# Field Sampling Summary Report

SOUTHERN BROOKLYN CROSSTOWN (B82) SELECT BUS SERVICE
BROOKLYN, NY

NYCDDC PROJECT # HWK100SBC

Prepared for:


New York City Department of Design and Construction
Office of Environmental and Hazmat Services
30-30 Thomson Avenue, 3rd Floor
Long Island City, New York 11101

On behalf of:

Restani Construction Corp.
4204 Berrian Boulevard
Astoria, NY 11105

Prepared by:

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AES Project No. 0942

REVISION #2
JUNE 26th, 2024

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# 1.0 INTRODUCTION

American Environmental Solutions, Inc. (AES) of Patchogue, New York, has been contracted by Restani Construction Corp. (RCC) of Astoria, New York, as their project environmental consultant to prepare a Field Sampling Summary Report (FSSR) for the New York City Department of Design and Construction (NYCDDC) Southern Brooklyn Crosstown (B82) Select Bus Service project (Project No. HWK100SBC) located in Brooklyn, New York. This FSSR documents field sampling activities performed by AES on May 24th, 2024.

## 1.1 Project Description

The work area consists of roadways and street right of ways in the Spring Creek and Gravesend neighborhoods of Brooklyn. The work locations are shown on Figures 1a and 1b.

Scope of work to be performed includes construction of new bus lanes and bus stations, ADA compliant bus stops, safety improvements, concrete curb extensions and reconstruction of medians. Approximately 7,500 cubic yards of material total are anticipated to be excavated during the course of work. In accordance with the NYCDDC approved Field Sampling Plan, soil to be excavated during the course of work was sampled and analyzed in order to characterize the material for disposal purposes.

# 2.0 FIELD ACTIVITIES

AES performed in-situ soil sampling at the site on May 24th, 2024. Five (5) soil borings were advanced in the work areas to depths of 10 or 16 feet below grade surface (ftbg), the proposed depth of site excavation at each location. Each sample consisted of five (5) grab samples composited from various intervals along the depth of excavation at each sampling location and one VOC grab sample. Each sample collected represented approximately 500 cubic yards of soil to be excavated. Soil sampling locations are shown on Figure 2.

## 2.1 Soil Sampling and Analysis

Soil samples were field screened using a photoionization detector (PID) and readings were recorded on boring logs. All PID readings collected during the field sampling events were 0.0 parts per million (ppm). One grab sample and one composite soil sample were collected from each boring location and submitted for laboratory analysis.

Soil samples were placed into laboratory supplied sample jars and properly labeled. The soil samples were stored in a cooler with ice to preserve the samples at approximately 4° Celsius prior to and during sample shipment. A chain-of-custody was prepared prior to sample shipment

Soil samples were delivered in coolers to Phoenix Environmental Laboratories, Inc. of Manchester, Connecticut (NYSDOH ELAP # 11301) for analysis. All soil samples collected were analyzed for the following parameters:

- 40 CFR Part 261, Subpart C (Characteristics of Hazardous Waste)
- Ignitability (Method 1010);
- Corrosivity (Method 9045C);
- Reactivity (Chapter 7.3.2);
- Toxicity Characteristic Leaching Procedure (TCLP) VOC (Method 1311/8260);
- TCLP SVOC (Method 1311/8270);
- TCLP Pesticides (Method 1311/8081)
- TCLP Herbicides (Method 1311/8151A);
- TCLP Metals (Method 1311/6010B/7470A);
- Polychlorinated biphenyls (PCBs) (Method 8082);
- Pesticides (Method 8081);
- Total Petroleum Hydrocarbons (TPH) (Method 8015);
- Target Analyte List Metals (TAL) (Method 6010);
- Target Compound List (TCL) VOCS (Method 8260) and SVOCS (Method 8270)

Laboratory analysis was evaluated by comparing results to NYSDEC Part 375 Commercial SCOs to determine if it is suitable for reuse and Part 371 to determine if material will be characterized as hazardous.

## 2.2 Analytical Results

Analytical laboratory results indicated the samples collected contained metals and SVOCs. One sample (SB12) also contained pesticides. One sample (SB13) contained a concentration of lead exceeding the RCRA Hazardous Waste Characteristic Regulatory Level. There were no VOCs or PCBs detected in the samples. Total Petroleum Hydrocarbons (TPH) were detected in two samples (SB13 and SB14). There is no regulatory criteria available for TPH. Compound detections compared to applicable criteria are shown on Tables 1 and 2.

**Comments:**

- A number of sampling locations (SB12 and SB14) contained compounds in concentrations exceeding NYSDEC Part 375 Commercial Use Soil Cleanup Objectives (CUSCOs). Material containing compound concentrations exceeding CUSCOs are not suitable for reuse as backfill on-site and should be transported off-site for disposal at a permitted facility pursuant to federal, state and local regulations.

- A number of sampling locations (SB11 and SB15) contained compounds in concentrations falling below NYSDEC Part 375 Commercial Use Soil Cleanup Objectives (CUSCOs). Material containing compound concentrations falling below CUSCOs may be suitable for reuse as backfill on-site as long as visual and olfactory evidence of contamination are not present.

- TCLP Lead exceeded the RCRA Hazardous Waste Characteristic Regulatory Level of 5 milligrams per liter (mg/L) in soil sample SB13 at a concentration of 9.5 mg/L. TCLP results are summarized in Table 2. Additionally, total lead was detected in SB13 in a concentration of 7410 parts per million (ppm) which exceeds CUSCOs.

## 3.0 CONCLUSIONS AND RECOMMENDATIONS

Based on review and evaluation of analytical data and field screening, the following findings, conclusions and recommendations are presented:

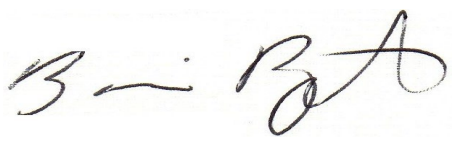
- Laboratory analytical results indicated soil sample SB13 exhibited evidence of hazardous waste characteristics for toxicity as discussed above and identified in Table 2. TCLP lead concentrations detected in the soil sample may be attributed to the presence of historic fill material. The General Contractor, RCC has determined boring location SB13 was advanced in a location where only milling and paving will be performed. This location will not be excavated during the course of work according to RCC.

- Two other samples collected on May 24th, 2024 (SB11 and SB15) contained compound concentrations in concentrations falling below CUSCOs. In accordance with NYCDDC specifications, soil meeting CUSCOs may be suitable for use as backfill on-site. Two samples collected (SB12 and SB14) contained compound concentrations in concentrations exceeding CUSCOs. In accordance with NYCDDC specifications, soil exceeding CUSCOs must be disposed off-site pursuant to federal, state and local regulations. Approximately 500 to 750 cubic yards of non-hazardous contaminated material are anticipated to be generated during the course of work. There will be no hazardous material generated during the course of work.

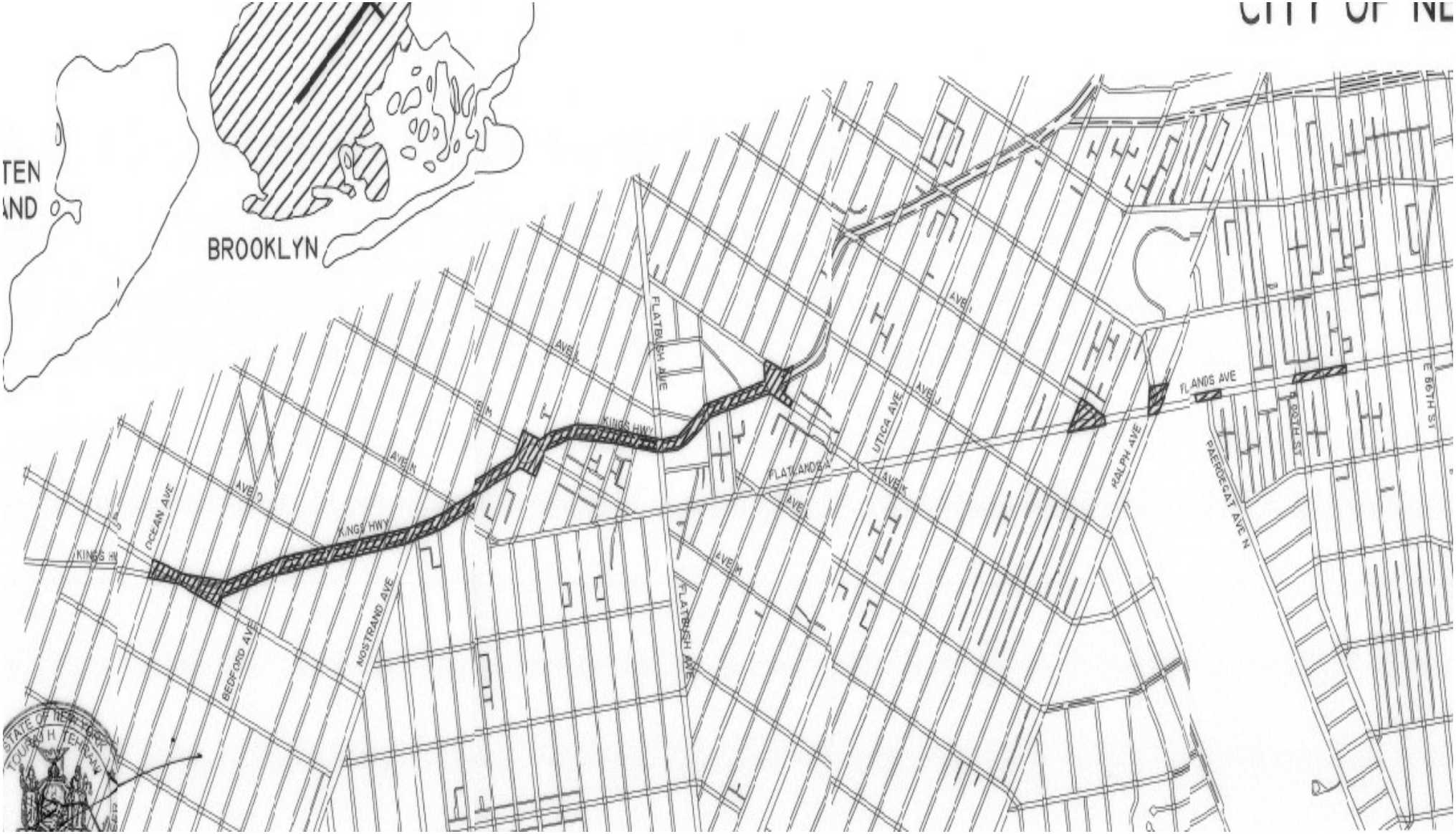
- Non-native material such as historic fill or petroleum impacted soil would not be suitable for use as backfill and must be disposed off-site pursuant to federal, state and local regulations.

- The soil analytical results should be presented to disposal facilities for classification and acceptance in accordance with the individual permit requirements and state and federal regulations.

Report prepared by:

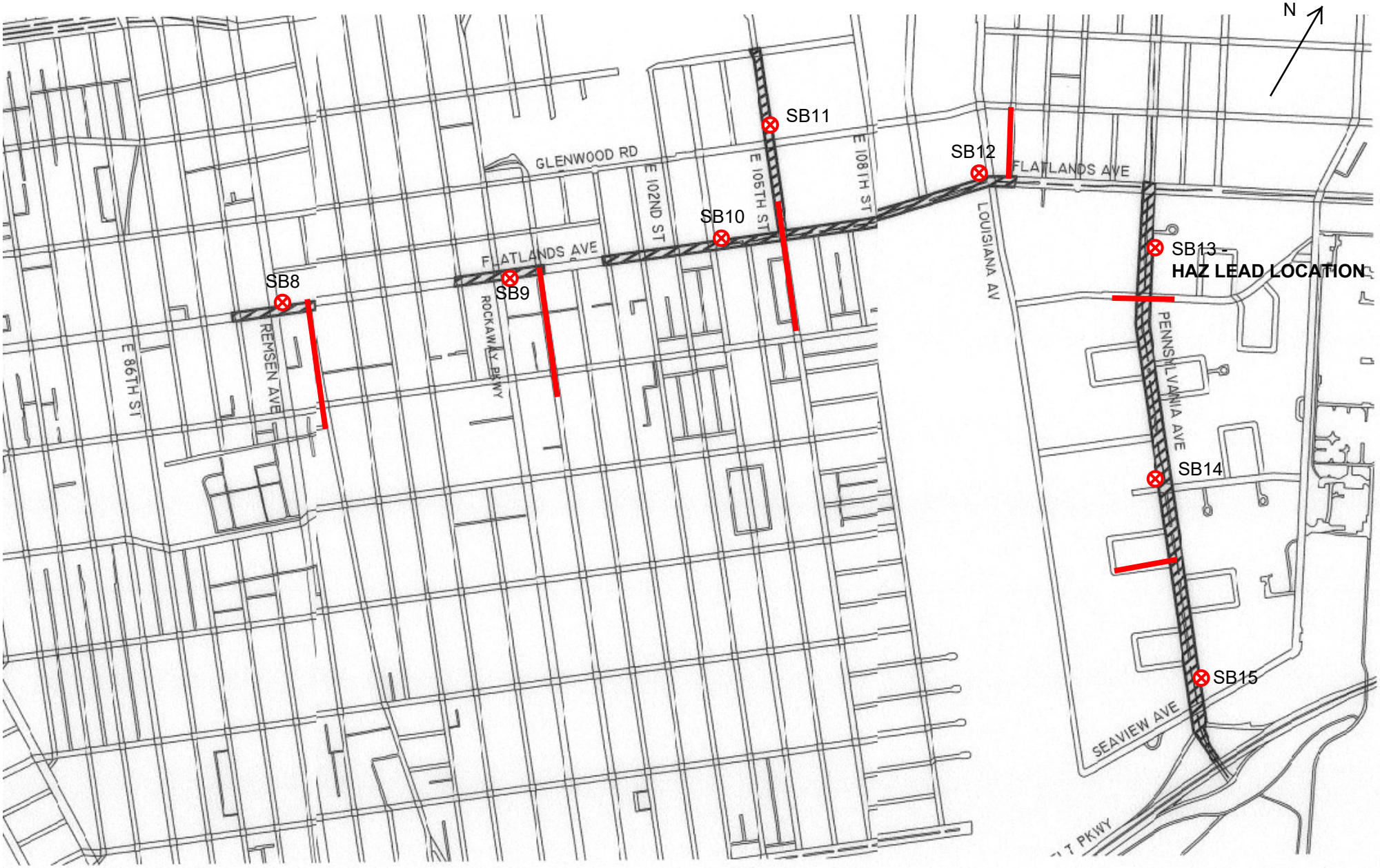


Brian Pendergast
Environmental Project Manager




| FSSR | FIGURE 1a Location Map |
|---|---|
| American Environmental Solutions, Inc.<br>AES Proj. #0942 | NYCDDC HWK100SBC<br>Southern Brooklyn Crosstown Select Bus Service<br>Nts not to scale |


| FSSR | FIGURE 1b Location Map |
|---|---|
| American Environmental Solutions, Inc.<br>AES Proj. #0942 | NYCDDC HWK100SBC<br>Southern Brooklyn Crosstown Select Bus Service<br>Nts not to scale |




Red circles show boring locations
Black hatched areas show work locations.
Areas between red lines represent grids of 500 cubic yards of soil to be excavated

| FSSR | FIGURE 2 Soil Sampling Locations |
|---|---|
| American Environmental Solutions, Inc.<br>AES Proj. #0942 | NYCDDC HWK100SBC<br>Southern Brooklyn Crosstown Select Bus Service<br>Nts not to scale |

# APPENDIX A

# LABORATORY ANALYSIS

**SOUTHERN BROOKLYN CROSSTOWN (B82) SELECT BUS SERVICE, BROOKLYN**
**NYCDDC PROJECT HWK100SBC**
**RESTANI CONSTRUCTION CORP.**
**TABLE 1: SUMMARY OF SOIL ANALYSIS - SAMPLES COLLECTED 5/24/2024**

| Parameter | Compounds Detected | Unit | NYSDEC Part 375 Commercial Use Soil Cleanup Objectives | SB11 | SB12 | SB13 | SB14 | SB15 |
|---|---|---|---|---|---|---|---|---|
| **PCBs** | None detected | ppm | - | ND | ND | ND | ND | ND |
| **Pesticides** | 4,4-DDE | ppm | 62 | ND | 0.011 | ND | ND | ND |
| | 4,4-DDT | ppm | 47 | ND | 0.013 | ND | ND | ND |
| | a-Chlordane | ppm | 24 | ND | 0.011 | ND | ND | ND |
| | Chlordane | ppm | NS | ND | 0.062 | ND | ND | ND |
| | g-Chlordane | ppm | NS | ND | 0.0096 | ND | ND | ND |
| **TAL Metals** | Aluminum | ppm | NS | 9220 | 6970 | 2530 | 8220 | 1330 |
| | Antimony | ppm | NS | ND | ND | ND | ND | ND |
| | Arsenic | ppm | 16 | 3.36 | 4.64 | **22.3** | 13.2 | ND |
| | Barium | ppm | 400 | 37.4 | 87.5 | 110 | **452** | 15 |
| | Beryllium | ppm | 590 | .38 | .4 | .39 | .74 | ND |
| | Cadmium | ppm | 9.3 | ND | ND | 0.97 | 3.96 | ND |
| | Calcium | ppm | NS | 959 | 47,500 | 2,500 | 6,080 | 773 |
| | Chromium | ppm | 1500 | 13.7 | 17.7 | 63.6 | 27.3 | 6.22 |
| | Cobalt | ppm | NS | 5.51 | 4.83 | 27.3 | 9.07 | 1.24 |
| | Copper | ppm | 270 | 12.1 | 26.9 | 224 | **1350** | 5.3 |
| | Iron | ppm | NS | 13,300 | 15,700 | 74,900 | 26,800 | 3,040 |
| | Lead | ppm | 1000 | 21.3 | 59.6 | **7410** | **1140** | 13.2 |
| | Manganese | ppm | 10,000 | 188 | 230 | 410 | 158 | 28.8 |
| | Magnesium | ppm | NS | 1750 | 7580 | 262 | 1710 | 625 |
| | Mercury | ppm | 2.8 | 0.07 | 0.12 | 0.07 | **4.25** | ND |
| | Nickel | ppm | 310 | 13.1 | 13.6 | 64.2 | 30.5 | 3.7 |
| | Silver | ppm | 1500 | ND | ND | ND | ND | ND |
| | Sodium | ppm | NS | 379 | 852 | 507 | 2380 | 80.5 |
| | Potassium | ppm | NS | 696 | 1110 | 276 | 1320 | 326 |
| | Vanadium | ppm | NS | 21.3 | 32.8 | 24.9 | 36 | 6.34 |
| | Zinc | ppm | 10,000 | 27.9 | 89.2 | 155 | 5700 | 17.3 |
| **Semi-Volatile Organic Compounds** | Acenapthene | ppm | 500 | ND | .86 | ND | ND | ND |
| | Anthracene | ppm | 500 | ND | 2 | ND | ND | ND |
| | Benz(a)anthracene | ppm | 5.6 | .8 | **5.7** | ND | ND | .56 |
| | Benzo(a)pyrene | ppm | 1 | .93 | **4.8** | ND | .56 | .6 |
| | Benzo(b)fluoranthene | ppm | 5.6 | .95 | **6.4** | ND | .56 | .68 |
| | Benzo(ghi)perylene | ppm | 500 | .47 | 2.3 | ND | ND | .31 |
| | Benzo(k)fluoranthene | ppm | 56 | .36 | 2.2 | ND | ND | ND |
| | Bis(2-ethylhexyl)phthalate | ppm | NS | ND | ND | ND | 1.6 | ND |
| | Carbazole | ppm | NS | ND | .77 | ND | ND | ND |
| | Chrysene | ppm | 56 | .93 | 4.8 | ND | ND | .55 |
| | Dibenz(a,h)anthracene | ppm | 0.56 | ND | **.6** | ND | ND | ND |
| | Dibenzofuran | ppm | NS | ND | .28 | ND | ND | ND |
| | Fluoranthene | ppm | 500 | 1.1 | 14 | ND | .53 | .9 |
| | Fluorene | ppm | 500 | ND | .75 | ND | ND | ND |
| | Indeno(1,2,3-cd)pyrene | ppm | 5.6 | .54 | 2.7 | ND | ND | .37 |
| | Napthalene | ppm | 500 | ND | ND | .57 | .6 | ND |
| | Phenanthrene | ppm | 500 | .47 | 6.6 | ND | .49 | .6 |
| | Pyrene | ppm | 500 | 1.4 | 7.2 | ND | .5 | .83 |
| **Cyanide** | Cyanide | ppm | 27 | ND | ND | 0.5 | ND | 0.61 |
| **Volatile Organic Compounds** | None detected | ppm | - | ND | ND | ND | ND | ND |
| **TPH** | DRO | ppm | NS | ND | ND | 130 | **1,200** | ND |
| | GRO | ppm | NS | ND | ND | 11 | ND | ND |

Notes:

ND Not detected
NS No regulatory criteria available

Yellow highlighted concentrations exceed NYSDEC Part 375 Restricted Residential and Commerical Soil Cleanup Objeictives

**SOUTHERN BROOKLYN CROSSTOWN (B82) SELECT BUS SERVICE, BROOKLYN**
**NYCDDC PROJECT HWK100SBC**
**RESTANI CONSTRUCTION CORP.**
**TABLE 2: SUMMARY OF TCLP & RCRA ANALYSIS - SAMPLES COLLECTED 5/24/24**

| Parameter | Compounds Detected | Unit | Regulatory Criteria | SB11 | SB12 | SB13 | SB14 | SB15 |
|---|---|---|---|---|---|---|---|---|
| RCRA Characteristics | pH | pH units | <2 or >12.5 | 8.26 | 8.99 | 7.76 | 7.36 | 7.77 |
| | Flashpoint | ° F | >200° F | >200°F | >200°F | >200°F | >200°F | >200°F |
| | Ignitability | ° F | <140° F | passed | passed | passed | passed | passed |
| | Reactivity - Cyanide | ppm | _ | ND | ND | ND | ND | ND |
| | Reactivity - Sulfide | ppm | | ND | ND | ND | ND | ND |
| **TOXICITY** | | **Unit** | **USEPA Toxicity Characteristic Regulatory Criteria** | **SB11** | **SB12** | **SB13** | **SB14** | **SB15** |
| TCLP Metals | Barium | mg/L | 100 | 0.88 | 0.49 | 2.1 | 0.7 | 0.76 |
| | Lead | mg/L | 5 | 0.35 | 0.2 | **9.5** | 1.29 | 0.68 |
| TCLP VOCs | None Detected | mg/L | 0.7 | ND | ND | ND | ND | ND |
| TCLP SVOCs | None Detected | | | ND | ND | ND | ND | ND |
| TCLP Pests/Herbicides | None Detected | _ | _ | ND | ND | ND | ND | ND |

Notes:
NS No regulatory criteria available
ND Not detected

# APPENDIX A

# LABORATORY

# ANALYTICAL RESULTS

**Wednesday, June 12, 2024**

**Attn: Mr. Brian Pendergast**
**American Environmental Solutions, Inc**
**42 West Avenue**
**Patchogue, NY 11772**

**Project ID: HWK100SBC-BROOKLYN BUS ROUTES**
**SDG ID: GCQ81819**
**Sample ID#s: CQ81819 - CQ81823**

**This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.**

**This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.**

**All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.**

**A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.**

**Enclosed are revised Analysis Report pages. Please replace and discard the original pages. If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.**

**Sincerely yours,**

**Phyllis Shiller**
**Laboratory Director**

**NELAC - #NY11301**
**CT Lab Registration #PH-0618**
**MA Lab Registration #M-CT007**
**ME Lab Registration #CT-007**
**NH Lab Registration #213693-A,B**
**NJ Lab Registration #CT-003**
**NY Lab Registration #11301**
**PA Lab Registration #68-03530**
**RI Lab Registration #63**
**VT Lab Registration #VT11301**

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

NY # 11301

# SDG Comments

June 12, 2024

SDG I.D.: GCQ81819

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

# Sample Id Cross Reference

June 12, 2024

SDG I.D.: GCQ81819

Project ID: HWK100SBC-BROOKLYN BUS ROUTES

| Client Id | Lab Id | Matrix |
|---|---|---|
| SB11 | CQ81819 | SOIL |
| SB12 | CQ81820 | SOIL |
| SB13 | CQ81821 | SOIL |
| SB14 | CQ81822 | SOIL |
| SB15 | CQ81823 | SOIL |

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

# Analysis Report

June 12, 2024

FOR: Attn: Mr. Brian Pendergast
American Environmental Solutions, Inc
42 West Avenue
Patchogue, NY 11772

| Sample Information | | Custody Information | | Date | Time |
|---|---|---|---|---|---|
| Matrix: | SOIL | Collected by: | | 05/24/24 | 8:55 |
| Location Code: | AES-INC | Received by: | SW | 05/28/24 | 17:28 |
| Rush Request: | Standard | Analyzed by: | see "By" below | | |
| P.O.#: | 0942 | | | | |

## Laboratory Data

SDG ID: GCQ81819
Phoenix ID: CQ81819

Project ID: HWK100SBC-BROOKLYN BUS ROUTES
Client ID: SB11

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference |
|---|---|---|---|---|---|---|---|
| Silver | < 0.36 | 0.36 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Aluminum | 9220 | 54 | mg/Kg | 10 | 05/29/24 | TH | SW6010D |
| Arsenic | 3.36 | 0.72 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Barium | 37.4 | 0.36 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Beryllium | 0.38 | 0.29 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Calcium | 959 | 5.4 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Cadmium | < 0.36 | 0.36 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Cobalt | 5.51 | 0.36 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Chromium | 13.7 | 0.36 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Copper | 12.1 | 0.7 | mg/kg | 1 | 05/29/24 | TH | SW6010D |
| Iron | 13300 | 54 | mg/Kg | 10 | 05/29/24 | TH | SW6010D |
| Mercury | 0.07 | 0.03 | mg/Kg | 2 | 05/30/24 | ZT | SW7471B |
| Potassium | 696 | 54 | mg/Kg | 10 | 05/29/24 | TH | SW6010D |
| Magnesium | 1750 | 5.4 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Manganese | 188 | 0.36 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Sodium | 379 | 5.4 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Nickel | 13.1 | 0.36 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Lead | 21.3 | 0.36 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Antimony | < 3.6 | 3.6 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Selenium | < 1.4 | 1.4 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| TCLP Silver | < 0.10 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Arsenic | < 0.10 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Barium | 0.88 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Cadmium | < 0.050 | 0.050 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Chromium | < 0.10 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Mercury | < 0.0002 | 0.0002 | mg/L | 1 | 05/30/24 | ZT | SW846 1311/7470 |
| TCLP Lead | 0.35 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Selenium | < 0.10 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010D |

