (0.86) | ND (1.2) | ND (1.2) | ND (1.1) |
| **GC/MS Volatile TIC** | | | | | | | | | | | | |
| Total TIC, Volatile | | ug/kg | - | 0 | 24.3 J | 0 | - | 0 | 0 | 0 | 0 | 0 |
| Total Alkanes | | ug/kg | - | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 |
| **GC/MS Semi-volatiles (SW846 8270D)** | | | | | | | | | | | | |
| 2-Chlorophenol | 95-57-8 | ug/kg | 800 | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| 4-Chloro-3-methyl phenol | 59-50-7 | ug/kg | - | ND (170) | ND (160) | ND (180) | - | ND (170) | ND (180) | ND (180) | ND (170) | ND (170) |
| 2,4-Dichlorophenol | 120-83-2 | ug/kg | 200 | ND (170) | ND (160) | ND (180) | - | ND (170) | ND (180) | ND (180) | ND (170) | ND (170) |
| 2,4-Dimethylphenol | 105-67-9 | ug/kg | 1000 | ND (170) | ND (160) | ND (180) | - | ND (170) | ND (180) | ND (180) | ND (170) | ND (170) |
| 2,4-Dinitrophenol | 51-28-5 | ug/kg | 300 | ND (690) | ND (640) | ND (740) | - | ND (700) | ND (730) | ND (710) | ND (690) | ND (670) |
| 4,6-Dinitro-o-cresol | 534-52-1 | ug/kg | 300 | ND (690) | ND (640) | ND (740) | - | ND (700) | ND (730) | ND (710) | ND (690) | ND (670) |
| 2-Methylphenol | 95-48-7 | ug/kg | NA | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| 3&4-Methylphenol | | ug/kg | - | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| 2-Nitrophenol | 88-75-5 | ug/kg | - | ND (170) | ND (160) | ND (180) | - | ND (170) | ND (180) | ND (180) | ND (170) | ND (170) |
| 4-Nitrophenol | 100-02-7 | ug/kg | - | ND (340) | ND (320) | ND (370) | - | ND (350) | ND (360) | ND (350) | ND (340) | ND (330) |
| Pentachlorophenol | 87-86-5 | ug/kg | 300 | ND (340) | ND (320) | ND (370) | - | ND (350) | ND (360) | ND (350) | ND (340) | ND (330) |
| Phenol | 108-95-2 | ug/kg | 8000 | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | ug/kg | - | ND (170) | ND (160) | ND (180) | - | ND (170) | ND (180) | ND (180) | ND (170) | ND (170) |
| 2,4,5-Trichlorophenol | 95-95-4 | ug/kg | 68000 | ND (170) | ND (160) | ND (180) | - | ND (170) | ND (180) | ND (180) | ND (170) | ND (170) |
| 2,4,6-Trichlorophenol | 88-06-2 | ug/kg | 200 | ND (170) | ND (160) | ND (180) | - | ND (170) | ND (180) | ND (180) | ND (170) | ND (170) |
| Acenaphthene | 83-32-9 | ug/kg | 110000 | ND (34) | ND (32) | ND (37) | - | ND (35) | ND (36) | ND (35) | ND (34) | ND (33) |
| Acenaphthylene | 208-96-8 | ug/kg | NA | ND (34) | ND (32) | ND (37) | - | ND (35) | ND (36) | ND (35) | ND (34) | ND (33) |
| Acetophenone | 98-86-2 | ug/kg | 3000 | ND (170) | ND (160) | ND (180) | - | ND (170) | ND (180) | ND (180) | ND (170) | ND (170) |
| Anthracene | 120-12-7 | ug/kg | 2400000 | ND (34) | ND (32) | ND (37) | - | ND (35) | ND (36) | ND (35) | ND (34) | 17.5 J |
| Atrazine | 1912-24-9 | ug/kg | 200 | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| Benzo(a)anthracene | 56-55-3 | ug/kg | 800 | ND (34) | ND (32) | ND (37) | - | ND (35) | 18.1 J | ND (35) | ND (34) | 51.3 |
| Benzo(a)pyrene | 50-32-8 | ug/kg | 200 | ND (34) | ND (32) | ND (37) | - | ND (35) | ND (36) | ND (35) | ND (34) | 38.8 |
| Benzo(b)fluoranthene | 205-99-2 | ug/kg | 2000 | ND (34) | ND (32) | ND (37) | - | ND (35) | 16.6 J | ND (35) | ND (34) | 43 |
| Benzo(g,h,i)perylene | 191-24-2 | ug/kg | NA | ND (34) | ND (32) | ND (37) | - | ND (35) | ND (36) | ND (35) | ND (34) | 18.3 J |
| Benzo(k)fluoranthene | 207-08-9 | ug/kg | 25000 | ND (34) | ND (32) | ND (37) | - | ND (35) | ND (36) | ND (35) | ND (34) | 19.4 J |
| 4-Bromophenyl phenyl ether | 101-55-3 | ug/kg | - | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| Butyl benzyl phthalate | 85-68-7 | ug/kg | 230000 | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| 1,1'-Biphenyl | 92-52-4 | ug/kg | 140000 | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| Benzaldehyde | 100-52-7 | ug/kg | NA | ND (170) | ND (160) | ND (180) | - | ND (170) | ND (180) | ND (180) | ND (170) | ND (170) |
| 2-Chloronaphthalene | 91-58-7 | ug/kg | - | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| 4-Chloroaniline | 106-47-8 | ug/kg | - | ND (170) | ND (160) | ND (180) | - | ND (170) | ND (180) | ND (180) | ND (170) | ND (170) |
| Carbazole | 86-74-8 | ug/kg | NA | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| Caprolactam | 105-60-2 | ug/kg | 12000 | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| Chrysene | 218-01-9 | ug/kg | 80000 | ND (34) | ND (32) | ND (37) | - | ND (35) | 17.8 J | ND (35) | ND (34) | 47.5 |
| bis(2-Chloroethoxy)methane | 111-91-1 | ug/kg | - | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| bis(2-Chloroethyl)ether | 111-44-4 | ug/kg | 200 | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| bis(2-Chloroisopropyl)ether | 108-60-1 | ug/kg | 5000 | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | ug/kg | - | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| 2,4-Dinitrotoluene | 121-14-2 | ug/kg | NA | ND (34) | ND (32) | ND (37) | - | ND (35) | ND (36) | ND (35) | ND (34) | ND (33) |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2,6-Dinitrotoluene | 606-20-2 | ug/kg | NA | ND (34) | ND (32) | ND (37) | - | ND (35) | ND (36) | ND (35) | ND (34) | ND (33) |
| 3,3'-Dichlorobenzidine | 91-94-1 | ug/kg | 200 | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| 1,4-Dioxane | 123-91-1 | ug/kg | - | ND (34) | ND (32) | ND (37) | - | ND (35) | ND (36) | ND (35) | ND (34) | ND (33) |
| Dibenzo(a,h)anthracene | 53-70-3 | ug/kg | 800 | ND (34) | ND (32) | ND (37) | - | ND (35) | ND (36) | ND (35) | ND (34) | ND (33) |
| Dibenzofuran | 132-64-9 | ug/kg | - | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| Di-n-butyl phthalate | 84-74-2 | ug/kg | 760000 | 59.2 J | 35.2 J | 126 | - | 48.6 J | 123 | 72.1 | 78.4 | 71.7 |
| Di-n-octyl phthalate | 117-84-0 | ug/kg | 3300000 | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| Diethyl phthalate | 84-66-2 | ug/kg | 88000 | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| Dimethyl phthalate | 131-11-3 | ug/kg | - | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| bis(2-Ethylhexyl)phthalate | 117-81-7 | ug/kg | 1200000 | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| Fluoranthene | 206-44-0 | ug/kg | 1300000 | ND (34) | ND (32) | ND (37) | - | ND (35) | 27.5 J | ND (35) | ND (34) | 82.6 |
| Fluorene | 86-73-7 | ug/kg | 170000 | ND (34) | ND (32) | ND (37) | - | ND (35) | ND (36) | ND (35) | ND (34) | ND (33) |
| Hexachlorobenzene | 118-74-1 | ug/kg | 200 | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| Hexachlorobutadiene | 87-68-3 | ug/kg | 900 | ND (34) | ND (32) | ND (37) | - | ND (35) | ND (36) | ND (35) | ND (34) | ND (33) |
| Hexachlorocyclopentadiene | 77-47-4 | ug/kg | 320000 | ND (340) | ND (320) | ND (370) | - | ND (350) | ND (360) | ND (350) | ND (340) | ND (330) |
| Hexachloroethane | 67-72-1 | ug/kg | 200 | ND (170) | ND (160) | ND (180) | - | ND (170) | ND (180) | ND (180) | ND (170) | ND (170) |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | ug/kg | 7000 | ND (34) | ND (32) | ND (37) | - | ND (35) | ND (36) | ND (35) | ND (34) | 21.2 J |
| Isophorone | 78-59-1 | ug/kg | 200 | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| 2-Methylnaphthalene | 91-57-6 | ug/kg | 8000 | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| 2-Nitroaniline | 88-74-4 | ug/kg | NA | ND (170) | ND (160) | ND (180) | - | ND (170) | ND (180) | ND (180) | ND (170) | ND (170) |
| 3-Nitroaniline | 99-09-2 | ug/kg | - | ND (170) | ND (160) | ND (180) | - | ND (170) | ND (180) | ND (180) | ND (170) | ND (170) |
| 4-Nitroaniline | 100-01-6 | ug/kg | - | ND (170) | ND (160) | ND (180) | - | ND (170) | ND (180) | ND (180) | ND (170) | ND (170) |
| Naphthalene | 91-20-3 | ug/kg | 25000 | ND (34) | ND (32) | ND (37) | - | ND (35) | ND (36) | ND (35) | ND (34) | ND (33) |
| Nitrobenzene | 98-95-3 | ug/kg | 200 | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| N-Nitroso-di-n-propylamine | 621-64-7 | ug/kg | 200 | ND (69) | ND (64) | ND (74) | - | ND (70) | ND (73) | ND (71) | ND (69) | ND (67) |
| N-Nitrosodiphenylamine | 86-30-6 | ug/kg | 400 | ND (170) | ND (160) | ND (180) | - | ND (170) | ND (180) | ND (180) | ND (170) | ND (170) |
| Phenanthrene | 85-01-8 | ug/kg | NA | ND (34) | ND (32) | ND (37) | - | ND (35) | 17.8 J | ND (35) | ND (34) | 54.1 |
| Pyrene | 129-00-0 | ug/kg | 840000 | ND (34) | ND (32) | ND (37) | - | ND (35) | 29.0 J | ND (35) | ND (34) | 74.6 |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | ug/kg | - | ND (170) | ND (160) | ND (180) | - | ND (170) | ND (180) | ND (180) | ND (170) | ND (170) |
| | | | | | | | | | | | | |
| **GC/MS Semi-volatile TIC** | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Total TIC, Semi-Volatile | | ug/kg | - | 0 | 140 J | 240 J | - | 0 | 11950 J | 240 J | 650 J | 3310 J |
| Total Alkanes | | ug/kg | - | 0 | 0 | 0 | - | 0 | 560 J | 0 | 0 | 0 |
| | | | | | | | | | | | | |
| **GC Semi-volatiles (NJDEP EPH)** | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| EPH (C9-C28) | | mg/kg | - | ND (7.5) | ND (6.7) | 68.1 | - | ND (7.1) | 13.7 | ND (7.1) | ND (6.8) | ND (6.9) |
| EPH (>C28-C40) | | mg/kg | - | ND (7.5) | ND (6.7) | 55.3 | - | ND (7.1) | 22.8 | ND (7.1) | ND (6.8) | 10.7 |
| Total EPH (C9-C40) | | mg/kg | - | ND (7.5) | ND (6.7) | 123 | - | ND (7.1) | 36.5 | ND (7.1) | ND (6.8) | 10.7 |
| | | | | | | | | | | | | |
| **GC Semi-volatiles (SW846 8081B)** | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Aldrin | 309-00-2 | ug/kg | 200 | ND (0.70) | ND (0.61) | ND (0.77) | - | ND (0.71) | ND (0.73) | ND (0.69) | ND (0.71) | ND (0.64) |
| alpha-BHC | 319-84-6 | ug/kg | 2 | ND (0.70) | ND (0.61) | ND (0.77) | - | ND (0.71) | ND (0.73) | ND (0.69) | ND (0.71) | ND (0.64) |
| beta-BHC | 319-85-7 | ug/kg | 2 | ND (0.70) | ND (0.61) | ND (0.77) | - | ND (0.71) | ND (0.73) | ND (0.69) | ND (0.71) | ND (0.64) |
| delta-BHC | 319-86-8 | ug/kg | - | ND (0.70) | ND (0.61) | ND (0.77) | - | ND (0.71) | ND (0.73) | ND (0.69) | ND (0.71) | ND (0.64) |
| gamma-BHC (Lindane) | 58-89-9 | ug/kg | 2 | ND (0.70) | ND (0.61) | ND (0.77) | - | ND (0.71) | ND (0.73) | ND (0.69) | ND (0.71) | ND (0.64) |
| alpha-Chlordane | 5103-71-9 | ug/kg | 50 | ND (0.70) | ND (0.61) | ND (0.77) | - | ND (0.71) | ND (0.73) | ND (0.69) | ND (0.71) | ND (0.64) |
| gamma-Chlordane | 5103-74-2 | ug/kg | 50 | ND (0.70) | ND (0.61) | ND (0.77) | - | ND (0.71) | ND (0.73) | ND (0.69) | ND (0.71) | ND (0.64) |
| Chlordane (alpha and gamma) | 57-74-9 | ug/kg | 50 | ND (0.70) | ND (0.61) | ND (0.77) | - | ND (0.71) | ND (0.73) | ND (0.69) | ND (0.71) | ND (0.64) |
| Dieldrin | 60-57-1 | ug/kg | 3 | ND (0.70) | ND (0.61) | ND (0.77) | - | ND (0.71) | ND (0.73) | ND (0.69) | ND (0.71) | ND (0.64) |
| 4,4'-DDD | 72-54-8 | ug/kg | 4000 | ND (0.70) | ND (0.61) | ND (0.77) | - | ND (0.71) | ND (0.73) | ND (0.69) | ND (0.71) | ND (0.64) |
| 4,4'-DDE | 72-55-9 | ug/kg | 18000 | ND (0.70) | ND (0.61) | ND (0.77) | - | ND (0.71) | 0.87 | ND (0.69) | ND (0.71) | ND (0.64) |
| 4,4'-DDT | 50-29-3 | ug/kg | 11000 | ND (0.70) | ND (0.61) | ND (0.77) | - | ND (0.71) | ND (0.73) | ND (0.69) | ND (0.71) | ND (0.64) |
| Endrin | 72-20-8 | ug/kg | 1000 | ND (0.70) | ND (0.61) | ND (0.77) | - | ND (0.71) | ND (0.73) | ND (0.69) | ND (0.71) | ND (0.64) |
| Endosulfan sulfate | 1031-07-8 | ug/kg | 2000 | ND (0.70) | ND (0.61) | ND (0.77) | - | ND (0.71) | ND (0.73) | ND (0.69) | ND (0.71) | ND (0.64) |
| Endrin aldehyde | 7421-93-4 | ug/kg | - | ND (0.70) | ND (0.61) | ND (0.77) | - | ND (0.71) | ND (0.73) | ND (0.69) | ND (0.71) | ND (0.64) |
| Endosulfan-I | 959-98-8 | ug/kg | 4000 | ND (0.70) | ND (0.61) | ND (0.77) | - | ND (0.71) | ND (0.73) | ND (0.69) | ND (0.71) | ND (0.64) |
| Endosulfan-II | 33213-65-9 | ug/kg | 4000 | ND (0.70) | ND (0.61) | ND (0.77) | - | ND (0.71) | ND (0.73) | ND (0.69) | ND (0.71) | ND (0.64) |
| Heptachlor | 76-44-8 | ug/kg | 500 | ND (0.70) | ND (0.61) | ND (0.77) | - | ND (0.71) | ND (0.73) | ND (0.69) | ND (0.71) | ND (0.64) |
| Heptachlor epoxide | 1024-57-3 | ug/kg | 10 | ND (0.70) | ND (0.61) | ND (0.77) | - | ND (0.71) | ND (0.73) | ND (0.69) | ND (0.71) | ND (0.64) |
| Methoxychlor | 72-43-5 | ug/kg | 160000 | ND (1.4) | ND (1.2) | ND (1.5) | - | ND (1.4) | ND (1.5) | ND (1.4) | ND (1.4) | ND (1.3) |
| Endrin ketone | 53494-70-5 | ug/kg | - | ND (0.70) | ND (0.61) | ND (0.77) | - | ND (0.71) | ND (0.73) | ND (0.69) | ND (0.71) | ND (0.64) |
| Toxaphene | 8001-35-2 | ug/kg | 300 | ND (18) | ND (15) | ND (19) | - | ND (18) | ND (18) | ND (17) | ND (18) | ND (16) |
| | | | | | | | | | | | | |
| **GC Semi-volatiles (SW846 8082A)** | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | ug/kg | 200 | ND (35) | ND (30) | ND (39) | - | ND (35) | ND (37) | ND (34) | ND (35) | ND (32) |
| Aroclor 1221 | 11104-28-2 | ug/kg | 200 | ND (35) | ND (30) | ND (39) | - | ND (35) | ND (37) | ND (34) | ND (35) | ND (32) |
| Aroclor 1232 | 11141-16-5 | ug/kg | 200 | ND (35) | ND (30) | ND (39) | - | ND (35) | ND (37) | ND (34) | ND (35) | ND (32) |
| Aroclor 1242 | 53469-21-9 | ug/kg | 200 | ND (35) | ND (30) | ND (39) | - | ND (35) | ND (37) | ND (34) | ND (35) | ND (32) |
| Aroclor 1248 | 12672-29-6 | ug/kg | 200 | ND (35) | ND (30) | ND (39) | - | ND (35) | ND (37) | ND (34) | ND (35) | ND (32) |
| Aroclor 1254 | 11097-69-1 | ug/kg | 200 | ND (35) | ND (30) | ND (39) | - | ND (35) | ND (37) | ND (34) | ND (35) | ND (32) |
| Aroclor 1260 | 11096-82-5 | ug/kg | 200 | ND (35) | ND (30) | ND (39) | - | ND (35) | ND (37) | ND (34) | ND (35) | ND (32) |
| Aroclor 1268 | 11100-14-4 | ug/kg | 200 | ND (35) | ND (30) | ND (39) | - | ND (35) | ND (37) | ND (34) | ND (35) | ND (32) |
| Aroclor 1262 | 37324-23-5 | ug/kg | 200 | ND (35) | ND (30) | ND (39) | - | ND (35) | ND (37) | ND (34) | ND (35) | ND (32) |
| | | | | | | | | | | | | |
| **Metals Analysis** | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | mg/kg | - | 322 | 225 | 1460 | - | 295 | 3270 | 595 | 9250 | 5630 |
| Antimony | 7440-36-0 | mg/kg | 6 | <2.4 | <2.0 | <2.5 | - | <2.2 | <2.2 | <2.1 | <2.1 | <2.1 |
| Arsenic | 7440-38-2 | mg/kg | 19 | <2.4 | <2.0 | 4.1 | - | <2.2 | <2.2 | 3.8 | <2.1 | <2.1 |
| Barium | 7440-39-3 | mg/kg | 2100 | <24 | <20 | <25 | - | <22 | <22 | <21 | <21 | <21 |
| Beryllium | 7440-41-7 | mg/kg | 1.9* | <0.24 | <0.20 | 0.9 | - | <0.22 | <0.22 | <0.21 | <0.21 | <0.21 |
| Cadmium | 7440-43-9 | mg/kg | 2 | <0.60 | <0.49 | <0.62 | - | <0.55 | <0.55 | <0.51 | <0.52 | <0.52 |
| Calcium | 7440-70-2 | mg/kg | - | <600 | <490 | <620 | - | <550 | 612 | <510 | <520 | <520 |
| Chromium | 7440-47-3 | mg/kg | - | 3.5 | 1.1 | 28.4 | - | 2.8 | 13.2 | 3.6 | 14.7 | 10.2 |
| Cobalt | 7440-48-4 | mg/kg | 90 | <6.0 | <4.9 | 16.9 | - | <5.5 | <5.5 | <5.1 | <5.2 | <5.2 |
| Copper | 7440-50-8 | mg/kg | 11000 | <3.0 | <2.5 | 5.2 | - | 4.1 | 7.5 | <2.6 | 4 | 4.9 |
| Iron | 7439-89-6 | mg/kg | - | 7420 | 252 | 9550 | - | 1100 | 3640 | 4570 | 8860 | 6840 |
| Lead | 7439-92-1 | mg/kg | 90 | <2.4 | <2.0 | 5.1 | - | <2.2 | 7.6 | <2.1 | 6 | 5.7 |
| Magnesium | 7439-95-4 | mg/kg | - | <600 | <490 | <620 | - | <550 | <550 | <510 | 696 | <520 |
| Manganese | 7439-96-5 | mg/kg | - | <1.8 | <1.5 | 2.8 | - | <1.6 | 9.7 | 2.4 | 23.1 | 16.5 |
| Mercury | 7439-97-6 | mg/kg | 0.13* | <0.034 | <0.031 | <0.035 | - | <0.036 | <0.033 | <0.035 | <0.035 | <0.032 |
| Nickel | 7440-02-0 | mg/kg | 48 | <4.8 | <3.9 | 11.4 | - | <4.4 | <4.4 | <4.1 | <4.2 | <4.2 |
| Potassium | 7440-09-7 | mg/kg | - | <1200 | <980 | <1200 | - | <1100 | <1100 | <1000 | <1000 | <1000 |
| Selenium | 7782-49-2 | mg/kg | 11 | <2.4 | <2.0 | <2.5 | - | <2.2 | <2.2 | <2.1 | <2.1 | <2.1 |
| Silver | 7440-22-4 | mg/kg | 1 | <0.60 | <0.49 | <0.62 | - | <0.55 | <0.55 | <0.51 | <0.52 | <0.52 |
| Sodium | 7440-23-5 | mg/kg | - | <1200 | <980 | <1200 | - | <1100 | <1100 | <1000 | <1000 | <1000 |
| Thallium | 7440-28-0 | mg/kg | 3 | <1.2 | <0.98 | <1.2 | - | <1.1 | <1.1 | <1.0 | <1.0 | <1.0 |
| Vanadium | 7440-62-2 | mg/kg | NA | 30.3 | <4.9 | 72.1 | - | <5.5 | 24.7 | 5.4 | 22.8 | 19.4 |
| Zinc | 7440-66-6 | mg/kg | 930 | <6.0 | <4.9 | <6.2 | - | <5.5 | 7.2 | <5.1 | 10.1 | 10.7 |
| | | | | | | | | | | | | |
| **General Chemistry** | | | | | | | | | | | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| pH, SPLP Leachate | | su | - | - | - | - | 8.87 | - | - | - | - | - |
| Volume, SPLP Leachate | | l | - | - | - | - | 2.002 | - | - | - | - | - |
| Weight, SPLP Leachate | | kg | - | - | - | - | 0.1001 | - | - | - | - | - |
| Dry Weight, SPLP Leachate | | kg | - | - | - | - | 0.0825 | - | - | - | - | - |
| Cyanide | 57-12-5 | mg/kg | 20 | <0.27 | <0.23 | <0.26 | - | <0.25 | <0.24 | <0.23 | <0.25 | <0.24 |
| Solids, Percent | | % | - | 85.5 | 98.9 | 82.4 | - | 87.7 | 90.8 | 94.4 | 93.4 | 96.3 |
| **Metals Analysis - SPLP Extract** | | | | | | | | | | | | |
| Beryllium | 7440-41-7 | ug/l | - | - | - | - | <5.0 | - | - | - | - | - |

| Client Sample ID: | | | NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 11/13) | ET-BS8 (10-10.5) | ET-BS8 (15-15.5) | ET-RB1(2.5-3) | ET-RB1(0.5-1) | ET-RB2(0.5-1) | ET-RB2(2.5-3) | ET-RB3(2-2.5) | ET-RB3(5.5-6) | ET-RB4(2-2.5) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab Sample ID: | | | | JB78959-38 | JB78959-39 | JB79128-1 | JB79128-2 | JB79128-3 | JB79128-4 | JB79128-5 | JB79128-6 | JB79128-7 |
| Date Sampled: | | | | 10/9/2014 | 10/9/2014 | 10/13/2014 | 10/13/2014 | 10/13/2014 | 10/13/2014 | 10/13/2014 | 10/13/2014 | 10/13/2014 |
| Matrix: | CAS# | | | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil | Soil |
| **GC/MS Volatiles (SW846 8260B)** | | | | | | | | | | | | |
| Acetone | 67-64-1 | ug/kg | 19000 | ND (12) | 27 | 69.8 | - | - | 34.1 | ND (12) | 13.2 | ND (14) |
| Benzene | 71-43-2 | ug/kg | 5 | ND (0.61) | ND (0.50) | ND (0.57) | - | - | ND (0.69) | ND (0.59) | ND (0.57) | ND (0.72) |
| Bromochloromethane | 74-97-5 | ug/kg | - | ND (6.1) | ND (5.0) | ND (5.7) | - | - | ND (6.9) | ND (5.9) | ND (5.7) | ND (7.2) |
| Bromodichloromethane | 75-27-4 | ug/kg | 5 | ND (2.5) | ND (2.0) | ND (2.3) | - | - | ND (2.8) | ND (2.4) | ND (2.3) | ND (2.9) |
| Bromoform | 75-25-2 | ug/kg | 30 | ND (6.1) | ND (5.0) | ND (5.7) | - | - | ND (6.9) | ND (5.9) | ND (5.7) | ND (7.2) |
| Bromomethane | 74-83-9 | ug/kg | 40 | ND (6.1) | ND (5.0) | ND (5.7) | - | - | ND (6.9) | ND (5.9) | ND (5.7) | ND (7.2) |
| 2-Butanone (MEK) | 78-93-3 | ug/kg | 900 | ND (12) | ND (10) | ND (11) | - | - | ND (14) | ND (12) | ND (11) | ND (14) |
| Carbon disulfide | 75-15-0 | ug/kg | 6000 | ND (2.5) | 0.41 J | ND (2.3) | - | - | ND (2.8) | ND (2.4) | 0.38 J | ND (2.9) |
| Carbon tetrachloride | 56-23-5 | ug/kg | 5 | ND (2.5) | ND (2.0) | ND (2.3) | - | - | ND (2.8) | ND (2.4) | ND (2.3) | ND (2.9) |
| Chlorobenzene | 108-90-7 | ug/kg | 600 | ND (2.5) | ND (2.0) | ND (2.3) | - | - | ND (2.8) | ND (2.4) | ND (2.3) | ND (2.9) |
| Chloroethane | 75-00-3 | ug/kg | NA | ND (6.1) | ND (5.0) | ND (5.7) | - | - | ND (6.9) | ND (5.9) | ND (5.7) | ND (7.2) |
| Chloroform | 67-66-3 | ug/kg | 400 | ND (2.5) | ND (2.0) | ND (2.3) | - | - | ND (2.8) | ND (2.4) | ND (2.3) | ND (2.9) |
| Chloromethane | 74-87-3 | ug/kg | NA | ND (6.1) | ND (5.0) | ND (5.7) | - | - | ND (6.9) | ND (5.9) | ND (5.7) | ND (7.2) |
| Cyclohexane | 110-82-7 | ug/kg | - | ND (2.5) | ND (2.0) | ND (2.3) | - | - | ND (2.8) | ND (2.4) | ND (2.3) | ND (2.9) |
| 1,2-Dibromo-3-chloropropane | 96-12-8 | ug/kg | 5 | ND (6.1) | ND (5.0) | ND (5.7) | - | - | ND (6.9) | ND (5.9) | ND (5.7) | ND (7.2) |
| Dibromochloromethane | 124-48-1 | ug/kg | 5 | ND (2.5) | ND (2.0) | ND (2.3) | - | - | ND (2.8) | ND (2.4) | ND (2.3) | ND (2.9) |
| 1,2-Dibromoethane | 106-93-4 | ug/kg | 5 | ND (1.2) | ND (1.0) | ND (1.1) | - | - | ND (1.4) | ND (1.2) | ND (1.1) | ND (1.4) |
| 1,2-Dichlorobenzene | 95-50-1 | ug/kg | 17000 | ND (1.2) | ND (1.0) | ND (1.1) | - | - | ND (1.4) | ND (1.2) | ND (1.1) | ND (1.4) |
| 1,3-Dichlorobenzene | 541-73-1 | ug/kg | 19000 | ND (1.2) | ND (1.0) | ND (1.1) | - | - | ND (1.4) | ND (1.2) | ND (1.1) | ND (1.4) |
| 1,4-Dichlorobenzene | 106-46-7 | ug/kg | 2000 | ND (1.2) | ND (1.0) | ND (1.1) | - | - | ND (1.4) | ND (1.2) | ND (1.1) | ND (1.4) |
| Dichlorodifluoromethane | 75-71-8 | ug/kg | 39000 | ND (6.1) | ND (5.0) | ND (5.7) | - | - | ND (6.9) | ND (5.9) | ND (5.7) | ND (7.2) |
| 1,1-Dichloroethane | 75-34-3 | ug/kg | 200 | ND (1.2) | ND (1.0) | ND (1.1) | - | - | ND (1.4) | ND (1.2) | ND (1.1) | ND (1.4) |
| 1,2-Dichloroethane | 107-06-2 | ug/kg | 5 | ND (1.2) | ND (1.0) | ND (1.1) | - | - | ND (1.4) | ND (1.2) | ND (1.1) | ND (1.4) |
| 1,1-Dichloroethene | 75-35-4 | ug/kg | 8 | ND (1.2) | ND (1.0) | ND (1.1) | - | - | ND (1.4) | ND (1.2) | ND (1.1) | ND (1.4) |
| cis-1,2-Dichloroethene | 156-59-2 | ug/kg | 300 | ND (1.2) | ND (1.0) | ND (1.1) | - | - | ND (1.4) | ND (1.2) | ND (1.1) | ND (1.4) |
| trans-1,2-Dichloroethene | 156-60-5 | ug/kg | 600 | ND (1.2) | ND (1.0) | ND (1.1) | - | - | ND (1.4) | ND (1.2) | ND (1.1) | ND (1.4) |
| 1,2-Dichloropropane | 78-87-5 | ug/kg | 5 | ND (2.5) | ND (2.0) | ND (2.3) | - | - | ND (2.8) | ND (2.4) | ND (2.3) | ND (2.9) |
| cis-1,3-Dichloropropene | 10061-01-5 | ug/kg | 5 | ND (2.5) | ND (2.0) | ND (2.3) | - | - | ND (2.8) | ND (2.4) | ND (2.3) | ND (2.9) |
| trans-1,3-Dichloropropene | 10061-02-6 | ug/kg | 5 | ND (2.5) | ND (2.0) | ND (2.3) | - | - | ND (2.8) | ND (2.4) | ND (2.3) | ND (2.9) |
| Ethylbenzene | 100-41-4 | ug/kg | 13000 | ND (1.2) | ND (1.0) | ND (1.1) | - | - | ND (1.4) | ND (1.2) | ND (1.1) | ND (1.4) |
| Freon 113 | 76-13-1 | ug/kg | - | ND (6.1) | ND (5.0) | ND (5.7) | - | - | ND (6.9) | ND (5.9) | ND (5.7) | ND (7.2) |
| 2-Hexanone | 591-78-6 | ug/kg | - | ND (6.1) | ND (5.0) | ND (5.7) | - | - | ND (6.9) | ND (5.9) | ND (5.7) | ND (7.2) |
| Isopropylbenzene | 98-82-8 | ug/kg | - | ND (6.1) | ND (5.0) | ND (5.7) | - | - | ND (6.9) | ND (5.9) | ND (5.7) | ND (7.2) |
| Methyl Acetate | 79-20-9 | ug/kg | 22000 | ND (6.1) | ND (5.0) | ND (5.7) | - | - | ND (6.9) | ND (5.9) | ND (5.7) | ND (7.2) |
| Methylcyclohexane | 108-87-2 | ug/kg | - | ND (2.5) | ND (2.0) | ND (2.3) | - | - | ND (2.8) | ND (2.4) | ND (2.3) | ND (2.9) |
| Methyl Tert Butyl Ether | 1634-04-4 | ug/kg | 200 | ND (1.2) | ND (1.0) | ND (1.1) | - | - | ND (1.4) | ND (1.2) | ND (1.1) | ND (1.4) |
| 4-Methyl-2-pentanone(MIBK) | 108-10-1 | ug/kg | - | ND (6.1) | ND (5.0) | ND (5.7) | - | - | ND (6.9) | ND (5.9) | ND (5.7) | ND (7.2) |
| Methylene chloride | 75-09-2 | ug/kg | 10 | ND (6.1) | ND (5.0) | ND (5.7) | - | - | ND (6.9) | ND (5.9) | ND (5.7) | ND (7.2) |
| Styrene | 100-42-5 | ug/kg | 3000 | ND (2.5) | ND (2.0) | ND (2.3) | - | - | ND (2.8) | ND (2.4) | ND (2.3) | ND (2.9) |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | ug/kg | 7 | ND (2.5) | ND (2.0) | ND (2.3) | - | - | ND (2.8) | ND (2.4) | ND (2.3) | ND (2.9) |
| Tetrachloroethene | 127-18-4 | ug/kg | 5 | ND (1.2) | ND (1.0) | ND (1.1) | - | - | ND (1.4) | ND (1.2) | ND (1.1) | ND (1.4) |
| Toluene | 108-88-3 | ug/kg | 7000 | ND (1.2) | ND (1.0) | ND (1.1) | - | - | ND (1.4) | ND (1.2) | ND (1.1) | ND (1.4) |
| 1,2,3-Trichlorobenzene | 87-61-6 | ug/kg | - | ND (6.1) | ND (5.0) | ND (5.7) | - | - | ND (6.9) | ND (5.9) | ND (5.7) | ND (7.2) |
| 1,2,4-Trichlorobenzene | 120-82-1 | ug/kg | 700 | ND (6.1) | ND (5.0) | ND (5.7) | - | - | ND (6.9) | ND (5.9) | ND (5.7) | ND (7.2) |
| 1,1,1-Trichloroethane | 71-55-6 | ug/kg | 300 | ND (2.5) | ND (2.0) | ND (2.3) | - | - | ND (2.8) | ND (2.4) | ND (2.3) | ND (2.9) |
| 1,1,2-Trichloroethane | 79-00-5 | ug/kg | 20 | ND (2.5) | ND (2.0) | ND (2.3) | - | - | ND (2.8) | ND (2.4) | ND (2.3) | ND (2.9) |
| Trichloroethene | 79-01-6 | ug/kg | 10 | ND (1.2) | ND (1.0) | ND (1.1) | - | - | ND (1.4) | ND (1.2) | ND (1.1) | ND (1.4) |
| Trichlorofluoromethane | 75-69-4 | ug/kg | 34000 | ND (6.1) | ND (5.0) | ND (5.7) | - | - | ND (6.9) | ND (5.9) | ND (5.7) | ND (7.2) |
| Vinyl chloride | 75-01-4 | ug/kg | 5 | ND (2.5) | ND (2.0) | ND (2.3) | - | - | ND (2.8) | ND (2.4) | ND (2.3) | ND (2.9) |
| m,p-Xylene | | ug/kg | 19000 | ND (1.2) | ND (1.0) | 0.88 J | - | - | ND (1.4) | ND (1.2) | ND (1.1) | ND (1.4) |
| o-Xylene | 95-47-6 | ug/kg | 19000 | ND (1.2) | ND (1.0) | 0.31 J | - | - | ND (1.4) | ND (1.2) | ND (1.1) | ND (1.4) |
| Xylene (total) | 1330-20-7 | ug/kg | 19000 | ND (1.2) | ND (1.0) | 1.2 | - | - | ND (1.4) | ND (1.2) | ND (1.1) | ND (1.4) |
| **GC/MS Volatile TIC** | | | | | | | | | | | | |
| Total TIC, Volatile | | ug/kg | - | 0 | 0 | 0 | - | - | 0 | 0 | 0 | 0 |
| Total Alkanes | | ug/kg | - | 0 | 0 | 0 | - | - | 0 | 0 | 0 | 0 |
| **GC/MS Semi-volatiles (SW846 8270D)** | | | | | | | | | | | | |
| 2-Chlorophenol | 95-57-8 | ug/kg | 800 | ND (62) | ND (70) | ND (140) | - | - | ND (66) | ND (130) | ND (160) | ND (140) |
| 4-Chloro-3-methyl phenol | 59-50-7 | ug/kg | - | ND (150) | ND (170) | ND (360) | - | - | ND (170) | ND (330) | ND (400) | ND (350) |
| 2,4-Dichlorophenol | 120-83-2 | ug/kg | 200 | ND (150) | ND (170) | ND (360) | - | - | ND (170) | ND (330) | ND (400) | ND (350) |
| 2,4-Dimethylphenol | 105-67-9 | ug/kg | 1000 | ND (150) | ND (170) | ND (360) | - | - | ND (170) | ND (330) | ND (400) | ND (350) |
| 2,4-Dinitrophenol | 51-28-5 | ug/kg | 300 | ND (620) | ND (700) | ND (1400) | - | - | ND (660) | ND (1300) | ND (1600) | ND (1400) |
| 4,6-Dinitro-o-cresol | 534-52-1 | ug/kg | 300 | ND (620) | ND (700) | ND (1400) | - | - | ND (660) | ND (1300) | ND (1600) | ND (1400) |
| 2-Methylphenol | 95-48-7 | ug/kg | NA | ND (62) | ND (70) | ND (140) | - | - | ND (66) | ND (130) | ND (160) | ND (140) |
| 3&4-Methylphenol | | ug/kg | - | ND (62) | ND (70) | ND (140) | - | - | ND (66) | ND (130) | ND (160) | ND (140) |
| 2-Nitrophenol | 88-75-5 | ug/kg | - | ND (150) | ND (170) | ND (360) | - | - | ND (170) | ND (330) | ND (400) | ND (350) |
| 4-Nitrophenol | 100-02-7 | ug/kg | - | ND (310) | ND (350) | ND (710) | - | - | ND (330) | ND (650) | ND (800) | ND (690) |
| Pentachlorophenol | 87-86-5 | ug/kg | 300 | ND (310) | ND (350) | ND (710) | - | - | ND (330) | ND (650) | ND (800) | ND (690) |
| Phenol | 108-95-2 | ug/kg | 8000 | ND (62) | ND (70) | ND (140) | - | - | ND (66) | ND (130) | ND (160) | ND (140) |
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | ug/kg | - | ND (150) | ND (170) | ND (360) | - | - | ND (170) | ND (330) | ND (400) | ND (350) |
| 2,4,5-Trichlorophenol | 95-95-4 | ug/kg | 68000 | ND (150) | ND (170) | ND (360) | - | - | ND (170) | ND (330) | ND (400) | ND (350) |
| 2,4,6-Trichlorophenol | 88-06-2 | ug/kg | 200 | ND (150) | ND (170) | ND (360) | - | - | ND (170) | ND (330) | ND (400) | ND (350) |
| Acenaphthene | 83-32-9 | ug/kg | 110000 | ND (31) | ND (35) | ND (71) | ND (68) | ND (35) | ND (33) | ND (65) | ND (80) | ND (69) |
| Acenaphthylene | 208-96-8 | ug/kg | NA | ND (31) | ND (35) | ND (71) | ND (68) | ND (35) | ND (33) | ND (65) | ND (80) | ND (69) |
| Acetophenone | 98-86-2 | ug/kg | 3000 | ND (150) | ND (170) | ND (360) | - | - | ND (170) | ND (330) | ND (400) | ND (350) |
| Anthracene | 120-12-7 | ug/kg | 2400000 | ND (31) | ND (35) | ND (71) | ND (68) | 22.3 J | ND (33) | ND (65) | ND (80) | ND (69) |
| Atrazine | 1912-24-9 | ug/kg | 200 | ND (62) | ND (70) | ND (140) | - | - | ND (66) | ND (130) | ND (160) | ND (140) |
| Benzo(a)anthracene | 56-55-3 | ug/kg | 800 | ND (31) | 18.6 J | ND (71) | 35.3 J | 94.3 | ND (33) | ND (65) | ND (80) | ND (69) |
| Benzo(a)pyrene | 50-32-8 | ug/kg | 200 | ND (31) | ND (35) | ND (71) | ND (68) | 97.9 | ND (33) | ND (65) | ND (80) | ND (69) |
| Benzo(b)fluoranthene | 205-99-2 | ug/kg | 2000 | ND (31) | ND (35) | ND (71) | 38.3 J | 115 | ND (33) | ND (65) | ND (80) | ND (69) |
| Benzo(g,h,i)perylene | 191-24-2 | ug/kg | NA | ND (31) | ND (35) | ND (71) | ND (68) | 66.3 | ND (33) | ND (65) | ND (80) | ND (69) |

**NJDEP SPLP Spreadsheet, V3.1, November 2013**

| | |
|---|---|
| Case name/area of concern: | Macy's Edison |
| Case number: | |
| Sampling date: | 10/6/2014-10/13/2014 |

CALCULATE SITE SPECIFIC IGW STANDARD | Reset Spreadsheet | Print Results | Instructions

CLICK HERE if chemical is not on drop-down list, or to enter alternate GWQC | Print to file | Exit

| | | |
|---|---|---|
| Contaminant: | Beryllium | |
| CAS No: | 7440-41-7 | |
| Water solubility (mg/L) | NA | |
| Aqueous reporting limit (µg/L): | 1.00E+00 | |
| Soil reporting limit (mg/kg): | 5.00E-01 | |
| Health-based GWQC (µg/L) | 1.00E+00 | |
| DAF (20, or site-specific if approved): | **20** | |
| Leachate Criterion (µg/L): | #NAME? | #NAME? |
| Henry's law constant (dimensionless): | 0.00E+00 | |

**NOTE:**
**USE ONE PAGE PER CONTAMINANT, do not leave empty rows between samples**
**Do not enter samples with soil concentrations at or below the reporting limit**
**When leachate concentration is non-detect, enter the aqueous reporting limit**
**Enter site-specific dilution-attenuation factor (DAF) if desired**

| | |
|---|---|
| | Data entry cells (do not skip rows) |
| | Optional data entry |
| | Calculated or locked cells |
| | **Indicates that Alternative Remediation Standard needs to be recalculated** |

| Sample ID | Soil sample weight (kg) | Leachate Volume (L) | Total Soil Concentration (mg/kg) | SPLP Leachate Concentration (µg/L) | Final pH of Leachate (except VOCs) | Optional data | | | | Kd (L/kg) | % Contaminant in Leachate | Field leachate concentration (µg/L) | Pass or fail? |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Sampling Depth (ft) | Soil Type | Organic Carbon (mg/kg) | Organic Carbon (%) | | | | |
| JB78845-5R | 0.1 | 2 | 1.9 | 5 | 10.07 | | | | | 360.0 | 5.26 | 5.28 | PASS |
| JB78845-5T | 0.1001 | 2.002 | 1.9 | 5 | 9.68 | | | | | 360.0 | 5.26 | 5.28 | PASS |
| JB78603-16T | 0.1 | 2 | 0.97 | 5 | 10.01 | | | | | 174.0 | 10.31 | 5.57 | PASS |
| JB78603-16R | 0.1001 | 2.002 | 0.97 | 5 | 5.85 | | | | | 174.0 | 10.31 | 5.57 | PASS |
| JB78959-39R | 0.1001 | 2.002 | 0.9 | 5 | 8.87 | | | | | 160.0 | 11.11 | 5.62 | PASS |

**SPLP RESULTS for**

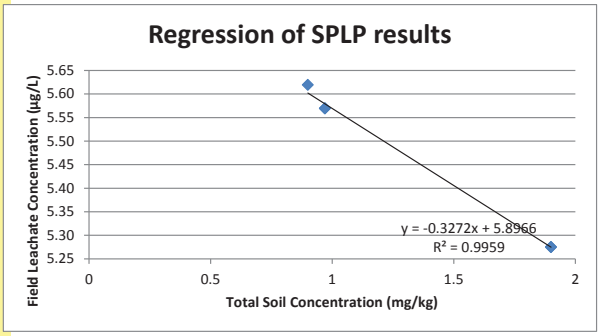
**OPTION 1a: All adjusted leachate concentrations are below the leachate criterion**

**REMEDIATION STANDARD = 1.9 mg/kg**

**OPTION 1b: Simple inspection of tabulated results to find highest acceptable standard**
EVERYTHING PASSED, OPTION 1b NOT VALID

**OPTION 2: Remediation standard using site-specific Kd value**
Kd ratio = 2.25, AVERAGING Kds OK
Kd USED FOR CALCULATING STANDARD = 245.6 L/kg
result before rounding = 4.9151 mg/kg
**REMEDIATION STANDARD = 2 mg/kg (controlled by maximum soil concentration)**

**OPTION 3: Remediation standard using linear regression**
Number of points = 5
Soil concentration midrange = 1.4
Number of points above midrange = 2
Enough points above midrange? NO
R-Square high enough? YES
Leachate criterion within range of leachate concentrations? NO
OPTION 3 NOT VALID



Accutest LabLink@822422 12:04 30-Oct-2014

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-TP7 (4.5-5) | | |
| **Lab Sample ID:** | JB78845-16 | **Date Sampled:** | 10/08/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/09/14 |
| **Method:** | SW846 8260B SW846 5035 | **Percent Solids:** | 89.0 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | I198519.D | 1 | 10/13/14 | SJM | 10/10/14 08:00 | n/a | VI7990 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.7 g |
| Run #2 | |

