

Field Sampling Summary Report #42

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
FROM MONTGOMERY STREET TO EAST 15th STREET
BOROUGH OF MANHATTAN

NYCDDC PROJECT # SANDRESM1

Prepared for:

City of New York Department of Design and Construction
Office of Environmental and Hazmat Services
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Long Island City, New York 11101

In partnership with
New York City Mayor's Office of Recovery and Resiliency
and
New York City Department of Parks and Recreation

On behalf of:

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Prepared by:

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AES Project No. 0897

ADDENDUM #1
MAY 21st, 2024

TABLE OF CONTENTS

1.0	FIELD SAMPLING SUMMARY REPORT.....	1
1.1	Introduction and Purpose.....	1
1.2	Site Background and History.....	2
2.0	SUBSURFACE INVESTIGATION ACTIVITIES.....	3
2.1	Soil Sampling and Sample Collection.....	3
2.2	Laboratory Analysis.....	4
3.0	EVALUATION OF SOIL ANALYSIS.....	5
3.1	Metals.....	5
3.2	PCBs.....	6
3.3	Pesticides.....	6
3.4	VOCs.....	6
3.5	SVOCs.....	6
3.6	Petroleum Hydrocarbons.....	6
3.7	RCRA Characteristics.....	6
4.0	CONCLUSIONS AND RECOMMENDATIONS.....	7

FIGURES

Figure 1	Location Map
Figures 2a-2c	Soil Sampling Locations

TABLES

Table 1	Summary of Soil Analysis
Table 2	Summary of TCLP & RCRA Analysis
Table 3	Reuse/Disposal Options

APPENDICES

Appendix A	Site Photographs
Appendix B	Boring Logs
Appendix C	Laboratory Analysis
Appendix D	CENJ Laboratory Analysis

1.0 FIELD SAMPLING SUMMARY REPORT

1.1 Introduction and Purpose

American Environmental Solutions, Inc. (AES) of Patchogue, New York, has been contracted by IPC Resiliency Partners (IPC) of Great Neck, New York, as their project environmental consultant to perform in-situ soil sampling and prepare a Field Sampling Summary Report (FSSR) for the New York City Department of Design and Construction (NYCDDC) East Side Coastal Resiliency project (Project No. SANDRESM1) located in Manhattan, New York.

The project work area extends approximately 1.5 miles along Manhattan's east side waterfront from East 15th Street to Montgomery Street, between FDR Drive and the East River. The site is primarily comprised of John V. Lindsay East River Park. This work area has been designated Project Area One. Due to the size and scope of the project, work areas have been delineated into Reaches A through J. The project location is shown on Figure 1.

The East Side Coastal Resiliency (ESCR) project involves construction of flood protection measures including installation of flood walls and closure structures. Project plans include construction of an above ground floodwall, a transition retaining wall, and installation of flood gates. The scope of work also includes infrastructure improvements to mitigate risk of flood damage including reconstruction of water mains and sewers. East River Park will be elevated nine feet and reconstructed, including existing park structures and recreational features, the amphitheater, track facility and tennis house. Proposed work also includes construction of new pedestrian bridges, street lighting and traffic work.

Soil sampling was performed by AES on December 20th and 21st, 2023 and January 11th, 2024 in accordance with the approved Field Sampling Plan (FSP) prepared for the project. The objective of this soil investigation was to evaluate the soil to be excavated for possible reuse on-site and to respond to the waste characterization protocols established by proposed disposal facilities to characterize contaminated materials to be generated on-site. This FSSR was established in accordance with specification Section ESCR 8.01 C2.1 (9) In-Situ and Ex-Situ Soil Sampling and Analysis for Waste Disposal Parameters.

1.2 Site Background and History

The work area has a long history of commercial, industrial and residential site use. Subsurface soil and groundwater is likely to be impacted by former Manufactured Gas Plant (MGP) facilities that were historically located in the northern project area (East 11th Street Works and East 14th Street Works) dating back to the early 1900's. Soil and groundwater encountered in the vicinity of former MGP operations during site redevelopment may be impacted by MGP wastes including coal tar and non-aqueous phase liquid (NAPL).

A Subsurface Investigation (SI) was conducted by AKRF Engineering, P.C. of New York, New York on behalf of NYCDDC during April through June 2015 in order to evaluate the nature and extent of subsurface soil and groundwater contamination which may impact construction activities on-site. Findings of the SI indicated material to be excavated during the course of work may be impacted by MGP wastes and historic fill material located in the subsurface.

The SI conducted included advancement of sixty-eight (68) deep soil borings and eighty-eight (88) shallow borings in the work area. Deep borings were advanced to 40 feet below grade surface (ftbg) or refusal and shallow soil borings were advanced to four ftbg during the investigation. Soil samples collected were analyzed for Target Compound List (TCL) VOCs, SVOCs, PCBs and Pesticides and Target Analyte List (TAL) Metals. Seventy-two (72) shallow samples were also analyzed for herbicides. Eleven deep soil samples were also analyzed for waste characterization parameters including TCLP RCRA Metals, TCLP VOCs, Reactivity, Corrosivity and Ignitability, total cyanide and Total Petroleum Hydrocarbons (TPH) Diesel Range Organics (DRO).

Evidence of MGP contamination was observed in a number of deep soil borings including elevated PID readings, oily sheens, viscous NAPL, significant staining and odor consistent with coal tar and petroleum at depths from 5 to 40 ftbg. Deep soil samples generally contained volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and metals. Lab analysis indicated a number of deep soil samples collected contained concentrations of VOCs, SVOCs and metals exceeding applicable New York State Department of Environmental Conservation (NYSDEC) 6 NYCRR Part 375 criteria.

Shallow soil borings advanced to four ftbg were observed to contain topsoil and mulch underlain by sandy fill materials, sand and gravel and rock fragments. Elevated concentrations of SVOCs and metals were generally detected in shallow soil samples. Levels of SVOCs and metals detected were attributed to the presence of historic fill in shallow samples.

2.0 SUBSURFACE INVESTIGATION ACTIVITIES

2.1 Soil Sampling and Sample Collection

AES performed in-situ sampling in Reached F and G at the ESCR project on December 20th and 21st, 2023. A total of thirty (30) soil borings were advanced using a Geoprobe drill rig provided by Associated Environmental Services, of Hauppauge, New York. Boring locations are described below:

- Thirteen boring locations identified as DEP-76 through DEP-84 and DEP-89 through DEP-92 were advanced to depths up to 20 ftbg in areas to be excavated for installation of NYCDEP sewers.
- Thirteen boring locations (G-119-G-124, G-135-G-138, G-148-G-150) were advanced to 4 ftbg in areas of general excavation to remove soil located above workable grade.
- Four boring locations (DM-100-DM-103) were advanced to 15 ftbg in areas of excavation for installation of dead men sheeting.

Grids representing 500 cubic yards of soil to be excavated were established by IPC and one boring was advanced in each grid. One 5-point composite and one VOC grab sample were collected from each boring location. Site photographs are shown in Appendix A. Soil boring logs are included in Appendix B.

AES returned to the site on January 11th, 2024 to collect one sample in Reach F (NCM-57) from material stockpiled on-site. The material was generated during excavation for coffer dam installation for the outfall tie-in. The stockpile sample was collected using stainless steel trowels from at least two feet below the soil surface. One grab sample was collected for VOC analysis and a five-point composite sample was collected and analyzed for the remaining analytical parameters.

Soil samples were field screened using a photoionization detector (PID) during the sampling event. All PID readings collected during were 0.0 parts per million (ppm). Soil sampling locations are shown on Figures 2a – 2c. Soil boring logs are included in Appendix B.

2.2 Laboratory Analysis

Soil samples collected were analyzed for parameters discussed in the approved Field Sampling Plan and in accordance with Contract Specifications. The 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) (if required by the selected disposal facility);
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);
Extractable Petroleum Hydrocarbons (EPH);
Target Analyte List Metals (TAL) (Method 6010);
Target Compound List (TCL) VOCS (Method 8260) and SVOCS (Method 8270).

Soil samples collected were delivered in coolers with ice to Phoenix Environmental Laboratories, Inc. for analysis. Their contact information is shown below:

Phoenix Environmental Laboratories, Inc.
587 East Middle Turnpike
PO Box 370
Manchester, Connecticut 06040
Phone: (860) 645-1102/ Fax: (860) 645-0823

Phoenix Environmental Laboratories is New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified (NY ELAP No. 11301), New Jersey Department of Environmental Protection (NJDEP) Certification No. CT003 for the specified methods. Laboratory analytical reports are included in Appendix C.

3.0 EVALUATION OF SOIL ANALYSIS

Soil results were evaluated by comparing them to New York State Department of Environmental Conservation (NYSDEC) Part 375-6 Commercial Soil Cleanup Objectives (CSCOs) and Restricted Residential SCOs (RRSCOs) per Specification Section 8.01 C1.1 (A). In accordance with contract specifications, soil meeting Commercial SCOs may be reused on-site as backfill in areas of street work and soil meeting Restricted Residential SCOs may be reused on-site in areas of parkland. Soil reused on-site as backfill may not exhibit visual evidence of contamination such as the presence of staining, odors or discoloration and may not contain physical evidence of coal ash, municipal solid wastes, construction and demolition debris or dredged spoils. Soil reused on-site must be below a structure, beneath a roadbed or other paved area, or beneath a soil cap in unpaved areas. Compounds detected in soil samples compared to applicable Part 375 criteria are shown on Table 1.

Soil analysis for TCLP and Resource and Conservation Recovery Act (RCRA) Characteristics were evaluated by comparing the results to Toxicity Characteristic Regulatory Levels and Regulatory Levels for Hazardous Waste published in RCRA, 6 New York Codes Rules and Regulations (NYCRR) Part 371 or 40 Code of Federal Regulations (CFR) Section 261. Compounds detected in soil samples compared to applicable hazardous waste criteria are shown on Table 2. Laboratory analysis is included in Appendix C.

3.1 Metals

The soil samples collected were analyzed for Target Analyte List (TAL) metals and TCLP metals. A number of TAL metals were detected in all 31 samples collected. Metals were detected in sample DEP-82 in concentrations exceeding RRSCOs. Samples DEP-76, DM-101, DEP-80, DEP-84, DEP-89, DEP-90, DEP-91 and NCM-57 contained metals in concentrations exceeding CSCOs. A summary of TAL Metals analysis is shown on Table 1.

Lab analysis for TCLP metals indicated barium was detected in all 31 samples collected in concentrations falling below regulatory levels. TCLP lead was detected in 21 of 31 samples in concentrations falling below regulatory levels. TCLP mercury was detected in one sample. A summary of TCLP analysis is shown on Table 2.

Soil excavated from grid location DEP-80 was transported to Clean Earth of North Jersey (CENJ) located in Kearney, New Jersey on May 14th, 2024. CENJ sampled and tested the incoming loads of material and the laboratory analysis indicated the soil contained TCLP lead detected at a concentration of 5.56 mg/L which exceeds the USEPA Hazardous Waste Limit of 5.00 mg/L. 230.49 tons of material disposed from this location will be treated as hazardous soil at CENJ.

3.2 PCBs

There were no PCBs detected in the thirty-one samples collected.

3.3 Pesticides

A number of pesticides were detected in 15 of 31 samples collected in concentrations falling below RRSCOS and CSCOs. There were no TCLP Pesticides or Herbicides detected in the samples collected.

3.4 VOCs

VOCs were detected in 11 of 31 samples collected in concentrations falling below RRSCOs and CSCOs. VOCs detected are summarized on Table 1.

There were no TCLP VOCs detected in the samples collected.

3.5 SVOCs

Soil samples collected were analyzed for TCL SVOCs and TCLP SVOCs. A number of SVOCs were detected in 30 of 31 samples collected. Samples collected from borings DEP-84 and G-137 contained SVOCs in concentrations exceeding RRSCOs. The samples collected from locations DEP-76, DEP-77, G-122, DM-102, DEP-80, DEP-81, DEP-82, DEP-89, DEP-90, DEP-91, DM-103, G-138 and NCM-57 contained SVOCs in concentrations exceeding CSCOs. A summary of SVOC analysis is shown on Table 1.

There were no TCLP SVOCs detected in the samples collected.

3.6 Petroleum Hydrocarbons

Nine samples collected contained Extractable Petroleum Hydrocarbons (EPH) in total concentrations ranging from 19 to 1670 ppm. Nine samples collected contained Total Petroleum Hydrocarbons (TPH) Diesel Range Organics (DRO) or Gasoline Range Organics (GRO). There are no regulatory standards available for TPH and EPH. EPH and TPH detections are summarized on Table 1.

3.7 RCRA Characteristics

Ignitability (flash point), reactivity (cyanide and sulfide) and corrosivity (pH) were all within acceptable ranges in the samples collected. Laboratory analysis for RCRA Characteristics are summarized in Table 2.

Soil excavated from grid location DEP-80 was transported to Clean Earth of North Jersey (CENJ) located in Kearney, New Jersey on May 14th, 2024. CENJ sampled and tested the incoming loads of material for TCLP metals as part of their usual compliance procedures. The laboratory analysis indicated the soil contained TCLP lead detected at a concentration of 5.56 mg/L which exceeds the USEPA Hazardous Waste Limit of 5.00 mg/L. 230.49 tons of material disposed from this location will be treated as hazardous soil at CENJ.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Based on review and evaluation of analytical data and field screening, AES offers the following conclusions and recommendations:

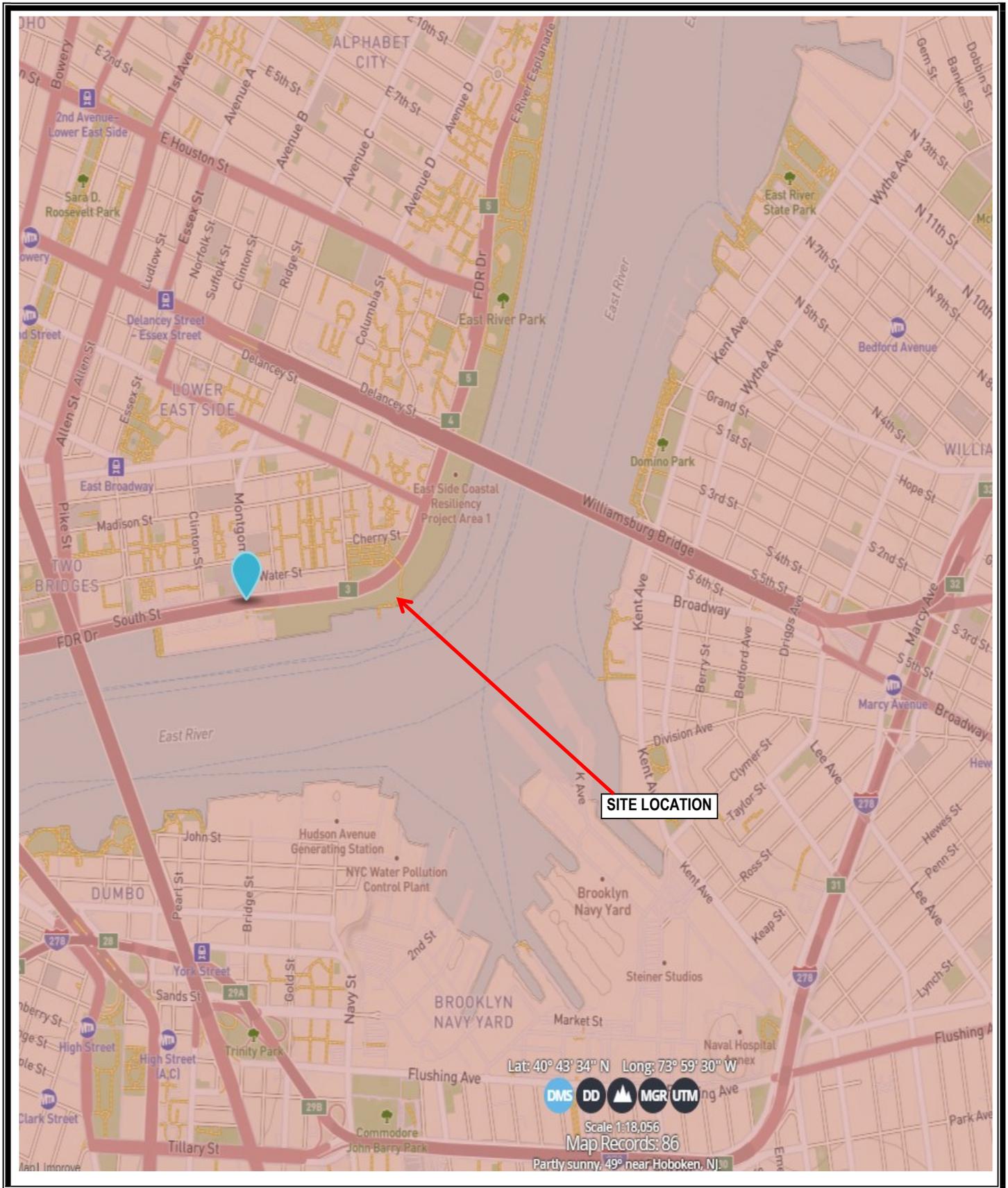
- Waste characterization analysis indicated hazardous material was not identified during the December 2023 subsurface investigation. There were no exceedances of Toxicity Characteristic Regulatory Levels and Regulatory Levels for Hazardous Waste published in RCRA, 6 New York Codes Rules and Regulations (NYCRR) Part 371 or 40 Code of Federal Regulations (CFR) Section 261.
- Eight loads of soil excavated at grid location DEP-80 were transported to Clean Earth of North Jersey (CENJ) located in Kearny, New Jersey, a New Jersey Department of Environmental Protection (NJDEP) permitted facility on May 14th, 2024. Testing was performed at CENJ on the incoming loads of material and the laboratory analysis indicated the soil contained TCLP lead detected at a concentration of 5.56 mg/L which exceeds the USEPA Hazardous Waste Limit of 5.00 mg/L. The total quantity of soil disposed was 230.49 tons. All soil to be excavated from grid DEP-80 for sewer installation has been removed from the site and transported to CENJ for disposal. The soil will be treated as hazardous soil by CENJ. During removal of sheeting located in grid DEP-80, air monitoring will be performed in accordance with the Community Air Monitoring Plan (CAMP) currently on file with DDC. Lab analysis provided by CENJ is included in Appendix D.
- Material encountered during site excavation exhibiting visual/olfactory evidence of contamination (such as odor, staining, fill material or debris) or elevated PID readings should not be reused as backfill and should be stockpiled separately on polyethylene sheeting and covered with poly sheeting. Additional lab analysis may be required to evaluate disposal options at a licensed, permitted disposal facility.
- Dust suppression measures such as wetting the work area should be implemented by IPC during excavation of contaminated materials in order to mitigate exposure of workers and the public to site contaminants.

- Waste profiles will be completed for submission to the proposed disposal facility to accept the material. NYCDDC OEHS shall review and sign waste profiles before transportation to the treatment/storage/disposal (TSD) facility.

Soil sampled exceeding Commercial Use Soil Cleanup Objectives (CSCOs) is not suitable for reuse as backfill on-site. Soil containing compounds exceeding CSCOs should be transported off-site at a permitted facility pursuant to all federal, state, and local regulations and contract specifications.

Soil sampled meeting CSCOs but exceeding RRSCOs may be suitable for reuse on-site as backfill in areas of road work. Soil used as backfill on-site may not exhibit evidence of contamination such as odor, staining or presence of historic fill material. Sampling locations exceeding CSCOs and/or RRSCOs are shown on Table 3.

FIGURES

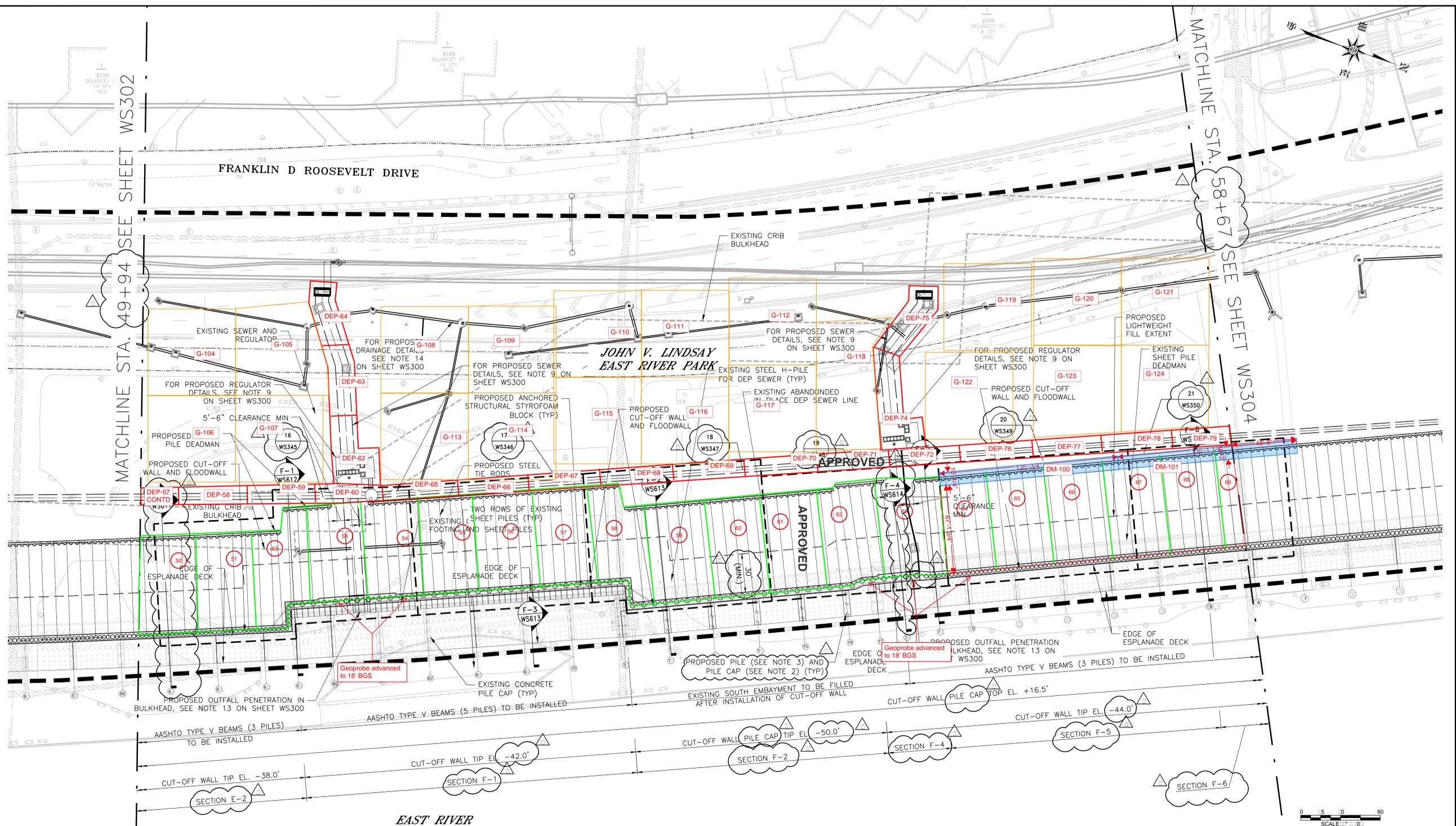


Site Location Map
East Side Coastal Resiliency
From Montgomery Street to 15th Street
New York, NY

AES Project No. 0897
 Field Sampling Summary Report
 NTS Not to Scale

Figure 1
 American Environmental
 Solutions, Inc.

SANDRESM1 BIDDABLE PACKAGE 2/21/2020



MATCHLINE STA. 49+94 SEE SHEET WS302

MATCHLINE STA. 58+67 SEE SHEET WS304

LEGEND:

--- LIMITS OF WORK

--- PROPOSED COMB. SEWER

NOTE:

- FOR NOTES, REFER TO SHEET WS300.
- REFER TO SHEET WS511 FOR PROPOSED PILE CAP DETAILS.
- REFER TO SHEETS WS500 AND WS501 FOR PROPOSED PILE DETAILS.

FOR BID

SUBMITTED DATE: 02/21/2020

NO.	DATE	DESCRIPTIONS	BY	APPR'D
4	4/7/2021	SANDRESM1 BULLETIN	JM	DF
3	7/16/2020	DRAWING REVISED	MKS	DF
2	6/26/2020	DRAWING REVISED	BP	DF
1	5/28/2020	DRAWING REVISED	JM	DF

FINAL DESIGN SUBMITTED BY:
AKRF KSE
 The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ch2m
 CH2M HILL NEW YORK, INC.
 NAME OF CONSULTANT

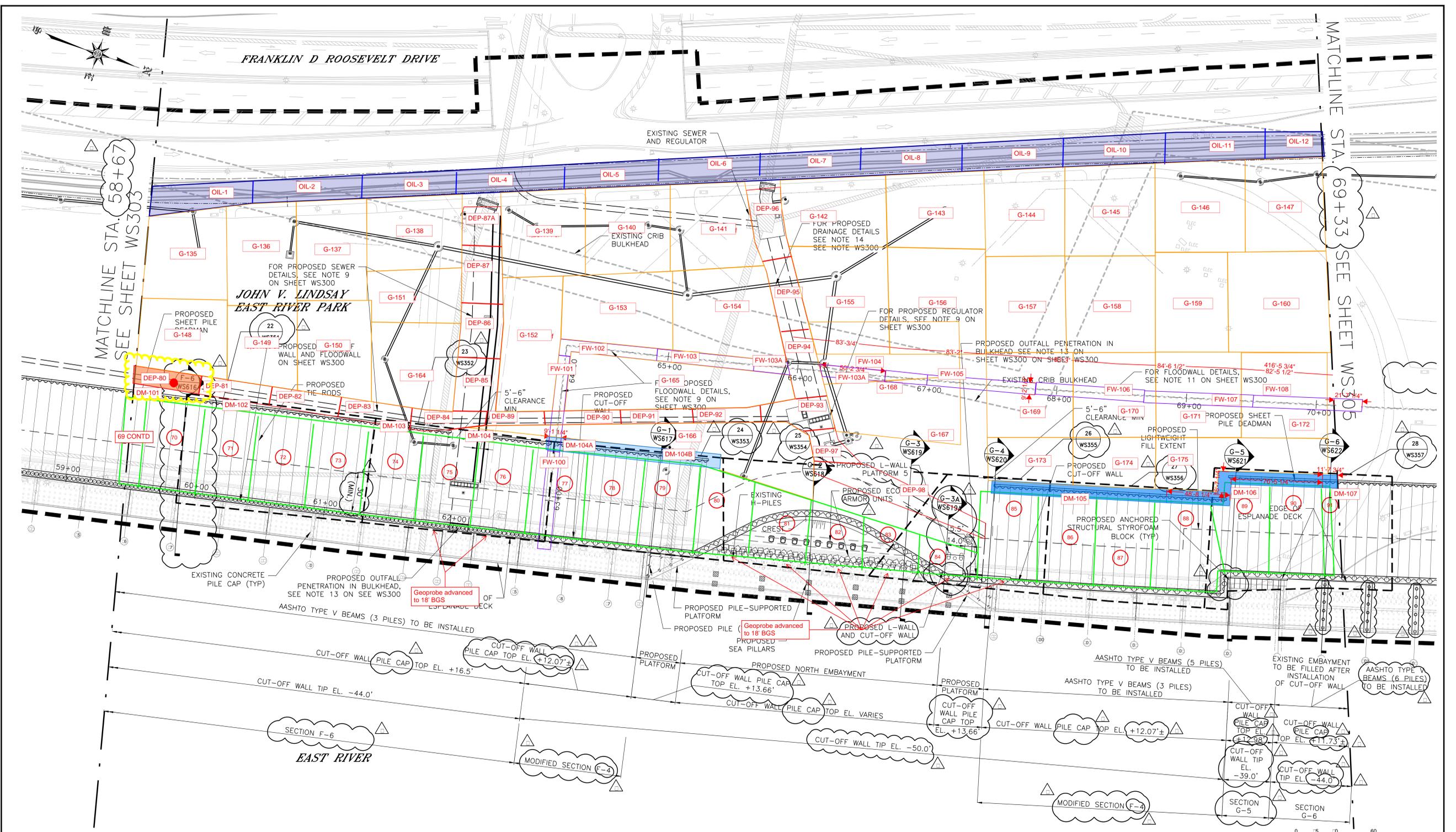
SIGNATURE: 
 DATE: _____

CITY OF NEW YORK
 DEPARTMENT OF DESIGN + CONSTRUCTION
 DIVISION OF INFRASTRUCTURE
 BUREAU OF DESIGN

WATERFRONT STRUCTURAL PLAN
 SEGMENT 2 - REACH F
 STA. 49+94 - 58+67
 CH2M DRAWN BY: _____
 SANDRESM1-WS303-04.DWG
 CADD FILE

INSTALLATION OF
 EAST SIDE COASTAL RESILIENCY
 BOROUGH OF MANHATTAN
 CAPITAL PROJECT NO. SANDRESM1 2/21/20 SHEET 729 OF 2791 WS303

SANDRESM1 BIDDABLE PACKAGE 2/21/2020



LEGEND:

--- LIMITS OF WORK

--- PROPOSED COMB. SEWER

NOTE:

1. FOR NOTES, REFER TO SHEET WS300.

FOR BID

SUBMITTED DATE: 02/21/2020

NO.	DATE	DESCRIPTIONS	BY	APPR'D
4	4/7/2021	SANDRESM1 BULLETIN	JM	DF
3	7/16/2020	DRAWING REVISED	MKS	DF
2	6/26/2020	DRAWING REVISED	BP	DF
1	5/28/2020	DRAWING REVISED	JM	DF

FINAL DESIGN SUBMITTED BY:

AKRF KSE

The AKRF-KSE JV

FINAL DESIGN PREPARED BY:

ch2m

CH2M HILL NEW YORK, INC.
NAME OF CONSULTANT

SIGNATURE

DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

WATERFRONT STRUCTURAL PLAN
SEGMENT 2 - REACH G
STA. 58+67 - 69+33

CH2M DRAWN BY

SANDRESM1-WS304-04.DWG
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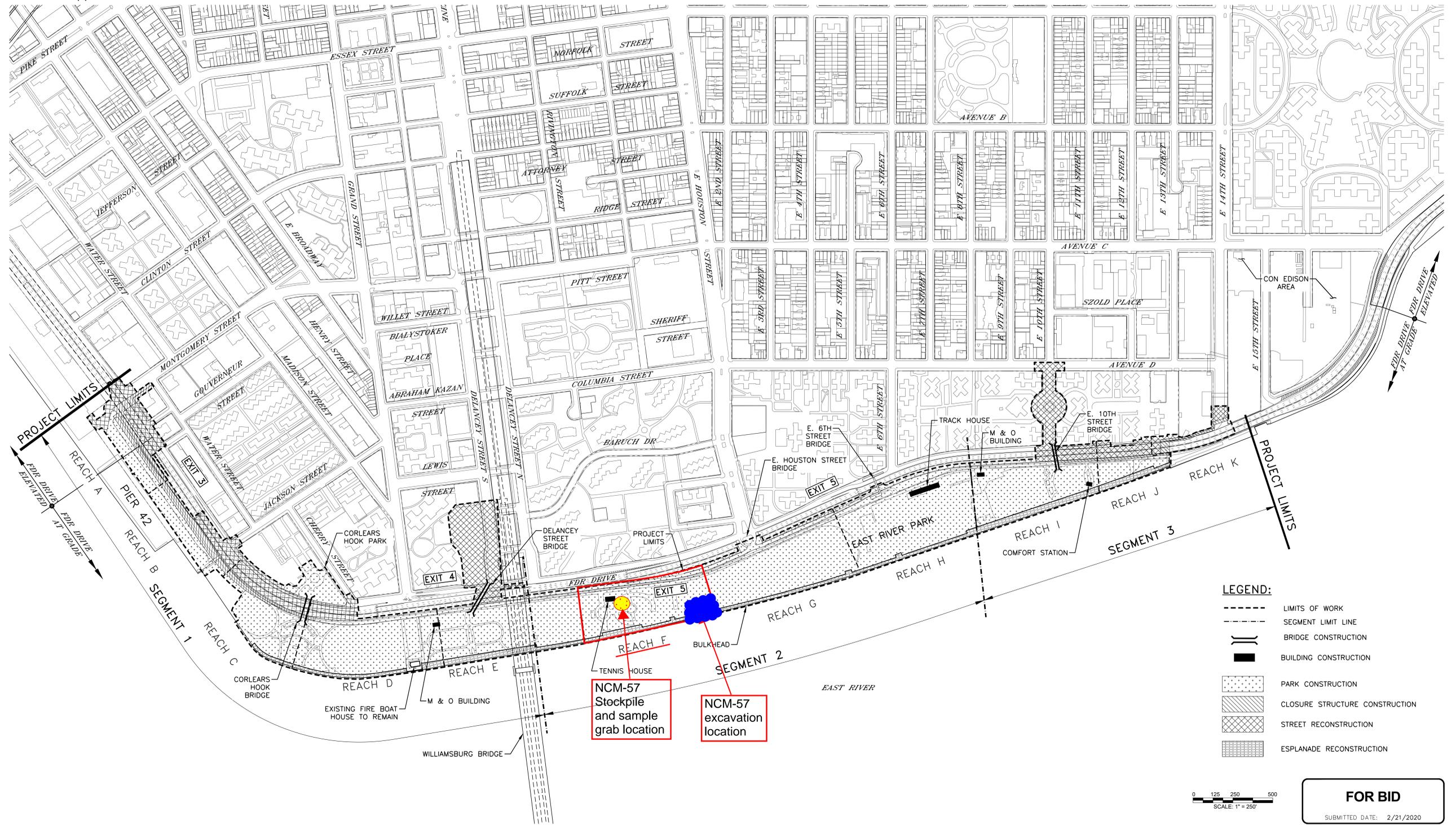
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 2/21/20

SHEET 730 OF 2791

WS304

SANDRESM1 BIDDABLE PACKAGE 2/21/2020



- LEGEND:**
- LIMITS OF WORK
 - SEGMENT LIMIT LINE
 - BRIDGE CONSTRUCTION
 - BUILDING CONSTRUCTION
 - PARK CONSTRUCTION
 - CLOSURE STRUCTURE CONSTRUCTION
 - STREET RECONSTRUCTION
 - ESPLANADE RECONSTRUCTION

0 125 250 500
SCALE: 1" = 250'

FOR BID
SUBMITTED DATE: 2/21/2020

NO.	DATE	DESCRIPTIONS REVISIONS	BY	APPR'D

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
KSE
KS ENGINEERS, P.C.
NAME OF CONSULTANT



CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

PROJECT GENERAL CONSTRUCTION
PLAN
KSE
DRAWN BY
SANDRESM1-TC101-00.dwg
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN
CAPITAL PROJECT NO. SANDRESM1 2/21/20
SHEET 2651 OF 2791
TC101

TABLES

EAST SIDE COASTAL RESILIENCY FROM MONTGOMERY STREET TO EAST 15TH STREET, MANHATTAN
 NYCDDC PROJECT SANDRESM1
 IPC RESILIENCY PARTNERS

TABLE 1: SUMMARY OF SOIL ANALYSIS - SAMPLES COLLECTED 12/20/23

Parameter	Compounds Detected	Unit	NYSDEC Part 375 Commercial Use Soil Cleanup Objectives	NYSDEC Part 375 Restricted Residential Soil Cleanup Objectives	DEP-76	DEP-77	DEP-78	DEP-79	G-119	G-120	G-122	G-123	DM-100	DM-101	DM-102	G-124	G-121
PCBs	None detected	ppm	-	-	ND												
Pesticides/Herbicides	4,4-DDD	ppm	92	13	ND	ND	ND	ND	ND	0.0036	ND						
	4,4-DDE	ppm	62	8.9	0.0097	ND	ND	ND	ND	0.066	0.015	0.0079	ND	ND	ND	ND	0.023
	4,4-DDT	ppm	47	7.9	0.011	ND	ND	ND	ND	0.04	0.0063	0.013	ND	ND	0.023	ND	0.022
	Aldrin	ppm	0.68	0.097	ND	ND	ND	ND	ND	ND	0.0087	ND	ND	ND	ND	ND	ND
	Dieldrin	ppm	24	4.2	0.013	ND	0.0048	ND	ND								
TAL Metals	Aluminum	ppm	NS	NS	3710	8350	870	10700	8370	11000	11400	6650	6260	9470	8420	6020	9280
	Antimony	ppm	NS	NS	4.8	ND											
	Arsenic	ppm	16	16	2.4	2	3.11	3.25	1.94	8.92	2.54	5.92	2.28	3.81	2.62	4.86	6.57
	Barium	ppm	400	400	1300	69.2	162	101	71.7	127	93.3	58.1	40.1	522	73.8	38.4	118
	Beryllium	ppm	590	72	ND	.4	.41	.49	.34	.52	.48	.51	.34	.42	.4	.45	.51
	Cadmium	ppm	9.3	4.3	0.64	0.78	1.75	.71	.69	1.23	1.46	.82	ND	.4	ND	ND	.98
	Calcium	ppm	NS	NS	17,300	11,000	15,600	2130	3290	4860	11,600	1,490	27,200	14,000	2,600	689	3,930
	Chromium	ppm	1500	180	17.8	23.4	18.2	18.1	13.5	23.9	20.3	20.3	13.9	20.1	13.9	15.7	21.7
	Hexavalent Chromium	ppm	400	110	ND												
	Trivalent Chromium	ppm	1500	180	17.8	23.4	18.2	18.1	13.5	23.9	20.3	20.6	13.9	20.1	13.9	15.7	21.7
	Cobalt	ppm	NS	NS	2.18	6.69	7.6	6.99	6.72	7.5	9.52	6.22	4.79	9.05	7.49	5.12	7.69
	Copper	ppm	270	270	54.9	22.6	42.7	22.5	15.5	44.4	34.8	21.6	13.1	31.5	30.1	13.2	39.1
	Iron	ppm	NS	NS	7,730	13,200	15,400	14,100	14,100	17,900	18,600	15,800	12,100	17,500	17,200	13,400	19,500
	Lead	ppm	1000	400	2270	94.4	215	48.4	29	224	85.3	70.6	38.6	562	108	23.5	296
	Manganese	ppm	10,000	2000	92	181	266	361	229	317	280	237	257	321	169	186	442
	Magnesium	ppm	NS	NS	15800	5110	4800	2910	3140	3420	7880	1780	6660	6080	3850	919	2720
	Mercury	ppm	2.8	0.81	0.91	0.19	0.53	.08	.04	22	.2	.09	ND	1	.11	ND	.28
	Nickel	ppm	310	310	7.52	22.9	15.3	14.6	16.5	19.3	22.5	12.3	12.8	20.4	16.9	7.42	17.4
	Silver	ppm	1500	180	ND												
	Sodium	ppm	NS	NS	120	748	962	123	156	175	220	194	217	254	151	42	102
Potassium	ppm	NS	NS	398	2110	2430	733	873	1140	3080	950	1170	40410	2240	795	1240	
Vanadium	ppm	NS	NS	14.7	24.7	27.1	25.8	16.6	37.2	30.3	34.6	15.6	26.3	20.1	22.5	32.1	
Zinc	ppm	10,000	10,000	454	92.3	211	49.6	42.3	200	80.3	62.5	34	146	70.1	44.9	208	
Semi-Volatile Organic Compounds	1,1-Biphenyl	ppm	NS	NS	ND	.85	ND	ND									
	2,4-Dimethylphenol	ppm	NS	NS	ND	.37	ND	ND									
	2-Methylnaphthalene	ppm	NS	NS	28	.8	ND	2.6	ND	ND							
	3&4-Methylphenol	ppm	500	100	ND	.47	ND	.56	ND	ND							
	Acenaphthene	ppm	500	100	1.6	3.3	ND	.29	7.2	ND							
	Acenaphthylene	ppm	500	100	ND	2.2	ND										
	Anthracene	ppm	500	100	5.2	17	ND	.64	14	ND							
	Benzo(a)anthracene	ppm	5.6	1	14	42	.4	.34	ND	29	1.4	ND	ND	ND	.81	17	ND
	Benzo(a)pyrene	ppm	1	1	17	38	.38	.5	ND	.34	1.6	ND	ND	ND	.7	16	ND
	Benzo(b)fluoranthene	ppm	5.6	1	18	45	.44	.47	ND	38	2.1	ND	ND	ND	.76	17	ND
	Benzo(ghi)perylene	ppm	500	100	9.9	18	ND	.48	ND	29	1.3	ND	ND	ND	.3	6.1	ND
	Benzo(k)fluoranthene	ppm	56	3.9	5.3	16	ND	ND	ND	ND	.75	ND	ND	ND	.3	4.6	ND
	Bis(2-ethylhexyl)phthalate	ppm	NS	NS	ND	.32											
	Carbazole	ppm	NS	NS	1	3.4	ND	6.3	ND								
	Chrysene	ppm	56	3.9	13	39	.36	.29	ND	29	1.4	ND	ND	ND	.71	16	ND
	Dibenz(a,h)anthracene	ppm	0.56	.33	2	6	ND	ND	ND	ND	.26	ND	ND	ND	ND	1.4	ND
	Dibenzofuran	ppm	NS	NS	1	2.1	ND	6.3	ND								
	Fluoranthene	ppm	500	100	32	110	.97	.69	ND	58	2.1	27	ND	2	ND	ND	.38
	Fluorene	ppm	500	100	1.7	3.9	ND	.33	9.6	ND							
	Indeno(1,2,3-cd)pyrene	ppm	5.6	0.5	11	24	ND	.49	ND	29	1.3	ND	ND	ND	.36	7.2	ND
Naphthalene	ppm	500	100	.46	2	.55	ND	5.2	ND								
Phenanthrene	ppm	500	100	20	29	.58	.31	ND	35	5.5	ND	ND	ND	2.4	47	ND	
Phenol	ppm	500	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	.27	ND	
Pyrene	ppm	500	100	28	71	.9	.65	ND	58	2.1	ND	ND	ND	1.7	ND	.34	
Cyanide	Cyanide	ppm	27	27	ND												
Volatile Organic Compounds	Acetone	ppm	500	100	ND	0.088	0.059	ND	ND	ND	ND	ND	ND	0.11	ND	ND	ND
	Benzene	ppm	44	4.8	0.08	ND											
	Ethylbenzene	ppm	390	41	ND	ND	ND	ND	ND	ND	0.0052	ND	ND	ND	ND	ND	ND
	Carbon Disulfide	ppm	NS	NS	ND	0.017	ND										
	Methyl ethyl ketone	ppm	500	100	ND	0.036	ND	ND									
	m & p-xylene	ppm	NS	NS	ND	ND	ND	ND	ND	ND	0.011	ND	ND	ND	ND	ND	ND
	o-Xylene	ppm	NS	NS	ND	ND	ND	ND	ND	ND	0.0071	ND	ND	ND	ND	ND	ND
	Total Xylenes	ppm	500	100	ND	ND	ND	ND	ND	ND	0.0181	ND	ND	ND	ND	ND	ND
	Toluene	ppm	500	100	ND	ND	ND	ND	ND	ND	0.0066	ND	ND	ND	ND	ND	ND

Parameter	Compounds Detected	Unit			DEP-76	DEP-77	DEP-78	DEP-79	G-119	G-120	G-122	G-123	DM-100	DM-101	DM-102	G-124	G-121
EPH	>C28-C40	ppm	NS	NS	ND	400	ND	ND	270	ND	570	ND	ND	ND	ND	ND	ND
	C9-C28	ppm	NS	NS	ND	770	19	ND	250	ND	1100	ND	ND	ND	ND	ND	ND
	Total EPH	ppm	NS	NS	ND	1170	19	ND	520	ND	1670	ND	ND	ND	ND	ND	ND
TPH	DRO	ppm	NS	NS	ND	460	ND	ND	ND	ND	430	ND	ND	ND	1300	ND	ND
	GRO	ppm	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

ND Not detected

NS No regulatory criteria available

Green highlighted concentrations exceed NYSDEC Part 375 Restricted Residential Soil Cleanup Objectives

Yellow highlighted concentrations exceed NYSDEC Part 375 Restricted Residential and Commercial Soil Cleanup Objectives

EAST SIDE COASTAL RESILIENCY FROM MONTGOMERY STREET TO EAST 15TH STREET, MANHATTAN
 NYCDDC PROJECT SANDRESM1
 IPC RESILIENCY PARTNERS

TABLE 1: SUMMARY OF SOIL ANALYSIS - SAMPLES COLLECTED 12/21/23

Parameter	Compounds Detected	Unit	NYSDEC Part 375 Commercial Use Soil Cleanup Objectives	NYSDEC Part 375 Restricted Residential Soil Cleanup Objectives	DEP-80	DEP-81	DEP-82	DEP-83	DEP-84	DEP-89	DEP-90	DEP-91	DEP-92
PCBs	None detected	ppm	-	-	ND								
Pesticides/Herbicides	4,4-DDD	ppm	92	13	ND	ND	ND	ND	0.0026	ND	ND	ND	ND
	4,4-DDE	ppm	62	8.9	0.008	ND	ND	ND	0.0091	ND	ND	0.015	ND
	4,4-DDT	ppm	47	7.9	0.0036	ND	ND	ND	0.0029	ND	ND	0.0055	ND
TAL Metals	Aluminum	ppm	NS	NS	9870	7410	8820	5500	6000	3980	7280	7820	7650
	Antimony	ppm	NS	NS	ND	9.4							
	Arsenic	ppm	16	16	9.2	5.29	4.76	6.2	39.7	3.49	3	2.99	2.94
	Barium	ppm	400	400	213	123	130	70.5	108	1240	471	431	288
	Beryllium	ppm	590	72	.79	.5	.57	.37	.45	ND	ND	.37	.41
	Cadmium	ppm	9.3	4.3	1.26	ND	0.44	ND	ND	.43	.35	.67	ND
	Calcium	ppm	NS	NS	24,800	9,840	15,700	7530	8120	38300	7060	8190	13900
	Chromium	ppm	1500	180	25.6	14	21	14.6	18.7	9.78	9.35	20.4	15.9
	Hexavalent Chromium	ppm	400	110	ND								
	Trivalent Chromium	ppm	1500	180	25.6	14	21	14.6	18.7	9.78	9.35	20.4	15.9
	Cobalt	ppm	NS	NS	16.8	5.94	11.1	6.51	9.2	2.99	3.8	5.27	6.17
	Copper	ppm	270	270	517	46.7	48.5	25.7	43.9	32.1	19.8	94.2	22.7
	Iron	ppm	NS	NS	58,300	14,900	22,100	13,700	1,800	8,570	8,710	10,900	13,000
	Lead	ppm	1000	400	705	149	95.4	33	162	302	274	234	47.5
	Manganese	ppm	10,000	2000	520	233	458	655	289	145	149	35	205
	Magnesium	ppm	NS	NS	4770	2850	5600	2420	4400	2690	2220	7390	4110
	Mercury	ppm	2.8	0.81	0.77	0.53	1.24	.75	.21	.06	.38	.25	.22
	Nickel	ppm	310	310	233	16.6	21.8	16.3	14.9	9.01	11.1	17.6	14.8
	Silver	ppm	1500	180	ND								
	Sodium	ppm	NS	NS	634	741	428	128	513	260	411	777	204
Potassium	ppm	NS	NS	2500	1020	3400	902	2000	582	826	1010	1230	
Vanadium	ppm	NS	NS	78.4	19.5	30.8	.18	27.4	12	13.4	19.7	22.4	
Zinc	ppm	10,000	10,000	287	112	110	67.5	126	286	170	468	105	
Semi-Volatile Organic Compounds	2-Methylnaphthalene	ppm	NS	NS	.38	ND							
	Acenaphthene	ppm	500	100	.72	.48	.32	ND	ND	.74	.88	ND	ND
	Acenaphthylene	ppm	500	100	ND								
	Anthracene	ppm	500	100	1.1	.91	.67	ND	.45	1.7	1.6	.61	ND
	Benzo(a)anthracene	ppm	5.6	1	2.3	2.2	1.5	.65	1.0	2.7	2.5	1.9	.46
	Benzo(a)pyrene	ppm	1	1	2.5	2.4	1.6	.72	.89	2.5	2.6	1.9	.46
	Benzo(b)fluoranthene	ppm	5.6	1	3	2.6	1.8	.77	1.1	2.8	3.0	2.3	.53
	Benzo(ghi)perylene	ppm	500	100	1.3	1.2	.83	.39	.58	1	1.3	1.0	.31
	Benzo(k)fluoranthene	ppm	56	3.9	1	.83	.65	.28	.37	1.1	.97	.84	ND
	Bis(2-ethylhexyl)phthalate	ppm	NS	NS	ND								
	Carbazole	ppm	NS	NS	.44	ND	ND	ND	ND	.63	ND	ND	ND
	Chrysene	ppm	56	3.9	2.3	2.3	1.4	.63	1	2.6	2.4	1.7	.43
	Dibenz(a,h)anthracene	ppm	0.56	.33	.3	.28	.21	ND	ND	.28	.3	.25	ND
	Dibenzofuran	ppm	NS	NS	.44	ND	ND	ND	ND	.48	.51	ND	ND
	Fluoranthene	ppm	500	100	5.2	4.8	3.4	1.2	2.6	7.2	7	4.6	.83
	Fluorene	ppm	500	100	.71	.48	.33	ND	ND	.72	.51	ND	ND
	Indeno(1,2,3-cd)pyrene	ppm	5.6	0.5	1.3	1.2	.93	.43	.49	1.2	1.5	1.1	.31
	Naphthalene	ppm	500	100	1.1	.53	.29	ND	ND	.37	.35	ND	ND
	Phenanthrene	ppm	500	100	4.8	4.8	2.5	.88	1.9	6.1	4.7	2.7	.57
	Pyrene	ppm	500	100	4.8	5.3	2.8	1.1	2.6	6.1	6.1	3.9	.77
Cyanide	Cyanide	ppm	27	27	16.4	9.25	1.26	7.44	10.2	7.12	ND	6.39	ND
Volatile Organic Compounds	1,2,4-Trimethylbenzene	ppm	190	52	ND	0.034	ND						
	1,3,5-Trimethylbenzene	ppm	190	52	ND	0.02	ND						
	Acetone	ppm	500	100	0.065	ND							
	Benzene	ppm	44	4.8	ND								
	Ethylbenzene	ppm	390	41	ND	0.0087	ND	ND	0.15	ND	ND	ND	ND
	Carbon Disulfide	ppm	NS	NS	ND								
	Isopropylbenzene	ppm	NS	NS	ND	0.0052	ND						
	Methyl ethyl ketone	ppm	500	100	ND								
	m & p-xylene	ppm	NS	NS	ND	0.015	ND	ND	0.6	ND	ND	ND	ND
	o-Xylene	ppm	NS	NS	ND	0.011	ND	ND	0.16	ND	ND	ND	ND
	Total Xylenes	ppm	500	100	ND	0.026	ND	ND	0.76	ND	ND	ND	ND
Toluene	ppm	500	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	
EPH	>C28-C40	ppm	NS	NS	ND	140	ND						
	C9-C28	ppm	NS	NS	ND	770	ND	ND	ND	ND	ND	ND	24
	Total EPH	ppm	NS	NS	ND	910	ND	ND	ND	ND	ND	ND	24
TPH	DRO	ppm	NS	NS	130	ND	77	170	ND	ND	280	160	ND
	GRO	ppm	NS	NS	ND								

Notes:

EAST SIDE COASTAL RESILIENCY FROM MONTGOMERY STREET TO EAST 15TH STREET, MANHATTAN
 NYCDDC PROJECT SANDRESM1
 IPC RESILIENCY PARTNERS

TABLE 1: SUMMARY OF SOIL ANALYSIS - SAMPLES COLLECTED 12/21/23 & 1/11/24

Parameter	Compounds Detected	Unit	NYSDEC Part 375 Commercial Use Soil Cleanup Objectives	NYSDEC Part 375 Restricted Residential Soil Cleanup Objectives	DM-103	G-135	G-136	G-137	G-138	G-148	G-149	G-150	NCM-57
PCBs	None detected	ppm	-	-	ND								
Pesticides/Herbicides	4,4-DDD	ppm	92	13	ND	0.0066	ND	ND	ND	ND	ND	ND	0.0066
	4,4-DDE	ppm	62	8.9	ND	0.038	0.014	ND	ND	0.0063	0.0094	0.0032	0.0056
	4,4-DDT	ppm	47	7.9	ND	0.055	0.013	ND	ND	0.0066	0.011	0.0027	0.015
TAL Metals	Aluminum	ppm	NS	NS	7680	7430	10400	6580	7570	8300	6830	6420	6940
	Antimony	ppm	NS	NS	ND	ND	ND	ND	ND	ND	395	ND	ND
	Arsenic	ppm	16	16	3.94	5.45	7.76	5.85	2.94	2.92	7.11	4.2	8.02
	Barium	ppm	400	400	103	72.4	101	309	79.9	210	59.4	63.8	605
	Beryllium	ppm	590	72	.71	.39	.66	.44	.34	.59	.37	.49	ND
	Cadmium	ppm	9.3	4.3	ND	0.52	0.63	.44	ND	.48	ND	.36	2.07
	Calcium	ppm	NS	NS	12,700	3,660	2,080	5370	12200	3650	5880	1490	25,200
	Chromium	ppm	1500	180	26.8	17.6	22.1	17.8	.16	31.1	15.7	16.2	18.2
	Hexavalent Chromium	ppm	400	110	ND								
	Trivalent Chromium	ppm	1500	180	26.8	17.6	22.1	17.8	.16	31.1	15.7	16.2	18.2
	Cobalt	ppm	NS	NS	9.42	5.28	7.95	6.97	6.89	18.7	4.65	5.83	6.73
	Copper	ppm	270	270	30.3	31.5	38.9	36.9	28.8	32.8	22.3	25	55.8
	Iron	ppm	NS	NS	20,800	13,400	17,800	16,400	14,200	31,100	13,700	9,000	47,800
	Lead	ppm	1000	400	87.7	143	107	254	112	114	150	69.2	3610
	Manganese	ppm	10,000	2000	404	243	520	326	265	367	283	336	386
	Magnesium	ppm	NS	NS	6510	2430	2660	3160	5100	7380	2870	2540	8040
	Mercury	ppm	2.8	0.81	0.34	0.26	0.26	.18	.22	1.09	.59	.1	.21
	Nickel	ppm	310	310	26.2	13.8	17.4	15.7	23.6	30.5	14.1	15.6	19.1
	Silver	ppm	1500	180	ND	ND	ND	ND	ND	ND	10.1	ND	ND
	Sodium	ppm	NS	NS	336	71.6	94.2	112	303	206	113	154	3300
Potassium	ppm	NS	NS	2500	977	765	1260	985	11200	1250	915	1210	
Vanadium	ppm	NS	NS	29	28.7	35	24.2	.21	45.8	20.7	21.6	25.8	
Zinc	ppm	10,000	10,000	57.9	178	125	128	86.7	112	68.7	75.8	406	
Semi-Volatile Organic Compounds	1,1-Biphenyl	ppm	NS	NS	ND	.37							
	2-Methylnaphthalene	ppm	NS	NS	ND	ND	ND	ND	.35	ND	ND	ND	1.6
	Acenaphthene	ppm	500	100	ND	ND	ND	ND	1.2	ND	ND	ND	2.6
	Acenaphthylene	ppm	500	100	ND	ND	ND	ND	.61	ND	ND	ND	.33
	Anthracene	ppm	500	100	2.8	ND	ND	ND	2.7	ND	ND	ND	2
	Benz(a)anthracene	ppm	5.6	1	1.9	.83	ND	.85	7	.36	ND	ND	3.1
	Benzaldehyde	ppm	NS	NS	ND	.51							
	Benzo(a)pyrene	ppm	1	1	1.8	.79	ND	.94	7.8	.43	.29	ND	2.6
	Benzo(b)fluoranthene	ppm	5.6	1	2.2	.94	.29	1.1	9.1	.5	.31	ND	3.1
	Benzo(ghi)perylene	ppm	500	100	.94	.38	ND	.48	4.8	.42	ND	ND	1.4
	Benzo(k)fluoranthene	ppm	56	3.9	.79	.35	ND	.39	2.6	ND	ND	ND	1.1
	Carbazole	ppm	NS	NS	ND	ND	ND	ND	.89	ND	ND	ND	.68
	Chrysene	ppm	56	3.9	1.7	.86	ND	.83	7	.37	ND	ND	3.0
	Dibenz(a,h)anthracene	ppm	0.56	.33	.26	ND	ND	ND	1.3	ND	ND	ND	.36
	Dibenzofuran	ppm	NS	NS	ND	ND	ND	ND	.71	ND	ND	ND	1.6
	Fluoranthene	ppm	500	100	2.7	1.5	.35	1.4	16	.57	.38	ND	8.1
	Fluorene	ppm	500	100	ND	2.5							
	Indeno(1,2,3-cd)pyrene	ppm	5.6	0.5	1.1	.41	ND	.52	5.3	.45	ND	ND	1.5
Naphthalene	ppm	500	100	ND	ND	ND	ND	.57	ND	ND	ND	5.1	
Phenanthrene	ppm	500	100	.72	1.5	ND	.73	10	ND	ND	ND	8.8	
Pyrene	ppm	500	100	2.3	1.4	.33	1.3	14	.55	.38	ND	5.4	
Cyanide	Cyanide	ppm	27	27	ND	2.71	ND	6.61	ND	11.6	ND	ND	ND
Volatile Organic Compounds	1,2,4-Trimethylbenzene	ppm	190	52	ND	0.04							
	1,3,5-Trimethylbenzene	ppm	190	52	ND	0.015							
	p-Isopropyltoluene	ppm	NS	NS	ND	0.048							
	Carbon Disulfide	ppm	NS	NS	ND	0.013							
	Ethylbenzene	ppm	390	41	ND	0.02							
	m & p-xylene	ppm	NS	NS	ND	ND	ND	ND	ND	0.44	ND	ND	0.2
	o-xylene	ppm	NS	NS	ND	0.046							
Total Xylenes	ppm	500	100	ND	ND	ND	ND	ND	0.44	ND	ND	0.246	
EPH	>C28-C40	ppm	NS	NS	ND	ND	ND	ND	44	17	ND	ND	ND
	C9-C28	ppm	NS	NS	ND	ND	ND	ND	ND	20	ND	ND	140
	Total EPH	ppm	NS	NS	ND	ND	ND	ND	44	37	ND	ND	140
TPH	DRO	ppm	NS	NS	ND								
	GRO	ppm	NS	NS	ND	12							

Notes:

ND Not detected
 NS No regulatory criteria available
 Green highlighted concentrations exceed NYSDEC Part 375 Restricted Residential Soil Cleanup Objectives

**EAST SIDE COASTAL RESILIENCY FROM MONTGOMERY STREET TO EAST 15TH STREET, MANHATTAN
NYCDDC PROJECT SANDRESM1
IPC RESILIENCY PARTNERS
TABLE 2: SUMMARY OF TCLP & RCRA ANALYSIS - SAMPLES COLLECTED 12/20/2023**

Parameter	Compounds Detected	Unit	Regulatory Criteria	DEP-76	DEP-77	DEP-78	DEP-79	G-119	G-120	G-122	G-123	DM-100	DM-101	DM-102	G-124
RCRA Characteristics	pH	pH units	<2 or >12.5	8.53	8.28	7.91	7.94	8.3	7.78	8.19	6.88	8.48	8.19	8.07	7.63
	Flashpoint	° F	>200° F	>200°F	>200°F	>200°F	>200°F	>200°F	>200°F	>200°F	>200°F	>200°F	>200°F	>200°F	>200°F
	Ignitability	° F	<140° F	passed	passed	passed	passed	passed	passed	passed	passed	passed	passed	passed	passed
	Reactivity - Cyanide	ppm	—	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Reactivity - Sulfide	ppm	—	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOXICITY		Unit	USEPA Toxicity Characteristic Regulatory Criteria	DEP-76	DEP-77	DEP-78	DEP-79	G-119	G-120	G-122	G-123	DM-100	DM-101	DM-102	G-124
TCLP Metals	Barium	mg/L	100	1.43	0.62	0.53	1.22	0.59	0.97	0.47	0.67	0.89	0.65	0.9	0.65
	Lead	mg/L	5	0.68	ND	1.22	2.83	0.16	0.27	ND	ND	ND	0.19	1.23	ND
TCLP VOCs	None Detected			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TCLP SVOCs	None Detected			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TCLP Pests/Herbicides	None Detected	—	—	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

NS No regulatory criteria available

ND Not detected

Yellow highlighted concentrations and boring locations exceed hazardous waste regulatory criteria.

**EAST SIDE COASTAL RESILIENCY FROM MONTGOMERY STREET TO EAST 15TH STREET, MANHATTAN
NYCDDC PROJECT SANDRESM1
IPC RESILIENCY PARTNERS
TABLE 2: SUMMARY OF TCLP & RCRA ANALYSIS - SAMPLES COLLECTED 12/21/2023**

Parameter	Compounds Detected	Unit	Regulatory Criteria	G-121	DEP-80	DEP-81	DEP-82	DEP-83	DEP-84	DEP-89	DEP-90	DEP-91	DEP-92
RCRA Characteristics	pH	pH units	<2 or >12.5	7.76	7.88	8.24	8.27	8.49	8.42	8.21	9.11	7.76	8.76
	Flashpoint	° F	>200° F	>200°F	>200°F	>200°F	>200°F	>200°F	>200°F	>200°F	>200°F	>200°F	>200°F
	Ignitability	° F	<140° F	passed	passed	passed	passed	passed	passed	passed	passed	passed	passed
	Reactivity - Cyanide	ppm	—	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Reactivity - Sulfide	ppm	—	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOXICITY		Unit	USEPA Toxicity Characteristic Regulatory Criteria	G-121	DEP-80	DEP-81	DEP-82	DEP-83	DEP-84	DEP-89	DEP-90	DEP-91	DEP-92
TCLP Metals	Barium	mg/L	100	0.75	0.84	0.85	0.78	0.73	1.37	1.25	0.97	1.01	0.98
	Lead	mg/L	5	ND	4.52	1.31	2.2	0.21	0.18	ND	1.07	0.27	0.66
TCLP VOCs	None Detected			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TCLP SVOCs	None Detected			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TCLP Pests/Herbicides	None Detected	—	—	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

NS No regulatory criteria available

ND Not detected

Yellow highlighted concentrations and boring locations exceed hazardous waste regulatory criteria.

**EAST SIDE COASTAL RESILIENCY FROM MONTGOMERY STREET TO EAST 15TH STREET, MANHATTAN
NYCDDC PROJECT SANDRESM1
IPC RESILIENCY PARTNERS**

TABLE 2: SUMMARY OF TCLP & RCRA ANALYSIS - SAMPLES COLLECTED 12/21/2023 & 1/11/2024

Parameter	Compounds Detected	Unit	Regulatory Criteria	DM-103	DEP-135	DEP-136	DEP-137	DEP-138	DEP-148	DEP-149	DEP-150	NCM-57
RCRA Characteristics	pH	pH units	<2 or >12.5	8.74	7.22	6.84	8.17	8.73	7.82	8.58	6.79	9.42
	Flashpoint	° F	>200° F	>200°F	>200°F	>200°F	>200°F	>200°F	>200°F	>200°F	>200°F	>200°F
	Ignitability	° F	<140° F	passed	passed	passed	passed	passed	passed	passed	passed	passed
	Reactivity - Cyanide	ppm	—	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Reactivity - Sulfide	ppm	—	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOXICITY		Unit	USEPA Toxicity Characteristic Regulatory Criteria	DM-103	DEP-135	DEP-136	DEP-137	DEP-138	DEP-148	DEP-149	DEP-150	NCM-57
TCLP Metals	Barium	mg/L	100	0.98	0.56	1.03	0.92	0.81	1.01	0.95	0.27	0.46
	Mercury	mg/L	0.2	ND	ND	ND	ND	ND	0.0003	ND	ND	ND
	Lead	mg/L	5	0.13	ND	0.49	0.23	0.6	0.19	ND	0.14	ND
TCLP VOCs	None Detected			ND	ND	ND	ND	ND	ND	ND	ND	ND
TCLP SVOCs	None Detected			ND	ND	ND	ND	ND	ND	ND	ND	ND
TCLP Pests/Herbicides	None Detected	—	—	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

NS No regulatory criteria available

ND Not detected

Yellow highlighted concentrations and boring locations exceed hazardous waste regulatory criteria.

EAST SIDE COASTAL RESILIENCY FROM MONTGOMERY STREET TO EAST 15TH STREET, MANHATTAN

NYCDDC PROJECT SANDRESM1

IPC RESILIENCY PARTNERS

TABLE 3: REUSE/DISPOSAL OPTIONS - 12/20-12/21/23 & 1/11/24 SAMPLING EVENTS

Locations Meeting RRUSCOs & CUSCOs (suitable for reuse as backfill in parkland and roadwork) *	Locations Exceeding RRUSCOs (suitable for reuse as backfill in road work areas but not parkland) *	Locations Exceeding RRUSCOs & CUSCOs (disposal off-site required)
DEP-78 DEP-79 G-119 G-120 G-123 DM-100 G-124 G-121 DEP-83 DEP-92 G-135 G-136 G-149 G-150	G-137 G-148	DEP-76 DEP-77 G-122 DM-101 DM-102 DEP-80 DEP-81 DEP-82 DEP-84 DEP-89 DEP-90 DEP-91 DM-103 G-138 NCM-57

* Material meeting these criteria may be suitable for use as backfill on site if the material does not contain evidence of historic fill or exhibit odors or staining.

APPENDIX A
SITE PHOTOGRAPHS



Soil boring G-121, collected 12/20/23



Soil boring G-120, collected 12/20/23



Soil boring G-123, collected 12/20/23



Soil boring G-124, collected 12/20/23



Soil boring DEP-79, collected 12/20/23



Soil boring DEP-78, collected 12/20/23



Soil boring DEP-77, collected 12/20/23



Soil boring DEP-76, collected 12/20/23



Soil boring G-119, collected 12/20/23



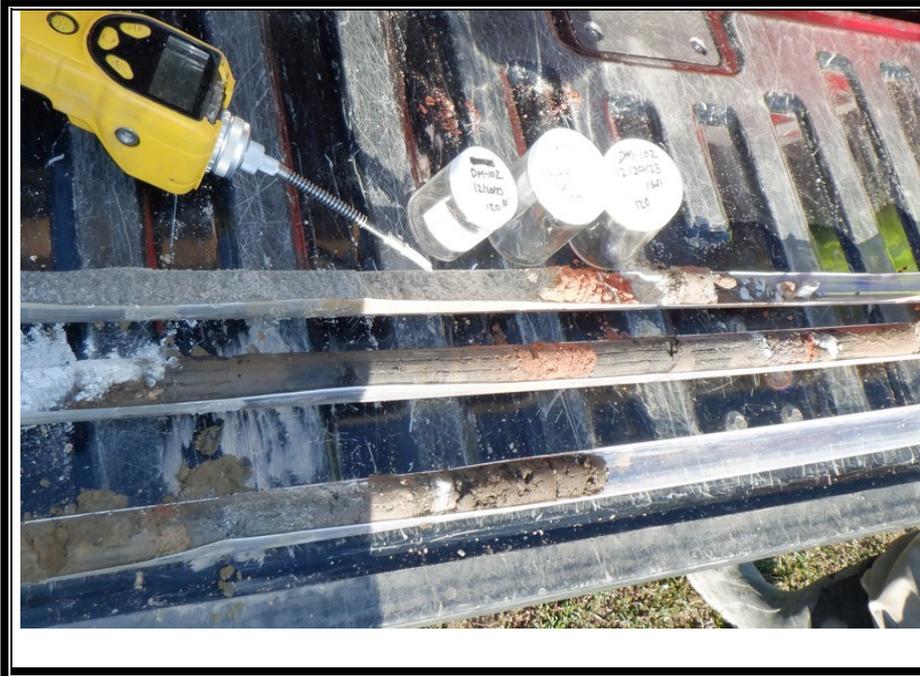
Soil boring G-122, collected 12/20/23



Soil boring DM-100, collected 12/20/23



Soil boring DM-101, collected 12/20/23



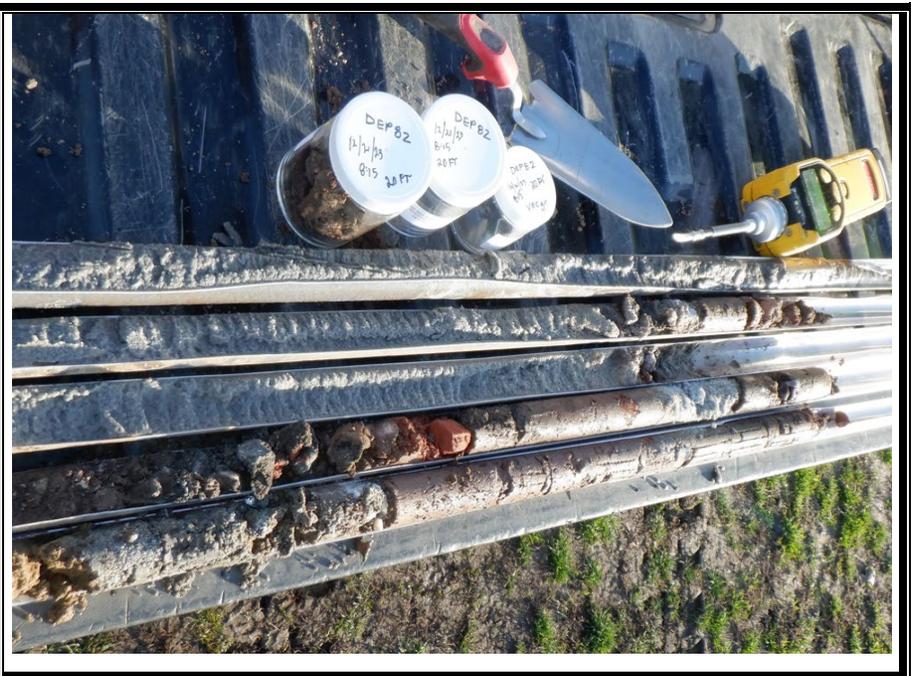
Soil boring DM-102, collected 12/20/23



Soil boring DEP-80, collected 12/21/23



Soil boring DEP-81, collected 12/21/23



Soil boring DEP-82, collected 12/21/23



Soil boring DEP-83, collected 12/21/23



Soil boring DM-103, collected 12/21/23



Soil boring G-150, collected 12/21/23



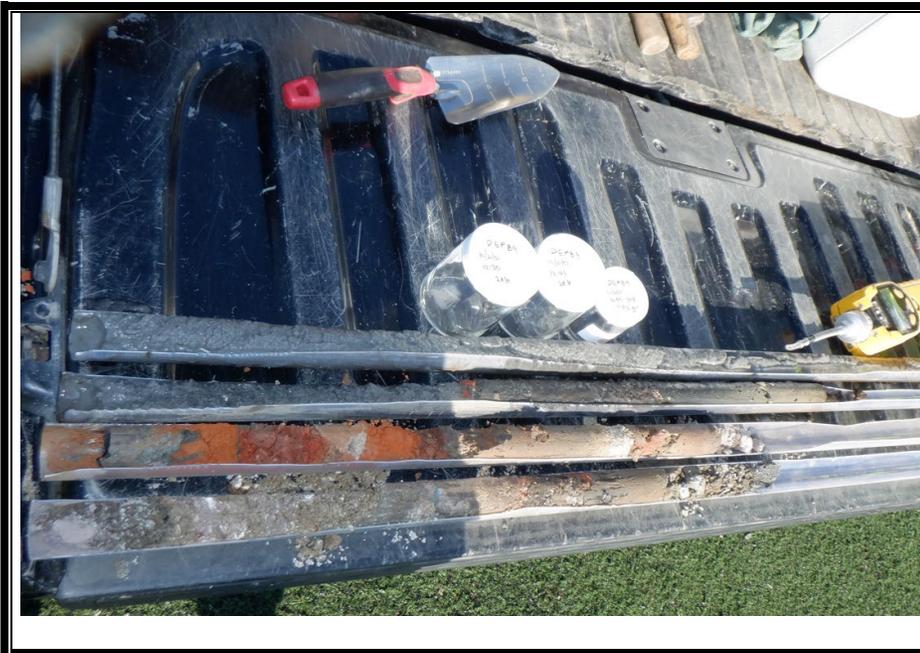
Soil boring G-149, collected 12/21/23



Soil boring G-135, collected 12/21/23



Soil boring G-138, collected 12/21/23



Soil boring DEP-89, collected 12/21/23



Soil boring DEP-90, collected 12/21/23



Soil boring DEP-91, collected 12/21/23



Soil boring DEP-92, collected 12/21/23

APPENDIX B
BORING LOGS

AES, Inc. SOIL BORING LOG				CLIENT:	IPC Resiliency Partners	BORING ID:	DEP-77	
				AGENCY:	NYCDDC	DEPTH OF BORING:	20'	
				DRILLER:	Associated Environmental Services	BORING DATE:	12/20/2023	
PROJECT ID:	SANDRESM1	PROJECT No.:	0897	TIME STARTED:	10:15	GROUND WATER COMMENTS		
ADDRESS :	East Side Coastal Resiliency East River Park, NYC	GEOLOGIST:	Brian Pendergast					
LOCATION:	Ballfield							
EQUIPMENT TYPE/SIZE:	Geoprobe 6011 DT			15'				
DEPTH FEET	SAMPLE			PID (ppm)	SOIL CLASSIFICATION COLOR, CONSISTENCY, DESCRIPTION	REMARKS		
	STRATA	SAMPLE #	PEN/REC					
1'			2' 6"	0.0	Fine light brown sand			
							Dark brown sand with trace brick	
5'			2' 6"	0.0	Crushed brick			
						Broken stone, crushed concrete		
						Fine tan sand		
10'			3'	0.0	Brown sand mixed with crushed rock, trace brick			
						Fine tan sand		
						Fill material, black cinders		
						Wet gray clay		
15'		3'		Water encountered				
					Wet pebbles and gravel			
				0.0	Trace brick			
					Fine wet gray silt			
20'				Wet black bog				
GENERAL COMMENTS								
VOC grab @ 20'					TIME SAMPLE COLLECTED:	10:35 AM		

AES, Inc. SOIL BORING LOG			CLIENT:	IPC Resiliency Partners	BORING ID:	DEP-79		
			AGENCY:	NYCDDC	DEPTH OF BORING	20'		
			DRILLER:	Associated Environmental Services	BORING DATE	12/20/2023		
PROJECT ID:	SANDRESM1	PROJECT No.	0897	TIME STARTED:	9:00	GROUND WATER COMMENTS		
ADDRESS :	East Side Coastal Resiliency East River Park, NYC	GEOLOGIST:	Brian Pendergast					
LOCATION:	Ballfield							
EQUIPMENT TYPE/SIZE:	Geoprobe 6011 DT							
DEPTH FEET	SAMPLE			PID (ppm)	SOIL CLASSIFICATION COLOR, CONSISTENCY, DESCRIPTION	REMARKS		
	STRATA	SAMPLE #	PEN/REC					
1'			5'	0.0	Brown topsoil			
							Trace concrete	
							Red/brown clay	
5'			4'		0.0	Brown sand, crushed concrete		
							Crushed brick, white /black cinders	
							Wet brown clay	
10'			3'		0.0	Crushed brick and concrete		
							Brown sand, trace gravel	
							Wet brown silt, mica flakes	
15'						Refusal encountered, foundation		
GENERAL COMMENTS								
VOC grab @ 15'					TIME SAMPLE COLLECTED:	9:25 AM		

<h1 style="text-align: center;">AES, Inc.</h1> <h2 style="text-align: center;">SOIL BORING LOG</h2>			CLIENT:	IPC Resiliency Partners	BORING ID:	G-120			
			AGENCY:	NYCDDC	DEPTH OF BORING	4'			
			DRILLER:	Associated Environmental Services	BORING DATE	12/20/2023			
PROJECT ID:	SANDRESM1	PROJECT No.	0897	TIME STARTED:	8:45				
ADDRESS :	East Side Coastal Resiliency East River Park, NYC	GEOLOGIST:	Brian Pendergast	GROUND WATER COMMENTS					
LOCATION:		Ballfield							
EQUIPMENT TYPE/SIZE:		Geoprobe 6011 DT							
DEPTH FEET	SAMPLE			PID (ppm)	SOIL CLASSIFICATION COLOR, CONSISTENCY, DESCRIPTION	REMARKS			
	STRATA	SAMPLE #	PEN/REC						
1'			3'	0.0	Brown sand				
							Trace gravel		
4'									
GENERAL COMMENTS									
VOC grab @ 4'					TIME SAMPLE COLLECTED:	8:45 AM			

AES, Inc. SOIL BORING LOG			CLIENT:	IPC Resiliency Partners	BORING ID:	DM-100		
			AGENCY:	NYCDDC	DEPTH OF BORING	15'		
			DRILLER:	Associated Environmental Services	BORING DATE	12/20/2023		
PROJECT ID:	SANDRESM1	PROJECT No.	0897	TIME STARTED:	12:15	GROUND WATER COMMENTS		
ADDRESS :	East Side Coastal Resiliency East River Park, NYC	GEOLOGIST:	Brian Pendergast					
LOCATION:	Ballfield							
EQUIPMENT TYPE/SIZE:	Geoprobe 6011 DT							
DEPTH FEET	SAMPLE			PID (ppm)	SOIL CLASSIFICATION COLOR, CONSISTENCY, DESCRIPTION	REMARKS		
	STRATA	SAMPLE #	PEN/REC					
1'			2'	0.0	Dark brown topsoil mixed with gravel			
							Fine brown sand	
							Wet brown clay	
5'			1'6"		Broken stone			
				0.0	Fine white/brown sand			
					Brown sand mixed with trace brick			
10'			2'		Brown sand mixed with crushed concrete			
				0.0	Gray sand mixed with wet, crushed brick			
15'								
GENERAL COMMENTS								
VOC grab @ 10'					TIME SAMPLE COLLECTED:	12:30 PM		

AES, Inc. SOIL BORING LOG			CLIENT:	IPC Resiliency Partners	BORING ID:	DM-102	
			AGENCY:	NYCDDC	DEPTH OF BORING	15'	
			DRILLER:	Associated Environmental Services	BORING DATE	12/20/2023	
PROJECT ID:	SANDRESM1	PROJECT No.	0897	TIME STARTED:	1:20		
ADDRESS :	East Side Coastal Resiliency East River Park, NYC	GEOLOGIST:	Brian Pendergast	GROUND WATER COMMENTS			
LOCATION:		Ballfield - 90' North of DM101					
EQUIPMENT TYPE/SIZE:		Geoprobe 6011 DT					
DEPTH FEET	SAMPLE			PID (ppm)	SOIL CLASSIFICATION COLOR, CONSISTENCY, DESCRIPTION	REMARKS	
	STRATA	SAMPLE #	PEN/REC				
1'			2'	0.0	Topsoil		
							Crushed concrete, fine brown sand
5'							
			3' 6"			Crushed brick	
				0.0		Fine brown sand. Crushed concrete	
						Silty gray clay, crushed	
						Fine gray brown silty clay	
10'						Crushed concrete	
			1'			Crushed brick mixed with crushed concrete and gravel	
				0.0		Fine wet gray sand	
15'							
GENERAL COMMENTS							
VOC grab @ 7'					TIME SAMPLE COLLECTED:	1:30 PM	

AES, Inc. SOIL BORING LOG		CLIENT:	IPC Resiliency Partners		BORING ID:	G-121			
		AGENCY:	NYCDDC		DEPTH OF BORING	4'			
		DRILLER:	Associated Environmental Services		BORING DATE	12/20/2023			
PROJECT ID:	SANDRESM1		PROJECT No.	0897		TIME STARTED:	8:35		
ADDRESS :	East Side Coastal Resiliency East River Park, NYC		GEOLOGIST:	Brian Pendergast		GROUND WATER COMMENTS			
LOCATION:		Ballfield - 90' North of DM101							
EQUIPMENT TYPE/SIZE:		Geoprobe 6011 DT							
DEPTH FEET	SAMPLE			PID (ppm)	SOIL CLASSIFICATION COLOR, CONSISTENCY, DESCRIPTION	REMARKS			
	STRATA	SAMPLE #	PEN/REC						
1'			3'	0.0	Brown sand				
							Crushed brick		
							Trace gravel		
4'									
GENERAL COMMENTS									
VOC grab @ 4'					TIME SAMPLE COLLECTED:	8:40 AM			

AES, Inc. SOIL BORING LOG			CLIENT:	IPC Resiliency Partners	BORING ID:	DEP-89		
			AGENCY:	NYCDDC	DEPTH OF BORING	20'		
			DRILLER:	Associated Environmental Services	BORING DATE	12/21/2023		
PROJECT ID:	SANDRESM1	PROJECT No.	0897	TIME STARTED:	12:45	GROUND WATER COMMENTS		
ADDRESS :	East Side Coastal Resiliency East River Park, NYC	GEOLOGIST:	Brian Pendergast					
LOCATION:	Ballfield			12'				
EQUIPMENT TYPE/SIZE:	Geoprobe 6011 DT							
DEPTH FEET	SAMPLE			PID (ppm)	SOIL CLASSIFICATION COLOR, CONSISTENCY, DESCRIPTION	REMARKS		
	STRATA	SAMPLE #	PEN/REC					
1'			2'	0.0	Brown sand mixed with gravel			
							Fine brown silty sand	
							Trace brick/trace concrete	
5'				2'				
						0.0	Gravel, fine brown sand	
							Brown clay	
						Crushed brick and gray clay		
10'				2' 6"				
11'						0.0	Gray clay	
							Black wet bog	
							Trace brick	
						Wet gray sand		
15'			4' 6"					
						Wet fine gray sand		
					0.0			
20'								
GENERAL COMMENTS								
VOC grab @ 10'					TIME SAMPLE COLLECTED:	12:50 PM		

AES, Inc. SOIL BORING LOG			CLIENT:	IPC Resiliency Partners	BORING ID:	DEP-90		
			AGENCY:	NYCDDC	DEPTH OF BORING	20'		
			DRILLER:	Associated Environmental Services	BORING DATE	12/21/2023		
PROJECT ID:	SANDRESM1	PROJECT No.	0897	TIME STARTED:	1:00	GROUND WATER COMMENTS		
ADDRESS :	East Side Coastal Resiliency East River Park, NYC	GEOLOGIST:	Brian Pendergast					
LOCATION:	Ballfield - 56' North of DEP89							
EQUIPMENT TYPE/SIZE:	Geoprobe 6011 DT			15'				
DEPTH FEET	SAMPLE			PID (ppm)	SOIL CLASSIFICATION COLOR, CONSISTENCY, DESCRIPTION	REMARKS		
	STRATA	SAMPLE #	PEN/REC					
1'			3'	0.0	Brown sand, trace rock			
							Brown silty clay, crushed brick	
							Brown sand and mica flakes	
5'				1' 6"	0.0	Brown sand mixed with broken stone and gravel		
							Fine brown sand	
10'				1' 6"	0.0	Gray/black clay, crushed brick		
15'				1'		Water encountered		
							Black bog mixed with gravel	
							0.0	Fine wet gray sand
20'								
GENERAL COMMENTS								
VOC grab @ 5'					TIME SAMPLE COLLECTED:	1:15 PM		

<h1 style="text-align: center;">AES, Inc.</h1> <h2 style="text-align: center;">SOIL BORING LOG</h2>				CLIENT:	IPC Resiliency Partners	BORING ID:	DEP-92		
				AGENCY:	NYCDDC	DEPTH OF BORING:	10'		
				DRILLER:	Associated Environmental Services	BORING DATE:	12/21/2023		
PROJECT ID:	SANDRESM1	PROJECT No.:	0897	TIME STARTED:	1:40	GROUND WATER COMMENTS			
ADDRESS :	East Side Coastal Resiliency East River Park, NYC	GEOLOGIST:	Brian Pendergast						
LOCATION:	Ballfield								
EQUIPMENT TYPE/SIZE:	Geoprobe 6011 DT								
DEPTH FEET	SAMPLE			PID (ppm)	SOIL CLASSIFICATION COLOR, CONSISTENCY, DESCRIPTION	REMARKS			
	STRATA	SAMPLE #	PEN/REC						
1'			2'	0.0	Fine light brown sand				
				Crushed concrete					
				Fine light brown sand, crushed brick					
5'			2'	0.0	Gravel, broken stone, crushed brick				
				Fine brown sand mixed with crushed brick					
10'						Refusal encountered			
GENERAL COMMENTS									
VOC grab @ 5'					TIME SAMPLE COLLECTED:	1:45 PM			

<h1 style="text-align: center;">AES, Inc.</h1> <h2 style="text-align: center;">SOIL BORING LOG</h2>			CLIENT:	IPC Resiliency Partners	BORING ID:	G-138		
			AGENCY:	NYCDDC	DEPTH OF BORING:	4'		
			DRILLER:	Associated Environmental Services	BORING DATE:	12/21/2023		
PROJECT ID:	SANDRESM1	PROJECT No.:	0897	TIME STARTED:	10:25			
ADDRESS :	East Side Coastal Resiliency East River Park, NYC	GEOLOGIST:	Brian Pendergast	GROUND WATER COMMENTS				
LOCATION:								
EQUIPMENT TYPE/SIZE:		Geoprobe 6011 DT						
DEPTH FEET	SAMPLE			PID (ppm)	SOIL CLASSIFICATION COLOR, CONSISTENCY, DESCRIPTION	REMARKS		
	STRATA	SAMPLE #	PEN/REC					
1'			3'	0.0	Crushed brick, crushed stone mixed with brown sand			
							Light brown sand	
							Black cinders	
4'								
GENERAL COMMENTS								
VOC grab @ 4'					TIME SAMPLE COLLECTED:	10:25 AM		

APPENDIX C
LABORATORY ANALYSIS



Wednesday, January 10, 2024

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

Project ID: EAST SIDE COASTAL RESILIENCY
SDG ID: GCP73450
Sample ID#s: CP73450 - CP73462

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.