**Ver 2**

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference | |
|---|---|---|---|---|---|---|---|---|
| Thallium | < 3.2 | 3.2 | mg/Kg | 1 | 05/29/24 | TH | SW6010D | |
| TCLP Metals Digestion | Completed | | | | 05/29/24 | AL/AL | SW3010A | |
| Vanadium | 21.3 | 0.36 | mg/Kg | 1 | 05/29/24 | TH | SW6010D | |
| Zinc | 27.9 | 0.7 | mg/Kg | 1 | 05/29/24 | TH | SW6010D | |
| Percent Solid | 85 | | % | | 05/28/24 | CV | SW846-%Solid | |
| Corrosivity | Negative | | Pos/Neg | 1 | 05/28/24 | MW | SW846-Corr | 1 |
| Flash Point | >200 | 200 | Degree F | 1 | 05/31/24 | G | SW1010B | |
| Ignitability | Passed | 140 | degree F | 1 | 05/31/24 | G | SW846-Ignit | 1 |
| pH at 25C - Soil | 8.26 | 1.00 | pH Units | 1 | 05/28/24 22:16 | MW | SW846 9045D | 1 |
| Reactivity Cyanide | < 6 | 6 | mg/Kg | 1 | 05/30/24 | NP/GD | SW846 7.3.3.1/90 | 1 |
| Reactivity Sulfide | < 20 | 20 | mg/Kg | 1 | 05/31/24 | NP/GD | SW846 CH7 | 1 |
| Reactivity | Negative | | Pos/Neg | 1 | 05/31/24 | NP/GD | SW846-React | 1 |
| Total Cyanide (SW9010C Distill.) | < 0.53 | 0.53 | mg/Kg | 1 | 05/30/24 | D/S/G | SW9012B | |
| Mercury Digestion | Completed | | | | 05/29/24 | AL/AL | SW7471B | |
| Extraction of NY ETPH | Completed | | | | 05/29/24 | R/H/U | SW3546 | |
| Soil Extraction for PCB | Completed | | | | 05/28/24 | C/A | SW3546 | |
| Soil Extraction for Pesticides | Completed | | | | 05/28/24 | C/A | SW3546 | |
| Soil Extraction for SVOA | Completed | | | | 05/28/24 | H/A | SW3546 | |
| TCLP Digestion Mercury | Completed | | | | 05/29/24 | AL/AL | SW7470A | |
| TCLP Herbicides Extraction | Completed | | | | 05/30/24 | CV/D | SW8150 MOD | |
| TCLP Extraction for Metals | Completed | | | | 05/28/24 | AL | SW1311 | |
| TCLP Extraction for Organics | Completed | | | | 05/28/24 | AL | SW1311 | |
| TCLP Pesticides Extraction | Completed | | | | 05/29/24 | CV/CV | SW3510C | |
| TCLP Semi-Volatile Extraction | Completed | | | | 05/31/24 | LB1/LB1 | SW3510C | |
| TCLP Extraction Volatiles | Completed | | | | 05/28/24 | cv | SW1311 | |
| Total Metals Digest | Completed | | | | 05/28/24 | J/AG | SW3050B | |
| **Gasoline Range Hydrocarbons (C6-C10)** | | | | | | | | |
| GRO (C6-C10) | ND | 7.1 | mg/Kg | 50 | 05/29/24 | V | SW8015D GRO | |
| **QA/QC Surrogates** | | | | | | | | |
| % 2,5-Dibromotoluene (FID) | 89 | | % | 50 | 05/29/24 | V | 70 - 130 % | |
| **Polychlorinated Biphenyls** | | | | | | | | |
| PCB-1016 | ND | 78 | ug/Kg | 2 | 05/29/24 | SC | SW8082A | |
| PCB-1221 | ND | 78 | ug/Kg | 2 | 05/29/24 | SC | SW8082A | |
| PCB-1232 | ND | 78 | ug/Kg | 2 | 05/29/24 | SC | SW8082A | |
| PCB-1242 | ND | 78 | ug/Kg | 2 | 05/29/24 | SC | SW8082A | |
| PCB-1248 | ND | 78 | ug/Kg | 2 | 05/29/24 | SC | SW8082A | |
| PCB-1254 | ND | 78 | ug/Kg | 2 | 05/29/24 | SC | SW8082A | |
| PCB-1260 | ND | 78 | ug/Kg | 2 | 05/29/24 | SC | SW8082A | |
| PCB-1262 | ND | 78 | ug/Kg | 2 | 05/29/24 | SC | SW8082A | |
| PCB-1268 | ND | 78 | ug/Kg | 2 | 05/29/24 | SC | SW8082A | |
| **QA/QC Surrogates** | | | | | | | | |
| % DCBP | 60 | | % | 2 | 05/29/24 | SC | 30 - 150 % | |
| % DCBP (Confirmation) | 62 | | % | 2 | 05/29/24 | SC | 30 - 150 % | |
| % TCMX | 61 | | % | 2 | 05/29/24 | SC | 30 - 150 % | |
| % TCMX (Confirmation) | 62 | | % | 2 | 05/29/24 | SC | 30 - 150 % | |

Project ID: HWK100SBC-BROOKLYN BUS ROUTES
Client ID: SB11

Phoenix I.D.: CQ81819

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference | |
|---|---|---|---|---|---|---|---|---|
| **Pesticides - Soil** | | | | | | | | |
| 4,4' -DDD | ND | 2.3 | ug/Kg | 2 | 05/29/24 | CN | SW8081B | |
| 4,4' -DDE | ND | 2.3 | ug/Kg | 2 | 05/29/24 | CN | SW8081B | |
| 4,4' -DDT | ND | 2.3 | ug/Kg | 2 | 05/29/24 | CN | SW8081B | |
| a-BHC | ND | 7.8 | ug/Kg | 2 | 05/29/24 | CN | SW8081B | |
| a-Chlordane | ND | 3.9 | ug/Kg | 2 | 05/29/24 | CN | SW8081B | |
| Aldrin | ND | 3.9 | ug/Kg | 2 | 05/29/24 | CN | SW8081B | |
| b-BHC | ND | 7.8 | ug/Kg | 2 | 05/29/24 | CN | SW8081B | |
| Chlordane | ND | 39 | ug/Kg | 2 | 05/29/24 | CN | SW8081B | |
| d-BHC | ND | 7.8 | ug/Kg | 2 | 05/29/24 | CN | SW8081B | |
| Dieldrin | ND | 3.9 | ug/Kg | 2 | 05/29/24 | CN | SW8081B | |
| Endosulfan I | ND | 7.8 | ug/Kg | 2 | 05/29/24 | CN | SW8081B | |
| Endosulfan II | ND | 7.8 | ug/Kg | 2 | 05/29/24 | CN | SW8081B | |
| Endosulfan sulfate | ND | 7.8 | ug/Kg | 2 | 05/29/24 | CN | SW8081B | |
| Endrin | ND | 7.8 | ug/Kg | 2 | 05/29/24 | CN | SW8081B | |
| Endrin aldehyde | ND | 7.8 | ug/Kg | 2 | 05/29/24 | CN | SW8081B | |
| Endrin ketone | ND | 7.8 | ug/Kg | 2 | 05/29/24 | CN | SW8081B | |
| g-BHC | ND | 1.6 | ug/Kg | 2 | 05/29/24 | CN | SW8081B | |
| g-Chlordane | ND | 3.9 | ug/Kg | 2 | 05/29/24 | CN | SW8081B | |
| Heptachlor | ND | 7.8 | ug/Kg | 2 | 05/29/24 | CN | SW8081B | |
| Heptachlor epoxide | ND | 7.8 | ug/Kg | 2 | 05/29/24 | CN | SW8081B | |
| Methoxychlor | ND | 39 | ug/Kg | 2 | 05/29/24 | CN | SW8081B | |
| Toxaphene | ND | 160 | ug/Kg | 2 | 05/29/24 | CN | SW8081B | |
| **QA/QC Surrogates** | | | | | | | | |
| % DCBP | 65 | | % | 2 | 05/29/24 | CN | 30 - 150 % | |
| % DCBP (Confirmation) | 64 | | % | 2 | 05/29/24 | CN | 30 - 150 % | |
| % TCMX | 60 | | % | 2 | 05/29/24 | CN | 30 - 150 % | |
| % TCMX (Confirmation) | 58 | | % | 2 | 05/29/24 | CN | 30 - 150 % | |
| **TCLP Herbicides** | | | | | | | | |
| 2,4,5-TP (Silvex) | ND | 50 | ug/L | 10 | 05/31/24 | JRB | SW846 1311/8151 | |
| 2,4-D | ND | 100 | ug/L | 10 | 05/31/24 | JRB | SW846 1311/8151 | |
| **QA/QC Surrogates** | | | | | | | | |
| % DCAA | 69 | | % | 10 | 05/31/24 | JRB | 30 - 150 % | |
| % DCAA (Confirmation) | 61 | | % | 10 | 05/31/24 | JRB | 30 - 150 % | |
| **TCLP Pesticides** | | | | | | | | |
| 4,4' -DDD | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| 4,4' -DDE | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| 4,4' -DDT | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| a-BHC | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| Alachlor | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | 1 |
| Aldrin | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| b-BHC | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| Chlordane | ND | 5.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| d-BHC | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| Dieldrin | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| Endosulfan I | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| Endosulfan II | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference |
|---|---|---|---|---|---|---|---|
| Endosulfan Sulfate | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Endrin | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Endrin Aldehyde | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| g-BHC (Lindane) | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Heptachlor | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Heptachlor epoxide | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Methoxychlor | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Toxaphene | ND | 20 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| **QA/QC Surrogates** | | | | | | | |
| %DCBP (Surrogate Rec) | 68 | | % | 10 | 05/29/24 | AW | 30 - 150 % |
| **%DCBP (Surrogate Rec) (Confirmation)** | 63 | | % | 10 | 05/29/24 | AW | 30 - 150 % |
| %TCMX (Surrogate Rec) | 63 | | % | 10 | 05/29/24 | AW | 30 - 150 % |
| **%TCMX (Surrogate Rec) (Confirmation)** | 66 | | % | 10 | 05/29/24 | AW | 30 - 150 % |
| **TPH DRO (C10-C28)** | | | | | | | |
| Diesel Range Organics (C10-C28) | ND | 57 | mg/Kg | 1 | 05/30/24 | JRB | SW-846 8015 |
| **QA/QC Surrogates** | | | | | | | |
| % COD (surr) | 83 | | % | 1 | 05/30/24 | JRB | 50 - 150 % |
| % Terphenyl (surr) | 90 | | % | 1 | 05/30/24 | JRB | 50 - 150 % |
| **Volatiles (TCL)** | | | | | | | |
| 1,1,1-Trichloroethane | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,1,2,2-Tetrachloroethane | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,1,2-Trichloroethane | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,1-Dichloroethane | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,1-Dichloroethene | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2,3-Trichlorobenzene | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2,4-Trichlorobenzene | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2-Dibromo-3-chloropropane | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2-Dibromoethane | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2-Dichlorobenzene | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2-Dichloroethane | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2-Dichloropropane | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,3-Dichlorobenzene | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,4-Dichlorobenzene | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 2-Hexanone | ND | 28 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 4-Methyl-2-pentanone | ND | 28 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Acetone | ND | 50 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Benzene | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Bromochloromethane | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Bromodichloromethane | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Bromoform | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Bromomethane | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Carbon Disulfide | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Carbon tetrachloride | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Chlorobenzene | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Chloroethane | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Chloroform | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Chloromethane | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| cis-1,2-Dichloroethene | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference |
|---|---|---|---|---|---|---|---|
| cis-1,3-Dichloropropene | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Cyclohexane | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Dibromochloromethane | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Dichlorodifluoromethane | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Ethylbenzene | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Isopropylbenzene | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| m&p-Xylene | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Methyl ethyl ketone | ND | 33 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Methyl t-butyl ether (MTBE) | ND | 11 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Methylacetate | ND | 4.4 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Methylcyclohexane | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Methylene chloride | ND | 28 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| o-Xylene | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Styrene | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Tetrachloroethene | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Toluene | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Total Xylenes | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| trans-1,2-Dichloroethene | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| trans-1,3-Dichloropropene | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Trichloroethene | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Trichlorofluoromethane | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Trichlorotrifluoroethane | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Vinyl chloride | ND | 5.5 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| **QA/QC Surrogates** | | | | | | | |
| % 1,2-dichlorobenzene-d4 | 95 | | % | 1 | 05/29/24 | JLI | 70 - 130 % |
| % Bromofluorobenzene | 95 | | % | 1 | 05/29/24 | JLI | 70 - 130 % |
| % Dibromofluoromethane | 100 | | % | 1 | 05/29/24 | JLI | 70 - 130 % |
| % Toluene-d8 | 98 | | % | 1 | 05/29/24 | JLI | 70 - 130 % |
| **1,4-dioxane** | | | | | | | |
| 1,4-dioxane | ND | 83 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| **TCLP Volatiles** | | | | | | | |
| 1,1-Dichloroethene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| 1,2-Dichloroethane | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| 1,4-Dichlorobenzene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Benzene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Carbon tetrachloride | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Chlorobenzene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Chloroform | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Methyl ethyl ketone | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Tetrachloroethene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Trichloroethene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Vinyl chloride | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| **QA/QC Surrogates** | | | | | | | |
| % 1,2-dichlorobenzene-d4 (10x) | 100 | | % | 10 | 05/30/24 | HM | 70 - 130 % |
| % Bromofluorobenzene (10x) | 95 | | % | 10 | 05/30/24 | HM | 70 - 130 % |
| % Dibromofluoromethane (10x) | 88 | | % | 10 | 05/30/24 | HM | 70 - 130 % |
| % Toluene-d8 (10x) | 98 | | % | 10 | 05/30/24 | HM | 70 - 130 % |

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference | |
|---|---|---|---|---|---|---|---|---|
| Volatile Library Search | Completed | | | | 05/29/24 | JLI | | |

## Semivolatiles

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1,1-Biphenyl | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 1,2,4,5-Tetrachlorobenzene | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,2'-Oxybis(1-Chloropropane) | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | 1 |
| 2,3,4,6-tetrachlorophenol | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,4,5-Trichlorophenol | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,4,6-Trichlorophenol | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,4-Dichlorophenol | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,4-Dimethylphenol | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,4-Dinitrophenol | ND | 610 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,4-Dinitrotoluene | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,6-Dinitrotoluene | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2-Chloronaphthalene | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2-Chlorophenol | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2-Methylnaphthalene | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2-Methylphenol (o-cresol) | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2-Nitroaniline | ND | 610 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2-Nitrophenol | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 3&4-Methylphenol (m&p-cresol) | ND | 380 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | 1 |
| 3,3'-Dichlorobenzidine | ND | 460 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 3-Nitroaniline | ND | 610 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4,6-Dinitro-2-methylphenol | ND | 1100 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4-Bromophenyl phenyl ether | ND | 380 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4-Chloro-3-methylphenol | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4-Chloroaniline | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4-Chlorophenyl phenyl ether | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4-Nitroaniline | ND | 610 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4-Nitrophenol | ND | 1100 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Acenaphthene | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Acenaphthylene | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Acetophenone | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Anthracene | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Atrazine | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benz(a)anthracene | 800 | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benzaldehyde | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benzo(a)pyrene | 930 | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benzo(b)fluoranthene | 950 | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benzo(ghi)perylene | 470 | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benzo(k)fluoranthene | 360 | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benzyl butyl phthalate | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Bis(2-chloroethoxy)methane | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Bis(2-chloroethyl)ether | ND | 380 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Bis(2-ethylhexyl)phthalate | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Caprolactam | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Carbazole | ND | 380 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Chrysene | 930 | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Dibenz(a,h)anthracene | ND | 190 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Dibenzofuran | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference |
|---|---|---|---|---|---|---|---|
| Diethyl phthalate | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Dimethylphthalate | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Di-n-butylphthalate | ND | 770 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Di-n-octylphthalate | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Fluoranthene | 1100 | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Fluorene | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Hexachlorobenzene | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Hexachlorobutadiene | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Hexachlorocyclopentadiene | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Hexachloroethane | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Indeno(1,2,3-cd)pyrene | 540 | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Isophorone | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Naphthalene | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Nitrobenzene | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| N-Nitrosodimethylamine | ND | 380 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| N-Nitrosodi-n-propylamine | ND | 190 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| N-Nitrosodiphenylamine | ND | 380 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Pentachlorophenol | ND | 380 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Phenanthrene | 470 | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Phenol | ND | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Pyrene | 1400 | 270 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| **QA/QC Surrogates** | | | | | | | |
| % 2,4,6-Tribromophenol | 66 | | % | 1 | 05/29/24 | AW | 30 - 130 % |
| % 2-Fluorobiphenyl | 68 | | % | 1 | 05/29/24 | AW | 30 - 130 % |
| % 2-Fluorophenol | 65 | | % | 1 | 05/29/24 | AW | 30 - 130 % |
| % Nitrobenzene-d5 | 81 | | % | 1 | 05/29/24 | AW | 30 - 130 % |
| % Phenol-d5 | 70 | | % | 1 | 05/29/24 | AW | 30 - 130 % |
| % Terphenyl-d14 | 58 | | % | 1 | 05/29/24 | AW | 30 - 130 % |

## TCLP Acid/Base-Neutral

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene | ND | 83 | ug/L | 1 | 06/01/24 | MR | SW-846 1311/8270 |
| 2,4,5-Trichlorophenol | ND | 83 | ug/L | 1 | 06/01/24 | MR | SW-846 1311/8270 |
| 2,4,6-Trichlorophenol | ND | 83 | ug/L | 1 | 06/01/24 | MR | SW-846 1311/8270 |
| 2,4-Dinitrotoluene | ND | 83 | ug/L | 1 | 06/01/24 | MR | SW-846 1311/8270 |
| 2-Methylphenol (o-cresol) | ND | 83 | ug/L | 1 | 06/01/24 | MR | SW-846 1311/8270 |
| 3&4-Methylphenol (m&p-Cresol) | ND | 83 | ug/L | 1 | 06/01/24 | MR | SW-846 1311/8270 |
| Hexachlorobenzene | ND | 83 | ug/L | 1 | 06/01/24 | MR | SW-846 1311/8270 |
| Hexachlorobutadiene | ND | 83 | ug/L | 1 | 06/01/24 | MR | SW-846 1311/8270 |
| Hexachloroethane | ND | 83 | ug/L | 1 | 06/01/24 | MR | SW-846 1311/8270 |
| Nitrobenzene | ND | 83 | ug/L | 1 | 06/01/24 | MR | SW-846 1311/8270 |
| Pentachlorophenol | ND | 83 | ug/L | 1 | 06/01/24 | MR | SW-846 1311/8270 |
| Pyridine | ND | 83 | ug/L | 1 | 06/01/24 | MR | SW-846 1311/8270 |
| **QA/QC Surrogates** | | | | | | | |
| % 2,4,6-Tribromophenol | 64 | | % | 1 | 06/01/24 | MR | 15 - 110 % |
| % 2-Fluorobiphenyl | 68 | | % | 1 | 06/01/24 | MR | 30 - 130 % |
| % 2-Fluorophenol | 62 | | % | 1 | 06/01/24 | MR | 15 - 110 % |
| % Nitrobenzene-d5 | 79 | | % | 1 | 06/01/24 | MR | 30 - 130 % |
| % Phenol-d5 | 59 | | % | 1 | 06/01/24 | MR | 15 - 110 % |
| % Terphenyl-d14 | 82 | | % | 1 | 06/01/24 | MR | 30 - 130 % |

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference |
|---|---|---|---|---|---|---|---|
| Semivolatile Library Search | Completed | | | | 05/29/24 | E | |

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

## Comments:

The GRO (C6-C10) is quantitated using an gasoline standard.

The TPH (C10-C28) is quantitated using an alkane standard.

Corrosivity is based solely on the pH analysis performed above.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Ignitability is based solely on the results of the closed cup flashpoint analysis performed above. Passed is >140 degree F.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Cyanide. This method is no longer listed in the current version of SW-846.

The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Sulfide. This method is no longer listed in the current version of SW-846.

Volatile Comment:
To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

**Phyllis Shiller, Laboratory Director**
**June 12, 2024**
**Reviewed and Released by: Phyllis Shiller, Laboratory Director**

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

# Analysis Report

June 12, 2024

FOR: Attn: Mr. Brian Pendergast
American Environmental Solutions, Inc
42 West Avenue
Patchogue, NY 11772

| Sample Information | | Custody Information | | Date | Time |
|---|---|---|---|---|---|
| Matrix: | SOIL | Collected by: | | 05/24/24 | 9:26 |
| Location Code: | AES-INC | Received by: | SW | 05/28/24 | 17:28 |
| Rush Request: | Standard | Analyzed by: | see "By" below | | |
| P.O.#: | 0942 | | | | |

## Laboratory Data

SDG ID: GCQ81819
Phoenix ID: CQ81820

Project ID: HWK100SBC-BROOKLYN BUS ROUTES
Client ID: SB12

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference |
|---|---|---|---|---|---|---|---|
| Silver | < 0.38 | 0.38 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Aluminum | 6970 | 5.6 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Arsenic | 4.64 | 0.75 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Barium | 87.5 | 0.38 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Beryllium | 0.40 | 0.30 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Calcium | 47500 | 56 | mg/Kg | 10 | 05/29/24 | TH | SW6010D |
| Cadmium | < 0.38 | 0.38 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Cobalt | 4.83 | 0.38 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Chromium | 17.7 | 0.38 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Copper | 26.9 | 0.8 | mg/kg | 1 | 05/29/24 | TH | SW6010D |
| Iron | 15700 | 56 | mg/Kg | 10 | 05/29/24 | TH | SW6010D |
| Mercury | 0.12 | 0.03 | mg/Kg | 2 | 05/30/24 | ZT | SW7471B |
| Potassium | 1110 | 56 | mg/Kg | 10 | 05/29/24 | TH | SW6010D |
| Magnesium | 7580 | 56 | mg/Kg | 10 | 05/29/24 | TH | SW6010D |
| Manganese | 230 | 0.38 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Sodium | 852 | 5.6 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Nickel | 13.6 | 0.38 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Lead | 59.6 | 0.38 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Antimony | < 3.8 | 3.8 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Selenium | < 1.5 | 1.5 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| TCLP Silver | < 0.10 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Arsenic | < 0.10 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Barium | 0.49 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Cadmium | < 0.050 | 0.050 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Chromium | < 0.10 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Mercury | < 0.0002 | 0.0002 | mg/L | 1 | 05/30/24 | ZT | SW846 1311/7470 |
| TCLP Lead | 0.20 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Selenium | < 0.10 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010D |

**Ver 2**

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference | |
|---|---|---|---|---|---|---|---|---|
| Thallium | < 3.4 | 3.4 | mg/Kg | 1 | 05/29/24 | TH | SW6010D | |
| TCLP Metals Digestion | Completed | | | | 05/29/24 | AL/AL | SW3010A | |
| Vanadium | 32.8 | 0.38 | mg/Kg | 1 | 05/29/24 | TH | SW6010D | |
| Zinc | 89.2 | 0.8 | mg/Kg | 1 | 05/29/24 | TH | SW6010D | |
| Percent Solid | 83 | | % | | 05/28/24 | CV | SW846-%Solid | |
| Corrosivity | Negative | | Pos/Neg | 1 | 05/28/24 | MW | SW846-Corr | 1 |
| Flash Point | >200 | 200 | Degree F | 1 | 05/31/24 | G | SW1010B | |
| Ignitability | Passed | 140 | degree F | 1 | 05/31/24 | G | SW846-Ignit | 1 |
| pH at 25C - Soil | 8.99 | 1.00 | pH Units | 1 | 05/28/24 22:16 | MW | SW846 9045D | 1 |
| Reactivity Cyanide | < 6 | 6 | mg/Kg | 1 | 05/30/24 | NP/GD | SW846 7.3.3.1/90 | 1 |
| Reactivity Sulfide | < 20 | 20 | mg/Kg | 1 | 05/31/24 | NP/GD | SW846 CH7 | 1 |
| Reactivity | Negative | | Pos/Neg | 1 | 05/31/24 | NP/GD | SW846-React | 1 |
| Total Cyanide (SW9010C Distill.) | < 0.60 | 0.60 | mg/Kg | 1 | 05/30/24 | D/S/G | SW9012B | |
| Mercury Digestion | Completed | | | | 05/29/24 | AL/AL | SW7471B | |
| Extraction of NY ETPH | Completed | | | | 05/29/24 | R/H/U | SW3546 | |
| Soil Extraction for PCB | Completed | | | | 05/28/24 | C/A | SW3546 | |
| Soil Extraction for Pesticides | Completed | | | | 05/28/24 | C/A | SW3546 | |
| Soil Extraction for SVOA | Completed | | | | 05/28/24 | H/A | SW3546 | |
| TCLP Digestion Mercury | Completed | | | | 05/29/24 | AL/AL | SW7470A | |
| TCLP Herbicides Extraction | Completed | | | | 05/30/24 | CV/D | SW8150 MOD | |
| TCLP Extraction for Metals | Completed | | | | 05/28/24 | AL | SW1311 | |
| TCLP Extraction for Organics | Completed | | | | 05/28/24 | AL | SW1311 | |
| TCLP Pesticides Extraction | Completed | | | | 05/29/24 | CV/CV | SW3510C | |
| TCLP Semi-Volatile Extraction | Completed | | | | 05/31/24 | LB1/LB1 | SW3510C | |
| TCLP Extraction Volatiles | Completed | | | | 05/28/24 | cv | SW1311 | |
| Total Metals Digest | Completed | | | | 05/28/24 | J/AG | SW3050B | |
| **Gasoline Range Hydrocarbons (C6-C10)** | | | | | | | | |
| GRO (C6-C10) | ND | 11 | mg/Kg | 50 | 05/29/24 | V | SW8015D GRO | |
| **QA/QC Surrogates** | | | | | | | | |
| % 2,5-Dibromotoluene (FID) | 93 | | % | 50 | 05/29/24 | V | 70 - 130 % | |
| **Polychlorinated Biphenyls** | | | | | | | | |
| PCB-1016 | ND | 80 | ug/Kg | 2 | 05/29/24 | SC | SW8082A | |
| PCB-1221 | ND | 80 | ug/Kg | 2 | 05/29/24 | SC | SW8082A | |
| PCB-1232 | ND | 80 | ug/Kg | 2 | 05/29/24 | SC | SW8082A | |
| PCB-1242 | ND | 80 | ug/Kg | 2 | 05/29/24 | SC | SW8082A | |
| PCB-1248 | ND | 80 | ug/Kg | 2 | 05/29/24 | SC | SW8082A | |
| PCB-1254 | ND | 80 | ug/Kg | 2 | 05/29/24 | SC | SW8082A | |
| PCB-1260 | ND | 80 | ug/Kg | 2 | 05/29/24 | SC | SW8082A | |
| PCB-1262 | ND | 80 | ug/Kg | 2 | 05/29/24 | SC | SW8082A | |
| PCB-1268 | ND | 80 | ug/Kg | 2 | 05/29/24 | SC | SW8082A | |
| **QA/QC Surrogates** | | | | | | | | |
| % DCBP | 73 | | % | 2 | 05/29/24 | SC | 30 - 150 % | |
| % DCBP (Confirmation) | 71 | | % | 2 | 05/29/24 | SC | 30 - 150 % | |
| % TCMX | 68 | | % | 2 | 05/29/24 | SC | 30 - 150 % | |
| % TCMX (Confirmation) | 70 | | % | 2 | 05/29/24 | SC | 30 - 150 % | |