**VOA TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 23.4 | 9.9 | 2.5 | ug/kg | |
| 71-43-2 | Benzene | ND | 0.49 | 0.17 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.9 | 0.27 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 2.0 | 0.20 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.9 | 0.18 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 4.9 | 0.29 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 9.9 | 1.8 | ug/kg | |
| 75-15-0 | Carbon disulfide | 1.3 | 2.0 | 0.29 | ug/kg | J |
| 56-23-5 | Carbon tetrachloride | ND | 2.0 | 0.14 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 2.0 | 0.14 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.9 | 0.28 | ug/kg | |
| 67-66-3 | Chloroform | ND | 2.0 | 0.13 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 4.9 | 0.30 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 2.0 | 0.35 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.9 | 0.38 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 2.0 | 0.17 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.99 | 0.18 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 0.99 | 0.19 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 0.99 | 0.19 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 0.99 | 0.16 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 4.9 | 0.51 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 0.99 | 0.18 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.99 | 0.25 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.99 | 0.27 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 0.99 | 0.26 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 0.99 | 0.19 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 2.0 | 0.17 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 2.0 | 0.13 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 2.0 | 0.17 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 0.99 | 0.19 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 4.9 | 0.53 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 4.9 | 1.6 | ug/kg | |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-TP7 (4.5-5) | | |
| **Lab Sample ID:** | JB78845-16 | **Date Sampled:** | 10/08/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/09/14 |
| **Method:** | SW846 8260B SW846 5035 | **Percent Solids:** | 89.0 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**VOA TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 98-82-8 | Isopropylbenzene | ND | 4.9 | 0.18 | ug/kg | |
| 79-20-9 | Methyl Acetate | ND | 4.9 | 1.1 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 2.0 | 0.21 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 0.99 | 0.16 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 4.9 | 0.53 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 4.9 | 1.5 | ug/kg | |
| 100-42-5 | Styrene | ND | 2.0 | 0.18 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 2.0 | 0.21 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 0.99 | 0.17 | ug/kg | |
| 108-88-3 | Toluene | ND | 0.99 | 0.23 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.9 | 0.20 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.9 | 0.18 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 2.0 | 0.14 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 2.0 | 0.22 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 0.99 | 0.20 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.9 | 0.17 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 2.0 | 0.37 | ug/kg | |
| | m,p-Xylene | ND | 0.99 | 0.40 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 0.99 | 0.21 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 0.99 | 0.21 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 95% | | 59-130% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 104% | | 65-123% |
| 2037-26-5 | Toluene-D8 | 97% | | 77-125% |
| 460-00-4 | 4-Bromofluorobenzene | 92% | | 71-132% |

| CAS No. | Tentatively Identified Compounds | R.T. | Est. Conc. | Units | Q |
|---|---|---|---|---|---|
| | Total TIC, Volatile | | 0 | ug/kg | |
| | Total Alkanes | | 0 | ug/kg | |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-TP7 (4.5-5) | | |
| **Lab Sample ID:** | JB78845-16 | **Date Sampled:** | 10/08/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/09/14 |
| **Method:** | SW846 8270D SW846 3550C | **Percent Solids:** | 89.0 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3E65739.D | 1 | 10/15/14 | AD | 10/10/14 | OP78718 | E3E2826 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 31.7 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (SOM0 2.0)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 71 | 35 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 180 | 35 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 180 | 57 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 180 | 60 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 710 | 43 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 710 | 43 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 71 | 40 | ug/kg | |
| | 3&4-Methylphenol | ND | 71 | 45 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 180 | 38 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 350 | 60 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 350 | 61 | ug/kg | |
| 108-95-2 | Phenol | ND | 71 | 37 | ug/kg | |
| 58-90-2 | 2,3,4,6-Tetrachlorophenol | ND | 180 | 37 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 180 | 41 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 180 | 33 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 35 | 10 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 35 | 11 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 180 | 6.2 | ug/kg | |
| 120-12-7 | Anthracene | ND | 35 | 12 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 71 | 7.0 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 35 | 12 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 35 | 11 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 35 | 12 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 35 | 13 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 35 | 13 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 71 | 13 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 71 | 21 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 71 | 4.1 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 180 | 8.2 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 71 | 11 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 180 | 11 | ug/kg | |
| 86-74-8 | Carbazole | ND | 71 | 16 | ug/kg | |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-TP7 (4.5-5) | | |
| **Lab Sample ID:** | JB78845-16 | **Date Sampled:** | 10/08/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/09/14 |
| **Method:** | SW846 8270D SW846 3550C | **Percent Solids:** | 89.0 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**ABN TCL List (SOM0 2.0)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 105-60-2 | Caprolactam | ND | 71 | 11 | ug/kg | |
| 218-01-9 | Chrysene | ND | 35 | 12 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 71 | 14 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 71 | 11 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 71 | 11 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 71 | 11 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 35 | 15 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 35 | 14 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 71 | 9.0 | ug/kg | |
| 123-91-1 | 1,4-Dioxane | ND | 35 | 23 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 35 | 12 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 71 | 11 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 71 | 7.9 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 71 | 17 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 71 | 12 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 71 | 12 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 71 | 31 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 35 | 16 | ug/kg | |
| 86-73-7 | Fluorene | ND | 35 | 12 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 71 | 12 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 35 | 9.9 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 350 | 36 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 180 | 9.9 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 35 | 12 | ug/kg | |
| 78-59-1 | Isophorone | ND | 71 | 9.5 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 71 | 20 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 180 | 16 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 180 | 14 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 180 | 14 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 35 | 9.7 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 71 | 10 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 71 | 8.6 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 180 | 21 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 35 | 16 | ug/kg | |
| 129-00-0 | Pyrene | ND | 35 | 14 | ug/kg | |
| 95-94-3 | 1,2,4,5-Tetrachlorobenzene | ND | 180 | 11 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 70% | | 13-110% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-TP7 (4.5-5) | | |
| **Lab Sample ID:** | JB78845-16 | **Date Sampled:** | 10/08/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/09/14 |
| **Method:** | SW846 8270D SW846 3550C | **Percent Solids:** | 89.0 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**ABN TCL List (SOM0 2.0)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 4165-62-2 | Phenol-d5 | 72% | | 15-110% |
| 118-79-6 | 2,4,6-Tribromophenol | 105% | | 20-123% |
| 4165-60-0 | Nitrobenzene-d5 | 76% | | 10-110% |
| 321-60-8 | 2-Fluorobiphenyl | 71% | | 17-110% |
| 1718-51-0 | Terphenyl-d14 | 93% | | 30-124% |

| CAS No. | Tentatively Identified Compounds | R.T. | Est. Conc. | Units | Q |
|---|---|---|---|---|---|
| | system artifact | 2.03 | 830 | ug/kg | J |
| | system artifact | 3.07 | 870 | ug/kg | J |
| | system artifact/aldol-condensation | 3.30 | 18000 | ug/kg | J |
| 57-10-3 | n-Hexadecanoic acid | 10.73 | 220 | ug/kg | JN |
| | Total TIC, Semi-Volatile | | 220 | ug/kg | J |
| | Total Alkanes | | 0 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-TP7 (4.5-5) | | |
| **Lab Sample ID:** | JB78845-16 | **Date Sampled:** | 10/08/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/09/14 |
| **Method:** | SW846 8081B SW846 3546 | **Percent Solids:** | 89.0 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 4G49724.D | 1 | 10/13/14 | YD | 10/10/14 | OP78724 | G4G1264 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 16.2 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 0.69 | 0.32 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 0.69 | 0.21 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 0.69 | 0.43 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 0.69 | 0.34 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 0.69 | 0.34 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 0.69 | 0.26 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 0.69 | 0.48 | ug/kg | |
| 57-74-9 | Chlordane (alpha and gamma) | ND | 0.69 | 0.26 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 0.69 | 0.27 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 0.69 | 0.38 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 0.69 | 0.28 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 0.69 | 0.34 | ug/kg | |
| 72-20-8 | Endrin | ND | 0.69 | 0.22 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 0.69 | 0.30 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 0.69 | 0.36 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 0.69 | 0.26 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 0.69 | 0.42 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 0.69 | 0.34 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 0.69 | 0.26 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.4 | 0.68 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 0.69 | 0.28 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 17 | 8.7 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 77% | | 10-129% |
| 877-09-8 | Tetrachloro-m-xylene | 75% | | 10-129% |
| 2051-24-3 | Decachlorobiphenyl | 79% | | 10-144% |
| 2051-24-3 | Decachlorobiphenyl | 81% | | 10-144% |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-TP7 (4.5-5) | | |
| **Lab Sample ID:** | JB78845-16 | **Date Sampled:** | 10/08/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/09/14 |
| **Method:** | SW846 8082A SW846 3546 | **Percent Solids:** | 89.0 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | XX158815.D | 1 | 10/12/14 | JN | 10/10/14 | OP78722 | GXX5136 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 16.2 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 35 | 9.0 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 35 | 21 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 35 | 18 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 35 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 35 | 11 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 35 | 16 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 35 | 11 | ug/kg | |
| 11100-14-4 | Aroclor 1268 | ND | 35 | 10 | ug/kg | |
| 37324-23-5 | Aroclor 1262 | ND | 35 | 11 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 74% | | 14-139% |
| 877-09-8 | Tetrachloro-m-xylene | 87% | | 14-139% |
| 2051-24-3 | Decachlorobiphenyl | 82% | | 10-155% |
| 2051-24-3 | Decachlorobiphenyl | 86% | | 10-155% |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-TP7 (4.5-5) | | |
| **Lab Sample ID:** | JB78845-16 | **Date Sampled:** | 10/08/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/09/14 |
| **Method:** | NJDEP EPH SW846 3546 | **Percent Solids:** | 89.0 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 4Y33403.D | 1 | 10/15/14 | JM | 10/11/14 | OP78721 | G4Y1056 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 15.8 g | 2.0 ml |
| Run #2 | | |

**NJDEP EPH List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| | EPH (C9-C28) | ND | 7.1 | 2.6 | mg/kg | |
| | EPH ( > C28-C40) | ND | 7.1 | 3.1 | mg/kg | |
| | Total EPH (C9-C40) | ND | 7.1 | 2.6 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 75% | | 40-140% |
| 3386-33-2 | 1-Chlorooctadecane | 79% | | 40-140% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-TP7 (4.5-5) | | |
| **Lab Sample ID:** | JB78845-16 | **Date Sampled:** | 10/08/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/09/14 |
| | | **Percent Solids:** | 89.0 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | 1990 | 57 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [4] |
| Antimony | < 2.3 | 2.3 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [4] |
| Arsenic | 3.7 | 2.3 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [4] |
| Barium | < 23 | 23 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [4] |
| Beryllium | < 0.23 | 0.23 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [4] |
| Cadmium | < 0.57 | 0.57 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [4] |
| Calcium | < 570 | 570 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [4] |
| Chromium | 21.9 | 1.1 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [4] |
| Cobalt | < 5.7 | 5.7 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [4] |
| Copper | 46.7 | 2.9 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [4] |
| Iron | 18000 | 57 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [4] |
| Lead | 10.2 | 2.3 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [4] |
| Magnesium | < 570 | 570 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [4] |
| Manganese | 5.4 | 1.7 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [4] |
| Mercury | < 0.037 | 0.037 | mg/kg | 1 | 10/10/14 | 10/10/14 | SB | SW846 7471B [1] | SW846 7471B [3] |
| Nickel | < 4.6 | 4.6 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [4] |
| Potassium | < 1100 | 1100 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [4] |
| Selenium | < 2.3 | 2.3 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [4] |
| Silver | < 0.57 | 0.57 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [4] |
| Sodium | < 1100 | 1100 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [4] |
| Thallium | < 1.1 | 1.1 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [4] |
| Vanadium | 56.5 | 5.7 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [4] |
| Zinc | < 5.7 | 5.7 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [4] |

(1) Instrument QC Batch: MA35140
(2) Instrument QC Batch: MA35158
(3) Prep QC Batch: MP82489
(4) Prep QC Batch: MP82519

RL = Reporting Limit

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-TP7 (4.5-5) | | |
| **Lab Sample ID:** | JB78845-16 | **Date Sampled:** | 10/08/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/09/14 |
| | | **Percent Solids:** | 89.0 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**General Chemistry**

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|
| Cyanide | < 0.26 | 0.26 | mg/kg | 1 | 10/13/14 12:31 | HC | SW846 9012 M/LACHAT |
| Solids, Percent | 89 | | % | 1 | 10/13/14 15:00 | NR | SM2540 G-97 |

RL = Reporting Limit

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# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-TP7 (11-11.5) | | |
| **Lab Sample ID:** | JB78845-17 | **Date Sampled:** | 10/08/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/09/14 |
| **Method:** | SW846 8260B SW846 5035 | **Percent Solids:** | 86.6 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | I198525.D | 1 | 10/13/14 | SJM | 10/10/14 08:00 | n/a | VI7990 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.4 g |
| Run #2 | |

**VOA TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 11 | 2.7 | ug/kg | |
| 71-43-2 | Benzene | ND | 0.53 | 0.19 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 5.3 | 0.30 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 2.1 | 0.22 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.3 | 0.19 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 5.3 | 0.31 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 11 | 2.0 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 2.1 | 0.31 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 2.1 | 0.15 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 2.1 | 0.15 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.3 | 0.30 | ug/kg | |
| 67-66-3 | Chloroform | ND | 2.1 | 0.14 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 5.3 | 0.32 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 2.1 | 0.38 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 5.3 | 0.42 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 2.1 | 0.19 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.1 | 0.19 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.1 | 0.20 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 1.1 | 0.21 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.1 | 0.18 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.3 | 0.56 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.1 | 0.20 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.1 | 0.27 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 1.1 | 0.29 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 1.1 | 0.28 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.1 | 0.20 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 2.1 | 0.18 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 2.1 | 0.14 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 2.1 | 0.18 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.1 | 0.21 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 5.3 | 0.58 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 5.3 | 1.7 | ug/kg | |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-TP7 (11-11.5) | | |
| **Lab Sample ID:** | JB78845-17 | **Date Sampled:** | 10/08/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/09/14 |
| **Method:** | SW846 8260B SW846 5035 | **Percent Solids:** | 86.6 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**VOA TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 98-82-8 | Isopropylbenzene | ND | 5.3 | 0.19 | ug/kg | |
| 79-20-9 | Methyl Acetate | ND | 5.3 | 1.2 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 2.1 | 0.23 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.1 | 0.18 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.3 | 0.57 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 5.3 | 1.6 | ug/kg | |
| 100-42-5 | Styrene | ND | 2.1 | 0.19 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 2.1 | 0.23 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 1.1 | 0.19 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.1 | 0.25 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 5.3 | 0.22 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.3 | 0.19 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 2.1 | 0.15 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 2.1 | 0.24 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 1.1 | 0.21 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.3 | 0.18 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 2.1 | 0.40 | ug/kg | |
| | m,p-Xylene | ND | 1.1 | 0.44 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.1 | 0.23 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 1.1 | 0.23 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 97% | | 59-130% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 103% | | 65-123% |
| 2037-26-5 | Toluene-D8 | 90% | | 77-125% |
| 460-00-4 | 4-Bromofluorobenzene | 94% | | 71-132% |

| CAS No. | Tentatively Identified Compounds | R.T. | Est. Conc. | Units | Q |
|---|---|---|---|---|---|
| | Total TIC, Volatile | | 0 | ug/kg | |
| | Total Alkanes | | 0 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-TP7 (11-11.5) | | |
| **Lab Sample ID:** | JB78845-17 | **Date Sampled:** | 10/08/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/09/14 |
| **Method:** | SW846 8270D SW846 3550C | **Percent Solids:** | 86.6 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3E65740.D | 1 | 10/15/14 | AD | 10/10/14 | OP78718 | E3E2826 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 33.1 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (SOM0 2.0)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 70 | 35 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 170 | 35 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 170 | 56 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 170 | 59 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 700 | 43 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 700 | 43 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 70 | 40 | ug/kg | |
| | 3&4-Methylphenol | ND | 70 | 44 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 170 | 37 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 350 | 59 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 350 | 60 | ug/kg | |
| 108-95-2 | Phenol | ND | 70 | 37 | ug/kg | |
| 58-90-2 | 2,3,4,6-Tetrachlorophenol | ND | 170 | 36 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 170 | 40 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 170 | 33 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 35 | 10 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 35 | 11 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 170 | 6.1 | ug/kg | |
| 120-12-7 | Anthracene | ND | 35 | 12 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 70 | 6.9 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 35 | 11 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 35 | 11 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 35 | 12 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 35 | 13 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 35 | 13 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 70 | 13 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 70 | 20 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 70 | 4.0 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 170 | 8.0 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 70 | 11 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 170 | 11 | ug/kg | |
| 86-74-8 | Carbazole | ND | 70 | 16 | ug/kg | |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-TP7 (11-11.5) | | |
| **Lab Sample ID:** | JB78845-17 | **Date Sampled:** | 10/08/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/09/14 |
| **Method:** | SW846 8270D SW846 3550C | **Percent Solids:** | 86.6 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**ABN TCL List (SOM0 2.0)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 105-60-2 | Caprolactam | ND | 70 | 11 | ug/kg | |
| 218-01-9 | Chrysene | ND | 35 | 12 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 70 | 14 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 70 | 11 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 70 | 10 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 70 | 11 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 35 | 15 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 35 | 13 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 70 | 8.9 | ug/kg | |
| 123-91-1 | 1,4-Dioxane | ND | 35 | 23 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 35 | 12 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 70 | 10 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 70 | 7.7 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 70 | 17 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 70 | 12 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 70 | 12 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 70 | 31 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 35 | 15 | ug/kg | |
| 86-73-7 | Fluorene | ND | 35 | 11 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 70 | 11 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 35 | 9.7 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 350 | 36 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 170 | 9.7 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 35 | 12 | ug/kg | |
| 78-59-1 | Isophorone | ND | 70 | 9.4 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 70 | 19 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 170 | 15 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 170 | 14 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 170 | 14 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 35 | 9.5 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 70 | 10 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 70 | 8.5 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 170 | 21 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 35 | 16 | ug/kg | |
| 129-00-0 | Pyrene | ND | 35 | 13 | ug/kg | |
| 95-94-3 | 1,2,4,5-Tetrachlorobenzene | ND | 170 | 11 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 69% | | 13-110% |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-TP7 (11-11.5) | | |
| **Lab Sample ID:** | JB78845-17 | **Date Sampled:** | 10/08/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/09/14 |
| **Method:** | SW846 8270D SW846 3550C | **Percent Solids:** | 86.6 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**ABN TCL List (SOM0 2.0)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 4165-62-2 | Phenol-d5 | 72% | | 15-110% |
| 118-79-6 | 2,4,6-Tribromophenol | 102% | | 20-123% |
| 4165-60-0 | Nitrobenzene-d5 | 78% | | 10-110% |
| 321-60-8 | 2-Fluorobiphenyl | 72% | | 17-110% |
| 1718-51-0 | Terphenyl-d14 | 97% | | 30-124% |

| CAS No. | Tentatively Identified Compounds | R.T. | Est. Conc. | Units | Q |
|---|---|---|---|---|---|
| | system artifact | 2.03 | 870 | ug/kg | J |
| | system artifact | 3.07 | 900 | ug/kg | J |
| | system artifact/aldol-condensation | 3.29 | 18000 | ug/kg | J |
| 57-10-3 | n-Hexadecanoic acid | 10.73 | 170 | ug/kg | JN |
| | Total TIC, Semi-Volatile | | 170 | ug/kg | J |
| | Total Alkanes | | 0 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-TP7 (11-11.5) | | |
| **Lab Sample ID:** | JB78845-17 | **Date Sampled:** | 10/08/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/09/14 |
| **Method:** | SW846 8081B SW846 3546 | **Percent Solids:** | 86.6 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 4G49725.D | 1 | 10/13/14 | YD | 10/10/14 | OP78724 | G4G1264 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 15.7 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 0.74 | 0.34 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 0.74 | 0.22 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 0.74 | 0.46 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 0.74 | 0.36 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 0.74 | 0.36 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 0.74 | 0.27 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 0.74 | 0.51 | ug/kg | |
| 57-74-9 | Chlordane (alpha and gamma) | ND | 0.74 | 0.27 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 0.74 | 0.29 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 0.74 | 0.40 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 0.74 | 0.30 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 0.74 | 0.36 | ug/kg | |
| 72-20-8 | Endrin | ND | 0.74 | 0.24 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 0.74 | 0.32 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 0.74 | 0.38 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 0.74 | 0.28 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 0.74 | 0.44 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 0.74 | 0.36 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 0.74 | 0.28 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.5 | 0.72 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 0.74 | 0.30 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 18 | 9.3 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 69% | | 10-129% |
| 877-09-8 | Tetrachloro-m-xylene | 70% | | 10-129% |
| 2051-24-3 | Decachlorobiphenyl | 75% | | 10-144% |
| 2051-24-3 | Decachlorobiphenyl | 75% | | 10-144% |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-TP7 (11-11.5) | | |
| **Lab Sample ID:** | JB78845-17 | **Date Sampled:** | 10/08/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/09/14 |
| **Method:** | SW846 8082A SW846 3546 | **Percent Solids:** | 86.6 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF135412.D | 1 | 10/11/14 | JN | 10/10/14 | OP78723 | GEF5163 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 15.7 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 37 | 9.6 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 37 | 22 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 37 | 19 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 37 | 12 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 37 | 11 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 37 | 17 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 37 | 12 | ug/kg | |
| 11100-14-4 | Aroclor 1268 | ND | 37 | 11 | ug/kg | |
| 37324-23-5 | Aroclor 1262 | ND | 37 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 73% | | 14-139% |
| 877-09-8 | Tetrachloro-m-xylene | 83% | | 14-139% |
| 2051-24-3 | Decachlorobiphenyl | 72% | | 10-155% |
| 2051-24-3 | Decachlorobiphenyl | 72% | | 10-155% |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest LabLink@822422 12:04 30-Oct-2014

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-TP7 (11-11.5) | | |
| **Lab Sample ID:** | JB78845-17 | **Date Sampled:** | 10/08/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/09/14 |
| **Method:** | NJDEP EPH SW846 3546 | **Percent Solids:** | 86.6 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 4Y33404.D | 1 | 10/15/14 | JM | 10/11/14 | OP78721 | G4Y1056 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 15.0 g | 2.0 ml |
| Run #2 | | |

**NJDEP EPH List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| | EPH (C9-C28) | ND | 7.7 | 2.8 | mg/kg | |
| | EPH ( > C28-C40) | ND | 7.7 | 3.4 | mg/kg | |
| | Total EPH (C9-C40) | ND | 7.7 | 2.8 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 62% | | 40-140% |
| 3386-33-2 | 1-Chlorooctadecane | 66% | | 40-140% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-TP7 (11-11.5) | | |
| **Lab Sample ID:** | JB78845-17 | **Date Sampled:** | 10/08/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/09/14 |
| | | **Percent Solids:** | 86.6 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | 476 | 57 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [5] |
| Antimony | < 2.3 | 2.3 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [5] |
| Arsenic | < 2.3 | 2.3 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [5] |
| Barium | < 23 | 23 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [5] |
| Beryllium | < 0.23 | 0.23 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [5] |
| Cadmium | < 0.57 | 0.57 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [5] |
| Calcium | < 570 | 570 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [5] |
| Chromium | 5.9 | 1.1 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [3] | SW846 3050B [5] |
| Cobalt | < 5.7 | 5.7 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [5] |
| Copper | 3.8 | 2.9 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [5] |
| Iron | 1750 | 57 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [5] |
| Lead | 2.3 | 2.3 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [5] |
| Magnesium | < 570 | 570 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [5] |
| Manganese | 2.6 | 1.7 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [5] |
| Mercury | < 0.034 | 0.034 | mg/kg | 1 | 10/10/14 | 10/10/14 | SB | SW846 7471B [1] | SW846 7471B [4] |
| Nickel | < 4.6 | 4.6 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [5] |
| Potassium | < 1100 | 1100 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [5] |
| Selenium | < 2.3 | 2.3 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [5] |
| Silver | < 0.57 | 0.57 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [5] |
| Sodium | < 1100 | 1100 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [5] |
| Thallium | < 1.1 | 1.1 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [5] |
| Vanadium | 16.3 | 5.7 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [5] |
| Zinc | < 5.7 | 5.7 | mg/kg | 1 | 10/13/14 | 10/14/14 | KK | SW846 6010C [2] | SW846 3050B [5] |

(1) Instrument QC Batch: MA35140
(2) Instrument QC Batch: MA35158
(3) Instrument QC Batch: MA35168
(4) Prep QC Batch: MP82489
(5) Prep QC Batch: MP82519

RL = Reporting Limit

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-TP7 (11-11.5) | | |
| **Lab Sample ID:** | JB78845-17 | **Date Sampled:** | 10/08/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/09/14 |
| | | **Percent Solids:** | 86.6 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**General Chemistry**

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|
| Cyanide | < 0.27 | 0.27 | mg/kg | 1 | 10/13/14 12:33 | HC | SW846 9012 M/LACHAT |
| Solids, Percent | 86.6 | | % | 1 | 10/13/14 15:00 | NR | SM2540 G-97 |

RL = Reporting Limit

Accutest LabLink@822422 12:05 30-Oct-2014

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS22 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-34 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8260B SW846 5035 | **Percent Solids:** | 90.8 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | I198569.D | 1 | 10/14/14 | SJM | 10/11/14 11:00 | n/a | VI7992 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 6.4 g |
| Run #2 | |

**VOA TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 16.9 | 8.6 | 2.2 | ug/kg | |
| 71-43-2 | Benzene | ND | 0.43 | 0.15 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 4.3 | 0.24 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 1.7 | 0.18 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.3 | 0.15 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 4.3 | 0.25 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 8.6 | 1.6 | ug/kg | |
| 75-15-0 | Carbon disulfide | 0.89 | 1.7 | 0.25 | ug/kg | J |
| 56-23-5 | Carbon tetrachloride | ND | 1.7 | 0.12 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 1.7 | 0.12 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.3 | 0.25 | ug/kg | |
| 67-66-3 | Chloroform | ND | 1.7 | 0.12 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 4.3 | 0.26 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 1.7 | 0.30 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 4.3 | 0.34 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 1.7 | 0.15 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.86 | 0.16 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 0.86 | 0.16 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 0.86 | 0.17 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 0.86 | 0.14 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 4.3 | 0.45 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 0.86 | 0.16 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.86 | 0.22 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 0.86 | 0.24 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 0.86 | 0.22 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 0.86 | 0.16 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.7 | 0.15 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.7 | 0.11 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.7 | 0.15 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 0.86 | 0.17 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 4.3 | 0.47 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 4.3 | 1.4 | ug/kg | |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS22 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-34 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8260B SW846 5035 | **Percent Solids:** | 90.8 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**VOA TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 98-82-8 | Isopropylbenzene | ND | 4.3 | 0.16 | ug/kg | |
| 79-20-9 | Methyl Acetate | ND | 4.3 | 0.95 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 1.7 | 0.19 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 0.86 | 0.14 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 4.3 | 0.46 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 4.3 | 1.3 | ug/kg | |
| 100-42-5 | Styrene | ND | 1.7 | 0.15 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.7 | 0.19 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 0.86 | 0.15 | ug/kg | |
| 108-88-3 | Toluene | ND | 0.86 | 0.20 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 4.3 | 0.18 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.3 | 0.15 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.7 | 0.12 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.7 | 0.19 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 0.86 | 0.17 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.3 | 0.15 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 1.7 | 0.32 | ug/kg | |
| | m,p-Xylene | ND | 0.86 | 0.35 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 0.86 | 0.18 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 0.86 | 0.18 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 100% | | 59-130% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 112% | | 65-123% |
| 2037-26-5 | Toluene-D8 | 97% | | 77-125% |
| 460-00-4 | 4-Bromofluorobenzene | 93% | | 71-132% |

| CAS No. | Tentatively Identified Compounds | R.T. | Est. Conc. | Units | Q |
|---|---|---|---|---|---|
| | Total TIC, Volatile | | 0 | ug/kg | |
| | Total Alkanes | | 0 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@822422 12:05 30-Oct-2014

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS22 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-34 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8270D SW846 3550C | **Percent Solids:** | 90.8 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3E65842.D | 1 | 10/17/14 | AP | 10/13/14 | OP78743 | E3E2831 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.2 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (SOM0 2.0)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 73 | 36 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 180 | 36 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 180 | 59 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 180 | 61 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 730 | 44 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 730 | 44 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 73 | 42 | ug/kg | |
| | 3&4-Methylphenol | ND | 73 | 46 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 180 | 39 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 360 | 62 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 360 | 62 | ug/kg | |
| 108-95-2 | Phenol | ND | 73 | 38 | ug/kg | |
| 58-90-2 | 2,3,4,6-Tetrachlorophenol | ND | 180 | 38 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 180 | 42 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 180 | 34 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 36 | 11 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 36 | 12 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 180 | 6.4 | ug/kg | |
| 120-12-7 | Anthracene | ND | 36 | 13 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 73 | 7.2 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | 18.1 | 36 | 12 | ug/kg | J |
| 50-32-8 | Benzo(a)pyrene | ND | 36 | 11 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | 16.6 | 36 | 12 | ug/kg | J |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 36 | 14 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 36 | 14 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 73 | 13 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 73 | 21 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 73 | 4.2 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 180 | 8.4 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 73 | 11 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 180 | 12 | ug/kg | |
| 86-74-8 | Carbazole | ND | 73 | 17 | ug/kg | |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS22 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-34 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8270D SW846 3550C | **Percent Solids:** | 90.8 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**ABN TCL List (SOM0 2.0)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 105-60-2 | Caprolactam | ND | 73 | 11 | ug/kg | |
| 218-01-9 | Chrysene | 17.8 | 36 | 12 | ug/kg | J |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 73 | 15 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 73 | 11 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 73 | 11 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 73 | 11 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 36 | 16 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 36 | 14 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 73 | 9.3 | ug/kg | |
| 123-91-1 | 1,4-Dioxane | ND | 36 | 24 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 36 | 12 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 73 | 11 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | 123 | 73 | 8.1 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 73 | 18 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 73 | 12 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 73 | 13 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 73 | 32 | ug/kg | |
| 206-44-0 | Fluoranthene | 27.5 | 36 | 16 | ug/kg | J |
| 86-73-7 | Fluorene | ND | 36 | 12 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 73 | 12 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 36 | 10 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 360 | 37 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 180 | 10 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 36 | 13 | ug/kg | |
| 78-59-1 | Isophorone | ND | 73 | 9.8 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 73 | 20 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 180 | 16 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 180 | 15 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 180 | 14 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 36 | 10 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 73 | 11 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 73 | 8.9 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 180 | 22 | ug/kg | |
| 85-01-8 | Phenanthrene | 17.8 | 36 | 17 | ug/kg | J |
| 129-00-0 | Pyrene | 29.0 | 36 | 14 | ug/kg | J |
| 95-94-3 | 1,2,4,5-Tetrachlorobenzene | ND | 180 | 11 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 80% | | 13-110% |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS22 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-34 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8270D SW846 3550C | **Percent Solids:** | 90.8 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**ABN TCL List (SOM0 2.0)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 4165-62-2 | Phenol-d5 | 81% | | 15-110% |
| 118-79-6 | 2,4,6-Tribromophenol | 127% [a] | | 20-123% |
| 4165-60-0 | Nitrobenzene-d5 | 90% | | 10-110% |
| 321-60-8 | 2-Fluorobiphenyl | 82% | | 17-110% |
| 1718-51-0 | Terphenyl-d14 | 117% | | 30-124% |

| CAS No. | Tentatively Identified Compounds | R.T. | Est. Conc. | Units | Q |
|---|---|---|---|---|---|
| | system artifact | 1.93 | 210 | ug/kg | J |
| | system artifact | 3.03 | 900 | ug/kg | J |
| | system artifact/aldol-condensation | 3.25 | 17000 | ug/kg | J |
| | unknown | 4.01 | 390 | ug/kg | J |
| 13798-23-7 | Sulfur | 7.82 | 310 | ug/kg | JN |
| | unknown | 14.75 | 990 | ug/kg | J |
| | unknown | 15.71 | 350 | ug/kg | J |
| 7616-22-0 | .gamma.-Tocopherol | 16.40 | 220 | ug/kg | JN |
| | unknown | 16.60 | 220 | ug/kg | J |
| | unknown | 16.65 | 230 | ug/kg | J |
| | dl-.alpha.-Tocopherol | 16.75 | 230 | ug/kg | J |
| | unknown | 17.16 | 210 | ug/kg | J |
| | unknown | 17.33 | 300 | ug/kg | J |
| | unknown | 17.41 | 510 | ug/kg | J |
| | unknown | 17.52 | 310 | ug/kg | J |
| | unknown | 17.65 | 280 | ug/kg | J |
| | unknown | 17.83 | 1700 | ug/kg | J |
| | unknown | 17.90 | 650 | ug/kg | J |
| | unknown | 18.03 | 970 | ug/kg | J |
| | unknown | 18.14 | 590 | ug/kg | J |
| | unknown | 18.25 | 410 | ug/kg | J |
| | unknown | 18.45 | 890 | ug/kg | J |
| | unknown | 18.54 | 190 | ug/kg | J |
| | unknown | 18.67 | 220 | ug/kg | J |
| | unknown | 19.32 | 380 | ug/kg | J |
| | unknown | 19.47 | 1400 | ug/kg | J |
| | Total TIC, Semi-Volatile | | 11950 | ug/kg | J |
| | Total Alkanes | | 560 | ug/kg | J |

(a) High percent recovery with no associated positive found in the sample.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@822422 12:05 30-Oct-2014

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS22 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-34 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8081B SW846 3546 | **Percent Solids:** | 90.8 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 4G49904.D | 1 | 10/16/14 | KJ | 10/13/14 | OP78771 | G4G1267 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 15.0 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 0.73 | 0.34 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 0.73 | 0.22 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 0.73 | 0.46 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 0.73 | 0.36 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 0.73 | 0.36 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 0.73 | 0.27 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 0.73 | 0.51 | ug/kg | |
| 57-74-9 | Chlordane (alpha and gamma) | ND | 0.73 | 0.27 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 0.73 | 0.29 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 0.73 | 0.40 | ug/kg | |
| 72-55-9 | 4,4'-DDE | 0.87 | 0.73 | 0.30 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 0.73 | 0.36 | ug/kg | |
| 72-20-8 | Endrin | ND | 0.73 | 0.24 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 0.73 | 0.32 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 0.73 | 0.38 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 0.73 | 0.28 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 0.73 | 0.44 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 0.73 | 0.36 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 0.73 | 0.27 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.5 | 0.72 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 0.73 | 0.30 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 18 | 9.3 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 68% | | 10-129% |
| 877-09-8 | Tetrachloro-m-xylene | 66% | | 10-129% |
| 2051-24-3 | Decachlorobiphenyl | 69% | | 10-144% |
| 2051-24-3 | Decachlorobiphenyl | 65% | | 10-144% |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest LabLink@822422 12:05 30-Oct-2014

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS22 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-34 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8082A SW846 3546 | **Percent Solids:** | 90.8 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | XX158939.D | 1 | 10/16/14 | JR | 10/13/14 | OP78770 | GXX5141 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 15.0 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 37 | 9.5 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 37 | 22 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 37 | 19 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 37 | 12 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 37 | 11 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 37 | 17 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 37 | 12 | ug/kg | |
| 11100-14-4 | Aroclor 1268 | ND | 37 | 11 | ug/kg | |
| 37324-23-5 | Aroclor 1262 | ND | 37 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 89% | | 14-139% |
| 877-09-8 | Tetrachloro-m-xylene | 100% | | 14-139% |
| 2051-24-3 | Decachlorobiphenyl | 82% | | 10-155% |
| 2051-24-3 | Decachlorobiphenyl | 86% | | 10-155% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@822422 12:05 30-Oct-2014

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS22 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-34 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | NJDEP EPH SW846 3546 | **Percent Solids:** | 90.8 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 4Y33390.D | 1 | 10/15/14 | JM | 10/14/14 | OP78776 | G4Y1056 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 15.7 g | 2.0 ml |
| Run #2 | | |

**NJDEP EPH List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| | EPH (C9-C28) | 13.7 | 7.0 | 2.5 | mg/kg | |
| | EPH (> C28-C40) | 22.8 | 7.0 | 3.1 | mg/kg | |
| | Total EPH (C9-C40) | 36.5 | 7.0 | 2.5 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 76% | | 40-140% |
| 3386-33-2 | 1-Chlorooctadecane | 83% | | 40-140% |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS22 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-34 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| | | **Percent Solids:** | 90.8 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | 3270 | 55 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Antimony | < 2.2 | 2.2 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Arsenic | < 2.2 | 2.2 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Barium | < 22 | 22 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Beryllium | < 0.22 | 0.22 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Cadmium | < 0.55 | 0.55 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Calcium | 612 | 550 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Chromium | 13.2 | 1.1 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Cobalt | < 5.5 | 5.5 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Copper | 7.5 | 2.7 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Iron | 3640 | 55 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Lead | 7.6 | 2.2 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Magnesium | < 550 | 550 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Manganese | 9.7 | 1.6 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Mercury | < 0.033 | 0.033 | mg/kg | 1 | 10/14/14 | 10/14/14 | JW | SW846 7471B [1] | SW846 7471B [3] |
| Nickel | < 4.4 | 4.4 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Potassium | < 1100 | 1100 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Selenium | < 2.2 | 2.2 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Silver | < 0.55 | 0.55 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Sodium | < 1100 | 1100 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Thallium | < 1.1 | 1.1 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Vanadium | 24.7 | 5.5 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Zinc | 7.2 | 5.5 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |

(1) Instrument QC Batch: MA35162
(2) Instrument QC Batch: MA35179
(3) Prep QC Batch: MP82551
(4) Prep QC Batch: MP82556

RL = Reporting Limit

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS22 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-34 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| | | **Percent Solids:** | 90.8 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**General Chemistry**

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|
| Cyanide | < 0.24 | 0.24 | mg/kg | 1 | 10/15/14 10:22 | HC | SW846 9012 M/LACHAT |
| Solids, Percent | 90.8 | | % | 1 | 10/13/14 13:00 | NR | SM2540 G-97 |

RL = Reporting Limit

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# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS22 (9-9.5) | | |
| **Lab Sample ID:** | JB78959-35 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8260B SW846 5035 | **Percent Solids:** | 94.4 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | I198600.D | 1 | 10/15/14 | SJM | 10/11/14 11:00 | n/a | VI7993 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.3 g |
| Run #2 | |

**VOA TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 24.4 | 12 | 3.1 | ug/kg | |
| 71-43-2 | Benzene | ND | 0.62 | 0.22 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 6.2 | 0.34 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 2.5 | 0.25 | ug/kg | |
| 75-25-2 | Bromoform | ND | 6.2 | 0.22 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 6.2 | 0.36 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 12 | 2.3 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 2.5 | 0.36 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 2.5 | 0.17 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 2.5 | 0.17 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 6.2 | 0.35 | ug/kg | |
| 67-66-3 | Chloroform | ND | 2.5 | 0.17 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 6.2 | 0.37 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 2.5 | 0.43 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 6.2 | 0.48 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 2.5 | 0.22 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.2 | 0.22 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.2 | 0.23 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 1.2 | 0.24 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.2 | 0.20 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 6.2 | 0.64 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.2 | 0.23 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.2 | 0.31 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 1.2 | 0.34 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 1.2 | 0.32 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.2 | 0.23 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 2.5 | 0.21 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 2.5 | 0.16 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 2.5 | 0.21 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.2 | 0.24 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 6.2 | 0.67 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 6.2 | 2.0 | ug/kg | |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS22 (9-9.5) | | |
| **Lab Sample ID:** | JB78959-35 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8260B SW846 5035 | **Percent Solids:** | 94.4 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**VOA TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 98-82-8 | Isopropylbenzene | ND | 6.2 | 0.22 | ug/kg | |
| 79-20-9 | Methyl Acetate | ND | 6.2 | 1.4 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 2.5 | 0.27 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.2 | 0.20 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 6.2 | 0.66 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 6.2 | 1.8 | ug/kg | |
| 100-42-5 | Styrene | ND | 2.5 | 0.22 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 2.5 | 0.27 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 1.2 | 0.22 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.2 | 0.29 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 6.2 | 0.25 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 6.2 | 0.22 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 2.5 | 0.17 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 2.5 | 0.27 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 1.2 | 0.25 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 6.2 | 0.21 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 2.5 | 0.46 | ug/kg | |
| | m,p-Xylene | ND | 1.2 | 0.51 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.2 | 0.26 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 1.2 | 0.26 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 99% | | 59-130% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 109% | | 65-123% |
| 2037-26-5 | Toluene-D8 | 97% | | 77-125% |
| 460-00-4 | 4-Bromofluorobenzene | 90% | | 71-132% |

| CAS No. | Tentatively Identified Compounds | R.T. | Est. Conc. | Units | Q |
|---|---|---|---|---|---|
| | Total TIC, Volatile | | 0 | ug/kg | |
| | Total Alkanes | | 0 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@822422 12:05 30-Oct-2014

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS22 (9-9.5) | | |
| **Lab Sample ID:** | JB78959-35 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8270D SW846 3550C | **Percent Solids:** | 94.4 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3E65843.D | 1 | 10/17/14 | AP | 10/13/14 | OP78743 | E3E2831 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 30.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (SOM0 2.0)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 71 | 35 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 180 | 35 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 180 | 57 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 180 | 59 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 710 | 43 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 710 | 43 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 71 | 40 | ug/kg | |
| | 3&4-Methylphenol | ND | 71 | 45 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 180 | 37 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 350 | 60 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 350 | 60 | ug/kg | |
| 108-95-2 | Phenol | ND | 71 | 37 | ug/kg | |
| 58-90-2 | 2,3,4,6-Tetrachlorophenol | ND | 180 | 36 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 180 | 41 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 180 | 33 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 35 | 10 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 35 | 11 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 180 | 6.2 | ug/kg | |
| 120-12-7 | Anthracene | ND | 35 | 12 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 71 | 7.0 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 35 | 12 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 35 | 11 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 35 | 12 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 35 | 13 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 35 | 13 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 71 | 13 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 71 | 20 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 71 | 4.1 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 180 | 8.1 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 71 | 11 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 180 | 11 | ug/kg | |
| 86-74-8 | Carbazole | ND | 71 | 16 | ug/kg | |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS22 (9-9.5) | | |
| **Lab Sample ID:** | JB78959-35 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8270D SW846 3550C | **Percent Solids:** | 94.4 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**ABN TCL List (SOM0 2.0)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 105-60-2 | Caprolactam | ND | 71 | 11 | ug/kg | |
| 218-01-9 | Chrysene | ND | 35 | 12 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 71 | 14 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 71 | 11 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 71 | 10 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 71 | 11 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 35 | 15 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 35 | 13 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 71 | 9.0 | ug/kg | |
| 123-91-1 | 1,4-Dioxane | ND | 35 | 23 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 35 | 12 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 71 | 10 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | 72.1 | 71 | 7.8 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 71 | 17 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 71 | 12 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 71 | 12 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 71 | 31 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 35 | 16 | ug/kg | |
| 86-73-7 | Fluorene | ND | 35 | 12 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 71 | 12 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 35 | 9.8 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 350 | 36 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 180 | 9.8 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 35 | 12 | ug/kg | |
| 78-59-1 | Isophorone | ND | 71 | 9.5 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 71 | 20 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 180 | 16 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 180 | 14 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 180 | 14 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 35 | 9.6 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 71 | 10 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 71 | 8.6 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 180 | 21 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 35 | 16 | ug/kg | |
| 129-00-0 | Pyrene | ND | 35 | 14 | ug/kg | |
| 95-94-3 | 1,2,4,5-Tetrachlorobenzene | ND | 180 | 11 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 74% | | 13-110% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS22 (9-9.5) | | |
| **Lab Sample ID:** | JB78959-35 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8270D SW846 3550C | **Percent Solids:** | 94.4 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**ABN TCL List (SOM0 2.0)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 4165-62-2 | Phenol-d5 | 74% | | 15-110% |
| 118-79-6 | 2,4,6-Tribromophenol | 106% | | 20-123% |
| 4165-60-0 | Nitrobenzene-d5 | 89% | | 10-110% |
| 321-60-8 | 2-Fluorobiphenyl | 79% | | 17-110% |
| 1718-51-0 | Terphenyl-d14 | 99% | | 30-124% |

| CAS No. | Tentatively Identified Compounds | R.T. | Est. Conc. | Units | Q |
|---|---|---|---|---|---|
| | system artifact | 1.92 | 190 | ug/kg | J |
| | system artifact | 1.98 | 150 | ug/kg | J |
| | system artifact | 3.04 | 190 | ug/kg | J |
| | system artifact/aldol-condensation | 3.22 | 3700 | ug/kg | J |
| | unknown | 14.99 | 240 | ug/kg | J |
| | Total TIC, Semi-Volatile | | 240 | ug/kg | J |
| | Total Alkanes | | 0 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS22 (9-9.5) | | |
| **Lab Sample ID:** | JB78959-35 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8081B SW846 3546 | **Percent Solids:** | 94.4 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 4G49905.D | 1 | 10/16/14 | KJ | 10/13/14 | OP78771 | G4G1267 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 15.4 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 0.69 | 0.32 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 0.69 | 0.21 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 0.69 | 0.43 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 0.69 | 0.34 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 0.69 | 0.34 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 0.69 | 0.25 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 0.69 | 0.47 | ug/kg | |
| 57-74-9 | Chlordane (alpha and gamma) | ND | 0.69 | 0.25 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 0.69 | 0.27 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 0.69 | 0.38 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 0.69 | 0.28 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 0.69 | 0.34 | ug/kg | |
| 72-20-8 | Endrin | ND | 0.69 | 0.22 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 0.69 | 0.30 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 0.69 | 0.36 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 0.69 | 0.26 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 0.69 | 0.41 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 0.69 | 0.33 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 0.69 | 0.26 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.4 | 0.67 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 0.69 | 0.28 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 17 | 8.7 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 82% | | 10-129% |
| 877-09-8 | Tetrachloro-m-xylene | 84% | | 10-129% |
| 2051-24-3 | Decachlorobiphenyl | 79% | | 10-144% |
| 2051-24-3 | Decachlorobiphenyl | 81% | | 10-144% |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS22 (9-9.5) | | |
| **Lab Sample ID:** | JB78959-35 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8082A SW846 3546 | **Percent Solids:** | 94.4 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | XX158940.D | 1 | 10/16/14 | JR | 10/13/14 | OP78770 | GXX5141 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 15.4 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 34 | 8.9 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 34 | 21 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 34 | 17 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 34 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 34 | 10 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 34 | 16 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 34 | 11 | ug/kg | |
| 11100-14-4 | Aroclor 1268 | ND | 34 | 10 | ug/kg | |
| 37324-23-5 | Aroclor 1262 | ND | 34 | 11 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 110% | | 14-139% |
| 877-09-8 | Tetrachloro-m-xylene | 116% | | 14-139% |
| 2051-24-3 | Decachlorobiphenyl | 107% | | 10-155% |
| 2051-24-3 | Decachlorobiphenyl | 104% | | 10-155% |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS22 (9-9.5) | | |
| **Lab Sample ID:** | JB78959-35 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | NJDEP EPH SW846 3546 | **Percent Solids:** | 94.4 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 4Y33391.D | 1 | 10/15/14 | JM | 10/14/14 | OP78776 | G4Y1056 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 15.0 g | 2.0 ml |
| Run #2 | | |