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,

A handwritten signature in black ink that reads "Phyllis Shiller". The signature is written in a cursive style.

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



SDG Comments

January 10, 2024

SDG I.D.: GCP73450

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



Sample Id Cross Reference

January 10, 2024

SDG I.D.: GCP73450

Project ID: EAST SIDE COASTAL RESILIENCY

Client Id	Lab Id	Matrix
DEP76	CP73450	SOIL
DEP77	CP73451	SOIL
DEP78	CP73452	SOIL
DEP79	CP73453	SOIL
G-119	CP73454	SOIL
G-120	CP73455	SOIL
G-122	CP73456	SOIL
G-123	CP73457	SOIL
DM100	CP73458	SOIL
DM101	CP73459	SOIL
DM102	CP73460	SOIL
G124	CP73461	SOIL
G121	CP73462	SOIL



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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
 Location Code: AES-EASTSIDE
 Rush Request: Standard
 P.O.#: 0897

Custody Information

Collected by:
 Received by: CP
 Analyzed by: see "By" below

Date

12/20/23
 12/21/23

Time

10:50
 19:25

Laboratory Data

SDG ID: GCP73450
 Phoenix ID: CP73450

Project ID: EAST SIDE COASTAL RESILIENCY
 Client ID: DEP76

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.0	1.0	mg/Kg	1	12/22/23	TH	SW6010D
Aluminum	3710	5.8	mg/Kg	1	12/22/23	TH	SW6010D
Arsenic	2.40	0.77	mg/Kg	1	12/22/23	TH	SW6010D
Barium	3300	3.9	mg/Kg	10	12/22/23	TH	SW6010D
Beryllium	< 0.31	0.31	mg/Kg	1	12/22/23	TH	SW6010D
Calcium	17300	58	mg/Kg	10	12/22/23	TH	SW6010D
Cadmium	0.64	0.39	mg/Kg	1	12/22/23	TH	SW6010D
Cobalt	2.18	0.39	mg/Kg	1	12/22/23	TH	SW6010D
Chromium	17.8	0.39	mg/Kg	1	12/22/23	TH	SW6010D
Copper	54.9	0.8	mg/kg	1	12/22/23	TH	SW6010D
Iron	7730	5.8	mg/Kg	1	12/22/23	TH	SW6010D
Mercury	0.91	0.03	mg/Kg	2	12/22/23	ZT	SW7471B
Potassium	398	58	mg/Kg	10	12/22/23	TH	SW6010D
Magnesium	15800	5.8	mg/Kg	1	12/22/23	TH	SW6010D
Manganese	92.0	0.39	mg/Kg	1	12/22/23	TH	SW6010D
Sodium	120	75	mg/Kg	1	12/22/23	TH	SW6010D
Nickel	7.52	0.39	mg/Kg	1	12/22/23	TH	SW6010D
Lead	2270	0.39	mg/Kg	1	12/22/23	TH	SW6010D
Antimony	< 4.9	4.9	mg/Kg	1	12/22/23	TH	SW6010D
Selenium	< 1.5	1.5	mg/Kg	1	12/22/23	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Barium	1.43	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	12/22/23	AL1	SW846 1311/7470
TCLP Lead	0.68	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.5	3.5	mg/Kg	1	12/22/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/22/23	AL/HL/HL	SW3010A
Trivalent Chromium	17.8	0.39	mg/kg	1	12/26/23		CALC 6010-7196
Vanadium	14.7	0.39	mg/Kg	1	12/22/23	TH	SW6010D
Zinc	454	0.8	mg/Kg	1	12/22/23	TH	SW6010D
Percent Solid	85		%		12/21/23	CV	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/22/23	ER	SW846-Corr
Flash Point	>200	200	Degree F	1	12/29/23	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.43	0.43	mg/Kg	1	12/22/23	NP	SW7196A
Ignitability	Passed	140	degree F	1	12/29/23	G	SW846-Ignit
pH at 25C - Soil	8.53	1.00	pH Units	1	12/22/23 00:19	ER	SW846 9045D
Reactivity Cyanide	< 5	5	mg/Kg	1	12/23/23	EG	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	12/23/23	NP/EG	SW846 CH7
Reactivity	Negative		Pos/Neg	1	12/23/23	EG	SW846-React
Redox Potential	234		mV	1	12/22/23	ER	SM2580B-09
Total Cyanide (SW9010C Distill.)	< 0.59	0.59	mg/Kg	1	12/23/23	EG	SW9012B
Mercury Digestion	Completed				12/22/23	HL/HL	SW7471B
Extraction of NY ETPH	Completed				12/22/23	H/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/21/23	L/D	SW3546
NJ EPH Extraction	Completed				12/22/23	C/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/22/23	H/A	SW3546
Soil Extraction for Pesticides	Completed				12/22/23	H/A	SW3546
Soil Extraction for SVOA	Completed				12/26/23	C/JDW	SW3546
TCLP Digestion Mercury	Completed				12/22/23	AL/HL/HL	SW7470A
TCLP Herbicides Extraction	Completed				12/27/23	CV/D	SW8150 MOD
TCLP Extraction for Metals	Completed				12/21/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/21/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/26/23	S/S	SW3510C
TCLP Semi-Volatile Extraction	Completed				12/27/23	LB1/LB1	SW3510C
TCLP Extraction Volatiles	Completed				12/21/23	CV	SW1311
Total Metals Digest	Completed				12/21/23	P/AG	SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	ND	92	mg/kg	10	12/26/23	JRB	NJEPH 10-08 R3
C9-C28	ND	180	mg/kg	10	12/26/23	JRB	NJEPH 10-08 R3
Total EPH	ND	92	mg/kg	10	12/26/23	JRB	NJEPH 10-08 R3

QA/QC Surrogates

% COD (surr)	56		%	10	12/26/23	JRB	40 - 140 %
% Terphenyl (surr)	93		%	10	12/26/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	7.7	mg/Kg	50	12/22/23	RM	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	83		%	50	12/22/23	RM	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	150	ug/Kg	10	12/22/23	KCA	SW8151A
2,4,5-TP (Silvex)	ND	150	ug/Kg	10	12/22/23	KCA	SW8151A
2,4-D	ND	290	ug/Kg	10	12/22/23	KCA	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	2900	ug/Kg	10	12/22/23	KCA	SW8151A
Dalapon	ND	150	ug/Kg	10	12/22/23	KCA	SW8151A
Dicamba	ND	150	ug/Kg	10	12/22/23	KCA	SW8151A
Dichloroprop	ND	290	ug/Kg	10	12/22/23	KCA	SW8151A
Dinoseb	ND	290	ug/Kg	10	12/22/23	KCA	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	51		%	10	12/22/23	KCA	30 - 150 %
% DCAA (Confirmation)	60		%	10	12/22/23	KCA	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	77	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1221	ND	77	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1232	ND	77	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1242	ND	77	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1248	ND	77	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1254	ND	77	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1260	ND	77	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1262	ND	77	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1268	ND	77	ug/Kg	2	12/26/23	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	62		%	2	12/26/23	SC	30 - 150 %
% DCBP (Confirmation)	52		%	2	12/26/23	SC	30 - 150 %
% TCMX	60		%	2	12/26/23	SC	30 - 150 %
% TCMX (Confirmation)	53		%	2	12/26/23	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.3	ug/Kg	2	12/27/23	AW	SW8081B
4,4' -DDE	9.7	2.3	ug/Kg	2	12/27/23	AW	SW8081B
4,4' -DDT	11	2.3	ug/Kg	2	12/27/23	AW	SW8081B
a-BHC	ND	7.7	ug/Kg	2	12/27/23	AW	SW8081B
a-Chlordane	ND	3.9	ug/Kg	2	12/27/23	AW	SW8081B
Aldrin	ND	3.9	ug/Kg	2	12/27/23	AW	SW8081B
b-BHC	ND	7.7	ug/Kg	2	12/27/23	AW	SW8081B
Chlordane	ND	39	ug/Kg	2	12/27/23	AW	SW8081B
d-BHC	ND	7.7	ug/Kg	2	12/27/23	AW	SW8081B
Dieldrin	13	3.9	ug/Kg	2	12/27/23	AW	SW8081B
Endosulfan I	ND	7.7	ug/Kg	2	12/27/23	AW	SW8081B
Endosulfan II	ND	7.7	ug/Kg	2	12/27/23	AW	SW8081B
Endosulfan sulfate	ND	7.7	ug/Kg	2	12/27/23	AW	SW8081B
Endrin	ND	14	ug/Kg	2	12/27/23	AW	SW8081B
Endrin aldehyde	ND	7.7	ug/Kg	2	12/27/23	AW	SW8081B
Endrin ketone	ND	7.7	ug/Kg	2	12/27/23	AW	SW8081B
g-BHC	ND	1.5	ug/Kg	2	12/27/23	AW	SW8081B
g-Chlordane	ND	3.9	ug/Kg	2	12/27/23	AW	SW8081B
Heptachlor	ND	7.7	ug/Kg	2	12/27/23	AW	SW8081B
Heptachlor epoxide	ND	7.7	ug/Kg	2	12/27/23	AW	SW8081B
Methoxychlor	ND	39	ug/Kg	2	12/27/23	AW	SW8081B
Toxaphene	ND	150	ug/Kg	2	12/27/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	58		%	2	12/27/23	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	79		%	2	12/27/23	AW	30 - 150 %
% TCMX	52		%	2	12/27/23	AW	30 - 150 %
% TCMX (Confirmation)	63		%	2	12/27/23	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/28/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/28/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	65		%	10	12/28/23	JRB	30 - 150 %
% DCAA (Confirmation)	65		%	10	12/28/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
a-BHC	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Alachlor	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Aldrin	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
b-BHC	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Chlordane	ND	5.0	ug/L	10	12/28/23	CN	SW8081B
d-BHC	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Dieldrin	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
Endosulfan I	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Endosulfan II	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
Endrin	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Heptachlor	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Methoxychlor	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Toxaphene	ND	20	ug/L	10	12/28/23	CN	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	70		%	10	12/28/23	CN	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	68		%	10	12/28/23	CN	30 - 150 %
%TCMX (Surrogate Rec)	75		%	10	12/28/23	CN	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	75		%	10	12/28/23	CN	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	ND	290	mg/Kg	5	12/27/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	84		%	5	12/27/23	JRB	50 - 150 %
% Terphenyl (surr)	Interference		%	5	12/27/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
1,1-Dichloroethane	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
1,1-Dichloroethene	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dibromoethane	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichloroethane	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichloropropane	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
2-Hexanone	ND	38	ug/kg	1	12/26/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	38	ug/kg	1	12/26/23	JLI	SW8260D
Acetone	ND	50	ug/kg	1	12/26/23	JLI	SW8260D
Benzene	80	60	ug/kg	50	12/26/23	JLI	SW8260D
Bromochloromethane	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
Bromodichloromethane	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
Bromoform	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
Bromomethane	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
Carbon Disulfide	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
Carbon tetrachloride	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
Chlorobenzene	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
Chloroethane	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
Chloroform	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
Chloromethane	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
Cyclohexane	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
Dibromochloromethane	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
Dichlorodifluoromethane	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
Ethylbenzene	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
Isopropylbenzene	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
m&p-Xylene	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
Methyl ethyl ketone	ND	45	ug/kg	1	12/26/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	15	ug/kg	1	12/26/23	JLI	SW8260D
Methylacetate	ND	6.0	ug/kg	1	12/26/23	JLI	SW8260D
Methylcyclohexane	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
Methylene chloride	ND	38	ug/kg	1	12/26/23	JLI	SW8260D
o-Xylene	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
Styrene	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
Tetrachloroethene	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
Toluene	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
Total Xylenes	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
Trichloroethene	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
Trichlorofluoromethane	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
Vinyl chloride	ND	7.5	ug/kg	1	12/26/23	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	96		%	1	12/26/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	86		%	1	12/26/23	JLI	70 - 130 %
% Dibromofluoromethane	102		%	1	12/26/23	JLI	70 - 130 %
% Toluene-d8	94		%	1	12/26/23	JLI	70 - 130 %
% 1,2-dichlorobenzene-d4 (50x)	95		%	50	12/26/23	JLI	70 - 130 %
% Bromofluorobenzene (50x)	99		%	50	12/26/23	JLI	70 - 130 %
% Dibromofluoromethane (50x)	103		%	50	12/26/23	JLI	70 - 130 %
% Toluene-d8 (50x)	97		%	50	12/26/23	JLI	70 - 130 %

1,4-dioxane

1,4-dioxane	ND	100	ug/kg	1	12/26/23	JLI	SW8260D
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Volatiles

1,2,3-Trichloropropane	ND	7.5	ug/Kg	1	12/26/23	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	7.5	ug/Kg	1	12/26/23	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	7.5	ug/Kg	1	12/26/23	JLI	SW8260D
1,3-Dichloropropane	ND	7.5	ug/Kg	1	12/26/23	JLI	SW8260D
n-Butylbenzene	ND	7.5	ug/Kg	1	12/26/23	JLI	SW8260D
n-Propylbenzene	ND	7.5	ug/Kg	1	12/26/23	JLI	SW8260D
p-Isopropyltoluene	ND	7.5	ug/Kg	1	12/26/23	JLI	SW8260D
sec-Butylbenzene	ND	7.5	ug/Kg	1	12/26/23	JLI	SW8260D
tert-Butylbenzene	ND	7.5	ug/Kg	1	12/26/23	JLI	SW8260D

QA/QC Surrogates

% 1,2-dichlorobenzene-d4	96		%	1	12/26/23	JLI	70 - 130 %
% Bromofluorobenzene	86		%	1	12/26/23	JLI	70 - 130 %
% Dibromofluoromethane	102		%	1	12/26/23	JLI	70 - 130 %
% Toluene-d8	94		%	1	12/26/23	JLI	70 - 130 %

TCLP Volatiles

1,1-Dichloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260

QA/QC Surrogates

% 1,2-dichlorobenzene-d4 (10x)	99		%	10	12/26/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	91		%	10	12/26/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	98		%	10	12/26/23	HM	70 - 130 %
% Toluene-d8 (10x)	95		%	10	12/26/23	HM	70 - 130 %

Volatile Library Search Completed 12/27/23 JLI

Semivolatiles

1,1-Biphenyl	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,3,4,6-tetrachlorophenol	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
2,4,5-Trichlorophenol	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
2,4,6-Trichlorophenol	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
2,4-Dichlorophenol	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
2,4-Dimethylphenol	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
2,4-Dinitrophenol	ND	630	ug/Kg	1	12/27/23	AJK	SW8270E
2,4-Dinitrotoluene	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
2,6-Dinitrotoluene	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
2-Chloronaphthalene	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
2-Chlorophenol	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
2-Methylnaphthalene	280	270	ug/Kg	1	12/27/23	AJK	SW8270E
2-Methylphenol (o-cresol)	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
2-Nitroaniline	ND	630	ug/Kg	1	12/27/23	AJK	SW8270E
2-Nitrophenol	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	390	ug/Kg	1	12/27/23	AJK	SW8270E
3,3'-Dichlorobenzidine	ND	470	ug/Kg	1	12/27/23	AJK	SW8270E
3-Nitroaniline	ND	630	ug/Kg	1	12/27/23	AJK	SW8270E
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	12/27/23	AJK	SW8270E
4-Bromophenyl phenyl ether	ND	390	ug/Kg	1	12/27/23	AJK	SW8270E
4-Chloro-3-methylphenol	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
4-Chloroaniline	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
4-Nitroaniline	ND	630	ug/Kg	1	12/27/23	AJK	SW8270E
4-Nitrophenol	ND	1100	ug/Kg	1	12/27/23	AJK	SW8270E
Acenaphthene	1600	270	ug/Kg	1	12/27/23	AJK	SW8270E
Acenaphthylene	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Acetophenone	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Anthracene	5200	270	ug/Kg	1	12/27/23	AJK	SW8270E
Atrazine	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Benz(a)anthracene	14000	2700	ug/Kg	10	12/28/23	AJK	SW8270E
Benzaldehyde	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Benzo(a)pyrene	17000	2700	ug/Kg	10	12/28/23	AJK	SW8270E
Benzo(b)fluoranthene	18000	2700	ug/Kg	10	12/28/23	AJK	SW8270E
Benzo(ghi)perylene	9900	2700	ug/Kg	10	12/28/23	AJK	SW8270E
Benzo(k)fluoranthene	5300	270	ug/Kg	1	12/27/23	AJK	SW8270E
Benzyl butyl phthalate	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Bis(2-chloroethyl)ether	ND	390	ug/Kg	1	12/27/23	AJK	SW8270E
Bis(2-ethylhexyl)phthalate	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Caprolactam	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Carbazole	1000	390	ug/Kg	1	12/27/23	AJK	SW8270E
Chrysene	13000	2700	ug/Kg	10	12/28/23	AJK	SW8270E
Dibenz(a,h)anthracene	2000	200	ug/Kg	1	12/27/23	AJK	SW8270E
Dibenzofuran	1000	270	ug/Kg	1	12/27/23	AJK	SW8270E
Diethyl phthalate	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Dimethylphthalate	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Di-n-butylphthalate	ND	780	ug/Kg	1	12/27/23	AJK	SW8270E
Di-n-octylphthalate	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Fluoranthene	32000	2700	ug/Kg	10	12/28/23	AJK	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Fluorene	1700	270	ug/Kg	1	12/27/23	AJK	SW8270E
Hexachlorobenzene	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Hexachlorobutadiene	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Hexachlorocyclopentadiene	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Hexachloroethane	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Indeno(1,2,3-cd)pyrene	11000	2700	ug/Kg	10	12/28/23	AJK	SW8270E
Isophorone	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Naphthalene	460	270	ug/Kg	1	12/27/23	AJK	SW8270E
Nitrobenzene	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
N-Nitrosodimethylamine	ND	390	ug/Kg	1	12/27/23	AJK	SW8270E
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	1	12/27/23	AJK	SW8270E
N-Nitrosodiphenylamine	ND	390	ug/Kg	1	12/27/23	AJK	SW8270E
Pentachlorophenol	ND	390	ug/Kg	1	12/27/23	AJK	SW8270E
Phenanthrene	20000	2700	ug/Kg	10	12/28/23	AJK	SW8270E
Phenol	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Pyrene	28000	2700	ug/Kg	10	12/28/23	AJK	SW8270E
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	77		%	1	12/27/23	AJK	30 - 130 %
% 2-Fluorobiphenyl	71		%	1	12/27/23	AJK	30 - 130 %
% 2-Fluorophenol	69		%	1	12/27/23	AJK	30 - 130 %
% Nitrobenzene-d5	69		%	1	12/27/23	AJK	30 - 130 %
% Phenol-d5	74		%	1	12/27/23	AJK	30 - 130 %
% Terphenyl-d14	82		%	1	12/27/23	AJK	30 - 130 %
<u>TCLP Acid/Base-Neutral</u>							
1,4-Dichlorobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	78		%	1	12/28/23	MR	15 - 110 %
% 2-Fluorobiphenyl	41		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorophenol	41		%	1	12/28/23	MR	15 - 110 %
% Nitrobenzene-d5	56		%	1	12/28/23	MR	30 - 130 %
% Phenol-d5	35		%	1	12/28/23	MR	15 - 110 %
% Terphenyl-d14	72		%	1	12/28/23	MR	30 - 130 %
Semivolatile Library Search	Completed				12/28/23	MR	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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 (preceded 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.

Hexavalent Chromium:
This sample is in a reducing state.

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 chromatogram 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

January 10, 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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
 Location Code: AES-EASTSIDE
 Rush Request: Standard
 P.O.#: 0897

Custody Information

Collected by:
 Received by: CP
 Analyzed by: see "By" below

Date

12/20/23
 12/21/23

Time

10:15
 19:25

Laboratory Data

SDG ID: GCP73450
 Phoenix ID: CP73451

Project ID: EAST SIDE COASTAL RESILIENCY
 Client ID: DEP77

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	1	12/22/23	TH	SW6010D
Aluminum	8350	54	mg/Kg	10	12/27/23	TH	SW6010D
Arsenic	2.00	0.72	mg/Kg	1	12/22/23	TH	SW6010D
Barium	69.2	0.36	mg/Kg	1	12/22/23	TH	SW6010D
Beryllium	0.40	0.29	mg/Kg	1	12/22/23	TH	SW6010D
Calcium	11000	54	mg/Kg	10	12/22/23	TH	SW6010D
Cadmium	0.78	0.36	mg/Kg	1	12/22/23	TH	SW6010D
Cobalt	6.69	0.36	mg/Kg	1	12/22/23	TH	SW6010D
Chromium	23.4	0.36	mg/Kg	1	12/22/23	TH	SW6010D
Copper	22.6	0.7	mg/kg	1	12/22/23	TH	SW6010D
Iron	13200	5.4	mg/Kg	1	12/22/23	TH	SW6010D
Mercury	0.19	0.03	mg/Kg	2	12/22/23	ZT	SW7471B
Potassium	2110	54	mg/Kg	10	12/22/23	TH	SW6010D
Magnesium	5110	5.4	mg/Kg	1	12/22/23	TH	SW6010D
Manganese	181	0.36	mg/Kg	1	12/22/23	TH	SW6010D
Sodium	748	75	mg/Kg	1	12/22/23	TH	SW6010D
Nickel	22.9	0.36	mg/Kg	1	12/22/23	TH	SW6010D
Lead	94.4	0.36	mg/Kg	1	12/22/23	TH	SW6010D
Antimony	< 3.6	3.6	mg/Kg	1	12/22/23	TH	SW6010D
Selenium	< 1.4	1.4	mg/Kg	1	12/22/23	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Barium	0.62	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	12/22/23	AL1	SW846 1311/7470
TCLP Lead	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.2	3.2	mg/Kg	1	12/22/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/22/23	AL/HL/HL	SW3010A
Trivalent Chromium	23.4	0.36	mg/kg	1	12/26/23		CALC 6010-7196
Vanadium	24.7	0.36	mg/Kg	1	12/22/23	TH	SW6010D
Zinc	92.3	0.7	mg/Kg	1	12/22/23	TH	SW6010D
Percent Solid	86		%		12/21/23	CV	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/22/23	ER	SW846-Corr
Flash Point	>200	200	Degree F	1	12/29/23	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.45	0.45	mg/Kg	1	12/22/23	NP	SW7196A
Ignitability	Passed	140	degree F	1	12/29/23	G	SW846-Ignit
pH at 25C - Soil	8.28	1.00	pH Units	1	12/22/23 00:19	ER	SW846 9045D
Reactivity Cyanide	< 6	6	mg/Kg	1	12/23/23	EG	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	12/23/23	NP/EG	SW846 CH7
Reactivity	Negative		Pos/Neg	1	12/23/23	EG	SW846-React
Redox Potential	211		mV	1	12/22/23	ER	SM2580B-09
Total Cyanide (SW9010C Distill.)	< 0.58	0.58	mg/Kg	1	12/23/23	EG	SW9012B
Mercury Digestion	Completed				12/22/23	HL/HL	SW7471B
Extraction of NY ETPH	Completed				12/22/23	H/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/21/23	L/D	SW3546
NJ EPH Extraction	Completed				12/22/23	C/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/22/23	H/A	SW3546
Soil Extraction for Pesticides	Completed				12/22/23	H/A	SW3546
Soil Extraction for SVOA	Completed				12/26/23	C/JDW	SW3546
TCLP Digestion Mercury	Completed				12/22/23	AL/HL/HL	SW7470A
TCLP Herbicides Extraction	Completed				12/27/23	CV/D	SW8150 MOD
TCLP Extraction for Metals	Completed				12/21/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/21/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/26/23	S/S	SW3510C
TCLP Semi-Volatile Extraction	Completed				12/27/23	LB1/LB1	SW3510C
TCLP Extraction Volatiles	Completed				12/21/23	CV	SW1311
Total Metals Digest	Completed				12/21/23	P/AG	SW3050B
<u>NJ EPH Category 1 (Fuel #2/Diesel)</u>							
>C28-C40	400	45	mg/kg	5	12/26/23	JRB	NJEPH 10-08 R3
C9-C28	770	90	mg/kg	5	12/26/23	JRB	NJEPH 10-08 R3
Total EPH	1170	45	mg/kg	5	12/26/23	JRB	NJEPH 10-08 R3
<u>QA/QC Surrogates</u>							
% COD (surr)	124		%	5	12/26/23	JRB	40 - 140 %
% Terphenyl (surr)	Interference		%	5	12/26/23	JRB	40 - 140 %
<u>Gasoline Range Hydrocarbons (C6-C10)</u>							
GRO (C6-C10)	ND	7.4	mg/Kg	50	12/22/23	RM	SW8015D GRO
<u>QA/QC Surrogates</u>							
% 2,5-Dibromotoluene (FID)	83		%	50	12/22/23	RM	70 - 130 %
<u>Chlorinated Herbicides</u>							
2,4,5-T	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
2,4,5-TP (Silvex)	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
2,4-D	ND	290	ug/Kg	10	12/22/23	KCA	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	2900	ug/Kg	10	12/22/23	KCA	SW8151A
Dalapon	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
Dicamba	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
Dichloroprop	ND	290	ug/Kg	10	12/22/23	KCA	SW8151A
Dinoseb	ND	290	ug/Kg	10	12/22/23	KCA	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	67		%	10	12/22/23	KCA	30 - 150 %
% DCAA (Confirmation)	74		%	10	12/22/23	KCA	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	76	ug/Kg	2	12/27/23	SC	SW8082A
PCB-1221	ND	76	ug/Kg	2	12/27/23	SC	SW8082A
PCB-1232	ND	76	ug/Kg	2	12/27/23	SC	SW8082A
PCB-1242	ND	76	ug/Kg	2	12/27/23	SC	SW8082A
PCB-1248	ND	76	ug/Kg	2	12/27/23	SC	SW8082A
PCB-1254	ND	76	ug/Kg	2	12/27/23	SC	SW8082A
PCB-1260	ND	76	ug/Kg	2	12/27/23	SC	SW8082A
PCB-1262	ND	76	ug/Kg	2	12/27/23	SC	SW8082A
PCB-1268	ND	76	ug/Kg	2	12/27/23	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	79		%	2	12/27/23	SC	30 - 150 %
% DCBP (Confirmation)	73		%	2	12/27/23	SC	30 - 150 %
% TCMX	83		%	2	12/27/23	SC	30 - 150 %
% TCMX (Confirmation)	73		%	2	12/27/23	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.3	ug/Kg	2	12/26/23	AW	SW8081B
4,4' -DDE	ND	2.3	ug/Kg	2	12/26/23	AW	SW8081B
4,4' -DDT	ND	2.3	ug/Kg	2	12/26/23	AW	SW8081B
a-BHC	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
a-Chlordane	ND	3.8	ug/Kg	2	12/26/23	AW	SW8081B
Aldrin	ND	3.8	ug/Kg	2	12/26/23	AW	SW8081B
b-BHC	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Chlordane	ND	38	ug/Kg	2	12/26/23	AW	SW8081B
d-BHC	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Dieldrin	ND	3.8	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan I	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan II	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan sulfate	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Endrin	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Endrin aldehyde	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Endrin ketone	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
g-BHC	ND	1.5	ug/Kg	2	12/26/23	AW	SW8081B
g-Chlordane	ND	3.8	ug/Kg	2	12/26/23	AW	SW8081B
Heptachlor	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Heptachlor epoxide	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Methoxychlor	ND	38	ug/Kg	2	12/26/23	AW	SW8081B
Toxaphene	ND	150	ug/Kg	2	12/26/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	87		%	2	12/26/23	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	96		%	2	12/26/23	AW	30 - 150 %
% TCMX	76		%	2	12/26/23	AW	30 - 150 %
% TCMX (Confirmation)	84		%	2	12/26/23	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/28/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/28/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	73		%	10	12/28/23	JRB	30 - 150 %
% DCAA (Confirmation)	71		%	10	12/28/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
a-BHC	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Alachlor	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Aldrin	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
b-BHC	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Chlordane	ND	5.0	ug/L	10	12/28/23	CN	SW8081B
d-BHC	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Dieldrin	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
Endosulfan I	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Endosulfan II	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
Endrin	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Heptachlor	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Methoxychlor	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Toxaphene	ND	20	ug/L	10	12/28/23	CN	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	63		%	10	12/28/23	CN	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	59		%	10	12/28/23	CN	30 - 150 %
%TCMX (Surrogate Rec)	63		%	10	12/28/23	CN	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	64		%	10	12/28/23	CN	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	460	290	mg/Kg	5	12/26/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	97		%	5	12/26/23	JRB	50 - 150 %
% Terphenyl (surr)	Interference		%	5	12/26/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
1,1-Dichloroethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
1,1-Dichloroethene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
1,2-Dibromoethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
1,2-Dichloroethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
1,2-Dichloropropane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
2-Hexanone	ND	28	ug/kg	1	12/27/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	28	ug/kg	1	12/27/23	JLI	SW8260D
Acetone	88	S 50	ug/kg	1	12/27/23	JLI	SW8260D
Benzene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Bromochloromethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Bromodichloromethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Bromoform	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Bromomethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Carbon Disulfide	17	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Carbon tetrachloride	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Chlorobenzene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Chloroethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Chloroform	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Chloromethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Cyclohexane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Dibromochloromethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Dichlorodifluoromethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Ethylbenzene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Isopropylbenzene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
m&p-Xylene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Methyl ethyl ketone	ND	34	ug/kg	1	12/27/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	11	ug/kg	1	12/27/23	JLI	SW8260D
Methylacetate	ND	4.5	ug/kg	1	12/27/23	JLI	SW8260D
Methylcyclohexane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Methylene chloride	ND	28	ug/kg	1	12/27/23	JLI	SW8260D
o-Xylene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Styrene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Tetrachloroethene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Toluene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Total Xylenes	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Trichloroethene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Trichlorofluoromethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Vinyl chloride	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	93		%	1	12/27/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	94		%	1	12/27/23	JLI	70 - 130 %
% Dibromofluoromethane	100		%	1	12/27/23	JLI	70 - 130 %
% Toluene-d8	94		%	1	12/27/23	JLI	70 - 130 %

1,4-dioxane

1,4-dioxane	ND	85	ug/kg	1	12/27/23	JLI	SW8260D
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Volatiles

1,2,3-Trichloropropane	ND	5.6	ug/Kg	1	12/27/23	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	5.6	ug/Kg	1	12/27/23	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	5.6	ug/Kg	1	12/27/23	JLI	SW8260D
1,3-Dichloropropane	ND	5.6	ug/Kg	1	12/27/23	JLI	SW8260D
n-Butylbenzene	ND	5.6	ug/Kg	1	12/27/23	JLI	SW8260D
n-Propylbenzene	ND	5.6	ug/Kg	1	12/27/23	JLI	SW8260D
p-Isopropyltoluene	ND	5.6	ug/Kg	1	12/27/23	JLI	SW8260D
sec-Butylbenzene	ND	5.6	ug/Kg	1	12/27/23	JLI	SW8260D
tert-Butylbenzene	ND	5.6	ug/Kg	1	12/27/23	JLI	SW8260D

QA/QC Surrogates

% 1,2-dichlorobenzene-d4	93		%	1	12/27/23	JLI	70 - 130 %
% Bromofluorobenzene	94		%	1	12/27/23	JLI	70 - 130 %
% Dibromofluoromethane	100		%	1	12/27/23	JLI	70 - 130 %
% Toluene-d8	94		%	1	12/27/23	JLI	70 - 130 %

TCLP Volatiles

1,1-Dichloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260

QA/QC Surrogates

% 1,2-dichlorobenzene-d4 (10x)	98		%	10	12/26/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	90		%	10	12/26/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	102		%	10	12/26/23	HM	70 - 130 %
% Toluene-d8 (10x)	96		%	10	12/26/23	HM	70 - 130 %

Volatile Library Search Completed 12/28/23 JLI

Semivolatiles

1,1-Biphenyl	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
2,3,4,6-tetrachlorophenol	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
2,4-Dichlorophenol	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
2,4-Dinitrophenol	ND	600	ug/Kg	1	12/27/23	AJK	SW8270E
2,4-Dinitrotoluene	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
2,6-Dinitrotoluene	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
2-Chloronaphthalene	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
2-Chlorophenol	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
2-Methylnaphthalene	800	260	ug/Kg	1	12/27/23	AJK	SW8270E
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
2-Nitroaniline	ND	600	ug/Kg	1	12/27/23	AJK	SW8270E
2-Nitrophenol	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
3&4-Methylphenol (m&p-cresol)	470	380	ug/Kg	1	12/27/23	AJK	SW8270E
3,3'-Dichlorobenzidine	ND	450	ug/Kg	1	12/27/23	AJK	SW8270E
3-Nitroaniline	ND	600	ug/Kg	1	12/27/23	AJK	SW8270E
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	12/27/23	AJK	SW8270E
4-Bromophenyl phenyl ether	ND	380	ug/Kg	1	12/27/23	AJK	SW8270E
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
4-Chloroaniline	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
4-Nitroaniline	ND	600	ug/Kg	1	12/27/23	AJK	SW8270E
4-Nitrophenol	ND	1100	ug/Kg	1	12/27/23	AJK	SW8270E
Acenaphthene	3300	260	ug/Kg	1	12/27/23	AJK	SW8270E
Acenaphthylene	2200	260	ug/Kg	1	12/27/23	AJK	SW8270E
Acetophenone	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
Anthracene	17000	2600	ug/Kg	10	12/28/23	AJK	SW8270E
Atrazine	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
Benz(a)anthracene	42000	2600	ug/Kg	10	12/28/23	AJK	SW8270E
Benzaldehyde	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
Benzo(a)pyrene	38000	2600	ug/Kg	10	12/28/23	AJK	SW8270E
Benzo(b)fluoranthene	45000	2600	ug/Kg	10	12/28/23	AJK	SW8270E
Benzo(ghi)perylene	18000	2600	ug/Kg	10	12/28/23	AJK	SW8270E
Benzo(k)fluoranthene	16000	2600	ug/Kg	10	12/28/23	AJK	SW8270E
Benzyl butyl phthalate	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
Bis(2-chloroethyl)ether	ND	380	ug/Kg	1	12/27/23	AJK	SW8270E
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
Caprolactam	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
Carbazole	3400	380	ug/Kg	1	12/27/23	AJK	SW8270E
Chrysene	39000	2600	ug/Kg	10	12/28/23	AJK	SW8270E
Dibenz(a,h)anthracene	6000	190	ug/Kg	1	12/27/23	AJK	SW8270E
Dibenzofuran	2100	260	ug/Kg	1	12/27/23	AJK	SW8270E
Diethyl phthalate	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
Dimethylphthalate	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
Di-n-butylphthalate	ND	750	ug/Kg	1	12/27/23	AJK	SW8270E
Di-n-octylphthalate	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
Fluoranthene	110000	26000	ug/Kg	100	12/28/23	AJK	SW8270E
Fluorene	3900	260	ug/Kg	1	12/27/23	AJK	SW8270E
Hexachlorobenzene	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
Hexachlorobutadiene	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
Indeno(1,2,3-cd)pyrene	24000	2600	ug/Kg	10	12/28/23	AJK	SW8270E
Isophorone	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
Naphthalene	2000	260	ug/Kg	1	12/27/23	AJK	SW8270E
Nitrobenzene	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
N-Nitrosodimethylamine	ND	380	ug/Kg	1	12/27/23	AJK	SW8270E
N-Nitrosodi-n-propylamine	ND	190	ug/Kg	1	12/27/23	AJK	SW8270E
N-Nitrosodiphenylamine	ND	380	ug/Kg	1	12/27/23	AJK	SW8270E
Pentachlorophenol	ND	380	ug/Kg	1	12/27/23	AJK	SW8270E
Phenanthrene	29000	2600	ug/Kg	10	12/28/23	AJK	SW8270E
Phenol	ND	260	ug/Kg	1	12/27/23	AJK	SW8270E
Pyrene	71000	2600	ug/Kg	10	12/28/23	AJK	SW8270E
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	62		%	1	12/27/23	AJK	30 - 130 %
% 2-Fluorobiphenyl	49		%	1	12/27/23	AJK	30 - 130 %
% 2-Fluorophenol	55		%	1	12/27/23	AJK	30 - 130 %
% Nitrobenzene-d5	59		%	1	12/27/23	AJK	30 - 130 %
% Phenol-d5	60		%	1	12/27/23	AJK	30 - 130 %
% Terphenyl-d14	63		%	1	12/27/23	AJK	30 - 130 %
<u>TCLP Acid/Base-Neutral</u>							
1,4-Dichlorobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	75		%	1	12/28/23	MR	15 - 110 %
% 2-Fluorobiphenyl	46		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorophenol	46		%	1	12/28/23	MR	15 - 110 %
% Nitrobenzene-d5	59		%	1	12/28/23	MR	30 - 130 %
% Phenol-d5	40		%	1	12/28/23	MR	15 - 110 %
% Terphenyl-d14	73		%	1	12/28/23	MR	30 - 130 %
Semivolatile Library Search	Completed				12/28/23	MR	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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 (preceded 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.

Hexavalent Chromium:
This sample is in a reducing state.

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.

S - Laboratory solvent, contamination is possible.

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

January 10, 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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
Location Code: AES-EASTSIDE
Rush Request: 5 Day
P.O.#: 0897

Custody Information

Collected by:
Received by: CP
Analyzed by: see "By" below

Date

12/20/23
12/21/23

Time

9:40
19:25

Laboratory Data

SDG ID: GCP73450
Phoenix ID: CP73452

Project ID: EAST SIDE COASTAL RESILIENCY
Client ID: DEP78

Table with 8 columns: Parameter, Result, RL/PQL, Units, Dilution, Date/Time, By, Reference. Lists various elements like Silver, Aluminum, Arsenic, Barium, Beryllium, Calcium, Cadmium, Cobalt, Chromium, Copper, Iron, Mercury, Potassium, Magnesium, Manganese, Sodium, Nickel, Lead, Antimony, Selenium, and TCLP elements with their respective results and references.

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.2	3.2	mg/Kg	1	12/22/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/22/23	AL/HL/HL	SW3010A
Trivalent Chromium	18.2	0.35	mg/kg	1	12/26/23		CALC 6010-7196
Vanadium	27.1	0.35	mg/Kg	1	12/22/23	TH	SW6010D
Zinc	211	0.7	mg/Kg	1	12/22/23	TH	SW6010D
Percent Solid	84		%		12/21/23	CV	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/22/23	ER	SW846-Corr
Flash Point	>200	200	Degree F	1	12/29/23	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.43	0.43	mg/Kg	1	12/22/23	NP	SW7196A
Ignitability	Passed	140	degree F	1	12/29/23	G	SW846-Ignit
pH at 25C - Soil	7.91	1.00	pH Units	1	12/22/23 00:19	ER	SW846 9045D
Reactivity Cyanide	< 6	6	mg/Kg	1	12/23/23	EG	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	12/23/23	NP/EG	SW846 CH7
Reactivity	Negative		Pos/Neg	1	12/23/23	EG	SW846-React
Redox Potential	238		mV	1	12/22/23	ER	SM2580B-09
Total Cyanide (SW9010C Distill.)	< 0.60	0.60	mg/Kg	1	12/23/23	EG	SW9012B
Mercury Digestion	Completed				12/22/23	HL/HL	SW7471B
Extraction of NY ETPH	Completed				12/22/23	H/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/21/23	L/D	SW3546
NJ EPH Extraction	Completed				12/22/23	C/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/22/23	H/A	SW3546
Soil Extraction for Pesticides	Completed				12/22/23	H/A	SW3546
Soil Extraction for SVOA	Completed				12/26/23	C/JDW	SW3546
TCLP Digestion Mercury	Completed				12/22/23	AL/HL/HL	SW7470A
TCLP Herbicides Extraction	Completed				12/27/23	CV/D	SW8150 MOD
TCLP Extraction for Metals	Completed				12/21/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/21/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/26/23	S/S	SW3510C
TCLP Semi-Volatile Extraction	Completed				12/27/23	LB1/LB1	SW3510C
TCLP Extraction Volatiles	Completed				12/21/23	CV	SW1311
Total Metals Digest	Completed				12/21/23	P/AG	SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	ND	9.4	mg/kg	1	12/26/23	JRB	NJEPH 10-08 R3
C9-C28	19	19	mg/kg	1	12/26/23	JRB	NJEPH 10-08 R3
Total EPH	19.0	9.4	mg/kg	1	12/26/23	JRB	NJEPH 10-08 R3

QA/QC Surrogates

% COD (surr)	58		%	1	12/26/23	JRB	40 - 140 %
% Terphenyl (surr)	73		%	1	12/26/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	6.8	mg/Kg	50	12/22/23	RM	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	75		%	50	12/22/23	RM	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	150	ug/Kg	10	12/22/23	KCA	SW8151A
2,4,5-TP (Silvex)	ND	150	ug/Kg	10	12/22/23	KCA	SW8151A
2,4-D	ND	290	ug/Kg	10	12/22/23	KCA	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	2900	ug/Kg	10	12/22/23	KCA	SW8151A
Dalapon	ND	150	ug/Kg	10	12/22/23	KCA	SW8151A
Dicamba	ND	150	ug/Kg	10	12/22/23	KCA	SW8151A
Dichloroprop	ND	290	ug/Kg	10	12/22/23	KCA	SW8151A
Dinoseb	ND	290	ug/Kg	10	12/22/23	KCA	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	57		%	10	12/22/23	KCA	30 - 150 %
% DCAA (Confirmation)	59		%	10	12/22/23	KCA	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	78	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1221	ND	78	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1232	ND	78	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1242	ND	78	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1248	ND	78	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1254	ND	78	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1260	ND	78	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1262	ND	78	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1268	ND	78	ug/Kg	2	12/26/23	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	72		%	2	12/26/23	SC	30 - 150 %
% DCBP (Confirmation)	68		%	2	12/26/23	SC	30 - 150 %
% TCMX	77		%	2	12/26/23	SC	30 - 150 %
% TCMX (Confirmation)	68		%	2	12/26/23	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.3	ug/Kg	2	12/26/23	AW	SW8081B
4,4' -DDE	ND	2.3	ug/Kg	2	12/26/23	AW	SW8081B
4,4' -DDT	ND	2.3	ug/Kg	2	12/26/23	AW	SW8081B
a-BHC	ND	7.8	ug/Kg	2	12/26/23	AW	SW8081B
a-Chlordane	ND	3.9	ug/Kg	2	12/26/23	AW	SW8081B
Aldrin	ND	3.9	ug/Kg	2	12/26/23	AW	SW8081B
b-BHC	ND	7.8	ug/Kg	2	12/26/23	AW	SW8081B
Chlordane	ND	39	ug/Kg	2	12/26/23	AW	SW8081B
d-BHC	ND	7.8	ug/Kg	2	12/26/23	AW	SW8081B
Dieldrin	ND	3.9	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan I	ND	7.8	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan II	ND	7.8	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan sulfate	ND	7.8	ug/Kg	2	12/26/23	AW	SW8081B
Endrin	ND	7.8	ug/Kg	2	12/26/23	AW	SW8081B
Endrin aldehyde	ND	7.8	ug/Kg	2	12/26/23	AW	SW8081B
Endrin ketone	ND	7.8	ug/Kg	2	12/26/23	AW	SW8081B
g-BHC	ND	1.6	ug/Kg	2	12/26/23	AW	SW8081B
g-Chlordane	ND	3.9	ug/Kg	2	12/26/23	AW	SW8081B
Heptachlor	ND	7.8	ug/Kg	2	12/26/23	AW	SW8081B
Heptachlor epoxide	ND	7.8	ug/Kg	2	12/26/23	AW	SW8081B
Methoxychlor	ND	39	ug/Kg	2	12/26/23	AW	SW8081B
Toxaphene	ND	160	ug/Kg	2	12/26/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	90		%	2	12/26/23	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	90		%	2	12/26/23	AW	30 - 150 %
% TCMX	75		%	2	12/26/23	AW	30 - 150 %
% TCMX (Confirmation)	80		%	2	12/26/23	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/28/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/28/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	73		%	10	12/28/23	JRB	30 - 150 %
% DCAA (Confirmation)	73		%	10	12/28/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
a-BHC	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Alachlor	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Aldrin	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
b-BHC	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Chlordane	ND	5.0	ug/L	10	12/28/23	CN	SW8081B
d-BHC	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Dieldrin	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
Endosulfan I	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Endosulfan II	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
Endrin	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Heptachlor	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Methoxychlor	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Toxaphene	ND	20	ug/L	10	12/28/23	CN	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	76		%	10	12/28/23	CN	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	71		%	10	12/28/23	CN	30 - 150 %
%TCMX (Surrogate Rec)	70		%	10	12/28/23	CN	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	68		%	10	12/28/23	CN	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	ND	58	mg/Kg	1	12/26/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	102		%	1	12/26/23	JRB	50 - 150 %
% Terphenyl (surr)	73		%	1	12/26/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
1,1-Dichloroethane	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
1,1-Dichloroethene	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
1,2-Dibromoethane	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
1,2-Dichloroethane	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
1,2-Dichloropropane	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
2-Hexanone	ND	25	ug/kg	1	12/27/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	25	ug/kg	1	12/27/23	JLI	SW8260D
Acetone	59	S 50	ug/kg	1	12/27/23	JLI	SW8260D
Benzene	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Bromochloromethane	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Bromodichloromethane	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Bromoform	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Bromomethane	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Carbon Disulfide	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Carbon tetrachloride	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Chlorobenzene	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Chloroethane	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Chloroform	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Chloromethane	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Cyclohexane	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Dibromochloromethane	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Dichlorodifluoromethane	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Ethylbenzene	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Isopropylbenzene	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
m&p-Xylene	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Methyl ethyl ketone	ND	30	ug/kg	1	12/27/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	10	ug/kg	1	12/27/23	JLI	SW8260D
Methylacetate	ND	4.0	ug/kg	1	12/27/23	JLI	SW8260D
Methylcyclohexane	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Methylene chloride	ND	25	ug/kg	1	12/27/23	JLI	SW8260D
o-Xylene	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Styrene	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Tetrachloroethene	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Toluene	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Total Xylenes	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Trichloroethene	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Trichlorofluoromethane	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Vinyl chloride	ND	5.0	ug/kg	1	12/27/23	JLI	SW8260D
<u>QA/QC Surrogates</u>							
% 1,2-dichlorobenzene-d4	93		%	1	12/27/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	95		%	1	12/27/23	JLI	70 - 130 %
% Dibromofluoromethane	102		%	1	12/27/23	JLI	70 - 130 %
% Toluene-d8	95		%	1	12/27/23	JLI	70 - 130 %

1,4-dioxane

1,4-dioxane	ND	75	ug/kg	1	12/27/23	JLI	SW8260D
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Volatiles

1,2,3-Trichloropropane	ND	5.0	ug/Kg	1	12/27/23	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	5.0	ug/Kg	1	12/27/23	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	5.0	ug/Kg	1	12/27/23	JLI	SW8260D
1,3-Dichloropropane	ND	5.0	ug/Kg	1	12/27/23	JLI	SW8260D
n-Butylbenzene	ND	5.0	ug/Kg	1	12/27/23	JLI	SW8260D
n-Propylbenzene	ND	5.0	ug/Kg	1	12/27/23	JLI	SW8260D
p-Isopropyltoluene	ND	5.0	ug/Kg	1	12/27/23	JLI	SW8260D
sec-Butylbenzene	ND	5.0	ug/Kg	1	12/27/23	JLI	SW8260D
tert-Butylbenzene	ND	5.0	ug/Kg	1	12/27/23	JLI	SW8260D

QA/QC Surrogates

% 1,2-dichlorobenzene-d4	93		%	1	12/27/23	JLI	70 - 130 %
% Bromofluorobenzene	95		%	1	12/27/23	JLI	70 - 130 %
% Dibromofluoromethane	102		%	1	12/27/23	JLI	70 - 130 %
% Toluene-d8	95		%	1	12/27/23	JLI	70 - 130 %

TCLP Volatiles

1,1-Dichloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260

QA/QC Surrogates

% 1,2-dichlorobenzene-d4 (10x)	98		%	10	12/26/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	89		%	10	12/26/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	103		%	10	12/26/23	HM	70 - 130 %
% Toluene-d8 (10x)	95		%	10	12/26/23	HM	70 - 130 %

Volatile Library Search Completed 12/28/23 JLI

Semivolatiles

1,1-Biphenyl	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2,3,4,6-tetrachlorophenol	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2,4,5-Trichlorophenol	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2,4,6-Trichlorophenol	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2,4-Dichlorophenol	ND	270	ug/Kg	1	12/27/23	MR	SW8270E

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2,4-Dinitrophenol	ND	630	ug/Kg	1	12/27/23	MR	SW8270E
2,4-Dinitrotoluene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2,6-Dinitrotoluene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2-Chloronaphthalene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2-Chlorophenol	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2-Methylnaphthalene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2-Methylphenol (o-cresol)	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2-Nitroaniline	ND	630	ug/Kg	1	12/27/23	MR	SW8270E
2-Nitrophenol	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	390	ug/Kg	1	12/27/23	MR	SW8270E
3,3'-Dichlorobenzidine	ND	470	ug/Kg	1	12/27/23	MR	SW8270E
3-Nitroaniline	ND	630	ug/Kg	1	12/27/23	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	12/27/23	MR	SW8270E
4-Bromophenyl phenyl ether	ND	390	ug/Kg	1	12/27/23	MR	SW8270E
4-Chloro-3-methylphenol	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
4-Chloroaniline	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
4-Nitroaniline	ND	630	ug/Kg	1	12/27/23	MR	SW8270E
4-Nitrophenol	ND	1100	ug/Kg	1	12/27/23	MR	SW8270E
Acenaphthene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Acenaphthylene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Acetophenone	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Anthracene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Atrazine	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Benz(a)anthracene	400	270	ug/Kg	1	12/27/23	MR	SW8270E
Benzaldehyde	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(a)pyrene	380	270	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(b)fluoranthene	440	270	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(ghi)perylene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(k)fluoranthene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Benzyl butyl phthalate	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Bis(2-chloroethyl)ether	ND	390	ug/Kg	1	12/27/23	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Caprolactam	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Carbazole	ND	390	ug/Kg	1	12/27/23	MR	SW8270E
Chrysene	360	270	ug/Kg	1	12/27/23	MR	SW8270E
Dibenz(a,h)anthracene	ND	200	ug/Kg	1	12/27/23	MR	SW8270E
Dibenzofuran	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Diethyl phthalate	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Dimethylphthalate	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Di-n-butylphthalate	ND	780	ug/Kg	1	12/27/23	MR	SW8270E
Di-n-octylphthalate	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Fluoranthene	970	270	ug/Kg	1	12/27/23	MR	SW8270E
Fluorene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Hexachlorobenzene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Hexachlorobutadiene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Hexachlorocyclopentadiene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E

1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Indeno(1,2,3-cd)pyrene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Isophorone	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Naphthalene	550	270	ug/Kg	1	12/27/23	MR	SW8270E
Nitrobenzene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
N-Nitrosodimethylamine	ND	390	ug/Kg	1	12/27/23	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	1	12/27/23	MR	SW8270E
N-Nitrosodiphenylamine	ND	390	ug/Kg	1	12/27/23	MR	SW8270E
Pentachlorophenol	ND	390	ug/Kg	1	12/27/23	MR	SW8270E
Phenanthrene	580	270	ug/Kg	1	12/27/23	MR	SW8270E
Phenol	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Pyrene	900	270	ug/Kg	1	12/27/23	MR	SW8270E
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	73		%	1	12/27/23	MR	30 - 130 %
% 2-Fluorobiphenyl	68		%	1	12/27/23	MR	30 - 130 %
% 2-Fluorophenol	66		%	1	12/27/23	MR	30 - 130 %
% Nitrobenzene-d5	64		%	1	12/27/23	MR	30 - 130 %
% Phenol-d5	72		%	1	12/27/23	MR	30 - 130 %
% Terphenyl-d14	77		%	1	12/27/23	MR	30 - 130 %
<u>TCLP Acid/Base-Neutral</u>							
1,4-Dichlorobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	76		%	1	12/28/23	MR	15 - 110 %
% 2-Fluorobiphenyl	53		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorophenol	49		%	1	12/28/23	MR	15 - 110 %
% Nitrobenzene-d5	62		%	1	12/28/23	MR	30 - 130 %
% Phenol-d5	42		%	1	12/28/23	MR	15 - 110 %
% Terphenyl-d14	73		%	1	12/28/23	MR	30 - 130 %
Semivolatile Library Search	Completed				12/28/23	MR	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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 (preceded 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.

Hexavalent Chromium:
This sample is in a reducing state.

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

S - Laboratory solvent, contamination is possible.

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

January 10, 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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
 Location Code: AES-EASTSIDE
 Rush Request: 5 Day
 P.O.#: 0897

Custody Information

Collected by:
 Received by: CP
 Analyzed by: see "By" below

Date

12/20/23
 12/21/23

Time

9:00
 19:25

Laboratory Data

SDG ID: GCP73450
 Phoenix ID: CP73453

Project ID: EAST SIDE COASTAL RESILIENCY
 Client ID: DEP79

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.39	0.39	mg/Kg	1	12/22/23	TH	SW6010D
Aluminum	10700	58	mg/Kg	10	12/27/23	TH	SW6010D
Arsenic	3.25	0.77	mg/Kg	1	12/22/23	TH	SW6010D
Barium	101	0.39	mg/Kg	1	12/22/23	TH	SW6010D
Beryllium	0.49	0.31	mg/Kg	1	12/22/23	TH	SW6010D
Calcium	2130	5.8	mg/Kg	1	12/22/23	TH	SW6010D
Cadmium	0.71	0.39	mg/Kg	1	12/22/23	TH	SW6010D
Cobalt	6.99	0.39	mg/Kg	1	12/22/23	TH	SW6010D
Chromium	18.1	0.39	mg/Kg	1	12/22/23	TH	SW6010D
Copper	22.5	0.8	mg/kg	1	12/22/23	TH	SW6010D
Iron	14100	5.8	mg/Kg	1	12/22/23	TH	SW6010D
Mercury	0.08	0.03	mg/Kg	2	12/22/23	ZT	SW7471B
Potassium	733	58	mg/Kg	10	12/22/23	TH	SW6010D
Magnesium	2910	5.8	mg/Kg	1	12/22/23	TH	SW6010D
Manganese	361	0.39	mg/Kg	1	12/22/23	TH	SW6010D
Sodium	123	75	mg/Kg	1	12/22/23	TH	SW6010D
Nickel	14.6	0.39	mg/Kg	1	12/22/23	TH	SW6010D
Lead	48.4	0.39	mg/Kg	1	12/22/23	TH	SW6010D
Antimony	< 3.9	3.9	mg/Kg	1	12/22/23	TH	SW6010D
Selenium	< 1.5	1.5	mg/Kg	1	12/22/23	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Barium	1.22	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	12/22/23	AL1	SW846 1311/7470
TCLP Lead	2.83	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.5	3.5	mg/Kg	1	12/22/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/22/23	AL/HL/HL	SW3010A
Trivalent Chromium	18.1	0.39	mg/kg	1	12/26/23		CALC 6010-7196
Vanadium	25.8	0.39	mg/Kg	1	12/22/23	TH	SW6010D
Zinc	49.6	0.8	mg/Kg	1	12/22/23	TH	SW6010D
Percent Solid	90		%		12/21/23	CV	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/22/23	ER	SW846-Corr 1
Flash Point	>200	200	Degree F	1	12/29/23	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.43	0.43	mg/Kg	1	12/22/23	NP	SW7196A
Ignitability	Passed	140	degree F	1	12/29/23	G	SW846-Ignit 1
pH at 25C - Soil	7.94	1.00	pH Units	1	12/22/23 00:19	ER	SW846 9045D 1
Reactivity Cyanide	< 5	5	mg/Kg	1	12/23/23	EG	SW846 7.3.3.1/90 1
Reactivity Sulfide	< 20	20	mg/Kg	1	12/23/23	NP/EG	SW846 CH7 1
Reactivity	Negative		Pos/Neg	1	12/23/23	EG	SW846-React 1
Redox Potential	258		mV	1	12/22/23	ER	SM2580B-09 1
Total Cyanide (SW9010C Distill.)	< 0.56	0.56	mg/Kg	1	12/23/23	EG	SW9012B
Mercury Digestion	Completed				12/22/23	HL/HL	SW7471B
Extraction of NY ETPH	Completed				12/22/23	H/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/21/23	L/D	SW3546
NJ EPH Extraction	Completed				12/22/23	C/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/22/23	H/A	SW3546
Soil Extraction for Pesticides	Completed				12/22/23	H/A	SW3546
Soil Extraction for SVOA	Completed				12/26/23	C/JDW	SW3546
TCLP Digestion Mercury	Completed				12/22/23	AL/HL/HL	SW7470A
TCLP Herbicides Extraction	Completed				12/27/23	CV/D	SW8150 MOD
TCLP Extraction for Metals	Completed				12/21/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/21/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/26/23	S/S	SW3510C
TCLP Semi-Volatile Extraction	Completed				12/27/23	LB1/LB1	SW3510C
TCLP Extraction Volatiles	Completed				12/21/23	CV	SW1311
Total Metals Digest	Completed				12/21/23	P/AG	SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	ND	8.6	mg/kg	1	12/26/23	JRB	NJEPH 10-08 R3 1
C9-C28	ND	17	mg/kg	1	12/26/23	JRB	NJEPH 10-08 R3 1
Total EPH	ND	8.6	mg/kg	1	12/26/23	JRB	NJEPH 10-08 R3 1

QA/QC Surrogates

% COD (surr)	74		%	1	12/26/23	JRB	40 - 140 %
% Terphenyl (surr)	73		%	1	12/26/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	5.3	mg/Kg	50	12/22/23	RM	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	78		%	50	12/22/23	RM	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
2,4,5-TP (Silvex)	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
2,4-D	ND	270	ug/Kg	10	12/22/23	KCA	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	2700	ug/Kg	10	12/22/23	KCA	SW8151A
Dalapon	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
Dicamba	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
Dichloroprop	ND	270	ug/Kg	10	12/22/23	KCA	SW8151A
Dinoseb	ND	270	ug/Kg	10	12/22/23	KCA	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	50		%	10	12/22/23	KCA	30 - 150 %
% DCAA (Confirmation)	59		%	10	12/22/23	KCA	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	72	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1221	ND	72	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1232	ND	72	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1242	ND	72	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1248	ND	72	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1254	ND	72	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1260	ND	72	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1262	ND	72	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1268	ND	72	ug/Kg	2	12/26/23	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	97		%	2	12/26/23	SC	30 - 150 %
% DCBP (Confirmation)	93		%	2	12/26/23	SC	30 - 150 %
% TCMX	98		%	2	12/26/23	SC	30 - 150 %
% TCMX (Confirmation)	94		%	2	12/26/23	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.2	ug/Kg	2	12/26/23	AW	SW8081B
4,4' -DDE	ND	2.2	ug/Kg	2	12/26/23	AW	SW8081B
4,4' -DDT	ND	2.2	ug/Kg	2	12/26/23	AW	SW8081B
a-BHC	ND	7.2	ug/Kg	2	12/26/23	AW	SW8081B
a-Chlordane	ND	3.6	ug/Kg	2	12/26/23	AW	SW8081B
Aldrin	ND	3.6	ug/Kg	2	12/26/23	AW	SW8081B
b-BHC	ND	7.2	ug/Kg	2	12/26/23	AW	SW8081B
Chlordane	ND	36	ug/Kg	2	12/26/23	AW	SW8081B
d-BHC	ND	7.2	ug/Kg	2	12/26/23	AW	SW8081B
Dieldrin	ND	3.6	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan I	ND	7.2	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan II	ND	7.2	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan sulfate	ND	7.2	ug/Kg	2	12/26/23	AW	SW8081B
Endrin	ND	7.2	ug/Kg	2	12/26/23	AW	SW8081B
Endrin aldehyde	ND	7.2	ug/Kg	2	12/26/23	AW	SW8081B
Endrin ketone	ND	7.2	ug/Kg	2	12/26/23	AW	SW8081B
g-BHC	ND	1.4	ug/Kg	2	12/26/23	AW	SW8081B
g-Chlordane	ND	3.6	ug/Kg	2	12/26/23	AW	SW8081B
Heptachlor	ND	7.2	ug/Kg	2	12/26/23	AW	SW8081B
Heptachlor epoxide	ND	7.2	ug/Kg	2	12/26/23	AW	SW8081B
Methoxychlor	ND	36	ug/Kg	2	12/26/23	AW	SW8081B
Toxaphene	ND	140	ug/Kg	2	12/26/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	85		%	2	12/26/23	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	81		%	2	12/26/23	AW	30 - 150 %
% TCMX	80		%	2	12/26/23	AW	30 - 150 %
% TCMX (Confirmation)	77		%	2	12/26/23	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/28/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/28/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	72		%	10	12/28/23	JRB	30 - 150 %
% DCAA (Confirmation)	72		%	10	12/28/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	12/28/23	KCA	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	12/28/23	KCA	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	12/28/23	KCA	SW8081B
a-BHC	ND	0.50	ug/L	10	12/28/23	KCA	SW8081B
Alachlor	ND	0.50	ug/L	10	12/28/23	KCA	SW8081B
Aldrin	ND	0.50	ug/L	10	12/28/23	KCA	SW8081B
b-BHC	ND	0.50	ug/L	10	12/28/23	KCA	SW8081B
Chlordane	ND	5.0	ug/L	10	12/28/23	KCA	SW8081B
d-BHC	ND	0.50	ug/L	10	12/28/23	KCA	SW8081B
Dieldrin	ND	1.0	ug/L	10	12/28/23	KCA	SW8081B
Endosulfan I	ND	0.50	ug/L	10	12/28/23	KCA	SW8081B
Endosulfan II	ND	1.0	ug/L	10	12/28/23	KCA	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	12/28/23	KCA	SW8081B
Endrin	ND	1.0	ug/L	10	12/28/23	KCA	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	12/28/23	KCA	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	12/28/23	KCA	SW8081B
Heptachlor	ND	0.50	ug/L	10	12/28/23	KCA	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	12/28/23	KCA	SW8081B
Methoxychlor	ND	0.50	ug/L	10	12/28/23	KCA	SW8081B
Toxaphene	ND	20	ug/L	10	12/28/23	KCA	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	66		%	10	12/28/23	KCA	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	60		%	10	12/28/23	KCA	30 - 150 %
%TCMX (Surrogate Rec)	69		%	10	12/28/23	KCA	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	69		%	10	12/28/23	KCA	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	ND	55	mg/Kg	1	12/26/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	81		%	1	12/26/23	JRB	50 - 150 %
% Terphenyl (surr)	79		%	1	12/26/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
1,1-Dichloroethane	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
1,1-Dichloroethene	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dibromoethane	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichloroethane	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichloropropane	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
2-Hexanone	ND	28	ug/kg	1	12/26/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	28	ug/kg	1	12/26/23	JLI	SW8260D
Acetone	ND	50	ug/kg	1	12/26/23	JLI	SW8260D
Benzene	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
Bromochloromethane	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
Bromodichloromethane	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
Bromoform	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
Bromomethane	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
Carbon Disulfide	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
Carbon tetrachloride	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
Chlorobenzene	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
Chloroethane	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
Chloroform	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
Chloromethane	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
Cyclohexane	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
Dibromochloromethane	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
Dichlorodifluoromethane	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
Ethylbenzene	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
Isopropylbenzene	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
m&p-Xylene	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
Methyl ethyl ketone	ND	33	ug/kg	1	12/26/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	11	ug/kg	1	12/26/23	JLI	SW8260D
Methylacetate	ND	4.4	ug/kg	1	12/26/23	JLI	SW8260D
Methylcyclohexane	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
Methylene chloride	ND	28	ug/kg	1	12/26/23	JLI	SW8260D
o-Xylene	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
Styrene	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
Tetrachloroethene	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
Toluene	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
Total Xylenes	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
Trichloroethene	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
Trichlorofluoromethane	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
Vinyl chloride	ND	5.5	ug/kg	1	12/26/23	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	95		%	1	12/26/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	97		%	1	12/26/23	JLI	70 - 130 %
% Dibromofluoromethane	104		%	1	12/26/23	JLI	70 - 130 %
% Toluene-d8	95		%	1	12/26/23	JLI	70 - 130 %

1,4-dioxane

1,4-dioxane	ND	83	ug/kg	1	12/26/23	JLI	SW8260D
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Volatiles

1,2,3-Trichloropropane	ND	5.5	ug/Kg	1	12/26/23	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	5.5	ug/Kg	1	12/26/23	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	5.5	ug/Kg	1	12/26/23	JLI	SW8260D
1,3-Dichloropropane	ND	5.5	ug/Kg	1	12/26/23	JLI	SW8260D
n-Butylbenzene	ND	5.5	ug/Kg	1	12/26/23	JLI	SW8260D
n-Propylbenzene	ND	5.5	ug/Kg	1	12/26/23	JLI	SW8260D
p-Isopropyltoluene	ND	5.5	ug/Kg	1	12/26/23	JLI	SW8260D
sec-Butylbenzene	ND	5.5	ug/Kg	1	12/26/23	JLI	SW8260D
tert-Butylbenzene	ND	5.5	ug/Kg	1	12/26/23	JLI	SW8260D

QA/QC Surrogates

% 1,2-dichlorobenzene-d4	95		%	1	12/26/23	JLI	70 - 130 %
% Bromofluorobenzene	97		%	1	12/26/23	JLI	70 - 130 %
% Dibromofluoromethane	104		%	1	12/26/23	JLI	70 - 130 %
% Toluene-d8	95		%	1	12/26/23	JLI	70 - 130 %

TCLP Volatiles

1,1-Dichloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260

QA/QC Surrogates

% 1,2-dichlorobenzene-d4 (10x)	97		%	10	12/26/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	90		%	10	12/26/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	103		%	10	12/26/23	HM	70 - 130 %
% Toluene-d8 (10x)	95		%	10	12/26/23	HM	70 - 130 %

Volatile Library Search Completed 12/27/23 JLI

Semivolatiles

1,1-Biphenyl	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
2,3,4,6-tetrachlorophenol	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
2,4,5-Trichlorophenol	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
2,4,6-Trichlorophenol	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
2,4-Dichlorophenol	ND	250	ug/Kg	1	12/27/23	MR	SW8270E

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
2,4-Dinitrophenol	ND	580	ug/Kg	1	12/27/23	MR	SW8270E
2,4-Dinitrotoluene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
2,6-Dinitrotoluene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
2-Chloronaphthalene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
2-Chlorophenol	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
2-Methylnaphthalene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
2-Methylphenol (o-cresol)	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
2-Nitroaniline	ND	580	ug/Kg	1	12/27/23	MR	SW8270E
2-Nitrophenol	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	360	ug/Kg	1	12/27/23	MR	SW8270E
3,3'-Dichlorobenzidine	ND	440	ug/Kg	1	12/27/23	MR	SW8270E
3-Nitroaniline	ND	580	ug/Kg	1	12/27/23	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	12/27/23	MR	SW8270E
4-Bromophenyl phenyl ether	ND	360	ug/Kg	1	12/27/23	MR	SW8270E
4-Chloro-3-methylphenol	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
4-Chloroaniline	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
4-Nitroaniline	ND	580	ug/Kg	1	12/27/23	MR	SW8270E
4-Nitrophenol	ND	1100	ug/Kg	1	12/27/23	MR	SW8270E
Acenaphthene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Acenaphthylene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Acetophenone	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Anthracene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Atrazine	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Benz(a)anthracene	340	250	ug/Kg	1	12/27/23	MR	SW8270E
Benzaldehyde	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(a)pyrene	500	250	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(b)fluoranthene	470	250	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(ghi)perylene	480	250	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(k)fluoranthene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Benzyl butyl phthalate	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Bis(2-chloroethyl)ether	ND	360	ug/Kg	1	12/27/23	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Caprolactam	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Carbazole	ND	360	ug/Kg	1	12/27/23	MR	SW8270E
Chrysene	290	250	ug/Kg	1	12/27/23	MR	SW8270E
Dibenz(a,h)anthracene	ND	180	ug/Kg	1	12/27/23	MR	SW8270E
Dibenzofuran	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Diethyl phthalate	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Dimethylphthalate	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Di-n-butylphthalate	ND	730	ug/Kg	1	12/27/23	MR	SW8270E
Di-n-octylphthalate	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Fluoranthene	690	250	ug/Kg	1	12/27/23	MR	SW8270E
Fluorene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Hexachlorobenzene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Hexachlorobutadiene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Hexachlorocyclopentadiene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Indeno(1,2,3-cd)pyrene	490	250	ug/Kg	1	12/27/23	MR	SW8270E
Isophorone	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Naphthalene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Nitrobenzene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
N-Nitrosodimethylamine	ND	360	ug/Kg	1	12/27/23	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	180	ug/Kg	1	12/27/23	MR	SW8270E
N-Nitrosodiphenylamine	ND	360	ug/Kg	1	12/27/23	MR	SW8270E
Pentachlorophenol	ND	360	ug/Kg	1	12/27/23	MR	SW8270E
Phenanthrene	310	250	ug/Kg	1	12/27/23	MR	SW8270E
Phenol	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Pyrene	650	250	ug/Kg	1	12/27/23	MR	SW8270E

QA/QC Surrogates

% 2,4,6-Tribromophenol	53		%	1	12/27/23	MR	30 - 130 %
% 2-Fluorobiphenyl	53		%	1	12/27/23	MR	30 - 130 %
% 2-Fluorophenol	55		%	1	12/27/23	MR	30 - 130 %
% Nitrobenzene-d5	55		%	1	12/27/23	MR	30 - 130 %
% Phenol-d5	59		%	1	12/27/23	MR	30 - 130 %
% Terphenyl-d14	62		%	1	12/27/23	MR	30 - 130 %

TCLP Acid/Base-Neutral

1,4-Dichlorobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270

QA/QC Surrogates

% 2,4,6-Tribromophenol	50		%	1	12/28/23	MR	15 - 110 %
% 2-Fluorobiphenyl	32		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorophenol	27		%	1	12/28/23	MR	15 - 110 %
% Nitrobenzene-d5	32		%	1	12/28/23	MR	30 - 130 %
% Phenol-d5	32		%	1	12/28/23	MR	15 - 110 %
% Terphenyl-d14	51		%	1	12/28/23	MR	30 - 130 %

Semivolatile Library Search Completed 12/28/23 MR

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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 (preceded 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.

Hexavalent Chromium:
This sample is in a reducing state.

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

January 10, 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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
Location Code: AES-EASTSIDE
Rush Request: Standard
P.O.#: 0897

Custody Information

Collected by:
Received by: CP
Analyzed by: see "By" below

Date

12/20/23
12/21/23

Time

11:15
19:25

Laboratory Data

SDG ID: GCP73450
Phoenix ID: CP73454

Project ID: EAST SIDE COASTAL RESILIENCY
Client ID: G-119

Table with 8 columns: Parameter, Result, RL/PQL, Units, Dilution, Date/Time, By, Reference. Lists various elements like Silver, Aluminum, Arsenic, etc., with their respective results and RL/PQL values.

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.2	3.2	mg/Kg	1	12/22/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/22/23	AL/HL/HL	SW3010A
Trivalent Chromium	13.5	0.35	mg/kg	1	12/26/23		CALC 6010-7196
Vanadium	16.6	0.35	mg/Kg	1	12/22/23	TH	SW6010D
Zinc	42.3	0.7	mg/Kg	1	12/22/23	TH	SW6010D
Percent Solid	88		%		12/21/23	CV	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/22/23	ER	SW846-Corr
Flash Point	>200	200	Degree F	1	12/29/23	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.41	0.41	mg/Kg	1	12/22/23	NP	SW7196A
Ignitability	Passed	140	degree F	1	12/29/23	G	SW846-Ignit
pH at 25C - Soil	8.30	1.00	pH Units	1	12/22/23 00:19	ER	SW846 9045D
Reactivity Cyanide	< 6	6	mg/Kg	1	12/23/23	EG	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	12/23/23	NP/EG	SW846 CH7
Reactivity	Negative		Pos/Neg	1	12/23/23	EG	SW846-React
Redox Potential	266		mV	1	12/22/23	ER	SM2580B-09
Total Cyanide (SW9010C Distill.)	< 0.57	0.57	mg/Kg	1	12/23/23	EG	SW9012B
Mercury Digestion	Completed				12/22/23	HL/HL	SW7471B
Extraction of NY ETPH	Completed				12/22/23	H/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/21/23	L/D	SW3546
NJ EPH Extraction	Completed				12/22/23	C/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/22/23	H/A	SW3546
Soil Extraction for Pesticides	Completed				12/22/23	H/A	SW3546
Soil Extraction for SVOA	Completed				12/26/23	C/JDW	SW3546
TCLP Digestion Mercury	Completed				12/22/23	AL/HL/HL	SW7470A
TCLP Herbicides Extraction	Completed				12/27/23	CV/D	SW8150 MOD
TCLP Extraction for Metals	Completed				12/21/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/29/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/26/23	S/S	SW3510C
TCLP Semi-Volatile Extraction	Completed				01/05/24	S/S	SW3510C
TCLP Extraction Volatiles	Completed				12/21/23	CV	SW1311
Total Metals Digest	Completed				12/21/23	P/AG	SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	270	44	mg/kg	5	12/26/23	JRB	NJEPH 10-08 R3
C9-C28	250	89	mg/kg	5	12/26/23	JRB	NJEPH 10-08 R3
Total EPH	520	44	mg/kg	5	12/26/23	JRB	NJEPH 10-08 R3

QA/QC Surrogates

% COD (surr)	139		%	5	12/26/23	JRB	40 - 140 %
% Terphenyl (surr)	128		%	5	12/26/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	13	mg/Kg	50	12/22/23	RM	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	75		%	50	12/22/23	RM	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
2,4,5-TP (Silvex)	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
2,4-D	ND	280	ug/Kg	10	12/22/23	KCA	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	2800	ug/Kg	10	12/22/23	KCA	SW8151A
Dalapon	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
Dicamba	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
Dichloroprop	ND	280	ug/Kg	10	12/22/23	KCA	SW8151A
Dinoseb	ND	280	ug/Kg	10	12/22/23	KCA	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	58		%	10	12/22/23	KCA	30 - 150 %
% DCAA (Confirmation)	69		%	10	12/22/23	KCA	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	75	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1221	ND	75	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1232	ND	75	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1242	ND	75	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1248	ND	75	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1254	ND	75	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1260	ND	75	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1262	ND	75	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1268	ND	75	ug/Kg	2	12/26/23	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	94		%	2	12/26/23	SC	30 - 150 %
% DCBP (Confirmation)	81		%	2	12/26/23	SC	30 - 150 %
% TCMX	94		%	2	12/26/23	SC	30 - 150 %
% TCMX (Confirmation)	80		%	2	12/26/23	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.2	ug/Kg	2	12/26/23	AW	SW8081B
4,4' -DDE	ND	2.2	ug/Kg	2	12/26/23	AW	SW8081B
4,4' -DDT	ND	2.2	ug/Kg	2	12/26/23	AW	SW8081B
a-BHC	ND	7.5	ug/Kg	2	12/26/23	AW	SW8081B
a-Chlordane	ND	3.7	ug/Kg	2	12/26/23	AW	SW8081B
Aldrin	ND	3.7	ug/Kg	2	12/26/23	AW	SW8081B
b-BHC	ND	7.5	ug/Kg	2	12/26/23	AW	SW8081B
Chlordane	ND	37	ug/Kg	2	12/26/23	AW	SW8081B
d-BHC	ND	7.5	ug/Kg	2	12/26/23	AW	SW8081B
Dieldrin	ND	3.7	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan I	ND	7.5	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan II	ND	7.5	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan sulfate	ND	7.5	ug/Kg	2	12/26/23	AW	SW8081B
Endrin	ND	7.5	ug/Kg	2	12/26/23	AW	SW8081B
Endrin aldehyde	ND	7.5	ug/Kg	2	12/26/23	AW	SW8081B
Endrin ketone	ND	7.5	ug/Kg	2	12/26/23	AW	SW8081B
g-BHC	ND	1.5	ug/Kg	2	12/26/23	AW	SW8081B
g-Chlordane	ND	3.7	ug/Kg	2	12/26/23	AW	SW8081B
Heptachlor	ND	7.5	ug/Kg	2	12/26/23	AW	SW8081B
Heptachlor epoxide	ND	7.5	ug/Kg	2	12/26/23	AW	SW8081B
Methoxychlor	ND	37	ug/Kg	2	12/26/23	AW	SW8081B
Toxaphene	ND	150	ug/Kg	2	12/26/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	84		%	2	12/26/23	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	95		%	2	12/26/23	AW	30 - 150 %
% TCMX	67		%	2	12/26/23	AW	30 - 150 %
% TCMX (Confirmation)	76		%	2	12/26/23	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/28/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/28/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	71		%	10	12/28/23	JRB	30 - 150 %
% DCAA (Confirmation)	72		%	10	12/28/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
a-BHC	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Alachlor	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Aldrin	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
b-BHC	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Chlordane	ND	5.0	ug/L	10	12/28/23	CN	SW8081B
d-BHC	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Dieldrin	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
Endosulfan I	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Endosulfan II	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
Endrin	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	12/28/23	CN	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Heptachlor	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Methoxychlor	ND	0.50	ug/L	10	12/28/23	CN	SW8081B
Toxaphene	ND	20	ug/L	10	12/28/23	CN	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	58		%	10	12/28/23	CN	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	55		%	10	12/28/23	CN	30 - 150 %
%TCMX (Surrogate Rec)	62		%	10	12/28/23	CN	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	65		%	10	12/28/23	CN	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	ND	280	mg/Kg	5	12/26/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	92		%	5	12/26/23	JRB	50 - 150 %
% Terphenyl (surr)	133		%	5	12/26/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
1,1-Dichloroethane	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
1,1-Dichloroethene	ND	10	ug/kg	1	12/26/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dibromoethane	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichloroethane	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichloropropane	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
2-Hexanone	ND	50	ug/kg	1	12/26/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	50	ug/kg	1	12/26/23	JLI	SW8260D
Acetone	ND	50	ug/kg	1	12/26/23	JLI	SW8260D
Benzene	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Bromochloromethane	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Bromodichloromethane	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Bromoform	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Bromomethane	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Carbon Disulfide	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Carbon tetrachloride	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Chlorobenzene	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Chloroethane	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Chloroform	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Chloromethane	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Cyclohexane	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Dibromochloromethane	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Dichlorodifluoromethane	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Ethylbenzene	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Isopropylbenzene	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
m&p-Xylene	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Methyl ethyl ketone	ND	60	ug/kg	1	12/26/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	20	ug/kg	1	12/26/23	JLI	SW8260D
Methylacetate	ND	8.0	ug/kg	1	12/26/23	JLI	SW8260D
Methylcyclohexane	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Methylene chloride	ND	50	ug/kg	1	12/26/23	JLI	SW8260D
o-Xylene	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Styrene	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Tetrachloroethene	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Toluene	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Total Xylenes	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Trichloroethene	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Trichlorofluoromethane	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Vinyl chloride	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	1	12/26/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	94		%	1	12/26/23	JLI	70 - 130 %
% Dibromofluoromethane	107		%	1	12/26/23	JLI	70 - 130 %
% Toluene-d8	96		%	1	12/26/23	JLI	70 - 130 %

1,4-dioxane

1,4-dioxane	ND	100	ug/kg	1	12/26/23	JLI	SW8260D
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Volatiles

1,2,3-Trichloropropane	ND	10	ug/Kg	1	12/26/23	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	10	ug/Kg	1	12/26/23	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	10	ug/Kg	1	12/26/23	JLI	SW8260D
1,3-Dichloropropane	ND	10	ug/Kg	1	12/26/23	JLI	SW8260D
n-Butylbenzene	ND	10	ug/Kg	1	12/26/23	JLI	SW8260D
n-Propylbenzene	ND	10	ug/Kg	1	12/26/23	JLI	SW8260D
p-Isopropyltoluene	ND	10	ug/Kg	1	12/26/23	JLI	SW8260D
sec-Butylbenzene	ND	10	ug/Kg	1	12/26/23	JLI	SW8260D
tert-Butylbenzene	ND	10	ug/Kg	1	12/26/23	JLI	SW8260D

QA/QC Surrogates

% 1,2-dichlorobenzene-d4	97		%	1	12/26/23	JLI	70 - 130 %
% Bromofluorobenzene	94		%	1	12/26/23	JLI	70 - 130 %
% Dibromofluoromethane	107		%	1	12/26/23	JLI	70 - 130 %
% Toluene-d8	96		%	1	12/26/23	JLI	70 - 130 %

TCLP Volatiles

1,1-Dichloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260

QA/QC Surrogates

% 1,2-dichlorobenzene-d4 (10x)	100		%	10	12/26/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	90		%	10	12/26/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	103		%	10	12/26/23	HM	70 - 130 %
% Toluene-d8 (10x)	95		%	10	12/26/23	HM	70 - 130 %

Volatile Library Search Completed 12/27/23 JLI

Semivolatiles

1,1-Biphenyl	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2,3,4,6-tetrachlorophenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2,4-Dichlorophenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2,4-Dinitrophenol	ND	600	ug/Kg	1	12/27/23	MR	SW8270E
2,4-Dinitrotoluene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2,6-Dinitrotoluene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2-Chloronaphthalene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2-Chlorophenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2-Methylnaphthalene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2-Nitroaniline	ND	600	ug/Kg	1	12/27/23	MR	SW8270E
2-Nitrophenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
3,3'-Dichlorobenzidine	ND	450	ug/Kg	1	12/27/23	MR	SW8270E
3-Nitroaniline	ND	600	ug/Kg	1	12/27/23	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	12/27/23	MR	SW8270E
4-Bromophenyl phenyl ether	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
4-Chloroaniline	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
4-Nitroaniline	ND	600	ug/Kg	1	12/27/23	MR	SW8270E
4-Nitrophenol	ND	1100	ug/Kg	1	12/27/23	MR	SW8270E
Acenaphthene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Acenaphthylene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Acetophenone	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Anthracene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Atrazine	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Benz(a)anthracene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Benzaldehyde	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(a)pyrene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(b)fluoranthene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(ghi)perylene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(k)fluoranthene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Benzyl butyl phthalate	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Bis(2-chloroethyl)ether	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Caprolactam	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Carbazole	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
Chrysene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Dibenz(a,h)anthracene	ND	190	ug/Kg	1	12/27/23	MR	SW8270E
Dibenzofuran	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Diethyl phthalate	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Dimethylphthalate	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Di-n-butylphthalate	ND	750	ug/Kg	1	12/27/23	MR	SW8270E
Di-n-octylphthalate	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Fluoranthene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Fluorene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Hexachlorobenzene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Hexachlorobutadiene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Indeno(1,2,3-cd)pyrene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Isophorone	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Naphthalene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Nitrobenzene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
N-Nitrosodimethylamine	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	190	ug/Kg	1	12/27/23	MR	SW8270E
N-Nitrosodiphenylamine	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
Pentachlorophenol	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
Phenanthrene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Phenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Pyrene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E

QA/QC Surrogates

% 2,4,6-Tribromophenol	69		%	1	12/27/23	MR	30 - 130 %
% 2-Fluorobiphenyl	62		%	1	12/27/23	MR	30 - 130 %
% 2-Fluorophenol	61		%	1	12/27/23	MR	30 - 130 %
% Nitrobenzene-d5	58		%	1	12/27/23	MR	30 - 130 %
% Phenol-d5	64		%	1	12/27/23	MR	30 - 130 %
% Terphenyl-d14	62		%	1	12/27/23	MR	30 - 130 %

TCLP Acid/Base-Neutral

1,4-Dichlorobenzene	ND	83	ug/L	1	01/06/24	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	01/06/24	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	01/06/24	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	01/06/24	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	01/06/24	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	01/06/24	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	01/06/24	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	01/06/24	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	01/06/24	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	01/06/24	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	01/06/24	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	01/06/24	MR	SW-846 1311/8270

QA/QC Surrogates

% 2,4,6-Tribromophenol	81		%	1	01/06/24	MR	15 - 110 %
% 2-Fluorobiphenyl	77		%	1	01/06/24	MR	30 - 130 %
% 2-Fluorophenol	70		%	1	01/06/24	MR	15 - 110 %
% Nitrobenzene-d5	80		%	1	01/06/24	MR	30 - 130 %
% Phenol-d5	63		%	1	01/06/24	MR	15 - 110 %
% Terphenyl-d14	90		%	1	01/06/24	MR	30 - 130 %

Semivolatile Library Search Completed 01/08/24 MR

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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 (preceded 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.