Project ID: HWK100SBC-BROOKLYN BUS ROUTES
Client ID: SB12

Phoenix I.D.: CQ81820

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference | |
|---|---|---|---|---|---|---|---|---|
| **Pesticides - Soil** | | | | | | | | |
| 4,4' -DDD | ND | 2.4 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| 4,4' -DDE | 11 | 2.4 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| 4,4' -DDT | 13 | 2.4 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| a-BHC | ND | 8.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| a-Chlordane | 11 | 4.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Aldrin | ND | 4.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| b-BHC | ND | 8.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Chlordane | 62 | 40 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| d-BHC | ND | 8.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Dieldrin | ND | 4.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Endosulfan I | ND | 8.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Endosulfan II | ND | 8.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Endosulfan sulfate | ND | 8.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Endrin | ND | 8.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Endrin aldehyde | ND | 8.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Endrin ketone | ND | 8.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| g-BHC | ND | 1.6 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| g-Chlordane | 9.6 | 4.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Heptachlor | ND | 8.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Heptachlor epoxide | ND | 8.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Methoxychlor | ND | 40 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Toxaphene | ND | 160 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| **QA/QC Surrogates** | | | | | | | | |
| % DCBP | 82 | | % | 2 | 05/29/24 | AW | 30 - 150 % | |
| % DCBP (Confirmation) | 82 | | % | 2 | 05/29/24 | AW | 30 - 150 % | |
| % TCMX | 80 | | % | 2 | 05/29/24 | AW | 30 - 150 % | |
| % TCMX (Confirmation) | 73 | | % | 2 | 05/29/24 | AW | 30 - 150 % | |
| **TCLP Herbicides** | | | | | | | | |
| 2,4,5-TP (Silvex) | ND | 50 | ug/L | 10 | 05/31/24 | JRB | SW846 1311/8151 | |
| 2,4-D | ND | 100 | ug/L | 10 | 05/31/24 | JRB | SW846 1311/8151 | |
| **QA/QC Surrogates** | | | | | | | | |
| % DCAA | 67 | | % | 10 | 05/31/24 | JRB | 30 - 150 % | |
| % DCAA (Confirmation) | 59 | | % | 10 | 05/31/24 | JRB | 30 - 150 % | |
| **TCLP Pesticides** | | | | | | | | |
| 4,4' -DDD | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| 4,4' -DDE | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| 4,4' -DDT | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| a-BHC | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| Alachlor | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | 1 |
| Aldrin | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| b-BHC | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| Chlordane | ND | 5.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| d-BHC | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| Dieldrin | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| Endosulfan I | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| Endosulfan II | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference |
|---|---|---|---|---|---|---|---|
| Endosulfan Sulfate | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Endrin | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Endrin Aldehyde | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| g-BHC (Lindane) | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Heptachlor | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Heptachlor epoxide | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Methoxychlor | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Toxaphene | ND | 20 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| **QA/QC Surrogates** | | | | | | | |
| %DCBP (Surrogate Rec) | 74 | | % | 10 | 05/29/24 | AW | 30 - 150 % |
| **%DCBP (Surrogate Rec) (Confirmation)** | 68 | | % | 10 | 05/29/24 | AW | 30 - 150 % |
| %TCMX (Surrogate Rec) | 72 | | % | 10 | 05/29/24 | AW | 30 - 150 % |
| **%TCMX (Surrogate Rec) (Confirmation)** | 72 | | % | 10 | 05/29/24 | AW | 30 - 150 % |
| **TPH DRO (C10-C28)** | | | | | | | |
| Diesel Range Organics (C10-C28) | ND | 300 | mg/Kg | 5 | 05/30/24 | JRB | SW-846 8015 |
| **QA/QC Surrogates** | | | | | | | |
| % COD (surr) | 92 | | % | 5 | 05/30/24 | JRB | 50 - 150 % |
| % Terphenyl (surr) | 66 | | % | 5 | 05/30/24 | JRB | 50 - 150 % |
| **Volatiles (TCL)** | | | | | | | |
| 1,1,1-Trichloroethane | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,1,2,2-Tetrachloroethane | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,1,2-Trichloroethane | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,1-Dichloroethane | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,1-Dichloroethene | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2,3-Trichlorobenzene | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2,4-Trichlorobenzene | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2-Dibromo-3-chloropropane | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2-Dibromoethane | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2-Dichlorobenzene | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2-Dichloroethane | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2-Dichloropropane | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,3-Dichlorobenzene | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,4-Dichlorobenzene | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 2-Hexanone | ND | 35 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 4-Methyl-2-pentanone | ND | 35 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Acetone | ND | 50 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Benzene | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Bromochloromethane | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Bromodichloromethane | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Bromoform | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Bromomethane | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Carbon Disulfide | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Carbon tetrachloride | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Chlorobenzene | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Chloroethane | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Chloroform | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Chloromethane | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| cis-1,2-Dichloroethene | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference |
|---|---|---|---|---|---|---|---|
| cis-1,3-Dichloropropene | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Cyclohexane | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Dibromochloromethane | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Dichlorodifluoromethane | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Ethylbenzene | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Isopropylbenzene | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| m&p-Xylene | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Methyl ethyl ketone | ND | 42 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Methyl t-butyl ether (MTBE) | ND | 14 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Methylacetate | ND | 5.6 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Methylcyclohexane | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Methylene chloride | ND | 35 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| o-Xylene | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Styrene | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Tetrachloroethene | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Toluene | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Total Xylenes | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| trans-1,2-Dichloroethene | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| trans-1,3-Dichloropropene | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Trichloroethene | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Trichlorofluoromethane | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Trichlorotrifluoroethane | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Vinyl chloride | ND | 7.0 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| **QA/QC Surrogates** | | | | | | | |
| % 1,2-dichlorobenzene-d4 | 93 | | % | 1 | 05/29/24 | JLI | 70 - 130 % |
| % Bromofluorobenzene | 89 | | % | 1 | 05/29/24 | JLI | 70 - 130 % |
| % Dibromofluoromethane | 107 | | % | 1 | 05/29/24 | JLI | 70 - 130 % |
| % Toluene-d8 | 93 | | % | 1 | 05/29/24 | JLI | 70 - 130 % |
| **1,4-dioxane** | | | | | | | |
| 1,4-dioxane | ND | 100 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| **TCLP Volatiles** | | | | | | | |
| 1,1-Dichloroethene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| 1,2-Dichloroethane | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| 1,4-Dichlorobenzene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Benzene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Carbon tetrachloride | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Chlorobenzene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Chloroform | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Methyl ethyl ketone | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Tetrachloroethene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Trichloroethene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Vinyl chloride | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| **QA/QC Surrogates** | | | | | | | |
| % 1,2-dichlorobenzene-d4 (10x) | 100 | | % | 10 | 05/30/24 | HM | 70 - 130 % |
| % Bromofluorobenzene (10x) | 97 | | % | 10 | 05/30/24 | HM | 70 - 130 % |
| % Dibromofluoromethane (10x) | 92 | | % | 10 | 05/30/24 | HM | 70 - 130 % |
| % Toluene-d8 (10x) | 98 | | % | 10 | 05/30/24 | HM | 70 - 130 % |

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference | |
|---|---|---|---|---|---|---|---|---|
| Volatile Library Search | Completed | | | | 05/29/24 | JLI | | |
| **Semivolatiles** | | | | | | | | |
| 1,1-Biphenyl | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| 1,2,4,5-Tetrachlorobenzene | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| 2,2'-Oxybis(1-Chloropropane) | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | 1 |
| 2,3,4,6-tetrachlorophenol | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| 2,4,5-Trichlorophenol | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| 2,4,6-Trichlorophenol | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| 2,4-Dichlorophenol | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| 2,4-Dimethylphenol | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| 2,4-Dinitrophenol | ND | 630 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| 2,4-Dinitrotoluene | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| 2,6-Dinitrotoluene | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| 2-Chloronaphthalene | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| 2-Chlorophenol | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| 2-Methylnaphthalene | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| 2-Methylphenol (o-cresol) | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| 2-Nitroaniline | ND | 630 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| 2-Nitrophenol | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| 3&4-Methylphenol (m&p-cresol) | ND | 390 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | 1 |
| 3,3'-Dichlorobenzidine | ND | 470 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| 3-Nitroaniline | ND | 630 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| 4,6-Dinitro-2-methylphenol | ND | 1100 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| 4-Bromophenyl phenyl ether | ND | 390 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| 4-Chloro-3-methylphenol | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| 4-Chloroaniline | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| 4-Chlorophenyl phenyl ether | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| 4-Nitroaniline | ND | 630 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| 4-Nitrophenol | ND | 1100 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| Acenaphthene | 860 | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| Acenaphthylene | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| Acetophenone | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| Anthracene | 2000 | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| Atrazine | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| Benz(a)anthracene | 5700 | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| Benzaldehyde | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| Benzo(a)pyrene | 4800 | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| Benzo(b)fluoranthene | 6400 | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| Benzo(ghi)perylene | 2300 | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| Benzo(k)fluoranthene | 2200 | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| Benzyl butyl phthalate | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| Bis(2-chloroethoxy)methane | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| Bis(2-chloroethyl)ether | ND | 390 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| Bis(2-ethylhexyl)phthalate | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| Caprolactam | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| Carbazole | 770 | 390 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| Chrysene | 4800 | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| Dibenz(a,h)anthracene | 600 | 200 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |
| Dibenzofuran | 280 | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E | |

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference |
|---|---|---|---|---|---|---|---|
| Diethyl phthalate | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E |
| Dimethylphthalate | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E |
| Di-n-butylphthalate | ND | 780 | ug/Kg | 1 | 05/29/24 | MR | SW8270E |
| Di-n-octylphthalate | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E |
| Fluoranthene | 14000 | 1400 | ug/Kg | 5 | 05/31/24 | MR | SW8270E |
| Fluorene | 750 | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E |
| Hexachlorobenzene | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E |
| Hexachlorobutadiene | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E |
| Hexachlorocyclopentadiene | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E |
| Hexachloroethane | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E |
| Indeno(1,2,3-cd)pyrene | 2700 | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E |
| Isophorone | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E |
| Naphthalene | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E |
| Nitrobenzene | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E |
| N-Nitrosodimethylamine | ND | 390 | ug/Kg | 1 | 05/29/24 | MR | SW8270E |
| N-Nitrosodi-n-propylamine | ND | 200 | ug/Kg | 1 | 05/29/24 | MR | SW8270E |
| N-Nitrosodiphenylamine | ND | 390 | ug/Kg | 1 | 05/29/24 | MR | SW8270E |
| Pentachlorophenol | ND | 390 | ug/Kg | 1 | 05/29/24 | MR | SW8270E |
| Phenanthrene | 6600 | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E |
| Phenol | ND | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E |
| Pyrene | 7200 | 270 | ug/Kg | 1 | 05/29/24 | MR | SW8270E |
| **QA/QC Surrogates** | | | | | | | |
| % 2,4,6-Tribromophenol | 62 | | % | 1 | 05/29/24 | MR | 30 - 130 % |
| % 2-Fluorobiphenyl | 65 | | % | 1 | 05/29/24 | MR | 30 - 130 % |
| % 2-Fluorophenol | 64 | | % | 1 | 05/29/24 | MR | 30 - 130 % |
| % Nitrobenzene-d5 | 78 | | % | 1 | 05/29/24 | MR | 30 - 130 % |
| % Phenol-d5 | 69 | | % | 1 | 05/29/24 | MR | 30 - 130 % |
| % Terphenyl-d14 | 48 | | % | 1 | 05/29/24 | MR | 30 - 130 % |
| % 2-Fluorobiphenyl (5x) | 71 | | % | 5 | 05/31/24 | MR | 30 - 130 % |
| % Nitrobenzene-d5 (5x) | 78 | | % | 5 | 05/31/24 | MR | 30 - 130 % |
| % Terphenyl-d14 (5x) | 59 | | % | 5 | 05/31/24 | MR | 30 - 130 % |

## TCLP Acid/Base-Neutral

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| 2,4,5-Trichlorophenol | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| 2,4,6-Trichlorophenol | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| 2,4-Dinitrotoluene | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| 2-Methylphenol (o-cresol) | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| 3&4-Methylphenol (m&p-Cresol) | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| Hexachlorobenzene | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| Hexachlorobutadiene | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| Hexachloroethane | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| Nitrobenzene | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| Pentachlorophenol | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| Pyridine | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| **QA/QC Surrogates** | | | | | | | |
| % 2,4,6-Tribromophenol | 49 | | % | 1 | 06/02/24 | MR | 15 - 110 % |
| % 2-Fluorobiphenyl | 58 | | % | 1 | 06/02/24 | MR | 30 - 130 % |
| % 2-Fluorophenol | 49 | | % | 1 | 06/02/24 | MR | 15 - 110 % |
| % Nitrobenzene-d5 | 62 | | % | 1 | 06/02/24 | MR | 30 - 130 % |

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference |
|---|---|---|---|---|---|---|---|
| % Phenol-d5 | 48 | | % | 1 | 06/02/24 | MR | 15 - 110 % |
| % Terphenyl-d14 | 67 | | % | 1 | 06/02/24 | MR | 30 - 130 % |
| Semivolatile Library Search | Completed | | | | 05/29/24 | E | |

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

## Comments:

The GRO (C6-C10) is quantitated using an gasoline standard.

The TPH (C10-C28) is quantitated using an alkane standard.

Corrosivity is based solely on the pH analysis performed above.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Ignitability is based solely on the results of the closed cup flashpoint analysis performed above. Passed is >140 degree F.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Cyanide. This method is no longer listed in the current version of SW-846.

The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Sulfide. This method is no longer listed in the current version of SW-846.

Volatile Comment:
To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

TPH Comment:
The sample chromatorgram exhibited non-DRO material outside the C10-C28 range.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

**Phyllis Shiller, Laboratory Director**

**June 12, 2024**

**Reviewed and Released by: Phyllis Shiller, Laboratory Director**

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

# Analysis Report

June 12, 2024

FOR: Attn: Mr. Brian Pendergast
American Environmental Solutions, Inc
42 West Avenue
Patchogue, NY 11772

| Sample Information | | Custody Information | | Date | Time |
|---|---|---|---|---|---|
| Matrix: | SOIL | Collected by: | | 05/24/24 | 11:23 |
| Location Code: | AES-INC | Received by: | SW | 05/28/24 | 17:28 |
| Rush Request: | 24 Hour | Analyzed by: | see "By" below | | |
| P.O.#: | 0942 | | | | |

## Laboratory Data

SDG ID: GCQ81819
Phoenix ID: CQ81821

Project ID: HWK100SBC-BROOKLYN BUS ROUTES
Client ID: SB13

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference |
|---|---|---|---|---|---|---|---|
| Silver | < 0.50 | 0.50 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Aluminum | 2530 | 6.1 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Arsenic | 22.3 | 0.81 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Barium | 110 | 0.41 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Beryllium | 0.39 | 0.33 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Calcium | 2500 | 6.1 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Cadmium | 0.97 | 0.41 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Cobalt | 27.3 | 0.41 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Chromium | 63.6 | 0.41 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Copper | 224 | 0.8 | mg/kg | 1 | 05/29/24 | TH | SW6010D |
| Iron | 74900 | 61 | mg/Kg | 10 | 05/29/24 | TH | SW6010D |
| Mercury | 0.07 | 0.03 | mg/Kg | 2 | 05/30/24 | ZT | SW7471B |
| Potassium | 276 | 6.1 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Magnesium | 262 | 6.1 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Manganese | 410 | 0.41 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Sodium | 507 | 6.1 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Nickel | 64.2 | 0.41 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Lead | 7410 | 4.1 | mg/Kg | 10 | 05/29/24 | TH | SW6010D |
| Antimony | < 4.1 | 4.1 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Selenium | < 1.6 | 1.6 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| TCLP Silver | < 0.10 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Arsenic | < 0.10 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Barium | 2.10 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Cadmium | < 0.050 | 0.050 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Chromium | < 0.10 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Mercury | < 0.0002 | 0.0002 | mg/L | 1 | 05/30/24 | ZT | SW846 1311/7470 |
| TCLP Lead | 9.50 | 0.10 | mg/L | 1 | 06/10/24 | PM | SW846 1311/6010 |
| TCLP Selenium | < 0.10 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010D |

**Ver 2**

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference | |
|---|---|---|---|---|---|---|---|---|
| Thallium | < 3.7 | 3.7 | mg/Kg | 1 | 05/29/24 | TH | SW6010D | |
| TCLP Metals Digestion | Completed | | | | 06/10/24 | AL/AL | SW3010A | |
| Vanadium | 24.9 | 0.41 | mg/Kg | 1 | 05/29/24 | TH | SW6010D | |
| Zinc | 155 | 0.8 | mg/Kg | 1 | 05/29/24 | TH | SW6010D | |
| Percent Solid | 82 | | % | | 05/28/24 | CV | SW846-%Solid | |
| Corrosivity | Negative | | Pos/Neg | 1 | 05/28/24 | MW | SW846-Corr | 1 |
| Flash Point | >200 | 200 | Degree F | 1 | 05/31/24 | G | SW1010B | |
| Ignitability | Passed | 140 | degree F | 1 | 05/31/24 | G | SW846-Ignit | 1 |
| pH at 25C - Soil | 7.76 | 1.00 | pH Units | 1 | 05/28/24 22:16 | MW | SW846 9045D | 1 |
| Reactivity Cyanide | < 6 | 6 | mg/Kg | 1 | 05/30/24 | NP/GD | SW846 7.3.3.1/90 | 1 |
| Reactivity Sulfide | 34.7 | 20 | mg/Kg | 1 | 05/31/24 | NP/GD | SW846 CH7 | 1 |
| Reactivity | Negative | | Pos/Neg | 1 | 05/31/24 | NP/GD | SW846-React | 1 |
| Total Cyanide (SW9010C Distill.) | 0.50 | 0.47 | mg/Kg | 1 | 05/30/24 | D/S/G | SW9012B | |
| Mercury Digestion | Completed | | | | 05/29/24 | AL/AL | SW7471B | |
| Extraction of NY ETPH | Completed | | | | 05/29/24 | R/H/U | SW3546 | |
| Soil Extraction for PCB | Completed | | | | 05/28/24 | C/A | SW3546 | |
| Soil Extraction for Pesticides | Completed | | | | 05/28/24 | C/A | SW3546 | |
| Soil Extraction for SVOA | Completed | | | | 05/28/24 | H/A | SW3546 | |
| TCLP Digestion Mercury | Completed | | | | 05/29/24 | AL/AL | SW7470A | |
| TCLP Herbicides Extraction | Completed | | | | 05/30/24 | CV/D | SW8150 MOD | |
| TCLP Extraction for Metals | Completed | | | | 06/07/24 | AL | SW1311 | |
| TCLP Extraction for Organics | Completed | | | | 05/28/24 | AL | SW1311 | |
| TCLP Pesticides Extraction | Completed | | | | 05/29/24 | CV/CV | SW3510C | |
| TCLP Semi-Volatile Extraction | Completed | | | | 05/31/24 | LB1/LB1 | SW3510C | |
| TCLP Extraction Volatiles | Completed | | | | 05/28/24 | cv | SW1311 | |
| Total Metals Digest | Completed | | | | 05/28/24 | J/AG | SW3050B | |
| **Gasoline Range Hydrocarbons (C6-C10)** | | | | | | | | |
| GRO (C6-C10) | 11 | 9.8 | mg/Kg | 50 | 05/29/24 | V | SW8015D GRO | |
| **QA/QC Surrogates** | | | | | | | | |
| % 2,5-Dibromotoluene (FID) | 92 | | % | 50 | 05/29/24 | V | 70 - 130 % | |
| **Polychlorinated Biphenyls** | | | | | | | | |
| PCB-1016 | ND | 80 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| PCB-1221 | ND | 80 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| PCB-1232 | ND | 80 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| PCB-1242 | ND | 80 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| PCB-1248 | ND | 80 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| PCB-1254 | ND | 80 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| PCB-1260 | ND | 80 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| PCB-1262 | ND | 80 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| PCB-1268 | ND | 80 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| **QA/QC Surrogates** | | | | | | | | |
| % DCBP | 79 | | % | 2 | 05/30/24 | SC | 30 - 150 % | |
| % DCBP (Confirmation) | 94 | | % | 2 | 05/30/24 | SC | 30 - 150 % | |
| % TCMX | 52 | | % | 2 | 05/30/24 | SC | 30 - 150 % | |
| % TCMX (Confirmation) | 54 | | % | 2 | 05/30/24 | SC | 30 - 150 % | |

Project ID: HWK100SBC-BROOKLYN BUS ROUTES
Client ID: SB13

Phoenix I.D.: CQ81821

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference | |
|---|---|---|---|---|---|---|---|---|
| **Pesticides - Soil** | | | | | | | | |
| 4,4' -DDD | ND | 2.4 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| 4,4' -DDE | ND | 2.4 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| 4,4' -DDT | ND | 2.4 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| a-BHC | ND | 8.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| a-Chlordane | ND | 4.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Aldrin | ND | 4.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| b-BHC | ND | 8.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Chlordane | ND | 40 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| d-BHC | ND | 8.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Dieldrin | ND | 4.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Endosulfan I | ND | 8.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Endosulfan II | ND | 8.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Endosulfan sulfate | ND | 8.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Endrin | ND | 8.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Endrin aldehyde | ND | 8.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Endrin ketone | ND | 8.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| g-BHC | ND | 1.6 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| g-Chlordane | ND | 4.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Heptachlor | ND | 8.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Heptachlor epoxide | ND | 8.0 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Methoxychlor | ND | 40 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| Toxaphene | ND | 160 | ug/Kg | 2 | 05/29/24 | AW | SW8081B | |
| **QA/QC Surrogates** | | | | | | | | |
| % DCBP | 112 | | % | 2 | 05/29/24 | AW | 30 - 150 % | |
| % DCBP (Confirmation) | 105 | | % | 2 | 05/29/24 | AW | 30 - 150 % | |
| % TCMX | 66 | | % | 2 | 05/29/24 | AW | 30 - 150 % | |
| % TCMX (Confirmation) | 58 | | % | 2 | 05/29/24 | AW | 30 - 150 % | |
| **TCLP Herbicides** | | | | | | | | |
| 2,4,5-TP (Silvex) | ND | 50 | ug/L | 10 | 05/31/24 | JRB | SW846 1311/8151 | |
| 2,4-D | ND | 100 | ug/L | 10 | 05/31/24 | JRB | SW846 1311/8151 | |
| **QA/QC Surrogates** | | | | | | | | |
| % DCAA | 67 | | % | 10 | 05/31/24 | JRB | 30 - 150 % | |
| % DCAA (Confirmation) | 59 | | % | 10 | 05/31/24 | JRB | 30 - 150 % | |
| **TCLP Pesticides** | | | | | | | | |
| 4,4' -DDD | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| 4,4' -DDE | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| 4,4' -DDT | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| a-BHC | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| Alachlor | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | 1 |
| Aldrin | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| b-BHC | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| Chlordane | ND | 5.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| d-BHC | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| Dieldrin | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| Endosulfan I | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| Endosulfan II | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference |
|---|---|---|---|---|---|---|---|
| Endosulfan Sulfate | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Endrin | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Endrin Aldehyde | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| g-BHC (Lindane) | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Heptachlor | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Heptachlor epoxide | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Methoxychlor | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Toxaphene | ND | 20 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| **QA/QC Surrogates** | | | | | | | |
| %DCBP (Surrogate Rec) | 74 | | % | 10 | 05/29/24 | AW | 30 - 150 % |
| **%DCBP (Surrogate Rec) (Confirmation)** | 67 | | % | 10 | 05/29/24 | AW | 30 - 150 % |
| %TCMX (Surrogate Rec) | 69 | | % | 10 | 05/29/24 | AW | 30 - 150 % |
| **%TCMX (Surrogate Rec) (Confirmation)** | 71 | | % | 10 | 05/29/24 | AW | 30 - 150 % |
| **TPH DRO (C10-C28)** | | | | | | | |
| Diesel Range Organics (C10-C28) | 130 | 60 | mg/Kg | 1 | 05/30/24 | JRB | SW-846 8015 |
| **QA/QC Surrogates** | | | | | | | |
| % COD (surr) | 66 | | % | 1 | 05/30/24 | JRB | 50 - 150 % |
| % Terphenyl (surr) | 88 | | % | 1 | 05/30/24 | JRB | 50 - 150 % |
| **Volatiles (TCL)** | | | | | | | |
| 1,1,1-Trichloroethane | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,1,2,2-Tetrachloroethane | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,1,2-Trichloroethane | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,1-Dichloroethane | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,1-Dichloroethene | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2,3-Trichlorobenzene | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2,4-Trichlorobenzene | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2-Dibromo-3-chloropropane | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2-Dibromoethane | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2-Dichlorobenzene | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2-Dichloroethane | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2-Dichloropropane | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,3-Dichlorobenzene | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,4-Dichlorobenzene | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 2-Hexanone | ND | 51 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 4-Methyl-2-pentanone | ND | 51 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Acetone | ND | 50 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Benzene | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Bromochloromethane | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Bromodichloromethane | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Bromoform | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Bromomethane | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Carbon Disulfide | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Carbon tetrachloride | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Chlorobenzene | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Chloroethane | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Chloroform | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Chloromethane | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| cis-1,2-Dichloroethene | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference |
|---|---|---|---|---|---|---|---|
| cis-1,3-Dichloropropene | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Cyclohexane | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Dibromochloromethane | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Dichlorodifluoromethane | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Ethylbenzene | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Isopropylbenzene | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| m&p-Xylene | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Methyl ethyl ketone | ND | 61 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Methyl t-butyl ether (MTBE) | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Methylacetate | ND | 8.1 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Methylcyclohexane | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Methylene chloride | ND | 50 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| o-Xylene | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Styrene | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Tetrachloroethene | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Toluene | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Total Xylenes | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| trans-1,2-Dichloroethene | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| trans-1,3-Dichloropropene | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Trichloroethene | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Trichlorofluoromethane | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Trichlorotrifluoroethane | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Vinyl chloride | ND | 10 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| **QA/QC Surrogates** | | | | | | | |
| % 1,2-dichlorobenzene-d4 | 98 | | % | 1 | 05/29/24 | JLI | 70 - 130 % |
| % Bromofluorobenzene | 92 | | % | 1 | 05/29/24 | JLI | 70 - 130 % |
| % Dibromofluoromethane | 99 | | % | 1 | 05/29/24 | JLI | 70 - 130 % |
| % Toluene-d8 | 98 | | % | 1 | 05/29/24 | JLI | 70 - 130 % |
| **1,4-dioxane** | | | | | | | |
| 1,4-dioxane | ND | 100 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| **TCLP Volatiles** | | | | | | | |
| 1,1-Dichloroethene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| 1,2-Dichloroethane | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| 1,4-Dichlorobenzene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Benzene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Carbon tetrachloride | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Chlorobenzene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Chloroform | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Methyl ethyl ketone | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Tetrachloroethene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Trichloroethene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Vinyl chloride | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| **QA/QC Surrogates** | | | | | | | |
| % 1,2-dichlorobenzene-d4 (10x) | 98 | | % | 10 | 05/30/24 | HM | 70 - 130 % |
| % Bromofluorobenzene (10x) | 97 | | % | 10 | 05/30/24 | HM | 70 - 130 % |
| % Dibromofluoromethane (10x) | 88 | | % | 10 | 05/30/24 | HM | 70 - 130 % |
| % Toluene-d8 (10x) | 97 | | % | 10 | 05/30/24 | HM | 70 - 130 % |