**NJDEP EPH List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| | EPH (C9-C28) | ND | 7.1 | 2.5 | mg/kg | |
| | EPH (> C28-C40) | ND | 7.1 | 3.1 | mg/kg | |
| | Total EPH (C9-C40) | ND | 7.1 | 2.5 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 70% | | 40-140% |
| 3386-33-2 | 1-Chlorooctadecane | 72% | | 40-140% |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS22 (9-9.5) | | |
| **Lab Sample ID:** | JB78959-35 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| | | **Percent Solids:** | 94.4 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | 595 | 51 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Antimony | < 2.1 | 2.1 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Arsenic | 3.8 | 2.1 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Barium | < 21 | 21 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Beryllium | < 0.21 | 0.21 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Cadmium | < 0.51 | 0.51 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Calcium | < 510 | 510 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Chromium | 3.6 | 1.0 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Cobalt | < 5.1 | 5.1 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Copper | < 2.6 | 2.6 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Iron | 4570 | 51 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Lead | < 2.1 | 2.1 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Magnesium | < 510 | 510 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Manganese | 2.4 | 1.5 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Mercury | < 0.035 | 0.035 | mg/kg | 1 | 10/14/14 | 10/14/14 | JW | SW846 7471B [1] | SW846 7471B [3] |
| Nickel | < 4.1 | 4.1 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Potassium | < 1000 | 1000 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Selenium | < 2.1 | 2.1 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Silver | < 0.51 | 0.51 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Sodium | < 1000 | 1000 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Thallium | < 1.0 | 1.0 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Vanadium | 5.4 | 5.1 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Zinc | < 5.1 | 5.1 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |

(1) Instrument QC Batch: MA35162
(2) Instrument QC Batch: MA35179
(3) Prep QC Batch: MP82551
(4) Prep QC Batch: MP82556

RL = Reporting Limit

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS22 (9-9.5) | | |
| **Lab Sample ID:** | JB78959-35 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| | | **Percent Solids:** | 94.4 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**General Chemistry**

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|
| Cyanide | < 0.23 | 0.23 | mg/kg | 1 | 10/15/14 10:23 | HC | SW846 9012 M/LACHAT |
| Solids, Percent | 94.4 | | % | 1 | 10/13/14 13:00 | NR | SM2540 G-97 |

RL = Reporting Limit

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# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS23 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-9 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8260B SW846 5035 | **Percent Solids:** | 83.3 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3C114603.D | 1 | 10/14/14 | PS | 10/11/14 11:00 | n/a | V3C5179 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.0 g |
| Run #2 | |

**VOA TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 12 | 3.0 | ug/kg | |
| 71-43-2 | Benzene | ND | 0.60 | 0.21 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 6.0 | 0.33 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 2.4 | 0.24 | ug/kg | |
| 75-25-2 | Bromoform | ND | 6.0 | 0.21 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 6.0 | 0.35 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 12 | 2.2 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 2.4 | 0.35 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 2.4 | 0.17 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 2.4 | 0.17 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 6.0 | 0.34 | ug/kg | |
| 67-66-3 | Chloroform | ND | 2.4 | 0.16 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 6.0 | 0.36 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 2.4 | 0.42 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 6.0 | 0.47 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 2.4 | 0.21 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.2 | 0.22 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.2 | 0.23 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 1.2 | 0.23 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.2 | 0.20 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 6.0 | 0.63 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.2 | 0.22 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.2 | 0.30 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 1.2 | 0.33 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 1.2 | 0.31 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.2 | 0.23 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 2.4 | 0.21 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 2.4 | 0.15 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 2.4 | 0.20 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.2 | 0.23 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 6.0 | 0.65 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 6.0 | 1.9 | ug/kg | |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS23 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-9 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8260B SW846 5035 | **Percent Solids:** | 83.3 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**VOA TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 98-82-8 | Isopropylbenzene | ND | 6.0 | 0.22 | ug/kg | |
| 79-20-9 | Methyl Acetate | ND | 6.0 | 1.3 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 2.4 | 0.26 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | 0.50 | 1.2 | 0.20 | ug/kg | J |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 6.0 | 0.64 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 6.0 | 1.8 | ug/kg | |
| 100-42-5 | Styrene | ND | 2.4 | 0.22 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 2.4 | 0.26 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 1.2 | 0.21 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.2 | 0.28 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 6.0 | 0.24 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 6.0 | 0.22 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 2.4 | 0.17 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 2.4 | 0.27 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 1.2 | 0.24 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 6.0 | 0.21 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 2.4 | 0.45 | ug/kg | |
| | m,p-Xylene | ND | 1.2 | 0.49 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.2 | 0.26 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 1.2 | 0.26 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 95% | | 59-130% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 95% | | 65-123% |
| 2037-26-5 | Toluene-D8 | 102% | | 77-125% |
| 460-00-4 | 4-Bromofluorobenzene | 110% | | 71-132% |

| CAS No. | Tentatively Identified Compounds | R.T. | Est. Conc. | Units | Q |
|---|---|---|---|---|---|
| | Total TIC, Volatile | | 0 | ug/kg | |
| | Total Alkanes | | 0 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS23 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-9 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8270D SW846 3550C | **Percent Solids:** | 83.3 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 5P12900.D | 1 | 10/16/14 | SW | 10/15/14 | OP78816 | E5P650 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 32.5 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (SOM0 2.0)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 74 | 37 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 180 | 37 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 180 | 59 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 180 | 62 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 740 | 45 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 740 | 45 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 74 | 42 | ug/kg | |
| | 3&4-Methylphenol | ND | 74 | 47 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 180 | 39 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 370 | 62 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 370 | 63 | ug/kg | |
| 108-95-2 | Phenol | ND | 74 | 39 | ug/kg | |
| 58-90-2 | 2,3,4,6-Tetrachlorophenol | ND | 180 | 38 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 180 | 43 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 180 | 35 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 37 | 11 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 37 | 12 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 180 | 6.5 | ug/kg | |
| 120-12-7 | Anthracene | ND | 37 | 13 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 74 | 7.3 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 37 | 12 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 37 | 11 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 37 | 12 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 37 | 14 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 37 | 14 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 74 | 13 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 74 | 21 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 74 | 4.3 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 180 | 8.5 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 74 | 11 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 180 | 12 | ug/kg | |
| 86-74-8 | Carbazole | ND | 74 | 17 | ug/kg | |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS23 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-9 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8270D SW846 3550C | **Percent Solids:** | 83.3 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**ABN TCL List (SOM0 2.0)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 105-60-2 | Caprolactam | ND | 74 | 12 | ug/kg | |
| 218-01-9 | Chrysene | ND | 37 | 12 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 74 | 15 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 74 | 11 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 74 | 11 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 74 | 11 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 37 | 16 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 37 | 14 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 74 | 9.4 | ug/kg | |
| 123-91-1 | 1,4-Dioxane | ND | 37 | 24 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 37 | 13 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 74 | 11 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | 74.3 | 74 | 8.2 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 74 | 18 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 74 | 13 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 74 | 13 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 74 | 33 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 37 | 16 | ug/kg | |
| 86-73-7 | Fluorene | ND | 37 | 12 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 74 | 12 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 37 | 10 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 370 | 38 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 180 | 10 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 37 | 13 | ug/kg | |
| 78-59-1 | Isophorone | ND | 74 | 9.9 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 74 | 21 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 180 | 16 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 180 | 15 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 180 | 14 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 37 | 10 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 74 | 11 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 74 | 9.0 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 180 | 22 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 37 | 17 | ug/kg | |
| 129-00-0 | Pyrene | ND | 37 | 14 | ug/kg | |
| 95-94-3 | 1,2,4,5-Tetrachlorobenzene | ND | 180 | 11 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 72% | | 13-110% |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS23 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-9 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8270D SW846 3550C | **Percent Solids:** | 83.3 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**ABN TCL List (SOM0 2.0)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 4165-62-2 | Phenol-d5 | 67% | | 15-110% |
| 118-79-6 | 2,4,6-Tribromophenol | 86% | | 20-123% |
| 4165-60-0 | Nitrobenzene-d5 | 79% | | 10-110% |
| 321-60-8 | 2-Fluorobiphenyl | 77% | | 17-110% |
| 1718-51-0 | Terphenyl-d14 | 94% | | 30-124% |

| CAS No. | Tentatively Identified Compounds | R.T. | Est. Conc. | Units | Q |
|---|---|---|---|---|---|
| | system artifact | 3.05 | 470 | ug/kg | J |
| | system artifact/aldol-condensation | 3.24 | 10000 | ug/kg | J |
| | Total TIC, Semi-Volatile | | 0 | ug/kg | |
| | Total Alkanes | | 0 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS23 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-9 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8081B SW846 3546 | **Percent Solids:** | 83.3 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1G105702.D | 1 | 10/14/14 | DG | 10/13/14 | OP78769 | G1G3473 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 15.2 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 0.79 | 0.36 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 0.79 | 0.24 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 0.79 | 0.49 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 0.79 | 0.39 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 0.79 | 0.39 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 0.79 | 0.29 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 0.79 | 0.54 | ug/kg | |
| 57-74-9 | Chlordane (alpha and gamma) | ND | 0.79 | 0.29 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 0.79 | 0.31 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 0.79 | 0.43 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 0.79 | 0.32 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 0.79 | 0.39 | ug/kg | |
| 72-20-8 | Endrin | ND | 0.79 | 0.26 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 0.79 | 0.34 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 0.79 | 0.41 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 0.79 | 0.30 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 0.79 | 0.47 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 0.79 | 0.38 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 0.79 | 0.30 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.6 | 0.77 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 0.79 | 0.32 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 20 | 10 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 73% | | 10-129% |
| 877-09-8 | Tetrachloro-m-xylene | 67% | | 10-129% |
| 2051-24-3 | Decachlorobiphenyl | 58% | | 10-144% |
| 2051-24-3 | Decachlorobiphenyl | 71% | | 10-144% |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS23 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-9 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8082A SW846 3546 | **Percent Solids:** | 83.3 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 5G33137.D | 1 | 10/15/14 | JN | 10/13/14 | OP78768 | G5G840 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 15.2 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 39 | 10 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 39 | 24 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 39 | 20 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 39 | 13 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 39 | 12 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 39 | 18 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 39 | 13 | ug/kg | |
| 11100-14-4 | Aroclor 1268 | ND | 39 | 12 | ug/kg | |
| 37324-23-5 | Aroclor 1262 | ND | 39 | 13 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 110% | | 14-139% |
| 877-09-8 | Tetrachloro-m-xylene | 116% | | 14-139% |
| 2051-24-3 | Decachlorobiphenyl | 116% | | 10-155% |
| 2051-24-3 | Decachlorobiphenyl | 103% | | 10-155% |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS23 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-9 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | NJDEP EPH SW846 3546 | **Percent Solids:** | 83.3 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 8Z7406.D | 1 | 10/15/14 | PK | 10/13/14 | OP78767 | G8Z261 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 15.3 g | 2.0 ml |
| Run #2 | | |

**NJDEP EPH List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| | EPH (C9-C28) | ND | 7.8 | 2.8 | mg/kg | |
| | EPH (> C28-C40) | ND | 7.8 | 3.5 | mg/kg | |
| | Total EPH (C9-C40) | ND | 7.8 | 2.8 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 82% | | 40-140% |
| 3386-33-2 | 1-Chlorooctadecane | 86% | | 40-140% |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS23 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-9 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| | | **Percent Solids:** | 83.3 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | 265 | 61 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Antimony | < 2.4 | 2.4 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Arsenic | < 2.4 | 2.4 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Barium | < 24 | 24 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Beryllium | < 0.24 | 0.24 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Cadmium | < 0.61 | 0.61 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Calcium | < 610 | 610 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Chromium | 7.2 | 1.2 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Cobalt | < 6.1 | 6.1 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Copper | 7.3 | 3.0 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Iron | 3630 | 61 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Lead | 3.1 | 2.4 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Magnesium | < 610 | 610 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Manganese | 2.1 | 1.8 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Mercury | < 0.040 | 0.040 | mg/kg | 1 | 10/13/14 | 10/13/14 | SB | SW846 7471B [1] | SW846 7471B [3] |
| Nickel | < 4.9 | 4.9 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Potassium | < 1200 | 1200 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Selenium | < 2.4 | 2.4 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Silver | < 0.61 | 0.61 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Sodium | < 1200 | 1200 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Thallium | < 1.2 | 1.2 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Vanadium | 28.8 | 6.1 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Zinc | < 6.1 | 6.1 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |

(1) Instrument QC Batch: MA35152
(2) Instrument QC Batch: MA35179
(3) Prep QC Batch: MP82517
(4) Prep QC Batch: MP82555

RL = Reporting Limit

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS23 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-9 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| | | **Percent Solids:** | 83.3 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**General Chemistry**

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|
| Cyanide | < 0.28 | 0.28 | mg/kg | 1 | 10/15/14 10:49 | HC | SW846 9012 M/LACHAT |
| Solids, Percent | 83.3 | | % | 1 | 10/14/14 19:00 | AC | SM2540 G-97 |

RL = Reporting Limit

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# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS24 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-8 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8260B SW846 5035 | **Percent Solids:** | 82.2 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3C114602.D | 1 | 10/13/14 | PS | 10/11/14 11:00 | n/a | V3C5179 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.9 g |
| Run #2 | |

**VOA TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 12 | 3.1 | ug/kg | |
| 71-43-2 | Benzene | ND | 0.62 | 0.22 | ug/kg | |
| 74-97-5 | Bromochloromethane | ND | 6.2 | 0.34 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 2.5 | 0.25 | ug/kg | |
| 75-25-2 | Bromoform | ND | 6.2 | 0.22 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 6.2 | 0.36 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 12 | 2.3 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 2.5 | 0.36 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 2.5 | 0.18 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 2.5 | 0.17 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 6.2 | 0.35 | ug/kg | |
| 67-66-3 | Chloroform | ND | 2.5 | 0.17 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 6.2 | 0.38 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 2.5 | 0.44 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 6.2 | 0.48 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 2.5 | 0.22 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.2 | 0.22 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.2 | 0.23 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 1.2 | 0.24 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.2 | 0.20 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 6.2 | 0.65 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.2 | 0.23 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.2 | 0.31 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 1.2 | 0.34 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 1.2 | 0.32 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.2 | 0.23 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 2.5 | 0.21 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 2.5 | 0.16 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 2.5 | 0.21 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.2 | 0.24 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 6.2 | 0.67 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 6.2 | 2.0 | ug/kg | |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS24 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-8 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8260B SW846 5035 | **Percent Solids:** | 82.2 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**VOA TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 98-82-8 | Isopropylbenzene | ND | 6.2 | 0.23 | ug/kg | |
| 79-20-9 | Methyl Acetate | ND | 6.2 | 1.4 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 2.5 | 0.27 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.2 | 0.21 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 6.2 | 0.66 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 6.2 | 1.8 | ug/kg | |
| 100-42-5 | Styrene | ND | 2.5 | 0.22 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 2.5 | 0.27 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 1.2 | 0.22 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.2 | 0.29 | ug/kg | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 6.2 | 0.25 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 6.2 | 0.22 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 2.5 | 0.17 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 2.5 | 0.27 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 1.2 | 0.25 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 6.2 | 0.21 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 2.5 | 0.46 | ug/kg | |
| | m,p-Xylene | ND | 1.2 | 0.51 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.2 | 0.27 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 1.2 | 0.27 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 97% | | 59-130% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 95% | | 65-123% |
| 2037-26-5 | Toluene-D8 | 101% | | 77-125% |
| 460-00-4 | 4-Bromofluorobenzene | 110% | | 71-132% |

| CAS No. | Tentatively Identified Compounds | R.T. | Est. Conc. | Units | Q |
|---|---|---|---|---|---|
| | Total TIC, Volatile | | 0 | ug/kg | |
| | Total Alkanes | | 0 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS24 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-8 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8270D SW846 3550C | **Percent Solids:** | 82.2 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 5P12899.D | 1 | 10/16/14 | SW | 10/15/14 | OP78816 | E5P650 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 32.3 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (SOM0 2.0)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 75 | 38 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 190 | 38 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 190 | 61 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 190 | 63 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 750 | 46 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 750 | 46 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 75 | 43 | ug/kg | |
| | 3&4-Methylphenol | ND | 75 | 48 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 190 | 40 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 380 | 64 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 380 | 64 | ug/kg | |
| 108-95-2 | Phenol | ND | 75 | 40 | ug/kg | |
| 58-90-2 | 2,3,4,6-Tetrachlorophenol | ND | 190 | 39 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 190 | 44 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 190 | 35 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 38 | 11 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 38 | 12 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 190 | 6.6 | ug/kg | |
| 120-12-7 | Anthracene | ND | 38 | 13 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 75 | 7.4 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 38 | 12 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 38 | 11 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 38 | 13 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 38 | 14 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 38 | 14 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 75 | 14 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 75 | 22 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 75 | 4.4 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 190 | 8.7 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 75 | 12 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 190 | 12 | ug/kg | |
| 86-74-8 | Carbazole | ND | 75 | 17 | ug/kg | |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS24 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-8 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8270D SW846 3550C | **Percent Solids:** | 82.2 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**ABN TCL List (SOM0 2.0)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 105-60-2 | Caprolactam | ND | 75 | 12 | ug/kg | |
| 218-01-9 | Chrysene | ND | 38 | 13 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 75 | 15 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 75 | 11 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 75 | 11 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 75 | 11 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 38 | 16 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 38 | 14 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 75 | 9.6 | ug/kg | |
| 123-91-1 | 1,4-Dioxane | ND | 38 | 24 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 38 | 13 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 75 | 11 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | 107 | 75 | 8.4 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 75 | 18 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 75 | 13 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 75 | 13 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 75 | 33 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 38 | 17 | ug/kg | |
| 86-73-7 | Fluorene | ND | 38 | 12 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 75 | 12 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 38 | 10 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 380 | 38 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 190 | 10 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 38 | 13 | ug/kg | |
| 78-59-1 | Isophorone | ND | 75 | 10 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 75 | 21 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 190 | 17 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 190 | 15 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 190 | 15 | ug/kg | |
| 91-20-3 | Naphthalene | 79.1 | 38 | 10 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 75 | 11 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 75 | 9.2 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 190 | 22 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 38 | 17 | ug/kg | |
| 129-00-0 | Pyrene | ND | 38 | 14 | ug/kg | |
| 95-94-3 | 1,2,4,5-Tetrachlorobenzene | ND | 190 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 87% | | 13-110% |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS24 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-8 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8270D SW846 3550C | **Percent Solids:** | 82.2 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**ABN TCL List (SOM0 2.0)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 4165-62-2 | Phenol-d5 | 82% | | 15-110% |
| 118-79-6 | 2,4,6-Tribromophenol | 117% | | 20-123% |
| 4165-60-0 | Nitrobenzene-d5 | 90% | | 10-110% |
| 321-60-8 | 2-Fluorobiphenyl | 84% | | 17-110% |
| 1718-51-0 | Terphenyl-d14 | 100% | | 30-124% |

| CAS No. | Tentatively Identified Compounds | R.T. | Est. Conc. | Units | Q |
|---|---|---|---|---|---|
| | system artifact | 3.05 | 510 | ug/kg | J |
| | system artifact/aldol-condensation | 3.24 | 11000 | ug/kg | J |
| | Total TIC, Semi-Volatile | | 0 | ug/kg | |
| | Total Alkanes | | 0 | ug/kg | |

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS24 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-8 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8081B SW846 3546 | **Percent Solids:** | 82.2 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1G105701.D | 1 | 10/14/14 | DG | 10/13/14 | OP78769 | G1G3473 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 16.5 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 0.74 | 0.34 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 0.74 | 0.22 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 0.74 | 0.46 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 0.74 | 0.36 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 0.74 | 0.36 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 0.74 | 0.27 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 0.74 | 0.51 | ug/kg | |
| 57-74-9 | Chlordane (alpha and gamma) | ND | 0.74 | 0.27 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 0.74 | 0.29 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 0.74 | 0.40 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 0.74 | 0.30 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 0.74 | 0.36 | ug/kg | |
| 72-20-8 | Endrin | ND | 0.74 | 0.24 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 0.74 | 0.32 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 0.74 | 0.39 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 0.74 | 0.28 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 0.74 | 0.44 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 0.74 | 0.36 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 0.74 | 0.28 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.5 | 0.72 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 0.74 | 0.30 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 18 | 9.3 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 66% | | 10-129% |
| 877-09-8 | Tetrachloro-m-xylene | 60% | | 10-129% |
| 2051-24-3 | Decachlorobiphenyl | 50% | | 10-144% |
| 2051-24-3 | Decachlorobiphenyl | 60% | | 10-144% |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS24 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-8 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | SW846 8082A SW846 3546 | **Percent Solids:** | 82.2 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 5G33136.D | 1 | 10/15/14 | JN | 10/13/14 | OP78768 | G5G840 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 16.5 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 37 | 9.6 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 37 | 22 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 37 | 19 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 37 | 12 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 37 | 11 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 37 | 17 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 37 | 12 | ug/kg | |
| 11100-14-4 | Aroclor 1268 | ND | 37 | 11 | ug/kg | |
| 37324-23-5 | Aroclor 1262 | ND | 37 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 97% | | 14-139% |
| 877-09-8 | Tetrachloro-m-xylene | 103% | | 14-139% |
| 2051-24-3 | Decachlorobiphenyl | 91% | | 10-155% |
| 2051-24-3 | Decachlorobiphenyl | 95% | | 10-155% |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest LabLink@822422 12:05 30-Oct-2014

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS24 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-8 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| **Method:** | NJDEP EPH SW846 3546 | **Percent Solids:** | 82.2 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 8Z7405.D | 1 | 10/15/14 | PK | 10/13/14 | OP78767 | G8Z261 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.0 g | 2.0 ml |
| Run #2 | | |

**NJDEP EPH List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| | EPH (C9-C28) | ND | 7.2 | 2.6 | mg/kg | |
| | EPH (> C28-C40) | ND | 7.2 | 3.1 | mg/kg | |
| | Total EPH (C9-C40) | ND | 7.2 | 2.6 | mg/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl | 80% | | 40-140% |
| 3386-33-2 | 1-Chlorooctadecane | 83% | | 40-140% |

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS24 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-8 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| | | **Percent Solids:** | 82.2 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | 387 | 61 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Antimony | < 2.4 | 2.4 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Arsenic | < 2.4 | 2.4 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Barium | < 24 | 24 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Beryllium | < 0.24 | 0.24 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Cadmium | < 0.61 | 0.61 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Calcium | < 610 | 610 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Chromium | 5.9 | 1.2 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Cobalt | < 6.1 | 6.1 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Copper | 4.1 | 3.0 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Iron | 1650 | 61 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Lead | < 2.4 | 2.4 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Magnesium | < 610 | 610 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Manganese | < 1.8 | 1.8 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Mercury | < 0.038 | 0.038 | mg/kg | 1 | 10/13/14 | 10/13/14 | SB | SW846 7471B [1] | SW846 7471B [3] |
| Nickel | < 4.9 | 4.9 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Potassium | < 1200 | 1200 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Selenium | < 2.4 | 2.4 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Silver | < 0.61 | 0.61 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Sodium | < 1200 | 1200 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Thallium | < 1.2 | 1.2 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Vanadium | 11.2 | 6.1 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |
| Zinc | < 6.1 | 6.1 | mg/kg | 1 | 10/14/14 | 10/16/14 | ND | SW846 6010C [2] | SW846 3050B [4] |

(1) Instrument QC Batch: MA35152
(2) Instrument QC Batch: MA35179
(3) Prep QC Batch: MP82517
(4) Prep QC Batch: MP82555

RL = Reporting Limit

# Report of Analysis





| | | | |
|---|---|---|---|
| **Client Sample ID:** | ET-BS24 (5-5.5) | | |
| **Lab Sample ID:** | JB78959-8 | **Date Sampled:** | 10/09/14 |
| **Matrix:** | SO - Soil | **Date Received:** | 10/10/14 |
| | | **Percent Solids:** | 82.2 |
| **Project:** | Macy's, 401 Clearview Road, Edison, NJ | | |

**General Chemistry**

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|---|---|---|---|---|---|---|---|
| Cyanide | < 0.29 | 0.29 | mg/kg | 1 | 10/15/14 10:47 | HC | SW846 9012 M/LACHAT |
| Solids, Percent | 82.2 | | % | 1 | 10/14/14 19:00 | AC | SM2540 G-97 |

RL = Reporting Limit

**Primary Source (Buch/Macy)**
**Historical Data**

# SOIL BORING LOG

**Groundwater & Environmental Services, Inc.**

ID NO. **AS_SB-1**

| | | |
|---|---|---|
| Project: Macy's Edison - Acid Soil Sampling | Client: Macy's | GES Project Mgr: Anita Locke |
| Address: 401 Clearview Rd, Edison NJ | County: Middlesex County | GES Job #: 0314240 |
| Logged By: Jane Barnes | Date Drilled: 7/10/2014 | Acetate Sleeve Diameter: 1 3/4 inches |
| Drilling Company: GES Probe Services | Sampling Method: Macrocore | Acetate Sleeve Length: 5 feet |
| Drill Operator: Steve Tacovsky | Soil Classification System: Burmister | Total Depth: 10 feet |
| Drill Rig Type: Geoprobe 7822DT | Field Screening: PID 10.6 eV Lamp (ppm) | Refusal Depth: N/A |
| Drilling Method: Direct Push | Depth to Water: 2.0 fbg | |

| Depth | Recovery (inches) | Field Screen (ppm) 0 – 1 | Geologic Description | Munsell Color System | Comments |
|---|---|---|---|---|---|
| 0 | Hand Auger | 0.0 | (0.0'-0.1') TOPSOIL (grass and leaf litter)<br>(0.1'-2.0') (FILL) Light brown/light gray coarse SAND, some silt water @ 2' | (0.5'-2.0') 10 YR 6/4 Light Yellowish Brown | AS_SB-1_0.5 (0.5'-1.0') |
| | | 0.0 | (2.0'-6.5') Brown fine to coarse SAND, clay lense @ 4' | (2.0'-3.0') 10YR 7/2 Light Gray<br>(3.0'-4.0') 10YR 6/6 Brownish Yellow<br>(4.0'-4.5') 10YR 7/3 Very Pale Brown<br>(4.5'-5.0') 7.5YR 6/8 Reddish Yellow<br>(5.0'-5.5') 10YR 6/6 Brownish Yellow<br>(5.5'-6.0') 10YR 6/8 Brownish Yellow<br>(6.0'-7.0') 10YR 6/3 Pale Brown | AS_SB-1_2.0 (2.0'-2.5') |
| 5 | | 0.0 | | | |
| | 49" | 0.0 | (6.5'-10.0') Brown fine to coarse SAND, some silt | (7.0'-8.0') 10YR 6/3 Pale Brown and 10YR 6/8 Brownish Yellow<br>(8.0'-10.0') 10YR 6/3 Pale Brown with staining of 7.5YR 5/8 Strong Brown | AS_SB-1_6.5 (6.5'-7.0') |
| 10 | | | | | AS_SB-1_9.5 (9.5'-10.0') |

Proportions Used:

Trace = <5%
Few = 5-10%
Little = 10-20%
Some = 20-40%
And = >40%

Notes:

NA = not available; fbg. = feet below grade
in. = inches; ft.= feet; ppm.= parts per million
Soil Lithologies based on field observations only.

Symbols:

Apparent Water Level
Acid Soil Sample Location
Historic Fill Soil Sample

# SOIL BORING LOG

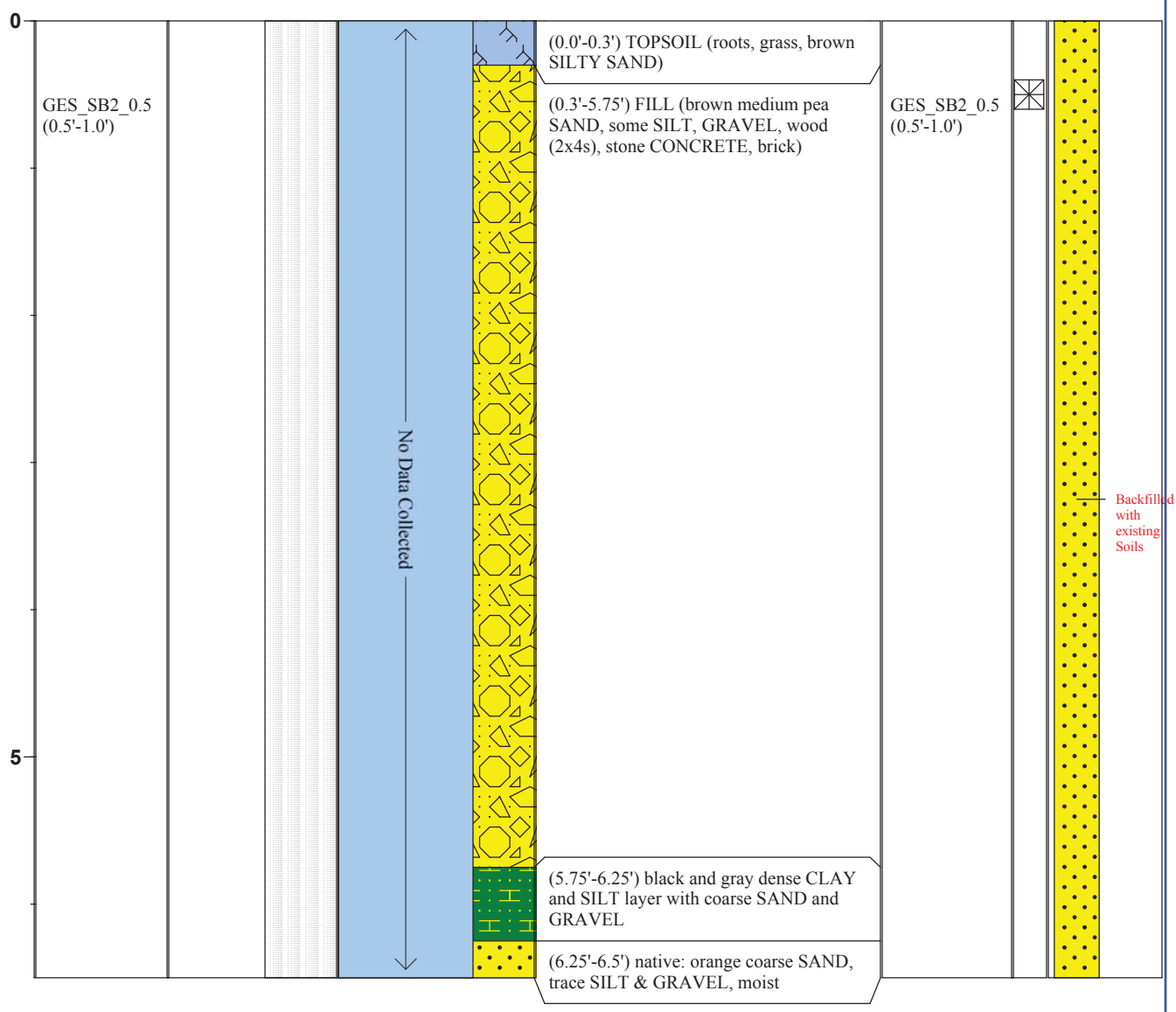


**Groundwater & Environmental Services, Inc.**

ID NO. **GES_SB2_0.5**

| | | |
|---|---|---|
| Project: **Macy's Edison** | Client: **Macy's** | Regulatory Case |
| Address: **401 Clearview Road, Edison NJ** | GES Job #: **0314240** | |
| County: **Middlesex County** | Permit #: **NA** | GES Project Mgr: **James Kearns** |
| Logged By: **Jane Barnes** | Date Drilled: **6/26/14** | Split Spoon/Acetate Sleeve Dia: **NA** |
| Drilling Company: **North Star E&MS** | Completion Date: **6/26/14** | Split Spoon/Acetate Sleeve Length: **NA** |
| Drill Operator: **Trevor Cooper** | Drilling Method: **Mini Excavator** | Soil Classification System: **USCS/Burmister** |
| Drill Rig Type: **JCB ZTS 8030** | Sampling Method: **Trowel** | Field Screening: **PID 10.9 eV Lamp (ppm)** |
| Borehole Diameter: **NA** | Surface Elevation: **NA** | Abandonment Method: **NA** |
| Total Depth: **6.5'** | Depth to Water: **NA** | Backfill Material: **NA** |
| Refusal Depth: **NA** | Well Diameter: **NA** | Abandonment Completion Date: **NA** |

| Depth (feet) | Sample Interval | Field Screen (ppm) 1 10000 | Blow Counts 1 50 | Geologic Description | Comments | Abandonment Detail |
|---|---|---|---|---|---|---|




**Proportions Used:**

| | |
|---|---|
| Trace = | <5% |
| Few = | 5-10% |
| Little = | 10-20% |
| Some = | 20-30% |
| Adjective = | Sand #2 |
| And = | >40% |

**Notes:**

NA = not available; fbg. = feet below grade

in. = inches; ft.= feet; ppm.= parts per million

Soil Lithologies based on field observations only.

E.O.B. = End of Boring

f = fine; m = medium; c = coarse

**Blow Count Pentration Resistance:**

| Consistency (M&C) | Density (G&S) |
|---|---|
| <2 = Very Soft | 0-4 = Very Loose |
| 2-4 = Soft | 4-10 = Loose |
| 4-8 = Medium | 10-30 = Medium |
| 8-15 = Stiff | 30-50 = Dense |
| 15-30 = Very Stiff | 50> = Very Dense |
| >30 = Hard | |

**Symbols:**

Apparent Water Level

Lab Sample Location

# SOIL BORING LOG



**Groundwater & Environmental Services, Inc.**

ID NO. **GES_SB3**

| | | |
|---|---|---|
| Project: **Macy's Edison** | Client: **Macy's** | Regulatory Case |
| Address: **401 Clearview Road, Edison NJ** | GES Job #: **0314240** | |
| County: **Middlesex County** | Permit #: **NA** | GES Project Mgr: **James Kearns** |
| Logged By: **Jane Barnes** | Date Drilled: **6/24/14** | Split Spoon/Acetate Sleeve Dia: **NA** |
| Drilling Company: **North Star E&MS** | Completion Date: **6/24/14** | Split Spoon/Acetate Sleeve Length: **NA** |
| Drill Operator: **Jane Barnes** | Drilling Method: **Hand Clearing** | Soil Classification System: **USCS/Burmister** |
| Drill Rig Type: **Hand Auger** | Sampling Method: **Trowel** | Field Screening: **PID 10.9 eV Lamp (ppm)** |
| Borehole Diameter: **NA** | Surface Elevation: **NA** | Abandonment Method: **NA** |
| Total Depth: **7.0'** | Depth to Water: **NA** | Backfill Material: **NA** |
| Refusal Depth: **NA** | Well Diameter: **NA** | Abandonment Completion Date: **NA** |

| Depth (feet) | Sample Interval | Field Screen (ppm) 1 10000 | Blow Counts 1 50 | Geologic Description | Comments | Abandonment Detail |
|---|---|---|---|---|---|---|
| 0 | GES_SB3_0.5 (0.5'-1.0') | 0 | No Data Collected | (0.0'-0.3') TOPSOIL (roots, organics, light brown medium fine SAND, trace GRAVEL) | GES_SB3_0.5 (0.5'-1.0') | |
| | | | | (0.3'-1.5') FILL (medium to fine tan SAND, trace SILT) | | |
| | | 1.3 | | (1.5'-3.5') FILL (medium to fine orange SAND, trace SILT with black fine CLAY lenses approximately 1" diameter) @3' tan | | |
| | | 2.1 | | (3.5'-3.75') FILL (tan SILTY CLAY) @ 3.75' water | | Backfilled with existing Soils |
| | | | | (3.75'-6.0') Native: orange coarse SAND, saturated with little SILT @ 3.75', @6.0 finer SAND | | |
| 5 | | 0 | | (6.0'-7.0') Native: orange fine to coarse SAND with little SILT | | |

**Proportions Used:**

| | |
|---|---|
| Trace = | <5% |
| Few = | 5-10% |
| Little = | 10-20% |
| Some = | 20-30% |
| Adjective = | Sand #2 |
| And = | >40% |

**Notes:**

NA = not available; fbg. = feet below grade

in. = inches; ft.= feet; ppm.= parts per million

Soil Lithologies based on field observations only.

E.O.B. = End of Boring

f = fine; m = medium; c = coarse

**Blow Count Pentration Resistance:**

| Consistency (M&C) | Density (G&S) |
|---|---|
| <2 = Very Soft | 0-4 = Very Loose |
| 2-4 = Soft | 4-10 = Loose |
| 4-8 = Medium | 10-30 = Medium |
| 8-15 = Stiff | 30-50 = Dense |
| 15-30 = Very Stiff | 50> = Very Dense |
| >30 = Hard | |

**Symbols:**

Apparent Water Level

Lab Sample Location

# SOIL BORING LOG

**Groundwater & Environmental Services, Inc.**

ID NO. **GES_TP4**

| | | |
|---|---|---|
| Project: **Macy's Edison** | Client: **Macy's** | Regulatory Case |
| Address: **401 Clearview Road, Edison NJ** | GES Job #: **0314240** | |
| County: **Middlesex County** | Permit #: **NA** | GES Project Mgr: **James Kearns** |
| Logged By: **Jane Barnes** | Date Drilled: **6/25/14** | Split Spoon/Acetate Sleeve Dia: **NA** |
| Drilling Company: **North Star E&MS** | Completion Date: **6/25/14** | Split Spoon/Acetate Sleeve Length: **NA** |
| Drill Operator: **Trevor Cooper** | Drilling Method: **Mini Excavator** | Soil Classification System: **USCS/Burmister** |
| Drill Rig Type: **JCB ZTS 8030** | Sampling Method: **Trowel** | Field Screening: **PID 10.9 eV Lamp (ppm)** |
| Borehole Diameter: **NA** | Surface Elevation: **NA** | Abandonment Method: **NA** |
| Total Depth: **8.0'** | Depth to Water: **NA** | Backfill Material: **NA** |
| Refusal Depth: **NA** | Well Diameter: **NA** | Abandonment Completion Date: **NA** |

| Depth (feet) | Sample Interval | Field Screen (ppm) 1 10000 | Blow Counts 1 50 | Geologic Description | Comments | Abandonment Detail |
|---|---|---|---|---|---|---|
| 0 | GES_TP4_0.5 (0.5'-1.0') | 0 | No Data Collected | (0.0'-0.5') TOPSOIL (light brown medium/fine SAND, with some GRAVEL, roots) | GES_TP4_0.5 (0.5'-1.0') | Backfilled with existing Soils |
| | | 0 | | (0.5'-1.5') FILL (brown medium/fine SILTY SAND orange fine SAND lenses, concrete blocks) | | |
| | | 0 | | (1.5'-5.0') FILL gray/black CLAY and coarse SAND pockets, trace ash and GRAVEL, cohesive and dense | | |
| | | 0 | | | | |
| | | 0 | | | | |
| | | 0 | | | | |
| 5 | | 0 | | (5.0'-6.0') Native: orange coarse medium SAND non-cohesive | | |
| | | 0 | | (6.0'-8.0') Native: tan medium fine SAND | | |
| | | 0 | | | | |
| | GES_TP4_7.5 (7.5'-8.0') | | | | GES_TP4_7.5 (7.5'-8.0') | |

**Proportions Used:**

| | |
|---|---|
| Trace = | <5% |
| Few = | 5-10% |
| Little = | 10-20% |
| Some = | 20-30% |
| Adjective = | Sand #2 |
| And = | >40% |

**Notes:**

NA = not available; fbg. = feet below grade

in. = inches; ft.= feet; ppm.= parts per million

Soil Lithologies based on field observations only.

E.O.B. = End of Boring

f = fine; m = medium; c = coarse

**Blow Count Pentration Resistance:**

| Consistency (M&C) | Density (G&S) |
|---|---|
| <2 = Very Soft | 0-4 = Very Loose |
| 2-4 = Soft | 4-10 = Loose |
| 4-8 = Medium | 10-30 = Medium |
| 8-15 = Stiff | 30-50 = Dense |
| 15-30 = Very Stiff | 50> = Very Dense |
| >30 = Hard | |

**Symbols:**

Apparent Water Level

Lab Sample Location

# SOIL BORING LOG



**Groundwater & Environmental Services, Inc.**

ID NO. **GES_TP7**

| | | |
|---|---|---|
| Project: **Macy's Edison** | Client: **Macy's** | Regulatory Case |
| Address: **401 Clearview Road, Edison NJ** | GES Job #: **0314240** | |
| County: **Middlesex County** | Permit #: **NA** | GES Project Mgr: **James Kearns** |
| Logged By: **Jane Barnes** | Date Drilled: **6/25/14** | Split Spoon/Acetate Sleeve Dia: **NA** |
| Drilling Company: **North Star E&MS** | Completion Date: **6/25/14** | Split Spoon/Acetate Sleeve Length: **NA** |
| Drill Operator: **Trevor Cooper** | Drilling Method: **Mini Excavator** | Soil Classification System: **USCS/Burmister** |
| Drill Rig Type: **JCB ZTS 8030** | Sampling Method: **Trowel** | Field Screening: **PID 10.9 eV Lamp (ppm)** |
| Borehole Diameter: **NA** | Surface Elevation: **NA** | Abandonment Method: **NA** |
| Total Depth: **3.0'** | Depth to Water: **NA** | Backfill Material: **NA** |
| Refusal Depth: **NA** | Well Diameter: **NA** | Abandonment Completion Date: **NA** |

| Depth (feet) | Sample Interval | Field Screen (ppm) 1 10000 | Blow Counts 1 50 | Geologic Description | Comments | Abandonment Detail |
|---|---|---|---|---|---|---|
| 0 | GES_TP7_0.5 (0.5'-1.0') | | No Data Collected | (0.0'-0.3') TOPSOIL (roots, leaf litter) | GES_TP7_0.5 (0.5'-1.0') | Backfilled with existing Soils |
| | | | | (0.3'-2.5') FILL (brown medium fine SAND, with some SILT, concrete block, GRAVEL, black and gray clay lenses) | | |
| | GES_TP7_2.5 (2.5'-3.0') | | | (2.5'-3.0') Native: tan medium/fine SAND, trace SILT, mottled | GES_TP7_2.5 (2.5'-3.0') | |

**Proportions Used:**

| | |
|---|---|
| Trace = | <5% |
| Few = | 5-10% |
| Little = | 10-20% |
| Some = | 20-30% |
| Adjective = | Sand #2 |
| And = | >40% |

**Notes:**

NA = not available; fbg. = feet below grade

in. = inches; ft.= feet; ppm.= parts per million

Soil Lithologies based on field observations only.