Hexavalent Chromium:
This sample is in a reducing state.

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

January 10, 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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
 Location Code: AES-EASTSIDE
 Rush Request: Standard
 P.O.#: 0897

Custody Information

Collected by:
 Received by: CP
 Analyzed by: see "By" below

Date

12/20/23
 12/21/23

Time

8:45
 19:25

Laboratory Data

SDG ID: GCP73450
 Phoenix ID: CP73455

Project ID: EAST SIDE COASTAL RESILIENCY
 Client ID: G-120

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.38	0.38	mg/Kg	1	12/22/23	TH	SW6010D
Aluminum	11000	57	mg/Kg	10	12/27/23	TH	SW6010D
Arsenic	8.92	0.76	mg/Kg	1	12/22/23	TH	SW6010D
Barium	127	0.38	mg/Kg	1	12/22/23	TH	SW6010D
Beryllium	0.52	0.30	mg/Kg	1	12/22/23	TH	SW6010D
Calcium	4860	5.7	mg/Kg	1	12/22/23	TH	SW6010D
Cadmium	1.23	0.38	mg/Kg	1	12/22/23	TH	SW6010D
Cobalt	7.50	0.38	mg/Kg	1	12/22/23	TH	SW6010D
Chromium	23.9	0.38	mg/Kg	1	12/22/23	TH	SW6010D
Copper	44.4	0.8	mg/kg	1	12/22/23	TH	SW6010D
Iron	17900	5.7	mg/Kg	1	12/22/23	TH	SW6010D
Mercury	0.22	0.03	mg/Kg	2	12/22/23	ZT	SW7471B
Potassium	1140	57	mg/Kg	10	12/22/23	TH	SW6010D
Magnesium	3420	5.7	mg/Kg	1	12/22/23	TH	SW6010D
Manganese	317	0.38	mg/Kg	1	12/22/23	TH	SW6010D
Sodium	175	75	mg/Kg	1	12/22/23	TH	SW6010D
Nickel	19.3	0.38	mg/Kg	1	12/22/23	TH	SW6010D
Lead	224	0.38	mg/Kg	1	12/22/23	TH	SW6010D
Antimony	< 3.8	3.8	mg/Kg	1	12/22/23	TH	SW6010D
Selenium	< 1.5	1.5	mg/Kg	1	12/22/23	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Barium	0.97	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	12/22/23	GW	SW846 1311/7470
TCLP Lead	0.27	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.4	3.4	mg/Kg	1	12/22/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/22/23	AL/HL/HL	SW3010A
Trivalent Chromium	23.9	0.38	mg/kg	1	12/26/23		CALC 6010-7196
Vanadium	37.2	0.38	mg/Kg	1	12/22/23	TH	SW6010D
Zinc	200	0.8	mg/Kg	1	12/22/23	TH	SW6010D
Percent Solid	87		%		12/21/23	CV	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/22/23	ER	SW846-Corr
Flash Point	>200	200	Degree F	1	12/29/23	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.44	0.44	mg/Kg	1	12/22/23	NP	SW7196A
Ignitability	Passed	140	degree F	1	12/29/23	G	SW846-Ignit
pH at 25C - Soil	7.78	1.00	pH Units	1	12/22/23 00:19	ER	SW846 9045D
Reactivity Cyanide	< 6	6	mg/Kg	1	12/23/23	EG	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	12/23/23	NP/EG	SW846 CH7
Reactivity	Negative		Pos/Neg	1	12/23/23	EG	SW846-React
Redox Potential	286		mV	1	12/22/23	ER	SM2580B-09
Total Cyanide (SW9010C Distill.)	< 0.57	0.57	mg/Kg	1	12/23/23	EG	SW9012B
Mercury Digestion	Completed				12/22/23	HL/HL	SW7471B
Extraction of NY ETPH	Completed				12/22/23	H/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/21/23	L/D	SW3546
NJ EPH Extraction	Completed				12/22/23	C/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/22/23	H/A	SW3546
Soil Extraction for Pesticides	Completed				12/22/23	H/A	SW3546
Soil Extraction for SVOA	Completed				12/26/23	C/JDW	SW3546
TCLP Digestion Mercury	Completed				12/22/23	AL/HL/HL	SW7470A
TCLP Herbicides Extraction	Completed				12/27/23	CV/D	SW8150 MOD
TCLP Extraction for Metals	Completed				12/21/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/29/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/28/23	S/S	SW3510C
TCLP Semi-Volatile Extraction	Completed				01/05/24	S/S	SW3510C
TCLP Extraction Volatiles	Completed				12/21/23	CV	SW1311
Total Metals Digest	Completed				12/21/23	P/AG	SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	ND	9.1	mg/kg	1	12/26/23	JRB	NJEPH 10-08 R3
C9-C28	ND	18	mg/kg	1	12/26/23	JRB	NJEPH 10-08 R3
Total EPH	ND	9.1	mg/kg	1	12/26/23	JRB	NJEPH 10-08 R3

QA/QC Surrogates

% COD (surr)	64		%	1	12/26/23	JRB	40 - 140 %
% Terphenyl (surr)	71		%	1	12/26/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	6.9	mg/Kg	50	12/22/23	RM	SW8015D GRO
<u>QA/QC Surrogates</u>							
% 2,5-Dibromotoluene (FID)	78		%	50	12/22/23	RM	70 - 130 %

Chlorinated Herbicides

2,4,5-T	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
2,4,5-TP (Silvex)	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
2,4-D	ND	280	ug/Kg	10	12/22/23	KCA	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	2800	ug/Kg	10	12/22/23	KCA	SW8151A
Dalapon	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
Dicamba	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
Dichloroprop	ND	280	ug/Kg	10	12/22/23	KCA	SW8151A
Dinoseb	ND	280	ug/Kg	10	12/22/23	KCA	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	50		%	10	12/22/23	KCA	30 - 150 %
% DCAA (Confirmation)	50		%	10	12/22/23	KCA	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1221	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1232	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1242	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1248	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1254	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1260	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1262	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1268	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	99		%	2	12/26/23	SC	30 - 150 %
% DCBP (Confirmation)	91		%	2	12/26/23	SC	30 - 150 %
% TCMX	100		%	2	12/26/23	SC	30 - 150 %
% TCMX (Confirmation)	97		%	2	12/26/23	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	3.6	2.3	ug/Kg	2	12/26/23	AW	SW8081B
4,4' -DDE	66	2.3	ug/Kg	2	12/26/23	AW	SW8081B
4,4' -DDT	40	2.3	ug/Kg	2	12/26/23	AW	SW8081B
a-BHC	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
a-Chlordane	ND	3.8	ug/Kg	2	12/26/23	AW	SW8081B
Aldrin	ND	3.8	ug/Kg	2	12/26/23	AW	SW8081B
b-BHC	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Chlordane	ND	38	ug/Kg	2	12/26/23	AW	SW8081B
d-BHC	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Dieldrin	ND	3.8	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan I	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan II	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan sulfate	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Endrin	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Endrin aldehyde	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Endrin ketone	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
g-BHC	ND	1.5	ug/Kg	2	12/26/23	AW	SW8081B
g-Chlordane	ND	3.8	ug/Kg	2	12/26/23	AW	SW8081B
Heptachlor	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Heptachlor epoxide	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Methoxychlor	ND	38	ug/Kg	2	12/26/23	AW	SW8081B
Toxaphene	ND	150	ug/Kg	2	12/26/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	92		%	2	12/26/23	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	98		%	2	12/26/23	AW	30 - 150 %
% TCMX	85		%	2	12/26/23	AW	30 - 150 %
% TCMX (Confirmation)	89		%	2	12/26/23	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/28/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/28/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	70		%	10	12/28/23	JRB	30 - 150 %
% DCAA (Confirmation)	71		%	10	12/28/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
a-BHC	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Alachlor	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Aldrin	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
b-BHC	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Chlordane	ND	5.0	ug/L	10	12/29/23	CN	SW8081B
d-BHC	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Dieldrin	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endosulfan I	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Endosulfan II	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endrin	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Heptachlor	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Methoxychlor	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Toxaphene	ND	20	ug/L	10	12/29/23	CN	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	75		%	10	12/29/23	CN	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	92		%	10	12/29/23	CN	30 - 150 %
%TCMX (Surrogate Rec)	62		%	10	12/29/23	CN	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	67		%	10	12/29/23	CN	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	ND	56	mg/Kg	1	12/26/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	92		%	1	12/26/23	JRB	50 - 150 %
% Terphenyl (surr)	82		%	1	12/26/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
1,1-Dichloroethane	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
1,1-Dichloroethene	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dibromoethane	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichloroethane	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichloropropane	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
2-Hexanone	ND	26	ug/kg	1	12/26/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	26	ug/kg	1	12/26/23	JLI	SW8260D
Acetone	ND	50	ug/kg	1	12/26/23	JLI	SW8260D
Benzene	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
Bromochloromethane	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
Bromodichloromethane	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
Bromoform	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
Bromomethane	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
Carbon Disulfide	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
Carbon tetrachloride	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
Chlorobenzene	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
Chloroethane	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
Chloroform	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
Chloromethane	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
Cyclohexane	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
Dibromochloromethane	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
Dichlorodifluoromethane	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
Ethylbenzene	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
Isopropylbenzene	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
m&p-Xylene	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
Methyl ethyl ketone	ND	31	ug/kg	1	12/26/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Methylacetate	ND	4.1	ug/kg	1	12/26/23	JLI	SW8260D
Methylcyclohexane	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
Methylene chloride	ND	26	ug/kg	1	12/26/23	JLI	SW8260D
o-Xylene	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
Styrene	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
Tetrachloroethene	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
Toluene	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
Total Xylenes	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
Trichloroethene	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
Trichlorofluoromethane	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
Vinyl chloride	ND	5.1	ug/kg	1	12/26/23	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	1	12/26/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	92		%	1	12/26/23	JLI	70 - 130 %
% Dibromofluoromethane	108		%	1	12/26/23	JLI	70 - 130 %
% Toluene-d8	96		%	1	12/26/23	JLI	70 - 130 %

1,4-dioxane

1,4-dioxane	ND	77	ug/kg	1	12/26/23	JLI	SW8260D
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Volatiles

1,2,3-Trichloropropane	ND	5.1	ug/Kg	1	12/26/23	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	5.1	ug/Kg	1	12/26/23	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	5.1	ug/Kg	1	12/26/23	JLI	SW8260D
1,3-Dichloropropane	ND	5.1	ug/Kg	1	12/26/23	JLI	SW8260D
n-Butylbenzene	ND	5.1	ug/Kg	1	12/26/23	JLI	SW8260D
n-Propylbenzene	ND	5.1	ug/Kg	1	12/26/23	JLI	SW8260D
p-Isopropyltoluene	ND	5.1	ug/Kg	1	12/26/23	JLI	SW8260D
sec-Butylbenzene	ND	5.1	ug/Kg	1	12/26/23	JLI	SW8260D
tert-Butylbenzene	ND	5.1	ug/Kg	1	12/26/23	JLI	SW8260D

QA/QC Surrogates

% 1,2-dichlorobenzene-d4	97		%	1	12/26/23	JLI	70 - 130 %
% Bromofluorobenzene	92		%	1	12/26/23	JLI	70 - 130 %
% Dibromofluoromethane	108		%	1	12/26/23	JLI	70 - 130 %
% Toluene-d8	96		%	1	12/26/23	JLI	70 - 130 %

TCLP Volatiles

1,1-Dichloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260

QA/QC Surrogates

% 1,2-dichlorobenzene-d4 (10x)	98		%	10	12/26/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	90		%	10	12/26/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	104		%	10	12/26/23	HM	70 - 130 %
% Toluene-d8 (10x)	95		%	10	12/26/23	HM	70 - 130 %

Volatile Library Search Completed 12/27/23 JLI

Semivolatiles

1,1-Biphenyl	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2,3,4,6-tetrachlorophenol	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2,4,5-Trichlorophenol	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2,4,6-Trichlorophenol	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2,4-Dichlorophenol	ND	270	ug/Kg	1	12/27/23	MR	SW8270E

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2,4-Dinitrophenol	ND	610	ug/Kg	1	12/27/23	MR	SW8270E
2,4-Dinitrotoluene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2,6-Dinitrotoluene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2-Chloronaphthalene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2-Chlorophenol	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2-Methylnaphthalene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2-Methylphenol (o-cresol)	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2-Nitroaniline	ND	610	ug/Kg	1	12/27/23	MR	SW8270E
2-Nitrophenol	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
3,3'-Dichlorobenzidine	ND	460	ug/Kg	1	12/27/23	MR	SW8270E
3-Nitroaniline	ND	610	ug/Kg	1	12/27/23	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	12/27/23	MR	SW8270E
4-Bromophenyl phenyl ether	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
4-Chloro-3-methylphenol	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
4-Chloroaniline	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
4-Nitroaniline	ND	610	ug/Kg	1	12/27/23	MR	SW8270E
4-Nitrophenol	ND	1100	ug/Kg	1	12/27/23	MR	SW8270E
Acenaphthene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Acenaphthylene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Acetophenone	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Anthracene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Atrazine	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Benz(a)anthracene	290	270	ug/Kg	1	12/27/23	MR	SW8270E
Benzaldehyde	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(a)pyrene	340	270	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(b)fluoranthene	380	270	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(ghi)perylene	290	270	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(k)fluoranthene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Benzyl butyl phthalate	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Bis(2-chloroethyl)ether	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Caprolactam	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Carbazole	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
Chrysene	290	270	ug/Kg	1	12/27/23	MR	SW8270E
Dibenz(a,h)anthracene	ND	190	ug/Kg	1	12/27/23	MR	SW8270E
Dibenzofuran	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Diethyl phthalate	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Dimethylphthalate	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Di-n-butylphthalate	ND	760	ug/Kg	1	12/27/23	MR	SW8270E
Di-n-octylphthalate	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Fluoranthene	580	270	ug/Kg	1	12/27/23	MR	SW8270E
Fluorene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Hexachlorobenzene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Hexachlorobutadiene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Hexachlorocyclopentadiene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Indeno(1,2,3-cd)pyrene	290	270	ug/Kg	1	12/27/23	MR	SW8270E
Isophorone	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Naphthalene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Nitrobenzene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
N-Nitrosodimethylamine	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	190	ug/Kg	1	12/27/23	MR	SW8270E
N-Nitrosodiphenylamine	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
Pentachlorophenol	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
Phenanthrene	350	270	ug/Kg	1	12/27/23	MR	SW8270E
Phenol	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Pyrene	580	270	ug/Kg	1	12/27/23	MR	SW8270E
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	79		%	1	12/27/23	MR	30 - 130 %
% 2-Fluorobiphenyl	71		%	1	12/27/23	MR	30 - 130 %
% 2-Fluorophenol	61		%	1	12/27/23	MR	30 - 130 %
% Nitrobenzene-d5	62		%	1	12/27/23	MR	30 - 130 %
% Phenol-d5	69		%	1	12/27/23	MR	30 - 130 %
% Terphenyl-d14	74		%	1	12/27/23	MR	30 - 130 %
<u>TCLP Acid/Base-Neutral</u>							
1,4-Dichlorobenzene	ND	83	ug/L	1	01/06/24	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	01/06/24	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	01/06/24	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	01/06/24	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	01/06/24	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	01/06/24	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	01/06/24	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	01/06/24	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	01/06/24	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	01/06/24	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	01/06/24	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	01/06/24	MR	SW-846 1311/8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	80		%	1	01/06/24	MR	15 - 110 %
% 2-Fluorobiphenyl	78		%	1	01/06/24	MR	30 - 130 %
% 2-Fluorophenol	68		%	1	01/06/24	MR	15 - 110 %
% Nitrobenzene-d5	78		%	1	01/06/24	MR	30 - 130 %
% Phenol-d5	62		%	1	01/06/24	MR	15 - 110 %
% Terphenyl-d14	88		%	1	01/06/24	MR	30 - 130 %
Semivolatile Library Search	Completed				12/28/23	MR	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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.

Hexavalent Chromium:
This sample is in a reducing state.

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

January 10, 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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
 Location Code: AES-EASTSIDE
 Rush Request: 5 Day
 P.O.#: 0897

Custody Information

Collected by:
 Received by: CP
 Analyzed by: see "By" below

Date

12/20/23
 12/21/23

Time

11:30
 19:25

Laboratory Data

SDG ID: GCP73450
 Phoenix ID: CP73456

Project ID: EAST SIDE COASTAL RESILIENCY
 Client ID: G-122

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.34	0.34	mg/Kg	1	12/22/23	TH	SW6010D
Aluminum	11400	51	mg/Kg	10	12/27/23	TH	SW6010D
Arsenic	2.54	0.68	mg/Kg	1	12/22/23	TH	SW6010D
Barium	93.3	0.34	mg/Kg	1	12/22/23	TH	SW6010D
Beryllium	0.48	0.27	mg/Kg	1	12/22/23	TH	SW6010D
Calcium	11600	51	mg/Kg	10	12/22/23	TH	SW6010D
Cadmium	1.46	0.34	mg/Kg	1	12/22/23	TH	SW6010D
Cobalt	9.52	0.34	mg/Kg	1	12/22/23	TH	SW6010D
Chromium	20.3	0.34	mg/Kg	1	12/22/23	TH	SW6010D
Copper	34.8	0.7	mg/kg	1	12/22/23	TH	SW6010D
Iron	18600	5.1	mg/Kg	1	12/22/23	TH	SW6010D
Mercury	0.20	0.03	mg/Kg	2	12/22/23	ZT	SW7471B
Potassium	3080	51	mg/Kg	10	12/22/23	TH	SW6010D
Magnesium	7880	5.1	mg/Kg	1	12/22/23	TH	SW6010D
Manganese	280	0.34	mg/Kg	1	12/22/23	TH	SW6010D
Sodium	220	75	mg/Kg	1	12/22/23	TH	SW6010D
Nickel	22.5	0.34	mg/Kg	1	12/22/23	TH	SW6010D
Lead	85.3	0.34	mg/Kg	1	12/22/23	TH	SW6010D
Antimony	< 3.4	3.4	mg/Kg	1	12/22/23	TH	SW6010D
Selenium	< 1.4	1.4	mg/Kg	1	12/22/23	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Barium	0.47	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	12/22/23	GW	SW846 1311/7470
TCLP Lead	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.0	3.0	mg/Kg	1	12/22/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/22/23	AL/HL/HL	SW3010A
Trivalent Chromium	20.3	0.34	mg/kg	1	12/26/23		CALC 6010-7196
Vanadium	30.3	0.34	mg/Kg	1	12/22/23	TH	SW6010D
Zinc	80.3	0.7	mg/Kg	1	12/22/23	TH	SW6010D
Percent Solid	87		%		12/21/23	CV	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/22/23	ER	SW846-Corr
Flash Point	>200	200	Degree F	1	12/29/23	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.44	0.44	mg/Kg	1	12/22/23	NP	SW7196A
Ignitability	Passed	140	degree F	1	12/29/23	G	SW846-Ignit
pH at 25C - Soil	8.19	1.00	pH Units	1	12/22/23 00:19	ER	SW846 9045D
Reactivity Cyanide	< 6	6	mg/Kg	1	12/23/23	EG	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	12/23/23	NP/EG	SW846 CH7
Reactivity	Negative		Pos/Neg	1	12/23/23	EG	SW846-React
Redox Potential	265		mV	1	12/22/23	ER	SM2580B-09
Total Cyanide (SW9010C Distill.)	< 0.57	0.57	mg/Kg	1	12/23/23	EG	SW9012B
Mercury Digestion	Completed				12/22/23	HL/HL	SW7471B
Extraction of NY ETPH	Completed				12/22/23	H/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/21/23	L/D	SW3546
NJ EPH Extraction	Completed				12/22/23	C/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/22/23	H/A	SW3546
Soil Extraction for Pesticides	Completed				12/22/23	H/A	SW3546
Soil Extraction for SVOA	Completed				12/26/23	C/JDW	SW3546
TCLP Digestion Mercury	Completed				12/22/23	AL/HL/HL	SW7470A
TCLP Herbicides Extraction	Completed				12/27/23	CV/D	SW8150 MOD
TCLP Extraction for Metals	Completed				12/21/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/21/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/28/23	S/S	SW3510C
TCLP Semi-Volatile Extraction	Completed				12/27/23	LB1/LB1	SW3510C
TCLP Extraction Volatiles	Completed				12/21/23	CV	SW1311
Total Metals Digest	Completed				12/21/23	P/AG	SW3050B
<u>NJ EPH Category 1 (Fuel #2/Diesel)</u>							
>C28-C40	570	45	mg/kg	5	12/26/23	JRB	NJEPH 10-08 R3
C9-C28	1100	89	mg/kg	5	12/26/23	JRB	NJEPH 10-08 R3
Total EPH	1670	45	mg/kg	5	12/26/23	JRB	NJEPH 10-08 R3
<u>QA/QC Surrogates</u>							
% COD (surr)	Interference		%	5	12/26/23	JRB	40 - 140 %
% Terphenyl (surr)	Interference		%	5	12/26/23	JRB	40 - 140 %
<u>Gasoline Range Hydrocarbons (C6-C10)</u>							
GRO (C6-C10)	ND	6.5	mg/Kg	50	12/22/23	RM	SW8015D GRO
<u>QA/QC Surrogates</u>							
% 2,5-Dibromotoluene (FID)	82		%	50	12/22/23	RM	70 - 130 %
<u>Chlorinated Herbicides</u>							
2,4,5-T	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
2,4,5-TP (Silvex)	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
2,4-D	ND	290	ug/Kg	10	12/22/23	KCA	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	2900	ug/Kg	10	12/22/23	KCA	SW8151A
Dalapon	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
Dicamba	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
Dichloroprop	ND	290	ug/Kg	10	12/22/23	KCA	SW8151A
Dinoseb	ND	290	ug/Kg	10	12/22/23	KCA	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	51		%	10	12/22/23	KCA	30 - 150 %
% DCAA (Confirmation)	55		%	10	12/22/23	KCA	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1221	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1232	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1242	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1248	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1254	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1260	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1262	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1268	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	87		%	2	12/26/23	SC	30 - 150 %
% DCBP (Confirmation)	56		%	2	12/26/23	SC	30 - 150 %
% TCMX	83		%	2	12/26/23	SC	30 - 150 %
% TCMX (Confirmation)	51		%	2	12/26/23	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.3	ug/Kg	2	12/26/23	AW	SW8081B
4,4' -DDE	15	2.3	ug/Kg	2	12/26/23	AW	SW8081B
4,4' -DDT	6.3	2.3	ug/Kg	2	12/26/23	AW	SW8081B
a-BHC	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
a-Chlordane	ND	3.8	ug/Kg	2	12/26/23	AW	SW8081B
Aldrin	8.7	3.8	ug/Kg	2	12/26/23	AW	SW8081B
b-BHC	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Chlordane	ND	38	ug/Kg	2	12/26/23	AW	SW8081B
d-BHC	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Dieldrin	ND	3.8	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan I	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan II	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan sulfate	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Endrin	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Endrin aldehyde	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Endrin ketone	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
g-BHC	ND	1.5	ug/Kg	2	12/26/23	AW	SW8081B
g-Chlordane	ND	10	ug/Kg	2	12/26/23	AW	SW8081B
Heptachlor	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Heptachlor epoxide	ND	7.6	ug/Kg	2	12/26/23	AW	SW8081B
Methoxychlor	ND	38	ug/Kg	2	12/26/23	AW	SW8081B
Toxaphene	ND	150	ug/Kg	2	12/26/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	78		%	2	12/26/23	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	97		%	2	12/26/23	AW	30 - 150 %
% TCMX	67		%	2	12/26/23	AW	30 - 150 %
% TCMX (Confirmation)	77		%	2	12/26/23	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/28/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/28/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	71		%	10	12/28/23	JRB	30 - 150 %
% DCAA (Confirmation)	72		%	10	12/28/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
a-BHC	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Alachlor	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Aldrin	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
b-BHC	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Chlordane	ND	5.0	ug/L	10	12/29/23	CN	SW8081B
d-BHC	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Dieldrin	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endosulfan I	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Endosulfan II	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endrin	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Heptachlor	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Methoxychlor	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Toxaphene	ND	20	ug/L	10	12/29/23	CN	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	73		%	10	12/29/23	CN	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	70		%	10	12/29/23	CN	30 - 150 %
%TCMX (Surrogate Rec)	63		%	10	12/29/23	CN	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	67		%	10	12/29/23	CN	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	430	280	mg/Kg	5	12/26/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	107		%	5	12/26/23	JRB	50 - 150 %
% Terphenyl (surr)	Interference		%	5	12/26/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
1,1-Dichloroethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
1,1-Dichloroethene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
1,2-Dibromoethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
1,2-Dichloroethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
1,2-Dichloropropane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
2-Hexanone	ND	28	ug/kg	1	12/27/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	28	ug/kg	1	12/27/23	JLI	SW8260D
Acetone	ND	50	ug/kg	1	12/27/23	JLI	SW8260D
Benzene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Bromochloromethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Bromodichloromethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Bromoform	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Bromomethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Carbon Disulfide	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Carbon tetrachloride	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Chlorobenzene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Chloroethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Chloroform	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Chloromethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Cyclohexane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Dibromochloromethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Dichlorodifluoromethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Ethylbenzene	5.2	5.0	ug/kg	1	12/27/23	JLI	SW8260D
Isopropylbenzene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
m&p-Xylene	11	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Methyl ethyl ketone	ND	33	ug/kg	1	12/27/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	11	ug/kg	1	12/27/23	JLI	SW8260D
Methylacetate	ND	4.5	ug/kg	1	12/27/23	JLI	SW8260D
Methylcyclohexane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Methylene chloride	ND	28	ug/kg	1	12/27/23	JLI	SW8260D
o-Xylene	7.1	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Styrene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Tetrachloroethene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Toluene	6.6	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Total Xylenes	18.1	5.6	ug/kg	1	12/27/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Trichloroethene	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Trichlorofluoromethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
Vinyl chloride	ND	5.6	ug/kg	1	12/27/23	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	1	12/27/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	95		%	1	12/27/23	JLI	70 - 130 %
% Toluene-d8	96		%	1	12/27/23	JLI	70 - 130 %
<u>1,4-dioxane</u>							
1,4-dioxane	ND	84	ug/kg	1	12/27/23	JLI	SW8260D
<u>Volatiles</u>							
1,2,3-Trichloropropane	ND	5.6	ug/Kg	1	12/27/23	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	5.6	ug/Kg	1	12/27/23	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	5.6	ug/Kg	1	12/27/23	JLI	SW8260D
1,3-Dichloropropane	ND	5.6	ug/Kg	1	12/27/23	JLI	SW8260D
n-Butylbenzene	ND	5.6	ug/Kg	1	12/27/23	JLI	SW8260D
n-Propylbenzene	ND	5.6	ug/Kg	1	12/27/23	JLI	SW8260D
p-Isopropyltoluene	ND	5.6	ug/Kg	1	12/27/23	JLI	SW8260D
sec-Butylbenzene	ND	5.6	ug/Kg	1	12/27/23	JLI	SW8260D
tert-Butylbenzene	ND	5.6	ug/Kg	1	12/27/23	JLI	SW8260D
<u>QA/QC Surrogates</u>							
% 1,2-dichlorobenzene-d4	97		%	1	12/27/23	JLI	70 - 130 %
% Bromofluorobenzene	95		%	1	12/27/23	JLI	70 - 130 %
% Dibromofluoromethane	102		%	1	12/27/23	JLI	70 - 130 %
% Toluene-d8	96		%	1	12/27/23	JLI	70 - 130 %
<u>TCLP Volatiles</u>							
1,1-Dichloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
<u>QA/QC Surrogates</u>							
% 1,2-dichlorobenzene-d4 (10x)	99		%	10	12/26/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	90		%	10	12/26/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	101		%	10	12/26/23	HM	70 - 130 %
% Toluene-d8 (10x)	94		%	10	12/26/23	HM	70 - 130 %
Volatile Library Search	Completed				12/28/23	JLI	
<u>Semivolatiles</u>							
1,1-Biphenyl	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2,3,4,6-tetrachlorophenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2,4-Dichlorophenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2,4-Dimethylphenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrophenol	ND	600	ug/Kg	1	12/27/23	MR	SW8270E
2,4-Dinitrotoluene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2,6-Dinitrotoluene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2-Chloronaphthalene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2-Chlorophenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2-Methylnaphthalene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2-Nitroaniline	ND	600	ug/Kg	1	12/27/23	MR	SW8270E
2-Nitrophenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
3,3'-Dichlorobenzidine	ND	450	ug/Kg	1	12/27/23	MR	SW8270E
3-Nitroaniline	ND	600	ug/Kg	1	12/27/23	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	12/27/23	MR	SW8270E
4-Bromophenyl phenyl ether	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
4-Chloroaniline	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
4-Nitroaniline	ND	600	ug/Kg	1	12/27/23	MR	SW8270E
4-Nitrophenol	ND	1100	ug/Kg	1	12/27/23	MR	SW8270E
Acenaphthene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Acenaphthylene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Acetophenone	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Anthracene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Atrazine	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Benz(a)anthracene	1400	260	ug/Kg	1	12/27/23	MR	SW8270E
Benzaldehyde	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(a)pyrene	1600	260	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(b)fluoranthene	2100	260	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(ghi)perylene	1300	260	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(k)fluoranthene	750	260	ug/Kg	1	12/27/23	MR	SW8270E
Benzyl butyl phthalate	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Bis(2-chloroethyl)ether	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Caprolactam	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Carbazole	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
Chrysene	1400	260	ug/Kg	1	12/27/23	MR	SW8270E
Dibenz(a,h)anthracene	260	190	ug/Kg	1	12/27/23	MR	SW8270E
Dibenzofuran	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Diethyl phthalate	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Dimethylphthalate	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Di-n-butylphthalate	ND	750	ug/Kg	1	12/27/23	MR	SW8270E
Di-n-octylphthalate	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Fluoranthene	2100	260	ug/Kg	1	12/27/23	MR	SW8270E
Fluorene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Hexachlorobenzene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Hexachlorobutadiene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Hexachloroethane	ND	260	ug/Kg	1	12/27/23	MR	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Indeno(1,2,3-cd)pyrene	1300	260	ug/Kg	1	12/27/23	MR	SW8270E
Isophorone	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Naphthalene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Nitrobenzene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
N-Nitrosodimethylamine	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	190	ug/Kg	1	12/27/23	MR	SW8270E
N-Nitrosodiphenylamine	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
Pentachlorophenol	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
Phenanthrene	550	260	ug/Kg	1	12/27/23	MR	SW8270E
Phenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Pyrene	2100	260	ug/Kg	1	12/27/23	MR	SW8270E
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	51		%	1	12/27/23	MR	30 - 130 %
% 2-Fluorobiphenyl	49		%	1	12/27/23	MR	30 - 130 %
% 2-Fluorophenol	47		%	1	12/27/23	MR	30 - 130 %
% Nitrobenzene-d5	46		%	1	12/27/23	MR	30 - 130 %
% Phenol-d5	50		%	1	12/27/23	MR	30 - 130 %
% Terphenyl-d14	47		%	1	12/27/23	MR	30 - 130 %
<u>TCLP Acid/Base-Neutral</u>							
1,4-Dichlorobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	77		%	1	12/28/23	MR	15 - 110 %
% 2-Fluorobiphenyl	45		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorophenol	45		%	1	12/28/23	MR	15 - 110 %
% Nitrobenzene-d5	57		%	1	12/28/23	MR	30 - 130 %
% Phenol-d5	40		%	1	12/28/23	MR	15 - 110 %
% Terphenyl-d14	69		%	1	12/28/23	MR	30 - 130 %
Semivolatiles Library Search	Completed				12/28/23	MR	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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 (preceded 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.

Hexavalent Chromium:
This sample is in a reducing state.

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

January 10, 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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
 Location Code: AES-EASTSIDE
 Rush Request: 5 Day
 P.O.#: 0897

Custody Information

Collected by:
 Received by: CP
 Analyzed by: see "By" below

Date

12/20/23
 12/21/23

Time

8:50
 19:25

Laboratory Data

SDG ID: GCP73450
 Phoenix ID: CP73457

Project ID: EAST SIDE COASTAL RESILIENCY
 Client ID: G-123

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.35	0.35	mg/Kg	1	12/22/23	TH	SW6010D
Aluminum	6650	5.3	mg/Kg	1	12/22/23	TH	SW6010D
Arsenic	5.92	0.70	mg/Kg	1	12/22/23	TH	SW6010D
Barium	58.1	0.35	mg/Kg	1	12/22/23	TH	SW6010D
Beryllium	0.51	0.28	mg/Kg	1	12/22/23	TH	SW6010D
Calcium	1490	5.3	mg/Kg	1	12/22/23	TH	SW6010D
Cadmium	0.82	0.35	mg/Kg	1	12/22/23	TH	SW6010D
Cobalt	6.22	0.35	mg/Kg	1	12/22/23	TH	SW6010D
Chromium	20.6	0.35	mg/Kg	1	12/22/23	TH	SW6010D
Copper	21.6	0.7	mg/kg	1	12/22/23	TH	SW6010D
Iron	15800	5.3	mg/Kg	1	12/22/23	TH	SW6010D
Mercury	0.09	0.03	mg/Kg	2.1	12/22/23	ZT	SW7471B
Potassium	950	53	mg/Kg	10	12/22/23	TH	SW6010D
Magnesium	1780	5.3	mg/Kg	1	12/22/23	TH	SW6010D
Manganese	237	0.35	mg/Kg	1	12/22/23	TH	SW6010D
Sodium	194	75	mg/Kg	1	12/22/23	TH	SW6010D
Nickel	12.3	0.35	mg/Kg	1	12/22/23	TH	SW6010D
Lead	70.6	0.35	mg/Kg	1	12/22/23	TH	SW6010D
Antimony	< 3.5	3.5	mg/Kg	1	12/22/23	TH	SW6010D
Selenium	< 1.4	1.4	mg/Kg	1	12/22/23	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Barium	0.67	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	12/22/23	GW	SW846 1311/7470
TCLP Lead	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.2	3.2	mg/Kg	1	12/22/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/22/23	AL/HL/HL	SW3010A
Trivalent Chromium	20.6	0.35	mg/kg	1	12/26/23		CALC 6010-7196
Vanadium	34.6	0.35	mg/Kg	1	12/22/23	TH	SW6010D
Zinc	62.5	0.7	mg/Kg	1	12/22/23	TH	SW6010D
Percent Solid	89		%		12/21/23	CV	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/22/23	ER	SW846-Corr 1
Flash Point	>200	200	Degree F	1	12/29/23	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.38	0.38	mg/Kg	1	12/22/23	NP	SW7196A
Ignitability	Passed	140	degree F	1	12/29/23	G	SW846-Ignit 1
pH at 25C - Soil	6.88	1.00	pH Units	1	12/22/23 00:23	ER	SW846 9045D 1
Reactivity Cyanide	< 6	6	mg/Kg	1	12/23/23	EG	SW846 7.3.3.1/90 1
Reactivity Sulfide	< 20	20	mg/Kg	1	12/23/23	NP/EG	SW846 CH7 1
Reactivity	Negative		Pos/Neg	1	12/23/23	EG	SW846-React 1
Redox Potential	395		mV	1	12/22/23	ER	SM2580B-09 1
Total Cyanide (SW9010C Distill.)	< 0.56	0.56	mg/Kg	1	12/23/23	EG	SW9012B
Mercury Digestion	Completed				12/22/23	HL/HL	SW7471B
Extraction of NY ETPH	Completed				12/22/23	H/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/21/23	L/D	SW3546
NJ EPH Extraction	Completed				12/22/23	C/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/22/23	H/A	SW3546
Soil Extraction for Pesticides	Completed				12/22/23	H/A	SW3546
Soil Extraction for SVOA	Completed				12/26/23	C/JDW	SW3546
TCLP Digestion Mercury	Completed				12/22/23	AL/HL/HL	SW7470A
TCLP Herbicides Extraction	Completed				12/27/23	CV/D	SW8150 MOD
TCLP Extraction for Metals	Completed				12/21/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/21/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/28/23	S/S	SW3510C
TCLP Semi-Volatile Extraction	Completed				12/27/23	LB1/LB1	SW3510C
TCLP Extraction Volatiles	Completed				12/21/23	CV	SW1311
Total Metals Digest	Completed				12/21/23	P/AG	SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	ND	8.9	mg/kg	1	12/26/23	JRB	NJEPH 10-08 R3 1
C9-C28	ND	18	mg/kg	1	12/26/23	JRB	NJEPH 10-08 R3 1
Total EPH	ND	8.9	mg/kg	1	12/26/23	JRB	NJEPH 10-08 R3 1

QA/QC Surrogates

% COD (surr)	85		%	1	12/26/23	JRB	40 - 140 %
% Terphenyl (surr)	85		%	1	12/26/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	6.7	mg/Kg	50	12/22/23	RM	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	78		%	50	12/22/23	RM	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
2,4,5-TP (Silvex)	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
2,4-D	ND	280	ug/Kg	10	12/22/23	KCA	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	2800	ug/Kg	10	12/22/23	KCA	SW8151A
Dalapon	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
Dicamba	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
Dichloroprop	ND	280	ug/Kg	10	12/22/23	KCA	SW8151A
Dinoseb	ND	280	ug/Kg	10	12/22/23	KCA	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	56		%	10	12/22/23	KCA	30 - 150 %
% DCAA (Confirmation)	64		%	10	12/22/23	KCA	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	73	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1221	ND	73	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1232	ND	73	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1242	ND	73	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1248	ND	73	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1254	ND	73	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1260	ND	73	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1262	ND	73	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1268	ND	73	ug/Kg	2	12/26/23	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	67		%	2	12/26/23	SC	30 - 150 %
% DCBP (Confirmation)	69		%	2	12/26/23	SC	30 - 150 %
% TCMX	70		%	2	12/26/23	SC	30 - 150 %
% TCMX (Confirmation)	67		%	2	12/26/23	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.2	ug/Kg	2	12/26/23	AW	SW8081B
4,4' -DDE	7.9	2.2	ug/Kg	2	12/26/23	AW	SW8081B
4,4' -DDT	13	2.2	ug/Kg	2	12/26/23	AW	SW8081B
a-BHC	ND	7.3	ug/Kg	2	12/26/23	AW	SW8081B
a-Chlordane	ND	3.7	ug/Kg	2	12/26/23	AW	SW8081B
Aldrin	ND	3.7	ug/Kg	2	12/26/23	AW	SW8081B
b-BHC	ND	7.3	ug/Kg	2	12/26/23	AW	SW8081B
Chlordane	ND	37	ug/Kg	2	12/26/23	AW	SW8081B
d-BHC	ND	7.3	ug/Kg	2	12/26/23	AW	SW8081B
Dieldrin	ND	3.7	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan I	ND	7.3	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan II	ND	7.3	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan sulfate	ND	7.3	ug/Kg	2	12/26/23	AW	SW8081B
Endrin	ND	7.3	ug/Kg	2	12/26/23	AW	SW8081B
Endrin aldehyde	ND	7.3	ug/Kg	2	12/26/23	AW	SW8081B
Endrin ketone	ND	7.3	ug/Kg	2	12/26/23	AW	SW8081B
g-BHC	ND	1.5	ug/Kg	2	12/26/23	AW	SW8081B
g-Chlordane	ND	3.7	ug/Kg	2	12/26/23	AW	SW8081B
Heptachlor	ND	7.3	ug/Kg	2	12/26/23	AW	SW8081B
Heptachlor epoxide	ND	7.3	ug/Kg	2	12/26/23	AW	SW8081B
Methoxychlor	ND	37	ug/Kg	2	12/26/23	AW	SW8081B
Toxaphene	ND	150	ug/Kg	2	12/26/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	67		%	2	12/26/23	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	75		%	2	12/26/23	AW	30 - 150 %
% TCMX	54		%	2	12/26/23	AW	30 - 150 %
% TCMX (Confirmation)	58		%	2	12/26/23	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/28/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/28/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	71		%	10	12/28/23	JRB	30 - 150 %
% DCAA (Confirmation)	70		%	10	12/28/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
a-BHC	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Alachlor	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Aldrin	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
b-BHC	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Chlordane	ND	5.0	ug/L	10	12/29/23	CN	SW8081B
d-BHC	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Dieldrin	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endosulfan I	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Endosulfan II	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endrin	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Heptachlor	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Methoxychlor	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Toxaphene	ND	20	ug/L	10	12/29/23	CN	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	59		%	10	12/29/23	CN	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	54		%	10	12/29/23	CN	30 - 150 %
%TCMX (Surrogate Rec)	76		%	10	12/29/23	CN	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	76		%	10	12/29/23	CN	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	ND	56	mg/Kg	1	12/26/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	75		%	1	12/26/23	JRB	50 - 150 %
% Terphenyl (surr)	71		%	1	12/26/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
1,1-Dichloroethane	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
1,1-Dichloroethene	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dibromoethane	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichloroethane	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichloropropane	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
2-Hexanone	ND	30	ug/kg	1	12/26/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	30	ug/kg	1	12/26/23	JLI	SW8260D
Acetone	ND	50	ug/kg	1	12/26/23	JLI	SW8260D
Benzene	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
Bromochloromethane	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
Bromodichloromethane	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
Bromoform	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
Bromomethane	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
Carbon Disulfide	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
Carbon tetrachloride	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
Chlorobenzene	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
Chloroethane	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
Chloroform	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
Chloromethane	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
Cyclohexane	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
Dibromochloromethane	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
Dichlorodifluoromethane	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
Ethylbenzene	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
Isopropylbenzene	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
m&p-Xylene	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
Methyl ethyl ketone	ND	36	ug/kg	1	12/26/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	12	ug/kg	1	12/26/23	JLI	SW8260D
Methylacetate	ND	4.9	ug/kg	1	12/26/23	JLI	SW8260D
Methylcyclohexane	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
Methylene chloride	ND	30	ug/kg	1	12/26/23	JLI	SW8260D
o-Xylene	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
Styrene	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
Tetrachloroethene	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
Toluene	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
Total Xylenes	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
Trichloroethene	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
Trichlorofluoromethane	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
Vinyl chloride	ND	6.1	ug/kg	1	12/26/23	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	95		%	1	12/26/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	92		%	1	12/26/23	JLI	70 - 130 %
% Dibromofluoromethane	106		%	1	12/26/23	JLI	70 - 130 %
% Toluene-d8	96		%	1	12/26/23	JLI	70 - 130 %

1,4-dioxane

1,4-dioxane	ND	91	ug/kg	1	12/26/23	JLI	SW8260D
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Volatiles

1,2,3-Trichloropropane	ND	6.1	ug/Kg	1	12/26/23	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	6.1	ug/Kg	1	12/26/23	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	6.1	ug/Kg	1	12/26/23	JLI	SW8260D
1,3-Dichloropropane	ND	6.1	ug/Kg	1	12/26/23	JLI	SW8260D
n-Butylbenzene	ND	6.1	ug/Kg	1	12/26/23	JLI	SW8260D
n-Propylbenzene	ND	6.1	ug/Kg	1	12/26/23	JLI	SW8260D
p-Isopropyltoluene	ND	6.1	ug/Kg	1	12/26/23	JLI	SW8260D
sec-Butylbenzene	ND	6.1	ug/Kg	1	12/26/23	JLI	SW8260D
tert-Butylbenzene	ND	6.1	ug/Kg	1	12/26/23	JLI	SW8260D

QA/QC Surrogates

% 1,2-dichlorobenzene-d4	95		%	1	12/26/23	JLI	70 - 130 %
% Bromofluorobenzene	92		%	1	12/26/23	JLI	70 - 130 %
% Dibromofluoromethane	106		%	1	12/26/23	JLI	70 - 130 %
% Toluene-d8	96		%	1	12/26/23	JLI	70 - 130 %

TCLP Volatiles

1,1-Dichloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260

QA/QC Surrogates

% 1,2-dichlorobenzene-d4 (10x)	99		%	10	12/26/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	91		%	10	12/26/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	103		%	10	12/26/23	HM	70 - 130 %
% Toluene-d8 (10x)	95		%	10	12/26/23	HM	70 - 130 %

Volatile Library Search Completed 12/27/23 JLI

Semivolatiles

1,1-Biphenyl	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2,3,4,6-tetrachlorophenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2,4-Dichlorophenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2,4-Dinitrophenol	ND	590	ug/Kg	1	12/27/23	MR	SW8270E
2,4-Dinitrotoluene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2,6-Dinitrotoluene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2-Chloronaphthalene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2-Chlorophenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2-Methylnaphthalene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
2-Nitroaniline	ND	590	ug/Kg	1	12/27/23	MR	SW8270E
2-Nitrophenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	1	12/27/23	MR	SW8270E
3,3'-Dichlorobenzidine	ND	440	ug/Kg	1	12/27/23	MR	SW8270E
3-Nitroaniline	ND	590	ug/Kg	1	12/27/23	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	12/27/23	MR	SW8270E
4-Bromophenyl phenyl ether	ND	370	ug/Kg	1	12/27/23	MR	SW8270E
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
4-Chloroaniline	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
4-Nitroaniline	ND	590	ug/Kg	1	12/27/23	MR	SW8270E
4-Nitrophenol	ND	1100	ug/Kg	1	12/27/23	MR	SW8270E
Acenaphthene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Acenaphthylene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Acetophenone	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Anthracene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Atrazine	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Benz(a)anthracene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Benzaldehyde	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(a)pyrene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(b)fluoranthene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(ghi)perylene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(k)fluoranthene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Benzyl butyl phthalate	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Bis(2-chloroethyl)ether	ND	370	ug/Kg	1	12/27/23	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Caprolactam	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Carbazole	ND	370	ug/Kg	1	12/27/23	MR	SW8270E
Chrysene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Dibenz(a,h)anthracene	ND	180	ug/Kg	1	12/27/23	MR	SW8270E
Dibenzofuran	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Diethyl phthalate	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Dimethylphthalate	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Di-n-butylphthalate	ND	730	ug/Kg	1	12/27/23	MR	SW8270E
Di-n-octylphthalate	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Fluoranthene	270	260	ug/Kg	1	12/27/23	MR	SW8270E
Fluorene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Hexachlorobenzene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Hexachlorobutadiene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Indeno(1,2,3-cd)pyrene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Isophorone	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Naphthalene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Nitrobenzene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
N-Nitrosodimethylamine	ND	370	ug/Kg	1	12/27/23	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	180	ug/Kg	1	12/27/23	MR	SW8270E
N-Nitrosodiphenylamine	ND	370	ug/Kg	1	12/27/23	MR	SW8270E
Pentachlorophenol	ND	370	ug/Kg	1	12/27/23	MR	SW8270E
Phenanthrene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Phenol	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
Pyrene	ND	260	ug/Kg	1	12/27/23	MR	SW8270E
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	50		%	1	12/27/23	MR	30 - 130 %
% 2-Fluorobiphenyl	51		%	1	12/27/23	MR	30 - 130 %
% 2-Fluorophenol	44		%	1	12/27/23	MR	30 - 130 %
% Nitrobenzene-d5	47		%	1	12/27/23	MR	30 - 130 %
% Phenol-d5	47		%	1	12/27/23	MR	30 - 130 %
% Terphenyl-d14	44		%	1	12/27/23	MR	30 - 130 %
<u>TCLP Acid/Base-Neutral</u>							
1,4-Dichlorobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	107		%	1	12/28/23	MR	15 - 110 %
% 2-Fluorobiphenyl	64		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorophenol	64		%	1	12/28/23	MR	15 - 110 %
% Nitrobenzene-d5	81		%	1	12/28/23	MR	30 - 130 %
% Phenol-d5	57		%	1	12/28/23	MR	15 - 110 %
% Terphenyl-d14	98		%	1	12/28/23	MR	30 - 130 %
Semivolatile Library Search	Completed				12/28/23	MR	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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.

Hexavalent Chromium:
This sample is in a reducing state.

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

January 10, 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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
 Location Code: AES-EASTSIDE
 Rush Request: 5 Day
 P.O.#: 0897

Custody Information

Collected by:
 Received by: CP
 Analyzed by: see "By" below

Date

12/20/23
 12/21/23

Time

12:50
 19:25

Laboratory Data

SDG ID: GCP73450
 Phoenix ID: CP73458

Project ID: EAST SIDE COASTAL RESILIENCY
 Client ID: DM100

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.40	0.40	mg/Kg	1	12/26/23	TH	SW6010D
Aluminum	6260	6.0	mg/Kg	1	12/26/23	TH	SW6010D
Arsenic	2.28	0.79	mg/Kg	1	12/26/23	TH	SW6010D
Barium	40.1	0.40	mg/Kg	1	12/26/23	TH	SW6010D
Beryllium	0.34	0.32	mg/Kg	1	12/26/23	TH	SW6010D
Calcium	27200	60	mg/Kg	10	12/28/23	TH	SW6010D
Cadmium	< 0.40	0.40	mg/Kg	1	12/26/23	TH	SW6010D
Cobalt	4.79	0.40	mg/Kg	1	12/26/23	TH	SW6010D
Chromium	13.9	0.40	mg/Kg	1	12/26/23	TH	SW6010D
Copper	13.1	0.8	mg/kg	1	12/26/23	TH	SW6010D
Iron	12100	6.0	mg/Kg	1	12/26/23	TH	SW6010D
Mercury	< 0.03	0.03	mg/Kg	2	12/22/23	ZT	SW7471B
Potassium	1170	60	mg/Kg	10	12/28/23	TH	SW6010D
Magnesium	6660	6.0	mg/Kg	1	12/26/23	TH	SW6010D
Manganese	257	0.40	mg/Kg	1	12/26/23	TH	SW6010D
Sodium	217	6.0	mg/Kg	1	12/26/23	TH	SW6010D
Nickel	12.8	0.40	mg/Kg	1	12/26/23	TH	SW6010D
Lead	38.6	0.40	mg/Kg	1	12/26/23	TH	SW6010D
Antimony	< 4.0	4.0	mg/Kg	1	12/26/23	TH	SW6010D
Selenium	< 1.6	1.6	mg/Kg	1	12/26/23	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Barium	0.89	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	12/22/23	GW	SW846 1311/7470
TCLP Lead	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.6	3.6	mg/Kg	1	12/26/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/22/23	AL/HL/HL	SW3010A
Trivalent Chromium	13.9	0.40	mg/kg	1	12/27/23		CALC 6010-7196
Vanadium	15.6	0.40	mg/Kg	1	12/26/23	TH	SW6010D
Zinc	34.0	0.8	mg/Kg	1	12/26/23	TH	SW6010D
Percent Solid	90		%		12/21/23	CV	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/22/23	ER	SW846-Corr
Flash Point	>200	200	Degree F	1	12/29/23	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.42	0.42	mg/Kg	1	12/22/23	NP	SW7196A
Ignitability	Passed	140	degree F	1	12/29/23	G	SW846-Ignit
pH at 25C - Soil	8.48	1.00	pH Units	1	12/22/23 00:23	ER	SW846 9045D
Reactivity Cyanide	< 5	5	mg/Kg	1	12/23/23	EG	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	12/23/23	NP/EG	SW846 CH7
Reactivity	Negative		Pos/Neg	1	12/23/23	EG	SW846-React
Redox Potential	329		mV	1	12/22/23	ER	SM2580B-09
Total Cyanide (SW9010C Distill.)	< 0.56	0.56	mg/Kg	1	12/23/23	EG	SW9012B
Mercury Digestion	Completed				12/22/23	HL/HL	SW7471B
Extraction of NY ETPH	Completed				12/22/23	H/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/21/23	L/D	SW3546
NJ EPH Extraction	Completed				12/22/23	C/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/22/23	H/A	SW3546
Soil Extraction for Pesticides	Completed				12/22/23	H/A	SW3546
Soil Extraction for SVOA	Completed				12/26/23	C/JDW	SW3546
TCLP Digestion Mercury	Completed				12/22/23	AL/HL/HL	SW7470A
TCLP Herbicides Extraction	Completed				12/27/23	CV/D	SW8150 MOD
TCLP Extraction for Metals	Completed				12/21/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/21/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/28/23	S/S	SW3510C
TCLP Semi-Volatile Extraction	Completed				12/27/23	LB1/LB1	SW3510C
TCLP Extraction Volatiles	Completed				12/21/23	CV	SW1311
Total Metals Digest	Completed				12/22/23		SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	ND	8.6	mg/kg	1	12/26/23	JRB	NJEPH 10-08 R3
C9-C28	ND	17	mg/kg	1	12/26/23	JRB	NJEPH 10-08 R3
Total EPH	ND	8.6	mg/kg	1	12/26/23	JRB	NJEPH 10-08 R3

QA/QC Surrogates

% COD (surr)	74		%	1	12/26/23	JRB	40 - 140 %
% Terphenyl (surr)	72		%	1	12/26/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	7.0	mg/Kg	50	12/22/23	RM	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	82		%	50	12/22/23	RM	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
2,4,5-TP (Silvex)	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
2,4-D	ND	280	ug/Kg	10	12/22/23	KCA	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	2800	ug/Kg	10	12/22/23	KCA	SW8151A
Dalapon	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
Dicamba	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
Dichloroprop	ND	280	ug/Kg	10	12/22/23	KCA	SW8151A
Dinoseb	ND	280	ug/Kg	10	12/22/23	KCA	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	62		%	10	12/22/23	KCA	30 - 150 %
% DCAA (Confirmation)	67		%	10	12/22/23	KCA	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	72	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1221	ND	72	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1232	ND	72	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1242	ND	72	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1248	ND	72	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1254	ND	72	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1260	ND	72	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1262	ND	72	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1268	ND	72	ug/Kg	2	12/26/23	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	93		%	2	12/26/23	SC	30 - 150 %
% DCBP (Confirmation)	89		%	2	12/26/23	SC	30 - 150 %
% TCMX	93		%	2	12/26/23	SC	30 - 150 %
% TCMX (Confirmation)	92		%	2	12/26/23	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.2	ug/Kg	2	12/26/23	AW	SW8081B
4,4' -DDE	ND	2.2	ug/Kg	2	12/26/23	AW	SW8081B
4,4' -DDT	ND	2.2	ug/Kg	2	12/26/23	AW	SW8081B
a-BHC	ND	7.2	ug/Kg	2	12/26/23	AW	SW8081B
a-Chlordane	ND	3.6	ug/Kg	2	12/26/23	AW	SW8081B
Aldrin	ND	3.6	ug/Kg	2	12/26/23	AW	SW8081B
b-BHC	ND	7.2	ug/Kg	2	12/26/23	AW	SW8081B
Chlordane	ND	36	ug/Kg	2	12/26/23	AW	SW8081B
d-BHC	ND	7.2	ug/Kg	2	12/26/23	AW	SW8081B
Dieldrin	ND	3.6	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan I	ND	7.2	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan II	ND	7.2	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan sulfate	ND	7.2	ug/Kg	2	12/26/23	AW	SW8081B
Endrin	ND	7.2	ug/Kg	2	12/26/23	AW	SW8081B
Endrin aldehyde	ND	7.2	ug/Kg	2	12/26/23	AW	SW8081B
Endrin ketone	ND	7.2	ug/Kg	2	12/26/23	AW	SW8081B
g-BHC	ND	1.4	ug/Kg	2	12/26/23	AW	SW8081B
g-Chlordane	ND	3.6	ug/Kg	2	12/26/23	AW	SW8081B
Heptachlor	ND	7.2	ug/Kg	2	12/26/23	AW	SW8081B
Heptachlor epoxide	ND	7.2	ug/Kg	2	12/26/23	AW	SW8081B
Methoxychlor	ND	36	ug/Kg	2	12/26/23	AW	SW8081B
Toxaphene	ND	140	ug/Kg	2	12/26/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	120		%	2	12/26/23	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	Interference		%	2	12/26/23	AW	30 - 150 %
% TCMX	75		%	2	12/26/23	AW	30 - 150 %
% TCMX (Confirmation)	133		%	2	12/26/23	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/28/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/28/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	70		%	10	12/28/23	JRB	30 - 150 %
% DCAA (Confirmation)	69		%	10	12/28/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
a-BHC	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Alachlor	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Aldrin	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
b-BHC	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Chlordane	ND	5.0	ug/L	10	12/29/23	CN	SW8081B
d-BHC	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Dieldrin	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endosulfan I	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Endosulfan II	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endrin	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Heptachlor	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Methoxychlor	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Toxaphene	ND	20	ug/L	10	12/29/23	CN	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	84		%	10	12/29/23	CN	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	82		%	10	12/29/23	CN	30 - 150 %
%TCMX (Surrogate Rec)	78		%	10	12/29/23	CN	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	79		%	10	12/29/23	CN	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	ND	54	mg/Kg	1	12/26/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	73		%	1	12/26/23	JRB	50 - 150 %
% Terphenyl (surr)	69		%	1	12/26/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
1,1-Dichloroethane	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
1,1-Dichloroethene	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dibromoethane	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichloroethane	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichloropropane	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
2-Hexanone	ND	26	ug/kg	1	12/26/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	26	ug/kg	1	12/26/23	JLI	SW8260D
Acetone	ND	50	ug/kg	1	12/26/23	JLI	SW8260D
Benzene	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
Bromochloromethane	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
Bromodichloromethane	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
Bromoform	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
Bromomethane	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
Carbon Disulfide	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
Carbon tetrachloride	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
Chlorobenzene	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
Chloroethane	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
Chloroform	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
Chloromethane	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
Cyclohexane	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
Dibromochloromethane	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
Dichlorodifluoromethane	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
Ethylbenzene	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
Isopropylbenzene	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
m&p-Xylene	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
Methyl ethyl ketone	ND	31	ug/kg	1	12/26/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	10	ug/kg	1	12/26/23	JLI	SW8260D
Methylacetate	ND	4.2	ug/kg	1	12/26/23	JLI	SW8260D
Methylcyclohexane	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
Methylene chloride	ND	26	ug/kg	1	12/26/23	JLI	SW8260D
o-Xylene	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
Styrene	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
Tetrachloroethene	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
Toluene	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
Total Xylenes	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
Trichloroethene	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
Trichlorofluoromethane	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
Vinyl chloride	ND	5.2	ug/kg	1	12/26/23	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	96		%	1	12/26/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
2,4-Dinitrophenol	ND	570	ug/Kg	1	12/27/23	MR	SW8270E
2,4-Dinitrotoluene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
2,6-Dinitrotoluene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
2-Chloronaphthalene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
2-Chlorophenol	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
2-Methylnaphthalene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
2-Methylphenol (o-cresol)	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
2-Nitroaniline	ND	570	ug/Kg	1	12/27/23	MR	SW8270E
2-Nitrophenol	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	360	ug/Kg	1	12/27/23	MR	SW8270E
3,3'-Dichlorobenzidine	ND	430	ug/Kg	1	12/27/23	MR	SW8270E
3-Nitroaniline	ND	570	ug/Kg	1	12/27/23	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	1	12/27/23	MR	SW8270E
4-Bromophenyl phenyl ether	ND	360	ug/Kg	1	12/27/23	MR	SW8270E
4-Chloro-3-methylphenol	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
4-Chloroaniline	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
4-Nitroaniline	ND	570	ug/Kg	1	12/27/23	MR	SW8270E
4-Nitrophenol	ND	1000	ug/Kg	1	12/27/23	MR	SW8270E
Acenaphthene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Acenaphthylene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Acetophenone	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Anthracene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Atrazine	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Benz(a)anthracene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Benzaldehyde	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(a)pyrene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(b)fluoranthene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(ghi)perylene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(k)fluoranthene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Benzyl butyl phthalate	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Bis(2-chloroethyl)ether	ND	360	ug/Kg	1	12/27/23	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Caprolactam	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Carbazole	ND	360	ug/Kg	1	12/27/23	MR	SW8270E
Chrysene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Dibenz(a,h)anthracene	ND	180	ug/Kg	1	12/27/23	MR	SW8270E
Dibenzofuran	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Diethyl phthalate	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Dimethylphthalate	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Di-n-butylphthalate	ND	720	ug/Kg	1	12/27/23	MR	SW8270E
Di-n-octylphthalate	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Fluoranthene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Fluorene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Hexachlorobenzene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Hexachlorobutadiene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Hexachlorocyclopentadiene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Indeno(1,2,3-cd)pyrene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Isophorone	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Naphthalene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Nitrobenzene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
N-Nitrosodimethylamine	ND	360	ug/Kg	1	12/27/23	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	180	ug/Kg	1	12/27/23	MR	SW8270E
N-Nitrosodiphenylamine	ND	360	ug/Kg	1	12/27/23	MR	SW8270E
Pentachlorophenol	ND	360	ug/Kg	1	12/27/23	MR	SW8270E
Phenanthrene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Phenol	ND	250	ug/Kg	1	12/27/23	MR	SW8270E
Pyrene	ND	250	ug/Kg	1	12/27/23	MR	SW8270E

QA/QC Surrogates

% 2,4,6-Tribromophenol	70		%	1	12/27/23	MR	30 - 130 %
% 2-Fluorobiphenyl	64		%	1	12/27/23	MR	30 - 130 %
% 2-Fluorophenol	63		%	1	12/27/23	MR	30 - 130 %
% Nitrobenzene-d5	58		%	1	12/27/23	MR	30 - 130 %
% Phenol-d5	65		%	1	12/27/23	MR	30 - 130 %
% Terphenyl-d14	62		%	1	12/27/23	MR	30 - 130 %

TCLP Acid/Base-Neutral

1,4-Dichlorobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270

QA/QC Surrogates

% 2,4,6-Tribromophenol	82		%	1	12/28/23	MR	15 - 110 %
% 2-Fluorobiphenyl	47		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorophenol	46		%	1	12/28/23	MR	15 - 110 %
% Nitrobenzene-d5	59		%	1	12/28/23	MR	30 - 130 %
% Phenol-d5	40		%	1	12/28/23	MR	15 - 110 %
% Terphenyl-d14	71		%	1	12/28/23	MR	30 - 130 %

Semivolatile Library Search Completed 12/28/23 MR

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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.

Hexavalent Chromium:
This sample is in a reducing state.

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

January 10, 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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
Location Code: AES-EASTSIDE
Rush Request: 5 Day
P.O.#: 0897

Custody Information

Collected by:
Received by: CP
Analyzed by: see "By" below

Date

12/20/23
12/21/23

Time

13:10
19:25

Laboratory Data

SDG ID: GCP73450
Phoenix ID: CP73459

Project ID: EAST SIDE COASTAL RESILIENCY
Client ID: DM101

Table with 8 columns: Parameter, Result, RL/PQL, Units, Dilution, Date/Time, By, Reference. Lists various elements like Silver, Aluminum, Arsenic, etc., with their respective results and reference values.

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.1	3.1	mg/Kg	1	12/26/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/22/23	AL/HL/HL	SW3010A
Trivalent Chromium	20.1	0.34	mg/kg	1	12/27/23		CALC 6010-7196
Vanadium	26.3	0.34	mg/Kg	1	12/26/23	TH	SW6010D
Zinc	146	0.7	mg/Kg	1	12/26/23	TH	SW6010D
Percent Solid	86		%		12/21/23	CV	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/22/23	ER	SW846-Corr
Flash Point	>200	200	Degree F	1	12/29/23	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.43	0.43	mg/Kg	1	12/22/23	NP	SW7196A
Ignitability	Passed	140	degree F	1	12/29/23	G	SW846-Ignit
pH at 25C - Soil	8.19	1.00	pH Units	1	12/22/23 00:23	ER	SW846 9045D
Reactivity Cyanide	< 6	6	mg/Kg	1	12/23/23	EG	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	12/23/23	NP/EG	SW846 CH7
Reactivity	Negative		Pos/Neg	1	12/23/23	EG	SW846-React
Redox Potential	332		mV	1	12/22/23	ER	SM2580B-09
Total Cyanide (SW9010C Distill.)	< 0.58	0.58	mg/Kg	1	12/23/23	EG	SW9012B
Mercury Digestion	Completed				12/22/23	HL/HL	SW7471B
Extraction of NY ETPH	Completed				12/22/23	H/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/21/23	L/D	SW3546
NJ EPH Extraction	Completed				12/22/23	C/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/22/23	H/A	SW3546
Soil Extraction for Pesticides	Completed				12/22/23	H/A	SW3546
Soil Extraction for SVOA	Completed				12/26/23	C/JDW	SW3546
TCLP Digestion Mercury	Completed				12/22/23	AL/HL/HL	SW7470A
TCLP Herbicides Extraction	Completed				12/27/23	CV/D	SW8150 MOD
TCLP Extraction for Metals	Completed				12/21/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/21/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/28/23	S/S	SW3510C
TCLP Semi-Volatile Extraction	Completed				12/27/23	LB1/LB1	SW3510C
TCLP Extraction Volatiles	Completed				12/21/23	CV	SW1311
Total Metals Digest	Completed				12/22/23		SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	ND	45	mg/kg	5	12/26/23	JRB	NJEPH 10-08 R3
C9-C28	ND	91	mg/kg	5	12/26/23	JRB	NJEPH 10-08 R3
Total EPH	ND	45	mg/kg	5	12/26/23	JRB	NJEPH 10-08 R3

QA/QC Surrogates

% COD (surr)	54		%	5	12/26/23	JRB	40 - 140 %
% Terphenyl (surr)	65		%	5	12/26/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	16	mg/Kg	50	12/22/23	RM	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	87		%	50	12/22/23	RM	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
2,4,5-TP (Silvex)	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
2,4-D	ND	290	ug/Kg	10	12/22/23	KCA	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	2900	ug/Kg	10	12/22/23	KCA	SW8151A
Dalapon	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
Dicamba	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
Dichloroprop	ND	290	ug/Kg	10	12/22/23	KCA	SW8151A
Dinoseb	ND	290	ug/Kg	10	12/22/23	KCA	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	58		%	10	12/22/23	KCA	30 - 150 %
% DCAA (Confirmation)	56		%	10	12/22/23	KCA	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	75	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1221	ND	75	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1232	ND	75	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1242	ND	75	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1248	ND	75	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1254	ND	75	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1260	ND	75	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1262	ND	75	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1268	ND	75	ug/Kg	2	12/26/23	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	81		%	2	12/26/23	SC	30 - 150 %
% DCBP (Confirmation)	77		%	2	12/26/23	SC	30 - 150 %
% TCMX	88		%	2	12/26/23	SC	30 - 150 %
% TCMX (Confirmation)	89		%	2	12/26/23	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.3	ug/Kg	2	12/26/23	AW	SW8081B
4,4' -DDE	ND	2.3	ug/Kg	2	12/26/23	AW	SW8081B
4,4' -DDT	ND	2.3	ug/Kg	2	12/26/23	AW	SW8081B
a-BHC	ND	7.5	ug/Kg	2	12/26/23	AW	SW8081B
a-Chlordane	ND	3.8	ug/Kg	2	12/26/23	AW	SW8081B
Aldrin	ND	3.8	ug/Kg	2	12/26/23	AW	SW8081B
b-BHC	ND	7.5	ug/Kg	2	12/26/23	AW	SW8081B
Chlordane	ND	38	ug/Kg	2	12/26/23	AW	SW8081B
d-BHC	ND	7.5	ug/Kg	2	12/26/23	AW	SW8081B
Dieldrin	ND	3.8	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan I	ND	7.5	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan II	ND	7.5	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan sulfate	ND	7.5	ug/Kg	2	12/26/23	AW	SW8081B
Endrin	ND	7.5	ug/Kg	2	12/26/23	AW	SW8081B
Endrin aldehyde	ND	7.5	ug/Kg	2	12/26/23	AW	SW8081B
Endrin ketone	ND	7.5	ug/Kg	2	12/26/23	AW	SW8081B
g-BHC	ND	1.5	ug/Kg	2	12/26/23	AW	SW8081B
g-Chlordane	ND	3.8	ug/Kg	2	12/26/23	AW	SW8081B
Heptachlor	ND	7.5	ug/Kg	2	12/26/23	AW	SW8081B
Heptachlor epoxide	ND	7.5	ug/Kg	2	12/26/23	AW	SW8081B
Methoxychlor	ND	38	ug/Kg	2	12/26/23	AW	SW8081B
Toxaphene	ND	150	ug/Kg	2	12/26/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	85		%	2	12/26/23	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	138		%	2	12/26/23	AW	30 - 150 %
% TCMX	66		%	2	12/26/23	AW	30 - 150 %
% TCMX (Confirmation)	100		%	2	12/26/23	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/28/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/28/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	69		%	10	12/28/23	JRB	30 - 150 %
% DCAA (Confirmation)	68		%	10	12/28/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
a-BHC	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Alachlor	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Aldrin	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
b-BHC	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Chlordane	ND	5.0	ug/L	10	12/29/23	CN	SW8081B
d-BHC	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Dieldrin	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endosulfan I	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Endosulfan II	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endrin	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Heptachlor	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Methoxychlor	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Toxaphene	ND	20	ug/L	10	12/29/23	CN	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	81		%	10	12/29/23	CN	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	77		%	10	12/29/23	CN	30 - 150 %
%TCMX (Surrogate Rec)	70		%	10	12/29/23	CN	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	71		%	10	12/29/23	CN	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	ND	290	mg/Kg	5	12/26/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	70		%	5	12/26/23	JRB	50 - 150 %
% Terphenyl (surr)	66		%	5	12/26/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
1,1-Dichloroethane	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
1,1-Dichloroethene	ND	18	ug/kg	1	12/26/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dibromoethane	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichloroethane	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichloropropane	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
2-Hexanone	ND	90	ug/kg	1	12/26/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	90	ug/kg	1	12/26/23	JLI	SW8260D
Acetone	110	S 50	ug/kg	1	12/26/23	JLI	SW8260D
Benzene	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
Bromochloromethane	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
Bromodichloromethane	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
Bromoform	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
Bromomethane	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
Carbon Disulfide	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
Carbon tetrachloride	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
Chlorobenzene	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
Chloroethane	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
Chloroform	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
Chloromethane	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
Cyclohexane	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
Dibromochloromethane	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
Dichlorodifluoromethane	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
Ethylbenzene	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
Isopropylbenzene	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
m&p-Xylene	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
Methyl ethyl ketone	ND	110	ug/kg	1	12/26/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	36	ug/kg	1	12/26/23	JLI	SW8260D
Methylacetate	ND	14	ug/kg	1	12/26/23	JLI	SW8260D
Methylcyclohexane	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
Methylene chloride	ND	50	ug/kg	1	12/26/23	JLI	SW8260D
o-Xylene	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
Styrene	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
Tetrachloroethene	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
Toluene	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
Total Xylenes	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
Trichloroethene	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
Trichlorofluoromethane	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
Vinyl chloride	ND	18	ug/kg	1	12/26/23	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	1	12/26/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2,4-Dinitrophenol	ND	610	ug/Kg	1	12/27/23	MR	SW8270E
2,4-Dinitrotoluene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2,6-Dinitrotoluene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2-Chloronaphthalene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2-Chlorophenol	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2-Methylnaphthalene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2-Methylphenol (o-cresol)	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
2-Nitroaniline	ND	610	ug/Kg	1	12/27/23	MR	SW8270E
2-Nitrophenol	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
3,3'-Dichlorobenzidine	ND	460	ug/Kg	1	12/27/23	MR	SW8270E
3-Nitroaniline	ND	610	ug/Kg	1	12/27/23	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	12/27/23	MR	SW8270E
4-Bromophenyl phenyl ether	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
4-Chloro-3-methylphenol	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
4-Chloroaniline	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
4-Nitroaniline	ND	610	ug/Kg	1	12/27/23	MR	SW8270E
4-Nitrophenol	ND	1100	ug/Kg	1	12/27/23	MR	SW8270E
Acenaphthene	290	270	ug/Kg	1	12/27/23	MR	SW8270E
Acenaphthylene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Acetophenone	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Anthracene	640	270	ug/Kg	1	12/27/23	MR	SW8270E
Atrazine	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Benz(a)anthracene	810	270	ug/Kg	1	12/27/23	MR	SW8270E
Benzaldehyde	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(a)pyrene	700	270	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(b)fluoranthene	760	270	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(ghi)perylene	300	270	ug/Kg	1	12/27/23	MR	SW8270E
Benzo(k)fluoranthene	300	270	ug/Kg	1	12/27/23	MR	SW8270E
Benzyl butyl phthalate	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Bis(2-chloroethyl)ether	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Caprolactam	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Carbazole	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
Chrysene	710	270	ug/Kg	1	12/27/23	MR	SW8270E
Dibenz(a,h)anthracene	ND	190	ug/Kg	1	12/27/23	MR	SW8270E
Dibenzofuran	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Diethyl phthalate	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Dimethylphthalate	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Di-n-butylphthalate	ND	760	ug/Kg	1	12/27/23	MR	SW8270E
Di-n-octylphthalate	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Fluoranthene	2000	270	ug/Kg	1	12/27/23	MR	SW8270E
Fluorene	330	270	ug/Kg	1	12/27/23	MR	SW8270E
Hexachlorobenzene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Hexachlorobutadiene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Hexachlorocyclopentadiene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Indeno(1,2,3-cd)pyrene	360	270	ug/Kg	1	12/27/23	MR	SW8270E
Isophorone	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Naphthalene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Nitrobenzene	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
N-Nitrosodimethylamine	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	190	ug/Kg	1	12/27/23	MR	SW8270E
N-Nitrosodiphenylamine	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
Pentachlorophenol	ND	380	ug/Kg	1	12/27/23	MR	SW8270E
Phenanthrene	2400	270	ug/Kg	1	12/27/23	MR	SW8270E
Phenol	ND	270	ug/Kg	1	12/27/23	MR	SW8270E
Pyrene	1700	270	ug/Kg	1	12/27/23	MR	SW8270E

QA/QC Surrogates

% 2,4,6-Tribromophenol	54		%	1	12/27/23	MR	30 - 130 %
% 2-Fluorobiphenyl	51		%	1	12/27/23	MR	30 - 130 %
% 2-Fluorophenol	51		%	1	12/27/23	MR	30 - 130 %
% Nitrobenzene-d5	49		%	1	12/27/23	MR	30 - 130 %
% Phenol-d5	54		%	1	12/27/23	MR	30 - 130 %
% Terphenyl-d14	49		%	1	12/27/23	MR	30 - 130 %

TCLP Acid/Base-Neutral

1,4-Dichlorobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270

QA/QC Surrogates

% 2,4,6-Tribromophenol	60		%	1	12/28/23	MR	15 - 110 %
% 2-Fluorobiphenyl	36		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorophenol	34		%	1	12/28/23	MR	15 - 110 %
% Nitrobenzene-d5	48		%	1	12/28/23	MR	30 - 130 %
% Phenol-d5	30		%	1	12/28/23	MR	15 - 110 %
% Terphenyl-d14	53		%	1	12/28/23	MR	30 - 130 %

Semivolatile Library Search Completed 12/28/23 MR

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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 (preceded 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.

Hexavalent Chromium:
This sample is in a reducing state.

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.

S - Laboratory solvent, contamination is possible.