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference | |
|---|---|---|---|---|---|---|---|---|
| Volatile Library Search | Completed | | | | 05/29/24 | JLI | | |

## Semivolatiles

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1,1-Biphenyl | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 1,2,4,5-Tetrachlorobenzene | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,2'-Oxybis(1-Chloropropane) | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | 1 |
| 2,3,4,6-tetrachlorophenol | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,4,5-Trichlorophenol | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,4,6-Trichlorophenol | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,4-Dichlorophenol | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,4-Dimethylphenol | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,4-Dinitrophenol | ND | 650 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,4-Dinitrotoluene | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,6-Dinitrotoluene | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2-Chloronaphthalene | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2-Chlorophenol | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2-Methylnaphthalene | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2-Methylphenol (o-cresol) | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2-Nitroaniline | ND | 650 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2-Nitrophenol | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 3&4-Methylphenol (m&p-cresol) | ND | 410 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | 1 |
| 3,3'-Dichlorobenzidine | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 3-Nitroaniline | ND | 650 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4,6-Dinitro-2-methylphenol | ND | 1200 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4-Bromophenyl phenyl ether | ND | 410 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4-Chloro-3-methylphenol | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4-Chloroaniline | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4-Chlorophenyl phenyl ether | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4-Nitroaniline | ND | 650 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4-Nitrophenol | ND | 1200 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Acenaphthene | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Acenaphthylene | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Acetophenone | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Anthracene | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Atrazine | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benz(a)anthracene | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benzaldehyde | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benzo(a)pyrene | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benzo(b)fluoranthene | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benzo(ghi)perylene | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benzo(k)fluoranthene | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benzyl butyl phthalate | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Bis(2-chloroethoxy)methane | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Bis(2-chloroethyl)ether | ND | 410 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Bis(2-ethylhexyl)phthalate | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Caprolactam | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Carbazole | ND | 410 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Chrysene | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Dibenz(a,h)anthracene | ND | 200 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Dibenzofuran | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference |
|---|---|---|---|---|---|---|---|
| Diethyl phthalate | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Dimethylphthalate | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Di-n-butylphthalate | ND | 810 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Di-n-octylphthalate | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Fluoranthene | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Fluorene | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Hexachlorobenzene | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Hexachlorobutadiene | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Hexachlorocyclopentadiene | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Hexachloroethane | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Indeno(1,2,3-cd)pyrene | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Isophorone | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Naphthalene | 570 | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Nitrobenzene | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| N-Nitrosodimethylamine | ND | 410 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| N-Nitrosodi-n-propylamine | ND | 200 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| N-Nitrosodiphenylamine | ND | 410 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Pentachlorophenol | ND | 410 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Phenanthrene | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Phenol | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Pyrene | ND | 280 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| **QA/QC Surrogates** | | | | | | | |
| % 2,4,6-Tribromophenol | 51 | | % | 1 | 05/29/24 | AW | 30 - 130 % |
| % 2-Fluorobiphenyl | 54 | | % | 1 | 05/29/24 | AW | 30 - 130 % |
| % 2-Fluorophenol | 53 | | % | 1 | 05/29/24 | AW | 30 - 130 % |
| % Nitrobenzene-d5 | 60 | | % | 1 | 05/29/24 | AW | 30 - 130 % |
| % Phenol-d5 | 54 | | % | 1 | 05/29/24 | AW | 30 - 130 % |
| % Terphenyl-d14 | 37 | | % | 1 | 05/29/24 | AW | 30 - 130 % |

## TCLP Acid/Base-Neutral

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| 2,4,5-Trichlorophenol | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| 2,4,6-Trichlorophenol | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| 2,4-Dinitrotoluene | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| 2-Methylphenol (o-cresol) | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| 3&4-Methylphenol (m&p-Cresol) | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| Hexachlorobenzene | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| Hexachlorobutadiene | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| Hexachloroethane | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| Nitrobenzene | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| Pentachlorophenol | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| Pyridine | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| **QA/QC Surrogates** | | | | | | | |
| % 2,4,6-Tribromophenol | 60 | | % | 1 | 06/02/24 | MR | 15 - 110 % |
| % 2-Fluorobiphenyl | 71 | | % | 1 | 06/02/24 | MR | 30 - 130 % |
| % 2-Fluorophenol | 59 | | % | 1 | 06/02/24 | MR | 15 - 110 % |
| % Nitrobenzene-d5 | 75 | | % | 1 | 06/02/24 | MR | 30 - 130 % |
| % Phenol-d5 | 54 | | % | 1 | 06/02/24 | MR | 15 - 110 % |
| % Terphenyl-d14 | 83 | | % | 1 | 06/02/24 | MR | 30 - 130 % |

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference |
|---|---|---|---|---|---|---|---|
| Semivolatile Library Search | Completed | | | | 05/29/24 | E | |

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

## Comments:

The GRO (C6-C10) is quantitated using an gasoline standard.

The TPH (C10-C28) is quantitated using an alkane standard.

Corrosivity is based solely on the pH analysis performed above.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Ignitability is based solely on the results of the closed cup flashpoint analysis performed above. Passed is >140 degree F.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Cyanide. This method is no longer listed in the current version of SW-846.

The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Sulfide. This method is no longer listed in the current version of SW-846.

Volatile Comment:
To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

**Phyllis Shiller, Laboratory Director**
**June 12, 2024**
**Reviewed and Released by: Phyllis Shiller, Laboratory Director**

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

# Analysis Report

June 12, 2024

FOR: Attn: Mr. Brian Pendergast
American Environmental Solutions, Inc
42 West Avenue
Patchogue, NY 11772

| Sample Information | | Custody Information | | Date | Time |
|---|---|---|---|---|---|
| Matrix: | SOIL | Collected by: | | 05/24/24 | 10:14 |
| Location Code: | AES-INC | Received by: | SW | 05/28/24 | 17:28 |
| Rush Request: | Standard | Analyzed by: | see "By" below | | |
| P.O.#: | 0942 | | | | |

## Laboratory Data

SDG ID: GCQ81819
Phoenix ID: CQ81822

Project ID: HWK100SBC-BROOKLYN BUS ROUTES
Client ID: SB14

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference |
|---|---|---|---|---|---|---|---|
| Silver | < 1.0 | 1.0 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Aluminum | 8220 | 11 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Arsenic | 13.2 | 1.5 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Barium | 452 | 0.76 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Beryllium | 0.74 | 0.61 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Calcium | 6080 | 11 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Cadmium | 3.96 | 0.76 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Cobalt | 9.07 | 0.76 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Chromium | 27.3 | 0.76 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Copper | 1350 | 1.5 | mg/kg | 1 | 05/29/24 | TH | SW6010D |
| Iron | 26800 | 110 | mg/Kg | 10 | 05/29/24 | TH | SW6010D |
| Mercury | 4.25 | 0.56 | mg/Kg | 20 | 05/30/24 | ZT | SW7471B |
| Potassium | 1320 | 110 | mg/Kg | 10 | 05/29/24 | TH | SW6010D |
| Magnesium | 1710 | 11 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Manganese | 158 | 0.76 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Sodium | 2380 | 11 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Nickel | 30.5 | 0.76 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Lead | 1140 | 0.76 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Antimony | < 7.6 | 7.6 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Selenium | < 3.0 | 3.0 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| TCLP Silver | < 0.10 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Arsenic | < 0.10 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Barium | 0.70 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Cadmium | < 0.050 | 0.050 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Chromium | < 0.10 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Mercury | < 0.0002 | 0.0002 | mg/L | 1 | 05/30/24 | ZT | SW846 1311/7470 |
| TCLP Lead | 1.29 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Selenium | < 0.10 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010D |

**Ver 2**

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference | |
|---|---|---|---|---|---|---|---|---|
| Thallium | < 6.8 | 6.8 | mg/Kg | 1 | 05/29/24 | TH | SW6010D | |
| TCLP Metals Digestion | Completed | | | | 05/29/24 | AL/AL | SW3010A | |
| Vanadium | 36.0 | 0.76 | mg/Kg | 1 | 05/29/24 | TH | SW6010D | |
| Zinc | 5700 | 1.5 | mg/Kg | 1 | 05/29/24 | TH | SW6010D | |
| Percent Solid | 47 | | % | | 05/28/24 | CV | SW846-%Solid | |
| Corrosivity | Negative | | Pos/Neg | 1 | 05/28/24 | MW | SW846-Corr | 1 |
| Flash Point | >200 | 200 | Degree F | 1 | 05/31/24 | G | SW1010B | |
| Ignitability | Passed | 140 | degree F | 1 | 05/31/24 | G | SW846-Ignit | 1 |
| pH at 25C - Soil | 7.36 | 1.00 | pH Units | 1 | 05/28/24 22:16 | MW | SW846 9045D | 1 |
| Reactivity Cyanide | < 11 | 11 | mg/Kg | 1 | 05/30/24 | NP/GD | SW846 7.3.3.1/90 | 1 |
| Reactivity Sulfide | < 20 | 20 | mg/Kg | 1 | 05/31/24 | NP/GD | SW846 CH7 | 1 |
| Reactivity | Negative | | Pos/Neg | 1 | 05/31/24 | NP/GD | SW846-React | 1 |
| Total Cyanide (SW9010C Distill.) | < 0.89 | 0.89 | mg/Kg | 1 | 05/30/24 | D/S/G | SW9012B | |
| Mercury Digestion | Completed | | | | 05/29/24 | AL/AL | SW7471B | |
| Extraction of NY ETPH | Completed | | | | 05/29/24 | R/H/U | SW3546 | |
| Soil Extraction for PCB | Completed | | | | 05/29/24 | C/U | SW3546 | |
| Soil Extraction for Pesticides | Completed | | | | 05/29/24 | C/U | SW3546 | |
| Soil Extraction for SVOA | Completed | | | | 05/28/24 | H/A | SW3546 | |
| TCLP Digestion Mercury | Completed | | | | 05/29/24 | AL/AL | SW7470A | |
| TCLP Herbicides Extraction | Completed | | | | 05/30/24 | CV/D | SW8150 MOD | |
| TCLP Extraction for Metals | Completed | | | | 05/28/24 | AL | SW1311 | |
| TCLP Extraction for Organics | Completed | | | | 05/28/24 | AL | SW1311 | |
| TCLP Pesticides Extraction | Completed | | | | 05/29/24 | CV/CV | SW3510C | |
| TCLP Semi-Volatile Extraction | Completed | | | | 05/31/24 | LB1/LB1 | SW3510C | |
| TCLP Extraction Volatiles | Completed | | | | 05/28/24 | cv | SW1311 | |
| Total Metals Digest | Completed | | | | 05/28/24 | J/AG | SW3050B | |
| **Gasoline Range Hydrocarbons (C6-C10)** | | | | | | | | |
| GRO (C6-C10) | ND | 31 | mg/Kg | 50 | 05/29/24 | V | SW8015D GRO | |
| **QA/QC Surrogates** | | | | | | | | |
| % 2,5-Dibromotoluene (FID) | 88 | | % | 50 | 05/29/24 | V | 70 - 130 % | |
| **Polychlorinated Biphenyls** | | | | | | | | |
| PCB-1016 | ND | 71 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| PCB-1221 | ND | 71 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| PCB-1232 | ND | 71 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| PCB-1242 | ND | 71 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| PCB-1248 | ND | 71 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| PCB-1254 | ND | 71 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| PCB-1260 | ND | 71 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| PCB-1262 | ND | 71 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| PCB-1268 | ND | 71 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| **QA/QC Surrogates** | | | | | | | | |
| % DCBP | 128 | | % | 2 | 05/30/24 | SC | 30 - 150 % | |
| % DCBP (Confirmation) | 119 | | % | 2 | 05/30/24 | SC | 30 - 150 % | |
| % TCMX | 67 | | % | 2 | 05/30/24 | SC | 30 - 150 % | |
| % TCMX (Confirmation) | 67 | | % | 2 | 05/30/24 | SC | 30 - 150 % | |

Project ID: HWK100SBC-BROOKLYN BUS ROUTES
Client ID: SB14

Phoenix I.D.: CQ81822

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference | |
|---|---|---|---|---|---|---|---|---|
| **Pesticides - Soil** | | | | | | | | |
| 4,4' -DDD | ND | 2.8 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| 4,4' -DDE | ND | 2.8 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| 4,4' -DDT | ND | 2.8 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| a-BHC | ND | 14 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| a-Chlordane | ND | 7.1 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Aldrin | ND | 2.8 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| b-BHC | ND | 14 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Chlordane | ND | 71 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| d-BHC | ND | 14 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Dieldrin | ND | 2.8 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Endosulfan I | ND | 14 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Endosulfan II | ND | 14 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Endosulfan sulfate | ND | 14 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Endrin | ND | 7.1 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Endrin aldehyde | ND | 14 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Endrin ketone | ND | 14 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| g-BHC | ND | 2.8 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| g-Chlordane | ND | 7.1 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Heptachlor | ND | 14 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Heptachlor epoxide | ND | 14 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Methoxychlor | ND | 71 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Toxaphene | ND | 280 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| **QA/QC Surrogates** | | | | | | | | |
| % DCBP | 90 | | % | 2 | 05/30/24 | AW | 30 - 150 % | |
| % DCBP (Confirmation) | 115 | | % | 2 | 05/30/24 | AW | 30 - 150 % | |
| % TCMX | 53 | | % | 2 | 05/30/24 | AW | 30 - 150 % | |
| % TCMX (Confirmation) | 63 | | % | 2 | 05/30/24 | AW | 30 - 150 % | |
| **TCLP Herbicides** | | | | | | | | |
| 2,4,5-TP (Silvex) | ND | 50 | ug/L | 10 | 05/31/24 | JRB | SW846 1311/8151 | |
| 2,4-D | ND | 100 | ug/L | 10 | 05/31/24 | JRB | SW846 1311/8151 | |
| **QA/QC Surrogates** | | | | | | | | |
| % DCAA | 70 | | % | 10 | 05/31/24 | JRB | 30 - 150 % | |
| % DCAA (Confirmation) | 60 | | % | 10 | 05/31/24 | JRB | 30 - 150 % | |
| **TCLP Pesticides** | | | | | | | | |
| 4,4' -DDD | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| 4,4' -DDE | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| 4,4' -DDT | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| a-BHC | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| Alachlor | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | 1 |
| Aldrin | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| b-BHC | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| Chlordane | ND | 5.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| d-BHC | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| Dieldrin | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| Endosulfan I | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| Endosulfan II | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference |
|---|---|---|---|---|---|---|---|
| Endosulfan Sulfate | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Endrin | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Endrin Aldehyde | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| g-BHC (Lindane) | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Heptachlor | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Heptachlor epoxide | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Methoxychlor | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Toxaphene | ND | 20 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| **QA/QC Surrogates** | | | | | | | |
| %DCBP (Surrogate Rec) | 64 | | % | 10 | 05/29/24 | AW | 30 - 150 % |
| **%DCBP (Surrogate Rec) (Confirmation)** | 57 | | % | 10 | 05/29/24 | AW | 30 - 150 % |
| %TCMX (Surrogate Rec) | 58 | | % | 10 | 05/29/24 | AW | 30 - 150 % |
| **%TCMX (Surrogate Rec) (Confirmation)** | 59 | | % | 10 | 05/29/24 | AW | 30 - 150 % |
| **TPH DRO (C10-C28)** | | | | | | | |
| Diesel Range Organics (C10-C28) | 1200 | 530 | mg/Kg | 5 | 05/30/24 | JRB | SW-846 8015 |
| **QA/QC Surrogates** | | | | | | | |
| % COD (surr) | Interference | | % | 5 | 05/30/24 | JRB | 50 - 150 % |
| % Terphenyl (surr) | 79 | | % | 5 | 05/30/24 | JRB | 50 - 150 % |
| **Volatiles (TCL)** | | | | | | | |
| 1,1,1-Trichloroethane | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,1,2,2-Tetrachloroethane | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,1,2-Trichloroethane | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,1-Dichloroethane | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,1-Dichloroethene | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2,3-Trichlorobenzene | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2,4-Trichlorobenzene | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2-Dibromo-3-chloropropane | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2-Dibromoethane | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2-Dichlorobenzene | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2-Dichloroethane | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2-Dichloropropane | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,3-Dichlorobenzene | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,4-Dichlorobenzene | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 2-Hexanone | ND | 100 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 4-Methyl-2-pentanone | ND | 100 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Acetone | ND | 50 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Benzene | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Bromochloromethane | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Bromodichloromethane | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Bromoform | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Bromomethane | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Carbon Disulfide | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Carbon tetrachloride | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Chlorobenzene | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Chloroethane | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Chloroform | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Chloromethane | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| cis-1,2-Dichloroethene | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference |
|---|---|---|---|---|---|---|---|
| cis-1,3-Dichloropropene | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Cyclohexane | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Dibromochloromethane | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Dichlorodifluoromethane | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Ethylbenzene | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Isopropylbenzene | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| m&p-Xylene | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Methyl ethyl ketone | ND | 120 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Methyl t-butyl ether (MTBE) | ND | 40 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Methylacetate | ND | 16 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Methylcyclohexane | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Methylene chloride | ND | 50 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| o-Xylene | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Styrene | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Tetrachloroethene | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Toluene | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Total Xylenes | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| trans-1,2-Dichloroethene | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| trans-1,3-Dichloropropene | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Trichloroethene | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Trichlorofluoromethane | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Trichlorotrifluoroethane | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Vinyl chloride | ND | 20 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| **QA/QC Surrogates** | | | | | | | |
| % 1,2-dichlorobenzene-d4 | 91 | | % | 1 | 05/29/24 | JLI | 70 - 130 % |
| % Bromofluorobenzene | 88 | | % | 1 | 05/29/24 | JLI | 70 - 130 % |
| % Dibromofluoromethane | 102 | | % | 1 | 05/29/24 | JLI | 70 - 130 % |
| % Toluene-d8 | 95 | | % | 1 | 05/29/24 | JLI | 70 - 130 % |
| **1,4-dioxane** | | | | | | | |
| 1,4-dioxane | ND | 100 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| **TCLP Volatiles** | | | | | | | |
| 1,1-Dichloroethene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| 1,2-Dichloroethane | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| 1,4-Dichlorobenzene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Benzene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Carbon tetrachloride | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Chlorobenzene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Chloroform | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Methyl ethyl ketone | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Tetrachloroethene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Trichloroethene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Vinyl chloride | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| **QA/QC Surrogates** | | | | | | | |
| % 1,2-dichlorobenzene-d4 (10x) | 99 | | % | 10 | 05/30/24 | HM | 70 - 130 % |
| % Bromofluorobenzene (10x) | 96 | | % | 10 | 05/30/24 | HM | 70 - 130 % |
| % Dibromofluoromethane (10x) | 89 | | % | 10 | 05/30/24 | HM | 70 - 130 % |
| % Toluene-d8 (10x) | 99 | | % | 10 | 05/30/24 | HM | 70 - 130 % |

Project ID: HWK100SBC-BROOKLYN BUS ROUTES
Client ID: SB14

Phoenix I.D.: CQ81822

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference | |
|---|---|---|---|---|---|---|---|---|
| Volatile Library Search | Completed | | | | 05/29/24 | JLI | | |
| **Semivolatiles** | | | | | | | | |
| 1,1-Biphenyl | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 1,2,4,5-Tetrachlorobenzene | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,2'-Oxybis(1-Chloropropane) | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | 1 |
| 2,3,4,6-tetrachlorophenol | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,4,5-Trichlorophenol | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,4,6-Trichlorophenol | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,4-Dichlorophenol | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,4-Dimethylphenol | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,4-Dinitrophenol | ND | 1100 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,4-Dinitrotoluene | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,6-Dinitrotoluene | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2-Chloronaphthalene | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2-Chlorophenol | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2-Methylnaphthalene | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2-Methylphenol (o-cresol) | ND | 330 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2-Nitroaniline | ND | 1100 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2-Nitrophenol | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 3&4-Methylphenol (m&p-cresol) | ND | 690 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | 1 |
| 3,3'-Dichlorobenzidine | ND | 830 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 3-Nitroaniline | ND | 1100 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4,6-Dinitro-2-methylphenol | ND | 2000 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4-Bromophenyl phenyl ether | ND | 690 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4-Chloro-3-methylphenol | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4-Chloroaniline | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4-Chlorophenyl phenyl ether | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4-Nitroaniline | ND | 1100 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4-Nitrophenol | ND | 2000 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Acenaphthene | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Acenaphthylene | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Acetophenone | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Anthracene | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Atrazine | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benz(a)anthracene | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benzaldehyde | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benzo(a)pyrene | 560 | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benzo(b)fluoranthene | 560 | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benzo(ghi)perylene | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benzo(k)fluoranthene | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benzyl butyl phthalate | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Bis(2-chloroethoxy)methane | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Bis(2-chloroethyl)ether | ND | 690 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Bis(2-ethylhexyl)phthalate | 1600 | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Caprolactam | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Carbazole | ND | 690 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Chrysene | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Dibenz(a,h)anthracene | ND | 330 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Dibenzofuran | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference |
|---|---|---|---|---|---|---|---|
| Diethyl phthalate | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Dimethylphthalate | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Di-n-butylphthalate | ND | 1400 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Di-n-octylphthalate | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Fluoranthene | 530 | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Fluorene | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Hexachlorobenzene | ND | 330 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Hexachlorobutadiene | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Hexachlorocyclopentadiene | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Hexachloroethane | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Indeno(1,2,3-cd)pyrene | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Isophorone | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Naphthalene | 600 | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Nitrobenzene | ND | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| N-Nitrosodimethylamine | ND | 690 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| N-Nitrosodi-n-propylamine | ND | 350 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| N-Nitrosodiphenylamine | ND | 690 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Pentachlorophenol | ND | 690 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Phenanthrene | 490 | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Phenol | ND | 330 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Pyrene | 500 | 490 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| **QA/QC Surrogates** | | | | | | | |
| % 2,4,6-Tribromophenol | 66 | | % | 1 | 05/29/24 | AW | 30 - 130 % |
| % 2-Fluorobiphenyl | 62 | | % | 1 | 05/29/24 | AW | 30 - 130 % |
| % 2-Fluorophenol | 63 | | % | 1 | 05/29/24 | AW | 30 - 130 % |
| % Nitrobenzene-d5 | 75 | | % | 1 | 05/29/24 | AW | 30 - 130 % |
| % Phenol-d5 | 66 | | % | 1 | 05/29/24 | AW | 30 - 130 % |
| % Terphenyl-d14 | 47 | | % | 1 | 05/29/24 | AW | 30 - 130 % |
| **TCLP Acid/Base-Neutral** | | | | | | | |
| 1,4-Dichlorobenzene | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| 2,4,5-Trichlorophenol | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| 2,4,6-Trichlorophenol | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| 2,4-Dinitrotoluene | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| 2-Methylphenol (o-cresol) | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| 3&4-Methylphenol (m&p-Cresol) | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| Hexachlorobenzene | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| Hexachlorobutadiene | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| Hexachloroethane | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| Nitrobenzene | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| Pentachlorophenol | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| Pyridine | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| **QA/QC Surrogates** | | | | | | | |
| % 2,4,6-Tribromophenol | 57 | | % | 1 | 06/02/24 | MR | 15 - 110 % |
| % 2-Fluorobiphenyl | 67 | | % | 1 | 06/02/24 | MR | 30 - 130 % |
| % 2-Fluorophenol | 58 | | % | 1 | 06/02/24 | MR | 15 - 110 % |
| % Nitrobenzene-d5 | 74 | | % | 1 | 06/02/24 | MR | 30 - 130 % |
| % Phenol-d5 | 55 | | % | 1 | 06/02/24 | MR | 15 - 110 % |
| % Terphenyl-d14 | 78 | | % | 1 | 06/02/24 | MR | 30 - 130 % |

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference |
|---|---|---|---|---|---|---|---|
| Semivolatile Library Search | Completed | | | | 05/29/24 | E | |

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

## Comments:

The GRO (C6-C10) is quantitated using an gasoline standard.

The TPH (C10-C28) is quantitated using an alkane standard.

Corrosivity is based solely on the pH analysis performed above.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Ignitability is based solely on the results of the closed cup flashpoint analysis performed above. Passed is >140 degree F.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Cyanide. This method is no longer listed in the current version of SW-846.

The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Sulfide. This method is no longer listed in the current version of SW-846.