E.O.B. = End of Boring

f = fine; m = medium; c = coarse

**Blow Count Pentration Resistance:**

| Consistency (M&C) | Density (G&S) |
|---|---|
| <2 = Very Soft | 0-4 = Very Loose |
| 2-4 = Soft | 4-10 = Loose |
| 4-8 = Medium | 10-30 = Medium |
| 8-15 = Stiff | 30-50 = Dense |
| 15-30 = Very Stiff | 50> = Very Dense |
| >30 = Hard | |

**Symbols:**

Apparent Water Level

Lab Sample Location

# SOIL BORING LOG



**Groundwater & Environmental Services, Inc.**

ID NO. **GES_TP15**

| | | |
|---|---|---|
| Project: **Macy's Edison** | Client: **Macy's** | Regulatory Case |
| Address: **401 Clearview Road, Edison NJ** | GES Job #: **0314240** | |
| County: **Middlesex County** | Permit #: **NA** | GES Project Mgr: **James Kearns** |
| Logged By: **Jane Barnes** | Date Drilled: **6/25/14** | Split Spoon/Acetate Sleeve Dia: **NA** |
| Drilling Company: **North Star E&MS** | Completion Date: **6/25/14** | Split Spoon/Acetate Sleeve Length: **NA** |
| Drill Operator: **Trevor Cooper** | Drilling Method: **Mini Excavator** | Soil Classification System: **USCS/Burmister** |
| Drill Rig Type: **JCB ZTS 8030** | Sampling Method: **Trowel** | Field Screening: **PID 10.9 eV Lamp (ppm)** |
| Borehole Diameter: **NA** | Surface Elevation: **NA** | Abandonment Method: **NA** |
| Total Depth: **5.5'** | Depth to Water: **NA** | Backfill Material: **NA** |
| Refusal Depth: **NA** | Well Diameter: **NA** | Abandonment Completion Date: **NA** |

| Depth (feet) | Sample Interval | Field Screen (ppm) 1 10000 | Blow Counts 1 50 | Geologic Description | Comments | Abandonment Detail |
|---|---|---|---|---|---|---|
| 0 | GES_TP15_0.5 (0.5'-1.0') | | No Data Collected | (0.0'-0.1') TOPSOIL (brown roots tan medium/fine SAND, mottled with trace SILT at the base of the mound) | GES_TP15_0.5 (0.5'-1.0') | Backfilled with existing Soils |
| | | | | (0.1'-5.0') FILL (brown coarse SAND, trace SILT with some GRAVEL) | | |
| | GES_TP15_1.5 (1.5'-2.0') | | | | GES_TP15_1.5 (1.5'-2.0') | |
| 5 | | | | (5.0'-5.5') Native: tan medium/fine SAND, mottled | | |

**Proportions Used:**

| | |
|---|---|
| Trace = | <5% |
| Few = | 5-10% |
| Little = | 10-20% |
| Some = | 20-30% |
| Adjective = | Sand #2 |
| And = | >40% |

**Notes:**

NA = not available; fbg. = feet below grade

in. = inches; ft.= feet; ppm.= parts per million

Soil Lithologies based on field observations only.

E.O.B. = End of Boring

f = fine; m = medium; c = coarse

**Blow Count Pentration Resistance:**

| Consistency (M&C) | Density (G&S) |
|---|---|
| <2 = Very Soft | 0-4 = Very Loose |
| 2-4 = Soft | 4-10 = Loose |
| 4-8 = Medium | 10-30 = Medium |
| 8-15 = Stiff | 30-50 = Dense |
| 15-30 = Very Stiff | 50> = Very Dense |
| >30 = Hard | |

**Symbols:**

Apparent Water Level

Lab Sample Location

Table 2 - Volatile Organic Compunds
AOC Historic Fill Soil Sampling
Macy's - Raritan Expansion
401 Clearview Road, Edison, NJ

| Sample ID: | Lab Sample ID: | Sample Depth: | Date Sampled: | Matrix: | Units: | 1,1,1-Trichloroethane | 1,1,2,2-Tetrachloroethane | 1,1,2-Trichloro-1,2,2 Trifluoroethane | 1,1,2-Trichloroethane | 1,1-Dichloroethane | 1,1-Dichloroethene | 1,2,3-Trichlorobenzene | 1,2,4-Trichlorobenzene | 1,2-Dibromo-3-chloropropane | 1,2-Dibromoethane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NJ Residential Direct Contact Soil (NJAC 7:26D 6/08) | | | | | | 290 | 1 | NA | 2 | 8 | 11 | NA | 73 | 0.08 | 0.008 |
| NJ Non-Residential Direct Contact Soil (NJAC 7:26D 6/08) | | | | | | 4,200 | 3 | NA | 6 | 24 | 150 | NA | 820 | 0.2 | 0.04 |
| *NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)* | | | | | | *0.3* | *0.007* | *NA* | *0.02* | *0.2* | *0.008* | *NA* | *0.7* | *0.005* | *0.005* |
| AS_SB-7_0.5 | 4070365-10 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | ND (0.00149) | ND (0.000935) | ND (0.00120) | ND (0.00195) | ND (0.000821) | ND (0.000969) | ND (0.000627) | ND (0.000422) | ND (0.00172) | ND (0.000695) |
| GES_TP1_8.0 | 4060880-13 | 8.0-8.5 | 6/26/2014 | Soil | mg/kg | ND (0.00135) | ND (0.000847) | ND (0.00108) | ND (0.00177) | ND (0.000744) | ND (0.000878) | ND (0.000568) | ND (0.000382) | ND (0.00156) | ND (0.000630) |
| GES_TP10_4.0 | 4060795-04 | 4.0-4.5 | 6/24/2014 | Soil | mg/kg | ND (0.00127) | ND (0.000792) | ND (0.00101) | ND (0.00165) | ND (0.000696) | ND (0.000821) | ND (0.000531) | ND (0.000357) | ND (0.00146) | ND (0.000589) |
| GES_TP10_9.0 | 4060795-05 | 9.0-9.5 | 6/24/2014 | Soil | mg/kg | ND (0.00117) | ND (0.000733) | ND (0.000939) | ND (0.00153) | ND (0.000644) | ND (0.000760) | ND (0.000492) | ND (0.000331) | ND (0.00135) | ND (0.000545) |
| GES_TP12_0.5 | 4060795-07 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.00161) | ND (0.00101) | ND (0.00129) | ND (0.00210) | ND (0.000885) | ND (0.00104) | ND (0.000676) | ND (0.000455) | ND (0.00186) | ND (0.000750) |
| GES_TP12_2.0 | 4060795-08 | 2.0-2.5 | 6/24/2014 | Soil | mg/kg | ND (0.00128) | ND (0.000804) | ND (0.00103) | ND (0.00166) | ND (0.000706) | ND (0.000834) | ND (0.000539) | ND (0.000363) | ND (0.00148) | ND (0.000598) |
| GES_TP13_6.0 | 4060795-09 | 6.0-6.5 | 6/24/2014 | Soil | mg/kg | ND (0.00131) | ND (0.000819) | ND (0.00105) | ND (0.00171) | ND (0.000719) | ND (0.000849) | ND (0.000549) | ND (0.000370) | ND (0.00151) | ND (0.000609) |
| GES_TP13_8.5 | 4060795-10 | 8.5-9.0 | 6/24/2014 | Soil | mg/kg | ND (0.00133) | ND (0.000834) | ND (0.00107) | ND (0.00174) | ND (0.000732) | ND (0.000864) | ND (0.000559) | ND (0.000376) | ND (0.00154) | ND (0.000620) |
| GES_TP14_0.5 | 4060795-11 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.00118) | ND (0.000741) | ND (0.000949) | ND (0.00155) | ND (0.000651) | ND (0.000769) | ND (0.000497) | ND (0.000335) | ND (0.00137) | ND (0.000552) |
| GES_TP14_4.0 | 4060880-12 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.00116) | ND (0.000724) | ND (0.000927) | ND (0.00151) | ND (0.000636) | ND (0.000750) | ND (0.000486) | ND (0.000327) | ND (0.00133) | ND (0.000539) |
| GES_TP15_0.5 | 4060831-10 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00138) | ND (0.000865) | ND (0.00111) | ND (0.00180) | ND (0.000759) | ND (0.000897) | ND (0.000580) | ND (0.000390) | ND (0.00159) | ND (0.000643) |
| GES_TP15_1.5 | 4060880-15 | 1.5-2.0 | 6/26/2014 | Soil | mg/kg | ND (0.00149) | ND (0.000931) | ND (0.00119) | ND (0.00194) | ND (0.000818) | ND (0.000965) | ND (0.000625) | ND (0.000420) | ND (0.00172) | ND (0.000693) |
| GES_TP16/17_4.0 | 4060880-11 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.00125) | ND (0.000784) | ND (0.00100) | ND (0.00163) | ND (0.000688) | ND (0.000812) | ND (0.000526) | ND (0.000354) | ND (0.00144) | ND (0.000583) |
| GES_TP16_2.0 | 4060831-11 | 2.0-2.5 | 6/25/2014 | Soil | mg/kg | ND (0.00113) | ND (0.000709) | ND (0.000908) | ND (0.00148) | ND (0.000623) | ND (0.000735) | ND (0.000476) | ND (0.000320) | ND (0.00131) | ND (0.000528) |
| GES_TP17_0.5 | 4060831-05 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00112) | ND (0.000704) | ND (0.000902) | ND (0.00147) | ND (0.000618) | ND (0.000730) | ND (0.000472) | ND (0.000318) | ND (0.00130) | ND (0.000524) |
| GES_TP18_0.5 | 4060795-13 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.00139) | ND (0.000872) | ND (0.00112) | ND (0.00182) | ND (0.000766) | ND (0.000904) | ND (0.000585) | ND (0.000394) | ND (0.00161) | ND (0.000649) |
| GES_TP18_2.0 | 4060880-04 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - |
| GES_TP4_0.5 | 4060831-02 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00135) | ND (0.000843) | ND (0.00108) | ND (0.00176) | ND (0.000740) | ND (0.000873) | ND (0.000565) | ND (0.000380) | ND (0.00155) | ND (0.000627) |
| GES_TP5_0.5 | 4060795-01 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.00145) | ND (0.000910) | ND (0.00117) | ND (0.00190) | ND (0.000799) | ND (0.000944) | ND (0.000611) | ND (0.000411) | ND (0.00168) | ND (0.000677) |
| GES_TP5_3.5 | 4060795-02 | 3.5-4.0 | 6/24/2014 | Soil | mg/kg | ND (0.00140) | ND (0.000874) | ND (0.00112) | ND (0.00182) | ND (0.000767) | ND (0.000906) | ND (0.000586) | ND (0.000394) | ND (0.00161) | ND (0.000650) |
| GES_TP7_0.5 | 4060831-03 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00123) | ND (0.000771) | ND (0.000987) | ND (0.00161) | ND (0.000677) | ND (0.000799) | ND (0.000517) | ND (0.000348) | ND (0.00142) | ND (0.000574) |
| GES_TP8_0.5 | 4060831-04 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00126) | ND (0.000787) | ND (0.00101) | ND (0.00164) | ND (0.000691) | ND (0.000816) | ND (0.000528) | ND (0.000355) | ND (0.00145) | ND (0.000586) |
| GES_TP8_2.0 | 4060880-14 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | ND (0.00177) | ND (0.00111) | ND (0.00142) | ND (0.00231) | ND (0.000973) | ND (0.00115) | ND (0.000743) | ND (0.000500) | ND (0.00204) | ND (0.000824) |
| GES_TP9_0.5 | 4060831-09 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00130) | ND (0.000812) | ND (0.00104) | ND (0.00169) | ND (0.000713) | ND (0.000841) | ND (0.000544) | ND (0.000366) | ND (0.00149) | ND (0.000604) |

**Qualifiers:**

E - Concentration exceeds highest calibration standard
B - Indicates compound found in associated blank
D - Indicates result is based on a dilution
H - Alternate peak selection upon analytical review
J - Indicates estimated value for TICs and all results when detected below the RL
U - Indicates compound analyzed for but not detected
µg/L - Units in Micrograms per Liter
ND - Not Detected
- Not analyzed
NA - Not Available

Table 2 - Volatile Organic Compunds
AOC Historic Fill Soil Sampling
Macy's - Raritan Expansion
401 Clearview Road, Edison, NJ

| Sample ID: | Lab Sample ID: | Sample Depth: | Date Sampled: | Matrix: | Units: | 1,2-Dichlorobenzene | 1,2-Dichloroethane | 1,2-Dichloropropane | 1,3-Dichlorobenzene | 1,4-Dichlorobenzene | 2-Butanone | 2-Hexanone | 4-Methyl-2-pentanone | Acetone | Benzene | Bromochloromethane | Bromodichloromethane | Bromoform |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **NJ Residential Direct Contact Soil (NJAC 7:26D 6/08)** | | | | | | **5,300** | **0.9** | **2** | **5,300** | **5** | **3,100** | **NA** | **NA** | **70,000** | **2** | **NA** | **1** | **81** |
| NJ Non-Residential Direct Contact Soil (NJAC 7:26D 6/08) | | | | | | 59,000 | 3 | 5 | 59,000 | 13 | 44,000 | NA | NA | NA | 5 | NA | 3 | 280 |
| *NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)* | | | | | | *17* | *0.005* | *0.005* | *19* | *2* | *0.9* | *NA* | *NA* | *19* | *0.005* | *NA* | *0.005* | *0.03* |
| AS_SB-7_0.5 | 4070365-10 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | ND (0.000501) | ND (0.000729) | ND (0.000581) | ND (0.000832) | ND (0.000604) | ND (0.00474) | ND (0.00335) | ND (0.00182) | ND (0.00387) | ND (0.000764) | ND (0.000775) | ND (0.00162) | ND (0.000957) |
| GES_TP1_8.0 | 4060880-13 | 8.0-8.5 | 6/26/2014 | Soil | mg/kg | ND (0.000454) | ND (0.000661) | ND (0.000527) | ND (0.000754) | ND (0.000547) | ND (0.00430) | ND (0.00304) | ND (0.00165) | ND (0.00351) | ND (0.000692) | ND (0.000702) | ND (0.00147) | ND (0.000868) |
| GES_TP10_4.0 | 4060795-04 | 4.0-4.5 | 6/24/2014 | Soil | mg/kg | ND (0.000425) | ND (0.000618) | ND (0.000493) | ND (0.000705) | ND (0.000512) | ND (0.00402) | ND (0.00284) | ND (0.00155) | 0.0404 | ND (0.000647) | ND (0.000657) | ND (0.00137) | ND (0.000812) |
| GES_TP10_9.0 | 4060795-05 | 9.0-9.5 | 6/24/2014 | Soil | mg/kg | ND (0.000393) | ND (0.000572) | ND (0.000456) | ND (0.000653) | ND (0.000474) | ND (0.00372) | ND (0.00263) | ND (0.00143) | 0.130 | ND (0.000599) | ND (0.000608) | ND (0.00127) | ND (0.000751) |
| GES_TP12_0.5 | 4060795-07 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.000541) | ND (0.000787) | ND (0.000627) | ND (0.000897) | ND (0.000651) | ND (0.00511) | ND (0.00361) | ND (0.00197) | ND (0.00418) | ND (0.000823) | ND (0.000836) | ND (0.00175) | ND (0.00103) |
| GES_TP12_2.0 | 4060795-08 | 2.0-2.5 | 6/24/2014 | Soil | mg/kg | ND (0.000432) | ND (0.000628) | ND (0.000500) | ND (0.000716) | ND (0.000520) | ND (0.00408) | ND (0.00288) | ND (0.00157) | ND (0.00333) | ND (0.000657) | ND (0.000667) | ND (0.00139) | ND (0.000824) |
| GES_TP13_6.0 | 4060795-09 | 6.0-6.5 | 6/24/2014 | Soil | mg/kg | ND (0.000440) | ND (0.000639) | ND (0.000509) | ND (0.000729) | ND (0.000529) | ND (0.00416) | ND (0.00294) | ND (0.00160) | 0.0928 | ND (0.000669) | ND (0.000679) | ND (0.00142) | ND (0.000839) |
| GES_TP13_8.5 | 4060795-10 | 8.5-9.0 | 6/24/2014 | Soil | mg/kg | ND (0.000447) | ND (0.000651) | ND (0.000519) | ND (0.000742) | ND (0.000539) | ND (0.00423) | ND (0.00299) | ND (0.00163) | ND (0.00346) | ND (0.000681) | ND (0.000692) | ND (0.00144) | ND (0.000854) |
| GES_TP14_0.5 | 4060795-11 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.000398) | ND (0.000579) | ND (0.000461) | ND (0.000660) | ND (0.000479) | ND (0.00376) | ND (0.00266) | ND (0.00145) | ND (0.00307) | ND (0.000606) | ND (0.000615) | ND (0.00128) | ND (0.000759) |
| GES_TP14_4.0 | 4060880-12 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.000388) | ND (0.000565) | ND (0.000450) | ND (0.000645) | ND (0.000468) | ND (0.00367) | ND (0.00260) | ND (0.00141) | ND (0.00300) | ND (0.000592) | ND (0.000600) | ND (0.00125) | ND (0.000742) |
| GES_TP15_0.5 | 4060831-10 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.000464) | ND (0.000675) | ND (0.000538) | ND (0.000770) | ND (0.000559) | ND (0.00439) | ND (0.00310) | ND (0.00169) | ND (0.00359) | ND (0.000707) | ND (0.000717) | ND (0.00150) | ND (0.000886) |
| GES_TP15_1.5 | 4060880-15 | 1.5-2.0 | 6/26/2014 | Soil | mg/kg | ND (0.000500) | ND (0.000727) | ND (0.000579) | ND (0.000829) | ND (0.000602) | ND (0.00473) | ND (0.00334) | ND (0.00182) | ND (0.00386) | ND (0.000761) | ND (0.000772) | ND (0.00161) | ND (0.000954) |
| GES_TP16-17_4.0 | 4060880-11 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.000421) | ND (0.000612) | ND (0.000487) | ND (0.000698) | ND (0.000507) | ND (0.00398) | ND (0.00281) | ND (0.00153) | ND (0.00325) | ND (0.000640) | ND (0.000650) | ND (0.00136) | ND (0.000803) |
| GES_TP16_2.0 | 4060831-11 | 2.0-2.5 | 6/25/2014 | Soil | mg/kg | ND (0.000381) | ND (0.000554) | ND (0.000441) | ND (0.000631) | ND (0.000458) | ND (0.00360) | ND (0.00254) | ND (0.00138) | ND (0.00294) | ND (0.000579) | ND (0.000588) | ND (0.00123) | ND (0.000726) |
| GES_TP17_0.5 | 4060831-05 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.000378) | ND (0.000550) | ND (0.000438) | ND (0.000627) | ND (0.000455) | ND (0.00357) | ND (0.00252) | ND (0.00137) | ND (0.00292) | ND (0.000575) | ND (0.000584) | ND (0.00122) | ND (0.000721) |
| GES_TP18_0.5 | 4060795-13 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.000468) | ND (0.000681) | ND (0.000543) | ND (0.000777) | ND (0.000564) | ND (0.00443) | ND (0.00313) | ND (0.00170) | ND (0.00362) | ND (0.000713) | ND (0.000723) | ND (0.00151) | ND (0.000894) |
| GES_TP18_2.0 | 4060880-04 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - |
| GES_TP4_0.5 | 4060831-02 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.000452) | ND (0.000658) | ND (0.000524) | ND (0.000750) | ND (0.000545) | ND (0.00427) | ND (0.00302) | ND (0.00164) | ND (0.00349) | ND (0.000688) | ND (0.000699) | ND (0.00146) | ND (0.000863) |
| GES_TP5_0.5 | 4060795-01 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.000489) | ND (0.000711) | ND (0.000566) | ND (0.000810) | ND (0.000588) | ND (0.00462) | ND (0.00326) | ND (0.00178) | ND (0.00377) | ND (0.000744) | ND (0.000755) | ND (0.00158) | ND (0.000933) |
| GES_TP5_3.5 | 4060795-02 | 3.5-4.0 | 6/24/2014 | Soil | mg/kg | ND (0.000469) | ND (0.000682) | ND (0.000543) | ND (0.000778) | ND (0.000565) | ND (0.00443) | ND (0.00313) | ND (0.00170) | ND (0.00362) | ND (0.000714) | ND (0.000724) | ND (0.00151) | ND (0.000895) |
| GES_TP7_0.5 | 4060831-03 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.000414) | ND (0.000602) | ND (0.000480) | ND (0.000687) | ND (0.000498) | ND (0.00391) | ND (0.00276) | ND (0.00150) | ND (0.00320) | ND (0.000630) | ND (0.000639) | ND (0.00134) | ND (0.000790) |
| GES_TP8_0.5 | 4060831-04 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.000425) | ND (0.000618) | ND (0.000492) | ND (0.000705) | ND (0.000511) | ND (0.00401) | ND (0.00282) | ND (0.00154) | ND (0.00327) | ND (0.000645) | ND (0.000655) | ND (0.00136) | ND (0.000807) |
| GES_TP8_2.0 | 4060880-14 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | ND (0.000595) | ND (0.000865) | ND (0.000689) | ND (0.000987) | ND (0.000716) | ND (0.00562) | ND (0.00397) | ND (0.0216) | ND (0.00460) | ND (0.000906) | ND (0.000919) | ND (0.00192) | ND (0.00114) |
| GES_TP9_0.5 | 4060831-09 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.000436) | ND (0.000634) | ND (0.000505) | ND (0.000723) | ND (0.000525) | ND (0.00412) | ND (0.00291) | ND (0.00158) | ND (0.00337) | ND (0.000663) | ND (0.000673) | ND (0.00141) | ND (0.000832) |

**Qualifiers:**

E - Concentration exceeds highest calibration standard
B - Indicates compound found in associated blank
D - Indicates result is based on a dilution
H - Alternate peak selection upon analytical review
J - Indicates estimated value for TICs and all results when detected below the RL
U - Indicates compound analyzed for but not detected
µg/L - Units in Micrograms per Liter
ND - Not Detected
- Not analyzed
NA - Not Available

Table 2 - Volatile Organic Compunds
AOC Historic Fill Soil Sampling
Macy's - Raritan Expansion
401 Clearview Road, Edison, NJ

| Sample ID: | Lab Sample ID: | Sample Depth: | Date Sampled: | Matrix: | Units: | Bromomethane | Carbon disulfide | Carbon Tetrachloride | Chlorobenzene | Chlorodibromomethane | Chloroethane | Chloroform | Chloromethane | cis-1,2-Dichloroethene | cis-1,3-Dichloropropene | Cyclohexane | Dichlorodifluoromethane | EthylBenzene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **NJ Residential Direct Contact Soil (NJAC 7:26D 6/08)** | | | | | | **25** | **7,800** | **0.6** | **510** | **3** | **220** | **0.6** | **4** | **230** | **2** | **NA** | **490** | **7,800** |
| NJ Non-Residential Direct Contact Soil (NJAC 7:26D 6/08) | | | | | | 59 | 110,000 | 2 | 7,400 | 8 | 1,100 | 2 | 12 | 560 | 7 | NA | 230000 | 110,000 |
| *NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)* | | | | | | *0.04* | *6* | *0.005* | *0.6* | *0.005* | *NA* | *0.4* | *NA* | *0.3* | *0.005* | *NA* | *39* | *13* |
| AS_SB-7_0.5 | 4070365-10 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | ND (0.00101) | ND (0.000410) | ND (0.00101) | ND (0.000353) | ND (0.000684) | ND (0.00202) | ND (0.00138) | ND (0.000775) | ND (0.000843) | ND (0.000547) | ND (0.00122) | ND (0.00121) | ND (0.000319) |
| GES_TP1_8.0 | 4060880-13 | 8.0-8.5 | 6/26/2014 | Soil | mg/kg | ND (0.000919) | ND (0.000372) | ND (0.000919) | ND (0.000320) | ND (0.000620) | ND (0.00183) | ND (0.00125) | ND (0.000702) | ND (0.000764) | ND (0.000496) | ND (0.00111) | ND (0.00109) | ND (0.000289) |
| GES_TP10_4.0 | 4060795-04 | 4.0-4.5 | 6/24/2014 | Soil | mg/kg | ND (0.000860) | ND (0.000348) | ND (0.000860) | ND (0.000300) | ND (0.000580) | ND (0.00171) | ND (0.00117) | ND (0.000657) | ND (0.000715) | ND (0.000464) | ND (0.00103) | ND (0.00102) | ND (0.000271) |
| GES_TP10_9.0 | 4060795-05 | 9.0-9.5 | 6/24/2014 | Soil | mg/kg | ND (0.000796) | ND (0.000322) | ND (0.000796) | ND (0.000277) | ND (0.000536) | ND (0.00158) | ND (0.00108) | ND (0.000608) | ND (0.000661) | ND (0.000429) | ND (0.000956) | ND (0.000948) | ND (0.000250) |
| GES_TP12_0.5 | 4060795-07 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.00109) | ND (0.000442) | ND (0.00109) | ND (0.000381) | ND (0.000737) | ND (0.00218) | ND (0.00149) | ND (0.000836) | ND (0.000909) | ND (0.000590) | ND (0.00132) | ND (0.00130) | ND (0.000344) |
| GES_TP12_2.0 | 4060795-08 | 2.0-2.5 | 6/24/2014 | Soil | mg/kg | ND (0.000873) | ND (0.000353) | ND (0.000873) | ND (0.000304) | ND (0.000588) | ND (0.00174) | ND (0.00119) | ND (0.000667) | ND (0.000726) | ND (0.000471) | ND (0.00105) | ND (0.00104) | 0.000853 J |
| GES_TP13_6.0 | 4060795-09 | 6.0-6.5 | 6/24/2014 | Soil | mg/kg | ND (0.000889) | ND (0.000360) | ND (0.000889) | ND (0.000310) | ND (0.000599) | ND (0.00177) | ND (0.00121) | ND (0.000679) | ND (0.000739) | ND (0.000479) | ND (0.00107) | ND (0.00106) | ND (0.000280) |
| GES_TP13_8.5 | 4060795-10 | 8.5-9.0 | 6/24/2014 | Soil | mg/kg | ND (0.000905) | ND (0.000366) | ND (0.000905) | ND (0.000315) | ND (0.000610) | ND (0.00180) | ND (0.00123) | ND (0.000692) | ND (0.000753) | ND (0.000488) | ND (0.00109) | ND (0.00108) | ND (0.000285) |
| GES_TP14_0.5 | 4060795-13 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.000805) | ND (0.000325) | ND (0.000805) | ND (0.000280) | ND (0.000542) | ND (0.00160) | ND (0.00109) | ND (0.000615) | ND (0.000669) | ND (0.000434) | ND (0.000967) | ND (0.000958) | ND (0.000253) |
| GES_TP14_4.0 | 4060880-12 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.000860) | ND (0.000348) | ND (0.000860) | ND (0.000299) | ND (0.000580) | ND (0.00171) | ND (0.00117) | ND (0.000657) | ND (0.000715) | ND (0.000464) | ND (0.00103) | ND (0.00102) | 0.000488 J |
| GES_TP15_0.5 | 4060831-10 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.000939) | ND (0.000380) | ND (0.000939) | ND (0.000327) | ND (0.000633) | ND (0.00187) | ND (0.00128) | ND (0.000717) | ND (0.000781) | ND (0.000506) | ND (0.00113) | ND (0.00112) | ND (0.000295) |
| GES_TP15_1.5 | 4060880-15 | 1.5-2.0 | 6/26/2014 | Soil | mg/kg | ND (0.00101) | ND (0.000409) | ND (0.00101) | ND (0.000352) | ND (0.000682) | ND (0.00201) | ND (0.00137) | ND (0.000772) | ND (0.000841) | ND (0.000545) | ND (0.00122) | ND (0.00120) | ND (0.000318) |
| GES_TP16/17_4.0 | 4060880-11 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.000851) | ND (0.000344) | ND (0.000851) | ND (0.000296) | ND (0.000573) | ND (0.00169) | ND (0.00116) | ND (0.000650) | ND (0.000707) | ND (0.000459) | ND (0.00102) | ND (0.00101) | 0.000526 J |
| GES_TP16_2.0 | 4060831-11 | 2.0-2.5 | 6/25/2014 | Soil | mg/kg | ND (0.000770) | ND (0.000311) | ND (0.000770) | ND (0.000268) | ND (0.000519) | ND (0.00153) | ND (0.00105) | ND (0.000588) | ND (0.000640) | ND (0.000415) | ND (0.000925) | ND (0.000917) | ND (0.000242) |
| GES_TP17_0.5 | 4060831-05 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.000764) | ND (0.000309) | ND (0.000764) | ND (0.000266) | ND (0.000515) | ND (0.00152) | ND (0.00104) | ND (0.000584) | ND (0.000635) | ND (0.000412) | ND (0.000919) | ND (0.000910) | ND (0.000240) |
| GES_TP18_0.5 | 4060795-13 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.000947) | ND (0.000383) | ND (0.000947) | ND (0.000330) | ND (0.000638) | ND (0.00188) | ND (0.00129) | ND (0.000723) | ND (0.000787) | ND (0.000511) | ND (0.00114) | ND (0.00113) | ND (0.000298) |
| GES_TP18_2.0 | 4060880-04 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - |
| GES_TP4_0.5 | 4060831-02 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.000914) | ND (0.000370) | ND (0.000914) | ND (0.000319) | ND (0.000616) | ND (0.00182) | ND (0.00124) | ND (0.000699) | ND (0.000760) | ND (0.000493) | ND (0.00110) | ND (0.00109) | ND (0.000288) |
| GES_TP5_0.5 | 4060795-01 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.000988) | ND (0.000400) | ND (0.000988) | ND (0.000344) | ND (0.000666) | ND (0.00197) | ND (0.00134) | ND (0.000755) | ND (0.000822) | ND (0.000533) | ND (0.00119) | ND (0.00118) | ND (0.000311) |
| GES_TP5_3.5 | 4060795-02 | 3.5-4.0 | 6/24/2014 | Soil | mg/kg | ND (0.000948) | ND (0.000384) | ND (0.000948) | ND (0.000330) | ND (0.000639) | ND (0.00189) | ND (0.00129) | ND (0.000724) | ND (0.000788) | ND (0.000511) | ND (0.00114) | ND (0.00113) | 0.00137 J |
| GES_TP7_0.5 | 4060831-03 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.000837) | ND (0.000339) | ND (0.000837) | ND (0.000292) | ND (0.000564) | ND (0.00166) | ND (0.00114) | ND (0.000639) | ND (0.000696) | ND (0.000451) | ND (0.00101) | ND (0.000997) | ND (0.000263) |
| GES_TP6_0.5 | 4060831-04 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.000855) | ND (0.000346) | ND (0.000855) | ND (0.000298) | ND (0.000576) | ND (0.00170) | ND (0.00116) | ND (0.000653) | ND (0.000711) | ND (0.000461) | ND (0.00103) | ND (0.00102) | ND (0.000269) |
| GES_TP8_2.0 | 4060880-14 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | ND (0.00120) | ND (0.000487) | ND (0.00120) | ND (0.000419) | ND (0.000811) | ND (0.00239) | ND (0.00164) | ND (0.000919) | ND (0.001000) | ND (0.000649) | ND (0.00145) | ND (0.00143) | ND (0.000378) |
| GES_TP9_0.5 | 4060831-09 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.000881) | ND (0.000356) | ND (0.000881) | ND (0.000307) | ND (0.000594) | ND (0.00175) | ND (0.00120) | ND (0.000673) | ND (0.000733) | ND (0.000475) | ND (0.00106) | ND (0.00105) | ND (0.000277) |

**Qualifiers:**

E - Concentration exceeds highest calibration standard
B - Indicates compound found in associated blank
D - Indicates result is based on a dilution
H - Alternate peak selection upon analytical review
J - Indicates estimated value for TICs and all results when detected below the RL
U - Indicates compound analyzed for but not detected
µg/L - Units in Micrograms per Liter
ND - Not Detected
- Not analyzed
NA - Not Available

Table 2 - Volatile Organic Compunds
AOC Historic Fill Soil Sampling
Macy's - Raritan Expansion
401 Clearview Road, Edison, NJ

| Sample ID: | Lab Sample ID: | Sample Depth: | Date Sampled: | Matrix: | Units: | Isopropylbenzene | m+p-Xylenes | Methyl Acetate | Methyl tert-Butyl Ether | Methylcyclohexane | Methylene Chloride | o-Xylene | Styrene | tert-Butyl alcohol | Tetrachloroethene | Toluene | Total Xylenes | trans-1,2-Dichloroethene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **NJ Residential Direct Contact Soil (NJAC 7:26D 6/08)** | | | | | | **NA** | **12,000** | **78,000** | **110** | **NA** | **34** | **12,000** | **90** | **1,400** | **2** | **6,300** | **12,000** | **300** |
| NJ Non-Residential Direct Contact Soil (NJAC 7:26D 6/08) | | | | | | NA | 170,000 | NA | 320 | NA | 97 | 170,000 | 260 | 11,000 | 5 | 91,000 | 170,000 | 720 |
| *NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)* | | | | | | *NA* | *19* | *22* | *0.2* | *NA* | *0.01* | *19* | *3* | *0.3* | *0.005* | *7* | *19* | *0.6* |
| AS_SB-7_0.5 | 4070365-10 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | ND (0.000194) | ND (0.000809) | ND (0.00137) | ND (0.000889) | ND (0.000935) | ND (0.00328) | ND (0.000274) | ND (0.000274) | ND (0.0106) | ND (0.000217) | ND (0.000205) | ND (0.000274) | ND (0.000798) |
| GES_TP1_8.0 | 4060880-13 | 8.0-8.5 | 6/26/2014 | Soil | mg/kg | ND (0.000176) | ND (0.000733) | ND (0.00124) | ND (0.000806) | ND (0.000847) | ND (0.00297) | ND (0.000248) | ND (0.000248) | ND (0.00958) | ND (0.000196) | ND (0.000186) | ND (0.000248) | ND (0.000723) |
| GES_TP10_4.0 | 4060795-04 | 4.0-4.5 | 6/24/2014 | Soil | mg/kg | ND (0.000164) | ND (0.000686) | ND (0.00116) | ND (0.000754) | ND (0.000792) | ND (0.00278) | ND (0.000232) | ND (0.000232) | ND (0.00897) | ND (0.000184) | ND (0.000174) | ND (0.000232) | ND (0.000676) |
| GES_TP10_9.0 | 4060795-05 | 9.0-9.5 | 6/24/2014 | Soil | mg/kg | ND (0.000152) | ND (0.000635) | ND (0.00107) | ND (0.000697) | ND (0.000733) | ND (0.00257) | ND (0.000215) | ND (0.000215) | ND (0.00830) | ND (0.000170) | ND (0.000161) | ND (0.000215) | ND (0.000626) |
| GES_TP12_0.5 | 4060795-07 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.000209) | ND (0.000873) | ND (0.00147) | ND (0.000959) | ND (0.00101) | ND (0.00354) | ND (0.000295) | ND (0.000295) | ND (0.0114) | ND (0.000234) | ND (0.000221) | ND (0.000295) | ND (0.000860) |
| GES_TP12_2.0 | 4060795-08 | 2.0-2.5 | 6/24/2014 | Soil | mg/kg | ND (0.000167) | ND (0.000696) | ND (0.00118) | ND (0.000765) | ND (0.000804) | ND (0.00282) | ND (0.000235) | ND (0.000235) | ND (0.00910) | ND (0.000186) | ND (0.000177) | ND (0.000235) | ND (0.000686) |
| GES_TP13_6.0 | 4060795-09 | 6.0-6.5 | 6/24/2014 | Soil | mg/kg | ND (0.000170) | ND (0.000709) | ND (0.00120) | ND (0.000779) | ND (0.000819) | ND (0.00288) | ND (0.000240) | ND (0.000240) | ND (0.00927) | ND (0.000190) | ND (0.000180) | ND (0.000240) | ND (0.000699) |
| GES_TP13_8.5 | 4060795-10 | 8.5-9.0 | 6/24/2014 | Soil | mg/kg | ND (0.000173) | ND (0.000722) | ND (0.00122) | ND (0.000793) | ND (0.000834) | ND (0.00293) | 0.000610 J | ND (0.000244) | ND (0.00944) | ND (0.000193) | ND (0.000183) | 0.00125 J | ND (0.000712) |
| GES_TP14_0.5 | 4060795-11 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.000154) | ND (0.000642) | ND (0.00108) | ND (0.000705) | ND (0.000741) | ND (0.00260) | ND (0.000217) | ND (0.000217) | ND (0.00839) | ND (0.000172) | ND (0.000163) | ND (0.000217) | ND (0.000633) |
| GES_TP14_4.0 | 4060880-12 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.000150) | ND (0.000627) | ND (0.00106) | ND (0.000689) | ND (0.000724) | ND (0.00254) | ND (0.000212) | ND (0.000212) | ND (0.00819) | ND (0.000168) | ND (0.000159) | ND (0.000212) | ND (0.000618) |
| GES_TP15_0.5 | 4060831-10 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.000179) | ND (0.000749) | ND (0.00127) | ND (0.000823) | ND (0.000865) | ND (0.00304) | ND (0.000253) | ND (0.000253) | ND (0.00979) | ND (0.000200) | ND (0.000190) | ND (0.000253) | ND (0.000738) |
| GES_TP15_1.5 | 4060880-15 | 1.5-2.0 | 6/26/2014 | Soil | mg/kg | ND (0.000193) | ND (0.000806) | ND (0.00136) | ND (0.000886) | ND (0.000931) | ND (0.00327) | ND (0.000273) | ND (0.000273) | ND (0.0105) | ND (0.000216) | ND (0.000204) | ND (0.000273) | ND (0.000795) |
| GES_TP16/17_4.0 | 4060880-11 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.000162) | ND (0.000679) | ND (0.00115) | ND (0.000745) | ND (0.000784) | ND (0.00275) | ND (0.000229) | ND (0.000229) | ND (0.00887) | ND (0.000182) | ND (0.000172) | ND (0.000229) | ND (0.000669) |
| GES_TP16_2.0 | 4060831-11 | 2.0-2.5 | 6/25/2014 | Soil | mg/kg | ND (0.000147) | ND (0.000614) | ND (0.00104) | ND (0.000675) | ND (0.000709) | ND (0.00249) | ND (0.000208) | ND (0.000208) | ND (0.00803) | ND (0.000164) | ND (0.000156) | ND (0.000208) | ND (0.000605) |
| GES_TP17_0.5 | 4060831-05 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.000146) | ND (0.000610) | ND (0.00103) | ND (0.000670) | ND (0.000704) | ND (0.00247) | ND (0.000206) | ND (0.000206) | ND (0.00797) | ND (0.000163) | ND (0.000155) | ND (0.000206) | ND (0.000601) |
| GES_TP18_0.5 | 4060795-13 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.000181) | ND (0.000755) | ND (0.00128) | ND (0.000830) | ND (0.000872) | ND (0.00306) | ND (0.000255) | ND (0.000255) | ND (0.00987) | ND (0.000202) | ND (0.000191) | ND (0.000255) | ND (0.000745) |
| GES_TP18_2.0 | 4060880-04 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - |
| GES_TP4_0.5 | 4060831-02 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.000175) | ND (0.000730) | ND (0.00123) | ND (0.000801) | ND (0.000843) | ND (0.00296) | ND (0.000247) | ND (0.000247) | ND (0.00953) | ND (0.000195) | 0.000647 J | ND (0.000247) | ND (0.000719) |
| GES_TP5_0.5 | 4060795-01 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.000189) | ND (0.000788) | ND (0.00133) | ND (0.000866) | ND (0.000910) | ND (0.00320) | ND (0.000266) | ND (0.000266) | ND (0.0103) | ND (0.000211) | ND (0.000200) | ND (0.000266) | ND (0.000777) |
| GES_TP5_3.5 | 4060795-02 | 3.5-4.0 | 6/24/2014 | Soil | mg/kg | ND (0.000181) | ND (0.000756) | ND (0.00128) | ND (0.000831) | ND (0.000874) | ND (0.00307) | ND (0.000256) | ND (0.000256) | ND (0.0989) | ND (0.000202) | ND (0.000192) | ND (0.000256) | ND (0.000746) |
| GES_TP7_0.5 | 4060831-03 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.000160) | ND (0.000668) | ND (0.00113) | ND (0.000734) | ND (0.000771) | ND (0.00271) | ND (0.000226) | ND (0.000226) | ND (0.00873) | ND (0.000179) | ND (0.000169) | ND (0.000226) | ND (0.000658) |
| GES_TP8_0.5 | 4060831-04 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.000163) | ND (0.000682) | ND (0.00115) | ND (0.000749) | ND (0.000787) | ND (0.00277) | ND (0.000230) | ND (0.000230) | ND (0.00891) | ND (0.000182) | ND (0.000173) | ND (0.000230) | ND (0.000672) |
| GES_TP9_2.0 | 4060880-14 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | ND (0.000230) | 0.00116 J | ND (0.00162) | ND (0.00105) | ND (0.00111) | ND (0.00389) | ND (0.000324) | ND (0.000324) | ND (0.0125) | ND (0.000257) | 0.000770 J | 0.00116 J | ND (0.000946) |
| GES_TP9_0.5 | 4060831-09 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.000168) | ND (0.000703) | ND (0.00119) | ND (0.000772) | ND (0.000812) | ND (0.00285) | ND (0.000238) | ND (0.000238) | ND (0.00919) | ND (0.000188) | ND (0.000178) | ND (0.000238) | ND (0.000693) |

**Qualifiers:**

E - Concentration exceeds highest calibration standard
B - Indicates compound found in associated blank
D - Indicates result is based on a dilution
H - Alternate peak selection upon analytical review
J - Indicates estimated value for TICs and all results when detected below the RL
U - Indicates compound analyzed for but not detected
µg/L - Units in Micrograms per Liter
ND - Not Detected
\- Not analyzed
NA - Not Available

Table 2 - Volatile Organic Compunds
AOC Historic Fill Soil Sampling
Macy's - Raritan Expansion
401 Clearview Road, Edison, NJ

| Sample ID: | Lab Sample ID: | Sample Depth: | Date Sampled: | Matrix: | Units: | trans-1,3-Dichloropropene | Trichloroethene | Trichlorofluoromethane | Vinyl chloride | TIC |
|---|---|---|---|---|---|---|---|---|---|---|
| **NJ Residential Direct Contact Soil (NJAC 7:26D 6/08)** | | | | | | **2** | **7** | **23,000** | **0.7** | **NA** |
| NJ Non-Residential Direct Contact Soil (NJAC 7:26D 6/08) | | | | | | 7 | 20 | 340,000 | 2 | NA |
| *NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)* | | | | | | *0.005* | *0.01* | *34* | *0.005* | *NA* |
| AS_SB-7_0.5 | 4070365-10 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | ND (0.000718) | ND (0.000319) | ND (0.00113) | ND (0.000615) | - |
| GES_TP1_8.0 | 4060880-13 | 8.0-8.5 | 6/26/2014 | Soil | mg/kg | ND (0.000651) | ND (0.000289) | ND (0.00102) | ND (0.000558) | - |
| GES_TP10_4.0 | 4060795-04 | 4.0-4.5 | 6/24/2014 | Soil | mg/kg | ND (0.000609) | ND (0.000271) | ND (0.000957) | ND (0.000522) | - |
| GES_TP10_9.0 | 4060795-05 | 9.0-9.5 | 6/24/2014 | Soil | mg/kg | ND (0.000563) | ND (0.000250) | ND (0.000885) | ND (0.000483) | - |
| GES_TP12_0.5 | 4060795-07 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.000774) | ND (0.000344) | ND (0.00122) | ND (0.000664) | 0.00815 J |
| GES_TP12_2.0 | 4060795-08 | 2.0-2.5 | 6/24/2014 | Soil | mg/kg | ND (0.000618) | ND (0.000275) | ND (0.000971) | ND (0.000530) | 0.01229 J |
| GES_TP13_6.0 | 4060795-09 | 6.0-6.5 | 6/24/2014 | Soil | mg/kg | ND (0.000629) | ND (0.000280) | ND (0.000989) | ND (0.000539) | - |
| GES_TP13_8.5 | 4060795-10 | 8.5-9.0 | 6/24/2014 | Soil | mg/kg | ND (0.000641) | ND (0.000285) | ND (0.00101) | ND (0.000549) | - |
| GES_TP14_0.5 | 4060795-11 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.000570) | ND (0.000253) | ND (0.000895) | ND (0.000488) | - |
| GES_TP14_4.0 | 4060880-12 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.000556) | ND (0.000247) | ND (0.000874) | ND (0.000477) | - |
| GES_TP15_0.5 | 4060831-10 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.000665) | ND (0.000295) | ND (0.00104) | ND (0.000570) | - |
| GES_TP15_1.5 | 4060880-15 | 1.5-2.0 | 6/26/2014 | Soil | mg/kg | ND (0.000716) | ND (0.000318) | ND (0.00112) | ND (0.000613) | - |
| GES_TP16/17_4.0 | 4060880-11 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.000602) | ND (0.000268) | ND (0.000946) | ND (0.000516) | - |
| GES_TP16_2.0 | 4060831-11 | 2.0-2.5 | 6/25/2014 | Soil | mg/kg | ND (0.000545) | ND (0.000242) | ND (0.000856) | ND (0.000467) | - |
| GES_TP17_0.5 | 4060831-05 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.000541) | ND (0.000240) | ND (0.000850) | ND (0.000464) | - |
| GES_TP18_0.5 | 4060795-13 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.000670) | ND (0.000298) | ND (0.00105) | ND (0.000574) | - |
| GES_TP18_2.0 | 4060880-04 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - |
| GES_TP4_0.5 | 4060831-02 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.000647) | ND (0.000288) | ND (0.00102) | ND (0.000555) | 0.01326 J |
| GES_TP5_0.5 | 4060795-01 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.000699) | ND (0.000311) | ND (0.00110) | ND (0.000600) | - |
| GES_TP6_0.5 | 4060795-02 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.000739) | ND (0.000329) | ND (0.00116) | ND (0.000633) | 0.006603 J |
| GES_TP7_0.5 | 4060831-03 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.000592) | ND (0.000263) | ND (0.000931) | ND (0.000508) | 0.01513 J |
| GES_TP8_0.5 | 4060831-04 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.000605) | ND (0.000269) | ND (0.000951) | ND (0.000519) | - |
| GES_TP9_2.0 | 4060880-14 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | ND (0.000851) | ND (0.000378) | ND (0.00134) | ND (0.000730) | - |
| GES_TP9_0.5 | 4060831-09 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.000624) | ND (0.000277) | ND (0.000980) | ND (0.000535) | - |