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

January 10, 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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
 Location Code: AES-EASTSIDE
 Rush Request: Standard
 P.O.#: 0897

Custody Information

Collected by:
 Received by: CP
 Analyzed by: see "By" below

Date

12/20/23
 12/21/23

Time

13:20
 19:25

Laboratory Data

SDG ID: GCP73450
 Phoenix ID: CP73460

Project ID: EAST SIDE COASTAL RESILIENCY
 Client ID: DM102

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.42	0.42	mg/Kg	1	12/26/23	TH	SW6010D
Aluminum	8420	6.3	mg/Kg	1	12/26/23	TH	SW6010D
Arsenic	2.62	0.84	mg/Kg	1	12/26/23	TH	SW6010D
Barium	73.8	0.42	mg/Kg	1	12/26/23	TH	SW6010D
Beryllium	0.40	0.34	mg/Kg	1	12/26/23	TH	SW6010D
Calcium	2600	6.3	mg/Kg	1	12/26/23	TH	SW6010D
Cadmium	< 0.42	0.42	mg/Kg	1	12/26/23	TH	SW6010D
Cobalt	7.49	0.42	mg/Kg	1	12/26/23	TH	SW6010D
Chromium	13.9	0.42	mg/Kg	1	12/26/23	TH	SW6010D
Copper	30.1	0.8	mg/kg	1	12/26/23	TH	SW6010D
Iron	17200	6.3	mg/Kg	1	12/26/23	TH	SW6010D
Mercury	0.11	0.03	mg/Kg	2	12/22/23	ZT	SW7471B
Potassium	2240	63	mg/Kg	10	12/28/23	TH	SW6010D
Magnesium	3850	6.3	mg/Kg	1	12/26/23	TH	SW6010D
Manganese	169	0.42	mg/Kg	1	12/26/23	TH	SW6010D
Sodium	151	6.3	mg/Kg	1	12/26/23	TH	SW6010D
Nickel	16.9	0.42	mg/Kg	1	12/26/23	TH	SW6010D
Lead	108	0.42	mg/Kg	1	12/26/23	TH	SW6010D
Antimony	< 4.2	4.2	mg/Kg	1	12/26/23	TH	SW6010D
Selenium	< 1.7	1.7	mg/Kg	1	12/26/23	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Barium	0.90	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	12/22/23	GW	SW846 1311/7470
TCLP Lead	1.23	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.8	3.8	mg/Kg	1	12/26/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/22/23	AL/HL/HL	SW3010A
Trivalent Chromium	13.9	0.42	mg/kg	1	12/27/23		CALC 6010-7196
Vanadium	20.1	0.42	mg/Kg	1	12/26/23	TH	SW6010D
Zinc	70.1	0.8	mg/Kg	1	12/26/23	TH	SW6010D
Percent Solid	84		%		12/21/23	CV	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/22/23	ER	SW846-Corr
Flash Point	>200	200	Degree F	1	12/29/23	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.43	0.43	mg/Kg	1	12/22/23	NP	SW7196A
Ignitability	Passed	140	degree F	1	12/29/23	G	SW846-Ignit
pH at 25C - Soil	8.07	1.00	pH Units	1	12/22/23 00:23	ER	SW846 9045D
Reactivity Cyanide	< 5	5	mg/Kg	1	12/23/23	EG	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	12/23/23	NP/EG	SW846 CH7
Reactivity	Negative		Pos/Neg	1	12/23/23	EG	SW846-React
Redox Potential	-128		mV	1	12/22/23	ER	SM2580B-09
Total Cyanide (SW9010C Distill.)	< 0.60	0.60	mg/Kg	1	12/23/23	EG	SW9012B
Mercury Digestion	Completed				12/22/23	HL/HL	SW7471B
Extraction of NY ETPH	Completed				12/22/23	H/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/21/23	L/D	SW3546
NJ EPH Extraction	Completed				12/26/23	H/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/22/23	H/A	SW3546
Soil Extraction for Pesticides	Completed				12/22/23	H/A	SW3546
Soil Extraction for SVOA	Completed				12/26/23	C/JDW	SW3546
TCLP Digestion Mercury	Completed				12/22/23	AL/HL/HL	SW7470A
TCLP Herbicides Extraction	Completed				12/27/23	CV/D	SW8150 MOD
TCLP Extraction for Metals	Completed				12/21/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/21/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/28/23	S/S	SW3510C
TCLP Semi-Volatile Extraction	Completed				12/27/23	LB1/LB1	SW3510C
TCLP Extraction Volatiles	Completed				12/21/23	CV	SW1311
Total Metals Digest	Completed				12/22/23		SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	ND	9.4	mg/kg	1	12/27/23	JRB	NJEPH 10-08 R3
C9-C28	ND	19	mg/kg	1	12/27/23	JRB	NJEPH 10-08 R3
Total EPH	ND	9.4	mg/kg	1	12/27/23	JRB	NJEPH 10-08 R3

QA/QC Surrogates

% COD (surr)	71		%	1	12/27/23	JRB	40 - 140 %
% Terphenyl (surr)	72		%	1	12/27/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	8.2	mg/Kg	50	12/22/23	RM	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	105		%	50	12/22/23	RM	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	150	ug/Kg	10	12/22/23	KCA	SW8151A
2,4,5-TP (Silvex)	ND	150	ug/Kg	10	12/22/23	KCA	SW8151A
2,4-D	ND	290	ug/Kg	10	12/22/23	KCA	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	2900	ug/Kg	10	12/22/23	KCA	SW8151A
Dalapon	ND	150	ug/Kg	10	12/22/23	KCA	SW8151A
Dicamba	ND	150	ug/Kg	10	12/22/23	KCA	SW8151A
Dichloroprop	ND	290	ug/Kg	10	12/22/23	KCA	SW8151A
Dinoseb	ND	290	ug/Kg	10	12/22/23	KCA	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	66		%	10	12/22/23	KCA	30 - 150 %
% DCAA (Confirmation)	75		%	10	12/22/23	KCA	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	79	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1221	ND	79	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1232	ND	79	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1242	ND	79	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1248	ND	79	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1254	ND	79	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1260	ND	79	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1262	ND	79	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1268	ND	79	ug/Kg	2	12/26/23	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	72		%	2	12/26/23	SC	30 - 150 %
% DCBP (Confirmation)	67		%	2	12/26/23	SC	30 - 150 %
% TCMX	79		%	2	12/26/23	SC	30 - 150 %
% TCMX (Confirmation)	69		%	2	12/26/23	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.4	ug/Kg	2	12/27/23	AW	SW8081B
4,4' -DDE	ND	2.4	ug/Kg	2	12/27/23	AW	SW8081B
4,4' -DDT	23	2.4	ug/Kg	2	12/27/23	AW	SW8081B
a-BHC	ND	7.9	ug/Kg	2	12/27/23	AW	SW8081B
a-Chlordane	ND	4.0	ug/Kg	2	12/27/23	AW	SW8081B
Aldrin	ND	4.0	ug/Kg	2	12/27/23	AW	SW8081B
b-BHC	ND	7.9	ug/Kg	2	12/27/23	AW	SW8081B
Chlordane	ND	40	ug/Kg	2	12/27/23	AW	SW8081B
d-BHC	ND	7.9	ug/Kg	2	12/27/23	AW	SW8081B
Dieldrin	4.8	4.0	ug/Kg	2	12/27/23	AW	SW8081B
Endosulfan I	ND	7.9	ug/Kg	2	12/27/23	AW	SW8081B
Endosulfan II	ND	7.9	ug/Kg	2	12/27/23	AW	SW8081B
Endosulfan sulfate	ND	7.9	ug/Kg	2	12/27/23	AW	SW8081B
Endrin	ND	7.9	ug/Kg	2	12/27/23	AW	SW8081B
Endrin aldehyde	ND	7.9	ug/Kg	2	12/27/23	AW	SW8081B
Endrin ketone	ND	7.9	ug/Kg	2	12/27/23	AW	SW8081B
g-BHC	ND	1.6	ug/Kg	2	12/27/23	AW	SW8081B
g-Chlordane	ND	4.0	ug/Kg	2	12/27/23	AW	SW8081B
Heptachlor	ND	7.9	ug/Kg	2	12/27/23	AW	SW8081B
Heptachlor epoxide	ND	7.9	ug/Kg	2	12/27/23	AW	SW8081B
Methoxychlor	ND	40	ug/Kg	2	12/27/23	AW	SW8081B
Toxaphene	ND	160	ug/Kg	2	12/27/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	106		%	2	12/27/23	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	68		%	2	12/27/23	AW	30 - 150 %
% TCMX	96		%	2	12/27/23	AW	30 - 150 %
% TCMX (Confirmation)	64		%	2	12/27/23	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/28/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/28/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	69		%	10	12/28/23	JRB	30 - 150 %
% DCAA (Confirmation)	70		%	10	12/28/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
a-BHC	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Alachlor	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Aldrin	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
b-BHC	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Chlordane	ND	5.0	ug/L	10	12/29/23	CN	SW8081B
d-BHC	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Dieldrin	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endosulfan I	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Endosulfan II	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endrin	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Heptachlor	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Methoxychlor	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Toxaphene	ND	20	ug/L	10	12/29/23	CN	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	32		%	10	12/29/23	CN	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	25		%	10	12/29/23	CN	30 - 150 %
%TCMX (Surrogate Rec)	62		%	10	12/29/23	CN	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	62		%	10	12/29/23	CN	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	1300	290	mg/Kg	5	12/26/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	132		%	5	12/26/23	JRB	50 - 150 %
% Terphenyl (surr)	Interference		%	5	12/26/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	410	ug/kg	50	12/27/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
1,1-Dichloroethane	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
1,1-Dichloroethene	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	410	ug/kg	50	12/27/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	410	ug/kg	50	12/27/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	410	ug/kg	50	12/27/23	JLI	SW8260D
1,2-Dibromoethane	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	410	ug/kg	50	12/27/23	JLI	SW8260D
1,2-Dichloroethane	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichloropropane	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	410	ug/kg	50	12/27/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	410	ug/kg	50	12/27/23	JLI	SW8260D
2-Hexanone	ND	28	ug/kg	1	12/26/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	28	ug/kg	1	12/26/23	JLI	SW8260D
Acetone	ND	50	ug/kg	50	12/27/23	JLI	SW8260D
Benzene	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
Bromochloromethane	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
Bromodichloromethane	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
Bromoform	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
Bromomethane	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
Carbon Disulfide	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
Carbon tetrachloride	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
Chlorobenzene	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
Chloroethane	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
Chloroform	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
Chloromethane	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
Cyclohexane	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
Dibromochloromethane	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
Dichlorodifluoromethane	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
Ethylbenzene	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
Isopropylbenzene	ND	410	ug/kg	50	12/27/23	JLI	SW8260D
m&p-Xylene	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
Methyl ethyl ketone	ND	50	ug/kg	1	12/26/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	11	ug/kg	1	12/26/23	JLI	SW8260D
Methylacetate	ND	4.5	ug/kg	1	12/26/23	JLI	SW8260D
Methylcyclohexane	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
Methylene chloride	ND	28	ug/kg	1	12/26/23	JLI	SW8260D
o-Xylene	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
Styrene	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
Tetrachloroethene	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
Toluene	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
Total Xylenes	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
Trichloroethene	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
Trichlorofluoromethane	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
Vinyl chloride	ND	5.6	ug/kg	1	12/26/23	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	1	12/26/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	86		%	1	12/26/23	JLI	70 - 130 %
% Dibromofluoromethane	111		%	1	12/26/23	JLI	70 - 130 %
% Toluene-d8	93		%	1	12/26/23	JLI	70 - 130 %
% 1,2-dichlorobenzene-d4 (50x)	95		%	50	12/27/23	JLI	70 - 130 %
% Bromofluorobenzene (50x)	98		%	50	12/27/23	JLI	70 - 130 %
% Dibromofluoromethane (50x)	98		%	50	12/27/23	JLI	70 - 130 %
% Toluene-d8 (50x)	96		%	50	12/27/23	JLI	70 - 130 %

1,4-dioxane

1,4-dioxane	ND	84	ug/kg	1	12/26/23	JLI	SW8260D
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Volatiles

1,2,3-Trichloropropane	ND	410	ug/Kg	50	12/27/23	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	410	ug/Kg	50	12/27/23	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	410	ug/Kg	50	12/27/23	JLI	SW8260D
1,3-Dichloropropane	ND	5.6	ug/Kg	1	12/26/23	JLI	SW8260D
n-Butylbenzene	ND	410	ug/Kg	50	12/27/23	JLI	SW8260D
n-Propylbenzene	ND	410	ug/Kg	50	12/27/23	JLI	SW8260D
p-Isopropyltoluene	ND	410	ug/Kg	50	12/27/23	JLI	SW8260D
sec-Butylbenzene	ND	410	ug/Kg	50	12/27/23	JLI	SW8260D
tert-Butylbenzene	ND	410	ug/Kg	50	12/27/23	JLI	SW8260D

QA/QC Surrogates

% 1,2-dichlorobenzene-d4	97		%	1	12/26/23	JLI	70 - 130 %
% Bromofluorobenzene	86		%	1	12/26/23	JLI	70 - 130 %
% Dibromofluoromethane	111		%	1	12/26/23	JLI	70 - 130 %
% Toluene-d8	93		%	1	12/26/23	JLI	70 - 130 %
% 1,2-dichlorobenzene-d4 (50x)	95		%	50	12/27/23	JLI	70 - 130 %
% Bromofluorobenzene (50x)	98		%	50	12/27/23	JLI	70 - 130 %
% Dibromofluoromethane (50x)	98		%	50	12/27/23	JLI	70 - 130 %
% Toluene-d8 (50x)	96		%	50	12/27/23	JLI	70 - 130 %

TCLP Volatiles

1,1-Dichloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	12/26/23	HM	SW846 1311/8260

QA/QC Surrogates

% 1,2-dichlorobenzene-d4 (10x)	99		%	10	12/26/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	90		%	10	12/26/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	103		%	10	12/26/23	HM	70 - 130 %
% Toluene-d8 (10x)	96		%	10	12/26/23	HM	70 - 130 %

Volatile Library Search	Completed				12/27/23	JLI	
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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Semivolatiles							
1,1-Biphenyl	850	270	ug/Kg	1	12/27/23	AJK	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
2,3,4,6-tetrachlorophenol	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
2,4,5-Trichlorophenol	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
2,4,6-Trichlorophenol	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
2,4-Dichlorophenol	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
2,4-Dimethylphenol	370	270	ug/Kg	1	12/27/23	AJK	SW8270E
2,4-Dinitrophenol	ND	620	ug/Kg	1	12/27/23	AJK	SW8270E
2,4-Dinitrotoluene	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
2,6-Dinitrotoluene	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
2-Chloronaphthalene	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
2-Chlorophenol	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
2-Methylnaphthalene	2600	270	ug/Kg	1	12/27/23	AJK	SW8270E
2-Methylphenol (o-cresol)	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
2-Nitroaniline	ND	620	ug/Kg	1	12/27/23	AJK	SW8270E
2-Nitrophenol	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
3&4-Methylphenol (m&p-cresol)	560	390	ug/Kg	1	12/27/23	AJK	SW8270E
3,3'-Dichlorobenzidine	ND	470	ug/Kg	1	12/27/23	AJK	SW8270E
3-Nitroaniline	ND	620	ug/Kg	1	12/27/23	AJK	SW8270E
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	12/27/23	AJK	SW8270E
4-Bromophenyl phenyl ether	ND	390	ug/Kg	1	12/27/23	AJK	SW8270E
4-Chloro-3-methylphenol	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
4-Chloroaniline	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
4-Nitroaniline	ND	620	ug/Kg	1	12/27/23	AJK	SW8270E
4-Nitrophenol	ND	1100	ug/Kg	1	12/27/23	AJK	SW8270E
Acenaphthene	7200	270	ug/Kg	1	12/27/23	AJK	SW8270E
Acenaphthylene	1600	270	ug/Kg	1	12/27/23	AJK	SW8270E
Acetophenone	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Anthracene	14000	2700	ug/Kg	10	12/28/23	AJK	SW8270E
Atrazine	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Benz(a)anthracene	17000	2700	ug/Kg	10	12/28/23	AJK	SW8270E
Benzaldehyde	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Benzo(a)pyrene	16000	2700	ug/Kg	10	12/28/23	AJK	SW8270E
Benzo(b)fluoranthene	17000	2700	ug/Kg	10	12/28/23	AJK	SW8270E
Benzo(ghi)perylene	6100	270	ug/Kg	1	12/27/23	AJK	SW8270E
Benzo(k)fluoranthene	4600	270	ug/Kg	1	12/27/23	AJK	SW8270E
Benzyl butyl phthalate	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Bis(2-chloroethyl)ether	ND	390	ug/Kg	1	12/27/23	AJK	SW8270E
Bis(2-ethylhexyl)phthalate	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Caprolactam	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Carbazole	6300	390	ug/Kg	1	12/27/23	AJK	SW8270E
Chrysene	16000	2700	ug/Kg	10	12/28/23	AJK	SW8270E
Dibenz(a,h)anthracene	1400	190	ug/Kg	1	12/27/23	AJK	SW8270E
Dibenzofuran	6300	270	ug/Kg	1	12/27/23	AJK	SW8270E
Diethyl phthalate	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dimethylphthalate	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Di-n-butylphthalate	ND	780	ug/Kg	1	12/27/23	AJK	SW8270E
Di-n-octylphthalate	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Fluoranthene	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Fluorene	9600	2700	ug/Kg	10	12/28/23	AJK	SW8270E
Hexachlorobenzene	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Hexachlorobutadiene	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Hexachlorocyclopentadiene	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Hexachloroethane	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Indeno(1,2,3-cd)pyrene	7200	270	ug/Kg	1	12/27/23	AJK	SW8270E
Isophorone	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
Naphthalene	5200	270	ug/Kg	1	12/27/23	AJK	SW8270E
Nitrobenzene	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
N-Nitrosodimethylamine	ND	390	ug/Kg	1	12/27/23	AJK	SW8270E
N-Nitrosodi-n-propylamine	ND	190	ug/Kg	1	12/27/23	AJK	SW8270E
N-Nitrosodiphenylamine	ND	390	ug/Kg	1	12/27/23	AJK	SW8270E
Pentachlorophenol	ND	390	ug/Kg	1	12/27/23	AJK	SW8270E
Phenanthrene	47000	2700	ug/Kg	10	12/28/23	AJK	SW8270E
Phenol	270	270	ug/Kg	1	12/27/23	AJK	SW8270E
Pyrene	ND	270	ug/Kg	1	12/27/23	AJK	SW8270E
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	66		%	1	12/27/23	AJK	30 - 130 %
% 2-Fluorobiphenyl	51		%	1	12/27/23	AJK	30 - 130 %
% 2-Fluorophenol	52		%	1	12/27/23	AJK	30 - 130 %
% Nitrobenzene-d5	58		%	1	12/27/23	AJK	30 - 130 %
% Phenol-d5	60		%	1	12/27/23	AJK	30 - 130 %
% Terphenyl-d14	59		%	1	12/27/23	AJK	30 - 130 %
<u>TCLP Acid/Base-Neutral</u>							
1,4-Dichlorobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	67		%	1	12/28/23	MR	15 - 110 %
% 2-Fluorobiphenyl	41		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorophenol	38		%	1	12/28/23	MR	15 - 110 %
% Nitrobenzene-d5	50		%	1	12/28/23	MR	30 - 130 %
% Phenol-d5	36		%	1	12/28/23	MR	15 - 110 %
% Terphenyl-d14	60		%	1	12/28/23	MR	30 - 130 %
Semivolatile Library Search	Completed				12/28/23	MR	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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.

3 = This parameter exceeds laboratory specified limits.

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.

Hexavalent Chromium:
This sample is in a reducing state.

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.

Volatile Comment:
There was a suppression of the last internal standard in the low level analysis, all affected compounds are reported from the methanol preserved high level analysis which did not exhibit this interference.

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

January 10, 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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
 Location Code: AES-EASTSIDE
 Rush Request: 5 Day
 P.O.#: 0897

Custody Information

Collected by:
 Received by: CP
 Analyzed by: see "By" below

Date

12/20/23
 12/21/23

Time

8:55
 19:25

Laboratory Data

SDG ID: GCP73450
 Phoenix ID: CP73461

Project ID: EAST SIDE COASTAL RESILIENCY
 Client ID: G124

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.38	0.38	mg/Kg	1	12/26/23	TH	SW6010D
Aluminum	6020	5.7	mg/Kg	1	12/26/23	TH	SW6010D
Arsenic	4.86	0.76	mg/Kg	1	12/26/23	TH	SW6010D
Barium	38.4	0.38	mg/Kg	1	12/26/23	TH	SW6010D
Beryllium	0.45	0.30	mg/Kg	1	12/26/23	TH	SW6010D
Calcium	689	5.7	mg/Kg	1	12/26/23	TH	SW6010D
Cadmium	< 0.38	0.38	mg/Kg	1	12/26/23	TH	SW6010D
Cobalt	5.12	0.38	mg/Kg	1	12/26/23	TH	SW6010D
Chromium	15.7	0.38	mg/Kg	1	12/26/23	TH	SW6010D
Copper	13.2	0.8	mg/kg	1	12/26/23	TH	SW6010D
Iron	13400	5.7	mg/Kg	1	12/26/23	TH	SW6010D
Mercury	< 0.03	0.03	mg/Kg	2	12/22/23	ZT	SW7471B
Potassium	795	57	mg/Kg	10	12/28/23	TH	SW6010D
Magnesium	919	5.7	mg/Kg	1	12/26/23	TH	SW6010D
Manganese	186	0.38	mg/Kg	1	12/26/23	TH	SW6010D
Sodium	42.0	5.7	mg/Kg	1	12/26/23	TH	SW6010D
Nickel	7.42	0.38	mg/Kg	1	12/26/23	TH	SW6010D
Lead	23.5	0.38	mg/Kg	1	12/26/23	TH	SW6010D
Antimony	< 3.8	3.8	mg/Kg	1	12/26/23	TH	SW6010D
Selenium	< 1.5	1.5	mg/Kg	1	12/26/23	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	12/26/23	TH	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	12/26/23	TH	SW846 1311/6010
TCLP Barium	0.65	0.10	mg/L	1	12/26/23	TH	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	12/26/23	TH	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	12/26/23	TH	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	12/22/23	GW	SW846 1311/7470
TCLP Lead	< 0.10	0.10	mg/L	1	12/26/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	12/26/23	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.4	3.4	mg/Kg	1	12/26/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/22/23	AL/AL	SW3010A
Trivalent Chromium	15.7	0.38	mg/kg	1	12/27/23		CALC 6010-7196
Vanadium	22.5	0.38	mg/Kg	1	12/26/23	TH	SW6010D
Zinc	44.9	0.8	mg/Kg	1	12/26/23	TH	SW6010D
Percent Solid	87		%		12/21/23	CV	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/22/23	ER	SW846-Corr 1
Flash Point	>200	200	Degree F	1	12/29/23	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.40	0.40	mg/Kg	1	12/22/23	NP	SW7196A
Ignitability	Passed	140	degree F	1	12/29/23	G	SW846-Ignit 1
pH at 25C - Soil	7.63	1.00	pH Units	1	12/22/23 00:24	ER	SW846 9045D 1
Reactivity Cyanide	< 5	5	mg/Kg	1	12/23/23	EG	SW846 7.3.3.1/90 1
Reactivity Sulfide	< 20	20	mg/Kg	1	12/23/23	NP/EG	SW846 CH7 1
Reactivity	Negative		Pos/Neg	1	12/23/23	EG	SW846-React 1
Redox Potential	294		mV	1	12/22/23	ER	SM2580B-09 1
Total Cyanide (SW9010C Distill.)	< 0.57	0.57	mg/Kg	1	12/23/23	EG	SW9012B
Mercury Digestion	Completed				12/22/23	HL/HL	SW7471B
Extraction of NY ETPH	Completed				12/22/23	H/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/21/23	L/D	SW3546
NJ EPH Extraction	Completed				12/26/23	H/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/22/23	H/A	SW3546
Soil Extraction for Pesticides	Completed				12/22/23	H/A	SW3546
Soil Extraction for SVOA	Completed				12/27/23	AC1/H/U	SW3546
TCLP Digestion Mercury	Completed				12/22/23	AL/HL/HL	SW7470A
TCLP Herbicides Extraction	Completed				12/27/23	CV/D	SW8150 MOD
TCLP Extraction for Metals	Completed				12/21/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/21/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/28/23	S/S	SW3510C
TCLP Semi-Volatile Extraction	Completed				12/27/23	LB1/LB1	SW3510C
TCLP Extraction Volatiles	Completed				12/21/23	CV	SW1311
Total Metals Digest	Completed				12/22/23		SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	ND	9.0	mg/kg	1	12/27/23	JRB	NJEPH 10-08 R3 1
C9-C28	ND	18	mg/kg	1	12/27/23	JRB	NJEPH 10-08 R3 1
Total EPH	ND	9.0	mg/kg	1	12/27/23	JRB	NJEPH 10-08 R3 1

QA/QC Surrogates

% COD (surr)	73		%	1	12/27/23	JRB	40 - 140 %
% Terphenyl (surr)	73		%	1	12/27/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	7.2	mg/Kg	50	12/22/23	RM	SW8015D GRO
<u>QA/QC Surrogates</u>							
% 2,5-Dibromotoluene (FID)	80		%	50	12/22/23	RM	70 - 130 %

Chlorinated Herbicides

2,4,5-T	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
2,4,5-TP (Silvex)	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
2,4-D	ND	290	ug/Kg	10	12/22/23	KCA	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	2900	ug/Kg	10	12/22/23	KCA	SW8151A
Dalapon	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
Dicamba	ND	140	ug/Kg	10	12/22/23	KCA	SW8151A
Dichloroprop	ND	290	ug/Kg	10	12/22/23	KCA	SW8151A
Dinoseb	ND	290	ug/Kg	10	12/22/23	KCA	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	58		%	10	12/22/23	KCA	30 - 150 %
% DCAA (Confirmation)	62		%	10	12/22/23	KCA	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1221	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1232	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1242	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1248	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1254	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1260	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1262	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1268	ND	76	ug/Kg	2	12/26/23	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	80		%	2	12/26/23	SC	30 - 150 %
% DCBP (Confirmation)	77		%	2	12/26/23	SC	30 - 150 %
% TCMX	80		%	2	12/26/23	SC	30 - 150 %
% TCMX (Confirmation)	77		%	2	12/26/23	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.3	ug/Kg	2	12/26/23	CN	SW8081B
4,4' -DDE	ND	2.3	ug/Kg	2	12/26/23	CN	SW8081B
4,4' -DDT	ND	2.3	ug/Kg	2	12/26/23	CN	SW8081B
a-BHC	ND	7.6	ug/Kg	2	12/26/23	CN	SW8081B
a-Chlordane	ND	3.8	ug/Kg	2	12/26/23	CN	SW8081B
Aldrin	ND	3.8	ug/Kg	2	12/26/23	CN	SW8081B
b-BHC	ND	7.6	ug/Kg	2	12/26/23	CN	SW8081B
Chlordane	ND	38	ug/Kg	2	12/26/23	CN	SW8081B
d-BHC	ND	7.6	ug/Kg	2	12/26/23	CN	SW8081B
Dieldrin	ND	3.8	ug/Kg	2	12/26/23	CN	SW8081B
Endosulfan I	ND	7.6	ug/Kg	2	12/26/23	CN	SW8081B
Endosulfan II	ND	7.6	ug/Kg	2	12/26/23	CN	SW8081B
Endosulfan sulfate	ND	7.6	ug/Kg	2	12/26/23	CN	SW8081B
Endrin	ND	7.6	ug/Kg	2	12/26/23	CN	SW8081B
Endrin aldehyde	ND	7.6	ug/Kg	2	12/26/23	CN	SW8081B
Endrin ketone	ND	7.6	ug/Kg	2	12/26/23	CN	SW8081B
g-BHC	ND	1.5	ug/Kg	2	12/26/23	CN	SW8081B
g-Chlordane	ND	3.8	ug/Kg	2	12/26/23	CN	SW8081B
Heptachlor	ND	7.6	ug/Kg	2	12/26/23	CN	SW8081B
Heptachlor epoxide	ND	7.6	ug/Kg	2	12/26/23	CN	SW8081B
Methoxychlor	ND	38	ug/Kg	2	12/26/23	CN	SW8081B
Toxaphene	ND	150	ug/Kg	2	12/26/23	CN	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	80		%	2	12/26/23	CN	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	78		%	2	12/26/23	CN	30 - 150 %
% TCMX	68		%	2	12/26/23	CN	30 - 150 %
% TCMX (Confirmation)	71		%	2	12/26/23	CN	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/28/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/28/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	73		%	10	12/28/23	JRB	30 - 150 %
% DCAA (Confirmation)	75		%	10	12/28/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
a-BHC	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Alachlor	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Aldrin	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
b-BHC	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Chlordane	ND	5.0	ug/L	10	12/29/23	CN	SW8081B
d-BHC	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Dieldrin	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endosulfan I	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Endosulfan II	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endrin	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Heptachlor	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Methoxychlor	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Toxaphene	ND	20	ug/L	10	12/29/23	CN	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	78		%	10	12/29/23	CN	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	77		%	10	12/29/23	CN	30 - 150 %
%TCMX (Surrogate Rec)	66		%	10	12/29/23	CN	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	66		%	10	12/29/23	CN	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	ND	56	mg/Kg	1	12/26/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	75		%	1	12/26/23	JRB	50 - 150 %
% Terphenyl (surr)	74		%	1	12/26/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
1,1-Dichloroethane	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
1,1-Dichloroethene	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dibromoethane	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichloroethane	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichloropropane	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
2-Hexanone	ND	24	ug/kg	1	12/26/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	24	ug/kg	1	12/26/23	JLI	SW8260D
Acetone	ND	48	ug/kg	1	12/26/23	JLI	SW8260D
Benzene	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
Bromochloromethane	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
Bromodichloromethane	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
Bromoform	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
Bromomethane	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
Carbon Disulfide	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
Carbon tetrachloride	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
Chlorobenzene	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
Chloroethane	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
Chloroform	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
Chloromethane	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
Cyclohexane	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
Dibromochloromethane	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
Dichlorodifluoromethane	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
Ethylbenzene	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
Isopropylbenzene	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
m&p-Xylene	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
Methyl ethyl ketone	ND	29	ug/kg	1	12/26/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	9.5	ug/kg	1	12/26/23	JLI	SW8260D
Methylacetate	ND	3.8	ug/kg	1	12/26/23	JLI	SW8260D
Methylcyclohexane	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
Methylene chloride	ND	24	ug/kg	1	12/26/23	JLI	SW8260D
o-Xylene	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
Styrene	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
Tetrachloroethene	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
Toluene	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
Total Xylenes	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
Trichloroethene	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
Trichlorofluoromethane	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
Vinyl chloride	ND	4.8	ug/kg	1	12/26/23	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	106		%	1	12/26/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2,4-Dinitrophenol	ND	600	ug/Kg	1	12/28/23	KCA	SW8270E
2,4-Dinitrotoluene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2,6-Dinitrotoluene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2-Chloronaphthalene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2-Chlorophenol	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2-Methylnaphthalene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2-Nitroaniline	ND	600	ug/Kg	1	12/28/23	KCA	SW8270E
2-Nitrophenol	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	380	ug/Kg	1	12/28/23	KCA	SW8270E
3,3'-Dichlorobenzidine	ND	450	ug/Kg	1	12/28/23	KCA	SW8270E
3-Nitroaniline	ND	600	ug/Kg	1	12/28/23	KCA	SW8270E
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	12/28/23	KCA	SW8270E
4-Bromophenyl phenyl ether	ND	380	ug/Kg	1	12/28/23	KCA	SW8270E
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
4-Chloroaniline	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
4-Nitroaniline	ND	600	ug/Kg	1	12/28/23	KCA	SW8270E
4-Nitrophenol	ND	1100	ug/Kg	1	12/28/23	KCA	SW8270E
Acenaphthene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Acenaphthylene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Acetophenone	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Anthracene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Atrazine	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Benz(a)anthracene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Benzaldehyde	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Benzo(a)pyrene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Benzo(b)fluoranthene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Benzo(ghi)perylene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Benzo(k)fluoranthene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Benzyl butyl phthalate	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Bis(2-chloroethyl)ether	ND	380	ug/Kg	1	12/28/23	KCA	SW8270E
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Caprolactam	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Carbazole	ND	380	ug/Kg	1	12/28/23	KCA	SW8270E
Chrysene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Dibenz(a,h)anthracene	ND	190	ug/Kg	1	12/28/23	KCA	SW8270E
Dibenzofuran	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Diethyl phthalate	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Dimethylphthalate	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Di-n-butylphthalate	ND	760	ug/Kg	1	12/28/23	KCA	SW8270E
Di-n-octylphthalate	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Fluoranthene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Fluorene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Hexachlorobenzene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Hexachlorobutadiene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Indeno(1,2,3-cd)pyrene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Isophorone	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Naphthalene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Nitrobenzene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
N-Nitrosodimethylamine	ND	380	ug/Kg	1	12/28/23	KCA	SW8270E
N-Nitrosodi-n-propylamine	ND	190	ug/Kg	1	12/28/23	KCA	SW8270E
N-Nitrosodiphenylamine	ND	380	ug/Kg	1	12/28/23	KCA	SW8270E
Pentachlorophenol	ND	380	ug/Kg	1	12/28/23	KCA	SW8270E
Phenanthrene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Phenol	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Pyrene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	91		%	1	12/28/23	KCA	30 - 130 %
% 2-Fluorobiphenyl	77		%	1	12/28/23	KCA	30 - 130 %
% 2-Fluorophenol	70		%	1	12/28/23	KCA	30 - 130 %
% Nitrobenzene-d5	72		%	1	12/28/23	KCA	30 - 130 %
% Phenol-d5	75		%	1	12/28/23	KCA	30 - 130 %
% Terphenyl-d14	81		%	1	12/28/23	KCA	30 - 130 %
<u>TCLP Acid/Base-Neutral</u>							
1,4-Dichlorobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	12/28/23	MR	SW-846 1311/8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	90		%	1	12/28/23	MR	15 - 110 %
% 2-Fluorobiphenyl	60		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorophenol	53		%	1	12/28/23	MR	15 - 110 %
% Nitrobenzene-d5	70		%	1	12/28/23	MR	30 - 130 %
% Phenol-d5	46		%	1	12/28/23	MR	15 - 110 %
% Terphenyl-d14	85		%	1	12/28/23	MR	30 - 130 %
Semivolatile Library Search	Completed				12/28/23	KCA	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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 (preceded 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.

Hexavalent Chromium:
This sample is in a reducing state.

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

January 10, 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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
Location Code: AES-EASTSIDE
Rush Request: 5 Day
P.O.#: 0897

Custody Information

Collected by:
Received by: CP
Analyzed by: see "By" below

Date

12/20/23
12/21/23

Time

8:40
19:25

Laboratory Data

SDG ID: GCP73450
Phoenix ID: CP73462

Project ID: EAST SIDE COASTAL RESILIENCY
Client ID: G121

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	1	12/26/23	TH	SW6010D
Aluminum	9280	55	mg/Kg	10	12/28/23	TH	SW6010D
Arsenic	6.57	0.73	mg/Kg	1	12/26/23	TH	SW6010D
Barium	118	0.36	mg/Kg	1	12/26/23	TH	SW6010D
Beryllium	0.51	0.29	mg/Kg	1	12/26/23	TH	SW6010D
Calcium	3930	5.5	mg/Kg	1	12/26/23	TH	SW6010D
Cadmium	0.98	0.36	mg/Kg	1	12/26/23	TH	SW6010D
Cobalt	7.69	0.36	mg/Kg	1	12/26/23	TH	SW6010D
Chromium	21.7	0.36	mg/Kg	1	12/26/23	TH	SW6010D
Copper	39.1	0.7	mg/kg	1	12/26/23	TH	SW6010D
Iron	19500	5.5	mg/Kg	1	12/26/23	TH	SW6010D
Mercury	0.28	0.03	mg/Kg	2	12/22/23	ZT	SW7471B
Potassium	1240	55	mg/Kg	10	12/28/23	TH	SW6010D
Magnesium	2720	5.5	mg/Kg	1	12/26/23	TH	SW6010D
Manganese	442	0.36	mg/Kg	1	12/26/23	TH	SW6010D
Sodium	102	5.5	mg/Kg	1	12/26/23	TH	SW6010D
Nickel	17.4	0.36	mg/Kg	1	12/26/23	TH	SW6010D
Lead	296	0.36	mg/Kg	1	12/26/23	TH	SW6010D
Antimony	< 3.6	3.6	mg/Kg	1	12/26/23	TH	SW6010D
Selenium	< 1.5	1.5	mg/Kg	1	12/26/23	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Barium	0.75	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	12/22/23	GW	SW846 1311/7470
TCLP Lead	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	12/22/23	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.3	3.3	mg/Kg	1	12/26/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/22/23	AL/HL/HL	SW3010A
Trivalent Chromium	21.7	0.36	mg/kg	1	12/27/23		CALC 6010-7196
Vanadium	32.1	0.36	mg/Kg	1	12/26/23	TH	SW6010D
Zinc	208	0.7	mg/Kg	1	12/26/23	TH	SW6010D
Percent Solid	88		%		12/21/23	CV	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/22/23	ER	SW846-Corr
Flash Point	>200	200	Degree F	1	12/29/23	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.42	0.42	mg/Kg	1	12/22/23	NP	SW7196A
Ignitability	Passed	140	degree F	1	12/29/23	G	SW846-Ignit
pH at 25C - Soil	7.76	1.00	pH Units	1	12/22/23 00:24	ER	SW846 9045D
Reactivity Cyanide	< 6	6	mg/Kg	1	12/23/23	EG	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	12/23/23	NP/EG	SW846 CH7
Reactivity	Negative		Pos/Neg	1	12/23/23	EG	SW846-React
Redox Potential	295		mV	1	12/22/23	ER	SM2580B-09
Total Cyanide (SW9010C Distill.)	< 0.57	0.57	mg/Kg	1	12/23/23	EG	SW9012B
Mercury Digestion	Completed				12/22/23	HL/HL	SW7471B
Extraction of NY ETPH	Completed				12/22/23	H/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/26/23	L/MQ	SW3546
NJ EPH Extraction	Completed				12/26/23	H/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/22/23	H/A	SW3546
Soil Extraction for Pesticides	Completed				12/22/23	H/A	SW3546
Soil Extraction for SVOA	Completed				12/27/23	AC1/H/U	SW3546
TCLP Digestion Mercury	Completed				12/22/23	AL/HL/HL	SW7470A
TCLP Herbicides Extraction	Completed				12/27/23	CV/D	SW8150 MOD
TCLP Extraction for Metals	Completed				12/21/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/21/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/28/23	S/S	SW3510C
TCLP Semi-Volatile Extraction	Completed				12/28/23	S/S	SW3510C
TCLP Extraction Volatiles	Completed				12/21/23	CV	SW1311
Total Metals Digest	Completed				12/22/23		SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	ND	9.0	mg/kg	1	12/27/23	JRB	NJEPH 10-08 R3
C9-C28	ND	18	mg/kg	1	12/27/23	JRB	NJEPH 10-08 R3
Total EPH	ND	9.0	mg/kg	1	12/27/23	JRB	NJEPH 10-08 R3

QA/QC Surrogates

% COD (surr)	77		%	1	12/27/23	JRB	40 - 140 %
% Terphenyl (surr)	87		%	1	12/27/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	6.6	mg/Kg	50	12/22/23	RM	SW8015D GRO
<u>QA/QC Surrogates</u>							
% 2,5-Dibromotoluene (FID)	74		%	50	12/22/23	RM	70 - 130 %

Chlorinated Herbicides

2,4,5-T	ND	140	ug/Kg	10	12/27/23	JRB	SW8151A
2,4,5-TP (Silvex)	ND	140	ug/Kg	10	12/27/23	JRB	SW8151A
2,4-D	ND	280	ug/Kg	10	12/27/23	JRB	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	2800	ug/Kg	10	12/27/23	JRB	SW8151A
Dalapon	ND	140	ug/Kg	10	12/27/23	JRB	SW8151A
Dicamba	ND	140	ug/Kg	10	12/27/23	JRB	SW8151A
Dichloroprop	ND	280	ug/Kg	10	12/27/23	JRB	SW8151A
Dinoseb	ND	280	ug/Kg	10	12/27/23	JRB	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	60		%	10	12/27/23	JRB	30 - 150 %
% DCAA (Confirmation)	61		%	10	12/27/23	JRB	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	73	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1221	ND	73	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1232	ND	73	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1242	ND	73	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1248	ND	73	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1254	ND	73	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1260	ND	73	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1262	ND	73	ug/Kg	2	12/26/23	SC	SW8082A
PCB-1268	ND	73	ug/Kg	2	12/26/23	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	63		%	2	12/26/23	SC	30 - 150 %
% DCBP (Confirmation)	58		%	2	12/26/23	SC	30 - 150 %
% TCMX	61		%	2	12/26/23	SC	30 - 150 %
% TCMX (Confirmation)	59		%	2	12/26/23	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.2	ug/Kg	2	12/26/23	AW	SW8081B
4,4' -DDE	23	2.2	ug/Kg	2	12/26/23	AW	SW8081B
4,4' -DDT	22	2.2	ug/Kg	2	12/26/23	AW	SW8081B
a-BHC	ND	7.3	ug/Kg	2	12/26/23	AW	SW8081B
a-Chlordane	ND	3.7	ug/Kg	2	12/26/23	AW	SW8081B
Aldrin	ND	3.7	ug/Kg	2	12/26/23	AW	SW8081B
b-BHC	ND	7.3	ug/Kg	2	12/26/23	AW	SW8081B
Chlordane	ND	37	ug/Kg	2	12/26/23	AW	SW8081B
d-BHC	ND	7.3	ug/Kg	2	12/26/23	AW	SW8081B
Dieldrin	ND	3.7	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan I	ND	7.3	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan II	ND	7.3	ug/Kg	2	12/26/23	AW	SW8081B
Endosulfan sulfate	ND	7.3	ug/Kg	2	12/26/23	AW	SW8081B
Endrin	ND	7.3	ug/Kg	2	12/26/23	AW	SW8081B
Endrin aldehyde	ND	7.3	ug/Kg	2	12/26/23	AW	SW8081B
Endrin ketone	ND	7.3	ug/Kg	2	12/26/23	AW	SW8081B
g-BHC	ND	1.5	ug/Kg	2	12/26/23	AW	SW8081B
g-Chlordane	ND	3.7	ug/Kg	2	12/26/23	AW	SW8081B
Heptachlor	ND	7.3	ug/Kg	2	12/26/23	AW	SW8081B
Heptachlor epoxide	ND	7.3	ug/Kg	2	12/26/23	AW	SW8081B
Methoxychlor	ND	37	ug/Kg	2	12/26/23	AW	SW8081B
Toxaphene	ND	150	ug/Kg	2	12/26/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	83		%	2	12/26/23	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	89		%	2	12/26/23	AW	30 - 150 %
% TCMX	50		%	2	12/26/23	AW	30 - 150 %
% TCMX (Confirmation)	58		%	2	12/26/23	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/28/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/28/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	73		%	10	12/28/23	JRB	30 - 150 %
% DCAA (Confirmation)	74		%	10	12/28/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
a-BHC	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Alachlor	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Aldrin	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
b-BHC	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Chlordane	ND	5.0	ug/L	10	12/29/23	CN	SW8081B
d-BHC	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Dieldrin	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endosulfan I	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Endosulfan II	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endrin	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	12/29/23	CN	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Heptachlor	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Methoxychlor	ND	0.50	ug/L	10	12/29/23	CN	SW8081B
Toxaphene	ND	20	ug/L	10	12/29/23	CN	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	71		%	10	12/29/23	CN	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	67		%	10	12/29/23	CN	30 - 150 %
%TCMX (Surrogate Rec)	72		%	10	12/29/23	CN	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	74		%	10	12/29/23	CN	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	ND	56	mg/Kg	1	12/26/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	73		%	1	12/26/23	JRB	50 - 150 %
% Terphenyl (surr)	68		%	1	12/26/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
1,1-Dichloroethane	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
1,1-Dichloroethene	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dibromoethane	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichloroethane	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
1,2-Dichloropropane	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
2-Hexanone	ND	33	ug/kg	1	12/26/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	33	ug/kg	1	12/26/23	JLI	SW8260D
Acetone	ND	50	ug/kg	1	12/26/23	JLI	SW8260D
Benzene	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
Bromochloromethane	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
Bromodichloromethane	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
Bromoform	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
Bromomethane	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
Carbon Disulfide	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
Carbon tetrachloride	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
Chlorobenzene	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
Chloroethane	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
Chloroform	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
Chloromethane	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
Cyclohexane	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
Dibromochloromethane	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
Dichlorodifluoromethane	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
Ethylbenzene	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
Isopropylbenzene	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
m&p-Xylene	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
Methyl ethyl ketone	ND	40	ug/kg	1	12/26/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	13	ug/kg	1	12/26/23	JLI	SW8260D
Methylacetate	ND	5.3	ug/kg	1	12/26/23	JLI	SW8260D
Methylcyclohexane	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
Methylene chloride	ND	33	ug/kg	1	12/26/23	JLI	SW8260D
o-Xylene	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
Styrene	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
Tetrachloroethene	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
Toluene	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
Total Xylenes	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
Trichloroethene	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
Trichlorofluoromethane	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
Vinyl chloride	ND	6.6	ug/kg	1	12/26/23	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	1	12/26/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2,4-Dinitrophenol	ND	600	ug/Kg	1	12/28/23	KCA	SW8270E
2,4-Dinitrotoluene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2,6-Dinitrotoluene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2-Chloronaphthalene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2-Chlorophenol	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2-Methylnaphthalene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2-Nitroaniline	ND	600	ug/Kg	1	12/28/23	KCA	SW8270E
2-Nitrophenol	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	380	ug/Kg	1	12/28/23	KCA	SW8270E
3,3'-Dichlorobenzidine	ND	450	ug/Kg	1	12/28/23	KCA	SW8270E
3-Nitroaniline	ND	600	ug/Kg	1	12/28/23	KCA	SW8270E
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	12/28/23	KCA	SW8270E
4-Bromophenyl phenyl ether	ND	380	ug/Kg	1	12/28/23	KCA	SW8270E
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
4-Chloroaniline	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
4-Nitroaniline	ND	600	ug/Kg	1	12/28/23	KCA	SW8270E
4-Nitrophenol	ND	1100	ug/Kg	1	12/28/23	KCA	SW8270E
Acenaphthene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Acenaphthylene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Acetophenone	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Anthracene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Atrazine	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Benz(a)anthracene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Benzaldehyde	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Benzo(a)pyrene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Benzo(b)fluoranthene	310	260	ug/Kg	1	12/28/23	KCA	SW8270E
Benzo(ghi)perylene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Benzo(k)fluoranthene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Benzyl butyl phthalate	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Bis(2-chloroethyl)ether	ND	380	ug/Kg	1	12/28/23	KCA	SW8270E
Bis(2-ethylhexyl)phthalate	ND	330	ug/Kg	1	12/28/23	KCA	SW8270E
Caprolactam	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Carbazole	ND	380	ug/Kg	1	12/28/23	KCA	SW8270E
Chrysene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Dibenz(a,h)anthracene	ND	190	ug/Kg	1	12/28/23	KCA	SW8270E
Dibenzofuran	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Diethyl phthalate	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Dimethylphthalate	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Di-n-butylphthalate	ND	750	ug/Kg	1	12/28/23	KCA	SW8270E
Di-n-octylphthalate	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Fluoranthene	380	260	ug/Kg	1	12/28/23	KCA	SW8270E
Fluorene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Hexachlorobenzene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Hexachlorobutadiene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E

1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Indeno(1,2,3-cd)pyrene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Isophorone	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Naphthalene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Nitrobenzene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
N-Nitrosodimethylamine	ND	380	ug/Kg	1	12/28/23	KCA	SW8270E
N-Nitrosodi-n-propylamine	ND	190	ug/Kg	1	12/28/23	KCA	SW8270E
N-Nitrosodiphenylamine	ND	380	ug/Kg	1	12/28/23	KCA	SW8270E
Pentachlorophenol	ND	380	ug/Kg	1	12/28/23	KCA	SW8270E
Phenanthrene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Phenol	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Pyrene	340	260	ug/Kg	1	12/28/23	KCA	SW8270E
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	79		%	1	12/28/23	KCA	30 - 130 %
% 2-Fluorobiphenyl	66		%	1	12/28/23	KCA	30 - 130 %
% 2-Fluorophenol	63		%	1	12/28/23	KCA	30 - 130 %
% Nitrobenzene-d5	65		%	1	12/28/23	KCA	30 - 130 %
% Phenol-d5	67		%	1	12/28/23	KCA	30 - 130 %
% Terphenyl-d14	70		%	1	12/28/23	KCA	30 - 130 %
<u>TCLP Acid/Base-Neutral</u>							
1,4-Dichlorobenzene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	82		%	1	12/29/23	MR	15 - 110 %
% 2-Fluorobiphenyl	73		%	1	12/29/23	MR	30 - 130 %
% 2-Fluorophenol	61		%	1	12/29/23	MR	15 - 110 %
% Nitrobenzene-d5	76		%	1	12/29/23	MR	30 - 130 %
% Phenol-d5	53		%	1	12/29/23	MR	15 - 110 %
% Terphenyl-d14	85		%	1	12/29/23	MR	30 - 130 %
Semivolatile Library Search	Completed				12/28/23	KCA	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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.

Hexavalent Chromium:
This sample is in a reducing state.

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

January 10, 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



QA/QC Report

January 10, 2024

QA/QC Data

SDG I.D.: GCP73450

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
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QA/QC Batch 711591 (mg/kg), QC Sample No: CP73458 40X (CP73450, CP73451, CP73452, CP73453, CP73454, CP73455, CP73456, CP73457, CP73458, CP73459, CP73460, CP73461, CP73462)

Chromium, Hexavalent - Soil

Chromium, Hexavalent	BRL	0.40	<0.42	<0.38	NC	90.6						85 - 115	30
Chromium, Hexavalent (Ins)						93.7			95.8			85 - 115	30
Chromium, Hexavalent (Sol)						93.4			44.9			85 - 115	30

Comment:

The QC sample is in a reducing state, acceptance criteria are not applicable for samples in a reducing state. The soluble spike was analyzed twice with similar recoveries.

QA/QC Batch 711586 (mg/kg), QC Sample No: CP72474 2X (CP73458, CP73459, CP73460, CP73461, CP73462)

Mercury - Soil	BRL	0.03	<0.03	<0.03	NC	102	94.7	7.4	91.7	90.6	1.2	70 - 130	30
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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 711585 (mg/kg), QC Sample No: CP73457 2X (CP73450, CP73451, CP73452, CP73453, CP73454, CP73455, CP73456, CP73457)

Mercury - Soil	BRL	0.03	0.09	0.05	NC	89.8	98.6	9.3	84.8	116	31.1	70 - 130	30
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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 711607 (mg/L), QC Sample No: CP73585 (CP73450, CP73451, CP73452, CP73453, CP73454, CP73455, CP73456, CP73457, CP73458, CP73459, CP73460, CP73461, CP73462)

Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	101			99.7			80 - 120	20
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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 711677 (mg/kg), QC Sample No: CP73005 (CP73458, CP73459, CP73460, CP73461, CP73462)

ICP Metals - Soil

Aluminum	BRL	14.0	7160	7510	4.80	102	102	0.0	NC			75 - 125	35
Antimony	BRL	3.3	<4.1	<4.1	NC	105	104	1.0	83.5			75 - 125	35
Arsenic	BRL	0.67	3.94	3.29	NC	101	97.1	3.9	91.8			75 - 125	35
Barium	BRL	0.33	367	664	57.6	109	104	4.7	101			75 - 125	35
Beryllium	BRL	0.27	0.41	0.53	NC	107	103	3.8	94.0			75 - 125	35
Cadmium	BRL	0.33	<0.41	<0.41	NC	102	100	2.0	89.5			75 - 125	35
Calcium	BRL	5.0	26700	49400	59.7	109	103	5.7	NC			75 - 125	35
Chromium	BRL	0.33	12.4	12.8	3.20	107	103	3.8	93.1			75 - 125	35
Cobalt	BRL	0.33	4.86	5.05	3.80	105	102	2.9	91.3			75 - 125	35
Copper	BRL	0.67	14.0	13.6	2.90	111	106	4.6	101			75 - 125	35
Iron	BRL	5.0	12000	12700	5.70	111	108	2.7	NC			75 - 125	35
Lead	BRL	0.33	32.1	42.1	27.0	103	103	0.0	97.1			75 - 125	35
Magnesium	BRL	5.0	7110	9630	30.1	111	109	1.8	NC			75 - 125	35
Manganese	BRL	0.33	238	263	10.0	108	113	4.5	106			75 - 125	35
Nickel	BRL	0.33	9.78	9.60	1.90	105	102	2.9	90.8			75 - 125	35
Potassium	BRL	5.0	745	1280	52.8	94.7	95.3	0.6	82.2			75 - 125	35
Selenium	BRL	1.3	<1.6	<1.6	NC	92.7	89.0	4.1	80.8			75 - 125	35

QA/QC Data

SDG I.D.: GCP73450

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Silver	BRL	0.33	<0.41	<0.41	NC	104	101	2.9	98.2			75 - 125	35
Sodium	BRL	6.0	670	767	13.5	104	102	1.9	>130			75 - 125	35 m
Thallium	BRL	3.0	<3.7	<3.7	NC	102	99.7	2.3	88.9			75 - 125	35
Vanadium	BRL	0.33	18.7	19.7	5.20	111	108	2.7	96.2			75 - 125	35
Zinc	BRL	0.67	179	328	58.8	103	100	3.0	101			75 - 125	35 r

Comment:

Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%.

QA/QC Batch 711525 (mg/kg), QC Sample No: CP73410 (CP73450, CP73451, CP73452, CP73453, CP73454, CP73455, CP73456, CP73457)

ICP Metals - Soil

Aluminum	BRL	5.0	9880	12900	26.5	101	102	1.0	NC			75 - 125	35
Antimony	BRL	3.3	<3.9	<3.7	NC	101	101	0.0	83.8			75 - 125	35
Arsenic	BRL	0.67	3.38	3.73	NC	92.2	91.4	0.9	88.7			75 - 125	35
Barium	BRL	0.33	60.5	62.4	3.10	104	97.7	6.2	114			75 - 125	35
Beryllium	BRL	0.27	0.33	0.37	NC	100	96.7	3.4	96.0			75 - 125	35
Cadmium	BRL	0.33	1.24	1.22	NC	95.5	93.5	2.1	90.5			75 - 125	35
Calcium	BRL	5.0	6410	8340	26.2	101	101	0.0	NC			75 - 125	35
Chromium	BRL	0.33	12.9	15.1	15.7	100	98.8	1.2	97.1			75 - 125	35
Cobalt	BRL	0.33	14.0	12.3	12.9	100	98.0	2.0	93.3			75 - 125	35
Copper	BRL	0.67	79.1	48.2	48.5	105	104	1.0	82.7			75 - 125	35 r
Iron	BRL	5.0	21000	24400	15.0	107	109	1.9	NC			75 - 125	35
Lead	BRL	0.33	82.5	66.2	21.9	99.4	98.6	0.8	94.8			75 - 125	35
Magnesium	BRL	5.0	3150	5630	56.5	105	105	0.0	NC			75 - 125	35 r
Manganese	BRL	0.33	282	359	24.0	103	102	1.0	>130			75 - 125	35 m
Nickel	BRL	0.33	23.1	22.0	4.90	98.7	96.7	2.0	87.9			75 - 125	35
Potassium	BRL	5.0	560	820	37.7	91.7	93.5	1.9	>130			75 - 125	35 m,r
Selenium	BRL	1.3	<1.6	<1.5	NC	76.5	75.7	1.1	73.2			75 - 125	35 m
Silver	BRL	0.33	<0.39	<0.37	NC	95.5	95.1	0.4	93.6			75 - 125	35
Sodium	BRL	75	611	818	29.0	124	101	20.4	>130			75 - 125	35 m
Thallium	BRL	3.0	<1.6	<3.4	NC	99.2	98.2	1.0	93.4			75 - 125	35
Vanadium	BRL	0.33	50.6	52.4	3.50	102	102	0.0	113			75 - 125	35
Zinc	BRL	0.67	129	75.5	52.3	97.1	96.3	0.8	60.6			75 - 125	35 m,r

Comment:

Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%.

QA/QC Batch 711598 (mg/L), QC Sample No: CP73410 (CP73450, CP73451, CP73452, CP73453, CP73454, CP73455, CP73456, CP73457, CP73458, CP73459, CP73460, CP73462)

ICP Metals - TCLP Extraction

Arsenic	BRL	0.10	<0.060	<0.10	NC	104	102	1.9	96.9			80 - 120	20
Barium	BRL	0.10	0.86	0.68	23.4	97.4	94.6	2.9	93.5			80 - 120	20 r
Cadmium	BRL	0.050	0.006	0.006	NC	96.0	93.0	3.2	93.4			80 - 120	20
Chromium	BRL	0.10	<0.10	<0.10	NC	95.1	92.3	3.0	94.2			80 - 120	20
Lead	BRL	0.10	0.12	0.09	NC	97.1	95.0	2.2	95.3			80 - 120	20
Selenium	BRL	0.10	<0.10	<0.10	NC	111	107	3.7	101			80 - 120	20
Silver	BRL	0.10	<0.10	<0.10	NC	102	100	2.0	97.8			80 - 120	20

Comment:

Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%.

QA/QC Batch 711597 (mg/L), QC Sample No: CP73559 (CP73461)

ICP Metals - TCLP Extraction

Arsenic	BRL	0.10	<0.10	<0.10	NC	108	108	0.0	101			80 - 120	20
Barium	BRL	0.10	0.80	0.79	1.30	103	102	1.0	101			80 - 120	20
Cadmium	BRL	0.050	<0.050	<0.050	NC	101	100	1.0	100			80 - 120	20

QA/QC Data

SDG I.D.: GCP73450

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Chromium	BRL	0.10	<0.10	<0.10	NC	97.7	97.1	0.6	98.0			80 - 120	20
Lead	BRL	0.10	0.35	0.36	NC	105	103	1.9	101			80 - 120	20
Selenium	BRL	0.10	<0.10	<0.10	NC	114	112	1.8	103			80 - 120	20
Silver	BRL	0.10	<0.10	<0.10	NC	108	106	1.9	100			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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QA/QC Report

January 10, 2024

QA/QC Data

SDG I.D.: GCP73450

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 711593 (mg/Kg), QC Sample No: CP72651 (CP73450, CP73451, CP73452, CP73453, CP73454, CP73455, CP73456, CP73457, CP73458, CP73459, CP73460, CP73461, CP73462)													
Reactivity Cyanide	BRL	1	<6	<5.5	NC	103						85 - 115	30
Reactivity Sulfide	BRL	20	<20	<20	NC	90.8						80 - 120	30
QA/QC Batch 711664 (mg/Kg), QC Sample No: CP73452 50X (CP73450, CP73451, CP73452, CP73453, CP73454, CP73455, CP73456, CP73457, CP73458, CP73459, CP73460, CP73461, CP73462)													
Total Cyanide (SW9010C Distill.)	BRL	0.50	<0.60	<0.60	NC	98.9			103			80 - 120	30
Comment: Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils													
QA/QC Batch 712358 (Degree F), QC Sample No: CP72651 (CP73450, CP73451, CP73452, CP73453, CP73454, CP73455, CP73456, CP73457, CP73458, CP73459, CP73460, CP73461, CP73462)													
Flash Point			>200	>200	NC	101						75 - 125	30
Comment: Additional criteria matrix spike acceptance range is 75-125%.													
QA/QC Batch 711580 (PH), QC Sample No: CP72695 (CP73450, CP73451, CP73452, CP73453, CP73454, CP73455)													
pH			5.69	5.68	0.20	101						85 - 115	20
QA/QC Batch 711581 (PH), QC Sample No: CP73456 (CP73456, CP73457, CP73458, CP73459, CP73460, CP73461, CP73462)													
pH			8.19	8.19	0	101						85 - 115	20



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QA/QC Report

January 10, 2024

QA/QC Data

SDG I.D.: GCP73450

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
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QA/QC Batch 711715 (mg/kg), QC Sample No: CP73391 (CP73450, CP73451, CP73452, CP73453, CP73454, CP73455, CP73456, CP73457, CP73458, CP73459)

Extractable Petroleum Hydrocarbons - Soil

C9-C28	ND	10	73	72	1.4	69	77	11.0	40 - 140	25
C9-C28 #2 Fuel / Diesel			97	44	75.2				40 - 140	25
>C28-C40	ND	10	67	66	1.5	63	70	10.5	40 - 140	25
C9 - Nonane	ND	3.3	59	61	3.3	57	63	10.0	40 - 140	25
C10 - Decane	ND	3.3	65	65	0.0	63	67	6.2	40 - 140	25
C12 - Dodecane	ND	3.3	71	70	1.4	69	73	5.6	40 - 140	25
C14 - Tetradecane	ND	3.3	74	72	2.7	70	77	9.5	40 - 140	25
C16 - Hexadecane	ND	3.3	73	72	1.4	70	78	10.8	40 - 140	25
C18 - Octadecane	ND	3.3	94	93	1.1	90	98	8.5	40 - 140	25
C20 - Eicosane	ND	3.3	76	74	2.7	73	84	14.0	40 - 140	25
C21 - Heneicosane	ND	3.3	70	69	1.4	63	72	13.3	40 - 140	25
C22 - Docosane	ND	3.3	90	89	1.1	83	92	10.3	40 - 140	25
C24 - Tetracosane	ND	3.3	70	68	2.9	64	72	11.8	40 - 140	25
C26 - Hexacosane	ND	3.3	70	68	2.9	64	71	10.4	40 - 140	25
C28 - Octacosane	ND	3.3	69	67	2.9	64	71	10.4	40 - 140	25
C30 - Tricotane	ND	3.3	68	66	3.0	63	71	11.9	40 - 140	25
C32 - Dotriacontane	ND	3.3	67	65	3.0	63	70	10.5	40 - 140	25
C34 - Tetratriacontane	ND	3.3	68	66	3.0	63	71	11.9	40 - 140	25
C36 - Hexatriacontane	ND	3.3	64	63	1.6	60	67	11.0	40 - 140	25
C38 - Octatriacontane	ND	3.3	65	64	1.6	62	70	12.1	40 - 140	25
C40 - Tetracontane	ND	3.3	68	69	1.5	65	74	12.9	40 - 140	25
% COD (surr)	65	%	73	72	1.4	75	77	2.6	40 - 140	25
% Terphenyl (surr)	66	%	70	69	1.4	69	75	8.3	40 - 140	25

Comment:

Additional EPH fractionation criteria: Breakthrough criteria (BT) is 0 to 5%

QA/QC Batch 711890 (mg/kg), QC Sample No: CP73462 (CP73460, CP73461, CP73462)

Extractable Petroleum Hydrocarbons - Soil

C9-C28	ND	10	86	85	1.2	81	93	13.8	40 - 140	25
C9-C28 #2 Fuel / Diesel			92	105	13.2				40 - 140	25
>C28-C40	ND	10	71	73	2.8	70	80	13.3	40 - 140	25
C9 - Nonane	ND	3.3	72	68	5.7	69	82	17.2	40 - 140	25
C10 - Decane	ND	3.3	78	75	3.9	74	87	16.1	40 - 140	25
C12 - Dodecane	ND	3.3	84	82	2.4	81	94	14.9	40 - 140	25
C14 - Tetradecane	ND	3.3	86	85	1.2	85	97	13.2	40 - 140	25
C16 - Hexadecane	ND	3.3	86	86	0.0	85	96	12.2	40 - 140	25
C18 - Octadecane	ND	3.3	111	116	4.4	106	122	14.0	40 - 140	25
C20 - Eicosane	ND	3.3	88	87	1.1	83	107	25.3	40 - 140	25
C21 - Heneicosane	ND	3.3	81	79	2.5	71	79	10.7	40 - 140	25
C22 - Docosane	ND	3.3	105	108	2.8	95	103	8.1	40 - 140	25
C24 - Tetracosane	ND	3.3	81	80	1.2	74	81	9.0	40 - 140	25

QA/QC Data

SDG I.D.: GCP73450

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
C26 - Hexacosane	ND	3.3	81	80	1.2	75	82	8.9	40 - 140	25
C28 - Octacosane	ND	3.3	80	79	1.3	76	84	10.0	40 - 140	25
C30 - Tricotane	ND	3.3	79	78	1.3	75	82	8.9	40 - 140	25
C32 - Dotriacontane	ND	3.3	75	76	1.3	74	82	10.3	40 - 140	25
C34 - Tetratriacontane	ND	3.3	73	74	1.4	72	80	10.5	40 - 140	25
C36 - Hexatriacontane	ND	3.3	66	69	4.4	67	75	11.3	40 - 140	25
C38 - Octatriacontane	ND	3.3	65	70	7.4	67	78	15.2	40 - 140	25
C40 - Tetracontane	ND	3.3	66	72	8.7	68	81	17.4	40 - 140	25
% COD (surr)	82	%	81	81	0.0	77	99	25.0	40 - 140	25
% Terphenyl (surr)	80	%	79	79	0.0	78	88	12.0	40 - 140	25

Comment:

Additional EPH fractionation criteria: Breakthrough criteria (BT) is 0 to 5%

QA/QC Batch 711714 (mg/Kg), QC Sample No: CP73457 (CP73450, CP73451, CP73452, CP73453, CP73454, CP73455, CP73456, CP73457, CP73458, CP73459, CP73460, CP73461, CP73462)

TPH by GC (Extractable Products) - Soil

Ext. Petroleum HC	ND	50	65	72	10.2	81	71	13.2	30 - 130	30
% COD (surr)	64	%	73	85	15.2	84	80	4.9	50 - 150	30
% Terphenyl (surr)	62	%	68	75	9.8	80	72	10.5	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 711747 (mg/Kg), QC Sample No: CP73450 (CP73450 (50X) , CP73451 (50X) , CP73452 (50X) , CP73453 (50X) , CP73454 (50X) , CP73455 (50X) , CP73456 (50X) , CP73457 (50X) , CP73458 (50X) , CP73459 (50X) , CP73460 (50X) , CP73461 (50X) , CP73462 (50X))

Gasoline Range Hydrocarbons (C6C10) - Soil

GRO (C6-C10)	ND	0.10	86	86	0.0	88	88	0.0	70 - 130	30
% 2,5-Dibromotoluene (FID)	86	%	87	89	2.3	94	96	2.1	70 - 130	30

QA/QC Batch 711526 (ug/Kg), QC Sample No: CP73410 10X (CP73450, CP73451, CP73452, CP73453, CP73454, CP73455, CP73456, CP73457, CP73458, CP73459, CP73460, CP73461)

Chlorinated Herbicides - Soil

2,4,5-T	ND	130	65	59	9.7	46	68	38.6	40 - 140	30
2,4,5-TP (Silvex)	ND	130	58	68	15.9	51	59	14.5	40 - 140	30
2,4-D	ND	250	43	53	20.8	41	49	17.8	40 - 140	30
2,4-DB	ND	2500	49	55	11.5	41	51	21.7	40 - 140	30
Dalapon	ND	130	48	54	11.8	39	44	12.0	40 - 140	30
Dicamba	ND	130	64	81	23.4	61	81	28.2	40 - 140	30
Dichloroprop	ND	130	61	72	16.5	59	63	6.6	40 - 140	30
Dinoseb	ND	130	73	79	7.9	49	61	21.8	40 - 140	30
% DCAA (Surrogate Rec)	79	%	62	75	19.0	56	68	19.4	30 - 150	30
% DCAA (Surrogate Rec) (Confirm	88	%	76	90	16.9	68	78	13.7	30 - 150	30

Comment:

Additional criteria: LCS acceptance range is 40-140% MS acceptance range 30-150%.

QA/QC Batch 711947 (ug/L), QC Sample No: CP73450 10X (CP73450, CP73451, CP73452, CP73453, CP73454, CP73455, CP73456, CP73457, CP73458, CP73459, CP73460, CP73461, CP73462)

TCLP Herbicides

2,4,5-TP (Silvex)	ND	50	89	94	5.5	93			40 - 140	20
2,4-D	ND	100	105	95	10.0	93			40 - 140	20
% DCAA	69	%	68	71	4.3	70			30 - 150	20
% DCAA (Confirmation)	64	%	62	67	7.8	65			30 - 150	20

Comment:

Additional criteria: LCS acceptance range is 40-140% MS acceptance range 30-150%.

QA/QC Data

SDG I.D.: GCP73450

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
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QA/QC Batch 711870 (ug/Kg), QC Sample No: CP73462 10X (CP73462)

Chlorinated Herbicides - Soil

2,4,5-T	ND	130	46	48	4.3	46	53	14.1	40 - 140	30
2,4,5-TP (Silvex)	ND	130	56	56	0.0	52	59	12.6	40 - 140	30
2,4-D	ND	250	50	53	5.8	50	60	18.2	40 - 140	30
2,4-DB	ND	2500	39	42	7.4	51	60	16.2	40 - 140	30
Dalapon	ND	130	60	55	8.7	38	33	14.1	40 - 140	30
Dicamba	ND	130	66	65	1.5	49	56	13.3	40 - 140	30
Dichloroprop	ND	130	65	66	1.5	61	66	7.9	40 - 140	30
Dinoseb	ND	130	67	60	11.0	61	62	1.6	40 - 140	30
% DCAA (Surrogate Rec)	79	%	71	76	6.8	75	82	8.9	30 - 150	30
% DCAA (Surrogate Rec) (Confirm	75	%	63	70	10.5	72	76	5.4	30 - 150	30

Comment:

Additional criteria: LCS acceptance range is 40-140% MS acceptance range 30-150%.

QA/QC Batch 711692 (ug/Kg), QC Sample No: CP72652 2X (CP73450, CP73451, CP73452, CP73453, CP73454, CP73455, CP73456, CP73457, CP73458, CP73459, CP73460, CP73461, CP73462)

Polychlorinated Biphenyls - Soil

PCB-1016	ND	33	93	97	4.2	90	82	9.3	40 - 140	30
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	94	99	5.2	88	82	7.1	40 - 140	30
PCB-1262	ND	33							40 - 140	30
PCB-1268	ND	33							40 - 140	30
% DCBP (Surrogate Rec)	105	%	109	114	4.5	98	92	6.3	30 - 150	30
% DCBP (Surrogate Rec) (Confirm	99	%	113	118	4.3	100	94	6.2	30 - 150	30
% TCMX (Surrogate Rec)	89	%	96	99	3.1	97	88	9.7	30 - 150	30
% TCMX (Surrogate Rec) (Confirm	90	%	96	99	3.1	96	88	8.7	30 - 150	30

QA/QC Batch 711693 (ug/Kg), QC Sample No: CP72652 2X (CP73450, CP73451, CP73452, CP73453, CP73454, CP73455, CP73456, CP73457, CP73458, CP73459, CP73460, CP73461, CP73462)

Pesticides - Soil

4,4' -DDD	ND	1.7	102	104	1.9	46	39	16.5	40 - 140	30
4,4' -DDE	ND	1.7	100	99	1.0	74	66	11.4	40 - 140	30
4,4' -DDT	ND	1.7	100	100	0.0	59	88	39.5	40 - 140	30
a-BHC	ND	1.0	80	78	2.5	91	82	10.4	40 - 140	30
a-Chlordane	ND	3.3	96	94	2.1	NC	NC	NC	40 - 140	30
Aldrin	ND	1.0	94	92	2.2	81	93	13.8	40 - 140	30
b-BHC	ND	1.0	102	101	1.0	66	64	3.1	40 - 140	30
Chlordane	ND	3.3	93	91	2.2	NC	NC	NC	40 - 140	30
d-BHC	ND	3.3	95	93	2.1	73	64	13.1	40 - 140	30
Dieldrin	ND	1.0	97	96	1.0	63	67	6.2	40 - 140	30
Endosulfan I	ND	3.3	89	90	1.1	93	87	6.7	40 - 140	30
Endosulfan II	ND	3.3	102	99	3.0	77	76	1.3	40 - 140	30
Endosulfan sulfate	ND	3.3	96	97	1.0	65	73	11.6	40 - 140	30
Endrin	ND	3.3	103	102	1.0	61	72	16.5	40 - 140	30
Endrin aldehyde	ND	3.3	95	91	4.3	60	70	15.4	40 - 140	30
Endrin ketone	ND	3.3	103	103	0.0	72	77	6.7	40 - 140	30
g-BHC	ND	1.0	106	104	1.9	71	87	20.3	40 - 140	30
g-Chlordane	ND	3.3	93	91	2.2	NC	NC	NC	40 - 140	30

QA/QC Data

SDG I.D.: GCP73450

Parameter	BIK		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
Heptachlor	ND	3.3	88	86	2.3	96	68	34.1	40 - 140	30
Heptachlor epoxide	ND	3.3	92	90	2.2	106	100	5.8	40 - 140	30
Methoxychlor	ND	3.3	96	96	0.0	69	72	4.3	40 - 140	30
Toxaphene	ND	130	NA	NA	NC	NA	NA	NC	40 - 140	30
% DCBP	93	%	86	86	0.0	62	65	4.7	30 - 150	30
% DCBP (Confirmation)	95	%	83	81	2.4	85	75	12.5	30 - 150	30
% TCMX	78	%	78	76	2.6	47	54	13.9	30 - 150	30
% TCMX (Confirmation)	77	%	76	75	1.3	62	62	0.0	30 - 150	30

QA/QC Batch 711841 (ug/L), QC Sample No: CP73450 10X (CP73450, CP73451, CP73452, CP73453, CP73454)

Pesticides

4,4' -DDD	ND	0.25	106	104	1.9	109			40 - 140	20
4,4' -DDE	ND	0.25	101	100	1.0	104			40 - 140	20
4,4' -DDT	ND	0.25	102	100	2.0	104			40 - 140	20
a-BHC	ND	0.15	79	76	3.9	80			40 - 140	20
Alachlor	ND	0.50	NA	NA	NC	NA			40 - 140	20
Aldrin	ND	0.15	96	93	3.2	98			40 - 140	20
b-BHC	ND	0.15	106	103	2.9	108			40 - 140	20
Chlordane	ND	5.0	94	93	1.1	97			40 - 140	20
d-BHC	ND	0.50	101	97	4.0	102			40 - 140	20
Dieldrin	ND	0.15	100	98	2.0	102			40 - 140	20
Endosulfan I	ND	0.50	94	93	1.1	98			40 - 140	20
Endosulfan II	ND	0.50	101	101	0.0	105			40 - 140	20
Endosulfan sulfate	ND	0.50	99	98	1.0	102			40 - 140	20
Endrin	ND	0.50	108	106	1.9	111			40 - 140	20
Endrin aldehyde	ND	0.50	98	95	3.1	100			40 - 140	20
g-BHC	ND	0.15	109	107	1.9	111			40 - 140	20
Heptachlor	ND	0.50	91	89	2.2	93			40 - 140	20
Heptachlor epoxide	ND	0.50	96	94	2.1	98			40 - 140	20
Methoxychlor	ND	0.50	99	99	0.0	102			40 - 140	20
Toxaphene	ND	20	NA	NA	NC	NA			40 - 140	20
% DCBP	82	%	80	81	1.2	76			30 - 150	20
% DCBP (Confirmation)	77	%	76	76	0.0	72			30 - 150	20
% TCMX	74	%	77	73	5.3	73			30 - 150	20
% TCMX (Confirmation)	75	%	78	74	5.3	72			30 - 150	20

QA/QC Batch 712189 (ug/L), QC Sample No: CP73455 10X (CP73455, CP73456, CP73457, CP73458, CP73459, CP73460, CP73461, CP73462)

Pesticides

4,4' -DDD	ND	0.25	97	99	2.0	97			40 - 140	20
4,4' -DDE	ND	0.25	99	100	1.0	99			40 - 140	20
4,4' -DDT	ND	0.25	102	102	0.0	102			40 - 140	20
a-BHC	ND	0.15	99	97	2.0	94			40 - 140	20
Alachlor	ND	0.50	NA	NA	NC	NA			40 - 140	20
Aldrin	ND	0.15	104	103	1.0	100			40 - 140	20
b-BHC	ND	0.15	95	96	1.0	97			40 - 140	20
Chlordane	ND	5.0	97	97	0.0	96			40 - 140	20
d-BHC	ND	0.50	95	87	8.8	95			40 - 140	20
Dieldrin	ND	0.15	105	105	0.0	103			40 - 140	20
Endosulfan I	ND	0.50	114	110	3.6	109			40 - 140	20
Endosulfan II	ND	0.50	110	108	1.8	109			40 - 140	20
Endosulfan sulfate	ND	0.50	96	97	1.0	97			40 - 140	20
Endrin	ND	0.50	105	104	1.0	103			40 - 140	20
Endrin aldehyde	ND	0.50	92	92	0.0	92			40 - 140	20

QA/QC Data

SDG I.D.: GCP73450

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
g-BHC	ND	0.15	100	108	7.7	96			40 - 140	20
Heptachlor	ND	0.50	109	105	3.7	106			40 - 140	20
Heptachlor epoxide	ND	0.50	106	101	4.8	103			40 - 140	20
Methoxychlor	ND	0.50	97	96	1.0	97			40 - 140	20
Toxaphene	ND	20	NA	NA	NC	NA			40 - 140	20
% DCBP	81	%	90	87	3.4	85			30 - 150	20
% DCBP (Confirmation)	101	%	110	110	0.0	109			30 - 150	20
% TCMX	77	%	78	74	5.3	75			30 - 150	20
% TCMX (Confirmation)	87	%	85	83	2.4	84			30 - 150	20

QA/QC Batch 711888 (ug/kg), QC Sample No: CP73450 (CP73450, CP73451, CP73452, CP73453, CP73454, CP73455, CP73456, CP73457, CP73458, CP73459, CP73460)

Semivolatiles - Soil

1,1-Biphenyl	ND	230	64	58	9.8	70	69	1.4	40 - 140	30	
1,2,4,5-Tetrachlorobenzene	ND	230	64	57	11.6	75	73	2.7	40 - 140	30	
2,2'-Oxybis(1-Chloropropane)	ND	230	45	41	9.3	53	51	3.8	40 - 140	30	
2,3,4,6-tetrachlorophenol	ND	230	70	60	15.4	66	53	21.8	30 - 130	30	
2,4,5-Trichlorophenol	ND	230	70	63	10.5	74	67	9.9	40 - 140	30	
2,4,6-Trichlorophenol	ND	130	72	64	11.8	73	62	16.3	30 - 130	30	
2,4-Dichlorophenol	ND	130	68	61	10.9	77	74	4.0	30 - 130	30	
2,4-Dimethylphenol	ND	230	73	66	10.1	77	78	1.3	30 - 130	30	
2,4-Dinitrophenol	ND	230	58	33	54.9	28	11	87.2	30 - 130	30	m,r
2,4-Dinitrotoluene	ND	130	69	59	15.6	76	70	8.2	30 - 130	30	
2,6-Dinitrotoluene	ND	130	69	60	14.0	75	71	5.5	40 - 140	30	
2-Chloronaphthalene	ND	230	64	57	11.6	70	68	2.9	40 - 140	30	
2-Chlorophenol	ND	230	65	59	9.7	73	73	0.0	30 - 130	30	
2-Methylnaphthalene	ND	230	64	57	11.6	72	70	2.8	40 - 140	30	
2-Methylphenol (o-cresol)	ND	230	61	53	14.0	70	72	2.8	40 - 140	30	
2-Nitroaniline	ND	330	85	76	11.2	87	83	4.7	40 - 140	30	
2-Nitrophenol	ND	230	66	60	9.5	72	64	11.8	40 - 140	30	
3&4-Methylphenol (m&p-cresol)	ND	230	70	60	15.4	78	81	3.8	30 - 130	30	
3,3'-Dichlorobenzidine	ND	130	56	60	6.9	58	67	14.4	40 - 140	30	
3-Nitroaniline	ND	330	64	64	0.0	73	74	1.4	40 - 140	30	
4,6-Dinitro-2-methylphenol	ND	230	68	49	32.5	35	16	74.5	30 - 130	30	m,r
4-Bromophenyl phenyl ether	ND	230	66	58	12.9	71	70	1.4	40 - 140	30	
4-Chloro-3-methylphenol	ND	230	70	62	12.1	82	81	1.2	30 - 130	30	
4-Chloroaniline	ND	230	49	55	11.5	57	61	6.8	40 - 140	30	
4-Chlorophenyl phenyl ether	ND	230	66	57	14.6	76	72	5.4	40 - 140	30	
4-Nitroaniline	ND	230	68	60	12.5	74	71	4.1	40 - 140	30	
4-Nitrophenol	ND	230	126	60	71.0	80	65	20.7	30 - 130	30	r
Acenaphthene	ND	230	64	56	13.3	54	48	11.8	30 - 130	30	
Acenaphthylene	ND	130	58	52	10.9	63	60	4.9	40 - 140	30	
Acetophenone	ND	230	61	53	14.0	71	71	0.0	40 - 140	30	
Anthracene	ND	230	67	59	12.7	NC	NC	NC	40 - 140	30	
Atrazine	ND	130	68	60	12.5	73	72	1.4	40 - 140	30	
Benz(a)anthracene	ND	230	66	59	11.2	NC	NC	NC	40 - 140	30	
Benzaldehyde	ND	230	34	25	30.5	17	14	19.4	40 - 140	30	l,m
Benzo(a)pyrene	ND	130	70	62	12.1	NC	NC	NC	40 - 140	30	
Benzo(b)fluoranthene	ND	160	66	59	11.2	NC	NC	NC	40 - 140	30	
Benzo(ghi)perylene	ND	230	69	63	9.1	NC	NC	NC	40 - 140	30	
Benzo(k)fluoranthene	ND	230	68	60	12.5	NC	NC	NC	40 - 140	30	
Benzyl butyl phthalate	ND	230	67	60	11.0	66	62	6.3	40 - 140	30	
Bis(2-chloroethoxy)methane	ND	230	61	54	12.2	68	65	4.5	40 - 140	30	

QA/QC Data

SDG I.D.: GCP73450

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Bis(2-chloroethyl)ether	ND	130	55	50	9.5	62	60	3.3	40 - 140	30
Bis(2-ethylhexyl)phthalate	ND	230	65	58	11.4	68	65	4.5	40 - 140	30
Caprolactam	ND	230	68	59	14.2	81	75	7.7	40 - 140	30
Carbazole	ND	230	66	59	11.2	57	56	1.8	40 - 140	30
Chrysene	ND	230	67	60	11.0	NC	NC	NC	40 - 140	30
Dibenz(a,h)anthracene	ND	130	67	59	12.7	NC	53	NC	40 - 140	30
Dibenzofuran	ND	230	66	58	12.9	58	54	7.1	40 - 140	30
Diethyl phthalate	ND	230	66	58	12.9	74	71	4.1	40 - 140	30
Dimethylphthalate	ND	230	64	58	9.8	71	69	2.9	40 - 140	30
Di-n-butylphthalate	ND	670	68	61	10.9	77	74	4.0	40 - 140	30
Di-n-octylphthalate	ND	230	68	60	12.5	68	64	6.1	40 - 140	30
Fluoranthene	ND	230	66	59	11.2	NC	NC	NC	40 - 140	30
Fluorene	ND	230	68	59	14.2	56	50	11.3	40 - 140	30
Hexachlorobenzene	ND	130	65	59	9.7	70	68	2.9	40 - 140	30
Hexachlorobutadiene	ND	230	59	55	7.0	68	65	4.5	40 - 140	30
Hexachlorocyclopentadiene	ND	230	55	49	11.5	<10	<10	NC	40 - 140	30
Hexachloroethane	ND	130	54	51	5.7	59	55	7.0	40 - 140	30
Indeno(1,2,3-cd)pyrene	ND	230	73	65	11.6	NC	NC	NC	40 - 140	30
Isophorone	ND	130	54	49	9.7	62	59	5.0	40 - 140	30
Naphthalene	ND	230	60	55	8.7	64	63	1.6	40 - 140	30
Nitrobenzene	ND	130	58	51	12.8	68	67	1.5	40 - 140	30
N-Nitrosodimethylamine	ND	230	49	46	6.3	49	44	10.8	40 - 140	30
N-Nitrosodi-n-propylamine	ND	130	61	53	14.0	70	69	1.4	40 - 140	30
N-Nitrosodiphenylamine	ND	130	62	55	12.0	71	67	5.8	40 - 140	30
Pentachlorophenol	ND	230	72	61	16.5	62	54	13.8	30 - 130	30
Phenanthrene	ND	130	66	58	12.9	NC	NC	NC	40 - 140	30
Phenol	ND	230	66	60	9.5	78	79	1.3	30 - 130	30
Pyrene	ND	230	65	59	9.7	NC	NC	NC	30 - 130	30
% 2,4,6-Tribromophenol	64	%	67	59	12.7	67	59	12.7	30 - 130	30
% 2-Fluorobiphenyl	60	%	62	55	12.0	66	65	1.5	30 - 130	30
% 2-Fluorophenol	60	%	61	55	10.3	65	64	1.6	30 - 130	30
% Nitrobenzene-d5	54	%	57	51	11.1	66	67	1.5	30 - 130	30
% Phenol-d5	61	%	63	55	13.6	70	72	2.8	30 - 130	30
% Terphenyl-d14	59	%	61	53	14.0	72	69	4.3	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 711987 (ug/L), QC Sample No: CP73458 (CP73450, CP73451, CP73452, CP73453, CP73456, CP73457, CP73458, CP73459, CP73460, CP73461)

Semivolatiles - TCLP

1,4-Dichlorobenzene	ND	17	36	37	2.7	36			40 - 140	20	l,m
2,4,5-Trichlorophenol	ND	17	100	99	1.0	84			40 - 140	20	
2,4,6-Trichlorophenol	ND	17	99	97	2.0	82			30 - 130	20	
2,4-Dinitrotoluene	ND	58	102	102	0.0	85			30 - 130	20	
2-Methylphenol (o-cresol)	ND	17	72	71	1.4	65			40 - 140	20	
3&4-Methylphenol (m&p-cresol)	ND	17	79	78	1.3	71			30 - 130	20	
Hexachlorobenzene	ND	58	96	90	6.5	80			40 - 140	20	
Hexachlorobutadiene	ND	58	44	46	4.4	43			40 - 140	20	
Hexachloroethane	ND	58	34	37	8.5	35			40 - 140	20	l,m
Nitrobenzene	ND	58	73	73	0.0	67			40 - 140	20	
Pentachlorophenol	ND	58	109	109	0.0	87			30 - 130	20	
Pyridine	ND	83	45	39	14.3	40			40 - 140	20	l

QA/QC Data

SDG I.D.: GCP73450

Parameter	Blank		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	BLK RL								
% 2,4,6-Tribromophenol	85	%	99	93	6.3	85			15 - 110	20
% 2-Fluorobiphenyl	56	%	70	67	4.4	61			30 - 130	20
% 2-Fluorophenol	51	%	47	47	0.0	45			15 - 110	20
% Nitrobenzene-d5	67	%	68	69	1.5	65			30 - 130	20
% Phenol-d5	43	%	46	46	0.0	43			15 - 110	20
% Terphenyl-d14	80	%	94	93	1.1	79			30 - 130	20

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 711954 (ug/kg), QC Sample No: CP73462 (CP73461, CP73462)