Semi-Volatile Comment:
To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

**Phyllis Shiller, Laboratory Director**
**June 12, 2024**
**Reviewed and Released by: Phyllis Shiller, Laboratory Director**

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

# Analysis Report

June 12, 2024

FOR: Attn: Mr. Brian Pendergast
American Environmental Solutions, Inc
42 West Avenue
Patchogue, NY 11772

| Sample Information | | Custody Information | | Date | Time |
|---|---|---|---|---|---|
| Matrix: | SOIL | Collected by: | | 05/24/24 | 10:55 |
| Location Code: | AES-INC | Received by: | SW | 05/28/24 | 17:28 |
| Rush Request: | Standard | Analyzed by: | see "By" below | | |
| P.O.#: | 0942 | | | | |

## Laboratory Data

SDG ID: GCQ81819
Phoenix ID: CQ81823

Project ID: HWK100SBC-BROOKLYN BUS ROUTES
Client ID: SB15

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference |
|---|---|---|---|---|---|---|---|
| Silver | < 0.37 | 0.37 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Aluminum | 1330 | 5.6 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Arsenic | < 0.74 | 0.74 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Barium | 15.0 | 0.37 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Beryllium | < 0.30 | 0.30 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Calcium | 773 | 5.6 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Cadmium | < 0.37 | 0.37 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Cobalt | 1.24 | 0.37 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Chromium | 6.22 | 0.37 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Copper | 5.3 | 0.7 | mg/kg | 1 | 05/29/24 | TH | SW6010D |
| Iron | 3040 | 5.6 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Mercury | < 0.03 | 0.03 | mg/Kg | 2 | 05/30/24 | ZT | SW7471B |
| Potassium | 326 | 5.6 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Magnesium | 625 | 5.6 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Manganese | 28.8 | 0.37 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Sodium | 80.5 | 5.6 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Nickel | 3.70 | 0.37 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Lead | 13.2 | 0.37 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Antimony | < 3.7 | 3.7 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| Selenium | < 1.5 | 1.5 | mg/Kg | 1 | 05/29/24 | TH | SW6010D |
| TCLP Silver | < 0.10 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Arsenic | < 0.10 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Barium | 0.76 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Cadmium | < 0.050 | 0.050 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Chromium | < 0.10 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Mercury | < 0.0002 | 0.0002 | mg/L | 1 | 05/30/24 | ZT | SW846 1311/7470 |
| TCLP Lead | 0.68 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010 |
| TCLP Selenium | < 0.10 | 0.10 | mg/L | 1 | 05/29/24 | CPP | SW846 1311/6010D |

**Ver 2**

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference | |
|---|---|---|---|---|---|---|---|---|
| Thallium | < 3.3 | 3.3 | mg/Kg | 1 | 05/29/24 | TH | SW6010D | |
| TCLP Metals Digestion | Completed | | | | 05/29/24 | AL/AL | SW3010A | |
| Vanadium | 6.34 | 0.37 | mg/Kg | 1 | 05/29/24 | TH | SW6010D | |
| Zinc | 17.3 | 0.7 | mg/Kg | 1 | 05/29/24 | TH | SW6010D | |
| Percent Solid | 91 | | % | | 05/28/24 | CV | SW846-%Solid | |
| Corrosivity | Negative | | Pos/Neg | 1 | 05/28/24 | MW | SW846-Corr | 1 |
| Flash Point | >200 | 200 | Degree F | 1 | 05/31/24 | G | SW1010B | |
| Ignitability | Passed | 140 | degree F | 1 | 05/31/24 | G | SW846-Ignit | 1 |
| pH at 25C - Soil | 7.77 | 1.00 | pH Units | 1 | 05/28/24 22:16 | MW | SW846 9045D | 1 |
| Reactivity Cyanide | < 5 | 5 | mg/Kg | 1 | 05/30/24 | NP/GD | SW846 7.3.3.1/90 | 1 |
| Reactivity Sulfide | < 20 | 20 | mg/Kg | 1 | 05/31/24 | NP/GD | SW846 CH7 | 1 |
| Reactivity | Negative | | Pos/Neg | 1 | 05/31/24 | NP/GD | SW846-React | 1 |
| Total Cyanide (SW9010C Distill.) | 0.61 | 0.50 | mg/Kg | 1 | 05/30/24 | D/S/G | SW9012B | |
| Mercury Digestion | Completed | | | | 05/29/24 | AL/AL | SW7471B | |
| Extraction of NY ETPH | Completed | | | | 05/29/24 | R/H/U | SW3546 | |
| Soil Extraction for PCB | Completed | | | | 05/29/24 | C/U | SW3546 | |
| Soil Extraction for Pesticides | Completed | | | | 05/29/24 | C/U | SW3546 | |
| Soil Extraction for SVOA | Completed | | | | 05/28/24 | H/A | SW3546 | |
| TCLP Digestion Mercury | Completed | | | | 05/29/24 | AL/AL | SW7470A | |
| TCLP Herbicides Extraction | Completed | | | | 05/30/24 | CV/D | SW8150 MOD | |
| TCLP Extraction for Metals | Completed | | | | 05/28/24 | AL | SW1311 | |
| TCLP Extraction for Organics | Completed | | | | 05/28/24 | AL | SW1311 | |
| TCLP Pesticides Extraction | Completed | | | | 05/29/24 | CV/CV | SW3510C | |
| TCLP Semi-Volatile Extraction | Completed | | | | 05/31/24 | LB1/LB1 | SW3510C | |
| TCLP Extraction Volatiles | Completed | | | | 05/28/24 | cv | SW1311 | |
| Total Metals Digest | Completed | | | | 05/28/24 | J/AG | SW3050B | |
| **Gasoline Range Hydrocarbons (C6-C10)** | | | | | | | | |
| GRO (C6-C10) | ND | 6.5 | mg/Kg | 50 | 05/29/24 | V | SW8015D GRO | |
| **QA/QC Surrogates** | | | | | | | | |
| % 2,5-Dibromotoluene (FID) | 92 | | % | 50 | 05/29/24 | V | 70 - 130 % | |
| **Polychlorinated Biphenyls** | | | | | | | | |
| PCB-1016 | ND | 72 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| PCB-1221 | ND | 72 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| PCB-1232 | ND | 72 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| PCB-1242 | ND | 72 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| PCB-1248 | ND | 72 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| PCB-1254 | ND | 72 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| PCB-1260 | ND | 72 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| PCB-1262 | ND | 72 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| PCB-1268 | ND | 72 | ug/Kg | 2 | 05/30/24 | SC | SW8082A | |
| **QA/QC Surrogates** | | | | | | | | |
| % DCBP | 116 | | % | 2 | 05/30/24 | SC | 30 - 150 % | |
| % DCBP (Confirmation) | 117 | | % | 2 | 05/30/24 | SC | 30 - 150 % | |
| % TCMX | 79 | | % | 2 | 05/30/24 | SC | 30 - 150 % | |
| % TCMX (Confirmation) | 80 | | % | 2 | 05/30/24 | SC | 30 - 150 % | |

Project ID: HWK100SBC-BROOKLYN BUS ROUTES
Client ID: SB15

Phoenix I.D.: CQ81823

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference | |
|---|---|---|---|---|---|---|---|---|
| **Pesticides - Soil** | | | | | | | | |
| 4,4' -DDD | ND | 2.2 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| 4,4' -DDE | ND | 2.2 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| 4,4' -DDT | ND | 2.2 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| a-BHC | ND | 7.2 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| a-Chlordane | ND | 3.6 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Aldrin | ND | 3.6 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| b-BHC | ND | 7.2 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Chlordane | ND | 36 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| d-BHC | ND | 7.2 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Dieldrin | ND | 3.6 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Endosulfan I | ND | 7.2 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Endosulfan II | ND | 7.2 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Endosulfan sulfate | ND | 7.2 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Endrin | ND | 7.2 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Endrin aldehyde | ND | 7.2 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Endrin ketone | ND | 7.2 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| g-BHC | ND | 1.4 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| g-Chlordane | ND | 3.6 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Heptachlor | ND | 7.2 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Heptachlor epoxide | ND | 7.2 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Methoxychlor | ND | 36 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| Toxaphene | ND | 140 | ug/Kg | 2 | 05/30/24 | AW | SW8081B | |
| **QA/QC Surrogates** | | | | | | | | |
| % DCBP | 96 | | % | 2 | 05/30/24 | AW | 30 - 150 % | |
| % DCBP (Confirmation) | 109 | | % | 2 | 05/30/24 | AW | 30 - 150 % | |
| % TCMX | 77 | | % | 2 | 05/30/24 | AW | 30 - 150 % | |
| % TCMX (Confirmation) | 109 | | % | 2 | 05/30/24 | AW | 30 - 150 % | |
| **TCLP Herbicides** | | | | | | | | |
| 2,4,5-TP (Silvex) | ND | 50 | ug/L | 10 | 05/31/24 | JRB | SW846 1311/8151 | |
| 2,4-D | ND | 100 | ug/L | 10 | 05/31/24 | JRB | SW846 1311/8151 | |
| **QA/QC Surrogates** | | | | | | | | |
| % DCAA | 69 | | % | 10 | 05/31/24 | JRB | 30 - 150 % | |
| % DCAA (Confirmation) | 60 | | % | 10 | 05/31/24 | JRB | 30 - 150 % | |
| **TCLP Pesticides** | | | | | | | | |
| 4,4' -DDD | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| 4,4' -DDE | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| 4,4' -DDT | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| a-BHC | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| Alachlor | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | 1 |
| Aldrin | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| b-BHC | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| Chlordane | ND | 5.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| d-BHC | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| Dieldrin | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| Endosulfan I | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B | |
| Endosulfan II | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B | |

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference |
|---|---|---|---|---|---|---|---|
| Endosulfan Sulfate | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Endrin | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Endrin Aldehyde | ND | 1.0 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| g-BHC (Lindane) | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Heptachlor | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Heptachlor epoxide | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Methoxychlor | ND | 0.50 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| Toxaphene | ND | 20 | ug/L | 10 | 05/29/24 | AW | SW8081B |
| **QA/QC Surrogates** | | | | | | | |
| %DCBP (Surrogate Rec) | 64 | | % | 10 | 05/29/24 | AW | 30 - 150 % |
| **%DCBP (Surrogate Rec) (Confirmation)** | 60 | | % | 10 | 05/29/24 | AW | 30 - 150 % |
| %TCMX (Surrogate Rec) | 69 | | % | 10 | 05/29/24 | AW | 30 - 150 % |
| **%TCMX (Surrogate Rec) (Confirmation)** | 71 | | % | 10 | 05/29/24 | AW | 30 - 150 % |
| **TPH DRO (C10-C28)** | | | | | | | |
| Diesel Range Organics (C10-C28) | ND | 54 | mg/Kg | 1 | 05/30/24 | JRB | SW-846 8015 |
| **QA/QC Surrogates** | | | | | | | |
| % COD (surr) | 90 | | % | 1 | 05/30/24 | JRB | 50 - 150 % |
| % Terphenyl (surr) | 95 | | % | 1 | 05/30/24 | JRB | 50 - 150 % |
| **Volatiles (TCL)** | | | | | | | |
| 1,1,1-Trichloroethane | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,1,2,2-Tetrachloroethane | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,1,2-Trichloroethane | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,1-Dichloroethane | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,1-Dichloroethene | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2,3-Trichlorobenzene | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2,4-Trichlorobenzene | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2-Dibromo-3-chloropropane | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2-Dibromoethane | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2-Dichlorobenzene | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2-Dichloroethane | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,2-Dichloropropane | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,3-Dichlorobenzene | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 1,4-Dichlorobenzene | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 2-Hexanone | ND | 39 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| 4-Methyl-2-pentanone | ND | 39 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Acetone | ND | 50 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Benzene | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Bromochloromethane | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Bromodichloromethane | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Bromoform | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Bromomethane | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Carbon Disulfide | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Carbon tetrachloride | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Chlorobenzene | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Chloroethane | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Chloroform | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Chloromethane | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| cis-1,2-Dichloroethene | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference |
|---|---|---|---|---|---|---|---|
| cis-1,3-Dichloropropene | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Cyclohexane | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Dibromochloromethane | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Dichlorodifluoromethane | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Ethylbenzene | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Isopropylbenzene | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| m&p-Xylene | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Methyl ethyl ketone | ND | 46 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Methyl t-butyl ether (MTBE) | ND | 15 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Methylacetate | ND | 6.2 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Methylcyclohexane | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Methylene chloride | ND | 39 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| o-Xylene | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Styrene | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Tetrachloroethene | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Toluene | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Total Xylenes | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| trans-1,2-Dichloroethene | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| trans-1,3-Dichloropropene | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Trichloroethene | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Trichlorofluoromethane | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Trichlorotrifluoroethane | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| Vinyl chloride | ND | 7.7 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| **QA/QC Surrogates** | | | | | | | |
| % 1,2-dichlorobenzene-d4 | 93 | | % | 1 | 05/29/24 | JLI | 70 - 130 % |
| % Bromofluorobenzene | 99 | | % | 1 | 05/29/24 | JLI | 70 - 130 % |
| % Dibromofluoromethane | 99 | | % | 1 | 05/29/24 | JLI | 70 - 130 % |
| % Toluene-d8 | 101 | | % | 1 | 05/29/24 | JLI | 70 - 130 % |
| **1,4-dioxane** | | | | | | | |
| 1,4-dioxane | ND | 100 | ug/kg | 1 | 05/29/24 | JLI | SW8260D |
| **TCLP Volatiles** | | | | | | | |
| 1,1-Dichloroethene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| 1,2-Dichloroethane | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| 1,4-Dichlorobenzene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Benzene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Carbon tetrachloride | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Chlorobenzene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Chloroform | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Methyl ethyl ketone | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Tetrachloroethene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Trichloroethene | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| Vinyl chloride | ND | 50 | ug/L | 10 | 05/30/24 | HM | SW846 1311/8260 |
| **QA/QC Surrogates** | | | | | | | |
| % 1,2-dichlorobenzene-d4 (10x) | 98 | | % | 10 | 05/30/24 | HM | 70 - 130 % |
| % Bromofluorobenzene (10x) | 96 | | % | 10 | 05/30/24 | HM | 70 - 130 % |
| % Dibromofluoromethane (10x) | 90 | | % | 10 | 05/30/24 | HM | 70 - 130 % |
| % Toluene-d8 (10x) | 96 | | % | 10 | 05/30/24 | HM | 70 - 130 % |

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference | |
|---|---|---|---|---|---|---|---|---|
| Volatile Library Search | Completed | | | | 05/29/24 | JLI | | |
| **Semivolatiles** | | | | | | | | |
| 1,1-Biphenyl | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 1,2,4,5-Tetrachlorobenzene | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,2'-Oxybis(1-Chloropropane) | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | 1 |
| 2,3,4,6-tetrachlorophenol | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,4,5-Trichlorophenol | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,4,6-Trichlorophenol | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,4-Dichlorophenol | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,4-Dimethylphenol | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,4-Dinitrophenol | ND | 580 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,4-Dinitrotoluene | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2,6-Dinitrotoluene | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2-Chloronaphthalene | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2-Chlorophenol | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2-Methylnaphthalene | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2-Methylphenol (o-cresol) | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2-Nitroaniline | ND | 580 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 2-Nitrophenol | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 3&4-Methylphenol (m&p-cresol) | ND | 360 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | 1 |
| 3,3'-Dichlorobenzidine | ND | 430 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 3-Nitroaniline | ND | 580 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4,6-Dinitro-2-methylphenol | ND | 1000 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4-Bromophenyl phenyl ether | ND | 360 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4-Chloro-3-methylphenol | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4-Chloroaniline | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4-Chlorophenyl phenyl ether | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4-Nitroaniline | ND | 580 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| 4-Nitrophenol | ND | 1000 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Acenaphthene | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Acenaphthylene | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Acetophenone | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Anthracene | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Atrazine | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benz(a)anthracene | 560 | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benzaldehyde | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benzo(a)pyrene | 600 | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benzo(b)fluoranthene | 680 | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benzo(ghi)perylene | 310 | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benzo(k)fluoranthene | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Benzyl butyl phthalate | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Bis(2-chloroethoxy)methane | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Bis(2-chloroethyl)ether | ND | 360 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Bis(2-ethylhexyl)phthalate | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Caprolactam | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Carbazole | ND | 360 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Chrysene | 550 | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Dibenz(a,h)anthracene | ND | 180 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |
| Dibenzofuran | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E | |

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference |
|---|---|---|---|---|---|---|---|
| Diethyl phthalate | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Dimethylphthalate | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Di-n-butylphthalate | ND | 720 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Di-n-octylphthalate | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Fluoranthene | 900 | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Fluorene | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Hexachlorobenzene | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Hexachlorobutadiene | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Hexachlorocyclopentadiene | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Hexachloroethane | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Indeno(1,2,3-cd)pyrene | 370 | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Isophorone | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Naphthalene | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Nitrobenzene | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| N-Nitrosodimethylamine | ND | 360 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| N-Nitrosodi-n-propylamine | ND | 180 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| N-Nitrosodiphenylamine | ND | 360 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Pentachlorophenol | ND | 360 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Phenanthrene | 600 | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Phenol | ND | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| Pyrene | 830 | 250 | ug/Kg | 1 | 05/29/24 | AW | SW8270E |
| **QA/QC Surrogates** | | | | | | | |
| % 2,4,6-Tribromophenol | 70 | | % | 1 | 05/29/24 | AW | 30 - 130 % |
| % 2-Fluorobiphenyl | 69 | | % | 1 | 05/29/24 | AW | 30 - 130 % |
| % 2-Fluorophenol | 69 | | % | 1 | 05/29/24 | AW | 30 - 130 % |
| % Nitrobenzene-d5 | 83 | | % | 1 | 05/29/24 | AW | 30 - 130 % |
| % Phenol-d5 | 72 | | % | 1 | 05/29/24 | AW | 30 - 130 % |
| % Terphenyl-d14 | 59 | | % | 1 | 05/29/24 | AW | 30 - 130 % |
| **TCLP Acid/Base-Neutral** | | | | | | | |
| 1,4-Dichlorobenzene | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| 2,4,5-Trichlorophenol | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| 2,4,6-Trichlorophenol | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| 2,4-Dinitrotoluene | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| 2-Methylphenol (o-cresol) | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| 3&4-Methylphenol (m&p-Cresol) | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| Hexachlorobenzene | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| Hexachlorobutadiene | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| Hexachloroethane | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| Nitrobenzene | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| Pentachlorophenol | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| Pyridine | ND | 83 | ug/L | 1 | 06/02/24 | MR | SW-846 1311/8270 |
| **QA/QC Surrogates** | | | | | | | |
| % 2,4,6-Tribromophenol | 58 | | % | 1 | 06/02/24 | MR | 15 - 110 % |
| % 2-Fluorobiphenyl | 68 | | % | 1 | 06/02/24 | MR | 30 - 130 % |
| % 2-Fluorophenol | 60 | | % | 1 | 06/02/24 | MR | 15 - 110 % |
| % Nitrobenzene-d5 | 74 | | % | 1 | 06/02/24 | MR | 30 - 130 % |
| % Phenol-d5 | 57 | | % | 1 | 06/02/24 | MR | 15 - 110 % |
| % Terphenyl-d14 | 80 | | % | 1 | 06/02/24 | MR | 30 - 130 % |

Project ID: HWK100SBC-BROOKLYN BUS ROUTES
Client ID: SB15

Phoenix I.D.: CQ81823

| Parameter | Result | RL/ PQL | Units | Dilution | Date/Time | By | Reference |
|---|---|---|---|---|---|---|---|
| Semivolatile Library Search | Completed | | | | 05/29/24 | E | |

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

## Comments:

The GRO (C6-C10) is quantitated using an gasoline standard.

The TPH (C10-C28) is quantitated using an alkane standard.

Corrosivity is based solely on the pH analysis performed above.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Ignitability is based solely on the results of the closed cup flashpoint analysis performed above. Passed is >140 degree F.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Cyanide. This method is no longer listed in the current version of SW-846.

The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Sulfide. This method is no longer listed in the current version of SW-846.

Volatile Comment:
To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

**Phyllis Shiller, Laboratory Director**
**June 12, 2024**
**Reviewed and Released by: Phyllis Shiller, Laboratory Director**

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: SB11

Lab Name: Phoenix Environmental Labs  Client: AES-INC

Lab Code: Phoenix  Case No.:  SAS No.:  SDG No.: GCQ8181

Matrix:(soil/water): SOIL  Lab Sample ID: CQ81819

Sample wt/vol: 5.33 (g/mL) g  Lab File ID: 0528_31.D

Level: (low/med): Low  Date Received: 05/28/24

% Moisture: not dec. 15  Date Analyzed: 05/29/24

GC Column: RTX-VMS  ID: 0.18mm  Dilution Factor: 1

Purge Volume: 5000 (uL)  Soil Aliquot Vol (uL): 5000

Number TICs found: 0  CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| | | | | |
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FORM I VOA-TIC

J - Used when estimating a concentration for TIC where a 1:1 response is assumed or when the result indicates the presence of a compound that meets the indentification criteria, but the results is less than the quantitation limit, but greater than zero.

N - The concentration is based on the response of the nearest internal. This flag is used on the TIC form for all compounds identified

Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: CQ81820 BLK

Lab Name: Phoenix Environmental Labs  Client:

Lab Code: Phoenix  Case No.:  SAS No.:  SDG No.:

Matrix:(soil/water) Soil  Lab Sample ID: CQ81820 BLK

Sample wt/vol: 5 (g/mL) g  Lab File ID: 0529_09.D

Level: (low/med) Low  Date Received: 05/28/24

% Moisture: not dec. n.a.  Date Analyzed: 05/29/24

GC Column: RTX-VMS  ID: 0.18mm  Dilution Factor: 1

Purge Volume: 5000 (uL)  Soil Aliquot Vol (uL): 5000

Number TICs found: 0  CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
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FORM I VOA-TIC

J - Used when estimating a concentration for TIC where a 1:1 response is assumed or when the result indicates the presence of a compound that meets the indentification criteria, but the results is less than the quantitation limit, but greater than zero.

N - The concentration is based on the response of the nearest internal. This flag is used on the TIC form for all compounds identified

Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: SB12

Lab Name: Phoenix Environmental Labs  Client: AES-INC

Lab Code: Phoenix  Case No.:  SAS No.:  SDG No.: GCQ8181

Matrix:(soil/water): SOIL  Lab Sample ID: CQ81820

Sample wt/vol: 4.32 (g/mL) g  Lab File ID: 0528_32.D

Level: (low/med): Low  Date Received: 05/28/24

% Moisture: not dec. 17  Date Analyzed: 05/29/24

GC Column: RTX-VMS  ID: 0.18mm  Dilution Factor: 1

Purge Volume: 5000 (uL)  Soil Aliquot Vol (uL): 5000

Number TICs found: 13  CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 108-67-8 | 1,3,5-Trimethylbenzene | 6.416 | 2.7 | Q |
| 95-63-6 | 1,2,4-Trimethylbenzene | 6.72 | 9.3 | Q |
| 526-73-8 | 1,2,3-Trimethylbenzene | 7.061 | 7.9 | Q |
| 001120-21-4 | Undecane | 7.203 | 14 | JN |
| 000488-23-3 | Benzene, 1,2,3,4-tetramethyl- | 7.916 | 15 | JN |
| | unknown | 8.068 | 22 | J |
| 003333-13-9 | Benzene, 1-methyl-4-(2-propenyl)- | 8.078 | 16 | JN |
| 000824-22-6 | 1H-Indene, 2,3-dihydro-4-methyl- | 8.220 | 23 | JN |
| | unknown | 8.335 | 20 | J |
| 002809-64-5 | Naphthalene, 1,2,3,4-tetrahydro-5-methyl- | 9.038 | 27 | JN |
| 001680-51-9 | Naphthalene, 1,2,3,4-tetrahydro-6-methyl- | 9.263 | 13 | JN |
| 000629-59-4 | Tetradecane | 9.389 | 13 | JN |
| 000629-62-9 | Pentadecane | 9.934 | 13 | JN |

FORM I VOA-TIC

J - Used when estimating a concentration for TIC where a 1:1 response is assumed or when the result indicates the presence of a compound that meets the indentification criteria, but the results is less than the quantitation limit, but greater than zero.
N - The concentration is based on the response of the nearest internal. This flag is used on the TIC form for all compounds identified
Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: SB13

Lab Name: Phoenix Environmental Labs  Client: AES-INC

Lab Code: Phoenix  Case No.:  SAS No.:  SDG No.: GCQ8181

Matrix:(soil/water): SOIL  Lab Sample ID: CQ81821

Sample wt/vol: 3 (g/mL) g  Lab File ID: 0528_33.D

Level: (low/med): Low  Date Received: 05/28/24

% Moisture: not dec. 18  Date Analyzed: 05/29/24

GC Column: RTX-VMS  ID: 0.18mm  Dilution Factor: 1

Purge Volume: 5000 (uL)  Soil Aliquot Vol (uL): 5000

Number TICs found: 0  CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
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FORM I VOA-TIC

J - Used when estimating a concentration for TIC where a 1:1 response is assumed or when the result indicates the presence of a compound that meets the indentification criteria, but the results is less than the quantitation limit, but greater than zero.

N - The concentration is based on the response of the nearest internal. This flag is used on the TIC form for all compounds identified

Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: SB14

Lab Name: Phoenix Environmental Labs  Client: AES-INC

Lab Code: Phoenix  Case No.:  SAS No.:  SDG No.: GCQ8181

Matrix:(soil/water): SOIL  Lab Sample ID: CQ81822

Sample wt/vol: 2.66 (g/mL) g  Lab File ID: 0528_34.D

Level: (low/med): Low  Date Received: 05/28/24

% Moisture: not dec. 53  Date Analyzed: 05/29/24

GC Column: RTX-VMS  ID: 0.18mm  Dilution Factor: 1

Purge Volume: 5000 (uL)  Soil Aliquot Vol (uL): 5000

Number TICs found: 8  CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 003728-54-9 | Cyclohexane, 1-ethyl-2-methyl- | 5.494 | 21 | JN |
| 003868-64-2 | Pentalene, octahydro-2-methyl- | 5.656 | 25 | JN |
| | unknown | 5.740 | 23 | J |
| 006783-92-2 | Cyclohexane, 1,1,2,3-tetramethyl- | 6.091 | 42 | JN |
| 020536-41-8 | Bicyclo[2.2.1]heptane, 2,2,3-trimethyl-, exo- | 6.338 | 71 | JN |
| | unknown | 6.374 | 27 | J |
| | unknown | 6.574 | 35 | J |
| | unknown | 7.622 | 22 | J |

FORM I VOA-TIC

J - Used when estimating a concentration for TIC where a 1:1 response is assumed or when the result indicates the presence of a compound that meets the indentification criteria, but the results is less than the quantitation limit, but greater than zero.
N - The concentration is based on the response of the nearest internal. This flag is used on the TIC form for all compounds identified
Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: SB15

Lab Name: Phoenix Environmental Labs  Client: AES-INC

Lab Code: Phoenix  Case No.:  SAS No.:  SDG No.: GCQ8181

Matrix:(soil/water): SOIL  Lab Sample ID: CQ81823

Sample wt/vol: 3.54 (g/mL) g  Lab File ID: 0528_35.D

Level: (low/med): Low  Date Received: 05/28/24

% Moisture: not dec. 9  Date Analyzed: 05/29/24

GC Column: RTX-VMS  ID: 0.18mm  Dilution Factor: 1

Purge Volume: 5000 (uL)  Soil Aliquot Vol (uL): 5000

Number TICs found: 0  CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
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FORM I VOA-TIC

J - Used when estimating a concentration for TIC where a 1:1 response is assumed or when the result indicates the presence of a compound that meets the indentification criteria, but the results is less than the quantitation limit, but greater than zero.

N - The concentration is based on the response of the nearest internal. This flag is used on the TIC form for all compounds identified

Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: SB11

Lab Name: Phoenix Environmental Labs | Client: AES-INC

Lab Code: Phoenix | Case No.: | SAS No.: | SDG No.: GCQ8181

Matrix:(soil/water): SOIL | Lab Sample ID: CQ81819

Sample wt/vol: 15.33 (g/mL) g | Lab File ID: 0528_27.D

Level: (low/med): Low | Date Received: 05/28/24

% Moisture: not dec. 15 | decanted:(Y/N) NA | Date Extracted: 05/29/24

GPC Cleanup (Y/N): N | pH: NA | Date Analyzed: 5/29/2024

Conc. Extract Volume: 1000 (uL) | Dilution Factor 1

Injection Volume: 1 (uL)

Number TICs found: 10 | CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 000123-42-2 | 2-Pentanone, 4-hydroxy-4-methyl- | 2.325 | 880 | JNA |
| 023676-09-7 | Benzoic acid, 4-ethoxy-, ethyl est | 6.125 | 1200 | JNC |
| 007206-21-5 | 5-Octadecene, (E)- | 7.236 | 840 | JN |
| 000057-10-3 | n-Hexadecanoic acid | 7.854 | 380 | JN |
| | unknown | 7.895 | 470 | J |
| 003674-66-6 | Phenanthrene, 2,5-dimethyl- | 8.295 | 360 | JN |
| 005737-13-3 | Cyclopenta(def)phenanthrenone | 8.366 | 340 | JN |
| 1000130-97-9 | E-15-Heptadecenal | 8.713 | 880 | JN |
| 002541-69-7 | Benz[a]anthracene, 7-methyl- | 10.977 | 380 | JN |
| 000192-97-2 | Benzo[e]pyrene | 13.130 | 670 | JN |

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.
C - Indicates that the tentatively identified compound is a suspected prep artifact produced during extraction process.
Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: SB12

Lab Name: Phoenix Environmental Labs  Client: AES-INC

Lab Code: Phoenix  Case No.:  SAS No.:  SDG No.: GCQ8181

Matrix:(soil/water): SOIL  Lab Sample ID: CQ81820

Sample wt/vol: 15.41 (g/mL) g  Lab File ID: 0528_28.D

Level: (low/med): Low  Date Received: 05/28/24

% Moisture: not dec. 17  decanted:(Y/N) NA  Date Extracted: 05/29/24

GPC Cleanup (Y/N): N  pH: NA  Date Analyzed: 5/29/2024

Conc. Extract Volume: 1000 (uL)  Dilution Factor 1

Injection Volume: 1 (uL)

Number TICs found: 15  CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 000123-42-2 | 2-Pentanone, 4-hydroxy-4-methyl- | 2.325 | 1200 | JNA |
| 023676-09-7 | Benzoic acid, 4-ethoxy-, ethyl est | 6.125 | 1200 | JNC |
| 007206-21-5 | 5-Octadecene, (E)- | 7.236 | 1100 | JN |
| | Phenanthrene, 2-methyl- Isomer | 7.801 | 800 | JN |
| 002531-84-2 | Phenanthrene, 2-methyl- | 7.825 | 930 | JN |
| 000832-69-9 | Phenanthrene, 1-methyl- | 7.866 | 700 | JN |
| | unknown | 7.901 | 1500 | J |
| 000084-65-1 | 9,10-Anthracenedione | 8.089 | 620 | JN |
| | unknown | 8.583 | 710 | J |
| 000207-08-9 | Benzo[k]fluoranthene | 12.718 | 1300 | JN |
| 000192-97-2 | Benzo[e]pyrene | 13.177 | 3800 | JN |
| | Benzo[e]pyrene Isomer | 13.542 | 1300 | JN |
| 000053-70-3 | Dibenz[a,h]anthracene | 16.965 | 780 | JN |
| 000135-48-8 | Pentacene | 17.024 | 590 | JN |
| 000191-26-4 | Dibenzo[def,mno]chrysene | 17.395 | 850 | JN |
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FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.