**Qualifiers:**

E - Concentration exceeds highest calibration standard
B - Indicates compound found in associated blank
D - Indicates result is based on a dilution
H - Alternate peak selection upon analytical review
J - Indicates estimated value for TICs and all results when detected below the RL
U - Indicates compound analyzed for but not detected
µg/L - Units in Micrograms per Liter
ND - Not Detected
- Not analyzed
NA - Not Available

Table 3 - Semi - Volatile Organic Compunds
AOC Historic Fill Soil Sampling
Macy's - Raritan Expansion
401 Clearview Road, Edison, NJ

| Sample ID: | Lab Sample ID: | Sample Depth: | Date Sampled: | Matrix: | Units: | 1,2,4,5-Tetrachlorobenzene | 1,2-Diphenylhydrazine | 2,3,4,6-Tetrachlorophenol | 2,4,5-Trichlorophenol | 2,4,6-Trichlorophenol | 2,4-Dichlorophenol | 2,4-Dimethylphenol | 2,4-Dinitrophenol | 2,4-Dinitrotoluene | 2,6-Dinitrotoluene | 2-Chloronaphthalene | 2-Chlorophenol | 2-Methylnaphthalene | 2-Methylphenol | 2-Nitroaniline | 2-Nitrophenol |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NJ Residential Direct Contact Soil (NJAC 7:26D 6/08) | | | | | | NA | 0.7 | NA | 6100 | 19 | 180 | 1200 | 120 | 0.7 | 0.7 | NA | 310 | 230 | 310 | 39 | NA |
| NJ Non-Residential Direct Contact Soil (NJAC 7:26D 6/08) | | | | | | NA | 2 | NA | 68000 | 74 | 2100 | 14000 | 1400 | 2 | 2 | NA | 2200 | 2400 | 2400 | 23000 | NA |
| *NJ Defualt Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)* | | | | | | *NA* | *0.7* | *NA* | *68* | *0.2* | *0.2* | *1* | *0.3* | *0.2* | *0.2* | *NA* | *0.8* | *8* | *NA* | *NA* | *NA* |
| AS_SB-1_0.5 | 4070365-05 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| AS_SB-4_0.5 | 4070365-14 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| AS_SB-5_0.5 | 4070365-09 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| AS_SB-6_0.5 | 4070365-01 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| AS_SB-7_0.5 | 4070365-10 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | ND (0.0485) | ND (0.0153) | ND (0.00984) | ND (0.0106) | ND (0.0226) | ND (0.0151) | ND (0.0233) | ND (0.0163) | ND (0.0230) | ND (0.0223) | ND (0.0228) | ND (0.0156) | 0.164 | ND (0.0159) | ND (0.0164) | ND (0.0294) |
| GES_SB11_0.5 | 4060880-10 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| GES_SB10_0.5 | 4060880-06 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| GES_SB11_0.5 | 4060880-09 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| GES_SB12_0.5 | 4060880-18 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| GES_SB13_0.5 | 4060880-02 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| GES_SB14_0.5 | 4060880-03 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| GES_SB2_0.5 | 4060880-05 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| GES_SB3_0.5 | 4060795-12 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| GES_SB4_0.5 | 4060831-12 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| GES_SB5_0.5 | 4060831-06 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| GES_SB6_0.5 | 4060831-07 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| GES_SB7_0.5 | 4060880-07 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| GES_SB9_0.5 | 4060880-01 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| GES_TP1_0.5 | 4060831-01 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| GES_TP1_8.0 | 4060880-13 | 8.0-8.5 | 6/26/2014 | Soil | mg/kg | ND (0.0458) | ND (0.0144) | ND (0.00929) | ND (0.00997) | ND (0.0213) | ND (0.0142) | ND (0.0220) | ND (0.0154) | ND (0.0217) | ND (0.0210) | ND (0.0215) | ND (0.0147) | ND (0.0233) | ND (0.0150) | ND (0.0155) | ND (0.0278) |
| GES_TP10_4.0 | 4060795-04 | 4.0-4.5 | 6/24/2014 | Soil | mg/kg | ND (0.0514) | ND (0.0162) | ND (0.0104) | ND (0.0112) | ND (0.0239) | ND (0.0160) | ND (0.0247) | ND (0.0173) | ND (0.0243) | ND (0.0236) | ND (0.0242) | ND (0.0165) | ND (0.0261) | ND (0.0168) | ND (0.0174) | ND (0.0312) |
| GES_TP10_9.0 | 4060795-05 | 9.0-9.5 | 6/24/2014 | Soil | mg/kg | ND (0.0508) | ND (0.0160) | ND (0.0103) | ND (0.0110) | ND (0.0236) | ND (0.0158) | ND (0.0244) | ND (0.0171) | ND (0.0240) | ND (0.0233) | ND (0.0239) | ND (0.0163) | ND (0.0258) | ND (0.0166) | ND (0.0171) | ND (0.0308) |
| GES_TP11_0.0 | 4060795-06 | 0.0-0.5 | 6/24/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| GES_TP12_0.5 | 4060795-07 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.0480) | ND (0.0151) | ND (0.00972) | ND (0.0104) | ND (0.0223) | ND (0.0149) | ND (0.0230) | ND (0.0161) | ND (0.0227) | ND (0.0220) | ND (0.0225) | ND (0.0154) | ND (0.0243) | ND (0.0157) | ND (0.0162) | ND (0.0291) |
| GES_TP12_2.0 | 4060795-08 | 2.0-2.5 | 6/24/2014 | Soil | mg/kg | ND (0.0505) | ND (0.0159) | ND (0.0102) | ND (0.0110) | ND (0.0235) | ND (0.0157) | ND (0.0242) | ND (0.0170) | ND (0.0239) | ND (0.0232) | ND (0.0237) | ND (0.0162) | ND (0.0256) | ND (0.0165) | ND (0.0170) | ND (0.0306) |
| GES_TP13_6.0 | 4060795-09 | 6.0-6.5 | 6/24/2014 | Soil | mg/kg | ND (0.0505) | ND (0.0159) | ND (0.0102) | ND (0.0110) | ND (0.0235) | ND (0.0157) | ND (0.0243) | ND (0.0170) | ND (0.0239) | ND (0.0232) | ND (0.0237) | ND (0.0162) | ND (0.0256) | ND (0.0165) | ND (0.0171) | ND (0.0306) |
| GES_TP13_8.5 | 4060795-10 | 8.5-9.0 | 6/24/2014 | Soil | mg/kg | ND (0.0532) | ND (0.0168) | ND (0.0108) | ND (0.0116) | ND (0.0248) | ND (0.0165) | ND (0.0256) | ND (0.0179) | ND (0.0252) | ND (0.0245) | ND (0.0250) | ND (0.0171) | ND (0.0270) | ND (0.0174) | ND (0.0180) | ND (0.0323) |
| GES_TP14_0.5 | 4060795-11 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.0465) | ND (0.0147) | ND (0.00943) | ND (0.0101) | ND (0.0217) | ND (0.0145) | ND (0.0224) | ND (0.0156) | ND (0.0220) | ND (0.0214) | ND (0.0219) | ND (0.0149) | ND (0.0236) | ND (0.0152) | ND (0.0157) | ND (0.0282) |
| GES_TP14_4.0 | 4060880-12 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.0501) | ND (0.0158) | ND (0.0102) | ND (0.0109) | ND (0.0233) | ND (0.0156) | ND (0.0241) | ND (0.0169) | ND (0.0237) | ND (0.0230) | ND (0.0236) | ND (0.0161) | ND (0.0254) | ND (0.0164) | ND (0.0169) | ND (0.0304) |
| GES_TP15_0.5 | 4060831-10 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0496) | ND (0.0156) | ND (0.0101) | ND (0.0108) | ND (0.0231) | ND (0.0154) | ND (0.0238) | ND (0.0167) | ND (0.0235) | ND (0.0228) | ND (0.0233) | ND (0.0159) | ND (0.0252) | ND (0.0162) | ND (0.0168) | ND (0.0301) |
| GES_TP15_1.5 | 4060880-15 | 1.5-2.0 | 6/26/2014 | Soil | mg/kg | ND (0.0504) | ND (0.0159) | ND (0.0102) | ND (0.0110) | ND (0.0235) | ND (0.0157) | ND (0.0242) | ND (0.0169) | ND (0.0238) | ND (0.0231) | ND (0.0237) | ND (0.0162) | ND (0.0256) | ND (0.0165) | ND (0.0170) | ND (0.0306) |
| GES_TP16/17_4.0 | 4060880-11 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.0475) | ND (0.0150) | ND (0.00962) | ND (0.0103) | ND (0.0221) | ND (0.0148) | ND (0.0228) | ND (0.0160) | ND (0.0225) | ND (0.0218) | ND (0.0223) | ND (0.0153) | ND (0.0241) | ND (0.0155) | ND (0.0160) | ND (0.0288) |
| GES_TP16_2.0 | 4060831-11 | 2.0-2.5 | 6/25/2014 | Soil | mg/kg | ND (0.0967) | ND (0.0305) | ND (0.0196) | ND (0.0210) | ND (0.0450) | ND (0.0300) | ND (0.0464) | ND (0.0325) | ND (0.0457) | ND (0.0444) | ND (0.0454) | ND (0.0311) | 0.726 D | ND (0.0316) | ND (0.0327) | ND (0.0586) |
| GES_TP17_0.5 | 4060831-05 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0480) | ND (0.0151) | ND (0.00973) | ND (0.0104) | ND (0.0223) | ND (0.0149) | ND (0.0231) | ND (0.0161) | ND (0.0227) | ND (0.0221) | ND (0.0226) | ND (0.0154) | 0.557 | ND (0.0157) | ND (0.0162) | ND (0.0291) |
| GES_TP18_0.5 | 4060795-13 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.0491) | ND (0.0155) | ND (0.00995) | ND (0.0107) | ND (0.0228) | ND (0.0153) | ND (0.0236) | ND (0.0165) | ND (0.0232) | ND (0.0225) | ND (0.0231) | ND (0.0158) | ND (0.0249) | ND (0.0161) | ND (0.0166) | ND (0.0298) |
| GES_TP18_2.0 | 4060880-04 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| GES_TP4_0.5 | 4060831-02 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0501) | ND (0.0158) | ND (0.0102) | ND (0.0109) | ND (0.0233) | ND (0.0156) | ND (0.0241) | ND (0.0169) | ND (0.0237) | ND (0.0230) | ND (0.0236) | ND (0.0161) | ND (0.0254) | ND (0.0164) | ND (0.0169) | ND (0.0304) |
| GES_TP5_0.5 | 4060795-01 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.0522) | ND (0.0165) | ND (0.0106) | ND (0.0114) | ND (0.0243) | ND (0.0162) | ND (0.0251) | ND (0.0176) | ND (0.0247) | ND (0.0240) | ND (0.0245) | ND (0.0168) | ND (0.0265) | ND (0.0171) | ND (0.0176) | ND (0.0317) |
| GES_TP5_3.5 | 4060795-02 | 3.5-4.0 | 6/24/2014 | Soil | mg/kg | ND (0.0482) | ND (0.0152) | ND (0.00977) | ND (0.0105) | ND (0.0224) | ND (0.0150) | ND (0.0232) | ND (0.0162) | ND (0.0228) | ND (0.0221) | ND (0.0227) | ND (0.0155) | ND (0.0245) | ND (0.0158) | ND (0.0163) | ND (0.0292) |
| GES_TP6_0.0 | 4060795-03 | 0.0-0.5 | 6/24/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| GES_TP7_0.5 | 4060831-03 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0484) | ND (0.0153) | ND (0.00981) | ND (0.0105) | ND (0.0225) | ND (0.0150) | ND (0.0232) | ND (0.0163) | ND (0.0229) | ND (0.0222) | ND (0.0227) | ND (0.0155) | ND (0.0246) | ND (0.0158) | ND (0.0163) | ND (0.0294) |
| GES_TP8_0.5 | 4060831-04 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0477) | ND (0.0150) | ND (0.00967) | ND (0.0104) | ND (0.0222) | ND (0.0148) | ND (0.0229) | ND (0.0160) | ND (0.0226) | ND (0.0219) | ND (0.0224) | ND (0.0153) | ND (0.0242) | ND (0.0156) | ND (0.0161) | ND (0.0289) |
| GES_TP9_2.0 | 4060880-14 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | ND (0.0552) | ND (0.0174) | ND (0.0112) | ND (0.0120) | ND (0.0257) | ND (0.0171) | ND (0.0265) | ND (0.0185) | ND (0.0261) | ND (0.0253) | ND (0.0259) | ND (0.0177) | ND (0.0280) | ND (0.0181) | ND (0.0186) | ND (0.0335) |
| GES_TP9_0.5 | 4060831-09 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0483) | ND (0.0152) | ND (0.00979) | ND (0.0105) | ND (0.0225) | ND (0.0150) | ND (0.0232) | ND (0.0162) | ND (0.0228) | ND (0.0222) | ND (0.0227) | ND (0.0155) | ND (0.0245) | ND (0.0158) | ND (0.0163) | ND (0.0293) |

**Qualifiers:**

E - Concentration exceeds highest calibration standard
B - Indicates compound found in associated blank
D - Indicates result is based on a dilution
H - Alternate peak selection upon analytical review
U - Indicates compound analyzed for but not detected
J - Indicates estimated value for TIC's and all results when detected below the RL

NA - Not Available
µg/L - Units in Micrograms per Liter
ND - Not Detected
- Not analyzed

Table 3 - Semi - Volatile Organic Compunds
AOC Historic Fill Soil Sampling
Macy's - Raritan Expansion
401 Clearview Road, Edison, NJ

| Sample ID: | Lab Sample ID: | Sample Depth: | Date Sampled: | Matrix: | Units: | 3+4-Methylphenol | 3,3'-Dichlorobenzidine | 3-Nitroaniline | 4,6-Dinitro-2-methylphenol | 4-Bromophenyl-phenyl ether | 4-Chloro-3-methylphenol | 4-Chloroaniline | 4-Chlorophenyl phenyl ether | 4-Nitroaniline | 4-Nitrophenol | Acenaphthene | Acenaphthylene | Acetophenone | Anthracene | Atrazine | Benzaldehyde | Benzidine |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **NJ Residential Direct Contact Soil (NJAC 7:26D 6/08)** | | | | | | **31** | **1** | **NA** | **6** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **3400** | **NA** | **2** | **17000** | **210** | **6100** | **0.7** |
| NJ Non-Residential Direct Contact Soil (NJAC 7:26D 6/08) | | | | | | 340 | 4 | NA | 68 | NA | NA | NA | NA | NA | NA | 37000 | 300000 | 5 | 30000 | 2400 | 68000 | 0.7 |
| *NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)* | | | | | | *NA* | *0.2* | *NA* | *0.3* | *NA* | *NA* | *NA* | *NA* | *NA* | *NA* | *110* | *NA* | *3* | *2400* | *0.2* | *NA* | *0.7* |
| AS_SB-1_0.5 | 4070365-05 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | ND (0.0183) | ND (0.0208) | - | ND (0.0192) | - | - | - |
| AS_SB-4_0.5 | 4070365-14 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | ND (0.0189) | 0.0710 J | - | 0.118 J | - | - | - |
| AS_SB-5_0.5 | 4070365-09 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | ND (0.0184) | ND (0.0209) | - | ND (0.0193) | - | - | - |
| AS_SB-6_0.5 | 4070365-01 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | 0.0475 J | ND (0.0212) | - | 0.195 | - | - | - |
| AS_SB-7_0.5 | 4070365-10 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | ND (0.0228) | ND (0.0882) | ND (0.0238) | ND (0.0210) | ND (0.0280) | ND (0.0227) | ND (0.0195) | ND (0.0171) | ND (0.0187) | ND (0.0220) | 0.283 | 0.233 | ND (0.0318) | 0.775 | ND (0.0669) | ND (0.0448) | ND (0.333) |
| GES_SB1_0.5 | 4060880-10 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | 0.586 D | 2.01 D | - | 4.44 D | - | - | - |
| GES_SB10_0.5 | 4060880-06 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | ND (0.0206) | ND (0.0235) | - | ND (0.0217) | - | - | - |
| GES_SB11_0.5 | 4060880-09 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | ND (0.0187) | ND (0.0213) | - | ND (0.0196) | - | - | - |
| GES_SB12_0.5 | 4060880-18 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | ND (0.0184) | 0.377 | - | 0.495 | - | - | - |
| GES_SB13_0.5 | 4060880-02 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | ND (0.0191) | ND (0.0218) | - | 0.0444 J | - | - | - |
| GES_SB14_0.5 | 4060880-03 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | ND (0.0196) | ND (0.0223) | - | ND (0.0206) | - | - | - |
| GES_SB2_0.5 | 4060880-05 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | ND (0.0181) | ND (0.0207) | - | 0.0359 J | - | - | - |
| GES_SB3_0.5 | 4060795-12 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | | | ND (0.0185) | ND (0.0210) | - | ND (0.0194) | - | - | - |
| GES_SB4_0.5 | 4060831-12 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | ND (0.0194) | ND (0.0221) | - | ND (0.0203) | - | - | - |
| GES_SB5_0.5 | 4060831-06 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | ND (0.0191) | 0.217 | - | 0.437 | - | - | - |
| GES_SB6_0.5 | 4060831-07 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | ND (0.0184) | ND (0.0210) | - | ND (0.0193) | - | - | - |
| GES_SB7_0.5 | 4060880-07 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | ND (0.0206) | ND (0.0235) | - | ND (0.0217) | - | - | - |
| GES_SB9_0.5 | 4060880-01 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | ND (0.0192) | ND (0.0219) | - | ND (0.0201) | - | - | - |
| GES_TP1_0.5 | 4060831-01 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | ND (0.0191) | ND (0.0217) | - | ND (0.0200) | - | - | - |
| GES_TP1_8.0 | 4060880-13 | 8.0-8.5 | 6/26/2014 | Soil | mg/kg | ND (0.0215) | ND (0.0832) | ND (0.0224) | ND (0.0198) | ND (0.0264) | ND (0.0214) | ND (0.0184) | ND (0.0161) | ND (0.0177) | ND (0.0208) | ND (0.0177) | ND (0.0202) | ND (0.0300) | ND (0.0186) | ND (0.0631) | ND (0.0423) | ND (0.314) |
| GES_TP10_4.0 | 4060795-04 | 4.0-4.5 | 6/24/2014 | Soil | mg/kg | ND (0.0242) | ND (0.0934) | ND (0.0252) | ND (0.0222) | ND (0.0297) | ND (0.0240) | ND (0.0206) | ND (0.0181) | ND (0.0198) | ND (0.0233) | 0.173 | 0.178 | ND (0.0337) | 0.594 | ND (0.0709) | ND (0.0475) | ND (0.353) |
| GES_TP10_9.0 | 4060795-05 | 9.0-9.5 | 6/24/2014 | Soil | mg/kg | ND (0.0239) | ND (0.0922) | ND (0.0248) | ND (0.0219) | ND (0.0293) | ND (0.0237) | ND (0.0203) | ND (0.0178) | ND (0.0196) | ND (0.0230) | ND (0.0197) | ND (0.0224) | ND (0.0332) | 0.0732 J | ND (0.0700) | ND (0.0469) | ND (0.348) |
| GES_TP11_0.0 | 4060795-06 | 0.0-0.5 | 6/24/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | ND (0.0187) | 0.0914 J | - | 0.0718 J | - | - | - |
| GES_TP12_0.5 | 4060795-07 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.0225) | ND (0.0872) | ND (0.0235) | ND (0.0207) | ND (0.0277) | ND (0.0224) | ND (0.0192) | ND (0.0169) | ND (0.0185) | ND (0.0218) | ND (0.0186) | ND (0.0212) | ND (0.0314) | ND (0.0195) | ND (0.0661) | ND (0.0443) | ND (0.329) |
| GES_TP12_2.0 | 4060795-08 | 2.0-2.5 | 6/24/2014 | Soil | mg/kg | ND (0.0237) | ND (0.0917) | ND (0.0247) | ND (0.0218) | ND (0.0291) | ND (0.0236) | ND (0.0202) | ND (0.0177) | ND (0.0195) | ND (0.0229) | ND (0.0195) | ND (0.0223) | ND (0.0330) | ND (0.0205) | ND (0.0696) | ND (0.0466) | ND (0.346) |
| GES_TP13_6.0 | 4060795-09 | 6.0-6.5 | 6/24/2014 | Soil | mg/kg | ND (0.0237) | ND (0.0918) | ND (0.0247) | ND (0.0218) | ND (0.0291) | ND (0.0236) | ND (0.0202) | ND (0.0177) | ND (0.0195) | ND (0.0229) | ND (0.0196) | ND (0.0223) | ND (0.0331) | 0.0698 J | ND (0.0696) | ND (0.0466) | ND (0.347) |
| GES_TP13_8.5 | 4060795-10 | 8.5-9.0 | 6/24/2014 | Soil | mg/kg | ND (0.0250) | ND (0.0967) | ND (0.0261) | ND (0.0230) | ND (0.0307) | ND (0.0249) | ND (0.0213) | ND (0.0187) | ND (0.0205) | ND (0.0241) | ND (0.0206) | ND (0.0235) | ND (0.0348) | ND (0.0217) | ND (0.0734) | ND (0.0492) | ND (0.365) |
| GES_TP14_0.5 | 4060795-11 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.0219) | ND (0.0845) | ND (0.0228) | ND (0.0201) | ND (0.0268) | ND (0.0217) | ND (0.0186) | ND (0.0163) | ND (0.0180) | ND (0.0211) | 0.0503 J | 0.494 | ND (0.0305) | 0.775 | ND (0.0641) | ND (0.0430) | ND (0.319) |
| GES_TP14_4.0 | 4060880-12 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.0236) | ND (0.0911) | ND (0.0245) | ND (0.0217) | ND (0.0289) | ND (0.0234) | ND (0.0201) | ND (0.0176) | ND (0.0193) | ND (0.0227) | ND (0.0194) | ND (0.0221) | ND (0.0328) | ND (0.0204) | ND (0.0691) | ND (0.0463) | ND (0.344) |
| GES_TP15_0.5 | 4060831-10 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0233) | ND (0.0901) | ND (0.0243) | ND (0.0214) | ND (0.0286) | ND (0.0232) | ND (0.0199) | ND (0.0174) | ND (0.0191) | ND (0.0225) | ND (0.0192) | ND (0.0219) | ND (0.0325) | ND (0.0202) | ND (0.0684) | ND (0.0458) | ND (0.340) |
| GES_TP15_1.5 | 4060880-15 | 1.5-2.0 | 6/26/2014 | Soil | mg/kg | ND (0.0237) | ND (0.0915) | ND (0.0247) | ND (0.0218) | ND (0.0290) | ND (0.0235) | ND (0.0202) | ND (0.0177) | ND (0.0194) | ND (0.0228) | ND (0.0195) | ND (0.0222) | ND (0.0330) | ND (0.0205) | ND (0.0694) | ND (0.0465) | ND (0.346) |
| GES_TP16/17_4.0 | 4060880-11 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.0223) | ND (0.0863) | ND (0.0232) | ND (0.0205) | ND (0.0274) | ND (0.0222) | ND (0.0190) | ND (0.0167) | ND (0.0183) | ND (0.0215) | ND (0.0184) | ND (0.0210) | ND (0.0311) | ND (0.0193) | ND (0.0654) | ND (0.0438) | ND (0.326) |
| GES_TP16_2.0 | 4060831-11 | 2.0-2.5 | 6/25/2014 | Soil | mg/kg | ND (0.0454) | ND (0.176) | ND (0.0473) | ND (0.0418) | ND (0.0557) | ND (0.0451) | ND (0.0388) | ND (0.0340) | ND (0.0373) | ND (0.0438) | 0.971 D | 1.69 D | ND (0.0633) | 3.66 D | ND (0.133) | ND (0.0893) | ND (0.663) |
| GES_TP17_0.5 | 4060831-05 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0226) | ND (0.0872) | ND (0.0235) | ND (0.0208) | ND (0.0277) | ND (0.0224) | ND (0.0192) | ND (0.0169) | ND (0.0185) | ND (0.0218) | 0.583 | 0.371 | ND (0.0314) | 1.68 | ND (0.0662) | ND (0.0443) | ND (0.329) |
| GES_TP18_0.5 | 4060795-13 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.0231) | ND (0.0892) | ND (0.0240) | ND (0.0212) | ND (0.0283) | ND (0.0229) | ND (0.0197) | ND (0.0172) | ND (0.0189) | ND (0.0223) | ND (0.0190) | ND (0.0217) | ND (0.0321) | ND (0.0200) | ND (0.0676) | ND (0.0453) | ND (0.337) |
| GES_TP18_2.0 | 4060880-04 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| GES_TP4_0.5 | 4060831-02 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0236) | ND (0.0911) | ND (0.0245) | ND (0.0217) | ND (0.0289) | ND (0.0234) | ND (0.0201) | ND (0.0176) | ND (0.0193) | ND (0.0227) | ND (0.0194) | ND (0.0221) | ND (0.0328) | ND (0.0204) | ND (0.0691) | ND (0.0463) | ND (0.344) |
| GES_TP5_0.5 | 4060795-01 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.0245) | ND (0.0948) | ND (0.0256) | ND (0.0226) | ND (0.0301) | ND (0.0244) | ND (0.0209) | ND (0.0183) | ND (0.0201) | ND (0.0237) | ND (0.0202) | 0.138 J | ND (0.0342) | 0.191 | ND (0.0720) | ND (0.0482) | ND (0.358) |
| GES_TP5_3.5 | 4060795-02 | 3.5-4.0 | 6/24/2014 | Soil | mg/kg | ND (0.0227) | ND (0.0876) | ND (0.0236) | ND (0.0208) | ND (0.0278) | ND (0.0225) | ND (0.0193) | ND (0.0169) | ND (0.0186) | ND (0.0219) | ND (0.0187) | ND (0.0213) | ND (0.0316) | 0.188 | ND (0.0664) | ND (0.0445) | ND (0.331) |
| GES_TP6_0.0 | 4060795-03 | 0.0-0.5 | 6/24/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | ND (0.0186) | ND (0.0211) | - | ND (0.0195) | - | - | - |
| GES_TP7_0.5 | 4060831-03 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0227) | ND (0.0879) | ND (0.0237) | ND (0.0209) | ND (0.0279) | ND (0.0226) | ND (0.0194) | ND (0.0170) | ND (0.0187) | ND (0.0219) | ND (0.0187) | ND (0.0214) | ND (0.0317) | ND (0.0197) | ND (0.0667) | ND (0.0447) | ND (0.332) |
| GES_TP8_0.5 | 4060831-04 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0224) | ND (0.0867) | ND (0.0234) | ND (0.0206) | ND (0.0275) | ND (0.0223) | ND (0.0191) | ND (0.0168) | ND (0.0184) | ND (0.0216) | ND (0.0185) | ND (0.0211) | ND (0.0312) | ND (0.0194) | ND (0.0658) | ND (0.0441) | ND (0.327) |
| GES_TP8_2.0 | 4060880-14 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | ND (0.0259) | ND (0.100) | ND (0.0270) | ND (0.0238) | ND (0.0318) | ND (0.0258) | ND (0.0221) | ND (0.0194) | ND (0.0213) | ND (0.0250) | ND (0.0214) | ND (0.0243) | ND (0.0361) | ND (0.0224) | ND (0.0760) | ND (0.0509) | ND (0.378) |
| GES_TP9_0.5 | 4060831-09 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0227) | ND (0.0877) | ND (0.0236) | ND (0.0209) | ND (0.0278) | ND (0.0226) | ND (0.0194) | ND (0.0170) | ND (0.0186) | ND (0.0219) | ND (0.0187) | ND (0.0213) | ND (0.0316) | 0.0523 J | ND (0.0666) | ND (0.0446) | ND (0.331) |

**Qualifiers:**

E - Concentration exceeds highest calibration standard
B - Indicates compound found in associated blank
D - Indicates result is based on a dilution
H - Alternate peak selection upon analytical review
U - Indicates compound analyzed for but not detected
J - Indicates estimated value for TICs and all results when detected below the RL

NA - Not Available
µg/L - Units in Micrograms per Liter
ND - Not Detected
- Not analyzed

Table 3 - Semi - Volatile Organic Compunds
AOC Historic Fill Soil Sampling
Macy's - Raritan Expansion
401 Clearview Road, Edison, NJ

| Sample ID: | Lab Sample ID: | Sample Depth: | Date Sampled: | Matrix: | Units: | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Benzyl alcohol | Biphenyl | bis(2-chloroethoxy)methane | bis(2-chloroethyl)ether | bis(2-chloroisopropyl)ether | bis(2-ethylhexyl)phthalate | Butylbenzylphthalate | Caprolactam | Carbazole | Chrysene | Di-n-butylphthalate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NJ Residential Direct Contact Soil (NJAC 7:26D 6/08) | | | | | | 0.6 | 0.2 | 0.6 | 380000 | 6 | NA | 3100 | NA | 0.4 | 23 | 35 | 1200 | 31000 | 24 | 62 | 6100 |
| NJ Non-Residential Direct Contact Soil (NJAC 7:26D 6/08) | | | | | | 2 | 0.2 | 2 | 380000 | 23 | NA | 34000 | NA | 2 | 67 | 140 | 140000 | 340000 | 96 | 230 | 68000 |
| *NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)* | | | | | | 0.8 | 0.2 | 2 | NA | 25 | NA | 140 | NA | 0.2 | 5 | 120 | 230 | 12 | NA | 80 | 760 |
| AS_SB-1_0.5 | 4070365-05 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | ND (0.0160) | ND (0.0125) | ND (0.0241) | ND (0.0285) | ND (0.0259) | - | - | - | - | - | - | - | - | - | ND (0.0251) | - |
| AS_SB-4_0.5 | 4070365-14 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | 0.540 | 0.435 | 0.478 | 0.125 J | 0.134 J | - | - | - | - | - | - | - | - | - | 0.438 | - |
| AS_SB-5_0.5 | 4070365-09 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | ND (0.0161) | ND (0.0125) | ND (0.0243) | ND (0.0287) | ND (0.0261) | - | - | - | - | - | - | - | - | - | ND (0.0253) | - |
| AS_SB-6_0.5 | 4070365-01 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | 0.543 | 0.463 | 0.529 | 0.185 | 0.238 | - | - | - | - | - | - | - | - | - | 0.501 | - |
| AS_SB-7_0.5 | 4070365-10 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | 2.09 | 1.63 | 1.86 | 0.640 | 1.04 | ND (0.0261) | ND (0.0224) | ND (0.0287) | ND (0.0135) | ND (0.0281) | 0.0722 J | ND (0.0234) | ND (0.0133) | ND (0.0219) | 1.86 | ND (0.0231) |
| GES_SB1_0.5 | 4060880-10 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | 7.15 D | 5.77 D | 6.94 D | 2.90 D | 2.23 D | - | - | - | - | - | - | - | - | - | 7.07 D | - |
| GES_SB10_0.5 | 4060880-06 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | ND (0.0181) | ND (0.0141) | ND (0.0273) | ND (0.0322) | ND (0.0293) | - | - | - | - | - | - | - | - | - | ND (0.0284) | - |
| GES_SB11_0.5 | 4060880-09 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | ND (0.0163) | ND (0.0127) | 0.0449 J | ND (0.0292) | ND (0.0265) | - | - | - | - | - | - | - | - | - | 0.0434 J | - |
| GES_SB12_0.5 | 4060880-18 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | 0.881 | 0.762 | 1.19 | 0.339 | 0.456 | - | - | - | - | - | - | - | - | - | 1.01 | - |
| GES_SB13_0.5 | 4060880-02 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | 0.0563 J | 0.0474 J | 0.0800 J | ND (0.0298) | ND (0.0271) | - | - | - | - | - | - | - | - | - | 0.0822 J | - |
| GES_SB14_0.5 | 4060880-03 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | ND (0.0172) | ND (0.0134) | ND (0.0259) | ND (0.0306) | ND (0.0278) | - | - | - | - | - | - | - | - | - | ND (0.0270) | - |
| GES_SB2_0.5 | 4060880-05 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | 0.0612 J | 0.0577 J | 0.0921 J | 0.0366 J | 0.0373 J | - | - | - | - | - | - | - | - | - | 0.0802 J | - |
| GES_SB3_0.5 | 4060795-12 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | 0.0509 J | ND (0.0126) | 0.0523 J | ND (0.0288) | ND (0.0262) | - | - | - | - | - | - | - | - | - | 0.0401 J | - |
| GES_SB4_0.5 | 4060831-12 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 0.0578 J | 0.0533 J | 0.0691 J | ND (0.0302) | ND (0.0275) | - | - | - | - | - | - | - | - | - | 0.0541 J | - |
| GES_SB5_0.5 | 4060831-06 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 0.901 | 0.691 | 1.09 | 0.191 | 0.526 | - | - | - | - | - | - | - | - | - | 0.746 | - |
| GES_SB6_0.5 | 4060831-07 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0161) | ND (0.0125) | ND (0.0243) | ND (0.0287) | ND (0.0261) | - | - | - | - | - | - | - | - | - | ND (0.0253) | - |
| GES_SB7_0.5 | 4060880-07 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | ND (0.0181) | ND (0.0141) | ND (0.0273) | ND (0.0322) | ND (0.0293) | - | - | - | - | - | - | - | - | - | ND (0.0284) | - |
| GES_SB9_0.5 | 4060880-01 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | ND (0.0168) | ND (0.0131) | ND (0.0253) | ND (0.0300) | ND (0.0272) | - | - | - | - | - | - | - | - | - | ND (0.0264) | - |
| GES_TP1_0.5 | 4060831-01 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0167) | ND (0.0130) | ND (0.0252) | ND (0.0298) | ND (0.0271) | - | - | - | - | - | - | - | - | - | ND (0.0263) | - |
| GES_TP1_8.0 | 4060880-13 | 8.0-8.5 | 6/26/2014 | Soil | mg/kg | ND (0.0155) | ND (0.0121) | ND (0.0235) | ND (0.0277) | ND (0.0252) | ND (0.0246) | ND (0.0211) | ND (0.0271) | ND (0.0127) | ND (0.0266) | ND (0.0176) | ND (0.0221) | ND (0.0126) | ND (0.0206) | ND (0.0244) | ND (0.0218) |
| GES_TP10_4.0 | 4060795-04 | 4.0-4.5 | 6/24/2014 | Soil | mg/kg | 1.52 | 1.14 | 1.28 | 0.279 | 0.646 | ND (0.0276) | ND (0.0237) | ND (0.0304) | ND (0.0143) | ND (0.0298) | ND (0.0198) | ND (0.0248) | ND (0.0141) | ND (0.0232) | 1.36 | ND (0.0245) |
| GES_TP10_9.0 | 4060795-05 | 9.0-9.5 | 6/24/2014 | Soil | mg/kg | 0.225 | 0.191 | 0.258 | 0.0633 J | 0.0847 J | ND (0.0273) | ND (0.0234) | ND (0.0300) | ND (0.0141) | ND (0.0294) | ND (0.0195) | ND (0.0245) | ND (0.0139) | ND (0.0229) | 0.249 | ND (0.0242) |
| GES_TP11_0.0 | 4060795-06 | 0.0-0.5 | 6/24/2014 | Soil | mg/kg | 0.223 | 0.243 | 0.330 | 0.114 J | 0.141 J | - | - | - | - | - | - | - | - | - | 0.334 | - |
| GES_TP12_0.5 | 4060795-07 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.0163) | ND (0.0127) | ND (0.0246) | ND (0.0290) | ND (0.0264) | ND (0.0258) | ND (0.0221) | ND (0.0284) | ND (0.0133) | ND (0.0278) | ND (0.0184) | ND (0.0231) | ND (0.0132) | ND (0.0216) | ND (0.0256) | ND (0.0228) |
| GES_TP12_2.0 | 4060795-08 | 2.0-2.5 | 6/24/2014 | Soil | mg/kg | ND (0.0171) | ND (0.0133) | ND (0.0258) | ND (0.0305) | ND (0.0277) | ND (0.0271) | ND (0.0233) | ND (0.0299) | ND (0.0140) | ND (0.0292) | ND (0.0194) | ND (0.0243) | ND (0.0139) | ND (0.0227) | ND (0.0269) | ND (0.0240) |
| GES_TP13_6.0 | 4060795-09 | 6.0-6.5 | 6/24/2014 | Soil | mg/kg | 0.222 | 0.165 | 0.191 | ND (0.0306) | 0.0554 J | ND (0.0272) | ND (0.0233) | ND (0.0299) | ND (0.0140) | ND (0.0293) | ND (0.0194) | ND (0.0243) | ND (0.0139) | ND (0.0228) | 0.163 | ND (0.0240) |
| GES_TP13_8.5 | 4060795-10 | 8.5-9.0 | 6/24/2014 | Soil | mg/kg | 0.0504 J | 0.0432 J | 0.0664 J | ND (0.0322) | ND (0.0293) | ND (0.0286) | ND (0.0245) | ND (0.0315) | ND (0.0148) | ND (0.0308) | ND (0.0205) | ND (0.0257) | ND (0.0146) | ND (0.0240) | 0.0624 J | ND (0.0253) |
| GES_TP14_0.5 | 4060795-11 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | 1.26 | 1.11 | 1.32 | 0.585 | 0.598 | ND (0.0250) | ND (0.0214) | ND (0.0275) | ND (0.0129) | ND (0.0270) | ND (0.0179) | ND (0.0224) | ND (0.0128) | 0.202 J | 1.51 | ND (0.0221) |
| GES_TP14_4.0 | 4060880-12 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.0170) | ND (0.0132) | ND (0.0254) | ND (0.0303) | ND (0.0275) | ND (0.0269) | ND (0.0211) | ND (0.0297) | ND (0.0139) | ND (0.0291) | ND (0.0193) | ND (0.0242) | ND (0.0138) | ND (0.0226) | ND (0.0267) | ND (0.0239) |
| GES_TP15_0.5 | 4060831-10 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 0.0485 J | ND (0.0131) | ND (0.0254) | ND (0.0300) | ND (0.0273) | ND (0.0267) | ND (0.0229) | ND (0.0293) | ND (0.0138) | ND (0.0287) | ND (0.0191) | ND (0.0239) | ND (0.0136) | ND (0.0223) | 0.0455 J | ND (0.0236) |
| GES_TP15_1.5 | 4060880-15 | 1.5-2.0 | 6/26/2014 | Soil | mg/kg | ND (0.0171) | ND (0.0133) | ND (0.0258) | ND (0.0305) | ND (0.0277) | ND (0.0271) | ND (0.0233) | ND (0.0298) | ND (0.0140) | ND (0.0292) | ND (0.0194) | ND (0.0243) | ND (0.0138) | ND (0.0227) | ND (0.0269) | ND (0.0240) |
| GES_TP16/17_4.0 | 4060880-11 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.0161) | ND (0.0125) | ND (0.0243) | ND (0.0287) | ND (0.0261) | ND (0.0255) | ND (0.0219) | ND (0.0281) | ND (0.0132) | ND (0.0275) | 0.0678 J | ND (0.0229) | ND (0.0130) | ND (0.0214) | ND (0.0253) | ND (0.0226) |
| GES_TP16_2.0 | 4060831-11 | 2.0-2.5 | 6/25/2014 | Soil | mg/kg | 10.1 D | 7.41 D | 7.84 D | 1.51 D | 4.04 D | ND (0.0520) | 0.0857 JD | ND (0.0572) | ND (0.0269) | ND (0.0560) | ND (0.0372) | ND (0.0466) | ND (0.0266) | 0.325 JD | 7.13 D | ND (0.0460) |
| GES_TP17_0.5 | 4060831-05 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 4.14 | 2.51 | 2.93 | 0.700 | 1.16 | ND (0.0258) | ND (0.0221) | ND (0.0284) | ND (0.0133) | ND (0.0278) | ND (0.0184) | ND (0.0231) | ND (0.0132) | 0.414 | 2.73 | ND (0.0228) |
| GES_TP18_0.5 | 4060795-13 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.0167) | ND (0.0130) | ND (0.0251) | ND (0.0297) | ND (0.0270) | ND (0.0264) | ND (0.0226) | ND (0.0290) | ND (0.0136) | ND (0.0284) | ND (0.0189) | ND (0.0237) | ND (0.0135) | ND (0.0221) | ND (0.0262) | ND (0.0234) |
| GES_TP18_2.0 | 4060880-04 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| GES_TP4_0.5 | 4060831-02 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0170) | ND (0.0132) | ND (0.0257) | ND (0.0303) | ND (0.0275) | ND (0.0269) | ND (0.0211) | ND (0.0297) | ND (0.0139) | ND (0.0291) | ND (0.0193) | ND (0.0242) | ND (0.0138) | ND (0.0226) | ND (0.0267) | ND (0.0239) |
| GES_TP5_0.5 | 4060795-01 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | 0.595 | 0.478 | 0.567 | 0.246 | 0.198 | ND (0.0281) | ND (0.0241) | ND (0.0309) | ND (0.0145) | ND (0.0303) | 0.0400 J | ND (0.0252) | ND (0.0143) | ND (0.0235) | 0.577 | ND (0.0248) |
| GES_TP5_3.5 | 4060795-02 | 3.5-4.0 | 6/24/2014 | Soil | mg/kg | 0.589 | 0.440 | 0.527 | 0.277 | 0.149 | ND (0.0259) | ND (0.0222) | ND (0.0285) | ND (0.0134) | ND (0.0279) | ND (0.0185) | ND (0.0232) | ND (0.0132) | ND (0.0217) | 0.577 | ND (0.0229) |
| GES_TP6_0.0 | 4060795-03 | 0.0-0.5 | 6/24/2014 | Soil | mg/kg | 0.102 J | 0.107 J | 0.132 J | 0.0418 J | 0.0698 J | - | - | - | - | - | - | - | - | - | 0.109 J | - |
| GES_TP7_0.5 | 4060831-03 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 0.0858 J | 0.0575 J | 0.0735 J | ND (0.0293) | 0.0378 J | ND (0.0260) | ND (0.0223) | ND (0.0286) | ND (0.0134) | ND (0.0280) | 0.0524 J | ND (0.0233) | ND (0.0133) | ND (0.0218) | 0.0618 J | ND (0.0230) |
| GES_TP8_0.5 | 4060831-04 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 0.0767 J | 0.0538 J | 0.0939 J | ND (0.0289) | ND (0.0262) | ND (0.0256) | ND (0.0220) | ND (0.0282) | ND (0.0133) | ND (0.0277) | 0.0531 J | ND (0.0230) | ND (0.0131) | ND (0.0215) | 0.0767 J | ND (0.0227) |
| GES_TP9_2.0 | 4060880-14 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | ND (0.0187) | ND (0.0146) | ND (0.0282) | ND (0.0334) | ND (0.0303) | ND (0.0296) | ND (0.0254) | ND (0.0326) | ND (0.0153) | ND (0.0320) | ND (0.0212) | ND (0.0266) | ND (0.0152) | ND (0.0248) | ND (0.0294) | ND (0.0263) |
| GES_TP9_0.5 | 4060831-09 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 0.203 | 0.148 | 0.179 | 0.0552 J | 0.0617 J | ND (0.0260) | ND (0.0223) | ND (0.0286) | ND (0.0134) | ND (0.0280) | ND (0.0186) | ND (0.0233) | ND (0.0133) | ND (0.0218) | 0.175 | ND (0.0230) |

**Qualifiers:**

E - Concentration exceeds highest calibration standard
B - Indicates compound found in associated blank
D - Indicates result is based on a dilution
H - Alternate peak selection upon analytical review
U - Indicates compound analyzed for but not detected
J - Indicates estimated value for TICs and all results when detected below the RL

NA - Not Available
µg/L - Units in Micrograms per Liter
ND - Not Detected
- Not analyzed