Semivolatiles - Soil

1,1-Biphenyl	ND	230	79	81	2.5	84	74	12.7	40 - 140	30
1,2,4,5-Tetrachlorobenzene	ND	230	80	82	2.5	85	75	12.5	40 - 140	30
2,2'-Oxybis(1-Chloropropane)	ND	230	52	60	14.3	62	56	10.2	40 - 140	30
2,3,4,6-tetrachlorophenol	ND	230	96	95	1.0	103	94	9.1	30 - 130	30
2,4,5-Trichlorophenol	ND	230	90	93	3.3	97	86	12.0	40 - 140	30
2,4,6-Trichlorophenol	ND	130	92	94	2.2	100	87	13.9	30 - 130	30
2,4-Dichlorophenol	ND	130	90	91	1.1	94	85	10.1	30 - 130	30
2,4-Dimethylphenol	ND	230	91	93	2.2	86	77	11.0	30 - 130	30
2,4-Dinitrophenol	ND	230	48	53	9.9	93	85	9.0	30 - 130	30
2,4-Dinitrotoluene	ND	130	95	95	0.0	97	87	10.9	30 - 130	30
2,6-Dinitrotoluene	ND	130	89	90	1.1	92	83	10.3	40 - 140	30
2-Chloronaphthalene	ND	230	79	81	2.5	83	74	11.5	40 - 140	30
2-Chlorophenol	ND	230	75	82	8.9	84	76	10.0	30 - 130	30
2-Methylnaphthalene	ND	230	81	82	1.2	88	79	10.8	40 - 140	30
2-Methylphenol (o-cresol)	ND	230	78	84	7.4	90	80	11.8	40 - 140	30
2-Nitroaniline	ND	330	111	112	0.9	89	86	3.4	40 - 140	30
2-Nitrophenol	ND	230	80	83	3.7	85	77	9.9	40 - 140	30
3&4-Methylphenol (m&p-cresol)	ND	230	79	82	3.7	83	73	12.8	30 - 130	30
3,3'-Dichlorobenzidine	ND	130	82	76	7.6	45	41	9.3	40 - 140	30
3-Nitroaniline	ND	330	95	91	4.3	73	74	1.4	40 - 140	30
4,6-Dinitro-2-methylphenol	ND	230	60	70	15.4	98	89	9.6	30 - 130	30
4-Bromophenyl phenyl ether	ND	230	89	88	1.1	92	81	12.7	40 - 140	30
4-Chloro-3-methylphenol	ND	230	94	95	1.1	98	90	8.5	30 - 130	30
4-Chloroaniline	ND	230	71	70	1.4	51	56	9.3	40 - 140	30
4-Chlorophenyl phenyl ether	ND	230	88	88	0.0	91	81	11.6	40 - 140	30
4-Nitroaniline	ND	230	87	90	3.4	90	84	6.9	40 - 140	30
4-Nitrophenol	ND	230	92	93	1.1	98	94	4.2	30 - 130	30
Acenaphthene	ND	230	82	83	1.2	87	78	10.9	30 - 130	30
Acenaphthylene	ND	130	75	75	0.0	78	71	9.4	40 - 140	30
Acetophenone	ND	230	70	76	8.2	78	70	10.8	40 - 140	30
Anthracene	ND	230	88	88	0.0	90	82	9.3	40 - 140	30
Atrazine	ND	130	94	94	0.0	92	83	10.3	40 - 140	30
Benz(a)anthracene	ND	230	92	89	3.3	98	85	14.2	40 - 140	30
Benzaldehyde	ND	230	20	30	40.0	55	59	7.0	40 - 140	30
Benzo(a)pyrene	ND	130	99	96	3.1	108	92	16.0	40 - 140	30
Benzo(b)fluoranthene	ND	160	91	88	3.4	111	91	19.8	40 - 140	30
Benzo(ghi)perylene	ND	230	98	92	6.3	93	79	16.3	40 - 140	30
Benzo(k)fluoranthene	ND	230	95	92	3.2	99	93	6.3	40 - 140	30
Benzyl butyl phthalate	ND	230	95	92	3.2	100	89	11.6	40 - 140	30
Bis(2-chloroethoxy)methane	ND	230	74	77	4.0	80	72	10.5	40 - 140	30
Bis(2-chloroethyl)ether	ND	130	60	69	14.0	72	65	10.2	40 - 140	30

QA/QC Data

SDG I.D.: GCP73450

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
Bis(2-ethylhexyl)phthalate	ND	230	91	90	1.1	104	84	21.3	40 - 140	30
Caprolactam	ND	230	92	92	0.0	93	90	3.3	40 - 140	30
Carbazole	ND	230	88	89	1.1	89	82	8.2	40 - 140	30
Chrysene	ND	230	91	88	3.4	94	82	13.6	40 - 140	30
Dibenz(a,h)anthracene	ND	130	95	91	4.3	88	79	10.8	40 - 140	30
Dibenzofuran	ND	230	84	85	1.2	87	79	9.6	40 - 140	30
Diethyl phthalate	ND	230	89	90	1.1	93	84	10.2	40 - 140	30
Dimethylphthalate	ND	230	86	87	1.2	89	78	13.2	40 - 140	30
Di-n-butylphthalate	ND	670	91	92	1.1	92	86	6.7	40 - 140	30
Di-n-octylphthalate	ND	230	98	98	0.0	95	88	7.7	40 - 140	30
Fluoranthene	ND	230	88	91	3.4	106	92	14.1	40 - 140	30
Fluorene	ND	230	89	90	1.1	94	85	10.1	40 - 140	30
Hexachlorobenzene	ND	130	87	86	1.2	89	79	11.9	40 - 140	30
Hexachlorobutadiene	ND	230	65	70	7.4	75	65	14.3	40 - 140	30
Hexachlorocyclopentadiene	ND	230	66	70	5.9	54	32	51.2	40 - 140	30 m,r
Hexachloroethane	ND	130	53	64	18.8	67	58	14.4	40 - 140	30
Indeno(1,2,3-cd)pyrene	ND	230	104	98	5.9	100	85	16.2	40 - 140	30
Isophorone	ND	130	69	70	1.4	72	65	10.2	40 - 140	30
Naphthalene	ND	230	69	73	5.6	75	69	8.3	40 - 140	30
Nitrobenzene	ND	130	68	75	9.8	77	70	9.5	40 - 140	30
N-Nitrosodimethylamine	ND	230	48	61	23.9	59	49	18.5	40 - 140	30
N-Nitrosodi-n-propylamine	ND	130	74	79	6.5	81	72	11.8	40 - 140	30
N-Nitrosodiphenylamine	ND	130	87	86	1.2	86	78	9.8	40 - 140	30
Pentachlorophenol	ND	230	94	94	0.0	114	103	10.1	30 - 130	30
Phenanthrene	ND	130	87	87	0.0	99	86	14.1	40 - 140	30
Phenol	ND	230	82	87	5.9	90	78	14.3	30 - 130	30
Pyrene	ND	230	87	91	4.5	101	88	13.8	30 - 130	30
% 2,4,6-Tribromophenol	99	%	92	94	2.2	98	90	8.5	30 - 130	30
% 2-Fluorobiphenyl	77	%	80	82	2.5	82	74	10.3	30 - 130	30
% 2-Fluorophenol	67	%	68	78	13.7	79	71	10.7	30 - 130	30
% Nitrobenzene-d5	68	%	69	78	12.2	78	72	8.0	30 - 130	30
% Phenol-d5	72	%	79	85	7.3	85	78	8.6	30 - 130	30
% Terphenyl-d14	94	%	84	90	6.9	84	81	3.6	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 712190 (ug/L), QC Sample No: CP74370 (CP73462)

Semivolatiles - TCLP

1,4-Dichlorobenzene	ND	17	63	61	3.2	63			40 - 140	20
2,4,5-Trichlorophenol	ND	17	85	87	2.3	86			40 - 140	20
2,4,6-Trichlorophenol	ND	17	81	84	3.6	83			30 - 130	20
2,4-Dinitrotoluene	ND	58	95	99	4.1	99			30 - 130	20
2-Methylphenol (o-cresol)	ND	17	86	87	1.2	89			40 - 140	20
3&4-Methylphenol (m&p-cresol)	ND	17	70	69	1.4	73			30 - 130	20
Hexachlorobenzene	ND	58	85	86	1.2	86			40 - 140	20
Hexachlorobutadiene	ND	58	73	70	4.2	70			40 - 140	20
Hexachloroethane	ND	58	69	65	6.0	67			40 - 140	20
Nitrobenzene	ND	58	78	76	2.6	82			40 - 140	20
Pentachlorophenol	ND	58	79	84	6.1	86			30 - 130	20
Pyridine	ND	83	40	33	19.2	44			40 - 140	20
% 2,4,6-Tribromophenol	85	%	82	86	4.8	88			15 - 110	20
% 2-Fluorobiphenyl	79	%	76	79	3.9	78			30 - 130	20

QA/QC Data

SDG I.D.: GCP73450

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
% 2-Fluorophenol	68	%	61	61	0.0	63			15 - 110	20
% Nitrobenzene-d5	79	%	77	78	1.3	80			30 - 130	20
% Phenol-d5	56	%	55	56	1.8	57			15 - 110	20
% Terphenyl-d14	91	%	89	95	6.5	98			30 - 130	20

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 713054 (ug/L), QC Sample No: CP75760 (CP73454, CP73455)

Semivolatiles - TCLP

1,4-Dichlorobenzene	ND	17	58	46	23.1	56			40 - 140	20
2,4,5-Trichlorophenol	ND	17	93	81	13.8	89			40 - 140	20
2,4,6-Trichlorophenol	ND	17	93	78	17.5	90			30 - 130	20
2,4-Dinitrotoluene	ND	58	88	76	14.6	90			30 - 130	20
2-Methylphenol (o-cresol)	ND	17	88	88	0.0	88			40 - 140	20
3&4-Methylphenol (m&p-cresol)	ND	17	78	73	6.6	84			30 - 130	20
Hexachlorobenzene	ND	58	81	74	9.0	83			40 - 140	20
Hexachlorobutadiene	ND	58	67	56	17.9	65			40 - 140	20
Hexachloroethane	ND	58	57	48	17.1	56			40 - 140	20
Nitrobenzene	ND	58	80	67	17.7	82			40 - 140	20
Pentachlorophenol	ND	58	93	80	15.0	94			30 - 130	20
Pyridine	ND	83	64	78	19.7	68			40 - 140	20
% 2,4,6-Tribromophenol	88	%	82	72	13.0	83			15 - 110	20
% 2-Fluorobiphenyl	88	%	84	69	19.6	82			30 - 130	20
% 2-Fluorophenol	72	%	67	67	0.0	69			15 - 110	20
% Nitrobenzene-d5	88	%	80	69	14.8	81			30 - 130	20
% Phenol-d5	63	%	61	65	6.3	60			15 - 110	20
% Terphenyl-d14	98	%	89	85	4.6	91			30 - 130	20

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 711946 (ug/kg), QC Sample No: CP73450 (CP73450, CP73453, CP73454, CP73455, CP73457, CP73458, CP73459, CP73460, CP73461, CP73462)

Volatiles - Soil (Low Level)

1,1,1-Trichloroethane	ND	5.0	108	121	11.4				70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	106	103	2.9				70 - 130	30
1,1,2-Trichloroethane	ND	5.0	104	109	4.7				70 - 130	30
1,1-Dichloroethane	ND	5.0	100	112	11.3				70 - 130	30
1,1-Dichloroethene	ND	5.0	104	118	12.6				70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	106	105	0.9				70 - 130	30
1,2,3-Trichloropropane	ND	5.0	98	95	3.1				70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	104	103	1.0				70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0	104	108	3.8				70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0	127	120	5.7				70 - 130	30
1,2-Dibromoethane	ND	5.0	104	105	1.0				70 - 130	30
1,2-Dichlorobenzene	ND	5.0	106	107	0.9				70 - 130	30
1,2-Dichloroethane	ND	5.0	103	107	3.8				70 - 130	30
1,2-Dichloropropane	ND	5.0	106	113	6.4				70 - 130	30
1,3,5-Trimethylbenzene	ND	1.0	104	109	4.7				70 - 130	30
1,3-Dichlorobenzene	ND	5.0	103	106	2.9				70 - 130	30
1,3-Dichloropropane	ND	5.0	103	103	0.0				70 - 130	30
1,4-Dichlorobenzene	ND	5.0	105	108	2.8				70 - 130	30
1,4-dioxane	ND	100	112	140	22.2				70 - 130	30

QA/QC Data

SDG I.D.: GCP73450

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
2-Hexanone	ND	25	102	96	6.1				70 - 130	30
4-Methyl-2-pentanone	ND	25	109	108	0.9				70 - 130	30
Acetone	ND	10	96	100	4.1				70 - 130	30
Benzene	ND	1.0	105	115	9.1				70 - 130	30
Bromochloromethane	ND	5.0	103	106	2.9				70 - 130	30
Bromodichloromethane	ND	5.0	108	113	4.5				70 - 130	30
Bromoform	ND	5.0	117	115	1.7				70 - 130	30
Bromomethane	ND	5.0	98	108	9.7				70 - 130	30
Carbon Disulfide	ND	5.0	104	116	10.9				70 - 130	30
Carbon tetrachloride	ND	5.0	113	126	10.9				70 - 130	30
Chlorobenzene	ND	5.0	105	110	4.7				70 - 130	30
Chloroethane	ND	5.0	102	118	14.5				70 - 130	30
Chloroform	ND	5.0	103	108	4.7				70 - 130	30
Chloromethane	ND	5.0	111	122	9.4				70 - 130	30
cis-1,2-Dichloroethene	ND	5.0	105	109	3.7				70 - 130	30
cis-1,3-Dichloropropene	ND	5.0	110	117	6.2				70 - 130	30
Cyclohexane	ND	5.0	105	117	10.8				70 - 130	30
Dibromochloromethane	ND	3.0	112	115	2.6				70 - 130	30
Dichlorodifluoromethane	ND	5.0	103	116	11.9				70 - 130	30
Ethylbenzene	ND	1.0	105	111	5.6				70 - 130	30
Isopropylbenzene	ND	1.0	107	114	6.3				70 - 130	30
m&p-Xylene	ND	2.0	103	110	6.6				70 - 130	30
Methyl ethyl ketone	ND	5.0	103	103	0.0				70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	96	101	5.1				70 - 130	30
Methylacetate	ND	5.0	113	113	0.0				70 - 130	30
Methylcyclohexane	ND	5.0	109	123	12.1				70 - 130	30
Methylene chloride	ND	5.0	98	106	7.8				70 - 130	30
n-Butylbenzene	ND	1.0	110	117	6.2				70 - 130	30
n-Propylbenzene	ND	1.0	108	115	6.3				70 - 130	30
o-Xylene	ND	2.0	105	110	4.7				70 - 130	30
p-Isopropyltoluene	ND	1.0	107	115	7.2				70 - 130	30
sec-Butylbenzene	ND	1.0	106	113	6.4				70 - 130	30
Styrene	ND	5.0	100	103	3.0				70 - 130	30
tert-Butylbenzene	ND	1.0	107	114	6.3				70 - 130	30
Tetrachloroethene	ND	5.0	110	122	10.3				70 - 130	30
Toluene	ND	1.0	107	116	8.1				70 - 130	30
trans-1,2-Dichloroethene	ND	5.0	102	113	10.2				70 - 130	30
trans-1,3-Dichloropropene	ND	5.0	117	119	1.7				70 - 130	30
Trichloroethene	ND	5.0	106	118	10.7				70 - 130	30
Trichlorofluoromethane	ND	5.0	106	122	14.0				70 - 130	30
Trichlorotrifluoroethane	ND	5.0	106	121	13.2				70 - 130	30
Vinyl chloride	ND	5.0	108	121	11.4				70 - 130	30
% 1,2-dichlorobenzene-d4	95	%	101	101	0.0				70 - 130	30
% Bromofluorobenzene	101	%	100	99	1.0				70 - 130	30
% Dibromofluoromethane	105	%	99	101	2.0				70 - 130	30
% Toluene-d8	96	%	101	102	1.0				70 - 130	30

Comment:

The Low Level MS/MSD are not reported for this batch.

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 Data

SDG I.D.: GCP73450

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
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QA/QC Batch 711946H (ug/kg), QC Sample No: CP73450 50X (CP73450 (50X))

Volatiles - Soil (High Level)

Benzene	ND	250	113	114	0.9	121	118	2.5	70 - 130	30
% 1,2-dichlorobenzene-d4	95	%	100	101	1.0	101	101	0.0	70 - 130	30
% Bromofluorobenzene	100	%	99	99	0.0	99	99	0.0	70 - 130	30
% Dibromofluoromethane	100	%	97	102	5.0	101	99	2.0	70 - 130	30
% Toluene-d8	97	%	102	102	0.0	103	103	0.0	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 712133 (ug/kg), QC Sample No: CP73454 (CP73451, CP73452, CP73456)

Volatiles - Soil (Low Level)

1,1,1-Trichloroethane	ND	5.0	107	129	18.6	107			70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	3.0	103	113	9.3	142			70 - 130	30	m
1,1,2-Trichloroethane	ND	5.0	104	116	10.9	99			70 - 130	30	
1,1-Dichloroethane	ND	5.0	102	117	13.7	103			70 - 130	30	
1,1-Dichloroethene	ND	5.0	106	124	15.7	101			70 - 130	30	
1,2,3-Trichlorobenzene	ND	5.0	105	116	10.0	34			70 - 130	30	m
1,2,3-Trichloropropane	ND	5.0	96	104	8.0	138			70 - 130	30	m
1,2,4-Trichlorobenzene	ND	5.0	103	113	9.3	38			70 - 130	30	m
1,2,4-Trimethylbenzene	ND	1.0	101	118	15.5	97			70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	5.0	120	130	8.0	140			70 - 130	30	m
1,2-Dibromoethane	ND	5.0	101	111	9.4	94			70 - 130	30	
1,2-Dichlorobenzene	ND	5.0	104	119	13.5	81			70 - 130	30	
1,2-Dichloroethane	ND	5.0	102	115	12.0	94			70 - 130	30	
1,2-Dichloropropane	ND	5.0	105	121	14.2	103			70 - 130	30	
1,3,5-Trimethylbenzene	ND	1.0	101	120	17.2	99			70 - 130	30	
1,3-Dichlorobenzene	ND	5.0	101	116	13.8	75			70 - 130	30	
1,3-Dichloropropane	ND	5.0	99	110	10.5	104			70 - 130	30	
1,4-Dichlorobenzene	ND	5.0	103	119	14.4	77			70 - 130	30	
1,4-dioxane	ND	100	104	123	16.7	108			70 - 130	30	
2-Hexanone	ND	25	96	102	6.1	105			70 - 130	30	
4-Methyl-2-pentanone	ND	25	107	114	6.3	107			70 - 130	30	
Acetone	ND	10	101	106	4.8	136			70 - 130	30	m
Benzene	ND	1.0	104	123	16.7	99			70 - 130	30	
Bromochloromethane	ND	5.0	103	115	11.0	100			70 - 130	30	
Bromodichloromethane	ND	5.0	107	120	11.5	97			70 - 130	30	
Bromoform	ND	5.0	114	124	8.4	95			70 - 130	30	
Bromomethane	ND	5.0	98	119	19.4	96			70 - 130	30	
Carbon Disulfide	ND	5.0	103	122	16.9	77			70 - 130	30	
Carbon tetrachloride	ND	5.0	109	131	18.3	101			70 - 130	30	l
Chlorobenzene	ND	5.0	101	118	15.5	88			70 - 130	30	
Chloroethane	ND	5.0	106	120	12.4	104			70 - 130	30	
Chloroform	ND	5.0	104	119	13.5	105			70 - 130	30	
Chloromethane	ND	5.0	109	130	17.6	111			70 - 130	30	
cis-1,2-Dichloroethene	ND	5.0	102	123	18.7	96			70 - 130	30	
cis-1,3-Dichloropropene	ND	5.0	107	123	13.9	86			70 - 130	30	
Cyclohexane	ND	5.0	104	125	18.3	85			70 - 130	30	
Dibromochloromethane	ND	3.0	108	124	13.8	103			70 - 130	30	
Dichlorodifluoromethane	ND	5.0	96	118	20.6	94			70 - 130	30	
Ethylbenzene	ND	1.0	101	121	18.0	91			70 - 130	30	
Isopropylbenzene	ND	1.0	104	125	18.3	113			70 - 130	30	

QA/QC Data

SDG I.D.: GCP73450

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
m&p-Xylene	ND	2.0	100	117	15.7	87			70 - 130	30
Methyl ethyl ketone	ND	5.0	105	111	5.6	109			70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	98	105	6.9	103			70 - 130	30
Methylacetate	ND	5.0	114	119	4.3	135			70 - 130	30
Methylcyclohexane	ND	5.0	107	130	19.4	61			70 - 130	30
Methylene chloride	ND	5.0	101	113	11.2	137			70 - 130	30
n-Butylbenzene	ND	1.0	107	127	17.1	61			70 - 130	30
n-Propylbenzene	ND	1.0	104	124	17.5	99			70 - 130	30
o-Xylene	ND	2.0	102	119	15.4	92			70 - 130	30
p-Isopropyltoluene	ND	1.0	104	124	17.5	79			70 - 130	30
sec-Butylbenzene	ND	1.0	103	123	17.7	79			70 - 130	30
Styrene	ND	5.0	97	111	13.5	77			70 - 130	30
tert-Butylbenzene	ND	1.0	103	124	18.5	97			70 - 130	30
Tetrachloroethene	ND	5.0	110	131	17.4	85			70 - 130	30
Toluene	ND	1.0	105	125	17.4	94			70 - 130	30
trans-1,2-Dichloroethene	ND	5.0	103	122	16.9	87			70 - 130	30
trans-1,3-Dichloropropene	ND	5.0	113	127	11.7	79			70 - 130	30
Trichloroethene	ND	5.0	106	127	18.0	90			70 - 130	30
Trichlorofluoromethane	ND	5.0	107	126	16.3	106			70 - 130	30
Trichlorotrifluoroethane	ND	5.0	108	128	16.9	103			70 - 130	30
Vinyl chloride	ND	5.0	105	128	19.7	102			70 - 130	30
% 1,2-dichlorobenzene-d4	94	%	101	100	1.0	103			70 - 130	30
% Bromofluorobenzene	97	%	99	97	2.0	89			70 - 130	30
% Dibromofluoromethane	103	%	100	97	3.0	104			70 - 130	30
% Toluene-d8	96	%	101	102	1.0	97			70 - 130	30

Comment:

The MSD is not reported for this LL soil batch.

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 712133H (ug/kg), QC Sample No: CP73454 50X (CP73460 (50X))

Volatiles - Soil (High Level)

1,1,2,2-Tetrachloroethane	ND	250	108	105	2.8	101	107	5.8	70 - 130	30
1,2,3-Trichlorobenzene	ND	250	116	114	1.7	103	108	4.7	70 - 130	30
1,2,3-Trichloropropane	ND	250	104	100	3.9	95	103	8.1	70 - 130	30
1,2,4-Trichlorobenzene	ND	250	116	115	0.9	105	108	2.8	70 - 130	30
1,2,4-Trimethylbenzene	ND	250	115	110	4.4	104	110	5.6	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	250	119	116	2.6	98	118	18.5	70 - 130	30
1,2-Dichlorobenzene	ND	250	116	112	3.5	105	111	5.6	70 - 130	30
1,3,5-Trimethylbenzene	ND	250	115	111	3.5	104	111	6.5	70 - 130	30
1,3-Dichlorobenzene	ND	250	115	110	4.4	103	107	3.8	70 - 130	30
1,4-Dichlorobenzene	ND	250	117	114	2.6	106	111	4.6	70 - 130	30
Acetone	ND	500	91	88	3.4	87	93	6.7	70 - 130	30
Isopropylbenzene	ND	250	118	113	4.3	108	115	6.3	70 - 130	30
n-Butylbenzene	ND	250	126	121	4.0	115	120	4.3	70 - 130	30
n-Propylbenzene	ND	250	121	115	5.1	110	117	6.2	70 - 130	30
p-Isopropyltoluene	ND	250	121	116	4.2	110	116	5.3	70 - 130	30
sec-Butylbenzene	ND	250	119	114	4.3	109	115	5.4	70 - 130	30
tert-Butylbenzene	ND	250	117	113	3.5	106	114	7.3	70 - 130	30
% 1,2-dichlorobenzene-d4	94	%	100	102	2.0	100	101	1.0	70 - 130	30
% Bromofluorobenzene	98	%	98	98	0.0	98	99	1.0	70 - 130	30
% Dibromofluoromethane	100	%	97	98	1.0	101	100	1.0	70 - 130	30
% Toluene-d8	96	%	102	102	0.0	101	102	1.0	70 - 130	30

QA/QC Data

SDG I.D.: GCP73450

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
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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 711981 (ug/L), QC Sample No: CP73454 (CP73450 (10X) , CP73451 (10X) , CP73452 (10X) , CP73453 (10X) , CP73454 (10X) , CP73455 (10X) , CP73456 (10X) , CP73457 (10X) , CP73458 (10X) , CP73459 (10X) , CP73460 (10X) , CP73461 (10X) , CP73462 (10X))

Volatiles - TCLP

1,1-Dichloroethene	ND	5.0	105	103	1.9	109	116	6.2	70 - 130	30
1,2-Dichloroethane	ND	0.60	93	93	0.0	93	99	6.3	70 - 130	30
Benzene	ND	0.70	101	101	0.0	106	112	5.5	70 - 130	30
Carbon tetrachloride	ND	5.0	127	126	0.8	112	118	5.2	70 - 130	30
Chlorobenzene	ND	1.0	104	104	0.0	107	113	5.5	70 - 130	30
Chloroform	ND	5.0	98	98	0.0	106	110	3.7	70 - 130	30
Methyl ethyl ketone	ND	5.0	91	90	1.1	84	92	9.1	70 - 130	30
Tetrachloroethene	ND	1.0	102	101	1.0	106	113	6.4	70 - 130	30
Trichloroethene	ND	5.0	102	101	1.0	105	113	7.3	70 - 130	30
Vinyl chloride	ND	5.0	110	107	2.8	116	123	5.9	70 - 130	30
% 1,2-dichlorobenzene-d4	98	%	99	98	1.0	97	99	2.0	70 - 130	30
% Bromofluorobenzene	91	%	96	97	1.0	96	97	1.0	70 - 130	30
% Dibromofluoromethane	99	%	98	96	2.1	97	95	2.1	70 - 130	30
% Toluene-d8	94	%	96	97	1.0	97	99	2.0	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

January 10, 2024

Sample Criteria Exceedances Report

GCP73450 - AES-EASTSIDE

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CP73450	\$8260_TCL_SM	Benzene	NY / 375-6.8 Volatiles / Unrestricted Use Soil	80	60	60	60	ug/kg
CP73450	\$8270_TCLR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Commercial	14000	2700	5600	5600	ug/Kg
CP73450	\$8270_TCLR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	14000	2700	1000	1000	ug/Kg
CP73450	\$8270_TCLR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	14000	2700	1000	1000	ug/Kg
CP73450	\$8270_TCLR	Chrysene	NY / 375-6.8 Semivolatiles / Residential Restricted	13000	2700	3900	3900	ug/Kg
CP73450	\$8270_TCLR	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	13000	2700	1000	1000	ug/Kg
CP73450	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Commercial	18000	2700	5600	5600	ug/Kg
CP73450	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	18000	2700	1000	1000	ug/Kg
CP73450	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	18000	2700	1000	1000	ug/Kg
CP73450	\$8270_TCLR	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	5300	270	3900	3900	ug/Kg
CP73450	\$8270_TCLR	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	5300	270	800	800	ug/Kg
CP73450	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Commercial	17000	2700	1000	1000	ug/Kg
CP73450	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	17000	2700	1000	1000	ug/Kg
CP73450	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	17000	2700	1000	1000	ug/Kg
CP73450	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Commercial	11000	2700	5600	5600	ug/Kg
CP73450	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	11000	2700	500	500	ug/Kg
CP73450	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	11000	2700	500	500	ug/Kg
CP73450	\$8270_TCLR	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Commercial	2000	200	560	560	ug/Kg
CP73450	\$8270_TCLR	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	2000	200	330	330	ug/Kg
CP73450	\$8270_TCLR	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2000	200	330	330	ug/Kg
CP73450	\$PESTSM_NY	Dieldrin	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	13	3.9	5	5	ug/Kg
CP73450	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	11	2.3	3.3	3.3	ug/Kg
CP73450	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	9.7	2.3	3.3	3.3	ug/Kg
CP73450	BA-SM	Barium	NY / 375-6.8 Metals / Commercial	3300	3.9	400	400	mg/Kg
CP73450	BA-SM	Barium	NY / 375-6.8 Metals / Residential Restricted	3300	3.9	400	400	mg/Kg
CP73450	BA-SM	Barium	NY / 375-6.8 Metals / Unrestricted Use Soil	3300	3.9	350	350	mg/Kg
CP73450	CU-SM	Copper	NY / 375-6.8 Metals / Unrestricted Use Soil	54.9	0.8	50	50	mg/kg
CP73450	HG-SM	Mercury	NY / 375-6.8 Metals / Residential Restricted	0.91	0.03	0.81	0.81	mg/Kg
CP73450	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.91	0.03	0.18	0.18	mg/Kg
CP73450	PB-SM	Lead	NY / 375-6.8 Metals / Commercial	2270	0.39	1000	1000	mg/Kg
CP73450	PB-SM	Lead	NY / 375-6.8 Metals / Residential Restricted	2270	0.39	400	400	mg/Kg
CP73450	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	2270	0.39	63	63	mg/Kg
CP73450	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	454	0.8	109	109	mg/Kg
CP73451	\$8260_TCL_SM	Acetone	NY / 375-6.8 Volatiles / Unrestricted Use Soil	88	50	50	50	ug/kg
CP73451	\$8270_TCLR	Fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	110000	26000	100000	100000	ug/Kg
CP73451	\$8270_TCLR	Fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	110000	26000	100000	100000	ug/Kg
CP73451	\$8270_TCLR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Commercial	42000	2600	5600	5600	ug/Kg
CP73451	\$8270_TCLR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	42000	2600	1000	1000	ug/Kg
CP73451	\$8270_TCLR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	42000	2600	1000	1000	ug/Kg
CP73451	\$8270_TCLR	Chrysene	NY / 375-6.8 Semivolatiles / Residential Restricted	39000	2600	3900	3900	ug/Kg
CP73451	\$8270_TCLR	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	39000	2600	1000	1000	ug/Kg

Sample Criteria Exceedances Report

GCP73450 - AES-EASTSIDE

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CP73451	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Commercial	45000	2600	5600	5600	ug/Kg
CP73451	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	45000	2600	1000	1000	ug/Kg
CP73451	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	45000	2600	1000	1000	ug/Kg
CP73451	\$8270_TCLR	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	16000	2600	3900	3900	ug/Kg
CP73451	\$8270_TCLR	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	16000	2600	800	800	ug/Kg
CP73451	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Commercial	38000	2600	1000	1000	ug/Kg
CP73451	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	38000	2600	1000	1000	ug/Kg
CP73451	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	38000	2600	1000	1000	ug/Kg
CP73451	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Commercial	24000	2600	5600	5600	ug/Kg
CP73451	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	24000	2600	500	500	ug/Kg
CP73451	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	24000	2600	500	500	ug/Kg
CP73451	\$8270_TCLR	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Commercial	6000	190	560	560	ug/Kg
CP73451	\$8270_TCLR	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	6000	190	330	330	ug/Kg
CP73451	\$8270_TCLR	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	6000	190	330	330	ug/Kg
CP73451	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.19	0.03	0.18	0.18	mg/Kg
CP73451	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	94.4	0.36	63	63	mg/Kg
CP73452	\$8260_TCL_SM	Acetone	NY / 375-6.8 Volatiles / Unrestricted Use Soil	59	50	50	50	ug/kg
CP73452	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.53	0.03	0.18	0.18	mg/Kg
CP73452	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	215	0.35	63	63	mg/Kg
CP73452	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	211	0.7	109	109	mg/Kg
CP73455	\$PESTSM_NY	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	3.6	2.3	3.3	3.3	ug/Kg
CP73455	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	66	2.3	3.3	3.3	ug/Kg
CP73455	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	40	2.3	3.3	3.3	ug/Kg
CP73455	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.22	0.03	0.18	0.18	mg/Kg
CP73455	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	224	0.38	63	63	mg/Kg
CP73455	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	200	0.8	109	109	mg/Kg
CP73456	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Commercial	1600	260	1000	1000	ug/Kg
CP73456	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	1300	260	500	500	ug/Kg
CP73456	\$8270_TCLR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	1400	260	1000	1000	ug/Kg
CP73456	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	1600	260	1000	1000	ug/Kg
CP73456	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	2100	260	1000	1000	ug/Kg
CP73456	\$8270_TCLR	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1400	260	1000	1000	ug/Kg
CP73456	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1300	260	500	500	ug/Kg
CP73456	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1600	260	1000	1000	ug/Kg
CP73456	\$8270_TCLR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1400	260	1000	1000	ug/Kg
CP73456	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2100	260	1000	1000	ug/Kg
CP73456	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	15	2.3	3.3	3.3	ug/Kg
CP73456	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	6.3	2.3	3.3	3.3	ug/Kg
CP73456	\$PESTSM_NY	Aldrin	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	8.7	3.8	5	5	ug/Kg
CP73456	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.20	0.03	0.18	0.18	mg/Kg

Wednesday, January 10, 2024

Criteria: NY: 375, 375COM, 375RRS

State: NY

Sample Criteria Exceedances Report GCP73450 - AES-EASTSIDE

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CP73456	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	85.3	0.34	63	63	mg/Kg
CP73457	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	13	2.2	3.3	3.3	ug/Kg
CP73457	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	7.9	2.2	3.3	3.3	ug/Kg
CP73457	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	70.6	0.35	63	63	mg/Kg
CP73459	\$8260_TCL_SM	Acetone	NY / 375-6.8 Volatiles / Unrestricted Use Soil	110	50	50	50	ug/kg
CP73459	BA-SM	Barium	NY / 375-6.8 Metals / Commercial	522	0.34	400	400	mg/Kg
CP73459	BA-SM	Barium	NY / 375-6.8 Metals / Residential Restricted	522	0.34	400	400	mg/Kg
CP73459	BA-SM	Barium	NY / 375-6.8 Metals / Unrestricted Use Soil	522	0.34	350	350	mg/Kg
CP73459	HG-SM	Mercury	NY / 375-6.8 Metals / Residential Restricted	1.00	0.03	0.81	0.81	mg/Kg
CP73459	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	1.00	0.03	0.18	0.18	mg/Kg
CP73459	PB-SM	Lead	NY / 375-6.8 Metals / Residential Restricted	562	0.34	400	400	mg/Kg
CP73459	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	562	0.34	63	63	mg/Kg
CP73459	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	146	0.7	109	109	mg/Kg
CP73460	\$8270_TCLR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Commercial	17000	2700	5600	5600	ug/Kg
CP73460	\$8270_TCLR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	17000	2700	1000	1000	ug/Kg
CP73460	\$8270_TCLR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	17000	2700	1000	1000	ug/Kg
CP73460	\$8270_TCLR	Chrysene	NY / 375-6.8 Semivolatiles / Residential Restricted	16000	2700	3900	3900	ug/Kg
CP73460	\$8270_TCLR	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	16000	2700	1000	1000	ug/Kg
CP73460	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Commercial	17000	2700	5600	5600	ug/Kg
CP73460	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	17000	2700	1000	1000	ug/Kg
CP73460	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	17000	2700	1000	1000	ug/Kg
CP73460	\$8270_TCLR	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	4600	270	3900	3900	ug/Kg
CP73460	\$8270_TCLR	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	4600	270	800	800	ug/Kg
CP73460	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Commercial	16000	2700	1000	1000	ug/Kg
CP73460	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	16000	2700	1000	1000	ug/Kg
CP73460	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	16000	2700	1000	1000	ug/Kg
CP73460	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Commercial	7200	270	5600	5600	ug/Kg
CP73460	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	7200	270	500	500	ug/Kg
CP73460	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	7200	270	500	500	ug/Kg
CP73460	\$8270_TCLR	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Commercial	1400	190	560	560	ug/Kg
CP73460	\$8270_TCLR	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	1400	190	330	330	ug/Kg
CP73460	\$8270_TCLR	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1400	190	330	330	ug/Kg
CP73460	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	23	2.4	3.3	3.3	ug/Kg
CP73460	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	108	0.42	63	63	mg/Kg
CP73462	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	23	2.2	3.3	3.3	ug/Kg
CP73462	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	22	2.2	3.3	3.3	ug/Kg
CP73462	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.28	0.03	0.18	0.18	mg/Kg
CP73462	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	296	0.36	63	63	mg/Kg
CP73462	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	208	0.7	109	109	mg/Kg

Wednesday, January 10, 2024

Criteria: NY: 375, 375COM, 375RRS

State: NY

Sample Criteria Exceedances Report

GCP73450 - AES-EASTSIDE

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
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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



Analysis Comments

January 10, 2024

SDG I.D.: GCP73450

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

Herbicide Narration

AU-ECD12 12/22/23-1: CP73450, CP73451, CP73452, CP73453, CP73454, CP73455, CP73456, CP73457, CP73458, CP73459, CP73460, CP73461

The following Continuing Calibration compounds did not meet % deviation criteria:

Samples: CP73451, CP73452, CP73453, CP73454, CP73455, CP73456, CP73457, CP73458, CP73459, CP73460

Preceding CC D22B015 - None.

Succeeding CC D22B027 - 2,4,5-T (11) 16%H (15%), 2,4-D (8) 17%L (15%)

Samples: CP73461

Preceding CC D22B027 - 2,4,5-T (11) 16%H (15%), 2,4-D (8) 17%L (15%)

Succeeding CC D22B033 - 2,4-D (8) 20%L (15%)

PEST Narration

AU-ECD4 12/26/23-1: CP73458, CP73459, CP73462

The following Continuing Calibration compounds did not meet % deviation criteria:

Samples: CP73458, CP73459, CP73462

Preceding CC D26B010 - d-BHC 21%L (20%)

Succeeding CC D26B023 - 4,4'-DDD 22%L (20%), 4,4'-DDT 23%L (20%), b-BHC 24%L (20%), d-BHC 25%L (20%), Methoxychlor 26%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-ECD4 12/29/23-1: CP73455

The following Continuing Calibration compounds did not meet % deviation criteria:

Samples: CP73455

Preceding CC D29B004 - None.

Succeeding CC D29B030 - b-BHC 24%L (20%), d-BHC 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

CHEM06 12/29/23-1: CP73462

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 Continuing Calibration compounds did not meet % deviation criteria: Pyridine 37%L (30%)

The following Continuing Calibration compounds did not meet Maximum % deviation 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%.

CHEM07 12/28/23-1: CP73450, CP73451, CP73452, CP73453, CP73456, CP73457, CP73458, CP73459, CP73460, CP73461



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Analysis Comments

January 10, 2024

SDG I.D.: GCP73450

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 0.085 (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%.

CHEM22 12/27/23-1: CP73450, CP73451, CP73452, CP73453, CP73454, CP73455, CP73456, CP73457, CP73458, CP73459, CP73460

The following Initial Calibration compounds did not meet recommended response factors: 2-Nitrophenol 0.090 (0.1), Hexachlorobenzene 0.096 (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: 2-Nitrophenol 0.094 (0.1), Hexachlorobenzene 0.094 (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 12/27/23-2: CP73461, CP73462

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: 2-Nitrophenol 0.079 (0.1), Hexachlorobenzene 0.091 (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: 2-Nitrophenol 0.084 (0.1), Hexachlorobenzene 0.090 (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 12/26/23-1: CP73450, CP73453, CP73454, CP73455, CP73457, CP73458, CP73459, CP73460, CP73461, CP73462

The following Initial Calibration compounds did not meet RSD% criteria: 1,2-Dibromo-3-chloropropane 21% (20%), Acetone 25% (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%.

CHEM14 12/27/23-1: CP73451, CP73452, CP73456, CP73460



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Analysis Comments

January 10, 2024

SDG I.D.: GCP73450

The following Initial Calibration compounds did not meet RSD% criteria: 1,2-Dibromo-3-chloropropane 21% (20%), Acetone 25% (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%.



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NY Temperature Narration

January 10, 2024

SDG I.D.: GCP73450

The samples in this delivery group were received at 1.9°C.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)



NY/NJ/PA CHAIN OF CUSTODY RECORD

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

Coolant: PK ICE No No
 Temp: 19 °C Pg 1 of 2

Contact Options:

Phone:
 Fax: pendyeh
 Email: empender.gas@aes.com

Project: EAST SIDE COASTAL RESILIENCE Project P.O.: 0897

Report to: AES

Invoice to: AES

QUOTE #: AEO90921BA

This section MUST be completed with Bottle Quantities.

Sampler's Signature	Client Sample - Information - Identification		Date Sampled	Time Sampled	Analysis Request
	Customer Sample Identification	Sample Matrix			
<i>R. R. R.</i>	DEPT6	S	12.20.23	10:58	MS/MSD (N/A) (Make a separate run rate)
	DEPT7			10:15	GL AMBER 8 oz WH PO (MASC) 40 ml VOA Vial (Metal) H ₂ O
	DEPT8			9:40	GL SOIL CONTAINER (4) oz
	DEPT9			9:00	GL AMBER 1000ml AS IS H ₂ SO ₄ 250ml 1500ml 1000ml
	G-119			11:15	PL AS IS 250ml 1500ml 1500ml 1500ml
	G-120			8:45	PL HNO ₃ 250ml 250ml 250ml
	G-122			8:40	PL H ₂ SO ₄ 250ml 250ml 250ml
	G-123			11:38:50	PL AS IS 250ml 1500ml 1500ml
	DM100			8:50	GL AMBER 8 oz WH PO (MASC) 40 ml VOA Vial (Metal) H ₂ O
	DM101			12:50	GL SOIL CONTAINER (4) oz
	DM102			1:10	GL AMBER 8 oz WH PO (MASC) 40 ml VOA Vial (Metal) H ₂ O
				1:20	PL AS IS 250ml 1500ml 1500ml

Relinquished by: [Signature] Accepted by: [Signature] Date: 12.21.23 Time: 10:05

Turnaround: 1 Day* 2 Days* 3 Days* 4 Days* 5 Days* STANDARD APPLIES

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 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

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

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

Comments, Special Requirements or Regulations:

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

State Samples Collected? NY



NY/NJ/PA CHAIN OF CUSTODY RECORD

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

Coolant: Yes No
 IPK ICE
 Temp: 9 °C Pg 2 of 2

Contact Options:

Phone:
 Fax: pendyenveng@phoenixlabs.net
 Email: empendyenveng@phoenixlabs.com

Customer: AES

Address: 42 West Avenue
Patchogue, NY 11772

Project: EAST SIDE COASTAL RESERVE Project P.O.: 0897
 Report to: AES
 Invoice to: AES
 QUOTE #: see p. 1

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

Client Sample - Information - Identification

Sampler's Signature: [Signature] Date: 12/20/23

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

PHOENIX USE ONLY
 SAMPLE # 73401 G124 Date Sampled 12.20.23 Time Sampled 8:55
73402 G121 8:40

Analysis Request

Analysis Request: HEAVY METALS (see table for analysis unit rate)
TRICHLOROETHYLENE
PERCHLOROETHYLENE
STYRENE
1,1-DICHLOROETHYLENE
1,2-DICHLOROETHYLENE
1,1,1-TRICHLOROETHYLENE
1,1,2-TRICHLOROETHYLENE
1,1,2,2-TETRACHLOROETHYLENE
1,1,1,2-TETRACHLOROETHYLENE
1,1,2,2,3-PENTACHLOROETHYLENE
1,1,1,2,2-PENTACHLOROETHYLENE
1,1,1,2,2,3-HEXACHLOROETHYLENE
1,1,1,2,2,3,3-HEPTACHLOROETHYLENE
1,1,1,2,2,3,3,4-OCTACHLOROETHYLENE
1,1,1,2,2,3,3,4,4-NONACHLOROETHYLENE
1,1,1,2,2,3,3,4,4,5-DECACHLOROETHYLENE
1,1,1,2,2,3,3,4,4,5,5-UNDECACHLOROETHYLENE
1,1,1,2,2,3,3,4,4,5,5,6-DODECACHLOROETHYLENE

GL Amber 8 oz [1 mL] PO [1 MHSO₄] or
 GL Amber 100mL [1 mL] PO [1 MHSO₄] or
 GL Amber 250mL [1 mL] PO [1 MHSO₄] or
 GL Amber 500mL [1 mL] PO [1 MHSO₄] or
 GL Amber 1000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 2000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 4000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 8000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 16000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 32000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 64000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 128000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 256000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 512000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 1024000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 2048000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 4096000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 8192000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 16384000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 32768000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 65536000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 131072000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 262144000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 524288000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 1048576000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 2097152000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 4194304000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 8388608000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 16777216000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 33554432000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 67108864000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 134217728000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 268435456000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 536870912000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 1073741824000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 2147483648000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 4294967296000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 8589934592000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 17179869184000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 34359738368000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 68719476736000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 137438953472000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 274877906944000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 549755813888000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 1099511627776000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 2199023255552000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 4398046511104000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 8796093022208000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 17592186444416000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 35184372888832000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 70368745777664000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 140737491553328000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 281474983106656000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 562949966213312000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 1125899932426624000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 2251799864853248000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 4503599729706496000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 9007199459412992000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 18014398918825984000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 36028797837651968000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 72057595675303936000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 144115191350607872000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 288230382701215744000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 576460765402431488000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 115292153080486296000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 230584306160972592000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 461168612321945184000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 922337224643890368000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 1844674449287780736000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 3689348898575561472000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 7378697797151122944000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 14757395594302245888000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 29514791188604491776000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 59029582377208983552000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 118059164754417967104000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 236118329508835934208000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 472236659017671868416000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 944473318035343736832000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 1888946636070687473664000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 3777893272141374947328000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 7555786544282749894656000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 15111573088565499789312000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 30223146171130999578624000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 60446292342261999157248000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 120892584684523998314464000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 241785169369047996628928000mL [1 mL] PO [1 MHSO₄] or
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 GL Amber 967140677476191986515712000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 1934281354952383973031424000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 3868562709904767946062848000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 7737125419809535892125696000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 15474250839619071784251328000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 30948501679238143568502656000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 61897003358476287137005312000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 123794006768952574274010624000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 247588013537905148548821248000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 49517602707581029709764496000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 99035205415162059419528992000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 198070410830324118839057984000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 396140821660648237678115968000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 792281643321296475356231936000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 1584563286642592950712473728000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 3169126573285185901424847456000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 6338253146570371802849694912000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 12676506293140743605699388824000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 25353012586281487211398777648000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 50706025172562974422797555296000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 101412050345125948845595110592000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 20282410069025189769119022118112000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 40564820138050379538238044236224000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 81129640276100759076476088472448000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 162259280552201518152952176944896000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 324518561104403036305904353889728000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 6490371222088060726111808076777536000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 1298074244377612153222361715555072000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 2596148488755224286444723431110144000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 5192296977510448572889446862220288000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 10384593955020897145778897724440576000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 207691879100417942915577944488911552000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 4153837582008358858311554889778220224000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 830767516401671771662310977954444448000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 166153503280334354332462195590888896000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 332307006560668708664924391181777792000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 664614013121337417328984782363555584000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 13292280264426743505779756447271111168000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 26584560528853487011559512894542222336000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 53169121057706974023119025789084444672000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 106338242115413948046380051579616888944000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 21267648423082789609276010315923377888000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 425352968461655792185520206318467557776000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 8507059369233115843710404126369351155552000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 1701411873846623168742080852737870222224000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 340282374769324633748416170547574044448000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 680564749538649267496832341095148088896000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 13611294990772985349936646821902961777792000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 2722258998154597069987329643805923555584000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 5444517996309194139974659287611847111168000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 1088903592661838267994931875223694222336000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 217780718532367653598986375044738844448000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 435561437064735307197972750089477688896000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 8711228741294706143959455001789553777792000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 1742245488258941287911910003579107555584000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 34844909765178825758238200071583111168000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 6968981953035765151647640014306222336000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 1393796390607153031289528002861244448000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 2787592781214306062579056005722488896000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 55751855624286121251558112011444977792000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 11150371124857224250311716402288955584000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 22300742249714448500623432804577911168000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 4460148449942889700124686560915544448000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 89202968998857794002493731218111168000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 17840593799771558800487462424222336000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 3568118759954311760097492484844448000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 7136237519908623520194889769688896000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 1427247503981724704038979539377792000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 2854495007963449408077959078755584000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 5708990015926898816155918157511168000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 114179800396537976323111835311168000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 228359600793075952646223670622336000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 45671920158615190529244734124448000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 91343840317230381058489468248896000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 182687600634460762116997896577792000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 365375201268921524233995793155584000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 730750402537843048467991586311168000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 146150080567568609693593172622336000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 29230016113513721938718634524448000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 58460032227027443877437269048896000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 116920064454054887754744538097792000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 233840128908109775509489076195584000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 467680257816219551019898152391168000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 9353605156324391020397963047822336000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 1870721031264878204079592609564448000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 374144206252975640815918321911168000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 748288412505951281631826443822336000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 14965768251119025632636528764448000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 29931536502238051265273057528896000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 59863073004476102530546115057792000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 119726146008952205061092301155584000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 23945229201790441012218460231168000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 478904584035808820244369204622336000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 95780916807161764048873840924448000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 191561836143523528097756818848896000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 3831236722870470561955137637792000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 7662473445740941123911274675584000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 15324946891481882247822553551168000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 306498937829637644956451101031168000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 6129978756592752899129020200622336000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 1225995751318550579824804040124448000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 2451991502637101159649680880248896000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 4903983005274202319299376760497792000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 9807966010548404638598753520995584000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 1961593202109680927719751704191168000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 39231864042193618554395034083822336000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 7846372808438723710879006816764448000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 15692746016877447421758013633528896000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 31385492033754894843516027267057792000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 627709840675097896870320545341168000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 12554196815001957937406410866822336000mL [1 mL] PO [1 MHSO₄] or
 GL Amber 2510839363000391587481282173364448000mL [1 mL] PO [1 MHSO



Wednesday, January 10, 2024

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

Project ID: EAST SIDE COASTAL RESILIENCY
SDG ID: GCP74370
Sample ID#s: CP74370 - CP74386

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,

A handwritten signature in black ink that reads "Phyllis Shiller". The signature is written in a cursive style.

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



SDG Comments

January 10, 2024

SDG I.D.: GCP74370

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



Sample Id Cross Reference

January 10, 2024

SDG I.D.: GCP74370

Project ID: EAST SIDE COASTAL RESILIENCY

Client Id	Lab Id	Matrix
DEP 80	CP74370	SOIL
DEP 81	CP74371	SOIL
DEP 82	CP74372	SOIL
DEP 83	CP74373	SOIL
DEP 84	CP74374	SOIL
DEP 89	CP74375	SOIL
DEP 90	CP74376	SOIL
DEP 91	CP74377	SOIL
DEP 92	CP74378	SOIL
DM 103	CP74379	SOIL
G 135	CP74380	SOIL
G 136	CP74381	SOIL
G 137	CP74382	SOIL
G 138	CP74383	SOIL
G 148	CP74384	SOIL
G 149	CP74385	SOIL
G 150	CP74386	SOIL



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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
 Location Code: AES-EASTSIDE
 Rush Request: Standard
 P.O.#: 0897

Custody Information

Collected by:
 Received by: SR1
 Analyzed by: see "By" below

Date

12/21/23
 12/26/23

Time

7:45
 17:04

Laboratory Data

SDG ID: GCP74370
 Phoenix ID: CP74370

Project ID: EAST SIDE COASTAL RESILIENCY
 Client ID: DEP 80

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.42	0.42	mg/Kg	1	12/28/23	TH	SW6010D
Aluminum	9870	63	mg/Kg	10	12/27/23	TH	SW6010D
Arsenic	9.20	0.84	mg/Kg	1	12/28/23	TH	SW6010D
Barium	213	0.42	mg/Kg	1	12/28/23	TH	SW6010D
Beryllium	0.79	0.34	mg/Kg	1	12/28/23	TH	SW6010D
Calcium	24800	63	mg/Kg	10	12/27/23	TH	SW6010D
Cadmium	1.26	0.42	mg/Kg	1	12/28/23	TH	SW6010D
Cobalt	16.8	0.42	mg/Kg	1	12/28/23	TH	SW6010D
Chromium	25.6	0.42	mg/Kg	1	12/28/23	TH	SW6010D
Copper	517	0.8	mg/kg	1	12/28/23	TH	SW6010D
Iron	58300	63	mg/Kg	10	12/27/23	TH	SW6010D
Mercury	0.77	0.03	mg/Kg	2	12/27/23	ZT	SW7471B
Potassium	2500	63	mg/Kg	10	12/27/23	TH	SW6010D
Magnesium	4770	6.3	mg/Kg	1	12/28/23	TH	SW6010D
Manganese	520	0.42	mg/Kg	1	12/28/23	TH	SW6010D
Sodium	634	6.3	mg/Kg	1	12/28/23	TH	SW6010D
Nickel	233	4.2	mg/Kg	10	12/27/23	TH	SW6010D
Lead	705	0.42	mg/Kg	1	12/28/23	TH	SW6010D
Antimony	< 4.2	4.2	mg/Kg	1	12/28/23	TH	SW6010D
Selenium	< 2.0	2.0	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Barium	0.84	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	12/28/23	ZT	SW846 1311/7470
TCLP Lead	4.52	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.8	3.8	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/28/23	W/AL/AL	SW3010A
Trivalent Chromium	25.6	0.42	mg/kg	1	12/29/23		CALC 6010-7196
Vanadium	78.4	0.42	mg/Kg	1	12/28/23	TH	SW6010D
Zinc	287	0.8	mg/Kg	1	12/28/23	TH	SW6010D
Percent Solid	77		%		12/26/23	AC1	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/26/23	ER	SW846-Corr
Flash Point	>200	200	Degree F	1	01/02/24	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.46	0.46	mg/Kg	1	12/29/23	NP	SW7196A
Ignitability	Passed	140	degree F	1	01/02/24	G	SW846-Ignit
pH at 25C - Soil	7.88	1.00	pH Units	1	12/26/23 22:36	ER	SW846 9045D
Reactivity Cyanide	< 6	6	mg/Kg	1	12/27/23	NP/GD	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	12/28/23	NP/GD	SW846 CH7
Reactivity	Negative		Pos/Neg	1	12/29/23	NP/GD	SW846-React
Redox Potential	-209		mV	1	12/26/23	ER	SM2580B-09
Total Cyanide (SW9010C Distill.)	16.4	0.65	mg/Kg	1	12/28/23	MW/GD	SW9012B
Mercury Digestion	Completed				12/27/23	AL/AL	SW7471B
Extraction of NY ETPH	Completed				12/26/23	C/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/27/23	L/MQ	SW3546
NJ EPH Extraction	Completed				12/26/23	H/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/27/23	H/JDW	SW3546
Soil Extraction for Pesticides	Completed				12/27/23	H/JDW	SW3546
Soil Extraction for SVOA	Completed				12/27/23	AC1/H/U	SW3546
TCLP Digestion Mercury	Completed				12/28/23	W/AL/AL	SW7470A
TCLP Herbicides Extraction	Completed				12/28/23	CV/MQ	SW8150 MOD
TCLP Extraction for Metals	Completed				12/27/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/27/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/28/23	S/S	SW3510C
TCLP Semi-Volatile Extraction	Completed				12/28/23	S/S	SW3510C
TCLP Extraction Volatiles	Completed				12/27/23	CV	SW1311
Total Metals Digest	Completed				12/26/23	L/AG	SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	ND	51	mg/kg	5	12/27/23	JRB	NJEPH 10-08 R3
C9-C28	ND	100	mg/kg	5	12/27/23	JRB	NJEPH 10-08 R3
Total EPH	ND	51	mg/kg	5	12/27/23	JRB	NJEPH 10-08 R3

QA/QC Surrogates

% COD (surr)	66		%	5	12/27/23	JRB	40 - 140 %
% Terphenyl (surr)	82		%	5	12/27/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	7.9	mg/Kg	50	12/27/23	V	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	93		%	50	12/27/23	V	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	160	ug/Kg	10	12/29/23	JRB	SW8151A
2,4,5-TP (Silvex)	ND	160	ug/Kg	10	12/29/23	JRB	SW8151A
2,4-D	ND	320	ug/Kg	10	12/29/23	JRB	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	3200	ug/Kg	10	12/29/23	JRB	SW8151A
Dalapon	ND	160	ug/Kg	10	12/29/23	JRB	SW8151A
Dicamba	ND	160	ug/Kg	10	12/29/23	JRB	SW8151A
Dichloroprop	ND	320	ug/Kg	10	12/29/23	JRB	SW8151A
Dinoseb	ND	320	ug/Kg	10	12/29/23	JRB	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	68		%	10	12/29/23	JRB	30 - 150 %
% DCAA (Confirmation)	52		%	10	12/29/23	JRB	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	85	ug/Kg	2	12/28/23	SC	SW8082A
PCB-1221	ND	85	ug/Kg	2	12/28/23	SC	SW8082A
PCB-1232	ND	85	ug/Kg	2	12/28/23	SC	SW8082A
PCB-1242	ND	85	ug/Kg	2	12/28/23	SC	SW8082A
PCB-1248	ND	85	ug/Kg	2	12/28/23	SC	SW8082A
PCB-1254	ND	85	ug/Kg	2	12/28/23	SC	SW8082A
PCB-1260	ND	85	ug/Kg	2	12/28/23	SC	SW8082A
PCB-1262	ND	85	ug/Kg	2	12/28/23	SC	SW8082A
PCB-1268	ND	85	ug/Kg	2	12/28/23	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	54		%	2	12/28/23	SC	30 - 150 %
% DCBP (Confirmation)	53		%	2	12/28/23	SC	30 - 150 %
% TCMX	62		%	2	12/28/23	SC	30 - 150 %
% TCMX (Confirmation)	61		%	2	12/28/23	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.5	ug/Kg	2	12/29/23	KCA	SW8081B
4,4' -DDE	8.0	2.5	ug/Kg	2	12/29/23	KCA	SW8081B
4,4' -DDT	3.6	2.5	ug/Kg	2	12/29/23	KCA	SW8081B
a-BHC	ND	8.5	ug/Kg	2	12/29/23	KCA	SW8081B
a-Chlordane	ND	4.2	ug/Kg	2	12/29/23	KCA	SW8081B
Aldrin	ND	4.2	ug/Kg	2	12/29/23	KCA	SW8081B
b-BHC	ND	8.5	ug/Kg	2	12/29/23	KCA	SW8081B
Chlordane	ND	42	ug/Kg	2	12/29/23	KCA	SW8081B
d-BHC	ND	8.5	ug/Kg	2	12/29/23	KCA	SW8081B
Dieldrin	ND	4.2	ug/Kg	2	12/29/23	KCA	SW8081B
Endosulfan I	ND	8.5	ug/Kg	2	12/29/23	KCA	SW8081B
Endosulfan II	ND	8.5	ug/Kg	2	12/29/23	KCA	SW8081B
Endosulfan sulfate	ND	8.5	ug/Kg	2	12/29/23	KCA	SW8081B
Endrin	ND	8.5	ug/Kg	2	12/29/23	KCA	SW8081B
Endrin aldehyde	ND	8.5	ug/Kg	2	12/29/23	KCA	SW8081B
Endrin ketone	ND	8.5	ug/Kg	2	12/29/23	KCA	SW8081B
g-BHC	ND	1.7	ug/Kg	2	12/29/23	KCA	SW8081B
g-Chlordane	ND	4.2	ug/Kg	2	12/29/23	KCA	SW8081B
Heptachlor	ND	8.5	ug/Kg	2	12/29/23	KCA	SW8081B
Heptachlor epoxide	ND	8.5	ug/Kg	2	12/29/23	KCA	SW8081B
Methoxychlor	ND	42	ug/Kg	2	12/29/23	KCA	SW8081B
Toxaphene	ND	170	ug/Kg	2	12/29/23	KCA	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	36		%	2	12/29/23	KCA	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	28		%	2	12/29/23	KCA	30 - 150 %
% TCMX	31		%	2	12/29/23	KCA	30 - 150 %
% TCMX (Confirmation)	29		%	2	12/29/23	KCA	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/29/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/29/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	63		%	10	12/29/23	JRB	30 - 150 %
% DCAA (Confirmation)	70		%	10	12/29/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
a-BHC	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Alachlor	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Aldrin	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
b-BHC	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Chlordane	ND	5.0	ug/L	10	12/29/23	AW	SW8081B
d-BHC	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Dieldrin	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endosulfan I	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Endosulfan II	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endrin	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Toxaphene	ND	20	ug/L	10	12/29/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	74		%	10	12/29/23	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	95		%	10	12/29/23	AW	30 - 150 %
%TCMX (Surrogate Rec)	79		%	10	12/29/23	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	88		%	10	12/29/23	AW	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	130	63	mg/Kg	1	12/27/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	54		%	1	12/27/23	JRB	50 - 150 %
% Terphenyl (surr)	100		%	1	12/27/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethane	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethene	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dibromoethane	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloroethane	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloropropane	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
2-Hexanone	ND	33	ug/kg	1	12/29/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	33	ug/kg	1	12/29/23	JLI	SW8260D
Acetone	ND	50	ug/kg	1	12/29/23	JLI	SW8260D
Benzene	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Bromochloromethane	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Bromodichloromethane	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Bromoform	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Bromomethane	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Carbon Disulfide	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Carbon tetrachloride	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Chlorobenzene	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Chloroethane	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Chloroform	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Chloromethane	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Cyclohexane	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Dibromochloromethane	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Dichlorodifluoromethane	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Ethylbenzene	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Isopropylbenzene	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
m&p-Xylene	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Methyl ethyl ketone	ND	40	ug/kg	1	12/29/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	13	ug/kg	1	12/29/23	JLI	SW8260D
Methylacetate	ND	5.4	ug/kg	1	12/29/23	JLI	SW8260D
Methylcyclohexane	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Methylene chloride	ND	33	ug/kg	1	12/29/23	JLI	SW8260D
o-Xylene	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Styrene	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Tetrachloroethene	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Toluene	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Total Xylenes	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Trichloroethene	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorofluoromethane	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Vinyl chloride	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	95		%	1	12/29/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	93		%	1	12/29/23	JLI	70 - 130 %
% Dibromofluoromethane	92		%	1	12/29/23	JLI	70 - 130 %
% Toluene-d8	95		%	1	12/29/23	JLI	70 - 130 %

1,4-dioxane

1,4-dioxane	ND	100	ug/kg	1	12/29/23	JLI	SW8260D
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Volatiles

1,2,3-Trichloropropane	ND	6.7	ug/Kg	1	12/29/23	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	6.7	ug/Kg	1	12/29/23	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	6.7	ug/Kg	1	12/29/23	JLI	SW8260D
1,3-Dichloropropane	ND	6.7	ug/Kg	1	12/29/23	JLI	SW8260D
n-Butylbenzene	ND	6.7	ug/Kg	1	12/29/23	JLI	SW8260D
n-Propylbenzene	ND	6.7	ug/Kg	1	12/29/23	JLI	SW8260D
p-Isopropyltoluene	ND	6.7	ug/Kg	1	12/29/23	JLI	SW8260D
sec-Butylbenzene	ND	6.7	ug/Kg	1	12/29/23	JLI	SW8260D
tert-Butylbenzene	ND	6.7	ug/Kg	1	12/29/23	JLI	SW8260D

QA/QC Surrogates

% 1,2-dichlorobenzene-d4	95		%	1	12/29/23	JLI	70 - 130 %
% Bromofluorobenzene	93		%	1	12/29/23	JLI	70 - 130 %
% Dibromofluoromethane	92		%	1	12/29/23	JLI	70 - 130 %
% Toluene-d8	95		%	1	12/29/23	JLI	70 - 130 %

TCLP Volatiles

1,1-Dichloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260

QA/QC Surrogates

% 1,2-dichlorobenzene-d4 (10x)	99		%	10	12/28/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	90		%	10	12/28/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	96		%	10	12/28/23	HM	70 - 130 %
% Toluene-d8 (10x)	94		%	10	12/28/23	HM	70 - 130 %

Volatile Library Search Completed 12/29/23 JLI

Semivolatiles

1,1-Biphenyl	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
2,3,4,6-tetrachlorophenol	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
2,4,5-Trichlorophenol	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
2,4,6-Trichlorophenol	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
2,4-Dichlorophenol	ND	300	ug/Kg	1	12/28/23	MR	SW8270E

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
2,4-Dinitrophenol	ND	680	ug/Kg	1	12/28/23	MR	SW8270E
2,4-Dinitrotoluene	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
2,6-Dinitrotoluene	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
2-Chloronaphthalene	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
2-Chlorophenol	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
2-Methylnaphthalene	380	300	ug/Kg	1	12/28/23	MR	SW8270E
2-Methylphenol (o-cresol)	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
2-Nitroaniline	ND	680	ug/Kg	1	12/28/23	MR	SW8270E
2-Nitrophenol	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	420	ug/Kg	1	12/28/23	MR	SW8270E
3,3'-Dichlorobenzidine	ND	510	ug/Kg	1	12/28/23	MR	SW8270E
3-Nitroaniline	ND	680	ug/Kg	1	12/28/23	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	1	12/28/23	MR	SW8270E
4-Bromophenyl phenyl ether	ND	420	ug/Kg	1	12/28/23	MR	SW8270E
4-Chloro-3-methylphenol	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
4-Chloroaniline	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
4-Nitroaniline	ND	680	ug/Kg	1	12/28/23	MR	SW8270E
4-Nitrophenol	ND	1200	ug/Kg	1	12/28/23	MR	SW8270E
Acenaphthene	720	300	ug/Kg	1	12/28/23	MR	SW8270E
Acenaphthylene	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
Acetophenone	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
Anthracene	1100	300	ug/Kg	1	12/28/23	MR	SW8270E
Atrazine	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
Benz(a)anthracene	2300	300	ug/Kg	1	12/28/23	MR	SW8270E
Benzaldehyde	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(a)pyrene	2500	300	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(b)fluoranthene	3000	300	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(ghi)perylene	1300	300	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(k)fluoranthene	1000	300	ug/Kg	1	12/28/23	MR	SW8270E
Benzyl butyl phthalate	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
Bis(2-chloroethyl)ether	ND	420	ug/Kg	1	12/28/23	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
Caprolactam	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
Carbazole	440	420	ug/Kg	1	12/28/23	MR	SW8270E
Chrysene	2300	300	ug/Kg	1	12/28/23	MR	SW8270E
Dibenz(a,h)anthracene	300	210	ug/Kg	1	12/28/23	MR	SW8270E
Dibenzofuran	440	300	ug/Kg	1	12/28/23	MR	SW8270E
Diethyl phthalate	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
Dimethylphthalate	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
Di-n-butylphthalate	ND	840	ug/Kg	1	12/28/23	MR	SW8270E
Di-n-octylphthalate	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
Fluoranthene	5200	300	ug/Kg	1	12/28/23	MR	SW8270E
Fluorene	710	300	ug/Kg	1	12/28/23	MR	SW8270E
Hexachlorobenzene	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
Hexachlorobutadiene	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
Hexachlorocyclopentadiene	ND	300	ug/Kg	1	12/28/23	MR	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
Indeno(1,2,3-cd)pyrene	1300	300	ug/Kg	1	12/28/23	MR	SW8270E
Isophorone	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
Naphthalene	1100	300	ug/Kg	1	12/28/23	MR	SW8270E
Nitrobenzene	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
N-Nitrosodimethylamine	ND	420	ug/Kg	1	12/28/23	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	210	ug/Kg	1	12/28/23	MR	SW8270E
N-Nitrosodiphenylamine	ND	420	ug/Kg	1	12/28/23	MR	SW8270E
Pentachlorophenol	ND	420	ug/Kg	1	12/28/23	MR	SW8270E
Phenanthrene	4800	300	ug/Kg	1	12/28/23	MR	SW8270E
Phenol	ND	300	ug/Kg	1	12/28/23	MR	SW8270E
Pyrene	4800	300	ug/Kg	1	12/28/23	MR	SW8270E

QA/QC Surrogates

% 2,4,6-Tribromophenol	93		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorobiphenyl	86		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorophenol	83		%	1	12/28/23	MR	30 - 130 %
% Nitrobenzene-d5	80		%	1	12/28/23	MR	30 - 130 %
% Phenol-d5	89		%	1	12/28/23	MR	30 - 130 %
% Terphenyl-d14	89		%	1	12/28/23	MR	30 - 130 %

TCLP Acid/Base-Neutral

1,4-Dichlorobenzene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270

QA/QC Surrogates

% 2,4,6-Tribromophenol	87		%	1	12/29/23	MR	15 - 110 %
% 2-Fluorobiphenyl	75		%	1	12/29/23	MR	30 - 130 %
% 2-Fluorophenol	62		%	1	12/29/23	MR	15 - 110 %
% Nitrobenzene-d5	78		%	1	12/29/23	MR	30 - 130 %
% Phenol-d5	53		%	1	12/29/23	MR	15 - 110 %
% Terphenyl-d14	93		%	1	12/29/23	MR	30 - 130 %

Semivolatile Library Search Completed 12/29/23 MR

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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.

3 = This parameter exceeds laboratory specified limits.

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 a 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.

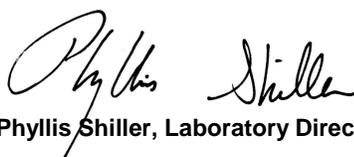
This sample was not collected in accordance with EPA method 5035. NELAC requires the laboratory to qualify the GRO/VPH soil data as biased low.

Hexavalent Chromium:
This sample is in a reducing state.

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

January 10, 2024

Reviewed and Released by: Sarah Bell, Project Manager



Environmental Laboratories, Inc.

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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
Location Code: AES-EASTSIDE
Rush Request: Standard
P.O.#: 0897

Custody Information

Collected by:
Received by: SR1
Analyzed by: see "By" below

Date

12/21/23
12/26/23

Time

8:00
17:04

Laboratory Data

SDG ID: GCP74370
Phoenix ID: CP74371

Project ID: EAST SIDE COASTAL RESILIENCY
Client ID: DEP 81

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.38	0.38	mg/Kg	1	12/28/23	TH	SW6010D
Aluminum	7410	57	mg/Kg	10	12/27/23	TH	SW6010D
Arsenic	5.29	0.76	mg/Kg	1	12/28/23	TH	SW6010D
Barium	123	0.38	mg/Kg	1	12/28/23	TH	SW6010D
Beryllium	0.50	0.30	mg/Kg	1	12/28/23	TH	SW6010D
Calcium	9840	5.7	mg/Kg	1	12/28/23	TH	SW6010D
Cadmium	< 0.38	0.38	mg/Kg	1	12/28/23	TH	SW6010D
Cobalt	5.94	0.38	mg/Kg	1	12/28/23	TH	SW6010D
Chromium	14.0	0.38	mg/Kg	1	12/28/23	TH	SW6010D
Copper	46.7	0.8	mg/kg	1	12/28/23	TH	SW6010D
Iron	14900	5.7	mg/Kg	1	12/28/23	TH	SW6010D
Mercury	0.53	0.03	mg/Kg	2	12/27/23	ZT	SW7471B
Potassium	1020	57	mg/Kg	10	12/27/23	TH	SW6010D
Magnesium	2850	5.7	mg/Kg	1	12/28/23	TH	SW6010D
Manganese	233	0.38	mg/Kg	1	12/28/23	TH	SW6010D
Sodium	741	5.7	mg/Kg	1	12/28/23	TH	SW6010D
Nickel	16.6	0.38	mg/Kg	1	12/28/23	TH	SW6010D
Lead	149	0.38	mg/Kg	1	12/28/23	TH	SW6010D
Antimony	< 3.8	3.8	mg/Kg	1	12/28/23	TH	SW6010D
Selenium	< 1.5	1.5	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Barium	0.85	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	12/28/23	ZT	SW846 1311/7470
TCLP Lead	1.31	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.4	3.4	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/28/23	W/AL/AL	SW3010A
Trivalent Chromium	14.0	0.38	mg/kg	1	12/29/23		CALC 6010-7196
Vanadium	19.5	0.38	mg/Kg	1	12/28/23	TH	SW6010D
Zinc	112	0.8	mg/Kg	1	12/28/23	TH	SW6010D
Percent Solid	87		%		12/26/23	AC1	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/26/23	ER	SW846-Corr
Flash Point	>200	200	Degree F	1	01/02/24	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.44	0.44	mg/Kg	1	12/29/23	NP	SW7196A
Ignitability	Passed	140	degree F	1	01/02/24	G	SW846-Ignit
pH at 25C - Soil	8.24	1.00	pH Units	1	12/26/23 22:36	ER	SW846 9045D
Reactivity Cyanide	< 6	6	mg/Kg	1	12/27/23	NP/GD	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	12/28/23	NP/GD	SW846 CH7
Reactivity	Negative		Pos/Neg	1	12/29/23	NP/GD	SW846-React
Redox Potential	83.4		mV	1	12/26/23	ER	SM2580B-09
Total Cyanide (SW9010C Distill.)	9.25	0.57	mg/Kg	1	12/28/23	MW/GD	SW9012B
Mercury Digestion	Completed				12/27/23	AL/AL	SW7471B
Extraction of NY ETPH	Completed				12/26/23	C/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/27/23	L/MQ	SW3546
NJ EPH Extraction	Completed				12/26/23	H/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/28/23	C/A	SW3546
Soil Extraction for Pesticides	Completed				12/28/23	C/A	SW3546
Soil Extraction for SVOA	Completed				12/27/23	AC1/H/U	SW3546
TCLP Digestion Mercury	Completed				12/28/23	W/AL/AL	SW7470A
TCLP Herbicides Extraction	Completed				12/28/23	CV/MQ	SW8150 MOD
TCLP Extraction for Metals	Completed				12/27/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/27/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/28/23	S/S	SW3510C
TCLP Semi-Volatile Extraction	Completed				12/28/23	S/S	SW3510C
TCLP Extraction Volatiles	Completed				12/27/23	CV	SW1311
Total Metals Digest	Completed				12/26/23	L/AG	SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	140	91	mg/kg	10	12/27/23	JRB	NJEPH 10-08 R3
C9-C28	770	180	mg/kg	10	12/27/23	JRB	NJEPH 10-08 R3
Total EPH	910	91	mg/kg	10	12/27/23	JRB	NJEPH 10-08 R3

QA/QC Surrogates

% COD (surr)	Diluted Out		%	10	12/27/23	JRB	40 - 140 %
% Terphenyl (surr)	Diluted Out		%	10	12/27/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	8.0	mg/Kg	50	12/27/23	V	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	93		%	50	12/27/23	V	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	140	ug/Kg	10	12/29/23	JRB	SW8151A
2,4,5-TP (Silvex)	ND	140	ug/Kg	10	12/29/23	JRB	SW8151A
2,4-D	ND	290	ug/Kg	10	12/29/23	JRB	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	2900	ug/Kg	10	12/29/23	JRB	SW8151A
Dalapon	ND	140	ug/Kg	10	12/29/23	JRB	SW8151A
Dicamba	ND	140	ug/Kg	10	12/29/23	JRB	SW8151A
Dichloroprop	ND	290	ug/Kg	10	12/29/23	JRB	SW8151A
Dinoseb	ND	290	ug/Kg	10	12/29/23	JRB	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	61		%	10	12/29/23	JRB	30 - 150 %
% DCAA (Confirmation)	52		%	10	12/29/23	JRB	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	75	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1221	ND	75	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1232	ND	75	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1242	ND	75	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1248	ND	75	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1254	ND	75	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1260	ND	75	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1262	ND	75	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1268	ND	75	ug/Kg	2	12/29/23	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	93		%	2	12/29/23	SC	30 - 150 %
% DCBP (Confirmation)	80		%	2	12/29/23	SC	30 - 150 %
% TCMX	100		%	2	12/29/23	SC	30 - 150 %
% TCMX (Confirmation)	79		%	2	12/29/23	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.3	ug/Kg	2	12/29/23	AW	SW8081B
4,4' -DDE	ND	2.3	ug/Kg	2	12/29/23	AW	SW8081B
4,4' -DDT	ND	2.3	ug/Kg	2	12/29/23	AW	SW8081B
a-BHC	ND	7.5	ug/Kg	2	12/29/23	AW	SW8081B
a-Chlordane	ND	3.8	ug/Kg	2	12/29/23	AW	SW8081B
Aldrin	ND	3.8	ug/Kg	2	12/29/23	AW	SW8081B
b-BHC	ND	7.5	ug/Kg	2	12/29/23	AW	SW8081B
Chlordane	ND	38	ug/Kg	2	12/29/23	AW	SW8081B
d-BHC	ND	7.5	ug/Kg	2	12/29/23	AW	SW8081B
Dieldrin	ND	3.8	ug/Kg	2	12/29/23	AW	SW8081B
Endosulfan I	ND	7.5	ug/Kg	2	12/29/23	AW	SW8081B
Endosulfan II	ND	7.5	ug/Kg	2	12/29/23	AW	SW8081B
Endosulfan sulfate	ND	7.5	ug/Kg	2	12/29/23	AW	SW8081B
Endrin	ND	7.5	ug/Kg	2	12/29/23	AW	SW8081B
Endrin aldehyde	ND	7.5	ug/Kg	2	12/29/23	AW	SW8081B
Endrin ketone	ND	7.5	ug/Kg	2	12/29/23	AW	SW8081B
g-BHC	ND	1.5	ug/Kg	2	12/29/23	AW	SW8081B
g-Chlordane	ND	3.8	ug/Kg	2	12/29/23	AW	SW8081B
Heptachlor	ND	7.5	ug/Kg	2	12/29/23	AW	SW8081B
Heptachlor epoxide	ND	7.5	ug/Kg	2	12/29/23	AW	SW8081B
Methoxychlor	ND	38	ug/Kg	2	12/29/23	AW	SW8081B
Toxaphene	ND	150	ug/Kg	2	12/29/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	73		%	2	12/29/23	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	69		%	2	12/29/23	AW	30 - 150 %
% TCMX	70		%	2	12/29/23	AW	30 - 150 %
% TCMX (Confirmation)	71		%	2	12/29/23	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/29/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/29/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	64		%	10	12/29/23	JRB	30 - 150 %
% DCAA (Confirmation)	71		%	10	12/29/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
a-BHC	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Alachlor	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Aldrin	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
b-BHC	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Chlordane	ND	5.0	ug/L	10	12/29/23	AW	SW8081B
d-BHC	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Dieldrin	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endosulfan I	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Endosulfan II	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endrin	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Toxaphene	ND	20	ug/L	10	12/29/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	72		%	10	12/29/23	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	94		%	10	12/29/23	AW	30 - 150 %
%TCMX (Surrogate Rec)	81		%	10	12/29/23	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	92		%	10	12/29/23	AW	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	ND	280	mg/Kg	5	12/28/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	114		%	5	12/28/23	JRB	50 - 150 %
% Terphenyl (surr)	Interference		%	5	12/28/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethane	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethene	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dibromoethane	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloroethane	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloropropane	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
2-Hexanone	ND	25	ug/kg	1	12/29/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	25	ug/kg	1	12/29/23	JLI	SW8260D
Acetone	ND	50	ug/kg	1	12/29/23	JLI	SW8260D
Benzene	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
Bromochloromethane	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
Bromodichloromethane	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
Bromoform	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
Bromomethane	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
Carbon Disulfide	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
Carbon tetrachloride	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
Chlorobenzene	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
Chloroethane	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
Chloroform	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
Chloromethane	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
Cyclohexane	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
Dibromochloromethane	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
Dichlorodifluoromethane	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
Ethylbenzene	8.7	5.1	ug/kg	1	12/29/23	JLI	SW8260D
Isopropylbenzene	5.2	5.1	ug/kg	1	12/29/23	JLI	SW8260D
m&p-Xylene	15	5.1	ug/kg	1	12/29/23	JLI	SW8260D
Methyl ethyl ketone	ND	30	ug/kg	1	12/29/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	10	ug/kg	1	12/29/23	JLI	SW8260D
Methylacetate	ND	4.0	ug/kg	1	12/29/23	JLI	SW8260D
Methylcyclohexane	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
Methylene chloride	ND	25	ug/kg	1	12/29/23	JLI	SW8260D
o-Xylene	11	5.1	ug/kg	1	12/29/23	JLI	SW8260D
Styrene	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
Tetrachloroethene	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
Toluene	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
Total Xylenes	26.0	5.1	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
Trichloroethene	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorofluoromethane	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
Vinyl chloride	ND	5.1	ug/kg	1	12/29/23	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	95		%	1	12/29/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	92		%	1	12/29/23	JLI	70 - 130 %
% Dibromofluoromethane	93		%	1	12/29/23	JLI	70 - 130 %
% Toluene-d8	94		%	1	12/29/23	JLI	70 - 130 %

1,4-dioxane

1,4-dioxane	ND	76	ug/kg	1	12/29/23	JLI	SW8260D
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Volatiles

1,2,3-Trichloropropane	ND	5.1	ug/Kg	1	12/29/23	JLI	SW8260D
1,2,4-Trimethylbenzene	34	5.1	ug/Kg	1	12/29/23	JLI	SW8260D
1,3,5-Trimethylbenzene	20	5.1	ug/Kg	1	12/29/23	JLI	SW8260D
1,3-Dichloropropane	ND	5.1	ug/Kg	1	12/29/23	JLI	SW8260D
n-Butylbenzene	ND	5.1	ug/Kg	1	12/29/23	JLI	SW8260D
n-Propylbenzene	ND	5.1	ug/Kg	1	12/29/23	JLI	SW8260D
p-Isopropyltoluene	ND	5.1	ug/Kg	1	12/29/23	JLI	SW8260D
sec-Butylbenzene	ND	5.1	ug/Kg	1	12/29/23	JLI	SW8260D
tert-Butylbenzene	ND	5.1	ug/Kg	1	12/29/23	JLI	SW8260D

QA/QC Surrogates

% 1,2-dichlorobenzene-d4	95		%	1	12/29/23	JLI	70 - 130 %
% Bromofluorobenzene	92		%	1	12/29/23	JLI	70 - 130 %
% Dibromofluoromethane	93		%	1	12/29/23	JLI	70 - 130 %
% Toluene-d8	94		%	1	12/29/23	JLI	70 - 130 %

TCLP Volatiles

1,1-Dichloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260

QA/QC Surrogates

% 1,2-dichlorobenzene-d4 (10x)	99		%	10	12/28/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	90		%	10	12/28/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	94		%	10	12/28/23	HM	70 - 130 %
% Toluene-d8 (10x)	94		%	10	12/28/23	HM	70 - 130 %

Volatile Library Search Completed 12/29/23 JLI

Semivolatiles

1,1-Biphenyl	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2,3,4,6-tetrachlorophenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2,4-Dichlorophenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2,4-Dinitrophenol	ND	590	ug/Kg	1	12/28/23	MR	SW8270E
2,4-Dinitrotoluene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2,6-Dinitrotoluene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2-Chloronaphthalene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2-Chlorophenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2-Methylnaphthalene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2-Nitroaniline	ND	590	ug/Kg	1	12/28/23	MR	SW8270E
2-Nitrophenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	1	12/28/23	MR	SW8270E
3,3'-Dichlorobenzidine	ND	450	ug/Kg	1	12/28/23	MR	SW8270E
3-Nitroaniline	ND	590	ug/Kg	1	12/28/23	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	12/28/23	MR	SW8270E
4-Bromophenyl phenyl ether	ND	370	ug/Kg	1	12/28/23	MR	SW8270E
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
4-Chloroaniline	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
4-Nitroaniline	ND	590	ug/Kg	1	12/28/23	MR	SW8270E
4-Nitrophenol	ND	1100	ug/Kg	1	12/28/23	MR	SW8270E
Acenaphthene	480	260	ug/Kg	1	12/28/23	MR	SW8270E
Acenaphthylene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Acetophenone	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Anthracene	910	260	ug/Kg	1	12/28/23	MR	SW8270E
Atrazine	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Benz(a)anthracene	2200	260	ug/Kg	1	12/28/23	MR	SW8270E
Benzaldehyde	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(a)pyrene	2400	260	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(b)fluoranthene	2600	260	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(ghi)perylene	1200	260	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(k)fluoranthene	830	260	ug/Kg	1	12/28/23	MR	SW8270E
Benzyl butyl phthalate	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Bis(2-chloroethyl)ether	ND	370	ug/Kg	1	12/28/23	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Caprolactam	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Carbazole	ND	370	ug/Kg	1	12/28/23	MR	SW8270E
Chrysene	2300	260	ug/Kg	1	12/28/23	MR	SW8270E
Dibenz(a,h)anthracene	280	190	ug/Kg	1	12/28/23	MR	SW8270E
Dibenzofuran	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Diethyl phthalate	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Dimethylphthalate	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Di-n-butylphthalate	ND	740	ug/Kg	1	12/28/23	MR	SW8270E
Di-n-octylphthalate	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Fluoranthene	4800	260	ug/Kg	1	12/28/23	MR	SW8270E
Fluorene	480	260	ug/Kg	1	12/28/23	MR	SW8270E
Hexachlorobenzene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Hexachlorobutadiene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Indeno(1,2,3-cd)pyrene	1200	260	ug/Kg	1	12/28/23	MR	SW8270E
Isophorone	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Naphthalene	530	260	ug/Kg	1	12/28/23	MR	SW8270E
Nitrobenzene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
N-Nitrosodimethylamine	ND	370	ug/Kg	1	12/28/23	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	190	ug/Kg	1	12/28/23	MR	SW8270E
N-Nitrosodiphenylamine	ND	370	ug/Kg	1	12/28/23	MR	SW8270E
Pentachlorophenol	ND	370	ug/Kg	1	12/28/23	MR	SW8270E
Phenanthrene	4800	260	ug/Kg	1	12/28/23	MR	SW8270E
Phenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Pyrene	5300	260	ug/Kg	1	12/28/23	MR	SW8270E

QA/QC Surrogates

% 2,4,6-Tribromophenol	92		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorobiphenyl	81		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorophenol	70		%	1	12/28/23	MR	30 - 130 %
% Nitrobenzene-d5	71		%	1	12/28/23	MR	30 - 130 %
% Phenol-d5	79		%	1	12/28/23	MR	30 - 130 %
% Terphenyl-d14	88		%	1	12/28/23	MR	30 - 130 %

TCLP Acid/Base-Neutral

1,4-Dichlorobenzene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270

QA/QC Surrogates

% 2,4,6-Tribromophenol	92		%	1	12/29/23	MR	15 - 110 %
% 2-Fluorobiphenyl	74		%	1	12/29/23	MR	30 - 130 %
% 2-Fluorophenol	64		%	1	12/29/23	MR	15 - 110 %
% Nitrobenzene-d5	81		%	1	12/29/23	MR	30 - 130 %
% Phenol-d5	58		%	1	12/29/23	MR	15 - 110 %
% Terphenyl-d14	93		%	1	12/29/23	MR	30 - 130 %

Semivolatile Library Search Completed 12/29/23 MR

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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.