C - Indicates that the tentatively identified compound is a suspected prep artifact produced during extraction process.

Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: SB13

Lab Name: Phoenix Environmental Labs  Client: AES-INC

Lab Code: Phoenix  Case No.:  SAS No.:  SDG No.: GCQ8181

Matrix:(soil/water): SOIL  Lab Sample ID: CQ81821

Sample wt/vol: 15.05 (g/mL) g  Lab File ID: 0528_24.D

Level: (low/med): Low  Date Received: 05/28/24

% Moisture: not dec. 18  decanted:(Y/N) NA  Date Extracted: 05/29/24

GPC Cleanup (Y/N): N  pH: NA  Date Analyzed: 5/29/2024

Conc. Extract Volume: 1000 (uL)  Dilution Factor 1

Injection Volume: 1 (uL)

Number TICs found: 15  CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 000123-42-2 | 2-Pentanone, 4-hydroxy-4-methyl- | 2.325 | 1000 | JNA |
| 000099-87-6 | Benzene, 1-methyl-4-(1-methylethyl | 3.490 | 930 | JNC |
| 023676-09-7 | Benzoic acid, 4-ethoxy-, ethyl est | 6.125 | 960 | JNC |
| | unknown | 7.213 | 1100 | J |
| 000057-10-3 | n-Hexadecanoic acid | 7.860 | 1400 | JN |
| | unknown | 8.025 | 1100 | J |
| 032624-67-2 | 10,18-Bisnorabieta-8,11,13-triene | 8.295 | 1300 | JN |
| 000483-65-8 | Phenanthrene, 1-methyl-7-(1-methyl | 9.001 | 12000 | JN |
| | unknown | 9.777 | 1600 | J |
| 001740-19-8 | 1-Phenanthrenecarboxylic acid, 1,2 | 9.972 | 1600 | JN |
| 015600-08-5 | Cholestan-3-one | 16.506 | 1600 | JN |
| 000083-46-5 | .beta.-Sitosterol | 17.583 | 800 | JN |
| | unknown | 17.842 | 960 | J |
| | unknown | 17.906 | 1100 | J |
| | unknown | 18.483 | 630 | J |
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FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.

C - Indicates that the tentatively identified compound is a suspected prep artifact produced during extraction process.

Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: SB14

Lab Name: Phoenix Environmental Labs  Client: AES-INC

Lab Code: Phoenix  Case No.:  SAS No.:  SDG No.: GCQ8181

Matrix:(soil/water) SOIL  Lab Sample ID: CQ81822

Sample wt/vol: 15.34 (g/mL) g  Lab File ID: 0528_29.D

Level: (low/med) Low  Date Received: 05/28/24

% Moisture: not dec. 53  decanted:(Y/N) NA  Date Extracted: 05/29/24

GPC Cleanup (Y/N): N  pH: NA  Date Analyzed: 5/29/2024

Conc. Extract Volume: 1000 (uL)  Dilution Factor 1

Injection Volume: 1 (uL)

Number TICs found: 16  CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 000123-42-2 | 2-Pentanone, 4-hydroxy-4-methyl- | 2.325 | 3300 | JNA |
| 62-53-3 | Aniline | 3.183 | 3600 | Q |
| 023676-09-7 | Benzoic acid, 4-ethoxy-, ethyl est | 6.125 | 2400 | JNC |
| 000057-10-3 | n-Hexadecanoic acid | 7.878 | 8000 | JN |
| 000057-11-4 | Octadecanoic acid | 8.601 | 6600 | JN |
| 000483-65-8 | Phenanthrene, 1-methyl-7-(1-methyl | 8.989 | 1700 | JN |
| 000593-45-3 | Octadecane | 9.148 | 2100 | JN |
| 075758-27-9 | 7,12a-Dimethyl-1,2,3,4,4a,11,12,12 | 9.607 | 2200 | JN |
| | unknown | 9.795 | 1600 | J |
| 001740-19-8 | 1-Phenanthrenecarboxylic acid, 1,2 | 9.989 | 2100 | JN |
| 000112-95-8 | Eicosane | 11.507 | 1600 | JN |
| | unknown | 16.036 | 19000 | J |
| | unknown | 16.348 | 3800 | J |
| 000083-46-5 | .beta.-Sitosterol | 17.595 | 7500 | JN |
| 019466-47-8 | Stigmastanol | 17.665 | 7100 | JN |
| 000559-74-0 | Friedelan-3-one | 18.971 | 6700 | JNA |
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FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.
C - Indicates that the tentatively identified compound is a suspected prep artifact produced during extraction process.
Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: SB15

Lab Name: Phoenix Environmental Labs  Client: AES-INC

Lab Code: Phoenix  Case No.:  SAS No.:  SDG No.: GCQ8181

Matrix:(soil/water): SOIL  Lab Sample ID: CQ81823

Sample wt/vol: 15.26 (g/mL) g  Lab File ID: 0528_25.D

Level: (low/med): Low  Date Received: 05/28/24

% Moisture: not dec. 9 decanted:(Y/N) NA  Date Extracted: 05/29/24

GPC Cleanup (Y/N): N  pH: NA  Date Analyzed: 5/29/2024

Conc. Extract Volume: 1000 (uL)  Dilution Factor 1

Injection Volume: 1 (uL)

Number TICs found: 5  CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|
| 000123-42-2 | 2-Pentanone, 4-hydroxy-4-methyl- | 2.325 | 680 | JNA |
| 023676-09-7 | Benzoic acid, 4-ethoxy-, ethyl est | 6.125 | 1100 | JNC |
| 000112-88-9 | 1-Octadecene | 7.236 | 830 | JN |
| 000057-10-3 | n-Hexadecanoic acid | 7.854 | 390 | JN |
| 000192-97-2 | Benzo[e]pyrene | 13.124 | 460 | JN |
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FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.

C - Indicates that the tentatively identified compound is a suspected prep artifact produced during extraction process.

Q - For TICS, this compound was quantitated using a calibration curve. This compound is part of the instrument method, but not part of the client target list.

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102

NY # 11301

# QA/QC Report

June 12, 2024

## QA/QC Data

SDG I.D.: GCQ81819

| Parameter | Blank | Blk RL | Sample Result | Dup Result | Dup RPD | LCS % | LCSD % | LCS RPD | MS % | MSD % | MS RPD | % Rec Limits | % RPD Limits | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QA/QC Batch 733349 (mg/L), QC Sample No: CQ81241 (CQ81819, CQ81820, CQ81821, CQ81822, CQ81823) | | | | | | | | | | | | | | |
| Mercury - Water | BRL | 0.0002 | <0.0002 | <0.0002 | NC | 104 | | | 109 | | | 80 - 120 | 20 | |
| Comment: | | | | | | | | | | | | | | |
| Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%. | | | | | | | | | | | | | | |
| QA/QC Batch 733350 (mg/kg), QC Sample No: CQ81781 2X (CQ81819, CQ81820, CQ81821, CQ81822, CQ81823) | | | | | | | | | | | | | | |
| Mercury - Soil | BRL | 0.03 | 0.04 | 0.02 | NC | 110 | 110 | 0.0 | 109 | 115 | 5.4 | 70 - 130 | 30 | |
| Comment: | | | | | | | | | | | | | | |
| Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%. | | | | | | | | | | | | | | |
| QA/QC Batch 733354 (mg/L), QC Sample No: CQ79288 (CQ81819, CQ81820, CQ81822, CQ81823) | | | | | | | | | | | | | | |
| ICP Metals - TCLP Extraction | | | | | | | | | | | | | | |
| Arsenic | BRL | 0.10 | <0.10 | <0.10 | NC | 111 | 110 | 0.9 | 104 | | | 80 - 120 | 20 | |
| Barium | BRL | 0.10 | 0.54 | 0.40 | NC | 104 | 103 | 1.0 | 100 | | | 80 - 120 | 20 | |
| Cadmium | BRL | 0.050 | <0.050 | <0.050 | NC | 105 | 104 | 1.0 | 101 | | | 80 - 120 | 20 | |
| Chromium | BRL | 0.10 | <0.10 | <0.10 | NC | 103 | 102 | 1.0 | 101 | | | 80 - 120 | 20 | |
| Lead | BRL | 0.10 | <0.10 | <0.10 | NC | 105 | 104 | 1.0 | 102 | | | 80 - 120 | 20 | |
| Selenium | BRL | 0.10 | <0.10 | <0.10 | NC | 112 | 111 | 0.9 | 102 | | | 80 - 120 | 20 | |
| Silver | BRL | 0.10 | <0.10 | <0.10 | NC | 112 | 111 | 0.9 | 106 | | | 80 - 120 | 20 | |
| Comment: | | | | | | | | | | | | | | |
| Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%. | | | | | | | | | | | | | | |
| QA/QC Batch 733297 (mg/kg), QC Sample No: CQ81611 (CQ81819, CQ81820, CQ81821, CQ81822, CQ81823) | | | | | | | | | | | | | | |
| ICP Metals - Soil | | | | | | | | | | | | | | |
| Aluminum | BRL | 5.0 | 5820 | 5970 | 2.50 | 83.2 | 87.0 | 4.5 | NC | | | 75 - 125 | 35 | |
| Antimony | BRL | 3.3 | 3.7 | 4.9 | NC | 93.9 | 97.4 | 3.7 | 89.8 | | | 75 - 125 | 35 | |
| Arsenic | BRL | 0.67 | 2.40 | 2.48 | NC | 89.5 | 92.7 | 3.5 | 87.7 | | | 75 - 125 | 35 | |
| Barium | BRL | 0.33 | 43.1 | 42.1 | 2.30 | 94.6 | 96.1 | 1.6 | 93.8 | | | 75 - 125 | 35 | |
| Beryllium | BRL | 0.27 | <0.27 | <0.31 | NC | 93.8 | 97.5 | 3.9 | 93.7 | | | 75 - 125 | 35 | |
| Cadmium | BRL | 0.33 | 0.75 | 0.65 | NC | 92.7 | 93.4 | 0.8 | 85.6 | | | 75 - 125 | 35 | |
| Calcium | BRL | 5.0 | 7120 | 7430 | 4.30 | 94.0 | 97.6 | 3.8 | NC | | | 75 - 125 | 35 | |
| Chromium | BRL | 0.33 | 31.2 | 185 | 142 | 93.8 | 97.7 | 4.1 | 116 | | | 75 - 125 | 35 | r |
| Cobalt | BRL | 0.33 | 27.7 | 520 | 180 | 94.4 | 97.3 | 3.0 | 91.0 | | | 75 - 125 | 35 | r |
| Copper | BRL | 0.67 | 395 | 459 | 15.0 | 95.1 | 98.6 | 3.6 | 71.6 | | | 75 - 125 | 35 | m |
| Iron | BRL | 5.0 | 18000 | 15300 | 16.2 | 88.5 | 91.2 | 3.0 | NC | | | 75 - 125 | 35 | |
| Lead | BRL | 0.33 | 211 | 208 | 1.40 | 88.9 | 91.0 | 2.3 | 74.1 | | | 75 - 125 | 35 | m |
| Magnesium | BRL | 5.0 | 3020 | 2770 | 8.60 | 86.3 | 89.4 | 3.5 | NC | | | 75 - 125 | 35 | |
| Manganese | BRL | 0.33 | 230 | 245 | 6.30 | 90.4 | 102 | 12.1 | >130 | | | 75 - 125 | 35 | m |
| Nickel | BRL | 0.33 | 81.5 | 121 | 39.0 | 96.6 | 100 | 3.5 | 99.1 | | | 75 - 125 | 35 | r |
| Potassium | BRL | 5.0 | 1680 | 1490 | 12.0 | 95.3 | 97.1 | 1.9 | >130 | | | 75 - 125 | 35 | m |
| Selenium | BRL | 1.3 | <1.3 | <1.6 | NC | 82.2 | 84.3 | 2.5 | 75.7 | | | 75 - 125 | 35 | |
| Silver | BRL | 0.33 | <0.34 | <0.39 | NC | 100 | 103 | 3.0 | 98.4 | | | 75 - 125 | 35 | |
| Sodium | BRL | 5.0 | 1140 | 1200 | 5.10 | 101 | 101 | 0.0 | NC | | | 75 - 125 | 35 | |
| Thallium | BRL | 3.0 | <3.0 | <3.5 | NC | 101 | 99.6 | 1.4 | 96.4 | | | 75 - 125 | 35 | |
| Vanadium | BRL | 0.33 | 36.2 | 28.2 | 24.8 | 93.6 | 97.7 | 4.3 | 93.7 | | | 75 - 125 | 35 | |

# QA/QC Data

SDG I.D.: GCQ81819

| Parameter | Blank | Blk RL | Sample Result | Dup Result | Dup RPD | LCS % | LCSD % | LCS RPD | MS % | MSD % | MS RPD | % Rec Limits | % RPD Limits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Zinc | BRL | 0.67 | 178 | 186 | 4.40 | 90.8 | 93.5 | 2.9 | 76.1 | | | 75 - 125 | 35 |
| Comment: | | | | | | | | | | | | | |
| Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%. | | | | | | | | | | | | | |
| QA/QC Batch 735086 (mg/L), QC Sample No: CQ90577 (CQ81821) | | | | | | | | | | | | | |
| ICP Metals - TCLP Extraction | | | | | | | | | | | | | |
| Arsenic | BRL | 0.04 | <0.04 | <0.04 | NC | 108 | 108 | 0.0 | 110 | | | 80 - 120 | 20 |
| Barium | BRL | 0.01 | 0.28 | 0.29 | 3.50 | 101 | 101 | 0.0 | 105 | | | 80 - 120 | 20 |
| Cadmium | BRL | 0.005 | <0.005 | <0.005 | NC | 98.8 | 98.9 | 0.1 | 100 | | | 80 - 120 | 20 |
| Chromium | BRL | 0.010 | <0.010 | <0.010 | NC | 99.6 | 99.9 | 0.3 | 101 | | | 80 - 120 | 20 |
| Lead | BRL | 0.010 | 0.096 | 0.096 | 0 | 98.8 | 99.5 | 0.7 | 101 | | | 80 - 120 | 20 |
| Selenium | BRL | 0.04 | <0.04 | <0.04 | NC | 109 | 110 | 0.9 | 110 | | | 80 - 120 | 20 |
| Silver | BRL | 0.010 | <0.010 | <0.010 | NC | 105 | 105 | 0.0 | 107 | | | 80 - 120 | 20 |
| Comment: | | | | | | | | | | | | | |
| Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%. | | | | | | | | | | | | | |

m = This parameter is outside laboratory MS/MSD specified recovery limits.
r = This parameter is outside laboratory RPD specified recovery limits.

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NY # 11301

# QA/QC Report

June 12, 2024

## QA/QC Data

SDG I.D.: GCQ81819

| Parameter | Blank | Blk RL | Sample Result | Dup Result | Dup RPD | LCS % | LCSD % | LCS RPD | MS % | MSD % | MS RPD | % Rec Limits | % RPD Limits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| QA/QC Batch 733406 (mg/Kg), QC Sample No: CQ76923 50X (CQ81819, CQ81820, CQ81821, CQ81822, CQ81823) | | | | | | | | | | | | | |
| Total Cyanide (SW9010C Distill.) | BRL | 0.50 | 1.47 | 1.44 | NC | 94.0 | | | 93.3 | | | 80 - 120 | 30 |
| QA/QC Batch 733357 (mg/Kg), QC Sample No: CQ80533 5X (CQ81819, CQ81820, CQ81821, CQ81822, CQ81823) | | | | | | | | | | | | | |
| Reactivity Cyanide | BRL | 5 | <5 | <5.2 | NC | 97.8 | | | | | | 85 - 115 | 30 |
| Reactivity Sulfide | BRL | 20 | <20 | <20 | NC | 96.0 | | | | | | 80 - 120 | 30 |
| QA/QC Batch 733877 (Degree F), QC Sample No: CQ79928 (CQ81819, CQ81820, CQ81821, CQ81822, CQ81823) | | | | | | | | | | | | | |
| Flash Point | | | >200 | >200 | NC | 103 | | | | | | 75 - 125 | 30 |
| Comment: | | | | | | | | | | | | | |
| Additional criteria matrix spike acceptance range is 75-125%. | | | | | | | | | | | | | |
| QA/QC Batch 733335 (PH), QC Sample No: CQ81250 (CQ81819, CQ81820, CQ81821, CQ81822, CQ81823) | | | | | | | | | | | | | |
| pH | | | 6.83 | 6.79 | 0.60 | 101 | | | | | | 85 - 115 | 20 |

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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

# QA/QC Report

June 12, 2024

## QA/QC Data

SDG I.D.: GCQ81819

| Parameter | Blank | Blk RL | LCS % | LCSD % | LCS RPD | MS % | MSD % | MS RPD | % Rec Limits | % RPD Limits | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| QA/QC Batch 733478 (mg/Kg), QC Sample No: CQ81819 (CQ81819, CQ81820, CQ81821, CQ81822, CQ81823) | | | | | | | | | | | |
| **TPH by GC (Extractable Products) - Soil** | | | | | | | | | | | |
| Ext. Petroleum HC | ND | 50 | 96 | 106 | 9.9 | 79 | 75 | 5.2 | 30 - 130 | 30 | |
| % COD (surr) | 100 | % | 61 | 60 | 1.7 | 67 | 50 | 29.1 | 50 - 150 | 30 | |
| % Terphenyl (surr) | 97 | % | 87 | 88 | 1.1 | 64 | 67 | 4.6 | 50 - 150 | 30 | |
| Comment: | | | | | | | | | | | |
| Additional surrogate criteria: LCS acceptance range is 60-120% MS acceptance range 50-150%. The ETPH/DRO LCS has been normalized based on the alkane calibration. | | | | | | | | | | | |
| QA/QC Batch 733628 (mg/Kg), QC Sample No: CQ81819 50X (CQ81819 (50X) , CQ81820 (50X) , CQ81821 (50X) , CQ81822 (50X) , CQ81823 (50X) ) | | | | | | | | | | | |
| **Gasoline Range Hydrocarbons (C6C10) - Soil** | | | | | | | | | | | |
| GRO (C6-C10) | ND | 5.0 | 102 | 101 | 1.0 | 104 | 102 | 1.9 | 70 - 130 | 30 | |
| % 2,5-Dibromotoluene (FID) | 89 | % | 91 | 93 | 2.2 | 89 | 90 | 1.1 | 70 - 130 | 30 | |
| QA/QC Batch 733576 (ug/L), QC Sample No: CQ82290 10X (CQ81819, CQ81820, CQ81821, CQ81822, CQ81823) | | | | | | | | | | | |
| **Chlorinated Herbicides** | | | | | | | | | | | |
| 2,4,5-TP (Silvex) | ND | 2.5 | 88 | 95 | 7.7 | | | | 40 - 140 | 20 | |
| 2,4-D | ND | 5.0 | 92 | 98 | 6.3 | | | | 40 - 140 | 20 | |
| % DCAA (Surrogate Rec) | 138 | % | 140 | 143 | 2.1 | | | | 30 - 150 | 20 | |
| % DCAA (Surrogate Rec) (Confirm | 126 | % | 124 | 130 | 4.7 | | | | 30 - 150 | 20 | |
| Comment: | | | | | | | | | | | |
| Additional criteria: LCS acceptance range is 40-140% MS acceptance range 30-150%. | | | | | | | | | | | |
| QA/QC Batch 733450 (ug/Kg), QC Sample No: CQ76923 2X (CQ81822, CQ81823) | | | | | | | | | | | |
| **Polychlorinated Biphenyls - Soil** | | | | | | | | | | | |
| PCB-1016 | ND | 33 | 98 | 93 | 5.2 | 57 | 79 | 32.4 | 40 - 140 | 30 | r |
| PCB-1221 | ND | 33 | | | | | | | 40 - 140 | 30 | |
| PCB-1232 | ND | 33 | | | | | | | 40 - 140 | 30 | |
| PCB-1242 | ND | 33 | | | | | | | 40 - 140 | 30 | |
| PCB-1248 | ND | 33 | | | | | | | 40 - 140 | 30 | |
| PCB-1254 | ND | 33 | | | | | | | 40 - 140 | 30 | |
| PCB-1260 | ND | 33 | 95 | 94 | 1.1 | 53 | 70 | 27.6 | 40 - 140 | 30 | |
| PCB-1262 | ND | 33 | | | | | | | 40 - 140 | 30 | |
| PCB-1268 | ND | 33 | | | | | | | 40 - 140 | 30 | |
| % DCBP (Surrogate Rec) | 86 | % | 110 | 107 | 2.8 | 62 | 79 | 24.1 | 30 - 150 | 30 | |
| % DCBP (Surrogate Rec) (Confirm | 96 | % | 123 | 119 | 3.3 | 64 | 82 | 24.7 | 30 - 150 | 30 | |
| % TCMX (Surrogate Rec) | 76 | % | 94 | 94 | 0.0 | 57 | 76 | 28.6 | 30 - 150 | 30 | |
| % TCMX (Surrogate Rec) (Confirm | 79 | % | 103 | 100 | 3.0 | 62 | 82 | 27.8 | 30 - 150 | 30 | |
| QA/QC Batch 733312 (ug/Kg), QC Sample No: CQ81783 2X (CQ81819, CQ81820, CQ81821) | | | | | | | | | | | |
| **Polychlorinated Biphenyls - Soil** | | | | | | | | | | | |
| PCB-1016 | ND | 33 | 90 | 95 | 5.4 | 93 | 80 | 15.0 | 40 - 140 | 30 | |
| PCB-1221 | ND | 33 | | | | | | | 40 - 140 | 30 | |
| PCB-1232 | ND | 33 | | | | | | | 40 - 140 | 30 | |

# QA/QC Data

SDG I.D.: GCQ81819

| Parameter | Blank | Blk RL | LCS % | LCSD % | LCS RPD | MS % | MSD % | MS RPD | % Rec Limits | % RPD Limits | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PCB-1242 | ND | 33 | | | | | | | 40 - 140 | 30 | |
| PCB-1248 | ND | 33 | | | | | | | 40 - 140 | 30 | |
| PCB-1254 | ND | 33 | | | | | | | 40 - 140 | 30 | |
| PCB-1260 | ND | 33 | 89 | 91 | 2.2 | 95 | 71 | 28.9 | 40 - 140 | 30 | |
| PCB-1262 | ND | 33 | | | | | | | 40 - 140 | 30 | |
| PCB-1268 | ND | 33 | | | | | | | 40 - 140 | 30 | |
| % DCBP (Surrogate Rec) | 79 | % | 94 | 96 | 2.1 | 94 | 72 | 26.5 | 30 - 150 | 30 | |
| % DCBP (Surrogate Rec) (Confirm | 88 | % | 105 | 109 | 3.7 | 102 | 80 | 24.2 | 30 - 150 | 30 | |
| % TCMX (Surrogate Rec) | 70 | % | 83 | 84 | 1.2 | 86 | 72 | 17.7 | 30 - 150 | 30 | |
| % TCMX (Surrogate Rec) (Confirm | 74 | % | 89 | 93 | 4.4 | 92 | 80 | 14.0 | 30 - 150 | 30 | |
| QA/QC Batch 733452 (ug/Kg), QC Sample No: CQ76923 2X (CQ81822, CQ81823) | | | | | | | | | | | |
| Pesticides - Soil | | | | | | | | | | | |
| 4,4' -DDD | ND | 1.7 | 109 | 114 | 4.5 | 102 | 92 | 10.3 | 40 - 140 | 30 | |
| 4,4' -DDE | ND | 1.7 | 103 | 108 | 4.7 | 97 | 74 | 26.9 | 40 - 140 | 30 | |
| 4,4' -DDT | ND | 1.7 | 95 | 87 | 8.8 | 86 | 78 | 9.8 | 40 - 140 | 30 | |
| a-BHC | ND | 1.0 | 91 | 96 | 5.3 | 54 | 66 | 20.0 | 40 - 140 | 30 | |
| a-Chlordane | ND | 3.3 | 89 | 92 | 3.3 | 55 | 64 | 15.1 | 40 - 140 | 30 | |
| Aldrin | ND | 1.0 | 86 | 90 | 4.5 | 60 | 52 | 14.3 | 40 - 140 | 30 | |
| b-BHC | ND | 1.0 | 88 | 90 | 2.2 | 59 | 58 | 1.7 | 40 - 140 | 30 | |
| Chlordane | ND | 33 | 89 | 92 | 3.3 | 76 | 67 | 12.6 | 40 - 140 | 30 | |
| d-BHC | ND | 3.3 | 93 | 96 | 3.2 | 64 | 58 | 9.8 | 40 - 140 | 30 | |
| Dieldrin | ND | 1.0 | 88 | 93 | 5.5 | 66 | 66 | 0.0 | 40 - 140 | 30 | |
| Endosulfan I | ND | 3.3 | 90 | 94 | 4.3 | 51 | 56 | 9.3 | 40 - 140 | 30 | |
| Endosulfan II | ND | 3.3 | 84 | 91 | 8.0 | 69 | 57 | 19.0 | 40 - 140 | 30 | |
| Endosulfan sulfate | ND | 3.3 | 105 | 97 | 7.9 | 55 | 70 | 24.0 | 40 - 140 | 30 | |
| Endrin | ND | 3.3 | 86 | 89 | 3.4 | 64 | 53 | 18.8 | 40 - 140 | 30 | |
| Endrin aldehyde | ND | 3.3 | 78 | 84 | 7.4 | 55 | 52 | 5.6 | 40 - 140 | 30 | |
| Endrin ketone | ND | 3.3 | 103 | 100 | 3.0 | 69 | 64 | 7.5 | 40 - 140 | 30 | |
| g-BHC | ND | 1.0 | 98 | 101 | 3.0 | 62 | 78 | 22.9 | 40 - 140 | 30 | |
| g-Chlordane | ND | 3.3 | 89 | 92 | 3.3 | 76 | 67 | 12.6 | 40 - 140 | 30 | |
| Heptachlor | ND | 3.3 | 76 | 78 | 2.6 | 44 | 55 | 22.2 | 40 - 140 | 30 | |
| Heptachlor epoxide | ND | 3.3 | 83 | 87 | 4.7 | 66 | 56 | 16.4 | 40 - 140 | 30 | |
| Methoxychlor | ND | 3.3 | 103 | 95 | 8.1 | 106 | 80 | 28.0 | 40 - 140 | 30 | |
| Toxaphene | ND | 130 | NA | NA | NC | NA | NA | NC | 40 - 140 | 30 | |
| % DCBP | 104 | % | 84 | 84 | 0.0 | 71 | 51 | 32.8 | 30 - 150 | 30 | r |
| % DCBP (Confirmation) | 73 | % | 75 | 81 | 7.7 | 115 | 55 | 70.6 | 30 - 150 | 30 | r |
| % TCMX | 73 | % | 79 | 80 | 1.3 | 54 | 56 | 3.6 | 30 - 150 | 30 | |
| % TCMX (Confirmation) | 73 | % | 76 | 76 | 0.0 | 66 | 56 | 16.4 | 30 - 150 | 30 | |
| QA/QC Batch 733366 (ug/L), QC Sample No: CQ81008 10X (CQ81819, CQ81820, CQ81821, CQ81822, CQ81823) | | | | | | | | | | | |
| Pesticides | | | | | | | | | | | |
| 4,4' -DDD | ND | 0.25 | 75 | 79 | 5.2 | 80 | | | 40 - 140 | 20 | |
| 4,4' -DDE | ND | 0.25 | 83 | 82 | 1.2 | 85 | | | 40 - 140 | 20 | |
| 4,4' -DDT | ND | 0.25 | 95 | 96 | 1.0 | 98 | | | 40 - 140 | 20 | |
| a-BHC | ND | 0.15 | 79 | 80 | 1.3 | 85 | | | 40 - 140 | 20 | |
| Alachlor | ND | 0.50 | NA | NA | NC | NA | | | 40 - 140 | 20 | |
| Aldrin | ND | 0.15 | 82 | 81 | 1.2 | 85 | | | 40 - 140 | 20 | |
| b-BHC | ND | 0.15 | 87 | 86 | 1.2 | 89 | | | 40 - 140 | 20 | |
| Chlordane | ND | 5.0 | 85 | 85 | 0.0 | 87 | | | 40 - 140 | 20 | |
| d-BHC | ND | 0.50 | 105 | 103 | 1.9 | 105 | | | 40 - 140 | 20 | |
| Dieldrin | ND | 0.15 | 98 | 96 | 2.1 | 98 | | | 40 - 140 | 20 | |
| Endosulfan I | ND | 0.50 | 98 | 98 | 0.0 | 105 | | | 40 - 140 | 20 | |
| Endosulfan II | ND | 0.50 | 122 | 117 | 4.2 | 120 | | | 40 - 140 | 20 | |