Table 3 - Semi - Volatile Organic Compunds
AOC Historic Fill Soil Sampling
Macy's - Raritan Expansion
401 Clearview Road, Edison, NJ

| Sample ID: | Lab Sample ID: | Sample Depth: | Date Sampled: | Matrix: | Units: | Di-n-octylphthalate | Dibenzo(a,h)anthracene | Dibenzofuran | Diethylphthalate | Dimethylphthalate | Fluoranthene | Fluorene | Hexachlorobenzene | Hexachlorobutadiene | Hexachlorocyclopentadiene | Hexachloroethane | Indeno(1,2,3-cd)pyrene | Isophorone | n-Nitroso-di-n-propylamine | n-Nitrosodiphenylamine | Naphthalene | Nitrobenzene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NJ Residential Direct Contact Soil (NJAC 7:26D 6/08) | | | | | | 2400 | 0.2 | NA | 49000 | NA | 2300 | 2300 | 0.3 | 6 | 45 | 35 | 0.6 | 510 | 0.2 | 99 | 6 | 31 |
| NJ Non-Residential Direct Contact Soil (NJAC 7:26D 6/08) | | | | | | 27000 | 0.2 | NA | 550000 | NA | 24000 | 24000 | 1 | 25 | 110 | 140 | 2 | 2000 | 0.3 | 390 | 17 | 340 |
| *NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)* | | | | | | *3300* | *0.2* | *NA* | *88* | *NA* | *1300* | *1300* | *0.2* | *0.9* | *330* | *0.2* | *0.2* | *0.2* | *0.2* | *0.4* | *25* | *0.2* |
| AS_SB-1_0.5 | 4070365-05 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | - | ND (0.0249) | - | - | - | ND (0.0195) | ND (0.0224) | - | - | - | - | ND (0.0291) | - | - | - | ND (0.0154) | - |
| AS_SB-4_0.5 | 4070365-14 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | - | ND (0.0257) | - | - | - | 0.801 | ND (0.0232) | - | - | - | - | 0.139 J | - | - | - | ND (0.0159) | - |
| AS_SB-5_0.5 | 4070365-09 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | - | ND (0.0251) | - | - | - | ND (0.0196) | ND (0.0226) | - | - | - | - | ND (0.0293) | - | - | - | ND (0.0155) | - |
| AS_SB-6_0.5 | 4070365-01 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | - | 0.0389 J | - | - | - | 0.965 | 0.0836 J | - | - | - | - | 0.196 | - | - | - | ND (0.0156) | - |
| AS_SB-7_0.5 | 4070365-10 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | ND (0.0316) | **0.276** | 0.0810 J | ND (0.0218) | 0.106 JB | 3.28 | 0.648 | ND (0.0277) | ND (0.0331) | ND (0.0358) | ND (0.00991) | **0.664** | ND (0.0337) | ND (0.0193) | ND (0.0219) | ND (0.0158) | ND (0.0219) |
| GES_SB1_0.5 | 4060880-10 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | **1.07 D** | - | - | - | 10.2 D | 0.250 JD | - | - | - | - | **2.37 D** | - | - | - | 0.258 JD | - |
| GES_SB10_0.5 | 4060880-06 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | ND (0.0282) | - | - | - | ND (0.0220) | ND (0.0254) | - | - | - | - | ND (0.0329) | - | - | - | ND (0.0174) | - |
| GES_SB11_0.5 | 4060880-09 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | ND (0.0255) | - | - | - | 0.0695 J | ND (0.0229) | - | - | - | - | ND (0.0297) | - | - | - | ND (0.0157) | - |
| GES_SB12_0.5 | 4060880-15 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | 0.146 | - | - | - | 1.87 | ND (0.0226) | - | - | - | - | 0.337 | - | - | - | ND (0.0155) | - |
| GES_SB13_0.5 | 4060880-02 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | ND (0.0260) | - | - | - | 0.100 J | ND (0.0235) | - | - | - | - | ND (0.0304) | - | - | - | ND (0.0161) | - |
| GES_SB14_0.5 | 4060880-03 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | ND (0.0267) | - | - | - | ND (0.0209) | ND (0.0241) | - | - | - | - | ND (0.0312) | - | - | - | ND (0.0165) | - |
| GES_SB2_0.5 | 4060880-05 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | ND (0.0247) | - | - | - | 0.120 J | ND (0.0223) | - | - | - | - | ND (0.0289) | - | - | - | ND (0.0152) | - |
| GES_SB3_0.5 | 4060795-12 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | - | ND (0.0252) | - | - | - | 0.0795 J | ND (0.0227) | - | - | - | - | ND (0.0294) | - | - | - | ND (0.0155) | - |
| GES_SB4_0.5 | 4060831-12 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | - | ND (0.0264) | - | - | - | 0.0819 J | ND (0.0238) | - | - | - | - | ND (0.0308) | - | - | - | ND (0.0163) | - |
| GES_SB5_0.5 | 4060831-06 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | - | 0.0821 J | - | - | - | 1.23 | 0.0518 J | - | - | - | - | 0.256 | - | - | - | ND (0.0160) | - |
| GES_SB6_0.5 | 4060831-07 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | - | ND (0.0251) | - | - | - | 0.0421 J | ND (0.0226) | - | - | - | - | ND (0.0293) | - | - | - | ND (0.0155) | - |
| GES_SB7_0.5 | 4060880-07 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | ND (0.0281) | - | - | - | ND (0.0220) | ND (0.0253) | - | - | - | - | ND (0.0328) | - | - | - | ND (0.0173) | - |
| GES_SB9_0.5 | 4060880-01 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | ND (0.0262) | - | - | - | ND (0.0204) | ND (0.0236) | - | - | - | - | ND (0.0305) | - | - | - | ND (0.0161) | - |
| GES_TP1_0.5 | 4060831-01 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | - | ND (0.0260) | - | - | - | ND (0.0203) | ND (0.0234) | - | - | - | - | ND (0.0304) | - | - | - | ND (0.0161) | - |
| GES_TP1_8.0 | 4060880-11 | 8.0-8.5 | 6/26/2014 | Soil | mg/kg | ND (0.0299) | ND (0.0242) | ND (0.0222) | ND (0.0206) | 0.125 JB | ND (0.0189) | ND (0.0218) | ND (0.0261) | ND (0.0312) | ND (0.0338) | ND (0.00936) | ND (0.0283) | ND (0.0318) | ND (0.0182) | ND (0.0207) | ND (0.0149) | ND (0.0207) |
| GES_TP10_0.5 | 4060795-04 | 4.0-4.5 | 6/24/2014 | Soil | mg/kg | ND (0.0335) | 0.147 J | ND (0.0249) | ND (0.0231) | 0.271 | 2.86 | 0.352 | ND (0.0293) | ND (0.0351) | ND (0.0379) | ND (0.0105) | 0.372 | ND (0.0357) | ND (0.0205) | ND (0.0232) | ND (0.0168) | ND (0.0232) |
| GES_TP10_9.0 | 4060795-05 | 9.0-9.5 | 6/24/2014 | Soil | mg/kg | ND (0.0331) | ND (0.0268) | ND (0.0246) | ND (0.0228) | 0.0915 J | 0.478 | ND (0.0242) | ND (0.0290) | ND (0.0346) | ND (0.0374) | ND (0.0104) | 0.0824 J | ND (0.0352) | ND (0.0202) | ND (0.0229) | ND (0.0165) | ND (0.0229) |
| GES_TP11_0.0 | 4060795-06 | 0.0-0.5 | 6/24/2014 | Soil | mg/kg | - | ND (0.0255) | - | - | - | 0.540 | ND (0.0230) | - | - | - | - | 0.120 J | - | - | - | ND (0.0157) | - |
| GES_TP12_0.5 | 4060795-07 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.0313) | ND (0.0254) | ND (0.0233) | ND (0.0215) | 0.172 | ND (0.0198) | ND (0.0228) | ND (0.0274) | ND (0.0327) | ND (0.0354) | ND (0.00980) | ND (0.0296) | ND (0.0333) | ND (0.0191) | ND (0.0217) | ND (0.0156) | ND (0.0217) |
| GES_TP12_2.0 | 4060795-08 | 2.0-2.5 | 6/24/2014 | Soil | mg/kg | ND (0.0329) | ND (0.0267) | ND (0.0245) | ND (0.0227) | 0.114 JB | ND (0.0208) | ND (0.0240) | ND (0.0288) | ND (0.0344) | ND (0.0372) | ND (0.0103) | ND (0.0311) | ND (0.0350) | ND (0.0201) | ND (0.0228) | ND (0.0164) | ND (0.0228) |
| GES_TP13_6.0 | 4060795-09 | 6.0-6.5 | 6/24/2014 | Soil | mg/kg | ND (0.0329) | ND (0.0267) | ND (0.0245) | ND (0.0227) | 0.530 | 0.348 | ND (0.0240) | ND (0.0288) | ND (0.0344) | ND (0.0372) | ND (0.0103) | 0.0387 J | ND (0.0350) | ND (0.0201) | ND (0.0228) | ND (0.0165) | ND (0.0228) |
| GES_TP13_8.5 | 4060795-10 | 8.5-9.0 | 6/24/2014 | Soil | mg/kg | ND (0.0347) | ND (0.0281) | ND (0.0258) | ND (0.0239) | 0.322 | 0.119 J | ND (0.0253) | ND (0.0304) | ND (0.0363) | ND (0.0392) | ND (0.0109) | ND (0.0328) | ND (0.0369) | ND (0.0212) | ND (0.0241) | ND (0.0173) | ND (0.0241) |
| GES_TP14_0.5 | 4060795-11 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.0303) | **0.213** | ND (0.0226) | ND (0.0209) | 0.333 | 1.91 | 0.0643 J | ND (0.0265) | ND (0.0317) | ND (0.0343) | ND (0.00950) | 0.458 | ND (0.0323) | ND (0.0185) | ND (0.0210) | ND (0.0152) | ND (0.0210) |
| GES_TP14_4.0 | 4060880-12 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.0327) | ND (0.0265) | ND (0.0243) | ND (0.0225) | 0.456 JB | ND (0.0207) | ND (0.0239) | ND (0.0286) | ND (0.0342) | ND (0.0370) | ND (0.0102) | ND (0.0289) | ND (0.0348) | ND (0.0199) | ND (0.0227) | ND (0.0163) | ND (0.0227) |
| GES_TP15_0.5 | 4060831-10 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0323) | ND (0.0262) | ND (0.0241) | ND (0.0223) | ND (0.0191) | 0.0656 J | ND (0.0236) | ND (0.0283) | ND (0.0338) | ND (0.0366) | ND (0.0101) | ND (0.0306) | ND (0.0344) | ND (0.0197) | ND (0.0224) | ND (0.0162) | ND (0.0224) |
| GES_TP15_1.5 | 4060880-15 | 1.5-2.0 | 6/26/2014 | Soil | mg/kg | ND (0.0328) | ND (0.0266) | ND (0.0244) | ND (0.0226) | 0.523 | ND (0.0208) | ND (0.0240) | ND (0.0287) | ND (0.0343) | ND (0.0371) | ND (0.0103) | ND (0.0311) | ND (0.0349) | ND (0.0200) | ND (0.0228) | ND (0.0164) | ND (0.0228) |
| GES_TP16_3.42 | 4060795-13 | 4.0-4.5 | 6/24/2014 | Soil | mg/kg | ND (0.0329) | ND (0.0267) | ND (0.0245) | ND (0.0227) | 0.262 JB | ND (0.0208) | ND (0.0240) | ND (0.0287) | ND (0.0344) | ND (0.0372) | ND (0.0103) | ND (0.0311) | ND (0.0350) | ND (0.0201) | ND (0.0228) | ND (0.0164) | ND (0.0228) |
| GES_TP16_2.0 | 4060831-11 | 2.0-2.5 | 6/25/2014 | Soil | mg/kg | ND (0.0639) | **0.922 D** | 0.336 D | ND (0.0434) | 0.173 JD | 11.6 D | 2.73 D | ND (0.0552) | ND (0.0659) | ND (0.0713) | ND (0.0197) | **1.73 D** | ND (0.0671) | ND (0.0385) | ND (0.0437) | 0.485 J | ND (0.0437) |
| GES_TP17_0.5 | 4060831-05 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0313) | **0.393** | 0.387 | ND (0.0215) | 0.0592 J | 5.46 | 1.59 | ND (0.0274) | ND (0.0327) | ND (0.0354) | ND (0.00980) | **0.882** | ND (0.0333) | ND (0.0191) | ND (0.0217) | 0.115 J | ND (0.0217) |
| GES_TP18_0.5 | 4060795-13 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.0320) | ND (0.0259) | ND (0.0238) | ND (0.0220) | 0.0841 JB | 0.0398 J | ND (0.0234) | ND (0.0280) | ND (0.0335) | ND (0.0362) | ND (0.0100) | ND (0.0303) | ND (0.0340) | ND (0.0195) | ND (0.0222) | ND (0.0160) | ND (0.0222) |
| GES_TP18_2.0 | 4060891-04 | 2.0-2.5 | 6/25/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| GES_TP4_0.5 | 4060831-02 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0327) | ND (0.0265) | ND (0.0243) | ND (0.0225) | 0.834 | 0.0852 J | ND (0.0239) | ND (0.0286) | ND (0.0342) | ND (0.0370) | ND (0.0102) | ND (0.0309) | ND (0.0348) | ND (0.0199) | ND (0.0227) | ND (0.0163) | ND (0.0227) |
| GES_TP5_0.5 | 4060795-01 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.0340) | 0.0824 J | ND (0.0253) | ND (0.0234) | 0.0871 J | 1.04 | 0.0949 J | ND (0.0298) | ND (0.0356) | ND (0.0385) | ND (0.0107) | 0.229 | ND (0.0362) | ND (0.0208) | ND (0.0236) | ND (0.0170) | ND (0.0236) |
| GES_TP5_3.5 | 4060795-02 | 3.5-4.0 | 6/24/2014 | Soil | mg/kg | ND (0.0314) | 0.0666 J | ND (0.0234) | ND (0.0216) | 0.501 B | 1.09 | 0.0862 J | ND (0.0275) | ND (0.0329) | ND (0.0355) | ND (0.00984) | 0.240 | ND (0.0334) | ND (0.0192) | ND (0.0218) | ND (0.0157) | ND (0.0218) |
| GES_TP6_0.0 | 4060795-03 | 0.0-0.5 | 6/24/2014 | Soil | mg/kg | - | - | - | - | - | 0.131 | 0.0272 J | - | - | - | - | 0.0454 J | - | - | - | ND (0.0155) | - |
| GES_TP7_0.5 | 4060831-03 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0315) | ND (0.0256) | ND (0.0235) | ND (0.0217) | 0.0756 J | 0.118 J | ND (0.0230) | ND (0.0276) | ND (0.0330) | ND (0.0357) | ND (0.00988) | ND (0.0299) | ND (0.0336) | ND (0.0193) | ND (0.0219) | ND (0.0158) | ND (0.0219) |
| GES_TP8_0.5 | 4060831-04 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0311) | ND (0.0252) | ND (0.0231) | ND (0.0214) | 0.219 | 0.146 | ND (0.0227) | ND (0.0272) | ND (0.0325) | ND (0.0352) | ND (0.00974) | ND (0.0294) | ND (0.0331) | ND (0.0190) | ND (0.0216) | ND (0.0155) | ND (0.0216) |
| GES_TP8_2.0 | 4060880-14 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | ND (0.0359) | ND (0.0291) | ND (0.0267) | ND (0.0248) | 1.24 B | ND (0.0228) | ND (0.0263) | ND (0.0315) | ND (0.0376) | ND (0.0407) | ND (0.0113) | ND (0.0340) | ND (0.0383) | ND (0.0219) | ND (0.0249) | ND (0.0180) | ND (0.0249) |
| GES_TP9_0.5 | 4060831-09 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0315) | ND (0.0255) | ND (0.0234) | ND (0.0217) | 0.0559 J | 0.331 | ND (0.0230) | ND (0.0276) | ND (0.0329) | ND (0.0356) | ND (0.00986) | 0.0581 J | ND (0.0335) | ND (0.0192) | ND (0.0218) | ND (0.0157) | ND (0.0218) |

**Qualifiers:**

E - Concentration exceeds highest calibration standard
B - Indicates compound found in associated blank
D - Indicates result is based on a dilution
H - Alternate peak selection upon analytical review
U - Indicates compound analyzed for but not detected
J - Indicates estimated value for TICs and all results when detected below the RL

NA - Not Available
µg/L - Units in Micrograms per Liter
ND - Not Detected
- Not analyzed

Table 3 - Semi - Volatile Organic Compunds
AOC Historic Fill Soil Sampling
Macy's - Raritan Expansion
401 Clearview Road, Edison, NJ

| Sample ID: | Lab Sample ID: | Sample Depth: | Date Sampled: | Matrix: | Units: | Pentachlorophenol | Phenanthrene | Phenol | Pyrene | SVOCs TICs |
|---|---|---|---|---|---|---|---|---|---|---|
| **NJ Residential Direct Contact Soil (NJAC 7:26D 6/08)** | | | | | | **3** | **NA** | **18000** | **1700** | **NA** |
| NJ Non-Residential Direct Contact Soil (NJAC 7:26D 6/08) | | | | | | 10 | 300000 | 210000 | 18000 | NA |
| *NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)* | | | | | | *0.3* | *NA* | *8* | *840* | *NA* |
| AS SB-1 0.5 | 4070365-05 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | - | ND (0.0187) | - | ND (0.0179) | - |
| AS SB-4 0.5 | 4070365-14 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | - | 0.362 | - | 0.362 | - |
| AS SB-5 0.5 | 4070365-09 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | - | ND (0.0188) | - | ND (0.0180) | - |
| AS SB-6 0.5 | 4070365-01 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | - | 0.467 | - | 0.773 | - |
| AS SB-7 0.5 | 4070365-10 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | ND (0.0128) | 4.41 | ND (0.0215) | 3.02 | 11.612 J |
| GES SB1 0.5 | 4060880-10 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | 7.22 D | - | 10.8 D | - |
| GES SB10 0.5 | 4060880-06 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | ND (0.0211) | - | ND (0.0202) | - |
| GES SB11 0.5 | 4060880-09 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | ND (0.0191) | - | 0.0550 J | - |
| GES SB12 0.5 | 4060880-18 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | 0.510 | - | 1.36 | - |
| GES SB13 0.5 | 4060880-02 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | 0.0526 J | - | 0.113 J | - |
| GES SB14 0.5 | 4060880-03 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | ND (0.0201) | - | ND (0.0192) | - |
| GES SB2 0.5 | 4060880-05 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | 0.0499 J | - | 0.110 J | - |
| GES SB3 0.5 | 4060795-12 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | - | 0.0473 J | - | 0.0652 J | - |
| GES SB4 0.5 | 4060831-12 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | - | ND (0.0198) | - | 0.0834 J | - |
| GES SB5 0.5 | 4060831-06 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | - | 0.573 | - | 1.18 | - |
| GES SB6 0.5 | 4060831-07 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | - | 0.0428 J | - | 0.0457 J | - |
| GES SB7 0.5 | 4060880-07 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | ND (0.0211) | - | ND (0.0202) | - |
| GES SB9 0.5 | 4060880-01 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | - | ND (0.0196) | - | ND (0.0188) | - |
| GES TP1 0.5 | 4060831-01 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | - | ND (0.0195) | - | ND (0.0187) | - |
| GES TP1 8.0 | 4060880-13 | 8.0-8.5 | 6/26/2014 | Soil | mg/kg | ND (0.0121) | ND (0.0182) | ND (0.0203) | ND (0.0174) | 1.795 J |
| GES TP10 4.0 | 4060795-04 | 4.0-4.5 | 6/24/2014 | Soil | mg/kg | ND (0.0136) | 2.29 | ND (0.0228) | 2.17 | 14.096 J |
| GES TP10 9.0 | 4060795-05 | 9.0-9.5 | 6/24/2014 | Soil | mg/kg | ND (0.0134) | 0.304 | ND (0.0225) | 0.397 | 12.49 J |
| GES TP11 0.0 | 4060795-06 | 0.0-0.5 | 6/24/2014 | Soil | mg/kg | - | 0.312 | - | 0.465 | - |
| GES TP12 0.5 | 4060795-07 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.0127) | ND (0.0190) | ND (0.0212) | ND (0.0182) | 4.943 J |
| GES TP12 2.0 | 4060795-08 | 2.0-2.5 | 6/24/2014 | Soil | mg/kg | ND (0.0133) | ND (0.0200) | ND (0.0224) | ND (0.0192) | 1.15 J |
| GES TP13 6.0 | 4060795-09 | 6.0-6.5 | 6/24/2014 | Soil | mg/kg | ND (0.0133) | 0.230 | ND (0.0224) | 0.349 | 14.309 J |
| GES TP13 8.5 | 4060795-10 | 8.5-9.0 | 6/24/2014 | Soil | mg/kg | ND (0.0141) | 0.0608 J | ND (0.0236) | 0.0888 J | 11.126 J |
| GES TP14 0.5 | 4060795-11 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.0123) | 1.06 | ND (0.0206) | 2.10 | 7.992 J |
| GES TP14 4.0 | 4060880-12 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.0132) | ND (0.0196) | ND (0.0222) | ND (0.0190) | 2.402 J |
| GES TP15 0.5 | 4060831-10 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0131) | ND (0.0197) | ND (0.0220) | 0.0604 J | 2.138 J |
| GES TP15 1.5 | 4060880-15 | 1.5-2.0 | 6/26/2014 | Soil | mg/kg | ND (0.0133) | ND (0.0200) | ND (0.0223) | ND (0.0191) | 2.089 J |
| GES TP16/17 4.0 | 4060880-11 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.0125) | ND (0.0188) | ND (0.0210) | ND (0.0180) | 4.15 J |
| GES TP16 2.0 | 4060831-11 | 2.0-2.5 | 6/25/2014 | Soil | mg/kg | ND (0.0255) | 9.70 D | ND (0.0428) | 11.3 D | 43.05 JD |
| GES TP17 0.5 | 4060831-05 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0127) | 8.96 D | ND (0.0213) | 5.76 | 19.911 J |
| GES TP18 0.5 | 4060795-13 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.0130) | ND (0.0195) | ND (0.0217) | ND (0.0186) | 6.384 |
| GES TP18 2.0 | 4060880-04 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - |
| GES TP4 0.5 | 4060831-02 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0132) | ND (0.0199) | ND (0.0222) | 0.0445 J | - |
| GES TP5 0.5 | 4060795-01 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.0138) | 0.738 | ND (0.0231) | 1.01 | 4.818 J |
| GES TP5 3.5 | 4060795-02 | 3.5-4.0 | 6/24/2014 | Soil | mg/kg | ND (0.0127) | 0.825 | ND (0.0213) | 0.959 | 1.66 J |
| GES TP6 0.0 | 4060795-03 | 0.0-0.5 | 6/24/2014 | Soil | mg/kg | - | 0.0490 J | - | 0.161 | - |
| GES TP7 0.5 | 4060831-03 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0128) | 0.0640 J | ND (0.0214) | 0.112 J | 3.563 J |
| GES TP8 0.5 | 4060831-04 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0126) | 0.0631 J | ND (0.0211) | 0.115 J | 2.524 J |
| GES TP8 2.0 | 4060880-14 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | ND (0.0146) | ND (0.0219) | ND (0.0244) | ND (0.0210) | 2.765 J |
| GES TP9 0.5 | 4060831-09 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.0128) | 0.107 J | ND (0.0214) | 0.359 | 1.512 J |

**Qualifiers:**

E - Concentration exceeds highest calibration standard
B - Indicates compound found in associated blank
D - Indicates result is based on a dilution
H - Alternate peak selection upon analytical review
U - Indicates compound analyzed for but not detected
J - Indicates estimated value for TICs and all results when detected below the RL

NA - Not Available
µg/L - Units in Micrograms per Liter
ND - Not Detected
- Not analyzed

Table 4 - Metals
AOC Historic Fill Soil Sampling
Macy's - Raritan Expansion
401 Clearview Road, Edison, NJ

| Sample ID: | Lab Sample ID: | Sample Depth: | Date Sampled: | Matrix: | Units: | Aluminum | Antimony | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Iron | Lead | Magnesium |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **NJ Residential Direct Contact Soil (NJAC 7:26D 6/08)** | | | | | | **78,000** | **31** | **19** | **16,000** | **16** | **78** | **NA** | **120,000** | **1,600** | **3,100** | **NA** | **400** | **NA** |
| NJ Non-Residential Direct Contact Soil (NJAC 7:26D 6/08) | | | | | | NA | 450 | 19 | 59,000 | 140 | 78 | NA | NA | 590 | 45,000 | NA | 800 | NA |
| *NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)* | | | | | | *6,000* | *6* | *19* | *2,100* | *0.7* | *2* | *NA* | *NA* | *90* | *11,000* | *NA* | *90* | *NA* |
| AS_SB-1_0.5 | 4070365-05 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | 678 | ND (0.531) | ND (0.531) | 2.50 | 0.0419 | ND (0.0531) | 211 | 5.21 | 0.273 | 3.01 | 2320 | 1.44 | 123 |
| AS_SB-4_0.5 | 4070365-14 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | 1620 | ND (0.549) | ND (0.549) | 4.80 | 0.0633 | 0.0678 | 247 | 4.47 | 0.682 | 5.80 | 4990 | 5.66 | 201 |
| AS_SB-5_0.5 | 4070365-09 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | 1170 | ND (0.535) | 0.586 | 3.34 | 0.0623 | ND (0.0535) | 160 | 4.40 | 0.372 | 4.31 | 5210 | 3.31 | 157 |
| AS_SB-6_0.5 | 4070365-01 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | 2630 | ND (0.540) | 0.790 | 8.65 | 0.125 | ND (0.0540) | 1060 | 6.10 | 1.31 | 7.20 | 6000 | 4.17 | 702 |
| AS_SB-7_0.5 | 4070365-10 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | 2240 | ND (0.547) | 1.11 | 8.69 | 0.113 | 0.0723 | 628 | 6.43 | 0.939 | 8.60 | 6590 | 9.47 | 468 |
| GES_SB1_0.5 | 4060880-10 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | 2890 | ND (0.562) | 1.81 | 11.3 | 0.187 | ND (0.0562) | 1920 | 13.3 | 2.17 | 14.9 | 7670 | 6.26 | 715 |
| GES_SB10_0.5 | 4060880-06 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | *7660* | ND (0.601) | 3.15 | 108 | 0.217 | 0.0631 | 24800 | 183 | 1.44 | 56.0 | 22200 | 15.3 | 5790 |
| GES_SB11_0.5 | 4060880-09 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | 5290 | ND (0.543) | 2.98 | 13.4 | 0.193 | 0.0713 | 8280 | 10.8 | 1.47 | 11.9 | 9940 | 9.33 | 4550 |
| GES_SB12_0.5 | 4060880-18 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | 5510 | ND (0.536) | 2.42 | 14.3 | 0.176 | 0.107 | 6250 | 9.33 | 2.94 | 15.3 | 10700 | 8.09 | 2310 |
| GES_SB13_0.5 | 4060880-02 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | *6440* | ND (0.555) | 1.74 | 13.5 | 0.138 | ND (0.0555) | 151 | 9.43 | 1.48 | 8.32 | 9140 | 6.56 | 456 |
| GES_SB14_0.5 | 4060880-03 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | *8360* | ND (0.570) | 1.72 | 13.5 | 0.103 | ND (0.0570) | 46.4 | 9.23 | 0.819 | 9.18 | 7540 | 6.85 | 454 |
| GES_SB2_0.5 | 4060880-05 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | 3590 | ND (0.527) | 1.70 | 19.1 | 0.139 | ND (0.0527) | 2250 | 23.4 | 1.62 | 13.8 | 5500 | 7.71 | 469 |
| GES_SB3_0.5 | 4060795-12 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | 2520 | ND (0.537) | 1.73 | 14.3 | 0.210 | 0.0598 | 552 | 8.23 | 0.955 | 9.60 | 3740 | 5.95 | 255 |
| GES_SB4_0.5 | 4060831-12 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 2990 | ND (0.563) | 1.64 | 14.8 | 0.166 | ND (0.0563) | 1300 | 12.6 | 1.76 | 13.5 | 4980 | 10.3 | 450 |
| GES_SB5_0.5 | 4060831-06 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 5940 | ND (0.555) | 10.0 | 69.3 | *0.711* | 0.185 | 3870 | 25.7 | 4.90 | 27.0 | 8960 | 10.6 | 1900 |
| GES_SB6_0.5 | 4060831-07 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 4220 | ND (0.535) | 3.19 | 14.3 | 0.252 | ND (0.0535) | 424 | 22.1 | 1.43 | 12.6 | 8080 | 9.11 | 526 |
| GES_SB7_0.5 | 4060880-07 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | 5200 | 1.19 | 6.06 | 22.8 | 0.0558 | 0.129 | 2390 | 23.8 | 0.471 | 14.8 | 9240 | 10.6 | 781 |
| GES_SB9_0.5 | 4060880-01 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | *7230* | ND (0.558) | 1.44 | 13.8 | 0.139 | ND (0.0558) | 32.5 | 8.06 | 1.29 | 5.19 | 7860 | 5.73 | 335 |
| GES_TP1_0.5 | 4060831-01 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 2470 | ND (0.555) | 1.11 | 5.63 | 0.209 | ND (0.0555) | 4360 | 7.42 | 15.6 | 12.7 | 6130 | 5.63 | 1640 |
| GES_TP1_8.0 | 4060880-13 | 8.0-8.5 | 6/26/2014 | Soil | mg/kg | 560 | ND (0.516) | 1.16 | 1.44 | 0.0330 | ND (0.0516) | ND (25.8) | 2.91 | ND (0.207) | 1.62 | 1980 | 1.73 | ND (51.6) |
| GES_TP10_4.0 | 4060795-04 | 4.0-4.5 | 6/24/2014 | Soil | mg/kg | 4430 | ND (0.580) | 3.44 | 14.7 | 0.120 | 0.0720 | 557 | 13.6 | 2.63 | 21.3 | 16100 | 18.5 | 384 |
| GES_TP10_9.0 | 4060795-05 | 9.0-9.5 | 6/24/2014 | Soil | mg/kg | *6300* | ND (0.572) | 1.89 | 17.9 | 0.206 | 0.0771 | 328 | 10.6 | 1.21 | 20.2 | 8890 | 16.5 | 460 |
| GES_TP11_0.0 | 4060795-06 | 0.0-0.5 | 6/24/2014 | Soil | mg/kg | 1710 | 0.566 | 1.24 | 5.53 | 0.0572 | 0.0629 | 90.0 | 5.73 | 0.387 | 7.84 | 4110 | 20.4 | 128 |
| GES_TP12_0.5 | 4060795-07 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | *10200* | ND (0.541) | 2.09 | 9.07 | 0.365 | ND (0.0541) | 90.6 | 18.1 | 1.55 | 8.75 | 12800 | 6.06 | 760 |
| GES_TP12_2.0 | 4060795-08 | 2.0-2.5 | 6/24/2014 | Soil | mg/kg | 5140 | ND (0.569) | 3.06 | 14.8 | 0.203 | ND (0.0569) | 67.0 | 8.67 | 1.17 | 5.19 | 12000 | 4.36 | 584 |
| GES_TP13_6.0 | 4060795-09 | 6.0-6.5 | 6/24/2014 | Soil | mg/kg | *7440* | ND (0.569) | 2.73 | 18.8 | 0.177 | 0.113 | 155 | 10.1 | 1.30 | 21.7 | 8590 | 16.8 | 502 |
| GES_TP13_8.5 | 4060795-10 | 8.5-9.0 | 6/24/2014 | Soil | mg/kg | 5910 | 0.863 | 4.49 | 23.6 | 0.157 | 0.225 | 285 | 8.09 | 1.01 | 38.5 | 7690 | 26.8 | 359 |
| GES_TP14_0.5 | 4060795-11 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | 5380 | ND (0.524) | 2.32 | 11.0 | 0.253 | ND (0.0524) | 463 | 11.1 | 3.15 | 12.2 | 10700 | 9.68 | 790 |
| GES_TP14_4.0 | 4060880-12 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | 3060 | ND (0.565) | 1.92 | 8.64 | 0.135 | ND (0.0565) | 36.5 | 5.90 | 0.952 | 5.25 | 4890 | 5.00 | 220 |
| GES_TP15_0.5 | 4060831-10 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | *6220* | ND (0.559) | 9.53 | 92.6 | *1.13* | 0.216 | 5650 | 17.9 | 4.79 | 23.8 | 7260 | 11.3 | 1510 |
| GES_TP15_1.5 | 4060880-15 | 1.5-2.0 | 6/26/2014 | Soil | mg/kg | 584 | ND (0.568) | ND (0.568) | 0.879 | ND (0.0284) | ND (0.0568) | ND (28.4) | 2.43 | ND (0.227) | 1.37 | 2150 | 0.857 | ND (56.8) |
| GES_TP16/17_4.0 | 4060880-11 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | 129 | ND (0.535) | ND (0.535) | 0.898 | ND (0.0268) | ND (0.0535) | 31.0 | 1.54 | ND (0.214) | 0.322 | 334 | 0.924 | ND (53.5) |
| GES_TP16_2.0 | 4060831-11 | 2.0-2.5 | 6/25/2014 | Soil | mg/kg | 3530 | ND (0.545) | 2.44 | 15.4 | 0.228 | ND (0.0545) | 2130 | 8.73 | 1.38 | 9.85 | 6840 | 6.16 | 1180 |
| GES_TP17_0.5 | 4060831-05 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 5260 | ND (0.541) | 2.44 | 12.3 | 0.208 | ND (0.0541) | 427 | 10.4 | 1.56 | 14.0 | 11300 | 11.9 | 557 |
| GES_TP18_0.5 | 4060795-13 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | 2620 | ND (0.553) | 2.03 | 9.18 | 0.0612 | 0.0970 | 46.6 | 7.17 | 0.364 | 19.3 | 2230 | 15.0 | 141 |
| GES_TP18_2.0 | 4060880-04 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - | - | - | - |
| GES_TP4_0.5 | 4060831-02 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 1400 | ND (0.565) | 0.624 | 5.44 | 0.0770 | ND (0.0565) | 176 | 7.91 | 1.22 | 6.52 | 4260 | 3.23 | 118 |
| GES_TP5_0.5 | 4060795-01 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | 3480 | ND (0.588) | 1.56 | 10.4 | 0.118 | ND (0.0588) | 405 | 7.20 | 0.865 | 14.0 | 5470 | 11.2 | 378 |
| GES_TP5_3.5 | 4060795-02 | 3.5-4.0 | 6/24/2014 | Soil | mg/kg | 1680 | ND (0.543) | 1.47 | 5.66 | 0.0984 | ND (0.0543) | 242 | 5.06 | 0.533 | 6.50 | 3690 | 7.15 | 165 |
| GES_TP6_0.0 | 4060795-03 | 0.0-1.0 | 6/24/2014 | Soil | mg/kg | 1850 | ND (0.540) | 0.632 | 7.55 | 0.102 | ND (0.0540) | 420 | 6.21 | 0.805 | 8.40 | 4740 | 7.03 | 306 |
| GES_TP7_0.5 | 4060831-03 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 2560 | ND (0.545) | 1.94 | 14.4 | 0.209 | ND (0.0545) | 439 | 7.39 | 1.30 | 8.49 | 5480 | 6.04 | 239 |
| GES_TP8_0.5 | 4060831-04 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 1770 | ND (0.538) | 1.41 | 11.0 | 0.127 | ND (0.0538) | 461 | 10.7 | 0.595 | 9.59 | 3230 | 5.07 | 155 |
| GES_TP8_2.0 | 4060880-14 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | 1190 | ND (0.622) | 1.04 | 1.23 | 0.0428 | ND (0.0622) | 62.8 | 3.10 | ND (0.249) | 2.20 | 1990 | 0.667 | ND (62.2) |
| GES_TP9_0.5 | 4060831-09 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 4500 | ND (0.544) | 1.75 | 9.77 | 0.122 | ND (0.0544) | 486 | 9.49 | 1.28 | 5.35 | 6230 | 4.74 | 630 |

**Qualifiers:**

E - Concentration exceeds highest calibration standard
B - Indicates compound found in associated blank
D - Indicates result is based on a dilution
H - Alternate peak selection upon analytical review
J - Indicates estimated value for TICs and all results when detected below the RL
U - Indicates compound analyzed for but not detected

µg/L - Units in Micrograms per Liter
ND - Not Detected
- Not analyzed
NA - Not Available

Table 4 - Metals
AOC Historic Fill Soil Sampling
Macy's - Raritan Expansion
401 Clearview Road, Edison, NJ

| Sample ID: | Lab Sample ID: | Sample Depth: | Date Sampled: | Matrix: | Units: | Manganese | Mercury | Nickel | Potassium | Selenium | Silver | Sodium | Thallium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NJ Residential Direct Contact Soil (NJAC 7:26D 6/08) | | | | | | **11,000** | **23** | **1,600** | **NA** | **390** | **390** | **NA** | **5** | **78** | **23,000** |
| NJ Non-Residential Direct Contact Soil (NJAC 7:26D 6/08) | | | | | | 5,900 | 65 | 23,000 | NA | 5,700 | 5,700 | NA | 79 | 1,100 | 110,000 |
| *NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)* | | | | | | *65* | *0.1* | *48* | *NA* | *11* | *1* | *NA* | 3 | *NA* | *930* |
| AS_SB-1_0.5 | 4070365-05 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | 9.67 | ND (0.0221) | 0.575 | ND (106) | ND (0.664) | ND (0.531) | ND (53.1) | ND (0.531) | 5.20 | 2.80 |
| AS_SB-4_0.5 | 4070365-14 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | 8.59 | ND (0.0228) | 1.32 | ND (110) | ND (0.686) | ND (0.549) | ND (54.9) | ND (0.549) | 12.8 | 7.53 |
| AS_SB-5_0.5 | 4070365-09 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | 6.82 | ND (0.0222) | 0.741 | ND (107) | ND (0.668) | ND (0.535) | ND (53.5) | ND (0.535) | 13.2 | 2.89 |
| AS_SB-6_0.5 | 4070365-01 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | 35.6 | ND (0.0225) | 2.73 | 167 | ND (0.675) | ND (0.540) | ND (54.0) | 0.643 | 13.0 | 8.52 |
| AS_SB-7_0.5 | 4070365-10 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | 19.4 | 0.0324 | 2.16 | 148 | ND (0.684) | ND (0.547) | ND (54.7) | ND (0.547) | 16.6 | 13.6 |
| GES_SB1_0.5 | 4060880-10 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | *79.9* | ND (0.0234) | 3.01 | ND (112) | ND (0.703) | ND (0.562) | ND (56.2) | ND (0.562) | 20.2 | 9.69 |
| GES_SB10_0.5 | 4060880-06 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | *4450 D* | 0.0334 | 7.19 | 274 | ND (0.751) | *1.82* | 75.2 | *3.27* | 73.9 | 24.0 |
| GES_SB11_0.5 | 4060880-09 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | 64.4 | ND (0.0226) | 2.59 | 342 | ND (0.679) | ND (0.543) | ND (54.3) | 0.569 | 24.3 | 11.0 |
| GES_SB12_0.5 | 4060880-18 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | 63.5 | 0.0256 | 4.09 | 236 | ND (0.670) | ND (0.536) | 172 | ND (0.536) | 28.6 | 21.8 |
| GES_SB13_0.5 | 4060880-02 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | 29.7 | 0.0235 | 3.31 | 239 | ND (0.694) | ND (0.555) | ND (55.5) | ND (0.555) | 20.8 | 18.4 |
| GES_SB14_0.5 | 4060880-03 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | 17.8 | 0.0468 | 2.65 | 269 | ND (0.713) | ND (0.570) | ND (57.0) | ND (0.570) | 24.9 | 9.95 |
| GES_SB2_0.5 | 4060880-05 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | *205* | ND (0.0219) | 2.57 | 137 | ND (0.659) | ND (0.527) | ND (52.7) | 0.770 | 28.3 | 8.66 |
| GES_SB3_0.5 | 4060795-12 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | 15.6 | ND (0.0223) | 2.09 | 139 | ND (0.672) | ND (0.537) | ND (53.7) | ND (0.537) | 16.1 | 8.24 |
| GES_SB4_0.5 | 4060831-12 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 45.0 | 0.0415 | 3.08 | 159 | ND (0.704) | ND (0.563) | ND (56.3) | ND (0.563) | 31.7 | 9.38 |
| GES_SB5_0.5 | 4060831-06 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 56.9 | *0.143* | 9.21 | 406 | 1.45 | ND (0.555) | 282 | 1.02 | 33.4 | 21.3 |
| GES_SB6_0.5 | 4060831-07 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 22.4 | 0.0508 | 2.79 | 460 | ND (0.669) | ND (0.535) | ND (53.5) | ND (0.535) | 27.7 | 10.6 |
| GES_SB7_0.5 | 4060880-07 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | *337* | 0.0950 | 1.57 | 177 | 0.853 | ND (0.600) | ND (60.0) | ND (0.600) | 26.2 | 6.79 |
| GES_SB9_0.5 | 4060880-01 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | 17.0 | 0.0332 | 4.03 | 178 | ND (0.697) | ND (0.558) | ND (55.8) | ND (0.558) | 18.3 | 15.2 |
| GES_TP1_0.5 | 4060831-01 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | *81.0* | ND (0.0231) | 11.0 | ND (111) | ND (0.694) | ND (0.555) | ND (55.5) | ND (0.555) | 22.7 | 19.5 |
| GES_TP1_8.0 | 4060880-13 | 8.0-8.5 | 6/26/2014 | Soil | mg/kg | 2.72 | ND (0.0215) | 0.318 | ND (103) | ND (0.646) | ND (0.516) | ND (51.6) | ND (0.516) | 21.5 | 1.70 |
| GES_TP10_4.0 | 4060795-04 | 4.0-4.5 | 6/24/2014 | Soil | mg/kg | 17.6 | 0.0377 | 4.66 | 180 | ND (0.725) | 0.795 | ND (58.0) | ND (0.580) | 25.5 | 11.8 |
| GES_TP10_9.0 | 4060795-05 | 9.0-9.5 | 6/24/2014 | Soil | mg/kg | 20.5 | 0.0328 | 3.21 | 228 | ND (0.715) | ND (0.572) | ND (57.2) | ND (0.572) | 22.3 | 11.4 |
| GES_TP11_0.0 | 4060795-06 | 0.0-0.5 | 6/24/2014 | Soil | mg/kg | 8.43 | ND (0.0226) | 1.61 | 129 | ND (0.680) | ND (0.544) | ND (54.4) | ND (0.544) | 21.0 | 8.02 |
| GES_TP12_0.5 | 4060795-07 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | 27.4 | ND (0.0225) | 2.70 | 1910 | ND (0.676) | 0.622 | ND (54.1) | ND (0.541) | 29.4 | 12.8 |
| GES_TP12_2.0 | 4060795-08 | 2.0-2.5 | 6/24/2014 | Soil | mg/kg | 19.3 | ND (0.0237) | 2.53 | 211 | ND (0.711) | ND (0.569) | ND (56.9) | ND (0.569) | 17.1 | 9.35 |
| GES_TP13_6.0 | 4060795-09 | 6.0-6.5 | 6/24/2014 | Soil | mg/kg | 24.3 | 0.0315 | 3.46 | 427 | ND (0.712) | ND (0.569) | ND (56.9) | ND (0.569) | 21.5 | 17.4 |
| GES_TP13_8.5 | 4060795-10 | 8.5-9.0 | 6/24/2014 | Soil | mg/kg | 21.3 | 0.0462 | 3.41 | 235 | ND (0.750) | ND (0.600) | ND (60.0) | ND (0.600) | 19.4 | 19.2 |
| GES_TP14_0.5 | 4060795-11 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | *82.2* | ND (0.0218) | 3.81 | 771 | ND (0.655) | ND (0.524) | ND (52.4) | ND (0.524) | 23.0 | 17.0 |
| GES_TP14_4.0 | 4060880-12 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | 15.6 | ND (0.0235) | 1.83 | ND (113) | ND (0.706) | ND (0.565) | ND (56.5) | ND (0.565) | 10.1 | 7.34 |
| GES_TP15_0.5 | 4060831-10 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 51.2 | 0.0559 | 9.99 | 665 | 0.909 | ND (0.559) | 145 | 1.41 | 35.0 | 20.7 |
| GES_TP15_1.5 | 4060880-15 | 1.5-2.0 | 6/26/2014 | Soil | mg/kg | 0.609 | ND (0.0236) | 0.173 | ND (114) | ND (0.710) | ND (0.568) | ND (56.8) | ND (0.568) | 12.3 | ND (0.852) |
| GES_TP16/17_4.0 | 4060880-11 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | 1.16 | ND (0.0223) | ND (0.134) | ND (107) | ND (0.669) | ND (0.535) | ND (53.5) | ND (0.535) | 3.32 | ND (0.803) |
| GES_TP16_2.0 | 4060831-11 | 2.0-2.5 | 6/25/2014 | Soil | mg/kg | 23.0 | 0.0282 | 2.59 | 242 | ND (0.681) | ND (0.545) | ND (54.5) | ND (0.545) | 21.8 | 8.85 |
| GES_TP17_0.5 | 4060831-05 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 27.9 | 0.0346 | 3.24 | 235 | ND (0.676) | ND (0.541) | ND (54.1) | ND (0.541) | 24.0 | 11.3 |
| GES_TP18_0.5 | 4060795-13 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | 5.69 | ND (0.0230) | 1.15 | 136 | ND (0.691) | ND (0.553) | ND (55.3) | ND (0.553) | 8.85 | 5.24 |
| GES_TP18_2.0 | 4060880-04 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - | - |
| GES_TP4_0.5 | 4060831-02 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 7.07 | ND (0.0235) | 1.22 | ND (113) | ND (0.706) | ND (0.565) | ND (56.5) | ND (0.565) | 21.7 | 3.87 |
| GES_TP5_0.5 | 4060795-01 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | 17.6 | 0.0260 | 2.24 | 182 | ND (0.736) | ND (0.588) | ND (58.8) | ND (0.588) | 21.2 | 9.13 |
| GES_TP5_3.5 | 4060795-02 | 3.5-4.0 | 6/24/2014 | Soil | mg/kg | 11.8 | ND (0.0226) | 1.00 | ND (109) | ND (0.679) | ND (0.543) | ND (54.3) | ND (0.543) | 13.0 | 5.50 |
| GES_TP6_0.0 | 4060795-03 | 0.0-1.0 | 6/24/2014 | Soil | mg/kg | 17.1 | ND (0.0225) | 1.82 | ND (108) | ND (0.675) | ND (0.540) | ND (54.0) | ND (0.540) | 18.0 | 8.15 |
| GES_TP7_0.5 | 4060831-03 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 13.6 | 0.0262 | 2.25 | 142 | ND (0.682) | ND (0.545) | ND (54.5) | ND (0.545) | 16.7 | 8.68 |
| GES_TP8_0.5 | 4060831-04 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 8.38 | 0.0237 | 1.28 | ND (108) | ND (0.672) | ND (0.538) | ND (53.8) | ND (0.538) | 13.9 | 4.35 |
| GES_TP8_2.0 | 4060880-14 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | 0.648 | ND (0.0259) | 0.240 | ND (124) | ND (0.777) | ND (0.622) | ND (62.2) | ND (0.622) | 17.1 | ND (0.933) |
| GES_TP9_0.5 | 4060831-09 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 18.5 | ND (0.0226) | 2.74 | 245 | ND (0.681) | ND (0.544) | ND (54.4) | ND (0.544) | 22.2 | 8.17 |