Hexavalent Chromium:
This sample is in a reducing state.

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

January 10, 2024

Reviewed and Released by: Sarah Bell, Project Manager



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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
 Location Code: AES-EASTSIDE
 Rush Request: Standard
 P.O.#: 0897

Custody Information

Collected by:
 Received by: SR1
 Analyzed by: see "By" below

Date

12/21/23
 12/26/23

Time

8:15
 17:04

Laboratory Data

SDG ID: GCP74370
 Phoenix ID: CP74372

Project ID: EAST SIDE COASTAL RESILIENCY
 Client ID: DEP 82

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.42	0.42	mg/Kg	1	12/28/23	TH	SW6010D
Aluminum	8820	62	mg/Kg	10	12/27/23	TH	SW6010D
Arsenic	4.76	0.83	mg/Kg	1	12/28/23	TH	SW6010D
Barium	130	0.42	mg/Kg	1	12/28/23	TH	SW6010D
Beryllium	0.57	0.33	mg/Kg	1	12/28/23	TH	SW6010D
Calcium	15700	62	mg/Kg	10	12/27/23	TH	SW6010D
Cadmium	0.44	0.42	mg/Kg	1	12/28/23	TH	SW6010D
Cobalt	11.1	0.42	mg/Kg	1	12/28/23	TH	SW6010D
Chromium	21.0	0.42	mg/Kg	1	12/28/23	TH	SW6010D
Copper	48.5	0.8	mg/kg	1	12/28/23	TH	SW6010D
Iron	22100	6.2	mg/Kg	1	12/28/23	TH	SW6010D
Mercury	1.24	0.03	mg/Kg	2	12/27/23	ZT	SW7471B
Potassium	3400	62	mg/Kg	10	12/27/23	TH	SW6010D
Magnesium	5600	6.2	mg/Kg	1	12/28/23	TH	SW6010D
Manganese	458	0.42	mg/Kg	1	12/28/23	TH	SW6010D
Sodium	428	6.2	mg/Kg	1	12/28/23	TH	SW6010D
Nickel	21.8	0.42	mg/Kg	1	12/28/23	TH	SW6010D
Lead	95.4	0.42	mg/Kg	1	12/28/23	TH	SW6010D
Antimony	< 4.2	4.2	mg/Kg	1	12/28/23	TH	SW6010D
Selenium	< 1.7	1.7	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Barium	0.78	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	12/28/23	ZT	SW846 1311/7470
TCLP Lead	2.20	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.7	3.7	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/28/23	W/AL/AL	SW3010A
Trivalent Chromium	21.0	0.42	mg/kg	1	12/29/23		CALC 6010-7196
Vanadium	30.8	0.42	mg/Kg	1	12/28/23	TH	SW6010D
Zinc	110	0.8	mg/Kg	1	12/28/23	TH	SW6010D
Percent Solid	80		%		12/26/23	AC1	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/26/23	ER	SW846-Corr
Flash Point	>200	200	Degree F	1	01/02/24	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.43	0.43	mg/Kg	1	12/29/23	NP	SW7196A
Ignitability	Passed	140	degree F	1	01/02/24	G	SW846-Ignit
pH at 25C - Soil	8.27	1.00	pH Units	1	12/26/23 23:19	ER	SW846 9045D
Reactivity Cyanide	< 6	6	mg/Kg	1	12/27/23	NP/GD	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	12/28/23	NP/GD	SW846 CH7
Reactivity	Negative		Pos/Neg	1	12/29/23	NP/GD	SW846-React
Redox Potential	9.9		mV	1	12/26/23	ER	SM2580B-09
Total Cyanide (SW9010C Distill.)	1.26	0.63	mg/Kg	1	12/28/23	MW/GD	SW9012B
Mercury Digestion	Completed				12/27/23	AL/AL	SW7471B
Extraction of NY ETPH	Completed				12/26/23	C/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/27/23	L/MQ	SW3546
NJ EPH Extraction	Completed				12/26/23	H/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/28/23	C/A	SW3546
Soil Extraction for Pesticides	Completed				12/28/23	C/A	SW3546
Soil Extraction for SVOA	Completed				12/27/23	AC1/H/U	SW3546
TCLP Digestion Mercury	Completed				12/28/23	W/AL/AL	SW7470A
TCLP Herbicides Extraction	Completed				12/28/23	CV/MQ	SW8150 MOD
TCLP Extraction for Metals	Completed				12/27/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/27/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/28/23	S/S	SW3510C
TCLP Semi-Volatile Extraction	Completed				12/28/23	S/S	SW3510C
TCLP Extraction Volatiles	Completed				12/27/23	CV	SW1311
Total Metals Digest	Completed				12/26/23	L/AG	SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	ND	9.7	mg/kg	1	12/27/23	JRB	NJEPH 10-08 R3
C9-C28	ND	19	mg/kg	1	12/27/23	JRB	NJEPH 10-08 R3
Total EPH	ND	9.7	mg/kg	1	12/27/23	JRB	NJEPH 10-08 R3

QA/QC Surrogates

% COD (surr)	83		%	1	12/27/23	JRB	40 - 140 %
% Terphenyl (surr)	82		%	1	12/27/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	7.4	mg/Kg	50	12/27/23	V	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	97		%	50	12/27/23	V	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	150	ug/Kg	10	12/29/23	JRB	SW8151A
2,4,5-TP (Silvex)	ND	150	ug/Kg	10	12/29/23	JRB	SW8151A
2,4-D	ND	310	ug/Kg	10	12/29/23	JRB	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	3100	ug/Kg	10	12/29/23	JRB	SW8151A
Dalapon	ND	150	ug/Kg	10	12/29/23	JRB	SW8151A
Dicamba	ND	150	ug/Kg	10	12/29/23	JRB	SW8151A
Dichloroprop	ND	310	ug/Kg	10	12/29/23	JRB	SW8151A
Dinoseb	ND	310	ug/Kg	10	12/29/23	JRB	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	85		%	10	12/29/23	JRB	30 - 150 %
% DCAA (Confirmation)	68		%	10	12/29/23	JRB	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	83	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1221	ND	83	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1232	ND	83	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1242	ND	83	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1248	ND	83	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1254	ND	83	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1260	ND	83	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1262	ND	83	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1268	ND	83	ug/Kg	2	12/29/23	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	67		%	2	12/29/23	SC	30 - 150 %
% DCBP (Confirmation)	62		%	2	12/29/23	SC	30 - 150 %
% TCMX	73		%	2	12/29/23	SC	30 - 150 %
% TCMX (Confirmation)	72		%	2	12/29/23	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.5	ug/Kg	2	12/29/23	KCA	SW8081B
4,4' -DDE	ND	2.5	ug/Kg	2	12/29/23	KCA	SW8081B
4,4' -DDT	ND	2.5	ug/Kg	2	12/29/23	KCA	SW8081B
a-BHC	ND	8.3	ug/Kg	2	12/29/23	KCA	SW8081B
a-Chlordane	ND	4.1	ug/Kg	2	12/29/23	KCA	SW8081B
Aldrin	ND	4.1	ug/Kg	2	12/29/23	KCA	SW8081B
b-BHC	ND	8.3	ug/Kg	2	12/29/23	KCA	SW8081B
Chlordane	ND	41	ug/Kg	2	12/29/23	KCA	SW8081B
d-BHC	ND	8.3	ug/Kg	2	12/29/23	KCA	SW8081B
Dieldrin	ND	4.1	ug/Kg	2	12/29/23	KCA	SW8081B
Endosulfan I	ND	8.3	ug/Kg	2	12/29/23	KCA	SW8081B
Endosulfan II	ND	8.3	ug/Kg	2	12/29/23	KCA	SW8081B
Endosulfan sulfate	ND	8.3	ug/Kg	2	12/29/23	KCA	SW8081B
Endrin	ND	8.3	ug/Kg	2	12/29/23	KCA	SW8081B
Endrin aldehyde	ND	8.3	ug/Kg	2	12/29/23	KCA	SW8081B
Endrin ketone	ND	8.3	ug/Kg	2	12/29/23	KCA	SW8081B
g-BHC	ND	1.7	ug/Kg	2	12/29/23	KCA	SW8081B
g-Chlordane	ND	4.1	ug/Kg	2	12/29/23	KCA	SW8081B
Heptachlor	ND	8.3	ug/Kg	2	12/29/23	KCA	SW8081B
Heptachlor epoxide	ND	8.3	ug/Kg	2	12/29/23	KCA	SW8081B
Methoxychlor	ND	41	ug/Kg	2	12/29/23	KCA	SW8081B
Toxaphene	ND	170	ug/Kg	2	12/29/23	KCA	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	73		%	2	12/29/23	KCA	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	75		%	2	12/29/23	KCA	30 - 150 %
% TCMX	74		%	2	12/29/23	KCA	30 - 150 %
% TCMX (Confirmation)	73		%	2	12/29/23	KCA	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/29/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/29/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	52		%	10	12/29/23	JRB	30 - 150 %
% DCAA (Confirmation)	58		%	10	12/29/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
a-BHC	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Alachlor	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Aldrin	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
b-BHC	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Chlordane	ND	5.0	ug/L	10	12/29/23	AW	SW8081B
d-BHC	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Dieldrin	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endosulfan I	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Endosulfan II	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endrin	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Toxaphene	ND	20	ug/L	10	12/29/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	82		%	10	12/29/23	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	110		%	10	12/29/23	AW	30 - 150 %
%TCMX (Surrogate Rec)	80		%	10	12/29/23	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	91		%	10	12/29/23	AW	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	77	61	mg/Kg	1	12/27/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	58		%	1	12/27/23	JRB	50 - 150 %
% Terphenyl (surr)	92		%	1	12/27/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethane	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethene	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dibromoethane	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloroethane	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloropropane	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
2-Hexanone	ND	45	ug/kg	1	12/29/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	45	ug/kg	1	12/29/23	JLI	SW8260D
Acetone	ND	50	ug/kg	1	12/29/23	JLI	SW8260D
Benzene	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
Bromochloromethane	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
Bromodichloromethane	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
Bromoform	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
Bromomethane	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
Carbon Disulfide	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
Carbon tetrachloride	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
Chlorobenzene	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
Chloroethane	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
Chloroform	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
Chloromethane	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
Cyclohexane	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
Dibromochloromethane	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
Dichlorodifluoromethane	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
Ethylbenzene	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
Isopropylbenzene	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
m&p-Xylene	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
Methyl ethyl ketone	ND	54	ug/kg	1	12/29/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	18	ug/kg	1	12/29/23	JLI	SW8260D
Methylacetate	ND	7.2	ug/kg	1	12/29/23	JLI	SW8260D
Methylcyclohexane	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
Methylene chloride	ND	45	ug/kg	1	12/29/23	JLI	SW8260D
o-Xylene	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
Styrene	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
Tetrachloroethene	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
Toluene	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
Total Xylenes	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
Trichloroethene	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorofluoromethane	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
Vinyl chloride	ND	9.0	ug/kg	1	12/29/23	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	1	12/29/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	95		%	1	12/29/23	JLI	70 - 130 %
% Dibromofluoromethane	93		%	1	12/29/23	JLI	70 - 130 %
% Toluene-d8	96		%	1	12/29/23	JLI	70 - 130 %

1,4-dioxane

1,4-dioxane	ND	100	ug/kg	1	12/29/23	JLI	SW8260D
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Volatiles

1,2,3-Trichloropropane	ND	9.0	ug/Kg	1	12/29/23	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	9.0	ug/Kg	1	12/29/23	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	9.0	ug/Kg	1	12/29/23	JLI	SW8260D
1,3-Dichloropropane	ND	9.0	ug/Kg	1	12/29/23	JLI	SW8260D
n-Butylbenzene	ND	9.0	ug/Kg	1	12/29/23	JLI	SW8260D
n-Propylbenzene	ND	9.0	ug/Kg	1	12/29/23	JLI	SW8260D
p-Isopropyltoluene	ND	9.0	ug/Kg	1	12/29/23	JLI	SW8260D
sec-Butylbenzene	ND	9.0	ug/Kg	1	12/29/23	JLI	SW8260D
tert-Butylbenzene	ND	9.0	ug/Kg	1	12/29/23	JLI	SW8260D

QA/QC Surrogates

% 1,2-dichlorobenzene-d4	98		%	1	12/29/23	JLI	70 - 130 %
% Bromofluorobenzene	95		%	1	12/29/23	JLI	70 - 130 %
% Dibromofluoromethane	93		%	1	12/29/23	JLI	70 - 130 %
% Toluene-d8	96		%	1	12/29/23	JLI	70 - 130 %

TCLP Volatiles

1,1-Dichloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260

QA/QC Surrogates

% 1,2-dichlorobenzene-d4 (10x)	99		%	10	12/28/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	89		%	10	12/28/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	96		%	10	12/28/23	HM	70 - 130 %
% Toluene-d8 (10x)	95		%	10	12/28/23	HM	70 - 130 %

Volatile Library Search Completed 12/29/23 JLI

Semivolatiles

1,1-Biphenyl	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
2,3,4,6-tetrachlorophenol	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
2,4,5-Trichlorophenol	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
2,4,6-Trichlorophenol	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
2,4-Dichlorophenol	ND	280	ug/Kg	1	12/28/23	MR	SW8270E

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
2,4-Dinitrophenol	ND	650	ug/Kg	1	12/28/23	MR	SW8270E
2,4-Dinitrotoluene	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
2,6-Dinitrotoluene	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
2-Chloronaphthalene	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
2-Chlorophenol	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
2-Methylnaphthalene	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
2-Methylphenol (o-cresol)	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
2-Nitroaniline	ND	650	ug/Kg	1	12/28/23	MR	SW8270E
2-Nitrophenol	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	400	ug/Kg	1	12/28/23	MR	SW8270E
3,3'-Dichlorobenzidine	ND	480	ug/Kg	1	12/28/23	MR	SW8270E
3-Nitroaniline	ND	650	ug/Kg	1	12/28/23	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	1	12/28/23	MR	SW8270E
4-Bromophenyl phenyl ether	ND	400	ug/Kg	1	12/28/23	MR	SW8270E
4-Chloro-3-methylphenol	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
4-Chloroaniline	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
4-Nitroaniline	ND	650	ug/Kg	1	12/28/23	MR	SW8270E
4-Nitrophenol	ND	1200	ug/Kg	1	12/28/23	MR	SW8270E
Acenaphthene	320	280	ug/Kg	1	12/28/23	MR	SW8270E
Acenaphthylene	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
Acetophenone	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
Anthracene	670	280	ug/Kg	1	12/28/23	MR	SW8270E
Atrazine	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
Benz(a)anthracene	1500	280	ug/Kg	1	12/28/23	MR	SW8270E
Benzaldehyde	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(a)pyrene	1600	280	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(b)fluoranthene	1800	280	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(ghi)perylene	830	280	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(k)fluoranthene	650	280	ug/Kg	1	12/28/23	MR	SW8270E
Benzyl butyl phthalate	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
Bis(2-chloroethyl)ether	ND	400	ug/Kg	1	12/28/23	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
Caprolactam	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
Carbazole	ND	400	ug/Kg	1	12/28/23	MR	SW8270E
Chrysene	1400	280	ug/Kg	1	12/28/23	MR	SW8270E
Dibenz(a,h)anthracene	210	200	ug/Kg	1	12/28/23	MR	SW8270E
Dibenzofuran	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
Diethyl phthalate	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
Dimethylphthalate	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
Di-n-butylphthalate	ND	810	ug/Kg	1	12/28/23	MR	SW8270E
Di-n-octylphthalate	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
Fluoranthene	3400	280	ug/Kg	1	12/28/23	MR	SW8270E
Fluorene	330	280	ug/Kg	1	12/28/23	MR	SW8270E
Hexachlorobenzene	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
Hexachlorobutadiene	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
Hexachlorocyclopentadiene	ND	280	ug/Kg	1	12/28/23	MR	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
Indeno(1,2,3-cd)pyrene	930	280	ug/Kg	1	12/28/23	MR	SW8270E
Isophorone	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
Naphthalene	290	280	ug/Kg	1	12/28/23	MR	SW8270E
Nitrobenzene	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
N-Nitrosodimethylamine	ND	400	ug/Kg	1	12/28/23	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	1	12/28/23	MR	SW8270E
N-Nitrosodiphenylamine	ND	400	ug/Kg	1	12/28/23	MR	SW8270E
Pentachlorophenol	ND	400	ug/Kg	1	12/28/23	MR	SW8270E
Phenanthrene	2500	280	ug/Kg	1	12/28/23	MR	SW8270E
Phenol	ND	280	ug/Kg	1	12/28/23	MR	SW8270E
Pyrene	2800	280	ug/Kg	1	12/28/23	MR	SW8270E
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	98		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorobiphenyl	85		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorophenol	71		%	1	12/28/23	MR	30 - 130 %
% Nitrobenzene-d5	69		%	1	12/28/23	MR	30 - 130 %
% Phenol-d5	80		%	1	12/28/23	MR	30 - 130 %
% Terphenyl-d14	92		%	1	12/28/23	MR	30 - 130 %
<u>TCLP Acid/Base-Neutral</u>							
1,4-Dichlorobenzene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	95		%	1	12/29/23	MR	15 - 110 %
% 2-Fluorobiphenyl	79		%	1	12/29/23	MR	30 - 130 %
% 2-Fluorophenol	64		%	1	12/29/23	MR	15 - 110 %
% Nitrobenzene-d5	83		%	1	12/29/23	MR	30 - 130 %
% Phenol-d5	58		%	1	12/29/23	MR	15 - 110 %
% Terphenyl-d14	93		%	1	12/29/23	MR	30 - 130 %
Semivolatile Library Search	Completed				01/04/24	MR	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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.

Hexavalent Chromium:
This sample is in a reducing state.

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

January 10, 2024

Reviewed and Released by: Sarah Bell, Project Manager



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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
 Location Code: AES-EASTSIDE
 Rush Request: Standard
 P.O.#: 0897

Custody Information

Collected by:
 Received by: SR1
 Analyzed by: see "By" below

Date

12/21/23
 12/26/23

Time

8:45
 17:04

Laboratory Data

SDG ID: GCP74370
 Phoenix ID: CP74373

Project ID: EAST SIDE COASTAL RESILIENCY
 Client ID: DEP 83

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.34	0.34	mg/Kg	1	12/28/23	TH	SW6010D
Aluminum	5500	51	mg/Kg	10	12/27/23	TH	SW6010D
Arsenic	6.20	0.68	mg/Kg	1	12/28/23	TH	SW6010D
Barium	70.5	0.34	mg/Kg	1	12/28/23	TH	SW6010D
Beryllium	0.37	0.27	mg/Kg	1	12/28/23	TH	SW6010D
Calcium	7530	5.1	mg/Kg	1	12/28/23	TH	SW6010D
Cadmium	< 0.34	0.34	mg/Kg	1	12/28/23	TH	SW6010D
Cobalt	6.51	0.34	mg/Kg	1	12/28/23	TH	SW6010D
Chromium	14.6	0.34	mg/Kg	1	12/28/23	TH	SW6010D
Copper	25.7	0.7	mg/kg	1	12/28/23	TH	SW6010D
Iron	13700	5.1	mg/Kg	1	12/28/23	TH	SW6010D
Mercury	0.75	0.03	mg/Kg	2	12/27/23	ZT	SW7471B
Potassium	902	51	mg/Kg	10	12/27/23	TH	SW6010D
Magnesium	2420	5.1	mg/Kg	1	12/28/23	TH	SW6010D
Manganese	655	0.34	mg/Kg	1	12/28/23	TH	SW6010D
Sodium	128	5.1	mg/Kg	1	12/28/23	TH	SW6010D
Nickel	16.3	0.34	mg/Kg	1	12/28/23	TH	SW6010D
Lead	133	0.34	mg/Kg	1	12/28/23	TH	SW6010D
Antimony	< 3.4	3.4	mg/Kg	1	12/28/23	TH	SW6010D
Selenium	< 1.4	1.4	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Barium	0.73	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	12/28/23	ZT	SW846 1311/7470
TCLP Lead	0.21	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.0	3.0	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/28/23	W/AL/AL	SW3010A
Trivalent Chromium	14.6	0.34	mg/kg	1	01/04/24		CALC 6010-7196
Vanadium	18.0	0.34	mg/Kg	1	12/28/23	TH	SW6010D
Zinc	67.5	0.7	mg/Kg	1	12/28/23	TH	SW6010D
Percent Solid	89		%		12/26/23	AC1	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/26/23	ER	SW846-Corr
Flash Point	>200	200	Degree F	1	01/02/24	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.39	0.39	mg/Kg	1	12/29/23	NP	SW7196A
Ignitability	Passed	140	degree F	1	01/02/24	G	SW846-Ignit
pH at 25C - Soil	8.49	1.00	pH Units	1	12/26/23 23:19	ER	SW846 9045D
Reactivity Cyanide	< 5	5	mg/Kg	1	12/27/23	NP/GD	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	12/28/23	NP/GD	SW846 CH7
Reactivity	Negative		Pos/Neg	1	12/29/23	NP/GD	SW846-React
Redox Potential	10.0		mV	1	12/26/23	ER	SM2580B-09
Total Cyanide (SW9010C Distill.)	7.44	0.47	mg/Kg	1	12/28/23	MW/GD	SW9012B
Mercury Digestion	Completed				12/27/23	AL/AL	SW7471B
Extraction of NY ETPH	Completed				12/26/23	C/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/27/23	L/MQ	SW3546
NJ EPH Extraction	Completed				12/27/23	C/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/28/23	C/A	SW3546
Soil Extraction for Pesticides	Completed				12/28/23	C/A	SW3546
Soil Extraction for SVOA	Completed				12/27/23	AC1/H/U	SW3546
TCLP Digestion Mercury	Completed				12/28/23	W/AL/AL	SW7470A
TCLP Herbicides Extraction	Completed				12/28/23	CV/MQ	SW8150 MOD
TCLP Extraction for Metals	Completed				12/27/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/27/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/28/23	S/S	SW3510C
TCLP Semi-Volatile Extraction	Completed				12/28/23	S/S	SW3510C
TCLP Extraction Volatiles	Completed				12/27/23	CV	SW1311
Total Metals Digest	Completed				12/26/23	L/AG	SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	ND	8.7	mg/kg	1	12/28/23	JRB	NJEPH 10-08 R3
C9-C28	ND	17	mg/kg	1	12/28/23	JRB	NJEPH 10-08 R3
Total EPH	ND	8.7	mg/kg	1	12/28/23	JRB	NJEPH 10-08 R3

QA/QC Surrogates

% COD (surr)	66		%	1	12/28/23	JRB	40 - 140 %
% Terphenyl (surr)	69		%	1	12/28/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	7.1	mg/Kg	50	12/27/23	V	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	94		%	50	12/27/23	V	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	140	ug/Kg	10	12/29/23	JRB	SW8151A
2,4,5-TP (Silvex)	ND	140	ug/Kg	10	12/29/23	JRB	SW8151A
2,4-D	ND	270	ug/Kg	10	12/29/23	JRB	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	2700	ug/Kg	10	12/29/23	JRB	SW8151A
Dalapon	ND	140	ug/Kg	10	12/29/23	JRB	SW8151A
Dicamba	ND	140	ug/Kg	10	12/29/23	JRB	SW8151A
Dichloroprop	ND	270	ug/Kg	10	12/29/23	JRB	SW8151A
Dinoseb	ND	270	ug/Kg	10	12/29/23	JRB	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	38		%	10	12/29/23	JRB	30 - 150 %
% DCAA (Confirmation)	34		%	10	12/29/23	JRB	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1221	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1232	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1242	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1248	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1254	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1260	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1262	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1268	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	60		%	2	12/29/23	SC	30 - 150 %
% DCBP (Confirmation)	56		%	2	12/29/23	SC	30 - 150 %
% TCMX	74		%	2	12/29/23	SC	30 - 150 %
% TCMX (Confirmation)	64		%	2	12/29/23	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.2	ug/Kg	2	12/29/23	AW	SW8081B
4,4' -DDE	ND	2.2	ug/Kg	2	12/29/23	AW	SW8081B
4,4' -DDT	ND	2.2	ug/Kg	2	12/29/23	AW	SW8081B
a-BHC	ND	7.4	ug/Kg	2	12/29/23	AW	SW8081B
a-Chlordane	ND	3.7	ug/Kg	2	12/29/23	AW	SW8081B
Aldrin	ND	3.7	ug/Kg	2	12/29/23	AW	SW8081B
b-BHC	ND	7.4	ug/Kg	2	12/29/23	AW	SW8081B
Chlordane	ND	37	ug/Kg	2	12/29/23	AW	SW8081B
d-BHC	ND	7.4	ug/Kg	2	12/29/23	AW	SW8081B
Dieldrin	ND	3.7	ug/Kg	2	12/29/23	AW	SW8081B
Endosulfan I	ND	7.4	ug/Kg	2	12/29/23	AW	SW8081B
Endosulfan II	ND	7.4	ug/Kg	2	12/29/23	AW	SW8081B
Endosulfan sulfate	ND	7.4	ug/Kg	2	12/29/23	AW	SW8081B
Endrin	ND	7.4	ug/Kg	2	12/29/23	AW	SW8081B
Endrin aldehyde	ND	10	ug/Kg	2	12/29/23	AW	SW8081B
Endrin ketone	ND	7.4	ug/Kg	2	12/29/23	AW	SW8081B
g-BHC	ND	1.5	ug/Kg	2	12/29/23	AW	SW8081B
g-Chlordane	ND	3.7	ug/Kg	2	12/29/23	AW	SW8081B
Heptachlor	ND	7.4	ug/Kg	2	12/29/23	AW	SW8081B
Heptachlor epoxide	ND	7.4	ug/Kg	2	12/29/23	AW	SW8081B
Methoxychlor	ND	37	ug/Kg	2	12/29/23	AW	SW8081B
Toxaphene	ND	150	ug/Kg	2	12/29/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	85		%	2	12/29/23	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	58		%	2	12/29/23	AW	30 - 150 %
% TCMX	87		%	2	12/29/23	AW	30 - 150 %
% TCMX (Confirmation)	58		%	2	12/29/23	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/29/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/29/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	62		%	10	12/29/23	JRB	30 - 150 %
% DCAA (Confirmation)	70		%	10	12/29/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
a-BHC	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Alachlor	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Aldrin	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
b-BHC	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Chlordane	ND	5.0	ug/L	10	12/29/23	AW	SW8081B
d-BHC	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Dieldrin	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endosulfan I	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Endosulfan II	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endrin	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Toxaphene	ND	20	ug/L	10	12/29/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	67		%	10	12/29/23	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	90		%	10	12/29/23	AW	30 - 150 %
%TCMX (Surrogate Rec)	78		%	10	12/29/23	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	86		%	10	12/29/23	AW	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	170	55	mg/Kg	1	12/27/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	76		%	1	12/27/23	JRB	50 - 150 %
% Terphenyl (surr)	72		%	1	12/27/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethane	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethene	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dibromoethane	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloroethane	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloropropane	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
2-Hexanone	ND	39	ug/kg	1	12/29/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	39	ug/kg	1	12/29/23	JLI	SW8260D
Acetone	ND	50	ug/kg	1	12/29/23	JLI	SW8260D
Benzene	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
Bromochloromethane	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
Bromodichloromethane	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
Bromoform	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
Bromomethane	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
Carbon Disulfide	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
Carbon tetrachloride	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
Chlorobenzene	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
Chloroethane	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
Chloroform	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
Chloromethane	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
Cyclohexane	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
Dibromochloromethane	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
Dichlorodifluoromethane	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
Ethylbenzene	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
Isopropylbenzene	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
m&p-Xylene	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
Methyl ethyl ketone	ND	47	ug/kg	1	12/29/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	16	ug/kg	1	12/29/23	JLI	SW8260D
Methylacetate	ND	6.3	ug/kg	1	12/29/23	JLI	SW8260D
Methylcyclohexane	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
Methylene chloride	ND	39	ug/kg	1	12/29/23	JLI	SW8260D
o-Xylene	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
Styrene	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
Tetrachloroethene	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
Toluene	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
Total Xylenes	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
Trichloroethene	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorofluoromethane	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
Vinyl chloride	ND	7.9	ug/kg	1	12/29/23	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	1	12/29/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	89		%	1	12/29/23	JLI	70 - 130 %
% Dibromofluoromethane	92		%	1	12/29/23	JLI	70 - 130 %
% Toluene-d8	96		%	1	12/29/23	JLI	70 - 130 %

1,4-dioxane

1,4-dioxane	ND	100	ug/kg	1	12/29/23	JLI	SW8260D
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Volatiles

1,2,3-Trichloropropane	ND	7.9	ug/Kg	1	12/29/23	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	7.9	ug/Kg	1	12/29/23	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	7.9	ug/Kg	1	12/29/23	JLI	SW8260D
1,3-Dichloropropane	ND	7.9	ug/Kg	1	12/29/23	JLI	SW8260D
n-Butylbenzene	ND	7.9	ug/Kg	1	12/29/23	JLI	SW8260D
n-Propylbenzene	ND	7.9	ug/Kg	1	12/29/23	JLI	SW8260D
p-Isopropyltoluene	ND	7.9	ug/Kg	1	12/29/23	JLI	SW8260D
sec-Butylbenzene	ND	7.9	ug/Kg	1	12/29/23	JLI	SW8260D
tert-Butylbenzene	ND	7.9	ug/Kg	1	12/29/23	JLI	SW8260D

QA/QC Surrogates

% 1,2-dichlorobenzene-d4	101		%	1	12/29/23	JLI	70 - 130 %
% Bromofluorobenzene	89		%	1	12/29/23	JLI	70 - 130 %
% Dibromofluoromethane	92		%	1	12/29/23	JLI	70 - 130 %
% Toluene-d8	96		%	1	12/29/23	JLI	70 - 130 %

TCLP Volatiles

1,1-Dichloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260

QA/QC Surrogates

% 1,2-dichlorobenzene-d4 (10x)	99		%	10	12/28/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	90		%	10	12/28/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	97		%	10	12/28/23	HM	70 - 130 %
% Toluene-d8 (10x)	95		%	10	12/28/23	HM	70 - 130 %

Volatile Library Search Completed 12/29/23 JLI

Semivolatiles

1,1-Biphenyl	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2,3,4,6-tetrachlorophenol	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2,4-Dichlorophenol	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2,4-Dinitrophenol	ND	590	ug/Kg	1	12/28/23	KCA	SW8270E
2,4-Dinitrotoluene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2,6-Dinitrotoluene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2-Chloronaphthalene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2-Chlorophenol	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2-Methylnaphthalene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
2-Nitroaniline	ND	590	ug/Kg	1	12/28/23	KCA	SW8270E
2-Nitrophenol	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	1	12/28/23	KCA	SW8270E
3,3'-Dichlorobenzidine	ND	440	ug/Kg	1	12/28/23	KCA	SW8270E
3-Nitroaniline	ND	590	ug/Kg	1	12/28/23	KCA	SW8270E
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	12/28/23	KCA	SW8270E
4-Bromophenyl phenyl ether	ND	370	ug/Kg	1	12/28/23	KCA	SW8270E
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
4-Chloroaniline	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
4-Nitroaniline	ND	590	ug/Kg	1	12/28/23	KCA	SW8270E
4-Nitrophenol	ND	1100	ug/Kg	1	12/28/23	KCA	SW8270E
Acenaphthene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Acenaphthylene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Acetophenone	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Anthracene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Atrazine	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Benz(a)anthracene	650	260	ug/Kg	1	12/28/23	KCA	SW8270E
Benzaldehyde	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Benzo(a)pyrene	720	260	ug/Kg	1	12/28/23	KCA	SW8270E
Benzo(b)fluoranthene	770	260	ug/Kg	1	12/28/23	KCA	SW8270E
Benzo(ghi)perylene	390	260	ug/Kg	1	12/28/23	KCA	SW8270E
Benzo(k)fluoranthene	280	260	ug/Kg	1	12/28/23	KCA	SW8270E
Benzyl butyl phthalate	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Bis(2-chloroethyl)ether	ND	370	ug/Kg	1	12/28/23	KCA	SW8270E
Bis(2-ethylhexyl)phthalate	ND	500	ug/Kg	1	12/28/23	KCA	SW8270E
Caprolactam	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Carbazole	ND	370	ug/Kg	1	12/28/23	KCA	SW8270E
Chrysene	630	260	ug/Kg	1	12/28/23	KCA	SW8270E
Dibenz(a,h)anthracene	ND	180	ug/Kg	1	12/28/23	KCA	SW8270E
Dibenzofuran	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Diethyl phthalate	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Dimethylphthalate	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Di-n-butylphthalate	ND	730	ug/Kg	1	12/28/23	KCA	SW8270E
Di-n-octylphthalate	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Fluoranthene	1200	260	ug/Kg	1	12/28/23	KCA	SW8270E
Fluorene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Hexachlorobenzene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Hexachlorobutadiene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Indeno(1,2,3-cd)pyrene	430	260	ug/Kg	1	12/28/23	KCA	SW8270E
Isophorone	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Naphthalene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Nitrobenzene	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
N-Nitrosodimethylamine	ND	370	ug/Kg	1	12/28/23	KCA	SW8270E
N-Nitrosodi-n-propylamine	ND	180	ug/Kg	1	12/28/23	KCA	SW8270E
N-Nitrosodiphenylamine	ND	370	ug/Kg	1	12/28/23	KCA	SW8270E
Pentachlorophenol	ND	370	ug/Kg	1	12/28/23	KCA	SW8270E
Phenanthrene	880	260	ug/Kg	1	12/28/23	KCA	SW8270E
Phenol	ND	260	ug/Kg	1	12/28/23	KCA	SW8270E
Pyrene	1100	260	ug/Kg	1	12/28/23	KCA	SW8270E

QA/QC Surrogates

% 2,4,6-Tribromophenol	97		%	1	12/28/23	KCA	30 - 130 %
% 2-Fluorobiphenyl	78		%	1	12/28/23	KCA	30 - 130 %
% 2-Fluorophenol	62		%	1	12/28/23	KCA	30 - 130 %
% Nitrobenzene-d5	66		%	1	12/28/23	KCA	30 - 130 %
% Phenol-d5	71		%	1	12/28/23	KCA	30 - 130 %
% Terphenyl-d14	87		%	1	12/28/23	KCA	30 - 130 %

TCLP Acid/Base-Neutral

1,4-Dichlorobenzene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270

QA/QC Surrogates

% 2,4,6-Tribromophenol	94		%	1	12/29/23	MR	15 - 110 %
% 2-Fluorobiphenyl	75		%	1	12/29/23	MR	30 - 130 %
% 2-Fluorophenol	63		%	1	12/29/23	MR	15 - 110 %
% Nitrobenzene-d5	81		%	1	12/29/23	MR	30 - 130 %
% Phenol-d5	56		%	1	12/29/23	MR	15 - 110 %
% Terphenyl-d14	94		%	1	12/29/23	MR	30 - 130 %

Semivolatile Library Search Completed 12/28/23 KCA

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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.

Hexavalent Chromium:
This sample is in a reducing state.

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

January 10, 2024

Reviewed and Released by: Sarah Bell, Project Manager



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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
 Location Code: AES-EASTSIDE
 Rush Request: Standard
 P.O.#: 0897

Custody Information

Collected by:
 Received by: SR1
 Analyzed by: see "By" below

Date

12/21/23
 12/26/23

Time

12:30
 17:04

Laboratory Data

SDG ID: GCP74370
 Phoenix ID: CP74374

Project ID: EAST SIDE COASTAL RESILIENCY
 Client ID: DEP 84

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.35	0.35	mg/Kg	1	12/28/23	TH	SW6010D
Aluminum	6000	52	mg/Kg	10	12/27/23	TH	SW6010D
Arsenic	39.7	0.70	mg/Kg	1	12/28/23	TH	SW6010D
Barium	108	0.35	mg/Kg	1	12/28/23	TH	SW6010D
Beryllium	0.45	0.28	mg/Kg	1	12/28/23	TH	SW6010D
Calcium	8120	5.2	mg/Kg	1	12/28/23	TH	SW6010D
Cadmium	< 0.35	0.35	mg/Kg	1	12/28/23	TH	SW6010D
Cobalt	9.20	0.35	mg/Kg	1	12/28/23	TH	SW6010D
Chromium	18.7	0.35	mg/Kg	1	12/28/23	TH	SW6010D
Copper	43.9	0.7	mg/kg	1	12/28/23	TH	SW6010D
Iron	18000	5.2	mg/Kg	1	12/28/23	TH	SW6010D
Mercury	0.21	0.03	mg/Kg	2	12/27/23	ZT	SW7471B
Potassium	2000	52	mg/Kg	10	12/27/23	TH	SW6010D
Magnesium	4400	5.2	mg/Kg	1	12/28/23	TH	SW6010D
Manganese	289	0.35	mg/Kg	1	12/28/23	TH	SW6010D
Sodium	513	5.2	mg/Kg	1	12/28/23	TH	SW6010D
Nickel	14.9	0.35	mg/Kg	1	12/28/23	TH	SW6010D
Lead	162	0.35	mg/Kg	1	12/28/23	TH	SW6010D
Antimony	< 3.5	3.5	mg/Kg	1	12/28/23	TH	SW6010D
Selenium	< 1.4	1.4	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Barium	1.37	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	12/28/23	ZT	SW846 1311/7470
TCLP Lead	0.18	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.1	3.1	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/28/23	W/AL/AL	SW3010A
Trivalent Chromium	18.7	0.35	mg/kg	1	12/29/23		CALC 6010-7196
Vanadium	27.4	0.35	mg/Kg	1	12/28/23	TH	SW6010D
Zinc	126	0.7	mg/Kg	1	12/28/23	TH	SW6010D
Percent Solid	92		%		12/26/23	AC1	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/26/23	ER	SW846-Corr 1
Flash Point	>200	200	Degree F	1	01/02/24	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.41	0.41	mg/Kg	1	12/29/23	NP	SW7196A
Ignitability	Passed	140	degree F	1	01/02/24	G	SW846-Ignit 1
pH at 25C - Soil	8.42	1.00	pH Units	1	12/26/23 23:20	ER	SW846 9045D 1
Reactivity Cyanide	< 5	5	mg/Kg	1	12/27/23	NP/GD	SW846 7.3.3.1/90 1
Reactivity Sulfide	< 20	20	mg/Kg	1	12/28/23	NP/GD	SW846 CH7 1
Reactivity	Negative		Pos/Neg	1	12/29/23	NP/GD	SW846-React 1
Redox Potential	99.6		mV	1	12/26/23	ER	SM2580B-09 1
Total Cyanide (SW9010C Distill.)	10.2	0.54	mg/Kg	1	12/28/23	MW/GD	SW9012B
Mercury Digestion	Completed				12/27/23	AL/AL	SW7471B
Extraction of NY ETPH	Completed				12/26/23	C/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/27/23	L/MQ	SW3546
NJ EPH Extraction	Completed				12/27/23	C/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/28/23	C/A	SW3546
Soil Extraction for Pesticides	Completed				12/28/23	C/A	SW3546
Soil Extraction for SVOA	Completed				12/27/23	AC1/H/U	SW3546
TCLP Digestion Mercury	Completed				12/28/23	W/AL/AL	SW7470A
TCLP Herbicides Extraction	Completed				12/28/23	CV/MQ	SW8150 MOD
TCLP Extraction for Metals	Completed				12/27/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/27/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/28/23	S/S	SW3510C
TCLP Semi-Volatile Extraction	Completed				12/28/23	S/S	SW3510C
TCLP Extraction Volatiles	Completed				12/27/23	CV	SW1311
Total Metals Digest	Completed				12/26/23	L/AG	SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	ND	8.4	mg/kg	1	12/28/23	JRB	NJEPH 10-08 R3 1
C9-C28	ND	17	mg/kg	1	12/28/23	JRB	NJEPH 10-08 R3 1
Total EPH	ND	8.4	mg/kg	1	12/28/23	JRB	NJEPH 10-08 R3 1

QA/QC Surrogates

% COD (surr)	69		%	1	12/28/23	JRB	40 - 140 %
% Terphenyl (surr)	71		%	1	12/28/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	6.6	mg/Kg	50	12/27/23	V	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	90		%	50	12/27/23	V	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	130	ug/Kg	10	12/29/23	JRB	SW8151A
2,4,5-TP (Silvex)	ND	130	ug/Kg	10	12/29/23	JRB	SW8151A
2,4-D	ND	270	ug/Kg	10	12/29/23	JRB	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	2700	ug/Kg	10	12/29/23	JRB	SW8151A
Dalapon	ND	130	ug/Kg	10	12/29/23	JRB	SW8151A
Dicamba	ND	130	ug/Kg	10	12/29/23	JRB	SW8151A
Dichloroprop	ND	270	ug/Kg	10	12/29/23	JRB	SW8151A
Dinoseb	ND	270	ug/Kg	10	12/29/23	JRB	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	76		%	10	12/29/23	JRB	30 - 150 %
% DCAA (Confirmation)	64		%	10	12/29/23	JRB	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	70	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1221	ND	70	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1232	ND	70	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1242	ND	70	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1248	ND	70	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1254	ND	70	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1260	ND	70	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1262	ND	70	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1268	ND	70	ug/Kg	2	12/29/23	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	77		%	2	12/29/23	SC	30 - 150 %
% DCBP (Confirmation)	70		%	2	12/29/23	SC	30 - 150 %
% TCMX	89		%	2	12/29/23	SC	30 - 150 %
% TCMX (Confirmation)	86		%	2	12/29/23	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	2.6	2.1	ug/Kg	2	12/29/23	AW	SW8081B
4,4' -DDE	9.1	2.1	ug/Kg	2	12/29/23	AW	SW8081B
4,4' -DDT	2.9	2.1	ug/Kg	2	12/29/23	AW	SW8081B
a-BHC	ND	7.0	ug/Kg	2	12/29/23	AW	SW8081B
a-Chlordane	ND	3.5	ug/Kg	2	12/29/23	AW	SW8081B
Aldrin	ND	3.5	ug/Kg	2	12/29/23	AW	SW8081B
b-BHC	ND	7.0	ug/Kg	2	12/29/23	AW	SW8081B
Chlordane	ND	35	ug/Kg	2	12/29/23	AW	SW8081B
d-BHC	ND	7.0	ug/Kg	2	12/29/23	AW	SW8081B
Dieldrin	ND	3.5	ug/Kg	2	12/29/23	AW	SW8081B
Endosulfan I	ND	7.0	ug/Kg	2	12/29/23	AW	SW8081B
Endosulfan II	ND	7.0	ug/Kg	2	12/29/23	AW	SW8081B
Endosulfan sulfate	ND	7.0	ug/Kg	2	12/29/23	AW	SW8081B
Endrin	ND	7.0	ug/Kg	2	12/29/23	AW	SW8081B
Endrin aldehyde	ND	7.0	ug/Kg	2	12/29/23	AW	SW8081B
Endrin ketone	ND	7.0	ug/Kg	2	12/29/23	AW	SW8081B
g-BHC	ND	1.4	ug/Kg	2	12/29/23	AW	SW8081B
g-Chlordane	ND	3.5	ug/Kg	2	12/29/23	AW	SW8081B
Heptachlor	ND	7.0	ug/Kg	2	12/29/23	AW	SW8081B
Heptachlor epoxide	ND	7.0	ug/Kg	2	12/29/23	AW	SW8081B
Methoxychlor	ND	35	ug/Kg	2	12/29/23	AW	SW8081B
Toxaphene	ND	140	ug/Kg	2	12/29/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	77		%	2	12/29/23	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	139		%	2	12/29/23	AW	30 - 150 %
% TCMX	98		%	2	12/29/23	AW	30 - 150 %
% TCMX (Confirmation)	141		%	2	12/29/23	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/29/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/29/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	53		%	10	12/29/23	JRB	30 - 150 %
% DCAA (Confirmation)	58		%	10	12/29/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
a-BHC	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Alachlor	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Aldrin	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
b-BHC	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Chlordane	ND	5.0	ug/L	10	12/29/23	AW	SW8081B
d-BHC	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Dieldrin	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endosulfan I	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Endosulfan II	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endrin	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Toxaphene	ND	20	ug/L	10	12/29/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	74		%	10	12/29/23	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	96		%	10	12/29/23	AW	30 - 150 %
%TCMX (Surrogate Rec)	70		%	10	12/29/23	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	78		%	10	12/29/23	AW	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	ND	53	mg/Kg	1	12/27/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	85		%	1	12/27/23	JRB	50 - 150 %
% Terphenyl (surr)	87		%	1	12/27/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethane	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethene	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dibromoethane	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloroethane	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloropropane	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
2-Hexanone	ND	40	ug/kg	1	12/29/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	40	ug/kg	1	12/29/23	JLI	SW8260D
Acetone	ND	50	ug/kg	1	12/29/23	JLI	SW8260D
Benzene	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
Bromochloromethane	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
Bromodichloromethane	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
Bromoform	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
Bromomethane	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
Carbon Disulfide	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
Carbon tetrachloride	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
Chlorobenzene	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
Chloroethane	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
Chloroform	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
Chloromethane	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
Cyclohexane	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
Dibromochloromethane	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
Dichlorodifluoromethane	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
Ethylbenzene	150	130	ug/kg	50	12/30/23	JLI	SW8260D
Isopropylbenzene	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
m&p-Xylene	600	330	ug/kg	50	12/30/23	JLI	SW8260D
Methyl ethyl ketone	ND	49	ug/kg	1	12/29/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	16	ug/kg	1	12/29/23	JLI	SW8260D
Methylacetate	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Methylcyclohexane	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
Methylene chloride	ND	40	ug/kg	1	12/29/23	JLI	SW8260D
o-Xylene	160	130	ug/kg	50	12/30/23	JLI	SW8260D
Styrene	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
Tetrachloroethene	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
Toluene	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
Total Xylenes	760	130	ug/kg	50	12/30/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
Trichloroethene	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorofluoromethane	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
Vinyl chloride	ND	8.1	ug/kg	1	12/29/23	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	1	12/29/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,3,4,6-tetrachlorophenol	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
2,4,5-Trichlorophenol	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
2,4,6-Trichlorophenol	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
2,4-Dichlorophenol	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
2,4-Dimethylphenol	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
2,4-Dinitrophenol	ND	570	ug/Kg	1	12/28/23	MR	SW8270E
2,4-Dinitrotoluene	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
2,6-Dinitrotoluene	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
2-Chloronaphthalene	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
2-Chlorophenol	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
2-Methylnaphthalene	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
2-Methylphenol (o-cresol)	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
2-Nitroaniline	ND	570	ug/Kg	1	12/28/23	MR	SW8270E
2-Nitrophenol	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	360	ug/Kg	1	12/28/23	MR	SW8270E
3,3'-Dichlorobenzidine	ND	430	ug/Kg	1	12/28/23	MR	SW8270E
3-Nitroaniline	ND	570	ug/Kg	1	12/28/23	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	1	12/28/23	MR	SW8270E
4-Bromophenyl phenyl ether	ND	360	ug/Kg	1	12/28/23	MR	SW8270E
4-Chloro-3-methylphenol	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
4-Chloroaniline	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
4-Nitroaniline	ND	570	ug/Kg	1	12/28/23	MR	SW8270E
4-Nitrophenol	ND	1000	ug/Kg	1	12/28/23	MR	SW8270E
Acenaphthene	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Acenaphthylene	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Acetophenone	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Anthracene	450	250	ug/Kg	1	12/28/23	MR	SW8270E
Atrazine	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Benz(a)anthracene	1000	250	ug/Kg	1	12/28/23	MR	SW8270E
Benzaldehyde	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(a)pyrene	890	250	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(b)fluoranthene	1100	250	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(ghi)perylene	580	250	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(k)fluoranthene	370	250	ug/Kg	1	12/28/23	MR	SW8270E
Benzyl butyl phthalate	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Bis(2-chloroethyl)ether	ND	360	ug/Kg	1	12/28/23	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Caprolactam	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Carbazole	ND	360	ug/Kg	1	12/28/23	MR	SW8270E
Chrysene	1000	250	ug/Kg	1	12/28/23	MR	SW8270E
Dibenz(a,h)anthracene	ND	180	ug/Kg	1	12/28/23	MR	SW8270E
Dibenzofuran	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Diethyl phthalate	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Dimethylphthalate	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Di-n-butylphthalate	ND	720	ug/Kg	1	12/28/23	MR	SW8270E
Di-n-octylphthalate	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Fluoranthene	2600	250	ug/Kg	1	12/28/23	MR	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Fluorene	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Hexachlorobenzene	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Hexachlorobutadiene	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Hexachlorocyclopentadiene	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Hexachloroethane	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Indeno(1,2,3-cd)pyrene	490	250	ug/Kg	1	12/28/23	MR	SW8270E
Isophorone	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Naphthalene	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Nitrobenzene	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
N-Nitrosodimethylamine	ND	360	ug/Kg	1	12/28/23	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	180	ug/Kg	1	12/28/23	MR	SW8270E
N-Nitrosodiphenylamine	ND	360	ug/Kg	1	12/28/23	MR	SW8270E
Pentachlorophenol	ND	360	ug/Kg	1	12/28/23	MR	SW8270E
Phenanthrene	1900	250	ug/Kg	1	12/28/23	MR	SW8270E
Phenol	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Pyrene	2600	250	ug/Kg	1	12/28/23	MR	SW8270E
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	89		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorobiphenyl	81		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorophenol	74		%	1	12/28/23	MR	30 - 130 %
% Nitrobenzene-d5	72		%	1	12/28/23	MR	30 - 130 %
% Phenol-d5	79		%	1	12/28/23	MR	30 - 130 %
% Terphenyl-d14	84		%	1	12/28/23	MR	30 - 130 %
<u>TCLP Acid/Base-Neutral</u>							
1,4-Dichlorobenzene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	97		%	1	12/29/23	MR	15 - 110 %
% 2-Fluorobiphenyl	79		%	1	12/29/23	MR	30 - 130 %
% 2-Fluorophenol	65		%	1	12/29/23	MR	15 - 110 %
% Nitrobenzene-d5	84		%	1	12/29/23	MR	30 - 130 %
% Phenol-d5	58		%	1	12/29/23	MR	15 - 110 %
% Terphenyl-d14	98		%	1	12/29/23	MR	30 - 130 %
Semivolatile Library Search	Completed				01/04/24	MR	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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.

Hexavalent Chromium:
This sample is in a reducing state.

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

January 10, 2024

Reviewed and Released by: Sarah Bell, Project Manager



Environmental Laboratories, Inc.

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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
Location Code: AES-EASTSIDE
Rush Request: Standard
P.O.#: 0897

Custody Information

Collected by:
Received by: SR1
Analyzed by: see "By" below

Date

12/21/23
12/26/23

Time

12:45
17:04

Laboratory Data

SDG ID: GCP74370
Phoenix ID: CP74375

Project ID: EAST SIDE COASTAL RESILIENCY
Client ID: DEP 89

Table with 8 columns: Parameter, Result, RL/PQL, Units, Dilution, Date/Time, By, Reference. Lists various elements like Silver, Aluminum, Arsenic, Barium, Beryllium, Calcium, Cadmium, Cobalt, Chromium, Copper, Iron, Mercury, Potassium, Magnesium, Manganese, Sodium, Nickel, Lead, Antimony, Selenium, and TCLP elements with their respective results and RL/PQL values.

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.5	3.5	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/28/23	W/AL/AL	SW3010A
Trivalent Chromium	9.78	0.39	mg/kg	1	12/29/23		CALC 6010-7196
Vanadium	12.0	0.39	mg/Kg	1	12/28/23	TH	SW6010D
Zinc	286	0.8	mg/Kg	1	12/28/23	TH	SW6010D
Percent Solid	89		%		12/26/23	AC1	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/26/23	ER	SW846-Corr
Flash Point	>200	200	Degree F	1	01/02/24	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.43	0.43	mg/Kg	1	12/29/23	NP	SW7196A
Ignitability	Passed	140	degree F	1	01/02/24	G	SW846-Ignit
pH at 25C - Soil	8.21	1.00	pH Units	1	12/26/23 23:20	ER	SW846 9045D
Reactivity Cyanide	< 5	5	mg/Kg	1	12/27/23	NP/GD	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	12/28/23	NP/GD	SW846 CH7
Reactivity	Negative		Pos/Neg	1	12/29/23	NP/GD	SW846-React
Redox Potential	115		mV	1	12/26/23	ER	SM2580B-09
Total Cyanide (SW9010C Distill.)	7.12	0.47	mg/Kg	1	12/28/23	MW/GD	SW9012B
Mercury Digestion	Completed				12/27/23	AL/AL	SW7471B
Extraction of NY ETPH	Completed				12/26/23	C/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/28/23	L/MQ/D	SW3546
NJ EPH Extraction	Completed				12/27/23	C/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/28/23	C/A	SW3546
Soil Extraction for Pesticides	Completed				12/28/23	C/A	SW3546
Soil Extraction for SVOA	Completed				12/27/23	AC1/H/U	SW3546
TCLP Digestion Mercury	Completed				12/28/23	W/AL/AL	SW7470A
TCLP Herbicides Extraction	Completed				12/28/23	CV/MQ	SW8150 MOD
TCLP Extraction for Metals	Completed				12/27/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/27/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/28/23	S/S	SW3510C
TCLP Semi-Volatile Extraction	Completed				12/28/23	S/S	SW3510C
TCLP Extraction Volatiles	Completed				12/27/23	CV	SW1311
Total Metals Digest	Completed				12/26/23	L/AG	SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	ND	9.0	mg/kg	1	12/28/23	JRB	NJEPH 10-08 R3
C9-C28	ND	18	mg/kg	1	12/28/23	JRB	NJEPH 10-08 R3
Total EPH	ND	9.0	mg/kg	1	12/28/23	JRB	NJEPH 10-08 R3

QA/QC Surrogates

% COD (surr)	64		%	1	12/28/23	JRB	40 - 140 %
% Terphenyl (surr)	73		%	1	12/28/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	6.4	mg/Kg	50	12/27/23	V	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	93		%	50	12/27/23	V	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	140	ug/Kg	10	12/29/23	JRB	SW8151A
2,4,5-TP (Silvex)	ND	140	ug/Kg	10	12/29/23	JRB	SW8151A
2,4-D	ND	280	ug/Kg	10	12/29/23	JRB	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	2800	ug/Kg	10	12/29/23	JRB	SW8151A
Dalapon	ND	140	ug/Kg	10	12/29/23	JRB	SW8151A
Dicamba	ND	140	ug/Kg	10	12/29/23	JRB	SW8151A
Dichloroprop	ND	280	ug/Kg	10	12/29/23	JRB	SW8151A
Dinoseb	ND	280	ug/Kg	10	12/29/23	JRB	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	78		%	10	12/29/23	JRB	30 - 150 %
% DCAA (Confirmation)	62		%	10	12/29/23	JRB	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1221	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1232	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1242	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1248	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1254	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1260	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1262	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1268	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	66		%	2	12/29/23	SC	30 - 150 %
% DCBP (Confirmation)	62		%	2	12/29/23	SC	30 - 150 %
% TCMX	72		%	2	12/29/23	SC	30 - 150 %
% TCMX (Confirmation)	73		%	2	12/29/23	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.2	ug/Kg	2	12/30/23	AW	SW8081B
4,4' -DDE	ND	2.2	ug/Kg	2	12/30/23	AW	SW8081B
4,4' -DDT	ND	2.2	ug/Kg	2	12/30/23	AW	SW8081B
a-BHC	ND	7.4	ug/Kg	2	12/30/23	AW	SW8081B
a-Chlordane	ND	3.7	ug/Kg	2	12/30/23	AW	SW8081B
Aldrin	ND	3.7	ug/Kg	2	12/30/23	AW	SW8081B
b-BHC	ND	7.4	ug/Kg	2	12/30/23	AW	SW8081B
Chlordane	ND	37	ug/Kg	2	12/30/23	AW	SW8081B
d-BHC	ND	7.4	ug/Kg	2	12/30/23	AW	SW8081B
Dieldrin	ND	3.7	ug/Kg	2	12/30/23	AW	SW8081B
Endosulfan I	ND	7.4	ug/Kg	2	12/30/23	AW	SW8081B
Endosulfan II	ND	7.4	ug/Kg	2	12/30/23	AW	SW8081B
Endosulfan sulfate	ND	7.4	ug/Kg	2	12/30/23	AW	SW8081B
Endrin	ND	7.4	ug/Kg	2	12/30/23	AW	SW8081B
Endrin aldehyde	ND	7.4	ug/Kg	2	12/30/23	AW	SW8081B
Endrin ketone	ND	7.4	ug/Kg	2	12/30/23	AW	SW8081B
g-BHC	ND	1.5	ug/Kg	2	12/30/23	AW	SW8081B
g-Chlordane	ND	3.7	ug/Kg	2	12/30/23	AW	SW8081B
Heptachlor	ND	7.4	ug/Kg	2	12/30/23	AW	SW8081B
Heptachlor epoxide	ND	7.4	ug/Kg	2	12/30/23	AW	SW8081B
Methoxychlor	ND	37	ug/Kg	2	12/30/23	AW	SW8081B
Toxaphene	ND	150	ug/Kg	2	12/30/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	64		%	2	12/30/23	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	59		%	2	12/30/23	AW	30 - 150 %
% TCMX	60		%	2	12/30/23	AW	30 - 150 %
% TCMX (Confirmation)	57		%	2	12/30/23	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/29/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/29/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	58		%	10	12/29/23	JRB	30 - 150 %
% DCAA (Confirmation)	65		%	10	12/29/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
a-BHC	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Alachlor	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Aldrin	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
b-BHC	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Chlordane	ND	5.0	ug/L	10	12/29/23	AW	SW8081B
d-BHC	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Dieldrin	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endosulfan I	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Endosulfan II	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endrin	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Toxaphene	ND	20	ug/L	10	12/29/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	71		%	10	12/29/23	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	92		%	10	12/29/23	AW	30 - 150 %
%TCMX (Surrogate Rec)	74		%	10	12/29/23	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	83		%	10	12/29/23	AW	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	ND	56	mg/Kg	1	12/27/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	67		%	1	12/27/23	JRB	50 - 150 %
% Terphenyl (surr)	80		%	1	12/27/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethane	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethene	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dibromoethane	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloroethane	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloropropane	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
2-Hexanone	ND	32	ug/kg	1	12/29/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	32	ug/kg	1	12/29/23	JLI	SW8260D
Acetone	ND	50	ug/kg	1	12/29/23	JLI	SW8260D
Benzene	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Bromochloromethane	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Bromodichloromethane	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Bromoform	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Bromomethane	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Carbon Disulfide	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Carbon tetrachloride	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Chlorobenzene	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Chloroethane	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Chloroform	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Chloromethane	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Cyclohexane	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Dibromochloromethane	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Dichlorodifluoromethane	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Ethylbenzene	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Isopropylbenzene	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
m&p-Xylene	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Methyl ethyl ketone	ND	39	ug/kg	1	12/29/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	13	ug/kg	1	12/29/23	JLI	SW8260D
Methylacetate	ND	5.2	ug/kg	1	12/29/23	JLI	SW8260D
Methylcyclohexane	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Methylene chloride	ND	32	ug/kg	1	12/29/23	JLI	SW8260D
o-Xylene	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Styrene	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Tetrachloroethene	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Toluene	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Total Xylenes	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Trichloroethene	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorofluoromethane	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
Vinyl chloride	ND	6.5	ug/kg	1	12/29/23	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	1	12/29/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	94		%	1	12/29/23	JLI	70 - 130 %
% Dibromofluoromethane	92		%	1	12/29/23	JLI	70 - 130 %
% Toluene-d8	96		%	1	12/29/23	JLI	70 - 130 %

1,4-dioxane

1,4-dioxane	ND	97	ug/kg	1	12/29/23	JLI	SW8260D
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Volatiles

1,2,3-Trichloropropane	ND	6.5	ug/Kg	1	12/29/23	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	6.5	ug/Kg	1	12/29/23	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	6.5	ug/Kg	1	12/29/23	JLI	SW8260D
1,3-Dichloropropane	ND	6.5	ug/Kg	1	12/29/23	JLI	SW8260D
n-Butylbenzene	ND	6.5	ug/Kg	1	12/29/23	JLI	SW8260D
n-Propylbenzene	ND	6.5	ug/Kg	1	12/29/23	JLI	SW8260D
p-Isopropyltoluene	ND	6.5	ug/Kg	1	12/29/23	JLI	SW8260D
sec-Butylbenzene	ND	6.5	ug/Kg	1	12/29/23	JLI	SW8260D
tert-Butylbenzene	ND	6.5	ug/Kg	1	12/29/23	JLI	SW8260D

QA/QC Surrogates

% 1,2-dichlorobenzene-d4	99		%	1	12/29/23	JLI	70 - 130 %
% Bromofluorobenzene	94		%	1	12/29/23	JLI	70 - 130 %
% Dibromofluoromethane	92		%	1	12/29/23	JLI	70 - 130 %
% Toluene-d8	96		%	1	12/29/23	JLI	70 - 130 %

TCLP Volatiles

1,1-Dichloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260

QA/QC Surrogates

% 1,2-dichlorobenzene-d4 (10x)	99		%	10	12/28/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	90		%	10	12/28/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	98		%	10	12/28/23	HM	70 - 130 %
% Toluene-d8 (10x)	94		%	10	12/28/23	HM	70 - 130 %

Volatile Library Search Completed 12/29/23 JLI

Semivolatiles

1,1-Biphenyl	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2,3,4,6-tetrachlorophenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2,4-Dichlorophenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2,4-Dinitrophenol	ND	590	ug/Kg	1	12/28/23	MR	SW8270E
2,4-Dinitrotoluene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2,6-Dinitrotoluene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2-Chloronaphthalene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2-Chlorophenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2-Methylnaphthalene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2-Nitroaniline	ND	590	ug/Kg	1	12/28/23	MR	SW8270E
2-Nitrophenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	1	12/28/23	MR	SW8270E
3,3'-Dichlorobenzidine	ND	440	ug/Kg	1	12/28/23	MR	SW8270E
3-Nitroaniline	ND	590	ug/Kg	1	12/28/23	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	12/28/23	MR	SW8270E
4-Bromophenyl phenyl ether	ND	370	ug/Kg	1	12/28/23	MR	SW8270E
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
4-Chloroaniline	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
4-Nitroaniline	ND	590	ug/Kg	1	12/28/23	MR	SW8270E
4-Nitrophenol	ND	1100	ug/Kg	1	12/28/23	MR	SW8270E
Acenaphthene	740	260	ug/Kg	1	12/28/23	MR	SW8270E
Acenaphthylene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Acetophenone	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Anthracene	1700	260	ug/Kg	1	12/28/23	MR	SW8270E
Atrazine	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Benz(a)anthracene	2700	260	ug/Kg	1	12/28/23	MR	SW8270E
Benzaldehyde	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(a)pyrene	2500	260	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(b)fluoranthene	2800	260	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(ghi)perylene	1000	260	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(k)fluoranthene	1100	260	ug/Kg	1	12/28/23	MR	SW8270E
Benzyl butyl phthalate	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Bis(2-chloroethyl)ether	ND	370	ug/Kg	1	12/28/23	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Caprolactam	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Carbazole	630	370	ug/Kg	1	12/28/23	MR	SW8270E
Chrysene	2600	260	ug/Kg	1	12/28/23	MR	SW8270E
Dibenz(a,h)anthracene	280	180	ug/Kg	1	12/28/23	MR	SW8270E
Dibenzofuran	480	260	ug/Kg	1	12/28/23	MR	SW8270E
Diethyl phthalate	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Dimethylphthalate	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Di-n-butylphthalate	ND	730	ug/Kg	1	12/28/23	MR	SW8270E
Di-n-octylphthalate	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Fluoranthene	7200	260	ug/Kg	1	12/28/23	MR	SW8270E
Fluorene	720	260	ug/Kg	1	12/28/23	MR	SW8270E
Hexachlorobenzene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Hexachlorobutadiene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E

1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Indeno(1,2,3-cd)pyrene	1200	260	ug/Kg	1	12/28/23	MR	SW8270E
Isophorone	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Naphthalene	370	260	ug/Kg	1	12/28/23	MR	SW8270E
Nitrobenzene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
N-Nitrosodimethylamine	ND	370	ug/Kg	1	12/28/23	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	180	ug/Kg	1	12/28/23	MR	SW8270E
N-Nitrosodiphenylamine	ND	370	ug/Kg	1	12/28/23	MR	SW8270E
Pentachlorophenol	ND	370	ug/Kg	1	12/28/23	MR	SW8270E
Phenanthrene	6100	2600	ug/Kg	10	12/29/23	MR	SW8270E
Phenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Pyrene	6100	260	ug/Kg	1	12/28/23	MR	SW8270E
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	94		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorobiphenyl	82		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorophenol	67		%	1	12/28/23	MR	30 - 130 %
% Nitrobenzene-d5	68		%	1	12/28/23	MR	30 - 130 %
% Phenol-d5	75		%	1	12/28/23	MR	30 - 130 %
% Terphenyl-d14	91		%	1	12/28/23	MR	30 - 130 %
% 2,4,6-Tribromophenol (10x)	75		%	10	12/29/23	MR	30 - 130 %
% 2-Fluorobiphenyl (10x)	73		%	10	12/29/23	MR	30 - 130 %
% 2-Fluorophenol (10x)	60		%	10	12/29/23	MR	30 - 130 %
% Nitrobenzene-d5 (10x)	62		%	10	12/29/23	MR	30 - 130 %
% Phenol-d5 (10x)	68		%	10	12/29/23	MR	30 - 130 %
% Terphenyl-d14 (10x)	75		%	10	12/29/23	MR	30 - 130 %
<u>TCLP Acid/Base-Neutral</u>							
1,4-Dichlorobenzene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	95		%	1	12/29/23	MR	15 - 110 %
% 2-Fluorobiphenyl	76		%	1	12/29/23	MR	30 - 130 %
% 2-Fluorophenol	61		%	1	12/29/23	MR	15 - 110 %
% Nitrobenzene-d5	79		%	1	12/29/23	MR	30 - 130 %
% Phenol-d5	55		%	1	12/29/23	MR	15 - 110 %
% Terphenyl-d14	98		%	1	12/29/23	MR	30 - 130 %
Semivolatile Library Search	Completed				01/04/24	MR	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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 (preceded 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.

Hexavalent Chromium:
This sample is in a reducing state.

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

January 10, 2024

Reviewed and Released by: Sarah Bell, Project Manager



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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
 Location Code: AES-EASTSIDE
 Rush Request: Standard
 P.O.#: 0897

Custody Information

Collected by:
 Received by: SR1
 Analyzed by: see "By" below

Date

12/21/23
 12/26/23

Time

13:00
 17:04

Laboratory Data

SDG ID: GCP74370
 Phoenix ID: CP74376

Project ID: EAST SIDE COASTAL RESILIENCY
 Client ID: DEP 90

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.33	0.33	mg/Kg	1	12/28/23	TH	SW6010D
Aluminum	4280	5.0	mg/Kg	1	12/28/23	TH	SW6010D
Arsenic	3.00	0.66	mg/Kg	1	12/28/23	TH	SW6010D
Barium	471	0.33	mg/Kg	1	12/28/23	TH	SW6010D
Beryllium	< 0.26	0.26	mg/Kg	1	12/28/23	TH	SW6010D
Calcium	7060	5.0	mg/Kg	1	12/28/23	TH	SW6010D
Cadmium	0.35	0.33	mg/Kg	1	12/28/23	TH	SW6010D
Cobalt	3.80	0.33	mg/Kg	1	12/28/23	TH	SW6010D
Chromium	9.35	0.33	mg/Kg	1	12/28/23	TH	SW6010D
Copper	19.8	0.7	mg/kg	1	12/28/23	TH	SW6010D
Iron	8710	5.0	mg/Kg	1	12/28/23	TH	SW6010D
Mercury	0.38	0.03	mg/Kg	2	12/27/23	ZT	SW7471B
Potassium	826	50	mg/Kg	10	12/27/23	TH	SW6010D
Magnesium	2220	5.0	mg/Kg	1	12/28/23	TH	SW6010D
Manganese	149	0.33	mg/Kg	1	12/28/23	TH	SW6010D
Sodium	411	5.0	mg/Kg	1	12/28/23	TH	SW6010D
Nickel	11.1	0.33	mg/Kg	1	12/28/23	TH	SW6010D
Lead	274	0.33	mg/Kg	1	12/28/23	TH	SW6010D
Antimony	< 3.3	3.3	mg/Kg	1	12/28/23	TH	SW6010D
Selenium	< 1.3	1.3	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Barium	0.97	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	12/28/23	ZT	SW846 1311/7470
TCLP Lead	1.07	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.0	3.0	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/28/23	W/AL/AL	SW3010A
Trivalent Chromium	9.35	0.33	mg/kg	1	12/29/23		CALC 6010-7196
Vanadium	13.4	0.33	mg/Kg	1	12/28/23	TH	SW6010D
Zinc	170	0.7	mg/Kg	1	12/28/23	TH	SW6010D
Percent Solid	90		%		12/26/23	AC1	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/26/23	ER	SW846-Corr
Flash Point	>200	200	Degree F	1	01/02/24	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.38	0.38	mg/Kg	1	12/29/23	NP	SW7196A
Ignitability	Passed	140	degree F	1	01/02/24	G	SW846-Ignit
pH at 25C - Soil	9.11	1.00	pH Units	1	12/26/23 23:20	ER	SW846 9045D
Reactivity Cyanide	< 5	5	mg/Kg	1	12/27/23	NP/GD	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	12/28/23	NP/GD	SW846 CH7
Reactivity	Negative		Pos/Neg	1	12/29/23	NP/GD	SW846-React
Redox Potential	-147		mV	1	12/26/23	ER	SM2580B-09
Total Cyanide (SW9010C Distill.)	< 0.51	0.51	mg/Kg	1	12/28/23	MW/GD	SW9012B
Mercury Digestion	Completed				12/27/23	AL/AL	SW7471B
Extraction of NY ETPH	Completed				12/26/23	C/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/28/23	L/MQ/D	SW3546
NJ EPH Extraction	Completed				12/27/23	C/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/28/23	C/A	SW3546
Soil Extraction for Pesticides	Completed				12/28/23	C/A	SW3546
Soil Extraction for SVOA	Completed				12/27/23	AC1/H/U	SW3546
TCLP Digestion Mercury	Completed				12/28/23	W/AL/AL	SW7470A
TCLP Herbicides Extraction	Completed				12/28/23	CV/MQ	SW8150 MOD
TCLP Extraction for Metals	Completed				12/27/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/27/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/28/23	S/S	SW3510C
TCLP Semi-Volatile Extraction	Completed				12/28/23	S/S	SW3510C
TCLP Extraction Volatiles	Completed				12/27/23	CV	SW1311
Total Metals Digest	Completed				12/26/23	L/AG	SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	ND	8.6	mg/kg	1	12/28/23	JRB	NJEPH 10-08 R3
C9-C28	ND	17	mg/kg	1	12/28/23	JRB	NJEPH 10-08 R3
Total EPH	ND	8.6	mg/kg	1	12/28/23	JRB	NJEPH 10-08 R3

QA/QC Surrogates

% COD (surr)	73		%	1	12/28/23	JRB	40 - 140 %
% Terphenyl (surr)	86		%	1	12/28/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	11	mg/Kg	50	12/27/23	V	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	92		%	50	12/27/23	V	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	140	ug/Kg	10	12/29/23	JRB	SW8151A
2,4,5-TP (Silvex)	ND	140	ug/Kg	10	12/29/23	JRB	SW8151A
2,4-D	ND	270	ug/Kg	10	12/29/23	JRB	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	2700	ug/Kg	10	12/29/23	JRB	SW8151A
Dalapon	ND	140	ug/Kg	10	12/29/23	JRB	SW8151A
Dicamba	ND	140	ug/Kg	10	12/29/23	JRB	SW8151A
Dichloroprop	ND	270	ug/Kg	10	12/29/23	JRB	SW8151A
Dinoseb	ND	270	ug/Kg	10	12/29/23	JRB	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	75		%	10	12/29/23	JRB	30 - 150 %
% DCAA (Confirmation)	59		%	10	12/29/23	JRB	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	72	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1221	ND	72	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1232	ND	72	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1242	ND	72	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1248	ND	72	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1254	ND	72	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1260	ND	72	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1262	ND	72	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1268	ND	72	ug/Kg	2	12/29/23	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	77		%	2	12/29/23	SC	30 - 150 %
% DCBP (Confirmation)	70		%	2	12/29/23	SC	30 - 150 %
% TCMX	79		%	2	12/29/23	SC	30 - 150 %
% TCMX (Confirmation)	77		%	2	12/29/23	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.2	ug/Kg	2	12/30/23	AW	SW8081B
4,4' -DDE	ND	2.2	ug/Kg	2	12/30/23	AW	SW8081B
4,4' -DDT	ND	2.2	ug/Kg	2	12/30/23	AW	SW8081B
a-BHC	ND	7.2	ug/Kg	2	12/30/23	AW	SW8081B
a-Chlordane	ND	3.6	ug/Kg	2	12/30/23	AW	SW8081B
Aldrin	ND	3.6	ug/Kg	2	12/30/23	AW	SW8081B
b-BHC	ND	7.2	ug/Kg	2	12/30/23	AW	SW8081B
Chlordane	ND	36	ug/Kg	2	12/30/23	AW	SW8081B
d-BHC	ND	7.2	ug/Kg	2	12/30/23	AW	SW8081B
Dieldrin	ND	3.6	ug/Kg	2	12/30/23	AW	SW8081B
Endosulfan I	ND	7.2	ug/Kg	2	12/30/23	AW	SW8081B
Endosulfan II	ND	7.2	ug/Kg	2	12/30/23	AW	SW8081B
Endosulfan sulfate	ND	7.2	ug/Kg	2	12/30/23	AW	SW8081B
Endrin	ND	7.2	ug/Kg	2	12/30/23	AW	SW8081B
Endrin aldehyde	ND	7.2	ug/Kg	2	12/30/23	AW	SW8081B
Endrin ketone	ND	7.2	ug/Kg	2	12/30/23	AW	SW8081B
g-BHC	ND	1.4	ug/Kg	2	12/30/23	AW	SW8081B
g-Chlordane	ND	3.6	ug/Kg	2	12/30/23	AW	SW8081B
Heptachlor	ND	7.2	ug/Kg	2	12/30/23	AW	SW8081B
Heptachlor epoxide	ND	7.2	ug/Kg	2	12/30/23	AW	SW8081B
Methoxychlor	ND	36	ug/Kg	2	12/30/23	AW	SW8081B
Toxaphene	ND	140	ug/Kg	2	12/30/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	71		%	2	12/30/23	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	68		%	2	12/30/23	AW	30 - 150 %
% TCMX	68		%	2	12/30/23	AW	30 - 150 %
% TCMX (Confirmation)	64		%	2	12/30/23	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/29/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/29/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	55		%	10	12/29/23	JRB	30 - 150 %
% DCAA (Confirmation)	62		%	10	12/29/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
a-BHC	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Alachlor	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Aldrin	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
b-BHC	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Chlordane	ND	5.0	ug/L	10	12/29/23	AW	SW8081B
d-BHC	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Dieldrin	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endosulfan I	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Endosulfan II	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endrin	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Toxaphene	ND	20	ug/L	10	12/29/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	70		%	10	12/29/23	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	92		%	10	12/29/23	AW	30 - 150 %
%TCMX (Surrogate Rec)	77		%	10	12/29/23	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	86		%	10	12/29/23	AW	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	280	54	mg/Kg	1	12/27/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	55		%	1	12/27/23	JRB	50 - 150 %
% Terphenyl (surr)	68		%	1	12/27/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethane	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethene	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dibromoethane	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloroethane	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloropropane	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
2-Hexanone	ND	39	ug/kg	1	12/29/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	39	ug/kg	1	12/29/23	JLI	SW8260D
Acetone	ND	50	ug/kg	1	12/29/23	JLI	SW8260D
Benzene	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
Bromochloromethane	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
Bromodichloromethane	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
Bromoform	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
Bromomethane	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
Carbon Disulfide	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
Carbon tetrachloride	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
Chlorobenzene	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
Chloroethane	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
Chloroform	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
Chloromethane	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
Cyclohexane	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
Dibromochloromethane	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
Dichlorodifluoromethane	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
Ethylbenzene	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
Isopropylbenzene	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
m&p-Xylene	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
Methyl ethyl ketone	ND	47	ug/kg	1	12/29/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	16	ug/kg	1	12/29/23	JLI	SW8260D
Methylacetate	ND	6.3	ug/kg	1	12/29/23	JLI	SW8260D
Methylcyclohexane	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
Methylene chloride	ND	39	ug/kg	1	12/29/23	JLI	SW8260D
o-Xylene	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
Styrene	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
Tetrachloroethene	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
Toluene	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
Total Xylenes	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
Trichloroethene	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorofluoromethane	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
Vinyl chloride	ND	7.8	ug/kg	1	12/29/23	JLI	SW8260D
<u>QA/QC Surrogates</u>							
% 1,2-dichlorobenzene-d4	102		%	1	12/29/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	89		%	1	12/29/23	JLI	70 - 130 %
% Dibromofluoromethane	92		%	1	12/29/23	JLI	70 - 130 %
% Toluene-d8	96		%	1	12/29/23	JLI	70 - 130 %

1,4-dioxane

1,4-dioxane	ND	100	ug/kg	1	12/29/23	JLI	SW8260D
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Volatiles

1,2,3-Trichloropropane	ND	7.8	ug/Kg	1	12/29/23	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	7.8	ug/Kg	1	12/29/23	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	7.8	ug/Kg	1	12/29/23	JLI	SW8260D
1,3-Dichloropropane	ND	7.8	ug/Kg	1	12/29/23	JLI	SW8260D
n-Butylbenzene	ND	7.8	ug/Kg	1	12/29/23	JLI	SW8260D
n-Propylbenzene	ND	7.8	ug/Kg	1	12/29/23	JLI	SW8260D
p-Isopropyltoluene	ND	7.8	ug/Kg	1	12/29/23	JLI	SW8260D
sec-Butylbenzene	ND	7.8	ug/Kg	1	12/29/23	JLI	SW8260D
tert-Butylbenzene	ND	7.8	ug/Kg	1	12/29/23	JLI	SW8260D

QA/QC Surrogates

% 1,2-dichlorobenzene-d4	102		%	1	12/29/23	JLI	70 - 130 %
% Bromofluorobenzene	89		%	1	12/29/23	JLI	70 - 130 %
% Dibromofluoromethane	92		%	1	12/29/23	JLI	70 - 130 %
% Toluene-d8	96		%	1	12/29/23	JLI	70 - 130 %

TCLP Volatiles

1,1-Dichloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260

QA/QC Surrogates

% 1,2-dichlorobenzene-d4 (10x)	99		%	10	12/28/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	90		%	10	12/28/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	96		%	10	12/28/23	HM	70 - 130 %
% Toluene-d8 (10x)	94		%	10	12/28/23	HM	70 - 130 %

Volatile Library Search Completed 12/29/23 JLI

Semivolatiles

1,1-Biphenyl	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
2,3,4,6-tetrachlorophenol	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
2,4,5-Trichlorophenol	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
2,4,6-Trichlorophenol	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
2,4-Dichlorophenol	ND	250	ug/Kg	1	12/28/23	MR	SW8270E

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
2,4-Dinitrophenol	ND	580	ug/Kg	1	12/28/23	MR	SW8270E
2,4-Dinitrotoluene	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
2,6-Dinitrotoluene	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
2-Chloronaphthalene	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
2-Chlorophenol	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
2-Methylnaphthalene	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
2-Methylphenol (o-cresol)	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
2-Nitroaniline	ND	580	ug/Kg	1	12/28/23	MR	SW8270E
2-Nitrophenol	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	360	ug/Kg	1	12/28/23	MR	SW8270E
3,3'-Dichlorobenzidine	ND	440	ug/Kg	1	12/28/23	MR	SW8270E
3-Nitroaniline	ND	580	ug/Kg	1	12/28/23	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	12/28/23	MR	SW8270E
4-Bromophenyl phenyl ether	ND	360	ug/Kg	1	12/28/23	MR	SW8270E
4-Chloro-3-methylphenol	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
4-Chloroaniline	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
4-Nitroaniline	ND	580	ug/Kg	1	12/28/23	MR	SW8270E
4-Nitrophenol	ND	1100	ug/Kg	1	12/28/23	MR	SW8270E
Acenaphthene	880	250	ug/Kg	1	12/28/23	MR	SW8270E
Acenaphthylene	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Acetophenone	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Anthracene	1600	250	ug/Kg	1	12/28/23	MR	SW8270E
Atrazine	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Benz(a)anthracene	2500	250	ug/Kg	1	12/28/23	MR	SW8270E
Benzaldehyde	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(a)pyrene	2600	250	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(b)fluoranthene	3000	250	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(ghi)perylene	1300	250	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(k)fluoranthene	970	250	ug/Kg	1	12/28/23	MR	SW8270E
Benzyl butyl phthalate	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Bis(2-chloroethyl)ether	ND	360	ug/Kg	1	12/28/23	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Caprolactam	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Carbazole	ND	360	ug/Kg	1	12/28/23	MR	SW8270E
Chrysene	2400	250	ug/Kg	1	12/28/23	MR	SW8270E
Dibenz(a,h)anthracene	300	180	ug/Kg	1	12/28/23	MR	SW8270E
Dibenzofuran	510	250	ug/Kg	1	12/28/23	MR	SW8270E
Diethyl phthalate	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Dimethylphthalate	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Di-n-butylphthalate	ND	730	ug/Kg	1	12/28/23	MR	SW8270E
Di-n-octylphthalate	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Fluoranthene	7000	250	ug/Kg	1	12/28/23	MR	SW8270E
Fluorene	510	250	ug/Kg	1	12/28/23	MR	SW8270E
Hexachlorobenzene	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Hexachlorobutadiene	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Hexachlorocyclopentadiene	ND	250	ug/Kg	1	12/28/23	MR	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Indeno(1,2,3-cd)pyrene	1500	250	ug/Kg	1	12/28/23	MR	SW8270E
Isophorone	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Naphthalene	350	250	ug/Kg	1	12/28/23	MR	SW8270E
Nitrobenzene	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
N-Nitrosodimethylamine	ND	360	ug/Kg	1	12/28/23	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	180	ug/Kg	1	12/28/23	MR	SW8270E
N-Nitrosodiphenylamine	ND	360	ug/Kg	1	12/28/23	MR	SW8270E
Pentachlorophenol	ND	360	ug/Kg	1	12/28/23	MR	SW8270E
Phenanthrene	4700	250	ug/Kg	1	12/28/23	MR	SW8270E
Phenol	ND	250	ug/Kg	1	12/28/23	MR	SW8270E
Pyrene	6100	250	ug/Kg	1	12/28/23	MR	SW8270E
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	81		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorobiphenyl	77		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorophenol	65		%	1	12/28/23	MR	30 - 130 %
% Nitrobenzene-d5	65		%	1	12/28/23	MR	30 - 130 %
% Phenol-d5	74		%	1	12/28/23	MR	30 - 130 %
% Terphenyl-d14	85		%	1	12/28/23	MR	30 - 130 %
<u>TCLP Acid/Base-Neutral</u>							
1,4-Dichlorobenzene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	12/29/23	MR	SW-846 1311/8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	93		%	1	12/29/23	MR	15 - 110 %
% 2-Fluorobiphenyl	73		%	1	12/29/23	MR	30 - 130 %
% 2-Fluorophenol	60		%	1	12/29/23	MR	15 - 110 %
% Nitrobenzene-d5	77		%	1	12/29/23	MR	30 - 130 %
% Phenol-d5	53		%	1	12/29/23	MR	15 - 110 %
% Terphenyl-d14	90		%	1	12/29/23	MR	30 - 130 %
Semivolatile Library Search	Completed				01/04/24	MR	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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.