# QA/QC Data

SDG I.D.: GCQ81819

| Parameter | Blank | Blk RL | LCS % | LCSD % | LCS RPD | MS % | MSD % | MS RPD | % Rec Limits | % RPD Limits | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Endosulfan sulfate | ND | 0.50 | 102 | 103 | 1.0 | 104 | | | 40 - 140 | 20 | |
| Endrin | ND | 0.50 | 102 | 101 | 1.0 | 103 | | | 40 - 140 | 20 | |
| Endrin aldehyde | ND | 0.50 | 101 | 101 | 0.0 | 103 | | | 40 - 140 | 20 | |
| g-BHC | ND | 0.15 | 87 | 86 | 1.2 | 89 | | | 40 - 140 | 20 | |
| Heptachlor | ND | 0.50 | 92 | 92 | 0.0 | 94 | | | 40 - 140 | 20 | |
| Heptachlor epoxide | ND | 0.50 | 90 | 89 | 1.1 | 91 | | | 40 - 140 | 20 | |
| Methoxychlor | ND | 0.50 | 87 | 86 | 1.2 | 92 | | | 40 - 140 | 20 | |
| Toxaphene | ND | 20 | NA | NA | NC | NA | | | 40 - 140 | 20 | |
| % DCBP | 74 | % | 83 | 80 | 3.7 | 77 | | | 30 - 150 | 20 | |
| % DCBP (Confirmation) | 72 | % | 79 | 77 | 2.6 | 75 | | | 30 - 150 | 20 | |
| % TCMX | 59 | % | 67 | 66 | 1.5 | 68 | | | 30 - 150 | 20 | |
| % TCMX (Confirmation) | 63 | % | 69 | 67 | 2.9 | 70 | | | 30 - 150 | 20 | |
| QA/QC Batch 733313 (ug/Kg), QC Sample No: CQ81783 2X (CQ81819, CQ81820, CQ81821) | | | | | | | | | | | |
| **Pesticides - Soil** | | | | | | | | | | | |
| 4,4' -DDD | ND | 1.7 | 103 | 104 | 1.0 | 70 | 90 | 25.0 | 40 - 140 | 30 | |
| 4,4' -DDE | ND | 1.7 | 96 | 95 | 1.0 | 71 | 91 | 24.7 | 40 - 140 | 30 | |
| 4,4' -DDT | ND | 1.7 | 81 | 80 | 1.2 | 62 | 77 | 21.6 | 40 - 140 | 30 | |
| a-BHC | ND | 1.0 | 82 | 83 | 1.2 | 50 | 54 | 7.7 | 40 - 140 | 30 | |
| a-Chlordane | ND | 3.3 | 82 | 82 | 0.0 | 47 | 64 | 30.6 | 40 - 140 | 30 | r |
| Aldrin | ND | 1.0 | 79 | 78 | 1.3 | 55 | 69 | 22.6 | 40 - 140 | 30 | |
| b-BHC | ND | 1.0 | 82 | 81 | 1.2 | 65 | 74 | 12.9 | 40 - 140 | 30 | |
| Chlordane | ND | 33 | 82 | 81 | 1.2 | 53 | 67 | 23.3 | 40 - 140 | 30 | |
| d-BHC | ND | 3.3 | 78 | 83 | 6.2 | 26 | 42 | 47.1 | 40 - 140 | 30 | m,r |
| Dieldrin | ND | 1.0 | 82 | 81 | 1.2 | 65 | 77 | 16.9 | 40 - 140 | 30 | |
| Endosulfan I | ND | 3.3 | 81 | 80 | 1.2 | 53 | 66 | 21.8 | 40 - 140 | 30 | |
| Endosulfan II | ND | 3.3 | 75 | 75 | 0.0 | 52 | 65 | 22.2 | 40 - 140 | 30 | |
| Endosulfan sulfate | ND | 3.3 | 85 | 85 | 0.0 | 65 | 70 | 7.4 | 40 - 140 | 30 | |
| Endrin | ND | 3.3 | 81 | 80 | 1.2 | 60 | 72 | 18.2 | 40 - 140 | 30 | |
| Endrin aldehyde | ND | 3.3 | 75 | 75 | 0.0 | 45 | 52 | 14.4 | 40 - 140 | 30 | |
| Endrin ketone | ND | 3.3 | 88 | 89 | 1.1 | 75 | 84 | 11.3 | 40 - 140 | 30 | |
| g-BHC | ND | 1.0 | 88 | 87 | 1.1 | 61 | 76 | 21.9 | 40 - 140 | 30 | |
| g-Chlordane | ND | 3.3 | 82 | 81 | 1.2 | 53 | 67 | 23.3 | 40 - 140 | 30 | |
| Heptachlor | ND | 3.3 | 74 | 72 | 2.7 | 52 | 64 | 20.7 | 40 - 140 | 30 | |
| Heptachlor epoxide | ND | 3.3 | 75 | 74 | 1.3 | 60 | 75 | 22.2 | 40 - 140 | 30 | |
| Methoxychlor | ND | 3.3 | 94 | 90 | 4.3 | 86 | 94 | 8.9 | 40 - 140 | 30 | |
| Toxaphene | ND | 130 | NA | NA | NC | NA | NA | NC | 40 - 140 | 30 | |
| % DCBP | 76 | % | 77 | 77 | 0.0 | 58 | 71 | 20.2 | 30 - 150 | 30 | |
| % DCBP (Confirmation) | 71 | % | 71 | 71 | 0.0 | 53 | 66 | 21.8 | 30 - 150 | 30 | |
| % TCMX | 70 | % | 74 | 72 | 2.7 | 58 | 66 | 12.9 | 30 - 150 | 30 | |
| % TCMX (Confirmation) | 67 | % | 68 | 68 | 0.0 | 54 | 60 | 10.5 | 30 - 150 | 30 | |
| QA/QC Batch 733309 (ug/kg), QC Sample No: CQ81783 (CQ81819, CQ81820, CQ81821, CQ81822, CQ81823) | | | | | | | | | | | |
| **Semivolatiles - Soil** | | | | | | | | | | | |
| 1,1-Biphenyl | ND | 230 | 67 | 70 | 4.4 | 69 | 63 | 9.1 | 40 - 140 | 30 | |
| 1,2,4,5-Tetrachlorobenzene | ND | 230 | 68 | 70 | 2.9 | 68 | 62 | 9.2 | 40 - 140 | 30 | |
| 2,2'-Oxybis(1-Chloropropane) | ND | 230 | 58 | 62 | 6.7 | 60 | 54 | 10.5 | 40 - 140 | 30 | |
| 2,3,4,6-tetrachlorophenol | ND | 230 | 89 | 89 | 0.0 | 81 | 76 | 6.4 | 30 - 130 | 30 | |
| 2,4,5-Trichlorophenol | ND | 230 | 88 | 89 | 1.1 | 85 | 81 | 4.8 | 40 - 140 | 30 | |
| 2,4,6-Trichlorophenol | ND | 130 | 90 | 92 | 2.2 | 86 | 80 | 7.2 | 30 - 130 | 30 | |
| 2,4-Dichlorophenol | ND | 130 | 82 | 84 | 2.4 | 81 | 75 | 7.7 | 30 - 130 | 30 | |
| 2,4-Dimethylphenol | ND | 230 | 80 | 84 | 4.9 | 86 | 79 | 8.5 | 30 - 130 | 30 | |
| 2,4-Dinitrophenol | ND | 230 | 102 | 111 | 8.5 | 80 | 60 | 28.6 | 30 - 130 | 30 | |
| 2,4-Dinitrotoluene | ND | 130 | 88 | 91 | 3.4 | 87 | 84 | 3.5 | 30 - 130 | 30 | |

# QA/QC Data

SDG I.D.: GCQ81819

| Parameter | Blank | Blk RL | LCS % | LCSD % | LCS RPD | MS % | MSD % | MS RPD | % Rec Limits | % RPD Limits | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2,6-Dinitrotoluene | ND | 130 | 88 | 91 | 3.4 | 88 | 84 | 4.7 | 40 - 140 | 30 | |
| 2-Chloronaphthalene | ND | 230 | 74 | 77 | 4.0 | 75 | 69 | 8.3 | 40 - 140 | 30 | |
| 2-Chlorophenol | ND | 230 | 74 | 78 | 5.3 | 76 | 68 | 11.1 | 30 - 130 | 30 | |
| 2-Methylnaphthalene | ND | 230 | 73 | 76 | 4.0 | 75 | 69 | 8.3 | 40 - 140 | 30 | |
| 2-Methylphenol (o-cresol) | ND | 230 | 72 | 75 | 4.1 | 78 | 68 | 13.7 | 40 - 140 | 30 | |
| 2-Nitroaniline | ND | 330 | 94 | 104 | 10.1 | 102 | 102 | 0.0 | 40 - 140 | 30 | |
| 2-Nitrophenol | ND | 230 | 71 | 77 | 8.1 | 76 | 68 | 11.1 | 40 - 140 | 30 | |
| 3&4-Methylphenol (m&p-cresol) | ND | 230 | 78 | 82 | 5.0 | 82 | 75 | 8.9 | 30 - 130 | 30 | |
| 3,3'-Dichlorobenzidine | ND | 130 | 55 | 101 | 59.0 | 97 | 99 | 2.0 | 40 - 140 | 30 | r |
| 3-Nitroaniline | ND | 330 | 75 | 94 | 22.5 | 93 | 92 | 1.1 | 40 - 140 | 30 | |
| 4,6-Dinitro-2-methylphenol | ND | 230 | 99 | 108 | 8.7 | 83 | 68 | 19.9 | 30 - 130 | 30 | |
| 4-Bromophenyl phenyl ether | ND | 230 | 84 | 85 | 1.2 | 81 | 79 | 2.5 | 40 - 140 | 30 | |
| 4-Chloro-3-methylphenol | ND | 230 | 85 | 88 | 3.5 | 86 | 84 | 2.4 | 30 - 130 | 30 | |
| 4-Chloroaniline | ND | 230 | 45 | 73 | 47.5 | 75 | 74 | 1.3 | 40 - 140 | 30 | r |
| 4-Chlorophenyl phenyl ether | ND | 230 | 75 | 77 | 2.6 | 75 | 72 | 4.1 | 40 - 140 | 30 | |
| 4-Nitroaniline | ND | 230 | 78 | 85 | 8.6 | 83 | 81 | 2.4 | 40 - 140 | 30 | |
| 4-Nitrophenol | ND | 230 | 93 | 96 | 3.2 | 94 | 92 | 2.2 | 30 - 130 | 30 | |
| Acenaphthene | ND | 230 | 70 | 74 | 5.6 | 77 | 74 | 4.0 | 30 - 130 | 30 | |
| Acenaphthylene | ND | 130 | 68 | 71 | 4.3 | 70 | 66 | 5.9 | 40 - 140 | 30 | |
| Acetophenone | ND | 230 | 67 | 71 | 5.8 | 68 | 62 | 9.2 | 40 - 140 | 30 | |
| Anthracene | ND | 230 | 78 | 81 | 3.8 | 80 | 88 | 9.5 | 40 - 140 | 30 | |
| Atrazine | ND | 130 | 74 | 82 | 10.3 | 77 | 78 | 1.3 | 40 - 140 | 30 | |
| Benz(a)anthracene | ND | 230 | 84 | 86 | 2.4 | 79 | 101 | 24.4 | 40 - 140 | 30 | |
| Benzaldehyde | ND | 230 | 76 | 85 | 11.2 | 90 | 75 | 18.2 | 40 - 140 | 30 | |
| Benzo(a)pyrene | ND | 130 | 86 | 87 | 1.2 | 78 | 93 | 17.5 | 40 - 140 | 30 | |
| Benzo(b)fluoranthene | ND | 160 | 88 | 88 | 0.0 | 81 | 103 | 23.9 | 40 - 140 | 30 | |
| Benzo(ghi)perylene | ND | 230 | 86 | 86 | 0.0 | 66 | 68 | 3.0 | 40 - 140 | 30 | |
| Benzo(k)fluoranthene | ND | 230 | 88 | 86 | 2.3 | 77 | 83 | 7.5 | 40 - 140 | 30 | |
| Benzyl butyl phthalate | ND | 230 | 83 | 87 | 4.7 | 86 | 85 | 1.2 | 40 - 140 | 30 | |
| Bis(2-chloroethoxy)methane | ND | 230 | 72 | 76 | 5.4 | 73 | 66 | 10.1 | 40 - 140 | 30 | |
| Bis(2-chloroethyl)ether | ND | 130 | 71 | 70 | 1.4 | 68 | 60 | 12.5 | 40 - 140 | 30 | |
| Bis(2-ethylhexyl)phthalate | ND | 230 | 83 | 86 | 3.6 | 84 | 82 | 2.4 | 40 - 140 | 30 | |
| Caprolactam | ND | 230 | 81 | 83 | 2.4 | 80 | 74 | 7.8 | 40 - 140 | 30 | |
| Carbazole | ND | 230 | 79 | 83 | 4.9 | 80 | 83 | 3.7 | 40 - 140 | 30 | |
| Chrysene | ND | 230 | 82 | 84 | 2.4 | 77 | 94 | 19.9 | 40 - 140 | 30 | |
| Dibenz(a,h)anthracene | ND | 130 | 84 | 83 | 1.2 | 66 | 64 | 3.1 | 40 - 140 | 30 | |
| Dibenzofuran | ND | 230 | 72 | 75 | 4.1 | 74 | 72 | 2.7 | 40 - 140 | 30 | |
| Diethyl phthalate | ND | 230 | 81 | 83 | 2.4 | 80 | 78 | 2.5 | 40 - 140 | 30 | |
| Dimethylphthalate | ND | 230 | 81 | 83 | 2.4 | 80 | 77 | 3.8 | 40 - 140 | 30 | |
| Di-n-butylphthalate | ND | 670 | 89 | 91 | 2.2 | 86 | 83 | 3.6 | 40 - 140 | 30 | |
| Di-n-octylphthalate | ND | 230 | 85 | 90 | 5.7 | 86 | 86 | 0.0 | 40 - 140 | 30 | |
| Fluoranthene | ND | 230 | 81 | 84 | 3.6 | 71 | 114 | 46.5 | 40 - 140 | 30 | r |
| Fluorene | ND | 230 | 75 | 79 | 5.2 | 78 | 79 | 1.3 | 40 - 140 | 30 | |
| Hexachlorobenzene | ND | 130 | 76 | 80 | 5.1 | 74 | 74 | 0.0 | 40 - 140 | 30 | |
| Hexachlorobutadiene | ND | 230 | 70 | 71 | 1.4 | 68 | 60 | 12.5 | 40 - 140 | 30 | |
| Hexachlorocyclopentadiene | ND | 230 | 72 | 74 | 2.7 | 49 | 31 | 45.0 | 40 - 140 | 30 | m,r |
| Hexachloroethane | ND | 130 | 66 | 70 | 5.9 | 66 | 57 | 14.6 | 40 - 140 | 30 | |
| Indeno(1,2,3-cd)pyrene | ND | 230 | 90 | 90 | 0.0 | 71 | 74 | 4.1 | 40 - 140 | 30 | |
| Isophorone | ND | 130 | 69 | 74 | 7.0 | 71 | 64 | 10.4 | 40 - 140 | 30 | |
| Naphthalene | ND | 230 | 65 | 68 | 4.5 | 66 | 61 | 7.9 | 40 - 140 | 30 | |
| Nitrobenzene | ND | 130 | 75 | 80 | 6.5 | 78 | 70 | 10.8 | 40 - 140 | 30 | |
| N-Nitrosodimethylamine | ND | 230 | 67 | 71 | 5.8 | 67 | 60 | 11.0 | 40 - 140 | 30 | |
| N-Nitrosodi-n-propylamine | ND | 130 | 72 | 77 | 6.7 | 75 | 69 | 8.3 | 40 - 140 | 30 | |

| Parameter | Blank | Blk RL | LCS % | LCSD % | LCS RPD | MS % | MSD % | MS RPD | % Rec Limits | % RPD Limits | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| N-Nitrosodiphenylamine | ND | 130 | 75 | 78 | 3.9 | 77 | 76 | 1.3 | 40 - 140 | 30 | |
| Pentachlorophenol | ND | 230 | 97 | 95 | 2.1 | 83 | 78 | 6.2 | 30 - 130 | 30 | |
| Phenanthrene | ND | 130 | 76 | 78 | 2.6 | 73 | 110 | 40.4 | 40 - 140 | 30 | r |
| Phenol | ND | 230 | 76 | 78 | 2.6 | 80 | 73 | 9.2 | 30 - 130 | 30 | |
| Pyrene | ND | 230 | 79 | 82 | 3.7 | 69 | 101 | 37.6 | 30 - 130 | 30 | r |
| % 2,4,6-Tribromophenol | 62 | % | 67 | 71 | 5.8 | 67 | 67 | 0.0 | 30 - 130 | 30 | |
| % 2-Fluorobiphenyl | 68 | % | 66 | 69 | 4.4 | 67 | 62 | 7.8 | 30 - 130 | 30 | |
| % 2-Fluorophenol | 68 | % | 67 | 70 | 4.4 | 67 | 60 | 11.0 | 30 - 130 | 30 | |
| % Nitrobenzene-d5 | 75 | % | 71 | 75 | 5.5 | 73 | 66 | 10.1 | 30 - 130 | 30 | |
| % Phenol-d5 | 68 | % | 67 | 71 | 5.8 | 69 | 63 | 9.1 | 30 - 130 | 30 | |
| % Terphenyl-d14 | 74 | % | 70 | 73 | 4.2 | 63 | 60 | 4.9 | 30 - 130 | 30 | |

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 733938 (ug/L), QC Sample No: CQ81819 (CQ81819, CQ81820, CQ81821, CQ81822, CQ81823)

## Semivolatiles - TCLP

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene | ND | 17 | 50 | 58 | 14.8 | 54 | | | 40 - 140 | 20 | |
| 2,4,5-Trichlorophenol | ND | 17 | 80 | 91 | 12.9 | 84 | | | 40 - 140 | 20 | |
| 2,4,6-Trichlorophenol | ND | 17 | 79 | 90 | 13.0 | 83 | | | 30 - 130 | 20 | |
| 2,4-Dinitrotoluene | ND | 58 | 84 | 96 | 13.3 | 86 | | | 30 - 130 | 20 | |
| 2-Methylphenol (o-cresol) | ND | 17 | 68 | 71 | 4.3 | 73 | | | 40 - 140 | 20 | |
| 3&4-Methylphenol (m&p-cresol) | ND | 17 | 71 | 82 | 14.4 | 77 | | | 30 - 130 | 20 | |
| Hexachlorobenzene | ND | 58 | 69 | 76 | 9.7 | 71 | | | 40 - 140 | 20 | |
| Hexachlorobutadiene | ND | 58 | 56 | 67 | 17.9 | 60 | | | 40 - 140 | 20 | |
| Hexachloroethane | ND | 58 | 52 | 62 | 17.5 | 58 | | | 40 - 140 | 20 | |
| Nitrobenzene | ND | 58 | 68 | 79 | 15.0 | 74 | | | 40 - 140 | 20 | |
| Pentachlorophenol | ND | 58 | 83 | 95 | 13.5 | 86 | | | 30 - 130 | 20 | |
| Pyridine | ND | 83 | 45 | 30 | 40.0 | 49 | | | 40 - 140 | 20 | l,r |
| % 2,4,6-Tribromophenol | 66 | % | 52 | 64 | 20.7 | 60 | | | 15 - 110 | 20 | r |
| % 2-Fluorobiphenyl | 73 | % | 57 | 70 | 20.5 | 66 | | | 30 - 130 | 20 | |
| % 2-Fluorophenol | 63 | % | 43 | 55 | 24.5 | 56 | | | 15 - 110 | 20 | r |
| % Nitrobenzene-d5 | 85 | % | 57 | 72 | 23.3 | 69 | | | 30 - 130 | 20 | r |
| % Phenol-d5 | 60 | % | 42 | 54 | 25.0 | 53 | | | 15 - 110 | 20 | r |
| % Terphenyl-d14 | 82 | % | 62 | 77 | 21.6 | 71 | | | 30 - 130 | 20 | r |

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 733420 (ug/kg), QC Sample No: CQ81611 (CQ81819, CQ81820, CQ81821, CQ81822, CQ81823)

## Volatiles - Soil (Low Level)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | 5.0 | 104 | 103 | 1.0 | 110 | 104 | 5.6 | 70 - 130 | 30 | |
| 1,1,2,2-Tetrachloroethane | ND | 3.0 | 107 | 102 | 4.8 | 104 | 112 | 7.4 | 70 - 130 | 30 | |
| 1,1,2-Trichloroethane | ND | 5.0 | 105 | 102 | 2.9 | 93 | 87 | 6.7 | 70 - 130 | 30 | |
| 1,1-Dichloroethane | ND | 5.0 | 137 | 95 | 36.2 | 105 | 99 | 5.9 | 70 - 130 | 30 | l,r |
| 1,1-Dichloroethene | ND | 5.0 | 91 | 91 | 0.0 | 102 | 96 | 6.1 | 70 - 130 | 30 | |
| 1,2,3-Trichlorobenzene | ND | 5.0 | 104 | 100 | 3.9 | 39 | 37 | 5.3 | 70 - 130 | 30 | m |
| 1,2,4-Trichlorobenzene | ND | 5.0 | 101 | 99 | 2.0 | 43 | 42 | 2.4 | 70 - 130 | 30 | m |
| 1,2-Dibromo-3-chloropropane | ND | 5.0 | 138 | 130 | 6.0 | 121 | 119 | 1.7 | 70 - 130 | 30 | l |
| 1,2-Dibromoethane | ND | 5.0 | 107 | 102 | 4.8 | 96 | 92 | 4.3 | 70 - 130 | 30 | |
| 1,2-Dichlorobenzene | ND | 5.0 | 102 | 99 | 3.0 | 81 | 81 | 0.0 | 70 - 130 | 30 | |
| 1,2-Dichloroethane | ND | 5.0 | 103 | 100 | 3.0 | 94 | 91 | 3.2 | 70 - 130 | 30 | |
| 1,2-Dichloropropane | ND | 5.0 | 100 | 101 | 1.0 | 99 | 96 | 3.1 | 70 - 130 | 30 | |
| 1,3-Dichlorobenzene | ND | 5.0 | 99 | 97 | 2.0 | 81 | 83 | 2.4 | 70 - 130 | 30 | |