**Qualifiers:**

E - Concentration exceeds highest calibration standard
B - Indicates compound found in associated blank
D - Indicates result is based on a dilution
H - Alternate peak selection upon analytical review
J - Indicates estimated value for TICs and all results when detected below the RL
U - Indicates compound analyzed for but not detected

µg/L - Units in Micrograms per Liter
ND - Not Detected
- Not analyzed
NA - Not Available

Table 5 - General Chemistry
AOC Historic Fill Soil Sampling
Macy's - Raritan Expansion
401 Clearview Road, Edison, NJ

| Sample ID: | Lab Sample ID: | Sample Depth: | Date Sampled: | Matrix: | Units: | Percent Solids | Chromium, Hexavalent | Cyanide | Redox Potential | pH |
|---|---|---|---|---|---|---|---|---|---|---|
| **NJ Residential Direct Contact Soil (NJAC 7:26D 6/08)** | | | | | | **NA** | **240** | **1,600** | **NA** | **NA** |
| NJ Non-Residential Direct Contact Soil (NJAC 7:26D 6/08) | | | | | | NA | 20 | 23,000 | NA | NA |
| *NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)* | | | | | | *NA* | *S.spec* | *20* | *NA* | *NA* |
| GES_TP5_0.5 | 4060795-01 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | 85.0 | ND (0.471) | ND (0.294) | 210 | 6.10 |
| GES_TP5_3.5 | 4060795-02 | 3.5-4.0 | 6/24/2014 | Soil | mg/kg | 92.0 | ND (0.435) | ND (0.272) | 215 | 6.00 |
| GES_TP6_0.0 | 4060795-03 | 0.0-1.0 | 6/24/2014 | Soil | mg/kg | 92.6 | - | - | - | - |
| GES_TP10_4.0 | 4060795-04 | 4.0-4.5 | 6/24/2014 | Soil | mg/kg | 86.2 | ND (0.464) | ND (0.290) | 261 | 4.90 |
| GES_TP10_9.0 | 4060795-05 | 9.0-9.5 | 6/24/2014 | Soil | mg/kg | 87.4 | ND (0.458) | ND (0.286) | 111 | 5.20 |
| GES_TP11_0.0 | 4060795-06 | 0.0-0.5 | 6/24/2014 | Soil | mg/kg | 91.9 | - | - | - | - |
| GES_TP12_0.5 | 4060795-07 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | 92.5 | ND (0.433) | ND (0.270) | 290 | 4.00 |
| GES_TP12_2.0 | 4060795-08 | 2.0-2.5 | 6/24/2014 | Soil | mg/kg | 87.9 | 2.64 | ND (0.284) | 326 | 4.00 |
| GES_TP13_6.0 | 4060795-09 | 6.0-6.5 | 6/24/2014 | Soil | mg/kg | 87.8 | ND (0.455) | ND (0.285) | 145 | 5.10 |
| GES_TP13_8.5 | 4060795-10 | 8.5-9.0 | 6/24/2014 | Soil | mg/kg | 83.3 | ND (0.480) | ND (0.300) | 166 | 5.20 |
| GES_TP14_0.5 | 4060795-11 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | 95.3 | ND (0.420) | ND (0.262) | 197 | 6.30 |
| GES_SB3_0.5 | 4060795-12 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | 93.1 | - | - | - | - |
| GES_TP18_0.5 | 4060795-13 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | 90.4 | ND (0.443) | ND (0.277) | 353 | 3.90 |
| GES_TP1_0.5 | 4060831-01 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 90 | - | - | - | - |
| GES_TP4_0.5 | 4060831-02 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 88.5 | ND (0.452) | ND (0.283) | 357 | 3.70 |
| GES_TP7_0.5 | 4060831-03 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 91.7 | ND (0.436) | ND (0.273) | 202 | 5.50 |
| GES_TP8_0.5 | 4060831-04 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 93.0 | ND (0.430) | ND (0.269) | 285 | 4.50 |
| GES_TP17_0.5 | 4060831-05 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 92.4 | ND (0.433) | ND (0.271) | 220 | 5.90 |
| GES_SB5_0.5 | 4060831-06 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 90.2 | - | - | - | - |
| GES_SB6_0.5 | 4060831-07 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 93.4 | - | - | - | - |
| GES_SP1 | 4060831-08 | - | 6/25/2014 | Aqueous | mg/kg | 88.9 | - | - | - | - |
| GES_TP9_0.5 | 4060831-09 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 91.8 | ND (0.436) | ND (0.272) | 201 | 6.80 |
| GES_TP15_0.5 | 4060831-10 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 89.4 | ND (0.447) | ND (0.280) | 172 | 7.80 |
| GES_TP16_2.0 | 4060831-11 | 2.0-2.5 | 6/25/2014 | Soil | mg/kg | 91.8 | ND (0.436) | ND (0.272) | 186 | 7.10 |
| GES_SB4_0.5 | 4060831-12 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 88.8 | - | - | - | - |
| GES_SB9_0.5 | 4060880-01 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | 89.6 | - | - | - | - |
| GES_SB13_0.5 | 4060880-02 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | 90 | - | - | - | - |
| GES_SB14_0.5 | 4060880-03 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | 87.7 | - | - | - | - |
| GES_TP18_2.0 | 4060880-04 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | 88.9 | ND (0.450) | - | 353 | 3.80 |
| GES_SB2_0.5 | 4060880-05 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | 94.8 | - | - | - | - |
| GES_SB10_0.5 | 4060880-06 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | 83.3 | - | - | - | - |
| GES_SB7_0.5 | 4060880-07 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | 83.3 | - | - | - | - |
| GES_TP4_7.5 | 4060880-08 | 7.5-8.0 | 6/26/2014 | Soil | mg/kg | 96.1 | ND (0.416) | - | 212 | 4.70 |
| GES_SB11_0.5 | 4060880-09 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | 92.1 | - | - | - | - |
| GES_SB1_0.5 | 4060880-10 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | 89 | - | - | - | - |
| GES_TP16/17_4.0 | 4060880-11 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | 93.4 | ND (0.428) | ND (0.268) | 170 | 6.30 |
| GES_TP14_4.0 | 4060880-12 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | 88.5 | ND (0.452) | ND (0.283) | 320 | 4.00 |
| GES_TP1_8.0 | 4060880-13 | 8.0-8.5 | 6/26/2014 | Soil | mg/kg | 96.8 | ND (0.413) | ND (0.258) | 270 | 3.90 |
| GES_TP8_2.0 | 4060880-14 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | 80.4 | ND (0.497) | ND (0.311) | 280 | 4.70 |
| GES_TP15_1.5 | 4060880-15 | 1.5-2.0 | 6/26/2014 | Soil | mg/kg | 88.0 | ND (0.454) | ND (0.284) | 356 | 4.00 |
| GES_LP1 | 4060880-16 | - | 6/26/2014 | Aqueous | mg/kg | 90.8 | - | - | - | - |
| GES_LP2 | 4060880-17 | - | 6/26/2014 | Aqueous | mg/kg | 90.8 | - | - | - | - |
| GES_SB12_0.5 | 4060880-18 | 0.5-1.0 | 6/26/2014 | Soil | mg/kg | 93.3 | - | - | - | - |
| AS_SB-6_0.5 | 4070365-01 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | 92.5 | - | - | - | - |
| AS_SB-1_0.5 | 4070365-05 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | 94.1 | - | - | - | - |
| AS_SB-5_0.5 | 4070365-09 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | 93.5 | - | - | - | - |
| AS_SB-7_0.5 | 4070365-10 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | 91.4 | - | ND (0.274) | - | - |
| AS_SB-4_0.5 | 4070365-14 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | 91.1 | - | - | - | - |

**Qualifiers:**

E - Concentration exceeds highest calibration standard
B - Indicates compound found in associated blank
D - Indicates result is based on a dilution
H - Alternate peak selection upon analytical review
J - Indicates estimated value for TICs and all results when detected below the RL
U - Indicates compound analyzed for but not detected

µg/L - Units in Micrograms per Liter
ND - Not Detected
- Not analyzed
NA - Not Available

Table 6 - Polychlorinated Biphenyls
AOC Historic Fill Soil Sampling
Macy's - Raritan Expansion
401 Clearview Road, Edison, NJ

| Sample ID: | Lab Sample ID: | Sample Depth: | Date Sampled: | Matrix: | Units: | Aroclor-1016 | Aroclor-1221 | Aroclor-1232 | Aroclor-1242 | Aroclor-1248 | Aroclor-1254 | Aroclor-1260 | Aroclor-1262 | Aroclor-1268 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **NJ Residential Direct Contact Soil (NJAC 7:26D 6/08)** | | | | | | **0.2** | **0.2** | **0.2** | **0.2** | **0.2** | **0.2** | **0.2** | **0.2** | **0.2** |
| NJ Non-Residential Direct Contact Soil (NJAC 7:26D 6/08) | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| *NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)* | | | | | | *0.2* | *0.2* | *0.2* | *0.2* | *0.2* | *0.2* | *0.2* | *0.2* | *0.2* |
| GES_TP5_0.5 | 4060795-01 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.00127) | ND (0.00837) | ND (0.00219) | ND (0.00300) | ND (0.00212) | ND (0.000817) | ND (0.00147) | ND (0.00312) | ND (0.00219) |
| GES_TP12_0.5 | 4060795-07 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.00116) | ND (0.00769) | ND (0.00201) | ND (0.00276) | ND (0.00195) | ND (0.000751) | ND (0.00135) | ND (0.00287) | ND (0.00201) |
| GES_TP14_0.5 | 4060795-11 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.00113) | ND (0.00746) | ND (0.00195) | ND (0.00268) | ND (0.00189) | ND (0.000728) | ND (0.00131) | ND (0.00278) | ND (0.00195) |
| GES_TP18_0.5 | 4060795-13 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.00119) | ND (0.00786) | ND (0.00206) | ND (0.00282) | ND (0.00200) | ND (0.000768) | ND (0.00138) | ND (0.00293) | ND (0.00205) |
| GES_TP18_2.0 | 4060880-04 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - |
| GES_TP4_0.5 | 4060831-02 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00122) | ND (0.00803) | ND (0.00211) | ND (0.00288) | ND (0.00204) | ND (0.000784) | ND (0.00141) | ND (0.00300) | ND (0.00210) |
| GES_TP7_0.5 | 4060831-03 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00117) | ND (0.00776) | ND (0.00203) | ND (0.00278) | ND (0.00197) | ND (0.000757) | ND (0.00136) | ND (0.00289) | ND (0.00203) |
| GES_TP8_0.5 | 4060831-04 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00116) | ND (0.00765) | ND (0.00200) | ND (0.00274) | ND (0.00194) | ND (0.000746) | ND (0.00135) | ND (0.00285) | ND (0.00200) |
| GES_TP17_0.5 | 4060831-05 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00116) | ND (0.00769) | ND (0.00202) | ND (0.00276) | ND (0.00195) | ND (0.000751) | ND (0.00135) | ND (0.00287) | ND (0.00201) |
| GES_TP9_0.5 | 4060831-09 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00117) | ND (0.00774) | ND (0.00203) | ND (0.00278) | ND (0.00196) | ND (0.000756) | ND (0.00136) | ND (0.00289) | ND (0.00202) |
| GES_TP15_0.5 | 4060831-10 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00120) | ND (0.00795) | ND (0.00208) | ND (0.00285) | ND (0.00202) | ND (0.000776) | ND (0.00140) | ND (0.00297) | ND (0.00208) |
| AS_SB-7_0.5 | 4070365-10 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | ND (0.00118) | ND (0.00778) | ND (0.00204) | ND (0.00279) | ND (0.00197) | ND (0.000759) | ND (0.00137) | ND (0.00290) | ND (0.00203) |
| GES_TP15_1.5 | 4060880-15 | 1.5-2.0 | 6/26/2014 | Soil | mg/kg | ND (0.00122) | ND (0.00807) | ND (0.00212) | ND (0.00290) | ND (0.00205) | ND (0.000788) | ND (0.00142) | ND (0.00301) | ND (0.00211) |
| GES_TP12_2.0 | 4060795-08 | 2.0-2.5 | 6/24/2014 | Soil | mg/kg | ND (0.00122) | ND (0.00809) | ND (0.00212) | ND (0.00290) | ND (0.00205) | ND (0.000790) | ND (0.00142) | ND (0.00302) | ND (0.00211) |
| GES_TP16_2.0 | 4060831-11 | 2.0-2.5 | 6/25/2014 | Soil | mg/kg | ND (0.00117) | ND (0.00775) | ND (0.00203) | ND (0.00278) | ND (0.00197) | ND (0.000756) | ND (0.00136) | ND (0.00289) | ND (0.00202) |
| GES_TP8_2.0 | 4060880-14 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | ND (0.00134) | ND (0.00884) | ND (0.00232) | ND (0.00317) | ND (0.00224) | ND (0.000863) | ND (0.00156) | ND (0.00330) | ND (0.00231) |
| GES_TP5_3.5 | 4060795-02 | 3.5-4.0 | 6/24/2014 | Soil | mg/kg | ND (0.00117) | ND (0.00772) | ND (0.00202) | ND (0.00277) | ND (0.00196) | ND (0.000754) | ND (0.00136) | ND (0.00288) | ND (0.00202) |
| GES_TP10_4.0 | 4060795-04 | 4.0-4.5 | 6/24/2014 | Soil | mg/kg | ND (0.00125) | ND (0.00824) | ND (0.00216) | ND (0.00296) | ND (0.00209) | ND (0.000805) | ND (0.00145) | ND (0.00307) | ND (0.00215) |
| GES_TP16/17_4.0 | 4060880-11 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.00115) | ND (0.00761) | ND (0.00199) | ND (0.00273) | ND (0.00193) | ND (0.000743) | ND (0.00134) | ND (0.00284) | ND (0.00199) |
| GES_TP14_4.0 | 4060880-12 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.00122) | ND (0.00803) | ND (0.00211) | ND (0.00288) | ND (0.00204) | ND (0.000784) | ND (0.00141) | ND (0.00300) | ND (0.00210) |
| GES_TP13_6.0 | 4060795-09 | 6.0-6.5 | 6/24/2014 | Soil | mg/kg | ND (0.00123) | ND (0.00810) | ND (0.00212) | ND (0.00290) | ND (0.00205) | ND (0.000790) | ND (0.00142) | ND (0.00302) | ND (0.00211) |
| GES_TP1_8.0 | 4060880-13 | 8.0-8.5 | 6/26/2014 | Soil | mg/kg | ND (0.00111) | ND (0.00734) | ND (0.00192) | ND (0.00263) | ND (0.00186) | ND (0.000717) | ND (0.00129) | ND (0.00274) | ND (0.00192) |
| GES_TP13_8.5 | 4060795-10 | 8.5-9.0 | 6/24/2014 | Soil | mg/kg | ND (0.00129) | ND (0.00853) | ND (0.00224) | ND (0.00306) | ND (0.00216) | ND (0.000833) | ND (0.00150) | ND (0.00318) | ND (0.00223) |
| GES_TP10_9.0 | 4060795-05 | 9.0-9.5 | 6/24/2014 | Soil | mg/kg | ND (0.00123) | ND (0.00813) | ND (0.00213) | ND (0.00292) | ND (0.00206) | ND (0.000794) | ND (0.00143) | ND (0.00303) | ND (0.00212) |

**Qualifiers:**

E - Concentration exceeds highest calibration standard
B - Indicates compound found in associated blank
D - Indicates result is based on a dilution
H - Alternate peak selection upon analytical review
J - Indicates estimated value for TICs and all results when detected below the RL
U - Indicates compound analyzed for but not detected

µg/L - Units in Micrograms per Liter
ND - Not Detected
- Not analyzed
NA - Not Available

Table 7 - Pesticides
AOC Historic Fill Soil Sampling
Macy's - Raritan Expansion
401 Clearview Road, Edison, NJ

| Sample ID: | Lab Sample ID: | Sample Depth: | Date Sampled: | Matrix: | Units: | 4,4'-DDD | 4,4'-DDE | 4,4'-DDT | Aldrin | alpha-BHC | beta-BHC | Chlordane | delta-BHC | Dieldrin |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **NJ Residential Direct Contact Soil (NJAC 7:26D 6/08)** | | | | | | **3** | **2** | **2** | **0.04** | **0.1** | **0.4** | **0.2** | **NA** | **0.04** |
| NJ Non-Residential Direct Contact Soil (NJAC 7:26D 6/08) | | | | | | *13* | *9* | *8* | *0.2* | *0.5* | *2* | *1* | *NA* | *0.2* |
| *NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)* | | | | | | 4 | 18 | 11 | 0.2 | 0.002 | 0.002 | 0.05 | NA | 0.003 |
| GES_TP5_0.5 | 4060795-01 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.00165) | ND (0.00172) | ND (0.00193) | ND (0.00191) | ND (0.00191) | ND (0.00397) | ND (0.00205) | ND (0.00165) | ND (0.00191) |
| GES_TP5_3.5 | 4060795-02 | 3.5-4.0 | 6/24/2014 | Soil | mg/kg | ND (0.00152) | ND (0.00159) | ND (0.00178) | ND (0.00176) | ND (0.00176) | ND (0.00366) | ND (0.00189) | ND (0.00152) | ND (0.00176) |
| GES_TP10_4.0 | 4060795-04 | 4.0-4.5 | 6/24/2014 | Soil | mg/kg | ND (0.00162) | ND (0.00169) | 0.00322 J | ND (0.00188) | ND (0.00188) | ND (0.00391) | ND (0.00202) | ND (0.00162) | ND (0.00188) |
| GES_TP10_9.0 | 4060795-05 | 9.0-9.5 | 6/24/2014 | Soil | mg/kg | ND (0.00160) | ND (0.00167) | ND (0.00188) | ND (0.00185) | ND (0.00185) | ND (0.00386) | ND (0.00199) | ND (0.00160) | ND (0.00185) |
| GES_TP12_0.5 | 4060795-07 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.00151) | ND (0.00158) | ND (0.00177) | ND (0.00175) | ND (0.00175) | ND (0.00364) | ND (0.00188) | ND (0.00151) | ND (0.00175) |
| GES_TP12_2.0 | 4060795-08 | 2.0-2.5 | 6/24/2014 | Soil | mg/kg | ND (0.00159) | ND (0.00166) | ND (0.00187) | ND (0.00184) | ND (0.00184) | ND (0.00383) | ND (0.00198) | ND (0.00159) | ND (0.00184) |
| GES_TP13_6.0 | 4060795-09 | 6.0-6.5 | 6/24/2014 | Soil | mg/kg | ND (0.00159) | ND (0.00166) | ND (0.00187) | ND (0.00184) | ND (0.00184) | ND (0.00384) | ND (0.00198) | ND (0.00159) | ND (0.00184) |
| GES_TP13_8.5 | 4060795-10 | 8.5-9.0 | 6/24/2014 | Soil | mg/kg | ND (0.00168) | ND (0.00175) | ND (0.00197) | ND (0.00194) | ND (0.00194) | ND (0.00404) | ND (0.00209) | ND (0.00168) | ND (0.00194) |
| GES_TP14_0.5 | 4060795-11 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.00147) | ND (0.00153) | 0.00509 | ND (0.00170) | ND (0.00170) | ND (0.00353) | ND (0.00182) | ND (0.00147) | ND (0.00170) |
| GES_TP18_0.5 | 4060795-13 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.00155) | ND (0.00162) | ND (0.00181) | ND (0.00179) | ND (0.00179) | ND (0.00373) | ND (0.00192) | ND (0.00155) | ND (0.00179) |
| GES_TP18_2.0 | 4060880-04 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - | - |
| GES_TP4_0.5 | 4060831-02 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00158) | ND (0.00165) | ND (0.00185) | ND (0.00183) | ND (0.00183) | ND (0.00381) | ND (0.00197) | ND (0.00158) | ND (0.00183) |
| GES_TP7_0.5 | 4060831-03 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00153) | ND (0.00159) | ND (0.00179) | ND (0.00177) | ND (0.00177) | ND (0.00368) | ND (0.00190) | ND (0.00153) | ND (0.00177) |
| GES_TP8_0.5 | 4060831-04 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00151) | ND (0.00157) | ND (0.00176) | ND (0.00174) | ND (0.00174) | ND (0.00362) | ND (0.00187) | ND (0.00151) | ND (0.00174) |
| GES_TP17_0.5 | 4060831-05 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00151) | ND (0.00158) | ND (0.00177) | ND (0.00175) | ND (0.00175) | ND (0.00365) | ND (0.00188) | ND (0.00151) | ND (0.00175) |
| GES_TP9_0.5 | 4060831-09 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00152) | ND (0.00159) | ND (0.00179) | ND (0.00176) | ND (0.00176) | ND (0.00367) | ND (0.00189) | ND (0.00152) | ND (0.00176) |
| GES_TP15_0.5 | 4060831-10 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00157) | ND (0.00163) | ND (0.00183) | ND (0.00181) | ND (0.00181) | ND (0.00377) | ND (0.00195) | ND (0.00157) | ND (0.00181) |
| GES_TP16_2.0 | 4060831-11 | 2.0-2.5 | 6/25/2014 | Soil | mg/kg | ND (0.00153) | ND (0.00159) | 0.0267 | ND (0.00177) | ND (0.00177) | ND (0.00367) | ND (0.00190) | ND (0.00153) | ND (0.00177) |
| GES_TP16/17_4.0 | 4060880-11 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.00150) | ND (0.00156) | ND (0.00176) | ND (0.00173) | ND (0.00173) | ND (0.00361) | ND (0.00186) | ND (0.00150) | ND (0.00173) |
| GES_TP14_4.0 | 4060880-12 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.00158) | ND (0.00165) | ND (0.00185) | ND (0.00183) | ND (0.00183) | ND (0.00381) | ND (0.00197) | ND (0.00158) | ND (0.00183) |
| GES_TP1_8.0 | 4060880-13 | 8.0-8.5 | 6/26/2014 | Soil | mg/kg | ND (0.00145) | ND (0.00151) | ND (0.00169) | ND (0.00167) | ND (0.00167) | ND (0.00348) | ND (0.00180) | ND (0.00145) | ND (0.00167) |
| GES_TP8_2.0 | 4060880-14 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | ND (0.00174) | ND (0.00182) | ND (0.00204) | ND (0.00201) | ND (0.00201) | ND (0.00419) | ND (0.00216) | ND (0.00174) | ND (0.00201) |
| GES_TP15_1.5 | 4060880-15 | 1.5-2.0 | 6/26/2014 | Soil | mg/kg | ND (0.00159) | ND (0.00166) | ND (0.00186) | ND (0.00184) | ND (0.00184) | ND (0.00383) | ND (0.00198) | ND (0.00159) | ND (0.00184) |
| AS_SB-7_0.5 | 4070365-10 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | ND (0.00153) | ND (0.00160) | ND (0.00179) | ND (0.00177) | ND (0.00177) | ND (0.00369) | ND (0.00190) | ND (0.00153) | ND (0.00177) |

**Qualifiers:**

E - Concentration exceeds highest calibration standard
B - Indicates compound found in associated blank
D - Indicates result is based on a dilution
H - Alternate peak selection upon analytical review
J - Indicates estimated value for TICs and all results when detected below the RL
U - Indicates compound analyzed for but not detected

µg/L - Units in Micrograms per Liter
ND - Not Detected
- Not analyzed
NA - Not Available

Table 7 - Pesticides
AOC Historic Fill Soil Sampling
Macy's - Raritan Expansion
401 Clearview Road, Edison, NJ

| Sample ID: | Lab Sample ID: | Sample Depth: | Date Sampled: | Matrix: | Units: | Endosulfan I | Endosulfan II | Endosulfan sulfate | Endrin | Endrin aldehyde | Endrin ketone | gamma-BHC (Lindane) | Heptachlor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **NJ Residential Direct Contact Soil (NJAC 7:26D 6/08)** | | | | | | **470** | **470** | **470** | **23** | **NA** | **NA** | **0.4** | **0.1** |
| NJ Non-Residential Direct Contact Soil (NJAC 7:26D 6/08) | | | | | | *6800* | *6800* | *6800* | *340* | *NA* | *NA* | *2* | *0.7* |
| *NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)* | | | | | | 4 | 4 | 2 | 1 | NA | NA | 0.002 | 0.5 |
| GES_TP5_0.5 | 4060795-01 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.00120) | ND (0.00182) | ND (0.00193) | ND (0.00191) | ND (0.00217) | ND (0.00204) | ND (0.00191) | ND (0.00174) |
| GES_TP5_3.5 | 4060795-02 | 3.5-4.0 | 6/24/2014 | Soil | mg/kg | ND (0.00111) | ND (0.00168) | ND (0.00178) | ND (0.00176) | ND (0.00200) | ND (0.00188) | ND (0.00176) | ND (0.00161) |
| GES_TP10_4.0 | 4060795-04 | 4.0-4.5 | 6/24/2014 | Soil | mg/kg | ND (0.00118) | ND (0.00180) | ND (0.00190) | ND (0.00188) | ND (0.00213) | ND (0.00201) | ND (0.00188) | ND (0.00172) |
| GES_TP10_9.0 | 4060795-05 | 9.0-9.5 | 6/24/2014 | Soil | mg/kg | ND (0.00117) | ND (0.00177) | ND (0.00188) | ND (0.00185) | ND (0.00211) | ND (0.00198) | ND (0.00185) | ND (0.00169) |
| GES_TP12_0.5 | 4060795-07 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.00110) | ND (0.00168) | ND (0.00177) | ND (0.00175) | ND (0.00199) | ND (0.00187) | ND (0.00175) | ND (0.00160) |
| GES_TP12_2.0 | 4060795-08 | 2.0-2.5 | 6/24/2014 | Soil | mg/kg | ND (0.00116) | ND (0.00176) | ND (0.00187) | ND (0.00184) | ND (0.00209) | ND (0.00197) | ND (0.00184) | ND (0.00168) |
| GES_TP13_6.0 | 4060795-09 | 6.0-6.5 | 6/24/2014 | Soil | mg/kg | ND (0.00116) | ND (0.00177) | ND (0.00187) | ND (0.00184) | ND (0.00210) | ND (0.00197) | ND (0.00184) | ND (0.00169) |
| GES_TP13_8.5 | 4060795-10 | 8.5-9.0 | 6/24/2014 | Soil | mg/kg | ND (0.00122) | ND (0.00186) | ND (0.00197) | ND (0.00194) | ND (0.00221) | ND (0.00208) | ND (0.00194) | ND (0.00178) |
| GES_TP14_0.5 | 4060795-11 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.00107) | ND (0.00163) | ND (0.00172) | ND (0.00170) | ND (0.00193) | ND (0.00181) | ND (0.00170) | ND (0.00155) |
| GES_TP18_0.5 | 4060795-13 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.00113) | ND (0.00171) | ND (0.00181) | ND (0.00179) | ND (0.00204) | ND (0.00191) | ND (0.00179) | ND (0.00164) |
| GES_TP18_2.0 | 4060880-04 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | - | - | - | - | - | - | - | - |
| GES_TP4_0.5 | 4060831-02 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00115) | ND (0.00175) | ND (0.00185) | ND (0.00183) | ND (0.00208) | ND (0.00196) | ND (0.00183) | ND (0.00167) |
| GES_TP7_0.5 | 4060831-03 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00111) | ND (0.00169) | ND (0.00179) | ND (0.00177) | ND (0.00201) | ND (0.00189) | ND (0.00177) | ND (0.00161) |
| GES_TP8_0.5 | 4060831-04 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00110) | ND (0.00167) | ND (0.00176) | ND (0.00174) | ND (0.00198) | ND (0.00186) | ND (0.00174) | ND (0.00159) |
| GES_TP17_0.5 | 4060831-05 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00110) | ND (0.00168) | ND (0.00177) | ND (0.00175) | ND (0.00199) | ND (0.00187) | ND (0.00175) | ND (0.00160) |
| GES_TP9_0.5 | 4060831-09 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00111) | ND (0.00169) | ND (0.00179) | ND (0.00176) | ND (0.00200) | ND (0.00188) | ND (0.00176) | ND (0.00161) |
| GES_TP15_0.5 | 4060831-10 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00114) | ND (0.00173) | ND (0.00183) | ND (0.00181) | ND (0.00206) | ND (0.00193) | ND (0.00181) | ND (0.00165) |
| GES_TP16_2.0 | 4060831-11 | 2.0-2.5 | 6/25/2014 | Soil | mg/kg | ND (0.00111) | ND (0.00169) | ND (0.00179) | ND (0.00177) | ND (0.00201) | ND (0.00189) | ND (0.00177) | ND (0.00161) |
| GES_TP16/17_4.0 | 4060880-11 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.00109) | ND (0.00166) | ND (0.00176) | ND (0.00173) | ND (0.00197) | ND (0.00185) | ND (0.00173) | ND (0.00158) |
| GES_TP14_4.0 | 4060880-12 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.00115) | ND (0.00175) | ND (0.00185) | ND (0.00183) | ND (0.00208) | ND (0.00196) | ND (0.00183) | ND (0.00167) |
| GES_TP1_8.0 | 4060880-13 | 8.0-8.5 | 6/26/2014 | Soil | mg/kg | ND (0.00105) | ND (0.00160) | ND (0.00169) | ND (0.00167) | ND (0.00190) | ND (0.00179) | ND (0.00167) | ND (0.00153) |
| GES_TP8_2.0 | 4060880-14 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | ND (0.00127) | ND (0.00193) | ND (0.00204) | ND (0.00201) | ND (0.00229) | ND (0.00215) | ND (0.00201) | ND (0.00184) |
| GES_TP15_1.5 | 4060880-15 | 1.5-2.0 | 6/26/2014 | Soil | mg/kg | ND (0.00116) | ND (0.00176) | ND (0.00186) | ND (0.00184) | ND (0.00209) | ND (0.00197) | ND (0.00184) | ND (0.00168) |
| AS_SB-7_0.5 | 4070365-10 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | ND (0.00112) | ND (0.00170) | ND (0.00179) | ND (0.00177) | ND (0.00201) | ND (0.00189) | ND (0.00177) | ND (0.00162) |

**Qualifiers:**

E - Concentration exceeds highest calibration standard
B - Indicates compound found in associated blank
D - Indicates result is based on a dilution
H - Alternate peak selection upon analytical review
J - Indicates estimated value for TICs and all results when detected below the RL
U - Indicates compound analyzed for but not detected

µg/L - Units in Micrograms per Liter
ND - Not Detected
- Not analyzed
NA - Not Available

Table 7 - Pesticides
AOC Historic Fill Soil Sampling
Macy's - Raritan Expansion
401 Clearview Road, Edison, NJ

| Sample ID: | Lab Sample ID: | Sample Depth: | Date Sampled: | Matrix: | Units: | Heptachlor Epoxide | Methoxychlor | Toxaphene |
|---|---|---|---|---|---|---|---|---|
| **NJ Residential Direct Contact Soil (NJAC 7:26D 6/08)** | | | | | | **0.07** | **390** | **0.6** |
| NJ Non-Residential Direct Contact Soil (NJAC 7:26D 6/08) | | | | | | *0.3* | *5700* | *3* |
| *NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)* | | | | | | 0.01 | 160 | 0.3 |
| GES_TP5_0.5 | 4060795-01 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.00212) | ND (0.00162) | ND (0.0238) |
| GES_TP5_3.5 | 4060795-02 | 3.5-4.0 | 6/24/2014 | Soil | mg/kg | ND (0.00196) | ND (0.00150) | ND (0.0220) |
| GES_TP10_4.0 | 4060795-04 | 4.0-4.5 | 6/24/2014 | Soil | mg/kg | ND (0.00209) | ND (0.00160) | ND (0.0234) |
| GES_TP10_9.0 | 4060795-05 | 9.0-9.5 | 6/24/2014 | Soil | mg/kg | ND (0.00206) | ND (0.00158) | ND (0.0231) |
| GES_TP12_0.5 | 4060795-07 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.00195) | ND (0.00149) | ND (0.0218) |
| GES_TP12_2.0 | 4060795-08 | 2.0-2.5 | 6/24/2014 | Soil | mg/kg | ND (0.00205) | ND (0.00157) | ND (0.0230) |
| GES_TP13_6.0 | 4060795-09 | 6.0-6.5 | 6/24/2014 | Soil | mg/kg | ND (0.00205) | ND (0.00157) | ND (0.0230) |
| GES_TP13_8.5 | 4060795-10 | 8.5-9.0 | 6/24/2014 | Soil | mg/kg | ND (0.00216) | ND (0.00166) | ND (0.0242) |
| GES_TP14_0.5 | 4060795-11 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.00189) | ND (0.00145) | ND (0.0212) |
| GES_TP18_0.5 | 4060795-13 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (0.00199) | ND (0.00153) | ND (0.0223) |
| GES_TP18_2.0 | 4060880-04 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | - | - | - |
| GES_TP4_0.5 | 4060831-02 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00203) | ND (0.00156) | ND (0.0228) |
| GES_TP7_0.5 | 4060831-03 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00196) | ND (0.00151) | ND (0.0220) |
| GES_TP8_0.5 | 4060831-04 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00194) | ND (0.00148) | ND (0.0217) |
| GES_TP17_0.5 | 4060831-05 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00195) | ND (0.00149) | ND (0.0219) |
| GES_TP9_0.5 | 4060831-09 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00196) | ND (0.00150) | ND (0.0220) |
| GES_TP15_0.5 | 4060831-10 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (0.00201) | ND (0.00154) | ND (0.0226) |
| GES_TP16_2.0 | 4060831-11 | 2.0-2.5 | 6/25/2014 | Soil | mg/kg | ND (0.00196) | ND (0.00150) | ND (0.0220) |
| GES_TP16/17_4.0 | 4060880-11 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.00193) | ND (0.00148) | ND (0.0216) |
| GES_TP14_4.0 | 4060880-12 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (0.00203) | ND (0.00156) | ND (0.0228) |
| GES_TP1_8.0 | 4060880-13 | 8.0-8.5 | 6/26/2014 | Soil | mg/kg | ND (0.00186) | ND (0.00143) | ND (0.0209) |
| GES_TP8_2.0 | 4060880-14 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | ND (0.00224) | ND (0.00172) | ND (0.0251) |
| GES_TP15_1.5 | 4060880-15 | 1.5-2.0 | 6/26/2014 | Soil | mg/kg | ND (0.00204) | ND (0.00157) | ND (0.0229) |
| AS_SB-7_0.5 | 4070365-10 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | ND (0.00197) | ND (0.00151) | ND (0.0221) |

**Qualifiers:**

E - Concentration exceeds highest calibration standard
B - Indicates compound found in associated blank
D - Indicates result is based on a dilution
H - Alternate peak selection upon analytical review
J - Indicates estimated value for TICs and all results when detected below the RL
U - Indicates compound analyzed for but not detected

µg/L - Units in Micrograms per Liter
ND - Not Detected
- Not analyzed
NA - Not Available

Table 8 - Extractable Petroleum Hydrocarbons
AOC Historic Fill Soil Sampling
Macy's - Raritan Expansion

| Sample ID: | Lab Sample ID: | Sample Depth: | Date Sampled: | Matrix: | Units: | Total EPH (C9-C40) |
|---|---|---|---|---|---|---|
| **NJ Residential Direct Contact Soil (NJAC 7:26D 6/08)** | | | | | | **NA** |
| NJ Non-Residential Direct Contact Soil (NJAC 7:26D 6/08) | | | | | | NA |
| *NJ Default Impact to Groundwater Soil Screening (NJAC 7:26D 12/08)* | | | | | | *NA* |
| AS_SB-7_0.5 | 4070365-10 | 0.5-1.0 | 7/10/2014 | Soil | mg/kg | 137 |
| GES_TP1_8.0 | 4060880-13 | 8.0-8.5 | 6/26/2014 | Soil | mg/kg | ND (20.7) |
| GES_TP10_4.0 | 4060795-04 | 4.0-4.5 | 6/24/2014 | Soil | mg/kg | 69.7 |
| GES_TP10_9.0 | 4060795-05 | 9.0-9.5 | 6/24/2014 | Soil | mg/kg | 52.3 |
| GES_TP12_0.5 | 4060795-07 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | ND (21.6) |
| GES_TP12_2.0 | 4060795-08 | 2.0-2.5 | 6/24/2014 | Soil | mg/kg | ND (22.8) |
| GES_TP13_6.0 | 4060795-09 | 6.0-6.5 | 6/24/2014 | Soil | mg/kg | 34.4 |
| GES_TP13_8.5 | 4060795-10 | 8.5-9.0 | 6/24/2014 | Soil | mg/kg | 44.6 |
| GES_TP14_0.5 | 4060795-11 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | 70.6 |
| GES_TP14_4.0 | 4060880-12 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (22.6) |
| GES_TP15_0.5 | 4060831-10 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (22.4) |
| GES_TP15_1.5 | 4060880-15 | 1.5-2.0 | 6/26/2014 | Soil | mg/kg | ND (22.7) |
| GES_TP16/17_4.0 | 4060880-11 | 4.0-4.5 | 6/26/2014 | Soil | mg/kg | ND (21.4) |
| GES_TP16_2.0 | 4060831-11 | 2.0-2.5 | 6/25/2014 | Soil | mg/kg | 651 |
| GES_TP17_0.5 | 4060831-05 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | 132 |
| GES_TP18_0.5 | 4060795-13 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | 40.4 |
| GES_TP18_2.0 | 4060880-04 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | - |
| GES_TP4_0.5 | 4060831-02 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (22.6) |
| GES_TP5_0.5 | 4060795-01 | 0.5-1.0 | 6/24/2014 | Soil | mg/kg | 39.3 |
| GES_TP5_3.5 | 4060795-02 | 3.5-4.0 | 6/24/2014 | Soil | mg/kg | ND (21.7) |
| GES_TP7_0.5 | 4060831-03 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (21.8) |
| GES_TP8_0.5 | 4060831-04 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (21.5) |
| GES_TP8_2.0 | 4060880-14 | 2.0-2.5 | 6/26/2014 | Soil | mg/kg | ND (24.9) |
| GES_TP9_0.5 | 4060831-09 | 0.5-1.0 | 6/25/2014 | Soil | mg/kg | ND (21.8) |

**Qualifiers:**

E - Concentration exceeds highest calibration standard
B - Indicates compound found in associated blank
D - Indicates result is based on a dilution
H - Alternate peak selection upon analytical review
J - Indicates estimated value for TICs and all results when detected below the RL
U - Indicates compound analyzed for but not detected

µg/L - Units in Micrograms per Liter
ND - Not Detected
- Not analyzed
NA - Not Available

**Secondary Source (Almasi)**
**Results**

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

# DATA FOR

## VOLATILE ORGANICS

## SEMI-VOLATILE ORGANICS

## GC SEMI-VOLATILES

## GENERAL CHEMISTRY

**PROJECT NAME : ROUX GRAHAM PACKAGING**

**VIASANT, LLC**

**606 East Baltimore Pike, Floor 3**

**Media, PA - 19063**

**Phone No: 484-427-2960**

**ORDER ID : F1563**

**ATTENTION : Robin White**

ACCREDITED IN ACCORDANCE WITH nelac

DoD ELAP

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Date : 03/13/2014

Dear Robin White,

**2** soil samples for the **Roux Graham Packaging** project were received on **03/06/2014.** The analytical fax results for those samples requested for an expedited turn around time may be seen in this report. Please contact me if you have any questions or concerns regarding this report.