Hexavalent Chromium:
This sample is in a reducing state.

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

January 10, 2024

Reviewed and Released by: Sarah Bell, Project Manager



Environmental Laboratories, Inc.

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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
Location Code: AES-EASTSIDE
Rush Request: Standard
P.O.#: 0897

Custody Information

Collected by:
Received by: SR1
Analyzed by: see "By" below

Date

12/21/23
12/26/23

Time

13:20
17:04

Laboratory Data

SDG ID: GCP74370
Phoenix ID: CP74377

Project ID: EAST SIDE COASTAL RESILIENCY
Client ID: DEP 91

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.75	0.75	mg/Kg	1	12/28/23	TH	SW6010D
Aluminum	7820	6.3	mg/Kg	1	12/28/23	TH	SW6010D
Arsenic	2.99	0.84	mg/Kg	1	12/28/23	TH	SW6010D
Barium	431	0.42	mg/Kg	1	12/28/23	TH	SW6010D
Beryllium	0.37	0.33	mg/Kg	1	12/28/23	TH	SW6010D
Calcium	8190	6.3	mg/Kg	1	12/28/23	TH	SW6010D
Cadmium	0.67	0.42	mg/Kg	1	12/28/23	TH	SW6010D
Cobalt	5.27	0.42	mg/Kg	1	12/28/23	TH	SW6010D
Chromium	20.4	0.42	mg/Kg	1	12/28/23	TH	SW6010D
Copper	94.2	0.8	mg/kg	1	12/28/23	TH	SW6010D
Iron	10900	6.3	mg/Kg	1	12/28/23	TH	SW6010D
Mercury	0.25	0.03	mg/Kg	2	12/27/23	ZT	SW7471B
Potassium	1010	63	mg/Kg	10	12/27/23	TH	SW6010D
Magnesium	7390	6.3	mg/Kg	1	12/28/23	TH	SW6010D
Manganese	335	0.42	mg/Kg	1	12/28/23	TH	SW6010D
Sodium	777	6.3	mg/Kg	1	12/28/23	TH	SW6010D
Nickel	17.6	0.42	mg/Kg	1	12/28/23	TH	SW6010D
Lead	234	0.42	mg/Kg	1	12/28/23	TH	SW6010D
Antimony	< 4.2	4.2	mg/Kg	1	12/28/23	TH	SW6010D
Selenium	< 1.7	1.7	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Barium	1.01	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	12/28/23	ZT	SW846 1311/7470
TCLP Lead	0.27	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.8	3.8	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/28/23	W/AL/AL	SW3010A
Trivalent Chromium	20.4	0.42	mg/kg	1	12/29/23		CALC 6010-7196
Vanadium	19.7	0.42	mg/Kg	1	12/28/23	TH	SW6010D
Zinc	468	0.8	mg/Kg	1	12/28/23	TH	SW6010D
Percent Solid	83		%		12/26/23	AC1	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/26/23	ER	SW846-Corr
Flash Point	>200	200	Degree F	1	01/02/24	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.43	0.43	mg/Kg	1	12/29/23	NP	SW7196A
Ignitability	Passed	140	degree F	1	01/02/24	G	SW846-Ignit
pH at 25C - Soil	7.76	1.00	pH Units	1	12/26/23 23:20	ER	SW846 9045D
Reactivity Cyanide	< 6	6	mg/Kg	1	12/27/23	NP/GD	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	12/28/23	NP/GD	SW846 CH7
Reactivity	Negative		Pos/Neg	1	12/29/23	NP/GD	SW846-React
Redox Potential	99.4		mV	1	12/26/23	ER	SM2580B-09
Total Cyanide (SW9010C Distill.)	6.39	0.60	mg/Kg	1	12/28/23	MW/GD	SW9012B
Mercury Digestion	Completed				12/27/23	AL/AL	SW7471B
Extraction of NY ETPH	Completed				12/26/23	C/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/28/23	L/MQ/D	SW3546
NJ EPH Extraction	Completed				12/27/23	C/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/28/23	C/A	SW3546
Soil Extraction for Pesticides	Completed				12/28/23	C/A	SW3546
Soil Extraction for SVOA	Completed				12/27/23	AC1/H/U	SW3546
TCLP Digestion Mercury	Completed				12/28/23	W/AL/AL	SW7470A
TCLP Herbicides Extraction	Completed				12/28/23	CV/MQ	SW8150 MOD
TCLP Extraction for Metals	Completed				12/27/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/27/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/28/23	S/S	SW3510C
TCLP Semi-Volatile Extraction	Completed				01/03/24	S/S	SW3510C
TCLP Extraction Volatiles	Completed				12/27/23	CV	SW1311
Total Metals Digest	Completed				12/26/23	L/AG	SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	ND	9.5	mg/kg	1	12/28/23	JRB	NJEPH 10-08 R3
C9-C28	ND	19	mg/kg	1	12/28/23	JRB	NJEPH 10-08 R3
Total EPH	ND	9.5	mg/kg	1	12/28/23	JRB	NJEPH 10-08 R3

QA/QC Surrogates

% COD (surr)	60		%	1	12/28/23	JRB	40 - 140 %
% Terphenyl (surr)	69		%	1	12/28/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	6.5	mg/Kg	50	12/27/23	V	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	95		%	50	12/27/23	V	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	150	ug/Kg	10	12/29/23	JRB	SW8151A
2,4,5-TP (Silvex)	ND	150	ug/Kg	10	12/29/23	JRB	SW8151A
2,4-D	ND	300	ug/Kg	10	12/29/23	JRB	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	3000	ug/Kg	10	12/29/23	JRB	SW8151A
Dalapon	ND	150	ug/Kg	10	12/29/23	JRB	SW8151A
Dicamba	ND	150	ug/Kg	10	12/29/23	JRB	SW8151A
Dichloroprop	ND	300	ug/Kg	10	12/29/23	JRB	SW8151A
Dinoseb	ND	300	ug/Kg	10	12/29/23	JRB	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	76		%	10	12/29/23	JRB	30 - 150 %
% DCAA (Confirmation)	62		%	10	12/29/23	JRB	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	79	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1221	ND	79	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1232	ND	79	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1242	ND	79	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1248	ND	79	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1254	ND	79	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1260	ND	79	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1262	ND	79	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1268	ND	79	ug/Kg	2	12/29/23	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	81		%	2	12/29/23	SC	30 - 150 %
% DCBP (Confirmation)	77		%	2	12/29/23	SC	30 - 150 %
% TCMX	81		%	2	12/29/23	SC	30 - 150 %
% TCMX (Confirmation)	79		%	2	12/29/23	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.4	ug/Kg	2	12/30/23	AW	SW8081B
4,4' -DDE	15	2.4	ug/Kg	2	12/30/23	AW	SW8081B
4,4' -DDT	5.5	2.4	ug/Kg	2	12/30/23	AW	SW8081B
a-BHC	ND	7.9	ug/Kg	2	12/30/23	AW	SW8081B
a-Chlordane	ND	5.0	ug/Kg	2	12/30/23	AW	SW8081B
Aldrin	ND	3.9	ug/Kg	2	12/30/23	AW	SW8081B
b-BHC	ND	7.9	ug/Kg	2	12/30/23	AW	SW8081B
Chlordane	ND	39	ug/Kg	2	12/30/23	AW	SW8081B
d-BHC	ND	7.9	ug/Kg	2	12/30/23	AW	SW8081B
Dieldrin	ND	3.9	ug/Kg	2	12/30/23	AW	SW8081B
Endosulfan I	ND	7.9	ug/Kg	2	12/30/23	AW	SW8081B
Endosulfan II	ND	7.9	ug/Kg	2	12/30/23	AW	SW8081B
Endosulfan sulfate	ND	7.9	ug/Kg	2	12/30/23	AW	SW8081B
Endrin	ND	7.9	ug/Kg	2	12/30/23	AW	SW8081B
Endrin aldehyde	ND	7.9	ug/Kg	2	12/30/23	AW	SW8081B
Endrin ketone	ND	7.9	ug/Kg	2	12/30/23	AW	SW8081B
g-BHC	ND	1.6	ug/Kg	2	12/30/23	AW	SW8081B
g-Chlordane	ND	5.0	ug/Kg	2	12/30/23	AW	SW8081B
Heptachlor	ND	7.9	ug/Kg	2	12/30/23	AW	SW8081B
Heptachlor epoxide	ND	7.9	ug/Kg	2	12/30/23	AW	SW8081B
Methoxychlor	ND	39	ug/Kg	2	12/30/23	AW	SW8081B
Toxaphene	ND	160	ug/Kg	2	12/30/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	86		%	2	12/30/23	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	81		%	2	12/30/23	AW	30 - 150 %
% TCMX	68		%	2	12/30/23	AW	30 - 150 %
% TCMX (Confirmation)	71		%	2	12/30/23	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/29/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/29/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	57		%	10	12/29/23	JRB	30 - 150 %
% DCAA (Confirmation)	64		%	10	12/29/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
a-BHC	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Alachlor	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Aldrin	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
b-BHC	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Chlordane	ND	5.0	ug/L	10	12/29/23	AW	SW8081B
d-BHC	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Dieldrin	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endosulfan I	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Endosulfan II	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endrin	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	12/29/23	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	12/29/23	AW	SW8081B
Toxaphene	ND	20	ug/L	10	12/29/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	59		%	10	12/29/23	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	78		%	10	12/29/23	AW	30 - 150 %
%TCMX (Surrogate Rec)	80		%	10	12/29/23	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	90		%	10	12/29/23	AW	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	160	59	mg/Kg	1	12/27/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	101		%	1	12/27/23	JRB	50 - 150 %
% Terphenyl (surr)	102		%	1	12/27/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
1,1-Dichloroethane	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
1,1-Dichloroethene	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
1,2-Dibromoethane	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
1,2-Dichloroethane	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
1,2-Dichloropropane	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
2-Hexanone	ND	27	ug/kg	1	12/28/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	27	ug/kg	1	12/28/23	JLI	SW8260D
Acetone	ND	50	ug/kg	1	12/28/23	JLI	SW8260D
Benzene	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
Bromochloromethane	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
Bromodichloromethane	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
Bromoform	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
Bromomethane	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
Carbon Disulfide	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
Carbon tetrachloride	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
Chlorobenzene	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
Chloroethane	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
Chloroform	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
Chloromethane	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
Cyclohexane	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
Dibromochloromethane	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
Dichlorodifluoromethane	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
Ethylbenzene	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
Isopropylbenzene	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
m&p-Xylene	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
Methyl ethyl ketone	ND	32	ug/kg	1	12/28/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	11	ug/kg	1	12/28/23	JLI	SW8260D
Methylacetate	ND	4.3	ug/kg	1	12/28/23	JLI	SW8260D
Methylcyclohexane	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
Methylene chloride	ND	27	ug/kg	1	12/28/23	JLI	SW8260D
o-Xylene	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
Styrene	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
Tetrachloroethene	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
Toluene	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
Total Xylenes	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
Trichloroethene	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
Trichlorofluoromethane	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
Vinyl chloride	ND	5.4	ug/kg	1	12/28/23	JLI	SW8260D
<u>QA/QC Surrogates</u>							
% 1,2-dichlorobenzene-d4	100		%	1	12/28/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
2,4-Dinitrophenol	ND	630	ug/Kg	1	12/28/23	MR	SW8270E
2,4-Dinitrotoluene	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
2,6-Dinitrotoluene	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
2-Chloronaphthalene	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
2-Chlorophenol	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
2-Methylnaphthalene	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
2-Methylphenol (o-cresol)	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
2-Nitroaniline	ND	630	ug/Kg	1	12/28/23	MR	SW8270E
2-Nitrophenol	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	390	ug/Kg	1	12/28/23	MR	SW8270E
3,3'-Dichlorobenzidine	ND	470	ug/Kg	1	12/28/23	MR	SW8270E
3-Nitroaniline	ND	630	ug/Kg	1	12/28/23	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	12/28/23	MR	SW8270E
4-Bromophenyl phenyl ether	ND	390	ug/Kg	1	12/28/23	MR	SW8270E
4-Chloro-3-methylphenol	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
4-Chloroaniline	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
4-Nitroaniline	ND	630	ug/Kg	1	12/28/23	MR	SW8270E
4-Nitrophenol	ND	1100	ug/Kg	1	12/28/23	MR	SW8270E
Acenaphthene	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
Acenaphthylene	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
Acetophenone	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
Anthracene	610	270	ug/Kg	1	12/28/23	MR	SW8270E
Atrazine	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
Benz(a)anthracene	1900	270	ug/Kg	1	12/28/23	MR	SW8270E
Benzaldehyde	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(a)pyrene	1900	270	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(b)fluoranthene	2300	270	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(ghi)perylene	1000	270	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(k)fluoranthene	840	270	ug/Kg	1	12/28/23	MR	SW8270E
Benzyl butyl phthalate	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
Bis(2-chloroethyl)ether	ND	390	ug/Kg	1	12/28/23	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
Caprolactam	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
Carbazole	ND	390	ug/Kg	1	12/28/23	MR	SW8270E
Chrysene	1700	270	ug/Kg	1	12/28/23	MR	SW8270E
Dibenz(a,h)anthracene	250	200	ug/Kg	1	12/28/23	MR	SW8270E
Dibenzofuran	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
Diethyl phthalate	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
Dimethylphthalate	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
Di-n-butylphthalate	ND	790	ug/Kg	1	12/28/23	MR	SW8270E
Di-n-octylphthalate	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
Fluoranthene	4600	270	ug/Kg	1	12/28/23	MR	SW8270E
Fluorene	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
Hexachlorobenzene	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
Hexachlorobutadiene	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
Hexachlorocyclopentadiene	ND	270	ug/Kg	1	12/28/23	MR	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
Indeno(1,2,3-cd)pyrene	1100	270	ug/Kg	1	12/28/23	MR	SW8270E
Isophorone	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
Naphthalene	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
Nitrobenzene	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
N-Nitrosodimethylamine	ND	390	ug/Kg	1	12/28/23	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	1	12/28/23	MR	SW8270E
N-Nitrosodiphenylamine	ND	390	ug/Kg	1	12/28/23	MR	SW8270E
Pentachlorophenol	ND	390	ug/Kg	1	12/28/23	MR	SW8270E
Phenanthrene	2700	270	ug/Kg	1	12/28/23	MR	SW8270E
Phenol	ND	270	ug/Kg	1	12/28/23	MR	SW8270E
Pyrene	3900	270	ug/Kg	1	12/28/23	MR	SW8270E
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	96		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorobiphenyl	89		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorophenol	76		%	1	12/28/23	MR	30 - 130 %
% Nitrobenzene-d5	76		%	1	12/28/23	MR	30 - 130 %
% Phenol-d5	83		%	1	12/28/23	MR	30 - 130 %
% Terphenyl-d14	93		%	1	12/28/23	MR	30 - 130 %
<u>TCLP Acid/Base-Neutral</u>							
1,4-Dichlorobenzene	ND	83	ug/L	1	01/03/24	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	01/03/24	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	01/03/24	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	01/03/24	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	01/03/24	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	01/03/24	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	01/03/24	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	01/03/24	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	01/03/24	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	01/03/24	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	01/03/24	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	01/03/24	MR	SW-846 1311/8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	84		%	1	01/03/24	MR	15 - 110 %
% 2-Fluorobiphenyl	76		%	1	01/03/24	MR	30 - 130 %
% 2-Fluorophenol	56		%	1	01/03/24	MR	15 - 110 %
% Nitrobenzene-d5	74		%	1	01/03/24	MR	30 - 130 %
% Phenol-d5	50		%	1	01/03/24	MR	15 - 110 %
% Terphenyl-d14	79		%	1	01/03/24	MR	30 - 130 %
Semivolatile Library Search	Completed				01/04/24	MR	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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 (preceded 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.

Hexavalent Chromium:
This sample is in a reducing state.

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

January 10, 2024

Reviewed and Released by: Sarah Bell, Project Manager



Environmental Laboratories, Inc.

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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
Location Code: AES-EASTSIDE
Rush Request: Standard
P.O.#: 0897

Custody Information

Collected by:
Received by: SR1
Analyzed by: see "By" below

Date

12/21/23
12/26/23

Time

13:40
17:04

Laboratory Data

SDG ID: GCP74370
Phoenix ID: CP74378

Project ID: EAST SIDE COASTAL RESILIENCY
Client ID: DEP 92

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.40	0.40	mg/Kg	1	12/28/23	TH	SW6010D
Aluminum	7650	5.9	mg/Kg	1	12/28/23	TH	SW6010D
Arsenic	2.94	0.79	mg/Kg	1	12/28/23	TH	SW6010D
Barium	288	0.40	mg/Kg	1	12/28/23	TH	SW6010D
Beryllium	0.41	0.32	mg/Kg	1	12/28/23	TH	SW6010D
Calcium	13900	59	mg/Kg	10	12/27/23	TH	SW6010D
Cadmium	< 0.40	0.40	mg/Kg	1	12/28/23	TH	SW6010D
Cobalt	6.17	0.40	mg/Kg	1	12/28/23	TH	SW6010D
Chromium	15.9	0.40	mg/Kg	1	12/28/23	TH	SW6010D
Copper	22.7	0.8	mg/kg	1	12/28/23	TH	SW6010D
Iron	13000	5.9	mg/Kg	1	12/28/23	TH	SW6010D
Mercury	0.22	0.03	mg/Kg	2	12/27/23	ZT	SW7471B
Potassium	1230	59	mg/Kg	10	12/27/23	TH	SW6010D
Magnesium	4110	5.9	mg/Kg	1	12/28/23	TH	SW6010D
Manganese	205	0.40	mg/Kg	1	12/28/23	TH	SW6010D
Sodium	204	5.9	mg/Kg	1	12/28/23	TH	SW6010D
Nickel	14.8	0.40	mg/Kg	1	12/28/23	TH	SW6010D
Lead	47.5	0.40	mg/Kg	1	12/28/23	TH	SW6010D
Antimony	9.4	4.0	mg/Kg	1	12/28/23	TH	SW6010D
Selenium	< 1.6	1.6	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Barium	0.98	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	12/28/23	ZT	SW846 1311/7470
TCLP Lead	0.66	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.6	3.6	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/28/23	W/AL/AL	SW3010A
Trivalent Chromium	15.9	0.40	mg/kg	1	12/29/23		CALC 6010-7196
Vanadium	22.4	0.40	mg/Kg	1	12/28/23	TH	SW6010D
Zinc	105	0.8	mg/Kg	1	12/28/23	TH	SW6010D
Percent Solid	89		%		12/26/23	AC1	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/26/23	ER	SW846-Corr 1
Flash Point	>200	200	Degree F	1	01/02/24	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.40	0.40	mg/Kg	1	12/29/23	NP	SW7196A
Ignitability	Passed	140	degree F	1	01/02/24	G	SW846-Ignit 1
pH at 25C - Soil	8.76	1.00	pH Units	1	12/26/23 23:20	ER	SW846 9045D 1
Reactivity Cyanide	< 5	5	mg/Kg	1	12/27/23	NP/GD	SW846 7.3.3.1/90 1
Reactivity Sulfide	< 20	20	mg/Kg	1	12/28/23	NP/GD	SW846 CH7 1
Reactivity	Negative		Pos/Neg	1	12/29/23	NP/GD	SW846-React 1
Redox Potential	122		mV	1	12/26/23	ER	SM2580B-09 1
Total Cyanide (SW9010C Distill.)	< 0.56	0.56	mg/Kg	1	12/28/23	MW/GD	SW9012B
Mercury Digestion	Completed				12/27/23	AL/AL	SW7471B
Extraction of NY ETPH	Completed				12/26/23	C/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/28/23	L/MQ/D	SW3546
NJ EPH Extraction	Completed				12/27/23	C/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/28/23	C/A	SW3546
Soil Extraction for Pesticides	Completed				12/28/23	C/A	SW3546
Soil Extraction for SVOA	Completed				12/27/23	AC1/H/U	SW3546
TCLP Digestion Mercury	Completed				12/28/23	W/AL/AL	SW7470A
TCLP Herbicides Extraction	Completed				12/28/23	CV/MQ	SW8150 MOD
TCLP Extraction for Metals	Completed				12/27/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/27/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/29/23	LB1/LB1	SW3510C
TCLP Semi-Volatile Extraction	Completed				01/03/24	S/S	SW3510C
TCLP Extraction Volatiles	Completed				12/27/23	CV	SW1311
Total Metals Digest	Completed				12/26/23	L/AG	SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	ND	8.9	mg/kg	1	12/28/23	JRB	NJEPH 10-08 R3 1
C9-C28	24	18	mg/kg	1	12/28/23	JRB	NJEPH 10-08 R3 1
Total EPH	24.0	8.9	mg/kg	1	12/28/23	JRB	NJEPH 10-08 R3 1

QA/QC Surrogates

% COD (surr)	73		%	1	12/28/23	JRB	40 - 140 %
% Terphenyl (surr)	99		%	1	12/28/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	6.6	mg/Kg	50	12/27/23	V	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	91		%	50	12/27/23	V	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	140	ug/Kg	10	12/29/23	JRB	SW8151A
2,4,5-TP (Silvex)	ND	140	ug/Kg	10	12/29/23	JRB	SW8151A
2,4-D	ND	280	ug/Kg	10	12/29/23	JRB	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	2800	ug/Kg	10	12/29/23	JRB	SW8151A
Dalapon	ND	140	ug/Kg	10	12/29/23	JRB	SW8151A
Dicamba	ND	140	ug/Kg	10	12/29/23	JRB	SW8151A
Dichloroprop	ND	280	ug/Kg	10	12/29/23	JRB	SW8151A
Dinoseb	ND	280	ug/Kg	10	12/29/23	JRB	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	89		%	10	12/29/23	JRB	30 - 150 %
% DCAA (Confirmation)	76		%	10	12/29/23	JRB	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1221	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1232	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1242	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1248	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1254	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1260	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1262	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
PCB-1268	ND	74	ug/Kg	2	12/29/23	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	75		%	2	12/29/23	SC	30 - 150 %
% DCBP (Confirmation)	68		%	2	12/29/23	SC	30 - 150 %
% TCMX	73		%	2	12/29/23	SC	30 - 150 %
% TCMX (Confirmation)	71		%	2	12/29/23	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.2	ug/Kg	2	12/29/23	AW	SW8081B
4,4' -DDE	ND	2.2	ug/Kg	2	12/29/23	AW	SW8081B
4,4' -DDT	ND	2.2	ug/Kg	2	12/29/23	AW	SW8081B
a-BHC	ND	7.4	ug/Kg	2	12/29/23	AW	SW8081B
a-Chlordane	ND	3.7	ug/Kg	2	12/29/23	AW	SW8081B
Aldrin	ND	3.7	ug/Kg	2	12/29/23	AW	SW8081B
b-BHC	ND	7.4	ug/Kg	2	12/29/23	AW	SW8081B
Chlordane	ND	37	ug/Kg	2	12/29/23	AW	SW8081B
d-BHC	ND	7.4	ug/Kg	2	12/29/23	AW	SW8081B
Dieldrin	ND	3.7	ug/Kg	2	12/29/23	AW	SW8081B
Endosulfan I	ND	7.4	ug/Kg	2	12/29/23	AW	SW8081B
Endosulfan II	ND	7.4	ug/Kg	2	12/29/23	AW	SW8081B
Endosulfan sulfate	ND	7.4	ug/Kg	2	12/29/23	AW	SW8081B
Endrin	ND	7.4	ug/Kg	2	12/29/23	AW	SW8081B
Endrin aldehyde	ND	7.4	ug/Kg	2	12/29/23	AW	SW8081B
Endrin ketone	ND	7.4	ug/Kg	2	12/29/23	AW	SW8081B
g-BHC	ND	1.5	ug/Kg	2	12/29/23	AW	SW8081B
g-Chlordane	ND	3.7	ug/Kg	2	12/29/23	AW	SW8081B
Heptachlor	ND	7.4	ug/Kg	2	12/29/23	AW	SW8081B
Heptachlor epoxide	ND	7.4	ug/Kg	2	12/29/23	AW	SW8081B
Methoxychlor	ND	37	ug/Kg	2	12/29/23	AW	SW8081B
Toxaphene	ND	150	ug/Kg	2	12/29/23	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	82		%	2	12/29/23	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	78		%	2	12/29/23	AW	30 - 150 %
% TCMX	73		%	2	12/29/23	AW	30 - 150 %
% TCMX (Confirmation)	70		%	2	12/29/23	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/29/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/29/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	64		%	10	12/29/23	JRB	30 - 150 %
% DCAA (Confirmation)	74		%	10	12/29/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
a-BHC	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Alachlor	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Aldrin	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
b-BHC	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Chlordane	ND	5.0	ug/L	10	01/03/24	AW	SW8081B
d-BHC	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Dieldrin	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
Endosulfan I	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Endosulfan II	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
Endrin	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Toxaphene	ND	20	ug/L	10	01/03/24	AW	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	57		%	10	01/03/24	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	65		%	10	01/03/24	AW	30 - 150 %
%TCMX (Surrogate Rec)	39		%	10	01/03/24	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	43		%	10	01/03/24	AW	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	ND	55	mg/Kg	1	12/27/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	58		%	1	12/27/23	JRB	50 - 150 %
% Terphenyl (surr)	71		%	1	12/27/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
1,1-Dichloroethane	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
1,1-Dichloroethene	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
1,2-Dibromoethane	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
1,2-Dichloroethane	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
1,2-Dichloropropane	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
2-Hexanone	ND	26	ug/kg	1	12/28/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	26	ug/kg	1	12/28/23	JLI	SW8260D
Acetone	ND	50	ug/kg	1	12/28/23	JLI	SW8260D
Benzene	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
Bromochloromethane	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
Bromodichloromethane	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
Bromoform	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
Bromomethane	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
Carbon Disulfide	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
Carbon tetrachloride	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
Chlorobenzene	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
Chloroethane	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
Chloroform	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
Chloromethane	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
Cyclohexane	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
Dibromochloromethane	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
Dichlorodifluoromethane	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
Ethylbenzene	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
Isopropylbenzene	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
m&p-Xylene	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
Methyl ethyl ketone	ND	32	ug/kg	1	12/28/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	11	ug/kg	1	12/28/23	JLI	SW8260D
Methylacetate	ND	4.2	ug/kg	1	12/28/23	JLI	SW8260D
Methylcyclohexane	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
Methylene chloride	ND	26	ug/kg	1	12/28/23	JLI	SW8260D
o-Xylene	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
Styrene	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
Tetrachloroethene	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
Toluene	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
Total Xylenes	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
Trichloroethene	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
Trichlorofluoromethane	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
Vinyl chloride	ND	5.3	ug/kg	1	12/28/23	JLI	SW8260D
<u>QA/QC Surrogates</u>							
% 1,2-dichlorobenzene-d4	101		%	1	12/28/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	88		%	1	12/28/23	JLI	70 - 130 %
% Dibromofluoromethane	89		%	1	12/28/23	JLI	70 - 130 %
% Toluene-d8	103		%	1	12/28/23	JLI	70 - 130 %

1,4-dioxane

1,4-dioxane	ND	79	ug/kg	1	12/28/23	JLI	SW8260D
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Volatiles

1,2,3-Trichloropropane	ND	5.3	ug/Kg	1	12/28/23	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	5.3	ug/Kg	1	12/28/23	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	5.3	ug/Kg	1	12/28/23	JLI	SW8260D
1,3-Dichloropropane	ND	5.3	ug/Kg	1	12/28/23	JLI	SW8260D
n-Butylbenzene	ND	5.3	ug/Kg	1	12/28/23	JLI	SW8260D
n-Propylbenzene	ND	5.3	ug/Kg	1	12/28/23	JLI	SW8260D
p-Isopropyltoluene	ND	5.3	ug/Kg	1	12/28/23	JLI	SW8260D
sec-Butylbenzene	ND	5.3	ug/Kg	1	12/28/23	JLI	SW8260D
tert-Butylbenzene	ND	5.3	ug/Kg	1	12/28/23	JLI	SW8260D

QA/QC Surrogates

% 1,2-dichlorobenzene-d4	101		%	1	12/28/23	JLI	70 - 130 %
% Bromofluorobenzene	88		%	1	12/28/23	JLI	70 - 130 %
% Dibromofluoromethane	89		%	1	12/28/23	JLI	70 - 130 %
% Toluene-d8	103		%	1	12/28/23	JLI	70 - 130 %

TCLP Volatiles

1,1-Dichloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260

QA/QC Surrogates

% 1,2-dichlorobenzene-d4 (10x)	99		%	10	12/28/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	89		%	10	12/28/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	96		%	10	12/28/23	HM	70 - 130 %
% Toluene-d8 (10x)	95		%	10	12/28/23	HM	70 - 130 %

Volatile Library Search Completed 01/02/24 JLI

Semivolatiles

1,1-Biphenyl	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2,3,4,6-tetrachlorophenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2,4-Dichlorophenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2,4-Dinitrophenol	ND	590	ug/Kg	1	12/28/23	MR	SW8270E
2,4-Dinitrotoluene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2,6-Dinitrotoluene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2-Chloronaphthalene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2-Chlorophenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2-Methylnaphthalene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
2-Nitroaniline	ND	590	ug/Kg	1	12/28/23	MR	SW8270E
2-Nitrophenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	1	12/28/23	MR	SW8270E
3,3'-Dichlorobenzidine	ND	440	ug/Kg	1	12/28/23	MR	SW8270E
3-Nitroaniline	ND	590	ug/Kg	1	12/28/23	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	12/28/23	MR	SW8270E
4-Bromophenyl phenyl ether	ND	370	ug/Kg	1	12/28/23	MR	SW8270E
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
4-Chloroaniline	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
4-Nitroaniline	ND	590	ug/Kg	1	12/28/23	MR	SW8270E
4-Nitrophenol	ND	1100	ug/Kg	1	12/28/23	MR	SW8270E
Acenaphthene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Acenaphthylene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Acetophenone	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Anthracene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Atrazine	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Benz(a)anthracene	460	260	ug/Kg	1	12/28/23	MR	SW8270E
Benzaldehyde	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(a)pyrene	460	260	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(b)fluoranthene	530	260	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(ghi)perylene	310	260	ug/Kg	1	12/28/23	MR	SW8270E
Benzo(k)fluoranthene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Benzyl butyl phthalate	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Bis(2-chloroethyl)ether	ND	370	ug/Kg	1	12/28/23	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Caprolactam	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Carbazole	ND	370	ug/Kg	1	12/28/23	MR	SW8270E
Chrysene	430	260	ug/Kg	1	12/28/23	MR	SW8270E
Dibenz(a,h)anthracene	ND	180	ug/Kg	1	12/28/23	MR	SW8270E
Dibenzofuran	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Diethyl phthalate	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Dimethylphthalate	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Di-n-butylphthalate	ND	740	ug/Kg	1	12/28/23	MR	SW8270E
Di-n-octylphthalate	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Fluoranthene	830	260	ug/Kg	1	12/28/23	MR	SW8270E
Fluorene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Hexachlorobenzene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Hexachlorobutadiene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Indeno(1,2,3-cd)pyrene	310	260	ug/Kg	1	12/28/23	MR	SW8270E
Isophorone	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Naphthalene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Nitrobenzene	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
N-Nitrosodimethylamine	ND	370	ug/Kg	1	12/28/23	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	180	ug/Kg	1	12/28/23	MR	SW8270E
N-Nitrosodiphenylamine	ND	370	ug/Kg	1	12/28/23	MR	SW8270E
Pentachlorophenol	ND	370	ug/Kg	1	12/28/23	MR	SW8270E
Phenanthrene	570	260	ug/Kg	1	12/28/23	MR	SW8270E
Phenol	ND	260	ug/Kg	1	12/28/23	MR	SW8270E
Pyrene	770	260	ug/Kg	1	12/28/23	MR	SW8270E
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	72		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorobiphenyl	65		%	1	12/28/23	MR	30 - 130 %
% 2-Fluorophenol	57		%	1	12/28/23	MR	30 - 130 %
% Nitrobenzene-d5	55		%	1	12/28/23	MR	30 - 130 %
% Phenol-d5	62		%	1	12/28/23	MR	30 - 130 %
% Terphenyl-d14	69		%	1	12/28/23	MR	30 - 130 %
<u>TCLP Acid/Base-Neutral</u>							
1,4-Dichlorobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	89		%	1	01/04/24	MR	15 - 110 %
% 2-Fluorobiphenyl	78		%	1	01/04/24	MR	30 - 130 %
% 2-Fluorophenol	56		%	1	01/04/24	MR	15 - 110 %
% Nitrobenzene-d5	74		%	1	01/04/24	MR	30 - 130 %
% Phenol-d5	51		%	1	01/04/24	MR	15 - 110 %
% Terphenyl-d14	80		%	1	01/04/24	MR	30 - 130 %
Semivolatile Library Search	Completed				01/04/24	MR	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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.

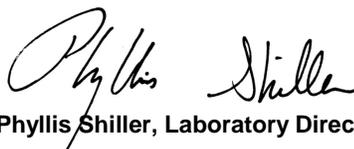
The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Sulfide. This method is no longer listed in the current version of SW-846.

Hexavalent Chromium:
This sample is in a reducing state.

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

January 10, 2024

Reviewed and Released by: Sarah Bell, Project Manager



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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
 Location Code: AES-EASTSIDE
 Rush Request: Standard
 P.O.#: 0897

Custody Information

Collected by:
 Received by: SR1
 Analyzed by: see "By" below

Date

12/21/23
 12/26/23

Time

9:30
 17:04

Laboratory Data

SDG ID: GCP74370
 Phoenix ID: CP74379

Project ID: EAST SIDE COASTAL RESILIENCY
 Client ID: DM 103

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.41	0.41	mg/Kg	1	12/28/23	TH	SW6010D
Aluminum	7680	61	mg/Kg	10	12/27/23	TH	SW6010D
Arsenic	3.94	0.81	mg/Kg	1	12/28/23	TH	SW6010D
Barium	103	0.41	mg/Kg	1	12/28/23	TH	SW6010D
Beryllium	0.71	0.33	mg/Kg	1	12/28/23	TH	SW6010D
Calcium	12700	61	mg/Kg	10	12/27/23	TH	SW6010D
Cadmium	< 0.41	0.41	mg/Kg	1	12/28/23	TH	SW6010D
Cobalt	9.42	0.41	mg/Kg	1	12/28/23	TH	SW6010D
Chromium	26.8	0.41	mg/Kg	1	12/28/23	TH	SW6010D
Copper	30.3	0.8	mg/kg	1	12/28/23	TH	SW6010D
Iron	20800	6.1	mg/Kg	1	12/28/23	TH	SW6010D
Mercury	0.34	0.03	mg/Kg	2	12/27/23	ZT	SW7471B
Potassium	2500	61	mg/Kg	10	12/27/23	TH	SW6010D
Magnesium	6510	6.1	mg/Kg	1	12/28/23	TH	SW6010D
Manganese	404	0.41	mg/Kg	1	12/28/23	TH	SW6010D
Sodium	336	6.1	mg/Kg	1	12/28/23	TH	SW6010D
Nickel	26.2	0.41	mg/Kg	1	12/28/23	TH	SW6010D
Lead	87.7	0.41	mg/Kg	1	12/28/23	TH	SW6010D
Antimony	< 4.1	4.1	mg/Kg	1	12/28/23	TH	SW6010D
Selenium	< 1.6	1.6	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Barium	0.98	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	12/28/23	ZT	SW846 1311/7470
TCLP Lead	0.13	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.7	3.7	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/28/23	W/AL/AL	SW3010A
Trivalent Chromium	26.8	0.41	mg/kg	1	01/02/24		CALC 6010-7196
Vanadium	29.0	0.41	mg/Kg	1	12/28/23	TH	SW6010D
Zinc	57.9	0.8	mg/Kg	1	12/28/23	TH	SW6010D
Percent Solid	83		%		12/26/23	AC1	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/26/23	ER	SW846-Corr 1
Flash Point	>200	200	Degree F	1	01/02/24	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.47	0.47	mg/Kg	1	01/02/24	NP	SW7196A
Ignitability	Passed	140	degree F	1	01/02/24	G	SW846-Ignit 1
pH at 25C - Soil	8.74	1.00	pH Units	1	12/26/23 23:20	ER	SW846 9045D 1
Reactivity Cyanide	< 6	6	mg/Kg	1	12/27/23	NP/GD	SW846 7.3.3.1/90 1
Reactivity Sulfide	< 20	20	mg/Kg	1	12/28/23	NP/GD	SW846 CH7 1
Reactivity	Negative		Pos/Neg	1	12/29/23	NP/GD	SW846-React 1
Redox Potential	134		mV	1	12/26/23	ER	SM2580B-09 1
Total Cyanide (SW9010C Distill.)	< 0.60	0.60	mg/Kg	1	12/28/23	MW/GD	SW9012B
Mercury Digestion	Completed				12/27/23	AL/AL	SW7471B
Extraction of NY ETPH	Completed				12/26/23	C/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/28/23	L/MQ/D	SW3546
NJ EPH Extraction	Completed				12/27/23	C/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/29/23	H/JDW	SW3546
Soil Extraction for Pesticides	Completed				12/29/23	H/JDW	SW3546
Soil Extraction for SVOA	Completed				12/28/23	H/U	SW3546
TCLP Digestion Mercury	Completed				12/28/23	W/AL/AL	SW7470A
TCLP Herbicides Extraction	Completed				12/28/23	CV/MQ	SW8150 MOD
TCLP Extraction for Metals	Completed				12/27/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/27/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/29/23	LB1/LB1	SW3510C
TCLP Semi-Volatile Extraction	Completed				01/03/24	S/S	SW3510C
TCLP Extraction Volatiles	Completed				12/27/23	CV	SW1311
Total Metals Digest	Completed				12/26/23	L/AG	SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	ND	47	mg/kg	5	12/29/23	JRB	NJEPH 10-08 R3 1
C9-C28	ND	94	mg/kg	5	12/29/23	JRB	NJEPH 10-08 R3 1
Total EPH	ND	47	mg/kg	5	12/29/23	JRB	NJEPH 10-08 R3 1

QA/QC Surrogates

% COD (surr)	48		%	5	12/29/23	JRB	40 - 140 %
% Terphenyl (surr)	66		%	5	12/29/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	8.3	mg/Kg	50	12/27/23	V	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	91		%	50	12/27/23	V	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	150	ug/Kg	10	12/30/23	JRB	SW8151A
2,4,5-TP (Silvex)	ND	150	ug/Kg	10	12/30/23	JRB	SW8151A
2,4-D	ND	300	ug/Kg	10	12/30/23	JRB	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	3000	ug/Kg	10	12/30/23	JRB	SW8151A
Dalapon	ND	150	ug/Kg	10	12/30/23	JRB	SW8151A
Dicamba	ND	150	ug/Kg	10	12/30/23	JRB	SW8151A
Dichloroprop	ND	300	ug/Kg	10	12/30/23	JRB	SW8151A
Dinoseb	ND	300	ug/Kg	10	12/30/23	JRB	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	79		%	10	12/30/23	JRB	30 - 150 %
% DCAA (Confirmation)	73		%	10	12/30/23	JRB	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	78	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1221	ND	78	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1232	ND	78	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1242	ND	78	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1248	ND	78	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1254	ND	78	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1260	ND	78	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1262	ND	78	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1268	ND	78	ug/Kg	2	01/02/24	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	68		%	2	01/02/24	SC	30 - 150 %
% DCBP (Confirmation)	67		%	2	01/02/24	SC	30 - 150 %
% TCMX	78		%	2	01/02/24	SC	30 - 150 %
% TCMX (Confirmation)	75		%	2	01/02/24	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.3	ug/Kg	2	01/02/24	CN	SW8081B
4,4' -DDE	ND	2.3	ug/Kg	2	01/02/24	CN	SW8081B
4,4' -DDT	ND	2.3	ug/Kg	2	01/02/24	CN	SW8081B
a-BHC	ND	7.8	ug/Kg	2	01/02/24	CN	SW8081B
a-Chlordane	ND	3.9	ug/Kg	2	01/02/24	CN	SW8081B
Aldrin	ND	3.9	ug/Kg	2	01/02/24	CN	SW8081B
b-BHC	ND	7.8	ug/Kg	2	01/02/24	CN	SW8081B
Chlordane	ND	39	ug/Kg	2	01/02/24	CN	SW8081B
d-BHC	ND	7.8	ug/Kg	2	01/02/24	CN	SW8081B
Dieldrin	ND	3.9	ug/Kg	2	01/02/24	CN	SW8081B
Endosulfan I	ND	7.8	ug/Kg	2	01/02/24	CN	SW8081B
Endosulfan II	ND	7.8	ug/Kg	2	01/02/24	CN	SW8081B
Endosulfan sulfate	ND	7.8	ug/Kg	2	01/02/24	CN	SW8081B
Endrin	ND	7.8	ug/Kg	2	01/02/24	CN	SW8081B
Endrin aldehyde	ND	7.8	ug/Kg	2	01/02/24	CN	SW8081B
Endrin ketone	ND	7.8	ug/Kg	2	01/02/24	CN	SW8081B
g-BHC	ND	1.6	ug/Kg	2	01/02/24	CN	SW8081B
g-Chlordane	ND	3.9	ug/Kg	2	01/02/24	CN	SW8081B
Heptachlor	ND	7.8	ug/Kg	2	01/02/24	CN	SW8081B
Heptachlor epoxide	ND	7.8	ug/Kg	2	01/02/24	CN	SW8081B
Methoxychlor	ND	39	ug/Kg	2	01/02/24	CN	SW8081B
Toxaphene	ND	160	ug/Kg	2	01/02/24	CN	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	80		%	2	01/02/24	CN	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	83		%	2	01/02/24	CN	30 - 150 %
% TCMX	81		%	2	01/02/24	CN	30 - 150 %
% TCMX (Confirmation)	81		%	2	01/02/24	CN	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/29/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/29/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	58		%	10	12/29/23	JRB	30 - 150 %
% DCAA (Confirmation)	66		%	10	12/29/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	01/03/24	CN	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	01/03/24	CN	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	01/03/24	CN	SW8081B
a-BHC	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Alachlor	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Aldrin	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
b-BHC	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Chlordane	ND	5.0	ug/L	10	01/03/24	CN	SW8081B
d-BHC	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Dieldrin	ND	1.0	ug/L	10	01/03/24	CN	SW8081B
Endosulfan I	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Endosulfan II	ND	1.0	ug/L	10	01/03/24	CN	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	01/03/24	CN	SW8081B
Endrin	ND	1.0	ug/L	10	01/03/24	CN	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	01/03/24	CN	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Heptachlor	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Methoxychlor	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Toxaphene	ND	20	ug/L	10	01/03/24	CN	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	53		%	10	01/03/24	CN	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	61		%	10	01/03/24	CN	30 - 150 %
%TCMX (Surrogate Rec)	36		%	10	01/03/24	CN	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	40		%	10	01/03/24	CN	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	ND	58	mg/Kg	1	12/27/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	61		%	1	12/27/23	JRB	50 - 150 %
% Terphenyl (surr)	67		%	1	12/27/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
1,1-Dichloroethane	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
1,1-Dichloroethene	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
1,2-Dibromoethane	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
1,2-Dichloroethane	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
1,2-Dichloropropane	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
2-Hexanone	ND	38	ug/kg	1	12/28/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	38	ug/kg	1	12/28/23	JLI	SW8260D
Acetone	ND	50	ug/kg	1	12/28/23	JLI	SW8260D
Benzene	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
Bromochloromethane	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
Bromodichloromethane	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
Bromoform	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
Bromomethane	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
Carbon Disulfide	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
Carbon tetrachloride	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
Chlorobenzene	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
Chloroethane	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
Chloroform	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
Chloromethane	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
Cyclohexane	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
Dibromochloromethane	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
Dichlorodifluoromethane	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
Ethylbenzene	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
Isopropylbenzene	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
m&p-Xylene	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
Methyl ethyl ketone	ND	46	ug/kg	1	12/28/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	15	ug/kg	1	12/28/23	JLI	SW8260D
Methylacetate	ND	6.1	ug/kg	1	12/28/23	JLI	SW8260D
Methylcyclohexane	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
Methylene chloride	ND	38	ug/kg	1	12/28/23	JLI	SW8260D
o-Xylene	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
Styrene	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
Tetrachloroethene	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
Toluene	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
Total Xylenes	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
Trichloroethene	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
Trichlorofluoromethane	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
Vinyl chloride	ND	7.7	ug/kg	1	12/28/23	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	1	12/28/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
2,4-Dinitrophenol	ND	620	ug/Kg	1	12/29/23	MR	SW8270E
2,4-Dinitrotoluene	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
2,6-Dinitrotoluene	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
2-Chloronaphthalene	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
2-Chlorophenol	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
2-Methylnaphthalene	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
2-Methylphenol (o-cresol)	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
2-Nitroaniline	ND	620	ug/Kg	1	12/29/23	MR	SW8270E
2-Nitrophenol	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	390	ug/Kg	1	12/29/23	MR	SW8270E
3,3'-Dichlorobenzidine	ND	470	ug/Kg	1	12/29/23	MR	SW8270E
3-Nitroaniline	ND	620	ug/Kg	1	12/29/23	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	12/29/23	MR	SW8270E
4-Bromophenyl phenyl ether	ND	390	ug/Kg	1	12/29/23	MR	SW8270E
4-Chloro-3-methylphenol	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
4-Chloroaniline	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
4-Nitroaniline	ND	620	ug/Kg	1	12/29/23	MR	SW8270E
4-Nitrophenol	ND	1100	ug/Kg	1	12/29/23	MR	SW8270E
Acenaphthene	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
Acenaphthylene	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
Acetophenone	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
Anthracene	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
Atrazine	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
Benz(a)anthracene	1900	270	ug/Kg	1	12/29/23	MR	SW8270E
Benzaldehyde	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(a)pyrene	1800	270	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(b)fluoranthene	2200	270	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(ghi)perylene	940	270	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(k)fluoranthene	790	270	ug/Kg	1	12/29/23	MR	SW8270E
Benzyl butyl phthalate	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
Bis(2-chloroethyl)ether	ND	390	ug/Kg	1	12/29/23	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
Caprolactam	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
Carbazole	ND	390	ug/Kg	1	12/29/23	MR	SW8270E
Chrysene	1700	270	ug/Kg	1	12/29/23	MR	SW8270E
Dibenz(a,h)anthracene	260	200	ug/Kg	1	12/29/23	MR	SW8270E
Dibenzofuran	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
Diethyl phthalate	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
Dimethylphthalate	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
Di-n-butylphthalate	ND	780	ug/Kg	1	12/29/23	MR	SW8270E
Di-n-octylphthalate	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
Fluoranthene	2700	270	ug/Kg	1	12/29/23	MR	SW8270E
Fluorene	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
Hexachlorobenzene	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
Hexachlorobutadiene	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
Hexachlorocyclopentadiene	ND	270	ug/Kg	1	12/29/23	MR	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
Indeno(1,2,3-cd)pyrene	1100	270	ug/Kg	1	12/29/23	MR	SW8270E
Isophorone	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
Naphthalene	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
Nitrobenzene	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
N-Nitrosodimethylamine	ND	390	ug/Kg	1	12/29/23	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	1	12/29/23	MR	SW8270E
N-Nitrosodiphenylamine	ND	390	ug/Kg	1	12/29/23	MR	SW8270E
Pentachlorophenol	ND	390	ug/Kg	1	12/29/23	MR	SW8270E
Phenanthrene	720	270	ug/Kg	1	12/29/23	MR	SW8270E
Phenol	ND	270	ug/Kg	1	12/29/23	MR	SW8270E
Pyrene	2300	270	ug/Kg	1	12/29/23	MR	SW8270E

QA/QC Surrogates

% 2,4,6-Tribromophenol	109		%	1	12/29/23	MR	30 - 130 %
% 2-Fluorobiphenyl	78		%	1	12/29/23	MR	30 - 130 %
% 2-Fluorophenol	50		%	1	12/29/23	MR	30 - 130 %
% Nitrobenzene-d5	68		%	1	12/29/23	MR	30 - 130 %
% Phenol-d5	63		%	1	12/29/23	MR	30 - 130 %
% Terphenyl-d14	68		%	1	12/29/23	MR	30 - 130 %

TCLP Acid/Base-Neutral

1,4-Dichlorobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270

QA/QC Surrogates

% 2,4,6-Tribromophenol	89		%	1	01/04/24	MR	15 - 110 %
% 2-Fluorobiphenyl	79		%	1	01/04/24	MR	30 - 130 %
% 2-Fluorophenol	63		%	1	01/04/24	MR	15 - 110 %
% Nitrobenzene-d5	79		%	1	01/04/24	MR	30 - 130 %
% Phenol-d5	56		%	1	01/04/24	MR	15 - 110 %
% Terphenyl-d14	85		%	1	01/04/24	MR	30 - 130 %

Semivolatile Library Search Completed 12/29/23 MR

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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 (preceded 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.

Hexavalent Chromium:
This sample is in a reducing state.

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

January 10, 2024

Reviewed and Released by: Sarah Bell, Project Manager



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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
 Location Code: AES-EASTSIDE
 Rush Request: Standard
 P.O.#: 0897

Custody Information

Collected by:
 Received by: SR1
 Analyzed by: see "By" below

Date

12/21/23
 12/26/23

Time

10:10
 17:04

Laboratory Data

SDG ID: GCP74370
 Phoenix ID: CP74380

Project ID: EAST SIDE COASTAL RESILIENCY
 Client ID: G 135

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.40	0.40	mg/Kg	1	12/28/23	TH	SW6010D
Aluminum	7430	6.0	mg/Kg	1	12/28/23	TH	SW6010D
Arsenic	5.45	0.80	mg/Kg	1	12/28/23	TH	SW6010D
Barium	72.4	0.40	mg/Kg	1	12/28/23	TH	SW6010D
Beryllium	0.39	0.32	mg/Kg	1	12/28/23	TH	SW6010D
Calcium	3660	6.0	mg/Kg	1	12/28/23	TH	SW6010D
Cadmium	0.52	0.40	mg/Kg	1	12/28/23	TH	SW6010D
Cobalt	5.28	0.40	mg/Kg	1	12/28/23	TH	SW6010D
Chromium	17.6	0.40	mg/Kg	1	12/28/23	TH	SW6010D
Copper	31.5	0.8	mg/kg	1	12/28/23	TH	SW6010D
Iron	13400	6.0	mg/Kg	1	12/28/23	TH	SW6010D
Mercury	0.26	0.03	mg/Kg	2	12/27/23	ZT	SW7471B
Potassium	977	60	mg/Kg	10	12/27/23	TH	SW6010D
Magnesium	2430	6.0	mg/Kg	1	12/28/23	TH	SW6010D
Manganese	243	0.40	mg/Kg	1	12/28/23	TH	SW6010D
Sodium	71.6	6.0	mg/Kg	1	12/28/23	TH	SW6010D
Nickel	13.8	0.40	mg/Kg	1	12/28/23	TH	SW6010D
Lead	143	0.40	mg/Kg	1	12/28/23	TH	SW6010D
Antimony	< 4.0	4.0	mg/Kg	1	12/28/23	TH	SW6010D
Selenium	< 1.6	1.6	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Barium	0.56	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	12/28/23	ZT	SW846 1311/7470
TCLP Lead	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.6	3.6	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/28/23	W/AL/AL	SW3010A
Trivalent Chromium	17.6	0.40	mg/kg	1	01/02/24		CALC 6010-7196
Vanadium	28.7	0.40	mg/Kg	1	12/28/23	TH	SW6010D
Zinc	178	0.8	mg/Kg	1	12/28/23	TH	SW6010D
Percent Solid	87		%		12/26/23	AC1	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/26/23	ER	SW846-Corr
Flash Point	>200	200	Degree F	1	01/02/24	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.38	0.38	mg/Kg	1	01/02/24	NP	SW7196A
Ignitability	Passed	140	degree F	1	01/02/24	G	SW846-Ignit
pH at 25C - Soil	7.22	1.00	pH Units	1	12/26/23 23:20	ER	SW846 9045D
Reactivity Cyanide	< 6	6	mg/Kg	1	12/27/23	NP/GD	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	12/28/23	NP/GD	SW846 CH7
Reactivity	Negative		Pos/Neg	1	12/29/23	NP/GD	SW846-React
Redox Potential	8.2		mV	1	12/26/23	ER	SM2580B-09
Total Cyanide (SW9010C Distill.)	2.71	0.52	mg/Kg	1	01/02/24	BA/GD	SW9012B
Mercury Digestion	Completed				12/27/23	AL/AL	SW7471B
Extraction of NY ETPH	Completed				12/26/23	C/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/28/23	L/MQ/D	SW3546
NJ EPH Extraction	Completed				12/27/23	C/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/29/23	H/JDW	SW3546
Soil Extraction for Pesticides	Completed				12/29/23	H/JDW	SW3546
Soil Extraction for SVOA	Completed				12/28/23	H/U	SW3546
TCLP Digestion Mercury	Completed				12/28/23	W/AL/AL	SW7470A
TCLP Herbicides Extraction	Completed				12/28/23	CV/MQ	SW8150 MOD
TCLP Extraction for Metals	Completed				12/27/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/27/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/29/23	LB1/LB1	SW3510C
TCLP Semi-Volatile Extraction	Completed				01/03/24	S/S	SW3510C
TCLP Extraction Volatiles	Completed				12/27/23	CV	SW1311
Total Metals Digest	Completed				12/26/23	L/AG	SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	ND	9.1	mg/kg	1	12/28/23	JRB	NJEPH 10-08 R3
C9-C28	ND	18	mg/kg	1	12/28/23	JRB	NJEPH 10-08 R3
Total EPH	ND	9.1	mg/kg	1	12/28/23	JRB	NJEPH 10-08 R3

QA/QC Surrogates

% COD (surr)	53		%	1	12/28/23	JRB	40 - 140 %
% Terphenyl (surr)	71		%	1	12/28/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	5.5	mg/Kg	50	12/27/23	V	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	92		%	50	12/27/23	V	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	140	ug/Kg	10	12/30/23	JRB	SW8151A
2,4,5-TP (Silvex)	ND	140	ug/Kg	10	12/30/23	JRB	SW8151A
2,4-D	ND	280	ug/Kg	10	12/30/23	JRB	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	2800	ug/Kg	10	12/30/23	JRB	SW8151A
Dalapon	ND	140	ug/Kg	10	12/30/23	JRB	SW8151A
Dicamba	ND	140	ug/Kg	10	12/30/23	JRB	SW8151A
Dichloroprop	ND	280	ug/Kg	10	12/30/23	JRB	SW8151A
Dinoseb	ND	280	ug/Kg	10	12/30/23	JRB	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	72		%	10	12/30/23	JRB	30 - 150 %
% DCAA (Confirmation)	60		%	10	12/30/23	JRB	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	76	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1221	ND	76	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1232	ND	76	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1242	ND	76	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1248	ND	76	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1254	ND	76	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1260	ND	76	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1262	ND	76	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1268	ND	76	ug/Kg	2	01/02/24	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	75		%	2	01/02/24	SC	30 - 150 %
% DCBP (Confirmation)	76		%	2	01/02/24	SC	30 - 150 %
% TCMX	82		%	2	01/02/24	SC	30 - 150 %
% TCMX (Confirmation)	81		%	2	01/02/24	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	6.6	2.3	ug/Kg	2	01/02/24	AW	SW8081B
4,4' -DDE	38	2.3	ug/Kg	2	01/02/24	AW	SW8081B
4,4' -DDT	55	2.3	ug/Kg	2	01/02/24	AW	SW8081B
a-BHC	ND	7.6	ug/Kg	2	01/02/24	AW	SW8081B
a-Chlordane	ND	10	ug/Kg	2	01/02/24	AW	SW8081B
Aldrin	ND	3.8	ug/Kg	2	01/02/24	AW	SW8081B
b-BHC	ND	7.6	ug/Kg	2	01/02/24	AW	SW8081B
Chlordane	ND	55	ug/Kg	2	01/02/24	AW	SW8081B
d-BHC	ND	7.6	ug/Kg	2	01/02/24	AW	SW8081B
Dieldrin	ND	3.8	ug/Kg	2	01/02/24	AW	SW8081B
Endosulfan I	ND	7.6	ug/Kg	2	01/02/24	AW	SW8081B
Endosulfan II	ND	7.6	ug/Kg	2	01/02/24	AW	SW8081B
Endosulfan sulfate	ND	7.6	ug/Kg	2	01/02/24	AW	SW8081B
Endrin	ND	7.6	ug/Kg	2	01/02/24	AW	SW8081B
Endrin aldehyde	ND	20	ug/Kg	2	01/02/24	AW	SW8081B
Endrin ketone	ND	7.6	ug/Kg	2	01/02/24	AW	SW8081B
g-BHC	ND	1.5	ug/Kg	2	01/02/24	AW	SW8081B
g-Chlordane	ND	10	ug/Kg	2	01/02/24	AW	SW8081B
Heptachlor	ND	7.6	ug/Kg	2	01/02/24	AW	SW8081B
Heptachlor epoxide	ND	7.6	ug/Kg	2	01/02/24	AW	SW8081B
Methoxychlor	ND	38	ug/Kg	2	01/02/24	AW	SW8081B
Toxaphene	ND	150	ug/Kg	2	01/02/24	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	101		%	2	01/02/24	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	111		%	2	01/02/24	AW	30 - 150 %
% TCMX	74		%	2	01/02/24	AW	30 - 150 %
% TCMX (Confirmation)	85		%	2	01/02/24	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/29/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/29/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	56		%	10	12/29/23	JRB	30 - 150 %
% DCAA (Confirmation)	65		%	10	12/29/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	01/03/24	CN	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	01/03/24	CN	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	01/03/24	CN	SW8081B
a-BHC	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Alachlor	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Aldrin	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
b-BHC	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Chlordane	ND	5.0	ug/L	10	01/03/24	CN	SW8081B
d-BHC	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Dieldrin	ND	1.0	ug/L	10	01/03/24	CN	SW8081B
Endosulfan I	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Endosulfan II	ND	1.0	ug/L	10	01/03/24	CN	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	01/03/24	CN	SW8081B
Endrin	ND	1.0	ug/L	10	01/03/24	CN	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	01/03/24	CN	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Heptachlor	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Methoxychlor	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Toxaphene	ND	20	ug/L	10	01/03/24	CN	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	58		%	10	01/03/24	CN	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	67		%	10	01/03/24	CN	30 - 150 %
%TCMX (Surrogate Rec)	41		%	10	01/03/24	CN	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	46		%	10	01/03/24	CN	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	ND	56	mg/Kg	1	12/27/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	62		%	1	12/27/23	JRB	50 - 150 %
% Terphenyl (surr)	70		%	1	12/27/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethane	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethene	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dibromoethane	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloroethane	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloropropane	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
2-Hexanone	ND	36	ug/kg	1	12/29/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	36	ug/kg	1	12/29/23	JLI	SW8260D
Acetone	ND	50	ug/kg	1	12/29/23	JLI	SW8260D
Benzene	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
Bromochloromethane	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
Bromodichloromethane	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
Bromoform	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
Bromomethane	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
Carbon Disulfide	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
Carbon tetrachloride	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
Chlorobenzene	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
Chloroethane	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
Chloroform	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
Chloromethane	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
Cyclohexane	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
Dibromochloromethane	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
Dichlorodifluoromethane	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
Ethylbenzene	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
Isopropylbenzene	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
m&p-Xylene	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
Methyl ethyl ketone	ND	44	ug/kg	1	12/29/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	15	ug/kg	1	12/29/23	JLI	SW8260D
Methylacetate	ND	5.8	ug/kg	1	12/29/23	JLI	SW8260D
Methylcyclohexane	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
Methylene chloride	ND	36	ug/kg	1	12/29/23	JLI	SW8260D
o-Xylene	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
Styrene	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
Tetrachloroethene	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
Toluene	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
Total Xylenes	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
Trichloroethene	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorofluoromethane	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
Vinyl chloride	ND	7.3	ug/kg	1	12/29/23	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	1	12/29/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	86		%	1	12/29/23	JLI	70 - 130 %
% Dibromofluoromethane	90		%	1	12/29/23	JLI	70 - 130 %
% Toluene-d8	103		%	1	12/29/23	JLI	70 - 130 %

1,4-dioxane

1,4-dioxane	ND	100	ug/kg	1	12/29/23	JLI	SW8260D
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Volatiles

1,2,3-Trichloropropane	ND	7.3	ug/Kg	1	12/29/23	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	7.3	ug/Kg	1	12/29/23	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	7.3	ug/Kg	1	12/29/23	JLI	SW8260D
1,3-Dichloropropane	ND	7.3	ug/Kg	1	12/29/23	JLI	SW8260D
n-Butylbenzene	ND	7.3	ug/Kg	1	12/29/23	JLI	SW8260D
n-Propylbenzene	ND	7.3	ug/Kg	1	12/29/23	JLI	SW8260D
p-Isopropyltoluene	ND	7.3	ug/Kg	1	12/29/23	JLI	SW8260D
sec-Butylbenzene	ND	7.3	ug/Kg	1	12/29/23	JLI	SW8260D
tert-Butylbenzene	ND	7.3	ug/Kg	1	12/29/23	JLI	SW8260D

QA/QC Surrogates

% 1,2-dichlorobenzene-d4	97		%	1	12/29/23	JLI	70 - 130 %
% Bromofluorobenzene	86		%	1	12/29/23	JLI	70 - 130 %
% Dibromofluoromethane	90		%	1	12/29/23	JLI	70 - 130 %
% Toluene-d8	103		%	1	12/29/23	JLI	70 - 130 %

TCLP Volatiles

1,1-Dichloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260

QA/QC Surrogates

% 1,2-dichlorobenzene-d4 (10x)	99		%	10	12/28/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	89		%	10	12/28/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	98		%	10	12/28/23	HM	70 - 130 %
% Toluene-d8 (10x)	94		%	10	12/28/23	HM	70 - 130 %

Volatile Library Search Completed 01/02/24 JLI

Semivolatiles

1,1-Biphenyl	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
2,3,4,6-tetrachlorophenol	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
2,4-Dichlorophenol	ND	260	ug/Kg	1	12/29/23	MR	SW8270E

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
2,4-Dinitrophenol	ND	600	ug/Kg	1	12/29/23	MR	SW8270E
2,4-Dinitrotoluene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
2,6-Dinitrotoluene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
2-Chloronaphthalene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
2-Chlorophenol	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
2-Methylnaphthalene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
2-Nitroaniline	ND	600	ug/Kg	1	12/29/23	MR	SW8270E
2-Nitrophenol	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	380	ug/Kg	1	12/29/23	MR	SW8270E
3,3'-Dichlorobenzidine	ND	450	ug/Kg	1	12/29/23	MR	SW8270E
3-Nitroaniline	ND	600	ug/Kg	1	12/29/23	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	12/29/23	MR	SW8270E
4-Bromophenyl phenyl ether	ND	380	ug/Kg	1	12/29/23	MR	SW8270E
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
4-Chloroaniline	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
4-Nitroaniline	ND	600	ug/Kg	1	12/29/23	MR	SW8270E
4-Nitrophenol	ND	1100	ug/Kg	1	12/29/23	MR	SW8270E
Acenaphthene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Acenaphthylene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Acetophenone	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Anthracene	280	260	ug/Kg	1	12/29/23	MR	SW8270E
Atrazine	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Benz(a)anthracene	830	260	ug/Kg	1	12/29/23	MR	SW8270E
Benzaldehyde	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(a)pyrene	790	260	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(b)fluoranthene	940	260	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(ghi)perylene	380	260	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(k)fluoranthene	350	260	ug/Kg	1	12/29/23	MR	SW8270E
Benzyl butyl phthalate	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Bis(2-chloroethyl)ether	ND	380	ug/Kg	1	12/29/23	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Caprolactam	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Carbazole	ND	380	ug/Kg	1	12/29/23	MR	SW8270E
Chrysene	860	260	ug/Kg	1	12/29/23	MR	SW8270E
Dibenz(a,h)anthracene	ND	190	ug/Kg	1	12/29/23	MR	SW8270E
Dibenzofuran	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Diethyl phthalate	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Dimethylphthalate	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Di-n-butylphthalate	ND	750	ug/Kg	1	12/29/23	MR	SW8270E
Di-n-octylphthalate	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Fluoranthene	1500	260	ug/Kg	1	12/29/23	MR	SW8270E
Fluorene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Hexachlorobenzene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Hexachlorobutadiene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Indeno(1,2,3-cd)pyrene	410	260	ug/Kg	1	12/29/23	MR	SW8270E
Isophorone	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Naphthalene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Nitrobenzene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
N-Nitrosodimethylamine	ND	380	ug/Kg	1	12/29/23	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	190	ug/Kg	1	12/29/23	MR	SW8270E
N-Nitrosodiphenylamine	ND	380	ug/Kg	1	12/29/23	MR	SW8270E
Pentachlorophenol	ND	380	ug/Kg	1	12/29/23	MR	SW8270E
Phenanthrene	1500	260	ug/Kg	1	12/29/23	MR	SW8270E
Phenol	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Pyrene	1400	260	ug/Kg	1	12/29/23	MR	SW8270E
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	109		%	1	12/29/23	MR	30 - 130 %
% 2-Fluorobiphenyl	85		%	1	12/29/23	MR	30 - 130 %
% 2-Fluorophenol	57		%	1	12/29/23	MR	30 - 130 %
% Nitrobenzene-d5	78		%	1	12/29/23	MR	30 - 130 %
% Phenol-d5	69		%	1	12/29/23	MR	30 - 130 %
% Terphenyl-d14	72		%	1	12/29/23	MR	30 - 130 %
<u>TCLP Acid/Base-Neutral</u>							
1,4-Dichlorobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	91		%	1	01/04/24	MR	15 - 110 %
% 2-Fluorobiphenyl	80		%	1	01/04/24	MR	30 - 130 %
% 2-Fluorophenol	60		%	1	01/04/24	MR	15 - 110 %
% Nitrobenzene-d5	77		%	1	01/04/24	MR	30 - 130 %
% Phenol-d5	54		%	1	01/04/24	MR	15 - 110 %
% Terphenyl-d14	86		%	1	01/04/24	MR	30 - 130 %
Semivolatile Library Search	Completed				12/29/23	MR	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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.

Hexavalent Chromium:
This sample is in a reducing state.

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

January 10, 2024

Reviewed and Released by: Sarah Bell, Project Manager



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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
 Location Code: AES-EASTSIDE
 Rush Request: Standard
 P.O.#: 0897

Custody Information

Collected by:
 Received by: SR1
 Analyzed by: see "By" below

Date

12/21/23
 12/26/23

Time

10:15
 17:04

Laboratory Data

SDG ID: GCP74370
 Phoenix ID: CP74381

Project ID: EAST SIDE COASTAL RESILIENCY
 Client ID: G 136

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.37	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Aluminum	10400	55	mg/Kg	10	12/27/23	TH	SW6010D
Arsenic	7.76	0.73	mg/Kg	1	12/28/23	TH	SW6010D
Barium	101	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Beryllium	0.66	0.29	mg/Kg	1	12/28/23	TH	SW6010D
Calcium	2080	5.5	mg/Kg	1	12/28/23	TH	SW6010D
Cadmium	0.63	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Cobalt	7.95	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Chromium	22.1	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Copper	38.9	0.7	mg/kg	1	12/28/23	TH	SW6010D
Iron	17800	5.5	mg/Kg	1	12/28/23	TH	SW6010D
Mercury	0.26	0.03	mg/Kg	2	12/27/23	ZT	SW7471B
Potassium	765	55	mg/Kg	10	12/27/23	TH	SW6010D
Magnesium	2660	5.5	mg/Kg	1	12/28/23	TH	SW6010D
Manganese	520	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Sodium	94.2	5.5	mg/Kg	1	12/28/23	TH	SW6010D
Nickel	17.4	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Lead	107	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Antimony	< 3.7	3.7	mg/Kg	1	12/28/23	TH	SW6010D
Selenium	< 1.5	1.5	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Barium	1.03	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	12/28/23	ZT	SW846 1311/7470
TCLP Lead	0.49	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.3	3.3	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/28/23	W/AL/AL	SW3010A
Trivalent Chromium	22.1	0.37	mg/kg	1	01/02/24		CALC 6010-7196
Vanadium	35.0	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Zinc	125	0.7	mg/Kg	1	12/28/23	TH	SW6010D
Percent Solid	82		%		12/26/23	AC1	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/26/23	ER	SW846-Corr
Flash Point	>200	200	Degree F	1	01/02/24	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.48	0.48	mg/Kg	1	01/02/24	NP	SW7196A
Ignitability	Passed	140	degree F	1	01/02/24	G	SW846-Ignit
pH at 25C - Soil	6.84	1.00	pH Units	1	12/26/23 23:20	ER	SW846 9045D
Reactivity Cyanide	< 6	6	mg/Kg	1	12/27/23	NP/GD	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	12/28/23	NP/GD	SW846 CH7
Reactivity	Negative		Pos/Neg	1	12/29/23	NP/GD	SW846-React
Redox Potential	201		mV	1	12/26/23	ER	SM2580B-09
Total Cyanide (SW9010C Distill.)	< 0.55	0.55	mg/Kg	1	01/02/24	BA/GD	SW9012B
Mercury Digestion	Completed				12/27/23	AL/AL	SW7471B
Extraction of NY ETPH	Completed				12/26/23	C/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/28/23	L/MQ/D	SW3546
NJ EPH Extraction	Completed				12/27/23	C/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/29/23	H/JDW	SW3546
Soil Extraction for Pesticides	Completed				12/29/23	H/JDW	SW3546
Soil Extraction for SVOA	Completed				12/28/23	H/U	SW3546
TCLP Digestion Mercury	Completed				12/28/23	W/AL/AL	SW7470A
TCLP Herbicides Extraction	Completed				12/28/23	CV/MQ	SW8150 MOD
TCLP Extraction for Metals	Completed				12/27/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/27/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/29/23	LB1/LB1	SW3510C
TCLP Semi-Volatile Extraction	Completed				01/03/24	S/S	SW3510C
TCLP Extraction Volatiles	Completed				12/27/23	CV	SW1311
Total Metals Digest	Completed				12/26/23	L/AG	SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	ND	48	mg/kg	5	12/29/23	JRB	NJEPH 10-08 R3
C9-C28	ND	95	mg/kg	5	12/29/23	JRB	NJEPH 10-08 R3
Total EPH	ND	48	mg/kg	5	12/29/23	JRB	NJEPH 10-08 R3

QA/QC Surrogates

% COD (surr)	43		%	5	12/29/23	JRB	40 - 140 %
% Terphenyl (surr)	54		%	5	12/29/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	8.2	mg/Kg	50	12/27/23	V	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	88		%	50	12/27/23	V	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	150	ug/Kg	10	12/30/23	JRB	SW8151A
2,4,5-TP (Silvex)	ND	150	ug/Kg	10	12/30/23	JRB	SW8151A
2,4-D	ND	300	ug/Kg	10	12/30/23	JRB	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	3000	ug/Kg	10	12/30/23	JRB	SW8151A
Dalapon	ND	150	ug/Kg	10	12/30/23	JRB	SW8151A
Dicamba	ND	150	ug/Kg	10	12/30/23	JRB	SW8151A
Dichloroprop	ND	300	ug/Kg	10	12/30/23	JRB	SW8151A
Dinoseb	ND	300	ug/Kg	10	12/30/23	JRB	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	68		%	10	12/30/23	JRB	30 - 150 %
% DCAA (Confirmation)	58		%	10	12/30/23	JRB	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	80	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1221	ND	80	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1232	ND	80	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1242	ND	80	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1248	ND	80	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1254	ND	80	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1260	ND	80	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1262	ND	80	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1268	ND	80	ug/Kg	2	01/02/24	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	76		%	2	01/02/24	SC	30 - 150 %
% DCBP (Confirmation)	77		%	2	01/02/24	SC	30 - 150 %
% TCMX	78		%	2	01/02/24	SC	30 - 150 %
% TCMX (Confirmation)	77		%	2	01/02/24	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.4	ug/Kg	2	01/02/24	AW	SW8081B
4,4' -DDE	14	2.4	ug/Kg	2	01/02/24	AW	SW8081B
4,4' -DDT	13	2.4	ug/Kg	2	01/02/24	AW	SW8081B
a-BHC	ND	8.0	ug/Kg	2	01/02/24	AW	SW8081B
a-Chlordane	ND	4.0	ug/Kg	2	01/02/24	AW	SW8081B
Aldrin	ND	4.0	ug/Kg	2	01/02/24	AW	SW8081B
b-BHC	ND	8.0	ug/Kg	2	01/02/24	AW	SW8081B
Chlordane	ND	40	ug/Kg	2	01/02/24	AW	SW8081B
d-BHC	ND	8.0	ug/Kg	2	01/02/24	AW	SW8081B
Dieldrin	ND	4.0	ug/Kg	2	01/02/24	AW	SW8081B
Endosulfan I	ND	8.0	ug/Kg	2	01/02/24	AW	SW8081B
Endosulfan II	ND	8.0	ug/Kg	2	01/02/24	AW	SW8081B
Endosulfan sulfate	ND	8.0	ug/Kg	2	01/02/24	AW	SW8081B
Endrin	ND	8.0	ug/Kg	2	01/02/24	AW	SW8081B
Endrin aldehyde	ND	8.0	ug/Kg	2	01/02/24	AW	SW8081B
Endrin ketone	ND	8.0	ug/Kg	2	01/02/24	AW	SW8081B
g-BHC	ND	1.6	ug/Kg	2	01/02/24	AW	SW8081B
g-Chlordane	ND	4.0	ug/Kg	2	01/02/24	AW	SW8081B
Heptachlor	ND	8.0	ug/Kg	2	01/02/24	AW	SW8081B
Heptachlor epoxide	ND	8.0	ug/Kg	2	01/02/24	AW	SW8081B
Methoxychlor	ND	40	ug/Kg	2	01/02/24	AW	SW8081B
Toxaphene	ND	160	ug/Kg	2	01/02/24	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	84		%	2	01/02/24	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	75		%	2	01/02/24	AW	30 - 150 %
% TCMX	78		%	2	01/02/24	AW	30 - 150 %
% TCMX (Confirmation)	76		%	2	01/02/24	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/29/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/29/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	56		%	10	12/29/23	JRB	30 - 150 %
% DCAA (Confirmation)	65		%	10	12/29/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
a-BHC	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Alachlor	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Aldrin	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
b-BHC	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Chlordane	ND	5.0	ug/L	10	01/03/24	AW	SW8081B
d-BHC	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Dieldrin	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
Endosulfan I	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Endosulfan II	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
Endrin	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Toxaphene	ND	20	ug/L	10	01/03/24	AW	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	58		%	10	01/03/24	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	67		%	10	01/03/24	AW	30 - 150 %
%TCMX (Surrogate Rec)	41		%	10	01/03/24	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	45		%	10	01/03/24	AW	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	ND	60	mg/Kg	1	12/27/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	71		%	1	12/27/23	JRB	50 - 150 %
% Terphenyl (surr)	72		%	1	12/27/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	410	ug/kg	50	12/30/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethane	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethene	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	410	ug/kg	50	12/30/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	410	ug/kg	50	12/30/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	410	ug/kg	50	12/30/23	JLI	SW8260D
1,2-Dibromoethane	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	410	ug/kg	50	12/30/23	JLI	SW8260D
1,2-Dichloroethane	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloropropane	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	410	ug/kg	50	12/30/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	410	ug/kg	50	12/30/23	JLI	SW8260D
2-Hexanone	ND	34	ug/kg	1	12/29/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	34	ug/kg	1	12/29/23	JLI	SW8260D
Acetone	ND	50	ug/kg	1	12/29/23	JLI	SW8260D
Benzene	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
Bromochloromethane	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
Bromodichloromethane	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
Bromoform	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
Bromomethane	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
Carbon Disulfide	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
Carbon tetrachloride	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
Chlorobenzene	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
Chloroethane	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
Chloroform	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
Chloromethane	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
Cyclohexane	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
Dibromochloromethane	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
Dichlorodifluoromethane	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
Ethylbenzene	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
Isopropylbenzene	ND	410	ug/kg	50	12/30/23	JLI	SW8260D
m&p-Xylene	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
Methyl ethyl ketone	ND	41	ug/kg	1	12/29/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	14	ug/kg	1	12/29/23	JLI	SW8260D
Methylacetate	ND	5.5	ug/kg	1	12/29/23	JLI	SW8260D
Methylcyclohexane	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
Methylene chloride	ND	34	ug/kg	1	12/29/23	JLI	SW8260D
o-Xylene	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
Styrene	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
Tetrachloroethene	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
Toluene	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
Total Xylenes	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
Trichloroethene	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorofluoromethane	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
Vinyl chloride	ND	6.9	ug/kg	1	12/29/23	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	90		%	1	12/29/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,3,4,6-tetrachlorophenol	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
2,4,5-Trichlorophenol	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
2,4,6-Trichlorophenol	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
2,4-Dichlorophenol	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
2,4-Dimethylphenol	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
2,4-Dinitrophenol	ND	640	ug/Kg	1	12/29/23	MR	SW8270E
2,4-Dinitrotoluene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
2,6-Dinitrotoluene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
2-Chloronaphthalene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
2-Chlorophenol	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
2-Methylnaphthalene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
2-Methylphenol (o-cresol)	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
2-Nitroaniline	ND	640	ug/Kg	1	12/29/23	MR	SW8270E
2-Nitrophenol	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	400	ug/Kg	1	12/29/23	MR	SW8270E
3,3'-Dichlorobenzidine	ND	480	ug/Kg	1	12/29/23	MR	SW8270E
3-Nitroaniline	ND	640	ug/Kg	1	12/29/23	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	1	12/29/23	MR	SW8270E
4-Bromophenyl phenyl ether	ND	400	ug/Kg	1	12/29/23	MR	SW8270E
4-Chloro-3-methylphenol	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
4-Chloroaniline	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
4-Nitroaniline	ND	640	ug/Kg	1	12/29/23	MR	SW8270E
4-Nitrophenol	ND	1200	ug/Kg	1	12/29/23	MR	SW8270E
Acenaphthene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Acenaphthylene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Acetophenone	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Anthracene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Atrazine	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Benz(a)anthracene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Benzaldehyde	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(a)pyrene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(b)fluoranthene	290	280	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(ghi)perylene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(k)fluoranthene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Benzyl butyl phthalate	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Bis(2-chloroethyl)ether	ND	400	ug/Kg	1	12/29/23	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Caprolactam	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Carbazole	ND	400	ug/Kg	1	12/29/23	MR	SW8270E
Chrysene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Dibenz(a,h)anthracene	ND	200	ug/Kg	1	12/29/23	MR	SW8270E
Dibenzofuran	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Diethyl phthalate	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Dimethylphthalate	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Di-n-butylphthalate	ND	800	ug/Kg	1	12/29/23	MR	SW8270E
Di-n-octylphthalate	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Fluoranthene	350	280	ug/Kg	1	12/29/23	MR	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Fluorene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Hexachlorobenzene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Hexachlorobutadiene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Hexachlorocyclopentadiene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Hexachloroethane	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Indeno(1,2,3-cd)pyrene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Isophorone	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Naphthalene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Nitrobenzene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
N-Nitrosodimethylamine	ND	400	ug/Kg	1	12/29/23	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	1	12/29/23	MR	SW8270E
N-Nitrosodiphenylamine	ND	400	ug/Kg	1	12/29/23	MR	SW8270E
Pentachlorophenol	ND	400	ug/Kg	1	12/29/23	MR	SW8270E
Phenanthrene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Phenol	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Pyrene	330	280	ug/Kg	1	12/29/23	MR	SW8270E
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	100		%	1	12/29/23	MR	30 - 130 %
% 2-Fluorobiphenyl	80		%	1	12/29/23	MR	30 - 130 %
% 2-Fluorophenol	61		%	1	12/29/23	MR	30 - 130 %
% Nitrobenzene-d5	79		%	1	12/29/23	MR	30 - 130 %
% Phenol-d5	70		%	1	12/29/23	MR	30 - 130 %
% Terphenyl-d14	65		%	1	12/29/23	MR	30 - 130 %
<u>TCLP Acid/Base-Neutral</u>							
1,4-Dichlorobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	84		%	1	01/04/24	MR	15 - 110 %
% 2-Fluorobiphenyl	74		%	1	01/04/24	MR	30 - 130 %
% 2-Fluorophenol	58		%	1	01/04/24	MR	15 - 110 %
% Nitrobenzene-d5	76		%	1	01/04/24	MR	30 - 130 %
% Phenol-d5	52		%	1	01/04/24	MR	15 - 110 %
% Terphenyl-d14	79		%	1	01/04/24	MR	30 - 130 %
Semivolatile Library Search	Completed				12/29/23	MR	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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.

Hexavalent Chromium:
This sample is in a reducing state.

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.

Volatile Comment:
There was a suppression of the last internal standard in the low level analysis, all affected compounds are reported from the methanol preserved high level analysis which did not exhibit this interference.