# QA/QC Data

SDG I.D.: GCQ81819

| Parameter | Blank | Blk RL | LCS % | LCSD % | LCS RPD | MS % | MSD % | MS RPD | % Rec Limits | % RPD Limits | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene | ND | 5.0 | 102 | 100 | 2.0 | 81 | 80 | 1.2 | 70 - 130 | 30 | |
| 1,4-dioxane | ND | 100 | 102 | 108 | 5.7 | 96 | 102 | 6.1 | 70 - 130 | 30 | |
| 2-Hexanone | ND | 25 | 100 | 92 | 8.3 | 89 | 83 | 7.0 | 70 - 130 | 30 | |
| 4-Methyl-2-pentanone | ND | 25 | 111 | 104 | 6.5 | 98 | 93 | 5.2 | 70 - 130 | 30 | |
| Acetone | ND | 10 | 88 | 83 | 5.8 | 61 | 80 | 27.0 | 70 - 130 | 30 | m |
| Benzene | ND | 1.0 | 98 | 98 | 0.0 | 100 | 94 | 6.2 | 70 - 130 | 30 | |
| Bromochloromethane | ND | 5.0 | 99 | 97 | 2.0 | 89 | 86 | 3.4 | 70 - 130 | 30 | |
| Bromodichloromethane | ND | 5.0 | 107 | 107 | 0.0 | 97 | 94 | 3.1 | 70 - 130 | 30 | |
| Bromoform | ND | 5.0 | 122 | 115 | 5.9 | 91 | 90 | 1.1 | 70 - 130 | 30 | |
| Bromomethane | ND | 5.0 | 109 | 101 | 7.6 | 116 | 111 | 4.4 | 70 - 130 | 30 | |
| Carbon Disulfide | ND | 5.0 | 88 | 88 | 0.0 | 92 | 86 | 6.7 | 70 - 130 | 30 | |
| Carbon tetrachloride | ND | 5.0 | 117 | 115 | 1.7 | 107 | 105 | 1.9 | 70 - 130 | 30 | |
| Chlorobenzene | ND | 5.0 | 101 | 97 | 4.0 | 91 | 87 | 4.5 | 70 - 130 | 30 | |
| Chloroethane | ND | 5.0 | 101 | 100 | 1.0 | 117 | 113 | 3.5 | 70 - 130 | 30 | |
| Chloroform | ND | 5.0 | 96 | 95 | 1.0 | 98 | 94 | 4.2 | 70 - 130 | 30 | |
| Chloromethane | ND | 5.0 | 94 | 92 | 2.2 | 119 | 114 | 4.3 | 70 - 130 | 30 | |
| cis-1,2-Dichloroethene | ND | 5.0 | 99 | 98 | 1.0 | 92 | 87 | 5.6 | 70 - 130 | 30 | |
| cis-1,3-Dichloropropene | ND | 5.0 | 110 | 110 | 0.0 | 89 | 85 | 4.6 | 70 - 130 | 30 | |
| Cyclohexane | ND | 5.0 | 95 | 94 | 1.1 | 96 | 88 | 8.7 | 70 - 130 | 30 | |
| Dibromochloromethane | ND | 3.0 | 117 | 112 | 4.4 | 106 | 106 | 0.0 | 70 - 130 | 30 | |
| Dichlorodifluoromethane | ND | 5.0 | 67 | 66 | 1.5 | 121 | 114 | 6.0 | 70 - 130 | 30 | l |
| Ethylbenzene | ND | 1.0 | 97 | 95 | 2.1 | 94 | 92 | 2.2 | 70 - 130 | 30 | |
| Isopropylbenzene | ND | 1.0 | 102 | 101 | 1.0 | 123 | 130 | 5.5 | 70 - 130 | 30 | |
| m&p-Xylene | ND | 2.0 | 98 | 97 | 1.0 | 90 | 86 | 4.5 | 70 - 130 | 30 | |
| Methyl ethyl ketone | ND | 5.0 | 96 | 89 | 7.6 | 86 | 83 | 3.6 | 70 - 130 | 30 | |
| Methyl t-butyl ether (MTBE) | ND | 1.0 | 97 | 93 | 4.2 | 103 | 101 | 2.0 | 70 - 130 | 30 | |
| Methylacetate | ND | 5.0 | 107 | 100 | 6.8 | 104 | 101 | 2.9 | 70 - 130 | 30 | |
| Methylcyclohexane | ND | 5.0 | 103 | 101 | 2.0 | 89 | 81 | 9.4 | 70 - 130 | 30 | |
| Methylene chloride | ND | 5.0 | 87 | 88 | 1.1 | 90 | 88 | 2.2 | 70 - 130 | 30 | |
| o-Xylene | ND | 2.0 | 99 | 97 | 2.0 | 92 | 89 | 3.3 | 70 - 130 | 30 | |
| Styrene | ND | 5.0 | 96 | 94 | 2.1 | 80 | 74 | 7.8 | 70 - 130 | 30 | |
| Tetrachloroethene | ND | 5.0 | 103 | 103 | 0.0 | 89 | 85 | 4.6 | 70 - 130 | 30 | |
| Toluene | ND | 1.0 | 101 | 100 | 1.0 | 93 | 89 | 4.4 | 70 - 130 | 30 | |
| trans-1,2-Dichloroethene | ND | 5.0 | 92 | 94 | 2.2 | 94 | 89 | 5.5 | 70 - 130 | 30 | |
| trans-1,3-Dichloropropene | ND | 5.0 | 116 | 115 | 0.9 | 78 | 74 | 5.3 | 70 - 130 | 30 | |
| Trichloroethene | ND | 5.0 | 102 | 102 | 0.0 | 111 | 106 | 4.6 | 70 - 130 | 30 | |
| Trichlorofluoromethane | ND | 5.0 | 98 | 96 | 2.1 | 115 | 111 | 3.5 | 70 - 130 | 30 | |
| Trichlorotrifluoroethane | ND | 5.0 | 89 | 93 | 4.4 | 105 | 101 | 3.9 | 70 - 130 | 30 | |
| Vinyl chloride | ND | 5.0 | 84 | 85 | 1.2 | 109 | 101 | 7.6 | 70 - 130 | 30 | |
| % 1,2-dichlorobenzene-d4 | 94 | % | 102 | 99 | 3.0 | 97 | 97 | 0.0 | 70 - 130 | 30 | |
| % Bromofluorobenzene | 100 | % | 100 | 96 | 4.1 | 91 | 87 | 4.5 | 70 - 130 | 30 | |
| % Dibromofluoromethane | 103 | % | 98 | 101 | 3.0 | 101 | 102 | 1.0 | 70 - 130 | 30 | |
| % Toluene-d8 | 100 | % | 102 | 102 | 0.0 | 97 | 96 | 1.0 | 70 - 130 | 30 | |

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%, 25-160% for Chloroethane-HL and Trichlorofluoromethane-HL.

QA/QC Batch 733573 (ug/L), QC Sample No: CQ81823 (CQ81819 (10X) , CQ81820 (10X) , CQ81821 (10X) , CQ81822 (10X) , CQ81823 (10X) )

## Volatiles - TCLP

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | ND | 5.0 | 102 | 94 | 8.2 | 117 | 120 | 2.5 | 70 - 130 | 30 | |
| 1,2-Dichloroethane | ND | 0.60 | 97 | 95 | 2.1 | 100 | 102 | 2.0 | 70 - 130 | 30 | |
| Benzene | ND | 0.70 | 99 | 96 | 3.1 | 107 | 111 | 3.7 | 70 - 130 | 30 | |

# QA/QC Data

SDG I.D.: GCQ81819

| Parameter | Blank | Blk RL | LCS % | LCSD % | LCS RPD | MS % | MSD % | MS RPD | % Rec Limits | % RPD Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| Carbon tetrachloride | ND | 5.0 | 107 | 99 | 7.8 | 117 | 116 | 0.9 | 70 - 130 | 30 |
| Chlorobenzene | ND | 1.0 | 100 | 98 | 2.0 | 107 | 109 | 1.9 | 70 - 130 | 30 |
| Chloroform | ND | 5.0 | 101 | 95 | 6.1 | 111 | 113 | 1.8 | 70 - 130 | 30 |
| Methyl ethyl ketone | ND | 5.0 | 100 | 93 | 7.3 | 97 | 93 | 4.2 | 70 - 130 | 30 |
| Tetrachloroethene | ND | 1.0 | 104 | 101 | 2.9 | 112 | 116 | 3.5 | 70 - 130 | 30 |
| Trichloroethene | ND | 5.0 | 102 | 100 | 2.0 | 111 | 115 | 3.5 | 70 - 130 | 30 |
| Vinyl chloride | ND | 5.0 | 112 | 102 | 9.3 | 119 | 125 | 4.9 | 70 - 130 | 30 |
| % 1,2-dichlorobenzene-d4 | 98 | % | 101 | 101 | 0.0 | 99 | 102 | 3.0 | 70 - 130 | 30 |
| % Bromofluorobenzene | 96 | % | 99 | 99 | 0.0 | 100 | 101 | 1.0 | 70 - 130 | 30 |
| % Dibromofluoromethane | 89 | % | 96 | 92 | 4.3 | 87 | 90 | 3.4 | 70 - 130 | 30 |
| % Toluene-d8 | 100 | % | 100 | 100 | 0.0 | 100 | 101 | 1.0 | 70 - 130 | 30 |

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%, 25-160% for Chloroethane-HL and Trichlorofluoromethane-HL.

l = This parameter is outside laboratory LCS/LCSD specified recovery limits.
m = This parameter is outside laboratory MS/MSD specified recovery limits.
r = This parameter is outside laboratory RPD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
June 12, 2024

Wednesday, June 12, 2024

Criteria: NY: 375, 375COM, 375RS

State: NY

# Sample Criteria Exceedances Report

## GCQ81819 - AES-INC

| SampNo | Acode | Phoenix Analyte | Criteria | Result | RL | Criteria | RL Criteria | Analysis Units |
|---|---|---|---|---|---|---|---|---|
| CQ81819 | $8270_TCLR | Indeno(1,2,3-cd)pyrene | NY / 375-6.8 Semivolatiles / Residential | 540 | 270 | 500 | 500 | ug/Kg |
| CQ81819 | $8270_TCLR | Indeno(1,2,3-cd)pyrene | NY / 375-6.8 Semivolatiles / Unrestricted Use Soil | 540 | 270 | 500 | 500 | ug/Kg |
| CQ81820 | $8270_TCLR | Benz(a)anthracene | NY / 375-6.8 Semivolatiles / Commercial | 5700 | 270 | 5600 | 5600 | ug/Kg |
| CQ81820 | $8270_TCLR | Benzo(a)pyrene | NY / 375-6.8 Semivolatiles / Commercial | 4800 | 270 | 1000 | 1000 | ug/Kg |
| CQ81820 | $8270_TCLR | Dibenz(a,h)anthracene | NY / 375-6.8 Semivolatiles / Commercial | 600 | 200 | 560 | 560 | ug/Kg |
| CQ81820 | $8270_TCLR | Benzo(b)fluoranthene | NY / 375-6.8 Semivolatiles / Commercial | 6400 | 270 | 5600 | 5600 | ug/Kg |
| CQ81820 | $8270_TCLR | Benzo(k)fluoranthene | NY / 375-6.8 Semivolatiles / Residential | 2200 | 270 | 1000 | 1000 | ug/Kg |
| CQ81820 | $8270_TCLR | Indeno(1,2,3-cd)pyrene | NY / 375-6.8 Semivolatiles / Residential | 2700 | 270 | 500 | 500 | ug/Kg |
| CQ81820 | $8270_TCLR | Dibenz(a,h)anthracene | NY / 375-6.8 Semivolatiles / Residential | 600 | 200 | 330 | 330 | ug/Kg |
| CQ81820 | $8270_TCLR | Chrysene | NY / 375-6.8 Semivolatiles / Residential | 4800 | 270 | 1000 | 1000 | ug/Kg |
| CQ81820 | $8270_TCLR | Benzo(b)fluoranthene | NY / 375-6.8 Semivolatiles / Residential | 6400 | 270 | 1000 | 1000 | ug/Kg |
| CQ81820 | $8270_TCLR | Benzo(a)pyrene | NY / 375-6.8 Semivolatiles / Residential | 4800 | 270 | 1000 | 1000 | ug/Kg |
| CQ81820 | $8270_TCLR | Benz(a)anthracene | NY / 375-6.8 Semivolatiles / Residential | 5700 | 270 | 1000 | 1000 | ug/Kg |
| CQ81820 | $8270_TCLR | Benzo(b)fluoranthene | NY / 375-6.8 Semivolatiles / Unrestricted Use Soil | 6400 | 270 | 1000 | 1000 | ug/Kg |
| CQ81820 | $8270_TCLR | Chrysene | NY / 375-6.8 Semivolatiles / Unrestricted Use Soil | 4800 | 270 | 1000 | 1000 | ug/Kg |
| CQ81820 | $8270_TCLR | Benzo(a)pyrene | NY / 375-6.8 Semivolatiles / Unrestricted Use Soil | 4800 | 270 | 1000 | 1000 | ug/Kg |
| CQ81820 | $8270_TCLR | Dibenz(a,h)anthracene | NY / 375-6.8 Semivolatiles / Unrestricted Use Soil | 600 | 200 | 330 | 330 | ug/Kg |
| CQ81820 | $8270_TCLR | Benz(a)anthracene | NY / 375-6.8 Semivolatiles / Unrestricted Use Soil | 5700 | 270 | 1000 | 1000 | ug/Kg |
| CQ81820 | $8270_TCLR | Indeno(1,2,3-cd)pyrene | NY / 375-6.8 Semivolatiles / Unrestricted Use Soil | 2700 | 270 | 500 | 500 | ug/Kg |
| CQ81820 | $8270_TCLR | Benzo(k)fluoranthene | NY / 375-6.8 Semivolatiles / Unrestricted Use Soil | 2200 | 270 | 800 | 800 | ug/Kg |
| CQ81820 | $PESTSM_NY | 4,4' -DDE | NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil | 11 | 2.4 | 3.3 | 3.3 | ug/Kg |
| CQ81820 | $PESTSM_NY | 4,4' -DDT | NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil | 13 | 2.4 | 3.3 | 3.3 | ug/Kg |
| CQ81821 | AS-SM | Arsenic | NY / 375-6.8 Metals / Commercial | 22.3 | 0.81 | 16 | 16 | mg/Kg |
| CQ81821 | AS-SM | Arsenic | NY / 375-6.8 Metals / Residential | 22.3 | 0.81 | 16 | 16 | mg/Kg |
| CQ81821 | AS-SM | Arsenic | NY / 375-6.8 Metals / Unrestricted Use Soil | 22.3 | 0.81 | 13 | 13 | mg/Kg |
| CQ81821 | CU-SM | Copper | NY / 375-6.8 Metals / Unrestricted Use Soil | 224 | 0.8 | 50 | 50 | mg/kg |
| CQ81821 | NI-SM | Nickel | NY / 375-6.8 Metals / Unrestricted Use Soil | 64.2 | 0.41 | 30 | 30 | mg/Kg |
| CQ81821 | PB-SM | Lead | NY / 375-6.8 Metals / Commercial | 7410 | 4.1 | 1000 | 1000 | mg/Kg |
| CQ81821 | PB-SM | Lead | NY / 375-6.8 Metals / Residential | 7410 | 4.1 | 400 | 400 | mg/Kg |
| CQ81821 | PB-SM | Lead | NY / 375-6.8 Metals / Unrestricted Use Soil | 7410 | 4.1 | 63 | 63 | mg/Kg |
| CQ81821 | TCLP-PB | TCLP Lead | EPA / 40 CFR 261.24 / Toxicity Characteristics | 9.50 | 0.10 | 5 | 5 | mg/L |
| CQ81821 | ZN-SM | Zinc | NY / 375-6.8 Metals / Unrestricted Use Soil | 155 | 0.8 | 109 | 109 | mg/Kg |
| CQ81822 | AS-SM | Arsenic | NY / 375-6.8 Metals / Unrestricted Use Soil | 13.2 | 1.5 | 13 | 13 | mg/Kg |
| CQ81822 | BA-SM | Barium | NY / 375-6.8 Metals / Commercial | 452 | 0.76 | 400 | 400 | mg/Kg |
| CQ81822 | BA-SM | Barium | NY / 375-6.8 Metals / Residential | 452 | 0.76 | 350 | 350 | mg/Kg |
| CQ81822 | BA-SM | Barium | NY / 375-6.8 Metals / Unrestricted Use Soil | 452 | 0.76 | 350 | 350 | mg/Kg |
| CQ81822 | CD-SM | Cadmium | NY / 375-6.8 Metals / Residential | 3.96 | 0.76 | 2.5 | 2.5 | mg/Kg |
| CQ81822 | CD-SM | Cadmium | NY / 375-6.8 Metals / Unrestricted Use Soil | 3.96 | 0.76 | 2.5 | 2.5 | mg/Kg |
| CQ81822 | CU-SM | Copper | NY / 375-6.8 Metals / Commercial | 1350 | 1.5 | 270 | 270 | mg/kg |
| CQ81822 | CU-SM | Copper | NY / 375-6.8 Metals / Residential | 1350 | 1.5 | 270 | 270 | mg/kg |

Wednesday, June 12, 2024

Criteria: NY: 375, 375COM, 375RS

State: NY

# Sample Criteria Exceedances Report

## GCQ81819 - AES-INC

| SampNo | Acode | Phoenix Analyte | Criteria | Result | RL | Criteria | RL Criteria | Analysis Units |
|---|---|---|---|---|---|---|---|---|
| CQ81822 | CU-SM | Copper | NY / 375-6.8 Metals / Unrestricted Use Soil | 1350 | 1.5 | 50 | 50 | mg/kg |
| CQ81822 | HG-SM | Mercury | NY / 375-6.8 Metals / Commercial | 4.25 | 0.56 | 2.8 | 2.8 | mg/Kg |
| CQ81822 | HG-SM | Mercury | NY / 375-6.8 Metals / Residential | 4.25 | 0.56 | 0.81 | 0.81 | mg/Kg |
| CQ81822 | HG-SM | Mercury | NY / 375-6.8 Metals / Unrestricted Use Soil | 4.25 | 0.56 | 0.18 | 0.18 | mg/Kg |
| CQ81822 | NI-SM | Nickel | NY / 375-6.8 Metals / Unrestricted Use Soil | 30.5 | 0.76 | 30 | 30 | mg/Kg |
| CQ81822 | PB-SM | Lead | NY / 375-6.8 Metals / Commercial | 1140 | 0.76 | 1000 | 1000 | mg/Kg |
| CQ81822 | PB-SM | Lead | NY / 375-6.8 Metals / Residential | 1140 | 0.76 | 400 | 400 | mg/Kg |
| CQ81822 | PB-SM | Lead | NY / 375-6.8 Metals / Unrestricted Use Soil | 1140 | 0.76 | 63 | 63 | mg/Kg |
| CQ81822 | ZN-SM | Zinc | NY / 375-6.8 Metals / Residential | 5700 | 1.5 | 2200 | 2200 | mg/Kg |
| CQ81822 | ZN-SM | Zinc | NY / 375-6.8 Metals / Unrestricted Use Soil | 5700 | 1.5 | 109 | 109 | mg/Kg |

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

**Environmental Laboratories, Inc.**
**587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045**
**Tel. (860) 645-1102 Fax (860) 645-0823**

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

# Analysis Comments

June 12, 2024 SDG I.D.: GCQ81819

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report:

### *PCB Narration*

**AU-ECD5 05/30/24-1:** CQ81821

The following Continuing Calibration compounds did not meet % deviation criteria:
Samples: CQ81821
Preceding CC 530B003 - None.
Succeeding CC 530B007 - DCBP SURR 17%L (15%)

### *PEST Narration*

**AU-ECD33 05/30/24-1:** CQ81822, CQ81823

The following Continuing Calibration compounds did not meet % deviation criteria:
Samples: CQ81822, CQ81823
Preceding CC 530B023 - Methoxychlor 26%L (20%)
Succeeding CC 530B037 - Methoxychlor 29%L (20%)
A low "1A" standard was run after the samples to demonstrate capability to detect any compounds outside of the CC acceptance criteria. All reported samples were ND for the affected compounds.

**AU-ECD35 05/29/24-1:** CQ81819, CQ81820, CQ81821

The following Continuing Calibration compounds did not meet % deviation criteria:
Samples: CQ81819, CQ81820, CQ81821
Preceding CC 529B028 - None.
Succeeding CC 529B051 - Heptachlor 22%L (20%)
A low "1A" standard was run after the samples to demonstrate capability to detect any compounds outside of the CC acceptance criteria. All reported samples were ND for the affected compounds.

### *SVOA Narration*

**CHEM28 05/28/24-1:** CQ81819, CQ81820, CQ81821, CQ81822, CQ81823

For 8270 full list, the DDT breakdown and pentachlorophenol & benzidine peak tailing were evaluated in the DFTPP tune and were found to be in control.
For 8270 BN list, benzidine peak tailing was evaluated in the DFTPP tune and was found to be in control.

The following Initial Calibration compounds did not meet RSD% criteria: Benzo(a)pyrene 23% (20%)
The following Initial Calibration compounds did not meet maximum RSD% criteria: None.
The following Initial Calibration compounds did not meet recommended response factors: Hexachlorobenzene 0.089 (0.1)
The following Initial Calibration compounds did not meet minimum response factors: None.

The following Continuing Calibration compounds did not meet recommended response factors: Hexachlorobenzene 0.087 (0.1)
The following Continuing Calibration compounds did not meet minimum response factors: None.

Up to eight compounds can be outside of ICAL %RSD criteria and up to sixteen compounds can be outside of CCAL %Dev criteria if less than 40%.

**CHEM28 06/01/24-1:** CQ81819, CQ81820, CQ81821, CQ81822, CQ81823

**Environmental Laboratories, Inc.**
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**Tel. (860) 645-1102 Fax (860) 645-0823**

NY # 11301

# Analysis Comments

June 12, 2024 SDG I.D.: GCQ81819

For 8270 full list, the DDT breakdown and pentachlorophenol & benzidine peak tailing were evaluated in the DFTPP tune and were found to be in control.
For 8270 BN list, benzidine peak tailing was evaluated in the DFTPP tune and was found to be in control.

The following Initial Calibration compounds did not meet recommended response factors: Hexachlorobenzene 0.089 (0.1)
The following Initial Calibration compounds did not meet minimum response factors: None.

The following Continuing Calibration compounds did not meet recommended response factors: Hexachlorobenzene 0.083 (0.1)
The following Continuing Calibration compounds did not meet minimum response factors: None.

Up to eight compounds can be outside of ICAL %RSD criteria and up to sixteen compounds can be outside of CCAL %Dev criteria if less than 40%.

### *VOA Narration*

**CHEM14 05/28/24-3:** CQ81819, CQ81820, CQ81821, CQ81822, CQ81823
The following Initial Calibration compounds did not meet RSD% criteria: 1,2-Dibromo-3-chloropropane 25% (20%), 2-Hexanone 21% (20%), Acetone 31% (20%)
The following Initial Calibration compounds did not meet maximum RSD% criteria: None.

Up to eight compounds can be outside of ICAL %RSD criteria and up to sixteen compounds can be outside of CCAL %Dev criteria if less than 40%.

**Environmental Laboratories, Inc.**
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**Tel. (860) 645-1102 Fax (860) 645-0823**

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

# NY Temperature Narration

**June 12, 2024**

**SDG I.D.: GCQ81819**

The samples in this delivery group were received at 2.7°C.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

Cooler: Yes ☑ No ☐
Coolant: IPK ☐ ICE ☑ No ☐

# PHOENIX
*Environmental Laboratories, Inc.*

## NY/NJ/PA CHAIN OF CUSTODY RECORD

Temp 2.7 C Pg 1 of 1

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: Makrina Nolan, makrina@phoenixlabs.com Fax (860) 645-0823
**Client Services (860) 645-1102**

**Contact Options:**
☐ Phone:
☐ Fax: pendyenveng@optonline.net
☑ Email: empendergast@aol.com

Customer: AES
Address: 42 west Ave.
Patchogue, NY 11772

Project: HWB100SBC - Brooklyn Bus Route Project P.O: 0942
Report to: AES
Invoice to: AES
QUOTE # :

***This section MUST be completed with Bottle Quantities.***

**Client Sample - Information - Identification**

Sampler's Signature: [signature] Date: 5.24.24

**Matrix Code:**
**DW**=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
**RW**=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe **OIL**=Oil
**B**=Bulk **L**=Liquid

Analysis Request

| PHOENIX USE ONLY SAMPLE # | Customer Sample Identification | Sample Matrix | Date Sampled | Time Sampled | *MS/MSD (May be billable at analysis unit rate) | TAL/TCL | Full TCLP | RIC | TPH DRO/GRO | GL Amber 8 oz. [ ] w/$H_3PO_4$ [ ]$NAHSO_4$ | Soil VOA Vials [ ] methanol [ ] $H_2O$ | GL Soil container ( 8 ) oz | GL Soil container ( 4 ) oz VOCgr | 40 ml VOA Vial [ ] As is [ ] HCl | GL Amber 1000ml [ ] As is [ ] $H_2SO_4$ | PL As is [ ] 250ml [ ] 500ml [ ] 1000ml | PL $H_2SO_4$ [ ] 250ml [ ] 500ml | PL NAOH 250ml | PL $HNO_3$ 250ml | Bacteria Bottle w/thio | Bacteria Bottle as is |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 81819 | SB11 | S | 5.24.24 | 8:55 | | X | X | X | X | | | | | 3 | 2 | 1 | | | | | |
| 81820 | SB12 | ↓ | ↓ | 9:26 | | ↓ | ↓ | ↓ | ↓ | | | | | ↓ | ↓ | ↓ | | | | | |
| 81821 | SB13 | | | 11:23 | | | | | | | | | | | | | | | | | |
| 81822 | SB14 | | | 10:14 | | | | | | | | | | | | | | | | | |
| 81823 | SB15 | ↓ | ↓ | 10:55 | | ↓ | ↓ | ↓ | ↓ | | | | | ↓ | ↓ | ↓ | | | | | |

| Relinquished by: | Accepted by: | Date: | Time: |
|---|---|---|---|
| [signature] | [signature] | 5.28.24 | 1140 |
| | [signature] | 5/28/24 | 17:28 |

**Comments, Special Requirements or Regulations:**

***MS/MSD are considered site samples and will be billed as such in accordance with the prices quoted.**

**Data Format:**
☐ Phoenix Std Report ☐ EQuIS
☑ Excel ☐ NJ Hazsite EDD
☑ PDF ☐ NY EZ EDD (ASP)
☐ GIS/Key ☐ Other

**Turnaround:**
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☐ 4 Days*
☐ 6 Days*
☑ Standard
* SURCHARGE APPLIES
7 day

**Data Package:**
☐ NJ Reduced Deliv. *
☐ NY Enhanced (ASP B) *
☐ Other

**NJ**
☐ Res. Criteria
☐ Non-Res. Criteria
☐ Impact to GW Soil Cleanup Criteria
☐ Impact to GW soil screen Criteria
☐ GW Criteria

**NY**
☐ TOGS GW
☐ CP-51 SOIL
☑ 375SCO Unrestricted Soil
☑ 375SCO Residential Soil
☐ 375SCO Residential Restricted Soil
☑ 375SCO Commercial Soil
☐ 375SCO Industrial Soil
☐ Subpart 5 DW

**PA**
☐ Clean Fill Limits
☐ PA-GW
☐ Reg Fill Limits
☐ PA Soil Restricted
☐ PA Soil non-restricted

State Samples Collected?
NY

PEL-111 Rev 1/2023

## Sarah Bell

**From:** Eileen Pendergast <empendergast@aol.com>
**Sent:** Friday, June 07, 2024 9:10 AM
**To:** Sarah Bell
**Subject:** Fw: Phoenix Labs - GCQ81819, HWK100SBC-BROOKLYN BUS ROUTES - Report Ready

Hi Sarah

Can you please re-run the total lead and TCLP lead in sample CQ81821?
My customer wants to verify the result.

Thanks,

Eileen
AES
42 West Avenue
Patchogue, NY 11772
(631) 475-0020

---- Forwarded Message ----
**From:** "reports@phoenixlabs.com" <reports@phoenixlabs.com>
**To:** "empendergast@aol.com" <empendergast@aol.com>
**Sent:** Wednesday, June 5, 2024 at 05:32:32 PM EDT
**Subject:** Phoenix Labs - GCQ81819, HWK100SBC-BROOKLYN BUS ROUTES - Report Ready

Delivery group GCQ81819 (HWK100SBC-BROOKLYN BUS ROUTES ) for the following samples:

CQ81819 - SB11
CQ81820 - SB12
CQ81821 - SB13
CQ81822 - SB14
CQ81823 - SB15

is available for review. Please click the following link to view report data.

www.PhoenixLabs.com

Note: The default password is your email address. You may change it after logging in.

Please take a moment to give us some feedback on your experience with Phoenix Environmental Laboratories, Inc. Your input is valuable to us!
www.phoenixlabs.com/CustomerSurvey

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Please do not reply to this email.
cc'd:empendergast@aol.com;pendyenveng@optonline.net