Regards,

CHRISTOPHER WOLSKI

9087283149

c.wolski@CHEMTECH.NET

# CHEMTECH
## CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO.
QUOTE NO. 1402029
COC Number 023103

**CLIENT INFORMATION**

REPORT TO BE SENT TO:
COMPANY: VIASANT
ADDRESS: 100 E. Baltimore Pk F13
CITY: Media STATE: PA ZIP: 19063
ATTENTION: Robin White
PHONE: 484-427-2960 FAX: 484-444-0703

**CLIENT PROJECT INFORMATION**

PROJECT NAME: Roux Graham
PROJECT NO.: VPR-14103 LOCATION: Edison, NJ
PROJECT MANAGER: Jon Lowenduski
e-mail: rwhite@viasant.com
PHONE: — FAX: SAME

**CLIENT BILLING INFORMATION**

BILL TO: VIASANT PO#: VPR-14103-004
ADDRESS: 854 E. Algonquin Rd Ste 110
CITY: Schaumburg STATE: IL ZIP: 60173
ATTENTION: Haron Shah PHONE: 847-956-2000

**DATA TURNAROUND INFORMATION**

FAX: 5 DAYS *
HARD COPY: DAYS *
EDD: 10 DAYS *
PREAPPROVED TAT: ☒ YES ☐ NO
* STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

**DATA DELIVERABLE INFORMATION**

☐ LEVEL 1: Results only
☐ LEVEL 2: Results + QC
☐ LEVEL 3: Results (plus results raw data) + QC
☐ LEVEL 4: Results + QC (all raw data)
☐ EDD Format:
☒ Others NJ Reduced

**ANALYSIS**

1 NJ Cleanup (SPS) VOCs
2 NJ SRS SVOCs
3 EPH Cat 2
4 Hex Chrome
5 pH (9045)
6
7
8
9

| CHEMTECH SAMPLE ID | PROJECT SAMPLE IDENTIFICATION | SAMPLE MATRIX | SAMPLE TYPE COMP | SAMPLE TYPE GRAB | SAMPLE COLLECTION DATE | SAMPLE COLLECTION TIME | # OF BOTTLES | PRESERVATIVES 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | E | E | E | E | E | | | | | ← Specify Preservatives A–HCl B–$HNO_3$ C–$H_2SO_4$ D–NaOH E–ICE F–Other |
| 1. | 14103-CF-02 | S | | X | 3/5/14 | 13:43 | 4 | X | | | | | | | | | |
| 2. | 14103-CF-03 | S | X | | 3/5/14 | 13:47 | 2 | | X | X | X | X | | | | | |
| 3. | | | | | | | | | | | | | | | | | |
| 4. | | | | | | | | | | | | | | | | | |
| 5. | | | | | | | | | | | | | | | | | |
| 6. | | | | | | | | | | | | | | | | | |
| 7. | | | | | | | | | | | | | | | | | |
| 8. | | | | | | | | | | | | | | | | | |
| 9. | | | | | | | | | | | | | | | | | |
| 10. | | | | | | | | | | | | | | | | | |

**SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY**

| RELINQUISHED BY SAMPLER: | DATE/TIME: | RECEIVED BY: |
|---|---|---|
| 1. Robin White | 3/5/14 | 1. Media Pack + Ship (UPS) |
| RELINQUISHED BY: 2. | DATE/TIME: | RECEIVED BY: 2. |
| RELINQUISHED BY: 3. UPS | DATE/TIME: 3-6-14 1000 | RECEIVED FOR LAB BY: 3. |

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant
MeOH extraction requires an additional 4 oz jar for percent solid.
Comments:

Cooler Temp. 6°C
Ice in Cooler?: ✓

Page 1 of 1

SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☒ OVERNIGHT
CHEMTECH: ☐ PICKED UP ☐ OVERNIGHT

Shipment Complete: ☒ YES ☐ NO

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | VIASANT, LLC | Date Collected: | 03/05/14 |
| Project: | Roux Graham Packaging | Date Received: | 03/06/14 |
| Client Sample ID: | 14103-CF-02 | SDG No.: | F1563 |
| Lab Sample ID: | F1563-01 | Matrix: | SOIL |
| Analytical Method: | SW8260 | % Moisture: | 9.5 |
| Sample Wt/Vol: | 5.75 Units: g | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCGCMS NJ CleanGroup N |
| GC Column: | RTX-VMS ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VF040860.D | 1 | | 03/07/14 | VF030714 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| 75-71-8 | Dichlorodifluoromethane | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 74-87-3 | Chloromethane | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 75-01-4 | Vinyl Chloride | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 74-83-9 | Bromomethane | 0.96 | U | 0.96 | 0.96 | 4.8 | ug/Kg |
| 75-00-3 | Chloroethane | 0.48 | UQ | 0.48 | 0.48 | 4.8 | ug/Kg |
| 75-69-4 | Trichlorofluoromethane | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 75-65-0 | Tert butyl alcohol | 24 | U | 7.1 | 24 | 24 | ug/Kg |
| 75-35-4 | 1,1-Dichloroethene | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 107-02-8 | Acrolein | 24 | UQ | 3.8 | 24 | 24 | ug/Kg |
| 107-13-1 | Acrylonitrile | 2.4 | U | 2.4 | 2.4 | 24 | ug/Kg |
| 67-64-1 | Acetone | 2.4 | U | 2.4 | 2.4 | 24 | ug/Kg |
| 75-15-0 | Carbon Disulfide | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 1634-04-4 | Methyl tert-butyl Ether | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 79-20-9 | Methyl Acetate | 0.96 | U | 0.96 | 0.96 | 4.8 | ug/Kg |
| 75-09-2 | Methylene Chloride | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 156-60-5 | trans-1,2-Dichloroethene | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 75-34-3 | 1,1-Dichloroethane | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 78-93-3 | 2-Butanone | 7.2 | U | 3 | 7.2 | 24 | ug/Kg |
| 56-23-5 | Carbon Tetrachloride | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 156-59-2 | cis-1,2-Dichloroethene | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 67-66-3 | Chloroform | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 71-55-6 | 1,1,1-Trichloroethane | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 71-43-2 | Benzene | 0.48 | U | 0.37 | 0.48 | 4.8 | ug/Kg |
| 107-06-2 | 1,2-Dichloroethane | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 79-01-6 | Trichloroethene | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 78-87-5 | 1,2-Dichloropropane | 0.48 | U | 0.25 | 0.48 | 4.8 | ug/Kg |
| 75-27-4 | Bromodichloromethane | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 108-10-1 | 4-Methyl-2-Pentanone | 2.4 | U | 2.4 | 2.4 | 24 | ug/Kg |
| 108-88-3 | Toluene | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 10061-02-6 | t-1,3-Dichloropropene | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | VIASANT, LLC | Date Collected: | 03/05/14 |
| Project: | Roux Graham Packaging | Date Received: | 03/06/14 |
| Client Sample ID: | 14103-CF-02 | SDG No.: | F1563 |
| Lab Sample ID: | F1563-01 | Matrix: | SOIL |
| Analytical Method: | SW8260 | % Moisture: | 9.5 |
| Sample Wt/Vol: | 5.75 Units: g | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCGCMS NJ CleanGroup N |
| GC Column: | RTX-VMS ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VF040860.D | 1 | | 03/07/14 | VF030714 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| 79-00-5 | 1,1,2-Trichloroethane | 0.96 | U | 0.86 | 0.96 | 4.8 | ug/Kg |
| 124-48-1 | Dibromochloromethane | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 106-93-4 | 1,2-Dibromoethane | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 127-18-4 | Tetrachloroethene | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 108-90-7 | Chlorobenzene | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 100-41-4 | Ethyl Benzene | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 179601-23-1 | m/p-Xylenes | 0.96 | U | 0.69 | 0.96 | 9.6 | ug/Kg |
| 1330-20-7 | Total Xylenes | 1.44 | U | 1.17 | 1.44 | 14.4 | ug/Kg |
| 95-47-6 | o-Xylene | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 100-42-5 | Styrene | 0.48 | U | 0.43 | 0.48 | 4.8 | ug/Kg |
| 75-25-2 | Bromoform | 1.4 | U | 0.71 | 1.4 | 4.8 | ug/Kg |
| 98-82-8 | Isopropylbenzene | 0.48 | U | 0.46 | 0.48 | 4.8 | ug/Kg |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.48 | U | 0.44 | 0.48 | 4.8 | ug/Kg |
| 541-73-1 | 1,3-Dichlorobenzene | 0.48 | U | 0.36 | 0.48 | 4.8 | ug/Kg |
| 106-46-7 | 1,4-Dichlorobenzene | 0.48 | U | 0.39 | 0.48 | 4.8 | ug/Kg |
| 95-50-1 | 1,2-Dichlorobenzene | 0.48 | U | 0.48 | 0.48 | 4.8 | ug/Kg |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 4.8 | U | 0.84 | 4.8 | 4.8 | ug/Kg |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.48 | UQ | 0.48 | 0.48 | 4.8 | ug/Kg |
| **SURROGATES** | | | | | | | |
| 17060-07-0 | 1,2-Dichloroethane-d4 | 32.8 | | 56 - 120 | | 66% | SPK: 50 |
| 1868-53-7 | Dibromofluoromethane | 35.9 | | 57 - 135 | | 72% | SPK: 50 |
| 2037-26-5 | Toluene-d8 | 34.4 | | 67 - 123 | | 69% | SPK: 50 |
| 460-00-4 | 4-Bromofluorobenzene | 32.3 | | 33 - 141 | | 65% | SPK: 50 |
| **INTERNAL STANDARDS** | | | | | | | |
| 363-72-4 | Pentafluorobenzene | 571736 | 4.87 | | | | |
| 540-36-3 | 1,4-Difluorobenzene | 915748 | 5.59 | | | | |
| 3114-55-4 | Chlorobenzene-d5 | 769873 | 9.76 | | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 289055 | 12.53 | | | | |

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | VIASANT, LLC | Date Collected: | 03/05/14 |
| Project: | Roux Graham Packaging | Date Received: | 03/06/14 |
| Client Sample ID: | 14103-CF-02 | SDG No.: | F1563 |
| Lab Sample ID: | F1563-01 | Matrix: | SOIL |
| Analytical Method: | SW8260 | % Moisture: | 9.5 |
| Sample Wt/Vol: | 5.75 Units: g | Final Vol: | 5000 uL |
| Soil Aliquot Vol: | uL | Test: | VOCGCMS NJ CleanGroup N |
| GC Column: | RTX-VMS ID : 0.18 | Level : | LOW |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| VF040860.D | 1 | | 03/07/14 | VF030714 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | VIASANT, LLC | Date Collected: | 03/05/14 |
| Project: | Roux Graham Packaging | Date Received: | 03/06/14 |
| Client Sample ID: | 14103-CF-03 | SDG No.: | F1563 |
| Lab Sample ID: | F1563-02 | Matrix: | Solid |
| Analytical Method: | NJEPH | % Moisture: | 11.5 |
| Sample Wt/Vol: | 30.09 Units: g | Final Vol: | 2000 uL |
| Soil Aliquot Vol: | uL | Test: | EPH_NF |

| File ID 1: | File ID 2 : | Dilution: | Prep Date : | Date Analyzed 1: | Date Analyzed 2 : | Prep Batch ID |
|---|---|---|---|---|---|---|
| FC009713.D | | 1 | 03/07/14 | 03/08/14 | | PB75293 |

| CAS Number | Parameter | | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | | |
| Aliphatic C28-C40 | | Aliphatic C28-C40 | 1.39 | J | 0.903 | 1.125 | 2.25 | mg/kg |
| Aliphatic C9-C28 | | Aliphatic C9-C28 | 3.75 | J | 1.68 | 2.255 | 4.51 | mg/kg |
| **SURROGATES** | | | | | | | | |
| 1-chlorooctadecane (SURR) | | 1-chlorooctadecane (SURR) | 34.7 | | 40 - 140 | | 69.34% | SPK: 50 |
| ortho-Terphenyl (SURR) | | ortho-Terphenyl (SURR) | 35 | | 40 - 140 | | 70.04% | SPK: 50 |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | VIASANT, LLC | Date Collected: | 03/05/14 13:47 |
| Project: | Roux Graham Packaging | Date Received: | 03/06/14 |
| Client Sample ID: | 14103-CF-03 | SDG No.: | F1563 |
| Lab Sample ID: | F1563-02 | Matrix: | SOIL |
| | | % Solid: | 88.5 |

| Parameter | Conc. | Qua. | DF | MDL | LOD | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|---|---|---|---|---|---|---|---|---|---|---|
| Hexavalent Chromium | 0.225 | U | 1 | 0.09 | 0.225 | 0.45 | mg/Kg | 03/07/14 | 03/07/14 14:30 | 7196A |
| pH | 3.64 | H | 1 | 0 | 0 | 0 | pH | 03/06/14 | 03/06/14 10:40 | 9045C |

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | VIASANT, LLC | Date Collected: | 03/05/14 |
| Project: | Roux Graham Packaging | Date Received: | 03/06/14 |
| Client Sample ID: | 14103-CF-03 | SDG No.: | F1563 |
| Lab Sample ID: | F1563-02 | Matrix: | SOIL |
| Analytical Method: | SW8270 | % Moisture: | 11.5 |
| Sample Wt/Vol: | 30.05 Units: g | Final Vol: | 1000 uL |
| Soil Aliquot Vol: | uL | Test: | SVOCMS NJ CleanGroup Ne |
| Extraction Type : | Decanted : N | Level : | LOW |
| Injection Volume : | GPC Factor : 1.0 | GPC Cleanup : | N PH : |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| BF069049.D | 1 | 03/06/14 | 03/07/14 | PB75280 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **TARGETS** | | | | | | | |
| 62-75-9 | n-Nitrosodimethylamine | 75.2 | U | 19.3 | 75.2 | 370 | ug/Kg |
| 100-52-7 | Benzaldehyde | 37.6 | U | 19.6 | 37.6 | 370 | ug/Kg |
| 108-95-2 | Phenol | 37.6 | U | 8.7 | 37.6 | 370 | ug/Kg |
| 111-44-4 | bis(2-Chloroethyl)ether | 37.6 | U | 18 | 37.6 | 370 | ug/Kg |
| 95-57-8 | 2-Chlorophenol | 37.6 | U | 19.9 | 37.6 | 370 | ug/Kg |
| 95-48-7 | 2-Methylphenol | 37.6 | U | 20.4 | 37.6 | 370 | ug/Kg |
| 108-60-1 | 2,2-oxybis(1-Chloropropane) | 37.6 | U | 15.6 | 37.6 | 370 | ug/Kg |
| 98-86-2 | Acetophenone | 37.6 | U | 11.5 | 37.6 | 370 | ug/Kg |
| 65794-96-9 | 3+4-Methylphenols | 37.6 | U | 19.5 | 37.6 | 370 | ug/Kg |
| 621-64-7 | n-Nitroso-di-n-propylamine | 37.6 | U | 19 | 37.6 | 370 | ug/Kg |
| 67-72-1 | Hexachloroethane | 37.6 | U | 16.8 | 37.6 | 370 | ug/Kg |
| 98-95-3 | Nitrobenzene | 37.6 | U | 14.2 | 37.6 | 370 | ug/Kg |
| 78-59-1 | Isophorone | 37.6 | U | 12.4 | 37.6 | 370 | ug/Kg |
| 105-67-9 | 2,4-Dimethylphenol | 37.6 | U | 21.3 | 37.6 | 370 | ug/Kg |
| 120-83-2 | 2,4-Dichlorophenol | 37.6 | U | 14.3 | 37.6 | 370 | ug/Kg |
| 91-20-3 | Naphthalene | 37.6 | U | 13 | 37.6 | 370 | ug/Kg |
| 87-68-3 | Hexachlorobutadiene | 37.6 | U | 13.6 | 37.6 | 370 | ug/Kg |
| 105-60-2 | Caprolactam | 75.2 | U | 17.5 | 75.2 | 370 | ug/Kg |
| 91-57-6 | 2-Methylnaphthalene | 37.6 | U | 9.5 | 37.6 | 370 | ug/Kg |
| 77-47-4 | Hexachlorocyclopentadiene | 37.6 | U | 9.1 | 37.6 | 370 | ug/Kg |
| 88-06-2 | 2,4,6-Trichlorophenol | 37.6 | U | 11.5 | 37.6 | 370 | ug/Kg |
| 95-95-4 | 2,4,5-Trichlorophenol | 37.6 | U | 26.4 | 37.6 | 370 | ug/Kg |
| 92-52-4 | 1,1-Biphenyl | 37.6 | U | 14.2 | 37.6 | 370 | ug/Kg |
| 88-74-4 | 2-Nitroaniline | 37.6 | U | 16.7 | 37.6 | 370 | ug/Kg |
| 208-96-8 | Acenaphthylene | 37.6 | U | 9.5 | 37.6 | 370 | ug/Kg |
| 606-20-2 | 2,6-Dinitrotoluene | 37.6 | U | 15.3 | 37.6 | 370 | ug/Kg |
| 83-32-9 | Acenaphthene | 37.6 | U | 10.6 | 37.6 | 370 | ug/Kg |
| 51-28-5 | 2,4-Dinitrophenol | 300 | U | 38.2 | 300 | 370 | ug/Kg |
| 121-14-2 | 2,4-Dinitrotoluene | 37.6 | U | 11.3 | 37.6 | 370 | ug/Kg |
| 84-66-2 | Diethylphthalate | 150 | J | 5.9 | 37.6 | 370 | ug/Kg |
| 86-73-7 | Fluorene | 37.6 | U | 14.2 | 37.6 | 370 | ug/Kg |

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | VIASANT, LLC | Date Collected: | 03/05/14 |
| Project: | Roux Graham Packaging | Date Received: | 03/06/14 |
| Client Sample ID: | 14103-CF-03 | SDG No.: | F1563 |
| Lab Sample ID: | F1563-02 | Matrix: | SOIL |
| Analytical Method: | SW8270 | % Moisture: | 11.5 |
| Sample Wt/Vol: | 30.05 Units: g | Final Vol: | 1000 uL |
| Soil Aliquot Vol: | uL | Test: | SVOCMS NJ CleanGroup Ne |
| Extraction Type : | Decanted : N | Level : | LOW |
| Injection Volume : | GPC Factor : 1.0 | GPC Cleanup : | N PH : |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| BF069049.D | 1 | 03/06/14 | 03/07/14 | PB75280 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 190 | U | 21.5 | 190 | 370 | ug/Kg |
| 86-30-6 | n-Nitrosodiphenylamine | 37.6 | U | 9 | 37.6 | 370 | ug/Kg |
| 103-33-3 | Azobenzene | 37.6 | U | 8.8 | 37.6 | 370 | ug/Kg |
| 118-74-1 | Hexachlorobenzene | 37.6 | U | 15.3 | 37.6 | 370 | ug/Kg |
| 1912-24-9 | Atrazine | 37.6 | U | 19.9 | 37.6 | 370 | ug/Kg |
| 87-86-5 | Pentachlorophenol | 37.6 | U | 25.7 | 37.6 | 370 | ug/Kg |
| 85-01-8 | Phenanthrene | 37.6 | U | 10.2 | 37.6 | 370 | ug/Kg |
| 120-12-7 | Anthracene | 37.6 | U | 7.7 | 37.6 | 370 | ug/Kg |
| 86-74-8 | Carbazole | 37.6 | U | 8.2 | 37.6 | 370 | ug/Kg |
| 84-74-2 | Di-n-butylphthalate | 37.6 | U | 29.6 | 37.6 | 370 | ug/Kg |
| 206-44-0 | Fluoranthene | 37.6 | U | 7.6 | 37.6 | 370 | ug/Kg |
| 92-87-5 | Benzidine | 75.2 | U | 37.8 | 75.2 | 370 | ug/Kg |
| 129-00-0 | Pyrene | 37.6 | U | 9 | 37.6 | 370 | ug/Kg |
| 85-68-7 | Butylbenzylphthalate | 37.6 | U | 18 | 37.6 | 370 | ug/Kg |
| 91-94-1 | 3,3-Dichlorobenzidine | 37.6 | U | 24.1 | 37.6 | 370 | ug/Kg |
| 56-55-3 | Benzo(a)anthracene | 37.6 | U | 17.9 | 37.6 | 370 | ug/Kg |
| 218-01-9 | Chrysene | 37.6 | U | 17 | 37.6 | 370 | ug/Kg |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | 37.6 | U | 13.3 | 37.6 | 370 | ug/Kg |
| 117-84-0 | Di-n-octyl phthalate | 37.6 | U | 4.3 | 37.6 | 370 | ug/Kg |
| 205-99-2 | Benzo(b)fluoranthene | 37.6 | U | 12.3 | 37.6 | 370 | ug/Kg |
| 207-08-9 | Benzo(k)fluoranthene | 37.6 | U | 17.7 | 37.6 | 370 | ug/Kg |
| 50-32-8 | Benzo(a)pyrene | 37.6 | U | 8.1 | 37.6 | 370 | ug/Kg |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 37.6 | U | 12.5 | 37.6 | 370 | ug/Kg |
| 53-70-3 | Dibenzo(a,h)anthracene | 37.6 | U | 10.8 | 37.6 | 370 | ug/Kg |
| 191-24-2 | Benzo(g,h,i)perylene | 37.6 | U | 15.2 | 37.6 | 370 | ug/Kg |
| **SURROGATES** | | | | | | | |
| 367-12-4 | 2-Fluorophenol | 78.1 | | 28 - 127 | | 52% | SPK: 150 |
| 13127-88-3 | Phenol-d6 | 78.2 | | 34 - 127 | | 52% | SPK: 150 |
| 4165-60-0 | Nitrobenzene-d5 | 55.9 | | 31 - 132 | | 56% | SPK: 100 |
| 321-60-8 | 2-Fluorobiphenyl | 54.6 | | 39 - 123 | | 55% | SPK: 100 |
| 118-79-6 | 2,4,6-Tribromophenol | 83.5 | | 30 - 133 | | 56% | SPK: 150 |
| 1718-51-0 | Terphenyl-d14 | 59.7 | | 37 - 115 | | 60% | SPK: 100 |

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# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | VIASANT, LLC | Date Collected: | 03/05/14 |
| Project: | Roux Graham Packaging | Date Received: | 03/06/14 |
| Client Sample ID: | 14103-CF-03 | SDG No.: | F1563 |
| Lab Sample ID: | F1563-02 | Matrix: | SOIL |
| Analytical Method: | SW8270 | % Moisture: | 11.5 |
| Sample Wt/Vol: | 30.05 Units: g | Final Vol: | 1000 uL |
| Soil Aliquot Vol: | uL | Test: | SVOCMS NJ CleanGroup Ne |
| Extraction Type : | Decanted : N | Level : | LOW |
| Injection Volume : | GPC Factor : 1.0 | GPC Cleanup : | N PH : |

| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
|---|---|---|---|---|
| BF069049.D | 1 | 03/06/14 | 03/07/14 | PB75280 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOD | LOQ / CRQL | Units |
|---|---|---|---|---|---|---|---|
| **INTERNAL STANDARDS** | | | | | | | |
| 3855-82-1 | 1,4-Dichlorobenzene-d4 | 89353 | 6.89 | | | | |
| 1146-65-2 | Naphthalene-d8 | 366762 | 8.46 | | | | |
| 15067-26-2 | Acenaphthene-d10 | 177506 | 10.62 | | | | |
| 1517-22-2 | Phenanthrene-d10 | 292816 | 12.43 | | | | |
| 1719-03-5 | Chrysene-d12 | 303628 | 15.68 | | | | |
| 1520-96-3 | Perylene-d12 | 296413 | 17.29 | | | | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

# CHAIN OF CUSTODY FORM

**ACCREDITED ANALYTICAL RESOURCES, LLC**
20 PERSHING AVENUE
CARTERET, NEW JERSEY 07008
PHONE (732) 969-6112 FAX (732) 541-1383
accreditedanalytical.com

STATE AGENCY NJ NY PA CT DE OTHER _____

| | |
|---|---|
| CLIENT | ALMASI COMPANIES |
| ADDRESS | 63 METUCHEN AVE |
| CITY | WOODBRIDGE |
| STATE | N.J. ZIP 07095 |

| | |
|---|---|
| PROJECT | |
| CONTACT | KEN NAGY |
| PHONE | 732-522-0204 |
| FAX | 732-634-0609 |
| E-MAIL | KNAGY@ALMASICONTRACTORS.COM |

| LABORATORY SAMPLE # | CLIENT FIELD ID | # OF CONTAINERS | MATRIX | PRESERVATIVE | DATE / TIME SAMPLED | SAMPLE DESCRIPTION GRAB | COMPOSITE | DEPTH | ANALYSIS |
|---|---|---|---|---|---|---|---|---|---|
| 1400101-01 | SEWAREN | | | | | X | | | |
| 02 | ZAK PIT | | | | | X | | | |
| 03 | RATIAN CENTER | | | | | | X | | |

** M = MATRIX CODE: S=SOIL G=SLUDGE O=OIL F=FILTER K=SOLID X=OTHER
GW=GROUND WATER WW=WASTE WATER SW=SURFACE WATER P=POTABLE WATER

TURNAROUND TIME: 1 week ? (IF BLANK, STD. 3 WEEKS)

RECIEVED W/ ICE? YES ☐ NO ☑ TEMPERATURE:

QA/QC DELIVERABLES (circle one): STD NJ REDUCED NJ FULL OTHER : NYASP Cat. A NYASP Cat. B

PRESERVATIVE CODE: 1=HCL 2=$HNO_3$ 3=$H_2SO_4$ 4=$Na_2S_2O_3$ 5=NaOH 6=MeOH 7=OTHER

| RELINQUISHED BY: PRINT | SIGN | RECEIVED BY: PRINT | SIGN | ORGANIZATION | DATE | TIME | REASON |
|---|---|---|---|---|---|---|---|
| Kyle Kapraschuts | [signature] | John Inacio | [signature] | AAR | 1/17/14 | 7:45 | d/o |
| | | | | | | | |
| | | | | | | | |

PERSON(S) ASSUMING RESPONSIBILITY FOR SAMPLING: PRINT: _____ SIGN: _____

COMMENTS:

| | |
|---|---|
| AAR QUOTE # | |
| AAR CASE # | 1400101 |
| P.O. # | |

See Reverse for Instructions

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| | | |
|---|---|---|
| ALMASI CONTRACTORS<br>184 Main Street<br>WOODBRIDGE NJ, 07095 | Project: No Project<br>Project Manager: Ken Nagy | **Reported:**<br>01/24/2014 16:20 |

## Analytical Report for Samples

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| SEWAREN | 1400101-01 | Soil | 01/16/2014 00:00 | 01/17/2014 07:45 |
| ZAK PIT | 1400101-02 | Soil | 01/16/2014 00:00 | 01/17/2014 07:45 |
| RATIAN CENTER | 1400101-03 | Soil | 01/16/2014 00:00 | 01/17/2014 07:45 |

## Notes and Definitions

| | |
|---|---|
| U | Analyte included in the analysis, but not detected |
| J | Indicates estimated value for TICs and all results when detected below the RL |
| E | Concentration exceeds calibration range |
| ND | Indicates compound analyzed for but not detected |
| U | Indicates compound analyzed for but not detected |
| dry | Sample results reported on a dry weight basis |
| RL | Reporting Limit |
| MDL | Method Detection Limit |

Accredited Analytical Resources LLC

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Daniel Miguel, Technical Director

Accredited Analytical Resources, LLC.

| | | |
|---|---|---|
| ALMASI CONTRACTORS<br>184 Main Street<br>WOODBRIDGE NJ, 07095 | Project: No Project<br>Project Manager: Ken Nagy | **Reported:**<br>01/24/2014 16:20 |

## Methodology Summary

### EPA 6010B

A 1-5 gram portion of soil is digested with nitric acid and hydrogen peroxide. The digestate is then refluxed with either nitric acid or hydrochloric acid. The basis of ICAP method is the measurement of atomic emission by an optical spectroscope technique. The ICAP technique is specified in Method 6010B.

### EPA 7471A

The mercury in the sample is reduced to the elemental state and detected by the cold vapor technique in a closed system. The analytical procedure associated with the Cold Vapor technique is derived from EPA Method 7470A.

### EPA 8081/8082

A 30g portion of soil is mixed with anhydrous sodium sulfate and is serially extracted with 1:1 methylene chloride and acetone. The extract is dried and solvent/exchanged to hexane during concentration. A measured amount is injected onto a GC and the analytes are detected by an electron capture detector.

### EPA 8260

An inert gas is purged through a 5g sample by EPA Method 5035. Alternatively the soil is extracted with methanol. A portion of extract is spiked into a purging vessel and purged by an inert gas. The vapor is swept through a sorbent column where the purgeables are trapped. The sorbent column is heated and back-flushed with the inert gas to desorb the purgeables onto a GC capillary column. The GC is temperature programmed to separate the purgeables which are then detected with a mass spectrometer

### EPA 8270

A 30g portion of soil is mixed with anhydrous sodium sulfate and is extracted with 1:1 methylene chloride and acetone mixture. The methylene chloride extract is dried and concentrated and a measured amount is injected onto a GC and the analytes are detected with a mass spectrometer.

### EPA 9014

A representative portion of sample is weighed and placed into a cyanide distillation apparatus. The cyanide as hydrocyanic acid is released from cyanide complexes by means of a reflux-distillation operation and absorbed in a scrubber containing sodium hydroxide solution. The cyanide ion in the absorbing solution is then determined colorimetrically.

### SM 2540 G

A representative 5-10 grams of solid sample is placed in a preweighed weighing dish. The sample is dried in an oven at 103-105oC for 12-24 hrs. Alternatively the constant weight of dried sample is attained for the drying period less than 12 hrs. The remaining weight of sample after drying to the original weight expressed in percentage is determined as percent solid.

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| | | |
|---|---|---|
| ALMASI CONTRACTORS<br>184 Main Street<br>WOODBRIDGE NJ, 07095 | Project: No Project<br>Project Manager: Ken Nagy | **Reported:**<br>01/24/2014 16:20 |

**Client ID: RATIAN CENTER**

**Lab ID: 1400101-03 (Soil)**

**Accredited Analytical Resources LLC**

**Volatile Organic Compounds EPA Method SW846 8260**

Sample Prepared by Method:EPA 5035A

| CAS # | Analyte | Result | MDL | RL | Units | Dilution | Prepared Date | Analyzed Date/By | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| 107-02-8 | Acrolein | ND | 7.11 | 11.8 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 107-13-1 | Acrylonitrile | ND | 2.37 | 11.8 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 67-64-1 | Acetone | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 75-71-8 | Dichlorodifluoromethane | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 74-87-3 | Chloromethane | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 75-01-4 | Vinyl chloride | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 74-83-9 | Bromomethane | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 75-00-3 | Chloroethane | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 75-69-4 | Trichlorofluoromethane | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 75-35-4 | 1,1-Dichloroethene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 75-15-0 | Carbon disulfide | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 75-09-2 | Methylene Chloride | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 108-05-4 | Vinyl acetate | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 590-20-7 | 2,2-Dichloropropane | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 78-93-3 | 2-Butanone | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 156-59-4 | cis-1,2-Dichloroethene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 67-66-3 | Chloroform | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 74-97-5 | Bromochloromethane | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 563-58-6 | 1,1-Dichloropropene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 56-23-5 | Carbon Tetrachloride | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 71-43-2 | Benzene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 79-01-6 | Trichloroethene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |

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Daniel Miguel, Technical Director

Accredited Analytical Resources, LLC.

| | | |
|---|---|---|
| ALMASI CONTRACTORS<br>184 Main Street<br>WOODBRIDGE NJ, 07095 | Project: No Project<br>Project Manager: Ken Nagy | **Reported:**<br>01/24/2014 16:20 |

**Client ID: RATIAN CENTER**

**Lab ID: 1400101-03 (Soil)**

**Accredited Analytical Resources LLC**

**Volatile Organic Compounds EPA Method SW846 8260**

| CAS # | Analyte | Result | MDL | RL | Units | Dilution | Prepared Date | Analyzed Date/By | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| 75-27-4 | Bromodichloromethane | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 74-95-3 | Dibromomethane | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 110-75-8 | 2-Chloroethyl vinyl ether | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 108-88-3 | Toluene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 591-78-6 | 2-Hexanone | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 142-28-9 | 1,3-Dichloropropane | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 127-18-4 | Tetrachloroethene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 124-48-1 | Dibromochloromethane | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 100-41-4 | Ethylbenzene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 108-90-7 | Chlorobenzene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 108-38-3/106-4 | m,p-Xylenes | ND | 2.37 | 4.74 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 95-47-6 | o-Xylene | ND | 2.37 | 4.74 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 100-42-5 | Styrene | ND | 1.18 | 4.74 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 75-25-2 | Bromoform | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 98-82-8 | Isopropylbenzene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 96-18-4 | 1,2,3-Trichloropropane | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 103-65-1 | n-Propyl Benzene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 108-86-1 | Bromobenzene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 95-49-8 | 2-Chlorotoluene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 106-43-4 | 4-Chlorotoluene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 98-06-6 | tert-Butylbenzene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |

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Daniel Miguel, Technical Director

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| | | |
|---|---|---|
| ALMASI CONTRACTORS<br>184 Main Street<br>WOODBRIDGE NJ, 07095 | Project: No Project<br>Project Manager: Ken Nagy | **Reported:**<br>01/24/2014 16:20 |

**Client ID: RATIAN CENTER**

**Lab ID: 1400101-03 (Soil)**

**Accredited Analytical Resources LLC**

| CAS # | Analyte | Result | MDL | RL | Units | Dilution | Prepared Date | Analyzed Date/By | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds EPA Method SW846 8260** | | | | | | | | | | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 135-98-8 | sec-Butylbenzene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 99-87-6 | p-Isopropyltoluene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 104-51-8 | n-Butyl Benzene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 87-68-3 | Hexachlorobutadiene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | 1.18 | 2.37 | ug/kg dry | 1 | 01/20/14 16:28 | 01/20/14 16:28/SCS | EPA 8260B | U |
| *Surrogate: 1,2-Dichloroethane-d4* | | | | *104 %* | *70-121* | | *01/20/14 16:28* | *01/20/14 16:28/SCS* | *EPA 8260B* | |
| *Surrogate: Toluene-d8* | | | | *96 %* | *81-117* | | *01/20/14 16:28* | *01/20/14 16:28/SCS* | *EPA 8260B* | |
| *Surrogate: Bromofluorobenzene* | | | | *85 %* | *74-121* | | *01/20/14 16:28* | *01/20/14 16:28/SCS* | *EPA 8260B* | |
| **Semivolatile Organic Compounds EPA Method SW846 8270** | | | | | | | | | | |
| Sample Prepared by Method:EPA 3550B GCMS | | | | | | | | | | |
| 62-75-9 | N-Nitrosodimethylamine | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 108-95-2 | Phenol | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 111-44-4 | bis(2-chloroethyl)ether | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 95-57-8 | 2-Chlorophenol | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 100-51-6 | Benzyl alcohol | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 95-48-7 | 2-Methylphenol | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 39638-32-9 | bis(2-chloroisopropyl)ether | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 106-44-5 | 3 & 4-Methylphenol | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |

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Daniel Miguel, Technical Director

Accredited Analytical Resources, LLC.

| | | |
|---|---|---|
| ALMASI CONTRACTORS<br>184 Main Street<br>WOODBRIDGE NJ, 07095 | Project: No Project<br>Project Manager: Ken Nagy | **Reported:**<br>01/24/2014 16:20 |

**Client ID: RATIAN CENTER**

**Lab ID: 1400101-03 (Soil)**

**Accredited Analytical Resources LLC**

**Semivolatile Organic Compounds EPA Method SW846 8270**

| CAS # | Analyte | Result | MDL | RL | Units | Dilution | Prepared Date | Analyzed Date/By | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-72-1 | Hexachloroethane | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 98-95-3 | Nitrobenzene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 78-59-1 | Isophorone | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 88-75-5 | 2-Nitrophenol | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 105-67-9 | 2,4-Dimethylphenol | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 65-85-0 | Benzoic acid | ND | 98.3 | 395 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 111-91-1 | bis(2-chloroethoxy)methane | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 120-83-2 | 2,4-Dichlorophenol | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 91-20-3 | Naphthalene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 106-47-8 | 4-Chloroaniline | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 87-68-3 | Hexachlorobutadiene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 59-50-7 | 4-Chloro-3-methylphenol | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 91-57-6 | 2-Methylnaphthylene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 91-58-7 | 2-Chloronaphthalene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 88-74-4 | 2-Nitroaniline | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 131-11-3 | Dimethylphthalate | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 208-96-8 | Acenaphthylene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 99-09-2 | 3-Nitroaniline | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 83-32-9 | Acenaphthene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 51-28-5 | 2,4-Dinitrophenol | ND | 39.5 | 395 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 100-02-7 | 4-Nitrophenol | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 132-64-9 | Dibenzofuran | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 84-66-2 | Diethyl phthalate | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |

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Daniel Miguel, Technical Director

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| | | |
|---|---|---|
| ALMASI CONTRACTORS<br>184 Main Street<br>WOODBRIDGE NJ, 07095 | Project: No Project<br>Project Manager: Ken Nagy | **Reported:**<br>01/24/2014 16:20 |

**Client ID: RATIAN CENTER**

**Lab ID: 1400101-03 (Soil)**

**Accredited Analytical Resources LLC**

**Semivolatile Organic Compounds EPA Method SW846 8270**

| CAS # | Analyte | Result | MDL | RL | Units | Dilution | Prepared Date | Analyzed Date/By | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| 7005-72-3 | 4-Chlorophenyl-phenylether | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 86-73-7 | Fluorene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 100-01-6 | 4-Nitroaniline | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 101-55-3 | 4-Bromophenyl-phenylether | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 118-74-1 | Hexachlorobenzene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 87-86-5 | Pentachlorophenol | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 85-01-8 | Phenanthrene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 120-12-7 | Anthracene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 84-74-2 | Di-n-butyl phthalate | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 206-44-0 | Fluoranthene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 129-00-0 | Pyrene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 85-68-7 | Butylbenzylphthalate | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 98.3 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 56-55-3 | Benzo[a]anthracene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 117-81-7 | bis(2-ethylhexyl)phthalate | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 218-01-9 | Chrysene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 117-84-0 | Di-n-octyl phthalate | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 205-99-2 | Benzo[b]fluoranthene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 207-08-9 | Benzo[k]fluoranthene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 50-32-8 | Benzo[a]pyrene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| 191-24-2 | Benzo[ghi]perylene | ND | 39.5 | 198 | ug/kg dry | 1 | 01/20/14 10:13 | 01/20/14 16:56/JMM | EPA 8270C | U |
| *Surrogate: 2-Fluorophenol* | | | | *65 %* | *25-121* | | *01/20/14 10:13* | *01/20/14 16:56/JMM* | *EPA 8270C* | |
| *Surrogate: Phenol-d5* | | | | *65 %* | *24-113* | | *01/20/14 10:13* | *01/20/14 16:56/JMM* | *EPA 8270C* | |
| *Surrogate: Nitrobenzene-d5* | | | | *68 %* | *23-120* | | *01/20/14 10:13* | *01/20/14 16:56/JMM* | *EPA 8270C* | |

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Daniel Miguel, Technical Director

Accredited Analytical Resources, LLC.

| | | |
|---|---|---|
| ALMASI CONTRACTORS<br>184 Main Street<br>WOODBRIDGE NJ, 07095 | Project: No Project<br>Project Manager: Ken Nagy | **Reported:**<br>01/24/2014 16:20 |

**Client ID: RATIAN CENTER**

**Lab ID: 1400101-03 (Soil)**

| CAS # | Analyte | Result | MDL | RL | Units | Dilution | Prepared Date | Analyzed Date/By | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Accredited Analytical Resources LLC** | | | | | | | | | |
| **Semivolatile Organic Compounds EPA Method SW846 8270** | | | | | | | | | | |
| *Surrogate: 2-Fluorobiphenyl* | | | | *74 %* | *30-115* | | *01/20/14 10:13* | *01/20/14 16:56/JMM* | *EPA 8270C* | |
| *Surrogate: 2,4,6-Tribromophenol* | | | | *88 %* | *19-122* | | *01/20/14 10:13* | *01/20/14 16:56/JMM* | *EPA 8270C* | |
| *Surrogate: Terphenyl-d14* | | | | *105 %* | *18-137* | | *01/20/14 10:13* | *01/20/14 16:56/JMM* | *EPA 8270C* | |
| **EPA Method SW846 8081/8082** | | | | | | | | | | |
| Sample Prepared by Method:EPA 3550B | | | | | | | | | | |
| 319-84-6 | alpha-BHC | ND | 0.782 | 0.782 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 319-85-7 | beta-BHC | ND | 0.782 | 0.782 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 319-86-8 | delta-BHC | ND | 0.782 | 0.782 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 58-89-9 | gamma-BHC [Lindane] | ND | 0.782 | 0.782 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 76-44-8 | Heptachlor | ND | 0.782 | 0.782 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 309-00-2 | Aldrin | ND | 0.782 | 0.782 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 1024-57-3 | Heptachlor Epoxide | ND | 0.782 | 0.782 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 959-98-8 | Endosulfan I | ND | 0.782 | 0.782 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 60-57-1 | Dieldrin | ND | 1.58 | 1.58 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 72-55-9 | 4,4'-DDE | ND | 1.58 | 1.58 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 72-20-8 | Endrin | ND | 1.58 | 1.58 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 33213-65-9 | Endosulfan II | ND | 1.58 | 1.58 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 72-54-8 | 4,4'-DDD | ND | 1.58 | 1.58 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 1031-07-8 | Endosulfan sulfate | ND | 1.58 | 1.58 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 50-29-3 | 4,4'-DDT | ND | 1.58 | 1.58 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 72-43-5 | Methoxychlor | ND | 7.89 | 7.89 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 53494-70-5 | Endrin ketone | ND | 1.58 | 1.58 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 7421-93-4 | Endrin aldehyde | ND | 1.58 | 1.58 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 5103-71-9 | alpha-Chlordane | ND | 0.782 | 0.782 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 5566-34-7 | gamma-Chlordane | ND | 0.782 | 0.782 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 8001-35-2 | Toxaphene | ND | 39.5 | 39.5 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 12674-11-2 | Aroclor-1016 | ND | 19.7 | 39.5 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 11104-28-2 | Aroclor-1221 | ND | 19.7 | 39.5 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |

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Daniel Miguel, Technical Director

Accredited Analytical Resources, LLC.

| | | |
|---|---|---|
| ALMASI CONTRACTORS<br>184 Main Street<br>WOODBRIDGE NJ, 07095 | Project: No Project<br>Project Manager: Ken Nagy | **Reported:**<br>01/24/2014 16:20 |

**Client ID: RATIAN CENTER**

**Lab ID: 1400101-03 (Soil)**

| CAS # | Analyte | Result | MDL | RL | Units | Dilution | Prepared Date | Analyzed Date/By | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Accredited Analytical Resources LLC** | | | | | | | | | |
| **EPA Method SW846 8081/8082** | | | | | | | | | | |
| 11141-16-5 | Aroclor-1232 | ND | 19.7 | 39.5 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 53469-21-9 | Aroclor-1242 | ND | 19.7 | 39.5 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 12672-29-6 | Aroclor-1248 | ND | 19.7 | 39.5 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 11097-69-1 | Aroclor-1254 | ND | 19.7 | 39.5 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 11096-82-5 | Aroclor-1260 | ND | 19.7 | 39.5 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 37324-23-5 | Aroclor-1262 | ND | 19.7 | 39.5 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| 11100-14-4 | Aroclor-1268 | ND | 19.7 | 39.5 | ug/kg dry | 1 | 01/21/14 09:26 | 01/22/14 15:16/JAM | EPA 8081A/8082 | U |
| *Surrogate: Tetrachloro-m-xylene* | | | | *98.1 %* | *30-150* | | *01/21/14 09:26* | *01/22/14 15:16/JAM* | *EPA 8081A/8082* | |
| *Surrogate: Tetrachloro-m-xylene* | | | | *92.9 %* | *30-150* | | *01/21/14 09:26* | *01/22/14 15:16/JAM* | *EPA 8081A/8082* | |
| *Surrogate: Decachlorobiphenyl* | | | | *96.2 %* | *30-150* | | *01/21/14 09:26* | *01/22/14 15:16/JAM* | *EPA 8081A/8082* | |
| *Surrogate: Decachlorobiphenyl* | | | | *93.5 %* | *30-150* | | *01/21/14 09:26* | *01/22/14 15:16/JAM* | *EPA 8081A/8082* | |
| **Total Metals by EPA Method SW846 6010B** | | | | | | | | | | |
| Sample Prepared by Method:EPA 3050B | | | | | | | | | | |
| 7429-90-5 | **Aluminum** | **2170** | 23.7 | 23.7 | mg/kg dry | 1 | 01/20/14 08:31 | 01/21/14 13:04/LIT | EPA 6010B | |
| 7440-36-0 | Antimony | ND | 7.11 | 7.11 | mg/kg dry | 1 | 01/20/14 08:31 | 01/21/14 13:04/LIT | EPA 6010B | U |
| 7440-38-2 | **Arsenic** | **2.26** | 1.18 | 1.18 | mg/kg dry | 1 | 01/20/14 08:31 | 01/21/14 13:04/LIT | EPA 6010B | |
| 7440-39-3 | **Barium** | **31.1** | 23.7 | 23.7 | mg/kg dry | 1 | 01/20/14 08:31 | 01/21/14 13:04/LIT | EPA 6010B | |
| 7440-41-7 | Beryllium | ND | 0.592 | 0.592 | mg/kg dry | 1 | 01/20/14 08:31 | 01/21/14 13:04/LIT | EPA 6010B | U |
| 7440-43-9 | Cadmium | ND | 0.592 | 0.592 | mg/kg dry | 1 | 01/20/14 08:31 | 01/21/14 13:04/LIT | EPA 6010B | U |
| 7440-70-2 | **Calcium** | **6000** | 29.6 | 29.6 | mg/kg dry | 1 | 01/20/14 08:31 | 01/21/14 13:04/LIT | EPA 6010B | |
| 7440-47-3 | **Chromium** | **42.4** | 2.37 | 2.37 | mg/kg dry | 1 | 01/20/14 08:31 | 01/21/14 13:04/LIT | EPA 6010B | |
| 7440-48-4 | Cobalt | ND | 5.92 | 5.92 | mg/kg dry | 1 | 01/20/14 08:31 | 01/21/14 13:04/LIT | EPA 6010B | U |
| 7440-50-8 | **Copper** | **14.9** | 3.55 | 3.55 | mg/kg dry | 1 | 01/20/14 08:31 | 01/21/14 13:04/LIT | EPA 6010B | |
| 7439-89-6 | **Iron** | **7450** | 29.6 | 29.6 | mg/kg dry | 1 | 01/20/14 08:31 | 01/21/14 13:04/LIT | EPA 6010B | |
| 7439-92-1 | **Lead** | **7.46** | 1.18 | 1.18 | mg/kg dry | 1 | 01/20/14 08:31 | 01/21/14 13:04/LIT | EPA 6010B | |
| 7439-95-4 | **Magnesium** | **1950** | 59.2 | 59.2 | mg/kg dry | 1 | 01/20/14 08:31 | 01/21/14 13:04/LIT | EPA 6010B | |
| 7439-96-5 | **Manganese** | **514** | 2.37 | 2.37 | mg/kg dry | 1 | 01/20/14 08:31 | 01/21/14 13:04/LIT | EPA 6010B | |

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| | | |
|---|---|---|
| ALMASI CONTRACTORS<br>184 Main Street<br>WOODBRIDGE NJ, 07095 | Project: No Project<br>Project Manager: Ken Nagy | **Reported:**<br>01/24/2014 16:20 |

**Client ID: RATIAN CENTER**

**Lab ID: 1400101-03 (Soil)**

| CAS # | Analyte | Result | MDL | RL | Units | Dilution | Prepared Date | Analyzed Date/By | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | **Accredited Analytical Resources LLC** | | | | | | |
| **Total Metals by EPA Method SW846 6010B** | | | | | | | | | | |
| 7440-02-0 | Nickel | ND | 4.74 | 4.74 | mg/kg dry | 1 | 01/20/14 08:31 | 01/21/14 13:04/LIT | EPA 6010B | U |
| 7440-09-7 | **Potassium** | **195** | 59.2 | 59.2 | mg/kg dry | 1 | 01/20/14 08:31 | 01/21/14 13:04/LIT | EPA 6010B | |
| 7782-49-2 | Selenium | ND | 4.74 | 4.74 | mg/kg dry | 1 | 01/20/14 08:31 | 01/22/14 14:42/LIT | EPA 6010B | U |
| 7440-22-4 | Silver | ND | 1.18 | 1.18 | mg/kg dry | 1 | 01/20/14 08:31 | 01/21/14 13:04/LIT | EPA 6010B | U |
| 7440-23-5 | **Sodium** | **59.5** | 59.2 | 59.2 | mg/kg dry | 1 | 01/20/14 08:31 | 01/21/14 13:04/LIT | EPA 6010B | |
| 7440-28-0 | Thallium | ND | 1.78 | 3.55 | mg/kg dry | 1 | 01/20/14 08:31 | 01/21/14 13:04/LIT | EPA 6010B | U |
| 7440-62-2 | **Vanadium** | **26.1** | 5.92 | 5.92 | mg/kg dry | 1 | 01/20/14 08:31 | 01/21/14 13:04/LIT | EPA 6010B | |
| 7440-66-6 | **Zinc** | **12.0** | 7.11 | 7.11 | mg/kg dry | 1 | 01/20/14 08:31 | 01/21/14 13:04/LIT | EPA 6010B | |
| **Total Mercury by SW846 7471** | | | | | | | | | | |
| Sample Prepared by Method:EPA 7471A | | | | | | | | | | |
| 7439-97-6 | Mercury | ND | 0.0889 | 0.0889 | mg/kg dry | 1 | 01/20/14 06:20 | 01/20/14 15:04/STM | EPA 7471A | |
| **Wet Chemistry** | | | | | | | | | | |
| Sample Prepared by Method:EPA 9010C | | | | | | | | | | |
| NA | Cyanide (total) | ND | 1.18 | 1.18 | mg/kg dry | 1 | 01/24/14 09:30 | 01/24/14 16:16/JAD | EPA 9014 | |
| Sample Prepared by Method:Percent Solids | | | | | | | | | | |
| NA | **Percent Solids** | **84.4** | 0.100 | 0.100 | % | 1 | 01/20/14 10:00 | 01/21/14 10:00/CMD | SM 2540 G | |

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*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Daniel Miguel, Technical Director