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

January 10, 2024

Reviewed and Released by: Sarah Bell, Project Manager



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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
 Location Code: AES-EASTSIDE
 Rush Request: Standard
 P.O.#: 0897

Custody Information

Collected by:
 Received by: SR1
 Analyzed by: see "By" below

Date

12/21/23
 12/26/23

Time

10:20
 17:04

Laboratory Data

SDG ID: GCP74370
 Phoenix ID: CP74382

Project ID: EAST SIDE COASTAL RESILIENCY
 Client ID: G 137

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.39	0.39	mg/Kg	1	12/28/23	TH	SW6010D
Aluminum	6580	58	mg/Kg	10	12/27/23	TH	SW6010D
Arsenic	5.85	0.78	mg/Kg	1	12/28/23	TH	SW6010D
Barium	309	0.39	mg/Kg	1	12/28/23	TH	SW6010D
Beryllium	0.44	0.31	mg/Kg	1	12/28/23	TH	SW6010D
Calcium	5370	5.8	mg/Kg	1	12/28/23	TH	SW6010D
Cadmium	0.44	0.39	mg/Kg	1	12/28/23	TH	SW6010D
Cobalt	6.97	0.39	mg/Kg	1	12/28/23	TH	SW6010D
Chromium	17.8	0.39	mg/Kg	1	12/28/23	TH	SW6010D
Copper	36.9	0.8	mg/kg	1	12/28/23	TH	SW6010D
Iron	16400	5.8	mg/Kg	1	12/28/23	TH	SW6010D
Mercury	0.18	0.03	mg/Kg	2	12/27/23	ZT	SW7471B
Potassium	1260	58	mg/Kg	10	12/27/23	TH	SW6010D
Magnesium	3160	5.8	mg/Kg	1	12/28/23	TH	SW6010D
Manganese	326	0.39	mg/Kg	1	12/28/23	TH	SW6010D
Sodium	112	5.8	mg/Kg	1	12/28/23	TH	SW6010D
Nickel	15.7	0.39	mg/Kg	1	12/28/23	TH	SW6010D
Lead	254	0.39	mg/Kg	1	12/28/23	TH	SW6010D
Antimony	< 3.9	3.9	mg/Kg	1	12/28/23	TH	SW6010D
Selenium	< 1.6	1.6	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Barium	0.92	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	12/28/23	ZT	SW846 1311/7470
TCLP Lead	0.23	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.5	3.5	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/28/23	W/AL/AL	SW3010A
Trivalent Chromium	17.8	0.39	mg/kg	1	01/02/24		CALC 6010-7196
Vanadium	24.2	0.39	mg/Kg	1	12/28/23	TH	SW6010D
Zinc	128	0.8	mg/Kg	1	12/28/23	TH	SW6010D
Percent Solid	88		%		12/26/23	AC1	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/26/23	ER	SW846-Corr
Flash Point	>200	200	Degree F	1	01/02/24	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.40	0.40	mg/Kg	1	01/02/24	NP	SW7196A
Ignitability	Passed	140	degree F	1	01/02/24	G	SW846-Ignit
pH at 25C - Soil	8.17	1.00	pH Units	1	12/26/23 23:20	ER	SW846 9045D
Reactivity Cyanide	< 6	6	mg/Kg	1	12/27/23	NP/GD	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	12/28/23	NP/GD	SW846 CH7
Reactivity	Negative		Pos/Neg	1	12/29/23	NP/GD	SW846-React
Redox Potential	179		mV	1	12/26/23	ER	SM2580B-09
Total Cyanide (SW9010C Distill.)	6.61	0.52	mg/Kg	1	01/02/24	BA/GD	SW9012B
Mercury Digestion	Completed				12/27/23	AL/AL	SW7471B
Extraction of NY ETPH	Completed				12/26/23	C/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/28/23	L/MQ/D	SW3546
NJ EPH Extraction	Completed				12/27/23	C/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/29/23	H/JDW	SW3546
Soil Extraction for Pesticides	Completed				12/29/23	H/JDW	SW3546
Soil Extraction for SVOA	Completed				12/28/23	H/U	SW3546
TCLP Digestion Mercury	Completed				12/28/23	W/AL/AL	SW7470A
TCLP Herbicides Extraction	Completed				12/28/23	CV/MQ	SW8150 MOD
TCLP Extraction for Metals	Completed				12/27/23	AL	SW1311
TCLP Extraction for Organics	Completed				01/02/24	AL	SW1311
TCLP Pesticides Extraction	Completed				01/03/24	LB1/LB1	SW3510C
TCLP Semi-Volatile Extraction	Completed				01/03/24	S/S	SW3510C
TCLP Extraction Volatiles	Completed				12/27/23	CV	SW1311
Total Metals Digest	Completed				12/26/23	L/AG	SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	ND	8.9	mg/kg	1	12/28/23	JRB	NJEPH 10-08 R3
C9-C28	ND	18	mg/kg	1	12/28/23	JRB	NJEPH 10-08 R3
Total EPH	ND	8.9	mg/kg	1	12/28/23	JRB	NJEPH 10-08 R3

QA/QC Surrogates

% COD (surr)	81		%	1	12/28/23	JRB	40 - 140 %
% Terphenyl (surr)	97		%	1	12/28/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	5.6	mg/Kg	50	12/27/23	V	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	88		%	50	12/27/23	V	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	140	ug/Kg	10	12/30/23	JRB	SW8151A
2,4,5-TP (Silvex)	ND	140	ug/Kg	10	12/30/23	JRB	SW8151A
2,4-D	ND	280	ug/Kg	10	12/30/23	JRB	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	2800	ug/Kg	10	12/30/23	JRB	SW8151A
Dalapon	ND	140	ug/Kg	10	12/30/23	JRB	SW8151A
Dicamba	ND	140	ug/Kg	10	12/30/23	JRB	SW8151A
Dichloroprop	ND	280	ug/Kg	10	12/30/23	JRB	SW8151A
Dinoseb	ND	280	ug/Kg	10	12/30/23	JRB	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	57		%	10	12/30/23	JRB	30 - 150 %
% DCAA (Confirmation)	52		%	10	12/30/23	JRB	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	75	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1221	ND	75	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1232	ND	75	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1242	ND	75	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1248	ND	75	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1254	ND	75	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1260	ND	75	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1262	ND	75	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1268	ND	75	ug/Kg	2	01/02/24	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	70		%	2	01/02/24	SC	30 - 150 %
% DCBP (Confirmation)	64		%	2	01/02/24	SC	30 - 150 %
% TCMX	74		%	2	01/02/24	SC	30 - 150 %
% TCMX (Confirmation)	70		%	2	01/02/24	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.3	ug/Kg	2	01/03/24	AW	SW8081B
4,4' -DDE	ND	2.3	ug/Kg	2	01/03/24	AW	SW8081B
4,4' -DDT	ND	2.3	ug/Kg	2	01/03/24	AW	SW8081B
a-BHC	ND	7.5	ug/Kg	2	01/03/24	AW	SW8081B
a-Chlordane	ND	3.8	ug/Kg	2	01/03/24	AW	SW8081B
Aldrin	ND	3.8	ug/Kg	2	01/03/24	AW	SW8081B
b-BHC	ND	7.5	ug/Kg	2	01/03/24	AW	SW8081B
Chlordane	ND	38	ug/Kg	2	01/03/24	AW	SW8081B
d-BHC	ND	7.5	ug/Kg	2	01/03/24	AW	SW8081B
Dieldrin	ND	3.8	ug/Kg	2	01/03/24	AW	SW8081B
Endosulfan I	ND	7.5	ug/Kg	2	01/03/24	AW	SW8081B
Endosulfan II	ND	7.5	ug/Kg	2	01/03/24	AW	SW8081B
Endosulfan sulfate	ND	7.5	ug/Kg	2	01/03/24	AW	SW8081B
Endrin	ND	7.5	ug/Kg	2	01/03/24	AW	SW8081B
Endrin aldehyde	ND	7.5	ug/Kg	2	01/03/24	AW	SW8081B
Endrin ketone	ND	7.5	ug/Kg	2	01/03/24	AW	SW8081B
g-BHC	ND	1.5	ug/Kg	2	01/03/24	AW	SW8081B
g-Chlordane	ND	3.8	ug/Kg	2	01/03/24	AW	SW8081B
Heptachlor	ND	7.5	ug/Kg	2	01/03/24	AW	SW8081B
Heptachlor epoxide	ND	7.5	ug/Kg	2	01/03/24	AW	SW8081B
Methoxychlor	ND	38	ug/Kg	2	01/03/24	AW	SW8081B
Toxaphene	ND	150	ug/Kg	2	01/03/24	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	70		%	2	01/03/24	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	63		%	2	01/03/24	AW	30 - 150 %
% TCMX	68		%	2	01/03/24	AW	30 - 150 %
% TCMX (Confirmation)	66		%	2	01/03/24	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/29/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/29/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	56		%	10	12/29/23	JRB	30 - 150 %
% DCAA (Confirmation)	63		%	10	12/29/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	01/04/24	AW	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	01/04/24	AW	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	01/04/24	AW	SW8081B
a-BHC	ND	0.50	ug/L	10	01/04/24	AW	SW8081B
Alachlor	ND	0.50	ug/L	10	01/04/24	AW	SW8081B
Aldrin	ND	0.50	ug/L	10	01/04/24	AW	SW8081B
b-BHC	ND	0.50	ug/L	10	01/04/24	AW	SW8081B
Chlordane	ND	5.0	ug/L	10	01/04/24	AW	SW8081B
d-BHC	ND	0.50	ug/L	10	01/04/24	AW	SW8081B
Dieldrin	ND	1.0	ug/L	10	01/04/24	AW	SW8081B
Endosulfan I	ND	0.50	ug/L	10	01/04/24	AW	SW8081B
Endosulfan II	ND	1.0	ug/L	10	01/04/24	AW	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	01/04/24	AW	SW8081B
Endrin	ND	1.0	ug/L	10	01/04/24	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	01/04/24	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	01/04/24	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	01/04/24	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	01/04/24	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	01/04/24	AW	SW8081B
Toxaphene	ND	20	ug/L	10	01/04/24	AW	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	55		%	10	01/04/24	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	73		%	10	01/04/24	AW	30 - 150 %
%TCMX (Surrogate Rec)	47		%	10	01/04/24	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	52		%	10	01/04/24	AW	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	ND	55	mg/Kg	1	12/27/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	75		%	1	12/27/23	JRB	50 - 150 %
% Terphenyl (surr)	94		%	1	12/27/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethane	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethene	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dibromoethane	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloroethane	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloropropane	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
2-Hexanone	ND	21	ug/kg	1	12/29/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	21	ug/kg	1	12/29/23	JLI	SW8260D
Acetone	ND	41	ug/kg	1	12/29/23	JLI	SW8260D
Benzene	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
Bromochloromethane	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
Bromodichloromethane	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
Bromoform	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
Bromomethane	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
Carbon Disulfide	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
Carbon tetrachloride	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
Chlorobenzene	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
Chloroethane	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
Chloroform	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
Chloromethane	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
Cyclohexane	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
Dibromochloromethane	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
Dichlorodifluoromethane	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
Ethylbenzene	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
Isopropylbenzene	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
m&p-Xylene	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
Methyl ethyl ketone	ND	25	ug/kg	1	12/29/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	8.3	ug/kg	1	12/29/23	JLI	SW8260D
Methylacetate	ND	3.3	ug/kg	1	12/29/23	JLI	SW8260D
Methylcyclohexane	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
Methylene chloride	ND	21	ug/kg	1	12/29/23	JLI	SW8260D
o-Xylene	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
Styrene	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
Tetrachloroethene	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
Toluene	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
Total Xylenes	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
Trichloroethene	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorofluoromethane	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
Vinyl chloride	ND	4.1	ug/kg	1	12/29/23	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	1	12/29/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	87		%	1	12/29/23	JLI	70 - 130 %
% Dibromofluoromethane	87		%	1	12/29/23	JLI	70 - 130 %
% Toluene-d8	103		%	1	12/29/23	JLI	70 - 130 %

1,4-dioxane

1,4-dioxane	ND	62	ug/kg	1	12/29/23	JLI	SW8260D
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Volatiles

1,2,3-Trichloropropane	ND	4.1	ug/Kg	1	12/29/23	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	4.1	ug/Kg	1	12/29/23	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	4.1	ug/Kg	1	12/29/23	JLI	SW8260D
1,3-Dichloropropane	ND	4.1	ug/Kg	1	12/29/23	JLI	SW8260D
n-Butylbenzene	ND	4.1	ug/Kg	1	12/29/23	JLI	SW8260D
n-Propylbenzene	ND	4.1	ug/Kg	1	12/29/23	JLI	SW8260D
p-Isopropyltoluene	ND	4.1	ug/Kg	1	12/29/23	JLI	SW8260D
sec-Butylbenzene	ND	4.1	ug/Kg	1	12/29/23	JLI	SW8260D
tert-Butylbenzene	ND	4.1	ug/Kg	1	12/29/23	JLI	SW8260D

QA/QC Surrogates

% 1,2-dichlorobenzene-d4	99		%	1	12/29/23	JLI	70 - 130 %
% Bromofluorobenzene	87		%	1	12/29/23	JLI	70 - 130 %
% Dibromofluoromethane	87		%	1	12/29/23	JLI	70 - 130 %
% Toluene-d8	103		%	1	12/29/23	JLI	70 - 130 %

TCLP Volatiles

1,1-Dichloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260

QA/QC Surrogates

% 1,2-dichlorobenzene-d4 (10x)	99		%	10	12/28/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	89		%	10	12/28/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	98		%	10	12/28/23	HM	70 - 130 %
% Toluene-d8 (10x)	94		%	10	12/28/23	HM	70 - 130 %

Volatile Library Search Completed 01/02/24 JLI

Semivolatiles

1,1-Biphenyl	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
2,3,4,6-tetrachlorophenol	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
2,4-Dichlorophenol	ND	260	ug/Kg	1	12/29/23	MR	SW8270E

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
2,4-Dinitrophenol	ND	590	ug/Kg	1	12/29/23	MR	SW8270E
2,4-Dinitrotoluene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
2,6-Dinitrotoluene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
2-Chloronaphthalene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
2-Chlorophenol	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
2-Methylnaphthalene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
2-Nitroaniline	ND	590	ug/Kg	1	12/29/23	MR	SW8270E
2-Nitrophenol	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	1	12/29/23	MR	SW8270E
3,3'-Dichlorobenzidine	ND	440	ug/Kg	1	12/29/23	MR	SW8270E
3-Nitroaniline	ND	590	ug/Kg	1	12/29/23	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	12/29/23	MR	SW8270E
4-Bromophenyl phenyl ether	ND	370	ug/Kg	1	12/29/23	MR	SW8270E
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
4-Chloroaniline	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
4-Nitroaniline	ND	590	ug/Kg	1	12/29/23	MR	SW8270E
4-Nitrophenol	ND	1100	ug/Kg	1	12/29/23	MR	SW8270E
Acenaphthene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Acenaphthylene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Acetophenone	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Anthracene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Atrazine	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Benz(a)anthracene	850	260	ug/Kg	1	12/29/23	MR	SW8270E
Benzaldehyde	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(a)pyrene	940	260	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(b)fluoranthene	1100	260	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(ghi)perylene	480	260	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(k)fluoranthene	390	260	ug/Kg	1	12/29/23	MR	SW8270E
Benzyl butyl phthalate	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Bis(2-chloroethyl)ether	ND	370	ug/Kg	1	12/29/23	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Caprolactam	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Carbazole	ND	370	ug/Kg	1	12/29/23	MR	SW8270E
Chrysene	830	260	ug/Kg	1	12/29/23	MR	SW8270E
Dibenz(a,h)anthracene	ND	180	ug/Kg	1	12/29/23	MR	SW8270E
Dibenzofuran	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Diethyl phthalate	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Dimethylphthalate	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Di-n-butylphthalate	ND	740	ug/Kg	1	12/29/23	MR	SW8270E
Di-n-octylphthalate	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Fluoranthene	1400	260	ug/Kg	1	12/29/23	MR	SW8270E
Fluorene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Hexachlorobenzene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Hexachlorobutadiene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Indeno(1,2,3-cd)pyrene	520	260	ug/Kg	1	12/29/23	MR	SW8270E
Isophorone	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Naphthalene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Nitrobenzene	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
N-Nitrosodimethylamine	ND	370	ug/Kg	1	12/29/23	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	180	ug/Kg	1	12/29/23	MR	SW8270E
N-Nitrosodiphenylamine	ND	370	ug/Kg	1	12/29/23	MR	SW8270E
Pentachlorophenol	ND	370	ug/Kg	1	12/29/23	MR	SW8270E
Phenanthrene	730	260	ug/Kg	1	12/29/23	MR	SW8270E
Phenol	ND	260	ug/Kg	1	12/29/23	MR	SW8270E
Pyrene	1300	260	ug/Kg	1	12/29/23	MR	SW8270E

QA/QC Surrogates

% 2,4,6-Tribromophenol	111		%	1	12/29/23	MR	30 - 130 %
% 2-Fluorobiphenyl	85		%	1	12/29/23	MR	30 - 130 %
% 2-Fluorophenol	60		%	1	12/29/23	MR	30 - 130 %
% Nitrobenzene-d5	81		%	1	12/29/23	MR	30 - 130 %
% Phenol-d5	71		%	1	12/29/23	MR	30 - 130 %
% Terphenyl-d14	69		%	1	12/29/23	MR	30 - 130 %

TCLP Acid/Base-Neutral

1,4-Dichlorobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270

QA/QC Surrogates

% 2,4,6-Tribromophenol	95		%	1	01/04/24	MR	15 - 110 %
% 2-Fluorobiphenyl	86		%	1	01/04/24	MR	30 - 130 %
% 2-Fluorophenol	64		%	1	01/04/24	MR	15 - 110 %
% Nitrobenzene-d5	84		%	1	01/04/24	MR	30 - 130 %
% Phenol-d5	58		%	1	01/04/24	MR	15 - 110 %
% Terphenyl-d14	87		%	1	01/04/24	MR	30 - 130 %

Semivolatile Library Search Completed 12/29/23 MR

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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.

Hexavalent Chromium:
This sample is in a reducing state.

TCLP Non-Volatile Extraction:
Sample weight was < 100 grams (the minimum requirement of the method to insure homogeneity).

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

January 10, 2024

Reviewed and Released by: Sarah Bell, Project Manager



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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
 Location Code: AES-EASTSIDE
 Rush Request: Standard
 P.O.#: 0897

Custody Information

Collected by:
 Received by: SR1
 Analyzed by: see "By" below

Date

12/21/23
 12/26/23

Time

10:25
 17:04

Laboratory Data

SDG ID: GCP74370
 Phoenix ID: CP74383

Project ID: EAST SIDE COASTAL RESILIENCY
 Client ID: G 138

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.37	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Aluminum	7570	5.6	mg/Kg	1	12/28/23	TH	SW6010D
Arsenic	2.94	0.74	mg/Kg	1	12/28/23	TH	SW6010D
Barium	79.9	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Beryllium	0.34	0.30	mg/Kg	1	12/28/23	TH	SW6010D
Calcium	12200	56	mg/Kg	10	12/27/23	TH	SW6010D
Cadmium	< 0.37	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Cobalt	6.89	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Chromium	16.0	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Copper	28.8	0.7	mg/kg	1	12/28/23	TH	SW6010D
Iron	14200	5.6	mg/Kg	1	12/28/23	TH	SW6010D
Mercury	0.22	0.03	mg/Kg	2	12/27/23	ZT	SW7471B
Potassium	985	56	mg/Kg	10	12/27/23	TH	SW6010D
Magnesium	5100	5.6	mg/Kg	1	12/28/23	TH	SW6010D
Manganese	265	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Sodium	303	5.6	mg/Kg	1	12/28/23	TH	SW6010D
Nickel	23.6	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Lead	112	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Antimony	< 3.7	3.7	mg/Kg	1	12/28/23	TH	SW6010D
Selenium	< 1.5	1.5	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Barium	0.81	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	12/28/23	ZT	SW846 1311/7470
TCLP Lead	0.60	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.3	3.3	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/28/23	W/AL/AL	SW3010A
Trivalent Chromium	16.0	0.37	mg/kg	1	01/02/24		CALC 6010-7196
Vanadium	21.0	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Zinc	86.7	0.7	mg/Kg	1	12/28/23	TH	SW6010D
Percent Solid	91		%		12/26/23	AC1	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/26/23	ER	SW846-Corr
Flash Point	>200	200	Degree F	1	01/02/24	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.42	0.42	mg/Kg	1	01/02/24	NP	SW7196A
Ignitability	Passed	140	degree F	1	01/02/24	G	SW846-Ignit
pH at 25C - Soil	8.73	1.00	pH Units	1	12/26/23 23:20	ER	SW846 9045D
Reactivity Cyanide	< 5	5	mg/Kg	1	12/29/23	NP/GD	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	01/02/24	NP/GD	SW846 CH7
Reactivity	Negative		Pos/Neg	1	01/02/24	NP/GD	SW846-React
Redox Potential	154		mV	1	12/26/23	ER	SM2580B-09
Total Cyanide (SW9010C Distill.)	< 0.42	0.42	mg/Kg	1	01/02/24	BA/GD	SW9012B
Mercury Digestion	Completed				12/27/23	AL/AL	SW7471B
Extraction of NY ETPH	Completed				12/26/23	C/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/28/23	L/MQ/D	SW3546
NJ EPH Extraction	Completed				12/27/23	C/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/29/23	H/JDW	SW3546
Soil Extraction for Pesticides	Completed				12/29/23	H/JDW	SW3546
Soil Extraction for SVOA	Completed				12/28/23	H/U	SW3546
TCLP Digestion Mercury	Completed				12/28/23	W/AL/AL	SW7470A
TCLP Herbicides Extraction	Completed				12/28/23	CV/MQ	SW8150 MOD
TCLP Extraction for Metals	Completed				12/27/23	AL	SW1311
TCLP Extraction for Organics	Completed				01/03/24	AL	SW1311
TCLP Pesticides Extraction	Completed				01/03/24	LB1/LB1	SW3510C
TCLP Semi-Volatile Extraction	Completed				01/03/24	S/S	SW3510C
TCLP Extraction Volatiles	Completed				12/27/23	CV	SW1311
Total Metals Digest	Completed				12/26/23	L/AG	SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	44	43	mg/kg	5	12/29/23	JRB	NJEPH 10-08 R3
C9-C28	ND	86	mg/kg	5	12/29/23	JRB	NJEPH 10-08 R3
Total EPH	44	43	mg/kg	5	12/29/23	JRB	NJEPH 10-08 R3

QA/QC Surrogates

% COD (surr)	53		%	5	12/29/23	JRB	40 - 140 %
% Terphenyl (surr)	90		%	5	12/29/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	9.2	mg/Kg	50	12/27/23	V	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	87		%	50	12/27/23	V	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	140	ug/Kg	10	12/30/23	JRB	SW8151A
2,4,5-TP (Silvex)	ND	140	ug/Kg	10	12/30/23	JRB	SW8151A
2,4-D	ND	270	ug/Kg	10	12/30/23	JRB	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	2700	ug/Kg	10	12/30/23	JRB	SW8151A
Dalapon	ND	140	ug/Kg	10	12/30/23	JRB	SW8151A
Dicamba	ND	140	ug/Kg	10	12/30/23	JRB	SW8151A
Dichloroprop	ND	270	ug/Kg	10	12/30/23	JRB	SW8151A
Dinoseb	ND	270	ug/Kg	10	12/30/23	JRB	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	51		%	10	12/30/23	JRB	30 - 150 %
% DCAA (Confirmation)	49		%	10	12/30/23	JRB	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	72	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1221	ND	72	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1232	ND	72	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1242	ND	72	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1248	ND	72	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1254	ND	72	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1260	ND	72	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1262	ND	72	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1268	ND	72	ug/Kg	2	01/02/24	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	90		%	2	01/02/24	SC	30 - 150 %
% DCBP (Confirmation)	80		%	2	01/02/24	SC	30 - 150 %
% TCMX	87		%	2	01/02/24	SC	30 - 150 %
% TCMX (Confirmation)	66		%	2	01/02/24	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	3.3	ug/Kg	10	01/02/24	AW	SW8081B
4,4' -DDE	ND	3.3	ug/Kg	10	01/02/24	AW	SW8081B
4,4' -DDT	ND	3.3	ug/Kg	10	01/02/24	AW	SW8081B
a-BHC	ND	7.2	ug/Kg	10	01/02/24	AW	SW8081B
a-Chlordane	ND	18	ug/Kg	10	01/02/24	AW	SW8081B
Aldrin	ND	5.0	ug/Kg	10	01/02/24	AW	SW8081B
b-BHC	ND	36	ug/Kg	10	01/02/24	AW	SW8081B
Chlordane	ND	180	ug/Kg	10	01/02/24	AW	SW8081B
d-BHC	ND	36	ug/Kg	10	01/02/24	AW	SW8081B
Dieldrin	ND	5.0	ug/Kg	10	01/02/24	AW	SW8081B
Endosulfan I	ND	36	ug/Kg	10	01/02/24	AW	SW8081B
Endosulfan II	ND	36	ug/Kg	10	01/02/24	AW	SW8081B
Endosulfan sulfate	ND	75	ug/Kg	10	01/02/24	AW	SW8081B
Endrin	ND	14	ug/Kg	10	01/02/24	AW	SW8081B
Endrin aldehyde	ND	75	ug/Kg	10	01/02/24	AW	SW8081B
Endrin ketone	ND	36	ug/Kg	10	01/02/24	AW	SW8081B
g-BHC	ND	7.2	ug/Kg	10	01/02/24	AW	SW8081B
g-Chlordane	ND	18	ug/Kg	10	01/02/24	AW	SW8081B
Heptachlor	ND	36	ug/Kg	10	01/02/24	AW	SW8081B
Heptachlor epoxide	ND	36	ug/Kg	10	01/02/24	AW	SW8081B
Methoxychlor	ND	180	ug/Kg	10	01/02/24	AW	SW8081B
Toxaphene	ND	720	ug/Kg	10	01/02/24	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	122		%	10	01/02/24	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	122		%	10	01/02/24	AW	30 - 150 %
% TCMX	61		%	10	01/02/24	AW	30 - 150 %
% TCMX (Confirmation)	90		%	10	01/02/24	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/29/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/29/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	64		%	10	12/29/23	JRB	30 - 150 %
% DCAA (Confirmation)	76		%	10	12/29/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	01/04/24	AW	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	01/04/24	AW	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	01/04/24	AW	SW8081B
a-BHC	ND	0.50	ug/L	10	01/04/24	AW	SW8081B
Alachlor	ND	0.50	ug/L	10	01/04/24	AW	SW8081B
Aldrin	ND	0.50	ug/L	10	01/04/24	AW	SW8081B
b-BHC	ND	0.50	ug/L	10	01/04/24	AW	SW8081B
Chlordane	ND	5.0	ug/L	10	01/04/24	AW	SW8081B
d-BHC	ND	0.50	ug/L	10	01/04/24	AW	SW8081B
Dieldrin	ND	1.0	ug/L	10	01/04/24	AW	SW8081B
Endosulfan I	ND	0.50	ug/L	10	01/04/24	AW	SW8081B
Endosulfan II	ND	1.0	ug/L	10	01/04/24	AW	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	01/04/24	AW	SW8081B
Endrin	ND	1.0	ug/L	10	01/04/24	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	01/04/24	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	01/04/24	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	01/04/24	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	01/04/24	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	01/04/24	AW	SW8081B
Toxaphene	ND	20	ug/L	10	01/04/24	AW	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	67		%	10	01/04/24	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	80		%	10	01/04/24	AW	30 - 150 %
%TCMX (Surrogate Rec)	52		%	10	01/04/24	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	57		%	10	01/04/24	AW	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	ND	53	mg/Kg	1	12/27/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	76		%	1	12/27/23	JRB	50 - 150 %
% Terphenyl (surr)	76		%	1	12/27/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethane	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethene	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dibromoethane	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloroethane	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloropropane	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
2-Hexanone	ND	30	ug/kg	1	12/29/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	30	ug/kg	1	12/29/23	JLI	SW8260D
Acetone	ND	50	ug/kg	1	12/29/23	JLI	SW8260D
Benzene	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
Bromochloromethane	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
Bromodichloromethane	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
Bromoform	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
Bromomethane	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
Carbon Disulfide	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
Carbon tetrachloride	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
Chlorobenzene	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
Chloroethane	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
Chloroform	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
Chloromethane	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
Cyclohexane	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
Dibromochloromethane	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
Dichlorodifluoromethane	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
Ethylbenzene	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
Isopropylbenzene	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
m&p-Xylene	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
Methyl ethyl ketone	ND	36	ug/kg	1	12/29/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	12	ug/kg	1	12/29/23	JLI	SW8260D
Methylacetate	ND	4.7	ug/kg	1	12/29/23	JLI	SW8260D
Methylcyclohexane	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
Methylene chloride	ND	30	ug/kg	1	12/29/23	JLI	SW8260D
o-Xylene	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
Styrene	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
Tetrachloroethene	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
Toluene	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
Total Xylenes	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
Trichloroethene	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorofluoromethane	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
Vinyl chloride	ND	5.9	ug/kg	1	12/29/23	JLI	SW8260D
<u>QA/QC Surrogates</u>							
% 1,2-dichlorobenzene-d4	101		%	1	12/29/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
2,4-Dinitrophenol	ND	570	ug/Kg	1	12/29/23	MR	SW8270E
2,4-Dinitrotoluene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
2,6-Dinitrotoluene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
2-Chloronaphthalene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
2-Chlorophenol	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
2-Methylnaphthalene	350	250	ug/Kg	1	12/29/23	MR	SW8270E
2-Methylphenol (o-cresol)	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
2-Nitroaniline	ND	570	ug/Kg	1	12/29/23	MR	SW8270E
2-Nitrophenol	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	360	ug/Kg	1	12/29/23	MR	SW8270E
3,3'-Dichlorobenzidine	ND	430	ug/Kg	1	12/29/23	MR	SW8270E
3-Nitroaniline	ND	570	ug/Kg	1	12/29/23	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	1	12/29/23	MR	SW8270E
4-Bromophenyl phenyl ether	ND	360	ug/Kg	1	12/29/23	MR	SW8270E
4-Chloro-3-methylphenol	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
4-Chloroaniline	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
4-Nitroaniline	ND	570	ug/Kg	1	12/29/23	MR	SW8270E
4-Nitrophenol	ND	1000	ug/Kg	1	12/29/23	MR	SW8270E
Acenaphthene	1200	250	ug/Kg	1	12/29/23	MR	SW8270E
Acenaphthylene	610	250	ug/Kg	1	12/29/23	MR	SW8270E
Acetophenone	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Anthracene	2700	250	ug/Kg	1	12/29/23	MR	SW8270E
Atrazine	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Benz(a)anthracene	7000	1300	ug/Kg	5	12/29/23	MR	SW8270E
Benzaldehyde	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(a)pyrene	7800	1300	ug/Kg	5	12/29/23	MR	SW8270E
Benzo(b)fluoranthene	9100	1300	ug/Kg	5	12/29/23	MR	SW8270E
Benzo(ghi)perylene	4800	250	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(k)fluoranthene	2600	250	ug/Kg	1	12/29/23	MR	SW8270E
Benzyl butyl phthalate	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Bis(2-chloroethyl)ether	ND	360	ug/Kg	1	12/29/23	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Caprolactam	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Carbazole	890	360	ug/Kg	1	12/29/23	MR	SW8270E
Chrysene	7000	1300	ug/Kg	5	12/29/23	MR	SW8270E
Dibenz(a,h)anthracene	1300	180	ug/Kg	1	12/29/23	MR	SW8270E
Dibenzofuran	710	250	ug/Kg	1	12/29/23	MR	SW8270E
Diethyl phthalate	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Dimethylphthalate	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Di-n-butylphthalate	ND	720	ug/Kg	1	12/29/23	MR	SW8270E
Di-n-octylphthalate	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Fluoranthene	16000	1300	ug/Kg	5	12/29/23	MR	SW8270E
Fluorene	1000	250	ug/Kg	1	12/29/23	MR	SW8270E
Hexachlorobenzene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Hexachlorobutadiene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Hexachlorocyclopentadiene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Indeno(1,2,3-cd)pyrene	5300	250	ug/Kg	1	12/29/23	MR	SW8270E
Isophorone	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Naphthalene	570	250	ug/Kg	1	12/29/23	MR	SW8270E
Nitrobenzene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
N-Nitrosodimethylamine	ND	360	ug/Kg	1	12/29/23	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	180	ug/Kg	1	12/29/23	MR	SW8270E
N-Nitrosodiphenylamine	ND	360	ug/Kg	1	12/29/23	MR	SW8270E
Pentachlorophenol	ND	360	ug/Kg	1	12/29/23	MR	SW8270E
Phenanthrene	10000	1300	ug/Kg	5	12/29/23	MR	SW8270E
Phenol	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Pyrene	14000	1300	ug/Kg	5	12/29/23	MR	SW8270E
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	100		%	1	12/29/23	MR	30 - 130 %
% 2-Fluorobiphenyl	87		%	1	12/29/23	MR	30 - 130 %
% 2-Fluorophenol	58		%	1	12/29/23	MR	30 - 130 %
% Nitrobenzene-d5	80		%	1	12/29/23	MR	30 - 130 %
% Phenol-d5	70		%	1	12/29/23	MR	30 - 130 %
% Terphenyl-d14	75		%	1	12/29/23	MR	30 - 130 %
% 2,4,6-Tribromophenol (5x)	76		%	5	12/29/23	MR	30 - 130 %
% 2-Fluorobiphenyl (5x)	72		%	5	12/29/23	MR	30 - 130 %
% 2-Fluorophenol (5x)	61		%	5	12/29/23	MR	30 - 130 %
% Nitrobenzene-d5 (5x)	64		%	5	12/29/23	MR	30 - 130 %
% Phenol-d5 (5x)	69		%	5	12/29/23	MR	30 - 130 %
% Terphenyl-d14 (5x)	70		%	5	12/29/23	MR	30 - 130 %
<u>TCLP Acid/Base-Neutral</u>							
1,4-Dichlorobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	87		%	1	01/04/24	MR	15 - 110 %
% 2-Fluorobiphenyl	74		%	1	01/04/24	MR	30 - 130 %
% 2-Fluorophenol	55		%	1	01/04/24	MR	15 - 110 %
% Nitrobenzene-d5	72		%	1	01/04/24	MR	30 - 130 %
% Phenol-d5	51		%	1	01/04/24	MR	15 - 110 %
% Terphenyl-d14	81		%	1	01/04/24	MR	30 - 130 %
Semivolatile Library Search	Completed				12/29/23	MR	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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.

Hexavalent Chromium:
This sample is in a reducing state.

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.

Pesticide Comment:
Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, an elevated RL was reported for the affected compounds.

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

January 10, 2024

Reviewed and Released by: Sarah Bell, Project Manager



Environmental Laboratories, Inc.

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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
 Location Code: AES-EASTSIDE
 Rush Request: Standard
 P.O.#: 0897

Custody Information

Collected by:
 Received by: SR1
 Analyzed by: see "By" below

Date

12/21/23
 12/26/23

Time

10:00
 17:04

Laboratory Data

SDG ID: GCP74370
 Phoenix ID: CP74384

Project ID: EAST SIDE COASTAL RESILIENCY
 Client ID: G 148

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.37	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Aluminum	8300	56	mg/Kg	10	12/27/23	TH	SW6010D
Arsenic	2.92	0.74	mg/Kg	1	12/28/23	TH	SW6010D
Barium	210	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Beryllium	0.59	0.30	mg/Kg	1	12/28/23	TH	SW6010D
Calcium	3650	5.6	mg/Kg	1	12/28/23	TH	SW6010D
Cadmium	0.48	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Cobalt	18.7	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Chromium	31.1	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Copper	32.8	0.7	mg/kg	1	12/28/23	TH	SW6010D
Iron	31100	5.6	mg/Kg	1	12/28/23	TH	SW6010D
Mercury	1.09	0.08	mg/Kg	5	12/28/23	ZT	SW7471B
Potassium	11200	560	mg/Kg	100	01/02/24	TH	SW6010D
Magnesium	7380	5.6	mg/Kg	1	12/28/23	TH	SW6010D
Manganese	367	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Sodium	206	5.6	mg/Kg	1	12/28/23	TH	SW6010D
Nickel	30.5	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Lead	114	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Antimony	< 3.7	3.7	mg/Kg	1	12/28/23	TH	SW6010D
Selenium	< 1.5	1.5	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Barium	1.01	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Mercury	0.0003	0.0002	mg/L	1	12/28/23	ZT	SW846 1311/7470
TCLP Lead	0.19	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.3	3.3	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/28/23	W/AL/AL	SW3010A
Trivalent Chromium	31.1	0.37	mg/kg	1	01/02/24		CALC 6010-7196
Vanadium	45.8	0.37	mg/Kg	1	12/28/23	TH	SW6010D
Zinc	112	0.7	mg/Kg	1	12/28/23	TH	SW6010D
Percent Solid	80		%		12/26/23	AC1	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/26/23	ER	SW846-Corr 1
Flash Point	>200	200	Degree F	1	01/02/24	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.49	0.49	mg/Kg	1	01/02/24	NP	SW7196A
Ignitability	Passed	140	degree F	1	01/02/24	G	SW846-Ignit 1
pH at 25C - Soil	7.82	1.00	pH Units	1	12/26/23 23:20	ER	SW846 9045D 1
Reactivity Cyanide	< 6	6	mg/Kg	1	12/29/23	NP/GD	SW846 7.3.3.1/90 1
Reactivity Sulfide	< 20	20	mg/Kg	1	01/02/24	NP/GD	SW846 CH7 1
Reactivity	Negative		Pos/Neg	1	01/02/24	NP/GD	SW846-React 1
Redox Potential	175		mV	1	12/26/23	ER	SM2580B-09 1
Total Cyanide (SW9010C Distill.)	11.6	0.63	mg/Kg	1	01/02/24	BA/GD	SW9012B
Mercury Digestion	Completed				12/27/23	AL/AL	SW7471B
Extraction of NY ETPH	Completed				12/26/23	C/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/28/23	L/MQ/D	SW3546
NJ EPH Extraction	Completed				12/27/23	C/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/29/23	H/JDW	SW3546
Soil Extraction for Pesticides	Completed				12/29/23	H/JDW	SW3546
Soil Extraction for SVOA	Completed				12/28/23	H/U	SW3546
TCLP Digestion Mercury	Completed				12/28/23	W/AL/AL	SW7470A
TCLP Herbicides Extraction	Completed				12/28/23	CV/MQ	SW8150 MOD
TCLP Extraction for Metals	Completed				12/27/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/27/23	AL	SW1311
TCLP Pesticides Extraction	Completed				12/29/23	LB1/LB1	SW3510C
TCLP Semi-Volatile Extraction	Completed				01/03/24	S/S	SW3510C
TCLP Extraction Volatiles	Completed				12/27/23	CV	SW1311
Total Metals Digest	Completed				12/26/23	L/AG	SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	17	9.9	mg/kg	1	12/29/23	JRB	NJEPH 10-08 R3 1
C9-C28	20	20	mg/kg	1	12/29/23	JRB	NJEPH 10-08 R3 1
Total EPH	37.0	9.9	mg/kg	1	12/29/23	JRB	NJEPH 10-08 R3 1

QA/QC Surrogates

% COD (surr)	66		%	1	12/29/23	JRB	40 - 140 %
% Terphenyl (surr)	79		%	1	12/29/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	9.6	mg/Kg	50	12/27/23	V	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	89		%	50	12/27/23	V	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	160	ug/Kg	10	12/30/23	JRB	SW8151A
2,4,5-TP (Silvex)	ND	160	ug/Kg	10	12/30/23	JRB	SW8151A
2,4-D	ND	310	ug/Kg	10	12/30/23	JRB	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	3100	ug/Kg	10	12/30/23	JRB	SW8151A
Dalapon	ND	160	ug/Kg	10	12/30/23	JRB	SW8151A
Dicamba	ND	160	ug/Kg	10	12/30/23	JRB	SW8151A
Dichloroprop	ND	310	ug/Kg	10	12/30/23	JRB	SW8151A
Dinoseb	ND	310	ug/Kg	10	12/30/23	JRB	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	66		%	10	12/30/23	JRB	30 - 150 %
% DCAA (Confirmation)	56		%	10	12/30/23	JRB	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	83	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1221	ND	83	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1232	ND	83	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1242	ND	83	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1248	ND	83	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1254	ND	83	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1260	ND	83	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1262	ND	83	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1268	ND	83	ug/Kg	2	01/02/24	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	65		%	2	01/02/24	SC	30 - 150 %
% DCBP (Confirmation)	57		%	2	01/02/24	SC	30 - 150 %
% TCMX	76		%	2	01/02/24	SC	30 - 150 %
% TCMX (Confirmation)	71		%	2	01/02/24	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.5	ug/Kg	2	01/02/24	AW	SW8081B
4,4' -DDE	6.3	2.5	ug/Kg	2	01/02/24	AW	SW8081B
4,4' -DDT	6.6	2.5	ug/Kg	2	01/02/24	AW	SW8081B
a-BHC	ND	8.3	ug/Kg	2	01/02/24	AW	SW8081B
a-Chlordane	ND	4.1	ug/Kg	2	01/02/24	AW	SW8081B
Aldrin	ND	4.1	ug/Kg	2	01/02/24	AW	SW8081B
b-BHC	ND	8.3	ug/Kg	2	01/02/24	AW	SW8081B
Chlordane	ND	41	ug/Kg	2	01/02/24	AW	SW8081B
d-BHC	ND	8.3	ug/Kg	2	01/02/24	AW	SW8081B
Dieldrin	ND	4.1	ug/Kg	2	01/02/24	AW	SW8081B
Endosulfan I	ND	8.3	ug/Kg	2	01/02/24	AW	SW8081B
Endosulfan II	ND	8.3	ug/Kg	2	01/02/24	AW	SW8081B
Endosulfan sulfate	ND	8.3	ug/Kg	2	01/02/24	AW	SW8081B
Endrin	ND	8.3	ug/Kg	2	01/02/24	AW	SW8081B
Endrin aldehyde	ND	8.3	ug/Kg	2	01/02/24	AW	SW8081B
Endrin ketone	ND	8.3	ug/Kg	2	01/02/24	AW	SW8081B
g-BHC	ND	1.7	ug/Kg	2	01/02/24	AW	SW8081B
g-Chlordane	ND	4.1	ug/Kg	2	01/02/24	AW	SW8081B
Heptachlor	ND	8.3	ug/Kg	2	01/02/24	AW	SW8081B
Heptachlor epoxide	ND	8.3	ug/Kg	2	01/02/24	AW	SW8081B
Methoxychlor	ND	41	ug/Kg	2	01/02/24	AW	SW8081B
Toxaphene	ND	170	ug/Kg	2	01/02/24	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	67		%	2	01/02/24	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	74		%	2	01/02/24	AW	30 - 150 %
% TCMX	73		%	2	01/02/24	AW	30 - 150 %
% TCMX (Confirmation)	75		%	2	01/02/24	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/30/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/30/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	65		%	10	12/30/23	JRB	30 - 150 %
% DCAA (Confirmation)	76		%	10	12/30/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	01/03/24	CN	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	01/03/24	CN	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	01/03/24	CN	SW8081B
a-BHC	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Alachlor	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Aldrin	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
b-BHC	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Chlordane	ND	5.0	ug/L	10	01/03/24	CN	SW8081B
d-BHC	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Dieldrin	ND	1.0	ug/L	10	01/03/24	CN	SW8081B
Endosulfan I	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Endosulfan II	ND	1.0	ug/L	10	01/03/24	CN	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	01/03/24	CN	SW8081B
Endrin	ND	1.0	ug/L	10	01/03/24	CN	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	01/03/24	CN	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Heptachlor	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Methoxychlor	ND	0.50	ug/L	10	01/03/24	CN	SW8081B
Toxaphene	ND	20	ug/L	10	01/03/24	CN	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	39		%	10	01/03/24	CN	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	46		%	10	01/03/24	CN	30 - 150 %
%TCMX (Surrogate Rec)	33		%	10	01/03/24	CN	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	37		%	10	01/03/24	CN	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	ND	61	mg/Kg	1	12/27/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	82		%	1	12/27/23	JRB	50 - 150 %
% Terphenyl (surr)	81		%	1	12/27/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	480	ug/kg	50	12/30/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethane	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethene	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	480	ug/kg	50	12/30/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	480	ug/kg	50	12/30/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	480	ug/kg	50	12/30/23	JLI	SW8260D
1,2-Dibromoethane	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	480	ug/kg	50	12/30/23	JLI	SW8260D
1,2-Dichloroethane	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloropropane	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	480	ug/kg	50	12/30/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	480	ug/kg	50	12/30/23	JLI	SW8260D
2-Hexanone	ND	38	ug/kg	1	12/29/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	38	ug/kg	1	12/29/23	JLI	SW8260D
Acetone	ND	50	ug/kg	1	12/29/23	JLI	SW8260D
Benzene	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
Bromochloromethane	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
Bromodichloromethane	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
Bromoform	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
Bromomethane	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
Carbon Disulfide	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
Carbon tetrachloride	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
Chlorobenzene	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
Chloroethane	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
Chloroform	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
Chloromethane	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
Cyclohexane	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
Dibromochloromethane	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
Dichlorodifluoromethane	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
Ethylbenzene	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
Isopropylbenzene	ND	480	ug/kg	50	12/30/23	JLI	SW8260D
m&p-Xylene	440	430	ug/kg	50	12/30/23	JLI	SW8260D
Methyl ethyl ketone	ND	46	ug/kg	1	12/29/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	15	ug/kg	1	12/29/23	JLI	SW8260D
Methylacetate	ND	6.2	ug/kg	1	12/29/23	JLI	SW8260D
Methylcyclohexane	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
Methylene chloride	ND	38	ug/kg	1	12/29/23	JLI	SW8260D
o-Xylene	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
Styrene	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
Tetrachloroethene	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
Toluene	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
Total Xylenes	440.0	7.7	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
Trichloroethene	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorofluoromethane	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
Vinyl chloride	ND	7.7	ug/kg	1	12/29/23	JLI	SW8260D
<u>QA/QC Surrogates</u>							
% 1,2-dichlorobenzene-d4	93		%	1	12/29/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	82		%	1	12/29/23	JLI	70 - 130 %
% Dibromofluoromethane	88		%	1	12/29/23	JLI	70 - 130 %
% Toluene-d8	101		%	1	12/29/23	JLI	70 - 130 %
% 1,2-dichlorobenzene-d4 (50x)	95		%	50	12/30/23	JLI	70 - 130 %
% Bromofluorobenzene (50x)	98		%	50	12/30/23	JLI	70 - 130 %
% Dibromofluoromethane (50x)	95		%	50	12/30/23	JLI	70 - 130 %
% Toluene-d8 (50x)	97		%	50	12/30/23	JLI	70 - 130 %

1,4-dioxane

1,4-dioxane	ND	100	ug/kg	1	12/29/23	JLI	SW8260D
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Volatiles

1,2,3-Trichloropropane	ND	7.7	ug/Kg	1	12/29/23	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	7.7	ug/Kg	1	12/29/23	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	7.7	ug/Kg	1	12/29/23	JLI	SW8260D
1,3-Dichloropropane	ND	7.7	ug/Kg	1	12/29/23	JLI	SW8260D
n-Butylbenzene	ND	7.7	ug/Kg	1	12/29/23	JLI	SW8260D
n-Propylbenzene	ND	7.7	ug/Kg	1	12/29/23	JLI	SW8260D
p-Isopropyltoluene	ND	7.7	ug/Kg	1	12/29/23	JLI	SW8260D
sec-Butylbenzene	ND	7.7	ug/Kg	1	12/29/23	JLI	SW8260D
tert-Butylbenzene	ND	7.7	ug/Kg	1	12/29/23	JLI	SW8260D

QA/QC Surrogates

% 1,2-dichlorobenzene-d4	93		%	1	12/29/23	JLI	70 - 130 %
% Bromofluorobenzene	82		%	1	12/29/23	JLI	70 - 130 %
% Dibromofluoromethane	88		%	1	12/29/23	JLI	70 - 130 %
% Toluene-d8	101		%	1	12/29/23	JLI	70 - 130 %

TCLP Volatiles

1,1-Dichloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260

QA/QC Surrogates

% 1,2-dichlorobenzene-d4 (10x)	99		%	10	12/28/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	89		%	10	12/28/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	98		%	10	12/28/23	HM	70 - 130 %
% Toluene-d8 (10x)	96		%	10	12/28/23	HM	70 - 130 %

Volatile Library Search	Completed				01/02/24	JLI	
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Semivolatiles

1,1-Biphenyl	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	280	ug/Kg	1	12/29/23	MR	SW8270E

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,3,4,6-tetrachlorophenol	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
2,4,5-Trichlorophenol	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
2,4,6-Trichlorophenol	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
2,4-Dichlorophenol	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
2,4-Dimethylphenol	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
2,4-Dinitrophenol	ND	650	ug/Kg	1	12/29/23	MR	SW8270E
2,4-Dinitrotoluene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
2,6-Dinitrotoluene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
2-Chloronaphthalene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
2-Chlorophenol	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
2-Methylnaphthalene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
2-Methylphenol (o-cresol)	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
2-Nitroaniline	ND	650	ug/Kg	1	12/29/23	MR	SW8270E
2-Nitrophenol	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	410	ug/Kg	1	12/29/23	MR	SW8270E
3,3'-Dichlorobenzidine	ND	490	ug/Kg	1	12/29/23	MR	SW8270E
3-Nitroaniline	ND	650	ug/Kg	1	12/29/23	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	1	12/29/23	MR	SW8270E
4-Bromophenyl phenyl ether	ND	410	ug/Kg	1	12/29/23	MR	SW8270E
4-Chloro-3-methylphenol	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
4-Chloroaniline	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
4-Nitroaniline	ND	650	ug/Kg	1	12/29/23	MR	SW8270E
4-Nitrophenol	ND	1200	ug/Kg	1	12/29/23	MR	SW8270E
Acenaphthene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Acenaphthylene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Acetophenone	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Anthracene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Atrazine	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Benz(a)anthracene	360	280	ug/Kg	1	12/29/23	MR	SW8270E
Benzaldehyde	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(a)pyrene	430	280	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(b)fluoranthene	500	280	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(ghi)perylene	420	280	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(k)fluoranthene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Benzyl butyl phthalate	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Bis(2-chloroethyl)ether	ND	410	ug/Kg	1	12/29/23	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Caprolactam	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Carbazole	ND	410	ug/Kg	1	12/29/23	MR	SW8270E
Chrysene	370	280	ug/Kg	1	12/29/23	MR	SW8270E
Dibenz(a,h)anthracene	ND	200	ug/Kg	1	12/29/23	MR	SW8270E
Dibenzofuran	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Diethyl phthalate	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Dimethylphthalate	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Di-n-butylphthalate	ND	810	ug/Kg	1	12/29/23	MR	SW8270E
Di-n-octylphthalate	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Fluoranthene	570	280	ug/Kg	1	12/29/23	MR	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Fluorene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Hexachlorobenzene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Hexachlorobutadiene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Hexachlorocyclopentadiene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Hexachloroethane	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Indeno(1,2,3-cd)pyrene	450	280	ug/Kg	1	12/29/23	MR	SW8270E
Isophorone	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Naphthalene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Nitrobenzene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
N-Nitrosodimethylamine	ND	410	ug/Kg	1	12/29/23	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	1	12/29/23	MR	SW8270E
N-Nitrosodiphenylamine	ND	410	ug/Kg	1	12/29/23	MR	SW8270E
Pentachlorophenol	ND	410	ug/Kg	1	12/29/23	MR	SW8270E
Phenanthrene	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Phenol	ND	280	ug/Kg	1	12/29/23	MR	SW8270E
Pyrene	550	280	ug/Kg	1	12/29/23	MR	SW8270E
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	107		%	1	12/29/23	MR	30 - 130 %
% 2-Fluorobiphenyl	77		%	1	12/29/23	MR	30 - 130 %
% 2-Fluorophenol	57		%	1	12/29/23	MR	30 - 130 %
% Nitrobenzene-d5	78		%	1	12/29/23	MR	30 - 130 %
% Phenol-d5	68		%	1	12/29/23	MR	30 - 130 %
% Terphenyl-d14	69		%	1	12/29/23	MR	30 - 130 %
<u>TCLP Acid/Base-Neutral</u>							
1,4-Dichlorobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	92		%	1	01/04/24	MR	15 - 110 %
% 2-Fluorobiphenyl	82		%	1	01/04/24	MR	30 - 130 %
% 2-Fluorophenol	59		%	1	01/04/24	MR	15 - 110 %
% Nitrobenzene-d5	80		%	1	01/04/24	MR	30 - 130 %
% Phenol-d5	55		%	1	01/04/24	MR	15 - 110 %
% Terphenyl-d14	83		%	1	01/04/24	MR	30 - 130 %
Semivolatile Library Search	Completed				12/29/23	MR	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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.

Hexavalent Chromium:
This sample is in a reducing state.

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.

Volatile Comment:
There was a suppression of the last internal standard in the low level analysis, all affected compounds are reported from the methanol preserved high level analysis which did not exhibit this interference.

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

January 10, 2024

Reviewed and Released by: Sarah Bell, Project Manager



Environmental Laboratories, Inc.

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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
Location Code: AES-EASTSIDE
Rush Request: 24 Hour
P.O.#: 0897

Custody Information

Collected by:
Received by: SR1
Analyzed by: see "By" below

Date

12/21/23
12/26/23

Time

9:50
17:04

Laboratory Data

SDG ID: GCP74370
Phoenix ID: CP74385

Project ID: EAST SIDE COASTAL RESILIENCY
Client ID: G 149

Table with 8 columns: Parameter, Result, RL/PQL, Units, Dilution, Date/Time, By, Reference. Lists various elements like Silver, Aluminum, Arsenic, etc., with their respective values and units.

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.6	3.6	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Metals Digestion	Completed				01/09/24	HL/HL	SW3010A
Trivalent Chromium	15.7	0.40	mg/kg	1	01/02/24		CALC 6010-7196
Vanadium	20.7	0.40	mg/Kg	1	12/28/23	TH	SW6010D
Zinc	68.7	0.8	mg/Kg	1	12/28/23	TH	SW6010D
Percent Solid	90		%		12/26/23	AC1	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/26/23	ER	SW846-Corr
Flash Point	>200	200	Degree F	1	01/02/24	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.41	0.41	mg/Kg	1	01/02/24	NP	SW7196A
Ignitability	Passed	140	degree F	1	01/02/24	G	SW846-Ignit
pH at 25C - Soil	8.58	1.00	pH Units	1	12/26/23 23:20	ER	SW846 9045D
Reactivity Cyanide	< 5	5	mg/Kg	1	12/29/23	NP/GD	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	01/02/24	NP/GD	SW846 CH7
Reactivity	Negative		Pos/Neg	1	01/02/24	NP/GD	SW846-React
Redox Potential	174		mV	1	12/26/23	ER	SM2580B-09
Total Cyanide (SW9010C Distill.)	< 0.56	0.56	mg/Kg	1	01/02/24	BA/GD	SW9012B
Mercury Digestion	Completed				12/27/23	AL/AL	SW7471B
Extraction of NY ETPH	Completed				12/26/23	C/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/28/23	L/MQ/D	SW3546
NJ EPH Extraction	Completed				12/27/23	C/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/29/23	H/JDW	SW3546
Soil Extraction for Pesticides	Completed				12/29/23	H/JDW	SW3546
Soil Extraction for SVOA	Completed				12/28/23	H/U	SW3546
TCLP Digestion Mercury	Completed				12/28/23	W/AL/AL	SW7470A
TCLP Herbicides Extraction	Completed				12/28/23	CV/MQ	SW8150 MOD
TCLP Extraction for Metals	Completed				01/08/24	HL	SW1311
TCLP Extraction for Organics	Completed				12/27/23	AL	SW1311
TCLP Pesticides Extraction	Completed				01/02/24	S/S	SW3510C
TCLP Semi-Volatile Extraction	Completed				01/03/24	S/S	SW3510C
TCLP Extraction Volatiles	Completed				12/27/23	CV	SW1311
Total Metals Digest	Completed				01/08/24	P/AG	SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	ND	44	mg/kg	5	12/29/23	JRB	NJEPH 10-08 R3
C9-C28	ND	88	mg/kg	5	12/29/23	JRB	NJEPH 10-08 R3
Total EPH	ND	44	mg/kg	5	12/29/23	JRB	NJEPH 10-08 R3

QA/QC Surrogates

% COD (surr)	48		%	5	12/29/23	JRB	40 - 140 %
% Terphenyl (surr)	65		%	5	12/29/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	6.4	mg/Kg	50	12/27/23	V	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	87		%	50	12/27/23	V	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	140	ug/Kg	10	12/30/23	JRB	SW8151A
2,4,5-TP (Silvex)	ND	140	ug/Kg	10	12/30/23	JRB	SW8151A
2,4-D	ND	270	ug/Kg	10	12/30/23	JRB	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	2700	ug/Kg	10	12/30/23	JRB	SW8151A
Dalapon	ND	140	ug/Kg	10	12/30/23	JRB	SW8151A
Dicamba	ND	140	ug/Kg	10	12/30/23	JRB	SW8151A
Dichloroprop	ND	270	ug/Kg	10	12/30/23	JRB	SW8151A
Dinoseb	ND	270	ug/Kg	10	12/30/23	JRB	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	65		%	10	12/30/23	JRB	30 - 150 %
% DCAA (Confirmation)	57		%	10	12/30/23	JRB	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	72	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1221	ND	72	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1232	ND	72	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1242	ND	72	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1248	ND	72	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1254	ND	72	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1260	ND	72	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1262	ND	72	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1268	ND	72	ug/Kg	2	01/02/24	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	76		%	2	01/02/24	SC	30 - 150 %
% DCBP (Confirmation)	74		%	2	01/02/24	SC	30 - 150 %
% TCMX	83		%	2	01/02/24	SC	30 - 150 %
% TCMX (Confirmation)	81		%	2	01/02/24	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.2	ug/Kg	2	01/02/24	AW	SW8081B
4,4' -DDE	9.4	2.2	ug/Kg	2	01/02/24	AW	SW8081B
4,4' -DDT	11	2.2	ug/Kg	2	01/02/24	AW	SW8081B
a-BHC	ND	7.2	ug/Kg	2	01/02/24	AW	SW8081B
a-Chlordane	ND	3.6	ug/Kg	2	01/02/24	AW	SW8081B
Aldrin	ND	3.6	ug/Kg	2	01/02/24	AW	SW8081B
b-BHC	ND	7.2	ug/Kg	2	01/02/24	AW	SW8081B
Chlordane	ND	36	ug/Kg	2	01/02/24	AW	SW8081B
d-BHC	ND	7.2	ug/Kg	2	01/02/24	AW	SW8081B
Dieldrin	ND	3.6	ug/Kg	2	01/02/24	AW	SW8081B
Endosulfan I	ND	7.2	ug/Kg	2	01/02/24	AW	SW8081B
Endosulfan II	ND	7.2	ug/Kg	2	01/02/24	AW	SW8081B
Endosulfan sulfate	ND	7.2	ug/Kg	2	01/02/24	AW	SW8081B
Endrin	ND	7.2	ug/Kg	2	01/02/24	AW	SW8081B
Endrin aldehyde	ND	7.2	ug/Kg	2	01/02/24	AW	SW8081B
Endrin ketone	ND	7.2	ug/Kg	2	01/02/24	AW	SW8081B
g-BHC	ND	1.4	ug/Kg	2	01/02/24	AW	SW8081B
g-Chlordane	ND	3.6	ug/Kg	2	01/02/24	AW	SW8081B
Heptachlor	ND	7.2	ug/Kg	2	01/02/24	AW	SW8081B
Heptachlor epoxide	ND	7.2	ug/Kg	2	01/02/24	AW	SW8081B
Methoxychlor	ND	36	ug/Kg	2	01/02/24	AW	SW8081B
Toxaphene	ND	140	ug/Kg	2	01/02/24	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	85		%	2	01/02/24	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	99		%	2	01/02/24	AW	30 - 150 %
% TCMX	76		%	2	01/02/24	AW	30 - 150 %
% TCMX (Confirmation)	86		%	2	01/02/24	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/30/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/30/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	62		%	10	12/30/23	JRB	30 - 150 %
% DCAA (Confirmation)	75		%	10	12/30/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
a-BHC	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Alachlor	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Aldrin	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
b-BHC	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Chlordane	ND	5.0	ug/L	10	01/03/24	AW	SW8081B
d-BHC	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Dieldrin	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
Endosulfan I	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Endosulfan II	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
Endrin	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Toxaphene	ND	20	ug/L	10	01/03/24	AW	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	61		%	10	01/03/24	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	72		%	10	01/03/24	AW	30 - 150 %
%TCMX (Surrogate Rec)	62		%	10	01/03/24	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	71		%	10	01/03/24	AW	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	ND	270	mg/Kg	5	12/28/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	55		%	5	12/28/23	JRB	50 - 150 %
% Terphenyl (surr)	82		%	5	12/28/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethane	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethene	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dibromoethane	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloroethane	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloropropane	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
2-Hexanone	ND	42	ug/kg	1	12/29/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	42	ug/kg	1	12/29/23	JLI	SW8260D
Acetone	ND	50	ug/kg	1	12/29/23	JLI	SW8260D
Benzene	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
Bromochloromethane	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
Bromodichloromethane	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
Bromoform	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
Bromomethane	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
Carbon Disulfide	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
Carbon tetrachloride	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
Chlorobenzene	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
Chloroethane	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
Chloroform	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
Chloromethane	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
Cyclohexane	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
Dibromochloromethane	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
Dichlorodifluoromethane	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
Ethylbenzene	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
Isopropylbenzene	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
m&p-Xylene	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
Methyl ethyl ketone	ND	50	ug/kg	1	12/29/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	17	ug/kg	1	12/29/23	JLI	SW8260D
Methylacetate	ND	6.7	ug/kg	1	12/29/23	JLI	SW8260D
Methylcyclohexane	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
Methylene chloride	ND	42	ug/kg	1	12/29/23	JLI	SW8260D
o-Xylene	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
Styrene	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
Tetrachloroethene	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
Toluene	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
Total Xylenes	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
Trichloroethene	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorofluoromethane	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
Vinyl chloride	ND	8.4	ug/kg	1	12/29/23	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	1	12/29/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	92		%	1	12/29/23	JLI	70 - 130 %
% Dibromofluoromethane	89		%	1	12/29/23	JLI	70 - 130 %
% Toluene-d8	102		%	1	12/29/23	JLI	70 - 130 %

1,4-dioxane

1,4-dioxane	ND	100	ug/kg	1	12/29/23	JLI	SW8260D
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Volatiles

1,2,3-Trichloropropane	ND	8.4	ug/Kg	1	12/29/23	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	8.4	ug/Kg	1	12/29/23	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	8.4	ug/Kg	1	12/29/23	JLI	SW8260D
1,3-Dichloropropane	ND	8.4	ug/Kg	1	12/29/23	JLI	SW8260D
n-Butylbenzene	ND	8.4	ug/Kg	1	12/29/23	JLI	SW8260D
n-Propylbenzene	ND	8.4	ug/Kg	1	12/29/23	JLI	SW8260D
p-Isopropyltoluene	ND	8.4	ug/Kg	1	12/29/23	JLI	SW8260D
sec-Butylbenzene	ND	8.4	ug/Kg	1	12/29/23	JLI	SW8260D
tert-Butylbenzene	ND	8.4	ug/Kg	1	12/29/23	JLI	SW8260D

QA/QC Surrogates

% 1,2-dichlorobenzene-d4	99		%	1	12/29/23	JLI	70 - 130 %
% Bromofluorobenzene	92		%	1	12/29/23	JLI	70 - 130 %
% Dibromofluoromethane	89		%	1	12/29/23	JLI	70 - 130 %
% Toluene-d8	102		%	1	12/29/23	JLI	70 - 130 %

TCLP Volatiles

1,1-Dichloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	12/28/23	HM	SW846 1311/8260

QA/QC Surrogates

% 1,2-dichlorobenzene-d4 (10x)	98		%	10	12/28/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	89		%	10	12/28/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	97		%	10	12/28/23	HM	70 - 130 %
% Toluene-d8 (10x)	95		%	10	12/28/23	HM	70 - 130 %

Volatile Library Search Completed 01/02/24 JLI

Semivolatiles

1,1-Biphenyl	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
2,3,4,6-tetrachlorophenol	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
2,4,5-Trichlorophenol	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
2,4,6-Trichlorophenol	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
2,4-Dichlorophenol	ND	250	ug/Kg	1	12/29/23	MR	SW8270E

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
2,4-Dinitrophenol	ND	580	ug/Kg	1	12/29/23	MR	SW8270E
2,4-Dinitrotoluene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
2,6-Dinitrotoluene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
2-Chloronaphthalene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
2-Chlorophenol	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
2-Methylnaphthalene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
2-Methylphenol (o-cresol)	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
2-Nitroaniline	ND	580	ug/Kg	1	12/29/23	MR	SW8270E
2-Nitrophenol	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	360	ug/Kg	1	12/29/23	MR	SW8270E
3,3'-Dichlorobenzidine	ND	430	ug/Kg	1	12/29/23	MR	SW8270E
3-Nitroaniline	ND	580	ug/Kg	1	12/29/23	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	1	12/29/23	MR	SW8270E
4-Bromophenyl phenyl ether	ND	360	ug/Kg	1	12/29/23	MR	SW8270E
4-Chloro-3-methylphenol	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
4-Chloroaniline	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
4-Nitroaniline	ND	580	ug/Kg	1	12/29/23	MR	SW8270E
4-Nitrophenol	ND	1000	ug/Kg	1	12/29/23	MR	SW8270E
Acenaphthene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Acenaphthylene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Acetophenone	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Anthracene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Atrazine	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Benz(a)anthracene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Benzaldehyde	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(a)pyrene	290	250	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(b)fluoranthene	310	250	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(ghi)perylene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(k)fluoranthene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Benzyl butyl phthalate	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Bis(2-chloroethyl)ether	ND	360	ug/Kg	1	12/29/23	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Caprolactam	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Carbazole	ND	360	ug/Kg	1	12/29/23	MR	SW8270E
Chrysene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Dibenz(a,h)anthracene	ND	180	ug/Kg	1	12/29/23	MR	SW8270E
Dibenzofuran	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Diethyl phthalate	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Dimethylphthalate	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Di-n-butylphthalate	ND	720	ug/Kg	1	12/29/23	MR	SW8270E
Di-n-octylphthalate	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Fluoranthene	380	250	ug/Kg	1	12/29/23	MR	SW8270E
Fluorene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Hexachlorobenzene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Hexachlorobutadiene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Hexachlorocyclopentadiene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Indeno(1,2,3-cd)pyrene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Isophorone	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Naphthalene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Nitrobenzene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
N-Nitrosodimethylamine	ND	360	ug/Kg	1	12/29/23	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	180	ug/Kg	1	12/29/23	MR	SW8270E
N-Nitrosodiphenylamine	ND	360	ug/Kg	1	12/29/23	MR	SW8270E
Pentachlorophenol	ND	360	ug/Kg	1	12/29/23	MR	SW8270E
Phenanthrene	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Phenol	ND	250	ug/Kg	1	12/29/23	MR	SW8270E
Pyrene	380	250	ug/Kg	1	12/29/23	MR	SW8270E
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	116		%	1	12/29/23	MR	30 - 130 %
% 2-Fluorobiphenyl	84		%	1	12/29/23	MR	30 - 130 %
% 2-Fluorophenol	62		%	1	12/29/23	MR	30 - 130 %
% Nitrobenzene-d5	87		%	1	12/29/23	MR	30 - 130 %
% Phenol-d5	77		%	1	12/29/23	MR	30 - 130 %
% Terphenyl-d14	73		%	1	12/29/23	MR	30 - 130 %
<u>TCLP Acid/Base-Neutral</u>							
1,4-Dichlorobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	82		%	1	01/04/24	MR	15 - 110 %
% 2-Fluorobiphenyl	72		%	1	01/04/24	MR	30 - 130 %
% 2-Fluorophenol	55		%	1	01/04/24	MR	15 - 110 %
% Nitrobenzene-d5	71		%	1	01/04/24	MR	30 - 130 %
% Phenol-d5	50		%	1	01/04/24	MR	15 - 110 %
% Terphenyl-d14	76		%	1	01/04/24	MR	30 - 130 %
Semivolatile Library Search	Completed				12/29/23	MR	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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.

Hexavalent Chromium:
This sample is in a reducing state.

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

January 10, 2024

Reviewed and Released by: Sarah Bell, Project Manager



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



Analysis Report

January 10, 2024

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

Sample Information

Matrix: SOIL
 Location Code: AES-EASTSIDE
 Rush Request: Standard
 P.O.#: 0897

Custody Information

Collected by:
 Received by: SR1
 Analyzed by: see "By" below

Date

12/21/23
 12/26/23

Time

10:10
 17:04

Laboratory Data

SDG ID: GCP74370
 Phoenix ID: CP74386

Project ID: EAST SIDE COASTAL RESILIENCY
 Client ID: G 150

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	1	12/28/23	TH	SW6010D
Aluminum	6420	54	mg/Kg	10	12/28/23	TH	SW6010D
Arsenic	4.20	0.72	mg/Kg	1	12/28/23	TH	SW6010D
Barium	63.8	0.36	mg/Kg	1	12/28/23	TH	SW6010D
Beryllium	0.49	0.29	mg/Kg	1	12/28/23	TH	SW6010D
Calcium	1490	5.4	mg/Kg	1	12/28/23	TH	SW6010D
Cadmium	0.36	0.36	mg/Kg	1	12/28/23	TH	SW6010D
Cobalt	5.83	0.36	mg/Kg	1	12/28/23	TH	SW6010D
Chromium	16.2	0.36	mg/Kg	1	12/28/23	TH	SW6010D
Copper	25.0	0.7	mg/kg	1	12/28/23	TH	SW6010D
Iron	9000	54	mg/Kg	10	12/28/23	TH	SW6010D
Mercury	0.10	0.03	mg/Kg	2	12/28/23	ZT	SW7471B
Potassium	915	54	mg/Kg	10	12/28/23	TH	SW6010D
Magnesium	2540	5.4	mg/Kg	1	12/28/23	TH	SW6010D
Manganese	336	0.36	mg/Kg	1	12/28/23	TH	SW6010D
Sodium	154	5.4	mg/Kg	1	12/28/23	TH	SW6010D
Nickel	15.6	0.36	mg/Kg	1	12/28/23	TH	SW6010D
Lead	69.2	0.36	mg/Kg	1	12/28/23	TH	SW6010D
Antimony	< 3.6	3.6	mg/Kg	1	12/28/23	TH	SW6010D
Selenium	< 1.4	1.4	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Barium	0.27	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	12/28/23	ZT	SW846 1311/7470
TCLP Lead	0.14	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	12/28/23	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.2	3.2	mg/Kg	1	12/28/23	TH	SW6010D
TCLP Metals Digestion	Completed				12/28/23	W/AL/AL	SW3010A
Trivalent Chromium	16.2	0.36	mg/kg	1	01/02/24		CALC 6010-7196
Vanadium	21.6	0.36	mg/Kg	1	12/28/23	TH	SW6010D
Zinc	75.8	0.7	mg/Kg	1	12/28/23	TH	SW6010D
Percent Solid	93		%		12/26/23	AC1	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	12/26/23	ER	SW846-Corr 1
Flash Point	>200	200	Degree F	1	01/02/24	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.36	0.36	mg/Kg	1	01/02/24	NP	SW7196A
Ignitability	Passed	140	degree F	1	01/02/24	G	SW846-Ignit 1
pH at 25C - Soil	6.79	1.00	pH Units	1	12/26/23 23:20	ER	SW846 9045D 1
Reactivity Cyanide	< 5	5	mg/Kg	1	12/29/23	NP/GD	SW846 7.3.3.1/90 1
Reactivity Sulfide	< 20	20	mg/Kg	1	01/02/24	NP/GD	SW846 CH7 1
Reactivity	Negative		Pos/Neg	1	01/02/24	NP/GD	SW846-React 1
Redox Potential	202		mV	1	12/26/23	ER	SM2580B-09 1
Total Cyanide (SW9010C Distill.)	< 0.41	0.41	mg/Kg	1	01/02/24	BA/GD	SW9012B
Mercury Digestion	Completed				12/27/23	AL/AL	SW7471B
Extraction of NY ETPH	Completed				12/26/23	C/JDW	SW3546
Soil Extraction for Herbicide	Completed				12/28/23	L/MQ/D	SW3546
NJ EPH Extraction	Completed				12/27/23	C/JDW	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				12/29/23	H/JDW	SW3546
Soil Extraction for Pesticides	Completed				12/29/23	H/JDW	SW3546
Soil Extraction for SVOA	Completed				12/28/23	H/U	SW3546
TCLP Digestion Mercury	Completed				12/28/23	W/AL/AL	SW7470A
TCLP Herbicides Extraction	Completed				12/28/23	CV/MQ	SW8150 MOD
TCLP Extraction for Metals	Completed				12/27/23	AL	SW1311
TCLP Extraction for Organics	Completed				12/27/23	AL	SW1311
TCLP Pesticides Extraction	Completed				01/02/24	S/S	SW3510C
TCLP Semi-Volatile Extraction	Completed				01/03/24	S/S	SW3510C
TCLP Extraction Volatiles	Completed				12/27/23	CV	SW1311
Total Metals Digest	Completed				12/26/23	L/AG	SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	ND	8.4	mg/kg	1	12/29/23	JRB	NJEPH 10-08 R3 1
C9-C28	ND	17	mg/kg	1	12/29/23	JRB	NJEPH 10-08 R3 1
Total EPH	ND	8.4	mg/kg	1	12/29/23	JRB	NJEPH 10-08 R3 1

QA/QC Surrogates

% COD (surr)	83		%	1	12/29/23	JRB	40 - 140 %
% Terphenyl (surr)	91		%	1	12/29/23	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	ND	5.8	mg/Kg	50	12/27/23	V	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	85		%	50	12/27/23	V	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	130	ug/Kg	10	12/30/23	JRB	SW8151A
2,4,5-TP (Silvex)	ND	130	ug/Kg	10	12/30/23	JRB	SW8151A
2,4-D	ND	270	ug/Kg	10	12/30/23	JRB	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	2700	ug/Kg	10	12/30/23	JRB	SW8151A
Dalapon	ND	130	ug/Kg	10	12/30/23	JRB	SW8151A
Dicamba	ND	130	ug/Kg	10	12/30/23	JRB	SW8151A
Dichloroprop	ND	270	ug/Kg	10	12/30/23	JRB	SW8151A
Dinoseb	ND	270	ug/Kg	10	12/30/23	JRB	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	76		%	10	12/30/23	JRB	30 - 150 %
% DCAA (Confirmation)	64		%	10	12/30/23	JRB	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	71	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1221	ND	71	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1232	ND	71	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1242	ND	71	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1248	ND	71	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1254	ND	71	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1260	ND	71	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1262	ND	71	ug/Kg	2	01/02/24	SC	SW8082A
PCB-1268	ND	71	ug/Kg	2	01/02/24	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	79		%	2	01/02/24	SC	30 - 150 %
% DCBP (Confirmation)	73		%	2	01/02/24	SC	30 - 150 %
% TCMX	82		%	2	01/02/24	SC	30 - 150 %
% TCMX (Confirmation)	79		%	2	01/02/24	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	ND	2.1	ug/Kg	2	01/02/24	AW	SW8081B
4,4' -DDE	3.2	2.1	ug/Kg	2	01/02/24	AW	SW8081B
4,4' -DDT	2.7	2.1	ug/Kg	2	01/02/24	AW	SW8081B
a-BHC	ND	7.1	ug/Kg	2	01/02/24	AW	SW8081B
a-Chlordane	ND	3.6	ug/Kg	2	01/02/24	AW	SW8081B
Aldrin	ND	3.6	ug/Kg	2	01/02/24	AW	SW8081B
b-BHC	ND	7.1	ug/Kg	2	01/02/24	AW	SW8081B
Chlordane	ND	36	ug/Kg	2	01/02/24	AW	SW8081B
d-BHC	ND	7.1	ug/Kg	2	01/02/24	AW	SW8081B
Dieldrin	ND	3.6	ug/Kg	2	01/02/24	AW	SW8081B
Endosulfan I	ND	7.1	ug/Kg	2	01/02/24	AW	SW8081B
Endosulfan II	ND	7.1	ug/Kg	2	01/02/24	AW	SW8081B
Endosulfan sulfate	ND	7.1	ug/Kg	2	01/02/24	AW	SW8081B
Endrin	ND	7.1	ug/Kg	2	01/02/24	AW	SW8081B
Endrin aldehyde	ND	7.1	ug/Kg	2	01/02/24	AW	SW8081B
Endrin ketone	ND	7.1	ug/Kg	2	01/02/24	AW	SW8081B
g-BHC	ND	1.4	ug/Kg	2	01/02/24	AW	SW8081B
g-Chlordane	ND	3.6	ug/Kg	2	01/02/24	AW	SW8081B
Heptachlor	ND	7.1	ug/Kg	2	01/02/24	AW	SW8081B
Heptachlor epoxide	ND	7.1	ug/Kg	2	01/02/24	AW	SW8081B
Methoxychlor	ND	36	ug/Kg	2	01/02/24	AW	SW8081B
Toxaphene	ND	140	ug/Kg	2	01/02/24	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	83		%	2	01/02/24	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	75		%	2	01/02/24	AW	30 - 150 %
% TCMX	80		%	2	01/02/24	AW	30 - 150 %
% TCMX (Confirmation)	76		%	2	01/02/24	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	12/30/23	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	12/30/23	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	65		%	10	12/30/23	JRB	30 - 150 %
% DCAA (Confirmation)	75		%	10	12/30/23	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
a-BHC	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Alachlor	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Aldrin	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
b-BHC	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Chlordane	ND	5.0	ug/L	10	01/03/24	AW	SW8081B
d-BHC	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Dieldrin	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
Endosulfan I	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Endosulfan II	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
Endrin	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	01/03/24	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	01/03/24	AW	SW8081B
Toxaphene	ND	20	ug/L	10	01/03/24	AW	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	62		%	10	01/03/24	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	74		%	10	01/03/24	AW	30 - 150 %
%TCMX (Surrogate Rec)	63		%	10	01/03/24	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	70		%	10	01/03/24	AW	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	ND	53	mg/Kg	1	12/27/23	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	68		%	1	12/27/23	JRB	50 - 150 %
% Terphenyl (surr)	74		%	1	12/27/23	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
1,1,2-Trichloroethane	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethane	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
1,1-Dichloroethene	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dibromoethane	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichlorobenzene	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloroethane	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
1,2-Dichloropropane	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
1,3-Dichlorobenzene	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
1,4-Dichlorobenzene	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
2-Hexanone	ND	24	ug/kg	1	12/29/23	JLI	SW8260D
4-Methyl-2-pentanone	ND	24	ug/kg	1	12/29/23	JLI	SW8260D
Acetone	ND	49	ug/kg	1	12/29/23	JLI	SW8260D
Benzene	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
Bromochloromethane	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
Bromodichloromethane	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
Bromoform	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
Bromomethane	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
Carbon Disulfide	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
Carbon tetrachloride	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
Chlorobenzene	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
Chloroethane	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
Chloroform	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
Chloromethane	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,2-Dichloroethene	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
cis-1,3-Dichloropropene	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
Cyclohexane	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
Dibromochloromethane	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
Dichlorodifluoromethane	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
Ethylbenzene	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
Isopropylbenzene	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
m&p-Xylene	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
Methyl ethyl ketone	ND	29	ug/kg	1	12/29/23	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	9.8	ug/kg	1	12/29/23	JLI	SW8260D
Methylacetate	ND	3.9	ug/kg	1	12/29/23	JLI	SW8260D
Methylcyclohexane	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
Methylene chloride	ND	24	ug/kg	1	12/29/23	JLI	SW8260D
o-Xylene	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
Styrene	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
Tetrachloroethene	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
Toluene	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
Total Xylenes	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,2-Dichloroethene	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
trans-1,3-Dichloropropene	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
Trichloroethene	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorofluoromethane	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
Trichlorotrifluoroethane	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
Vinyl chloride	ND	4.9	ug/kg	1	12/29/23	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	1	12/29/23	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
2,4-Dinitrophenol	ND	560	ug/Kg	1	12/29/23	MR	SW8270E
2,4-Dinitrotoluene	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
2,6-Dinitrotoluene	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
2-Chloronaphthalene	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
2-Chlorophenol	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
2-Methylnaphthalene	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
2-Methylphenol (o-cresol)	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
2-Nitroaniline	ND	560	ug/Kg	1	12/29/23	MR	SW8270E
2-Nitrophenol	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	350	ug/Kg	1	12/29/23	MR	SW8270E
3,3'-Dichlorobenzidine	ND	420	ug/Kg	1	12/29/23	MR	SW8270E
3-Nitroaniline	ND	560	ug/Kg	1	12/29/23	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	1	12/29/23	MR	SW8270E
4-Bromophenyl phenyl ether	ND	350	ug/Kg	1	12/29/23	MR	SW8270E
4-Chloro-3-methylphenol	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
4-Chloroaniline	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
4-Nitroaniline	ND	560	ug/Kg	1	12/29/23	MR	SW8270E
4-Nitrophenol	ND	1000	ug/Kg	1	12/29/23	MR	SW8270E
Acenaphthene	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Acenaphthylene	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Acetophenone	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Anthracene	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Atrazine	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Benz(a)anthracene	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Benzaldehyde	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(a)pyrene	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(b)fluoranthene	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(ghi)perylene	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Benzo(k)fluoranthene	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Benzyl butyl phthalate	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Bis(2-chloroethyl)ether	ND	350	ug/Kg	1	12/29/23	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Caprolactam	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Carbazole	ND	350	ug/Kg	1	12/29/23	MR	SW8270E
Chrysene	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Dibenz(a,h)anthracene	ND	170	ug/Kg	1	12/29/23	MR	SW8270E
Dibenzofuran	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Diethyl phthalate	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Dimethylphthalate	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Di-n-butylphthalate	ND	700	ug/Kg	1	12/29/23	MR	SW8270E
Di-n-octylphthalate	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Fluoranthene	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Fluorene	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Hexachlorobenzene	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Hexachlorobutadiene	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Hexachlorocyclopentadiene	ND	240	ug/Kg	1	12/29/23	MR	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Hexachloroethane	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Isophorone	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Naphthalene	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Nitrobenzene	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
N-Nitrosodimethylamine	ND	350	ug/Kg	1	12/29/23	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	170	ug/Kg	1	12/29/23	MR	SW8270E
N-Nitrosodiphenylamine	ND	350	ug/Kg	1	12/29/23	MR	SW8270E
Pentachlorophenol	ND	350	ug/Kg	1	12/29/23	MR	SW8270E
Phenanthrene	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Phenol	ND	240	ug/Kg	1	12/29/23	MR	SW8270E
Pyrene	ND	240	ug/Kg	1	12/29/23	MR	SW8270E

QA/QC Surrogates

% 2,4,6-Tribromophenol	102		%	1	12/29/23	MR	30 - 130 %
% 2-Fluorobiphenyl	81		%	1	12/29/23	MR	30 - 130 %
% 2-Fluorophenol	59		%	1	12/29/23	MR	30 - 130 %
% Nitrobenzene-d5	73		%	1	12/29/23	MR	30 - 130 %
% Phenol-d5	67		%	1	12/29/23	MR	30 - 130 %
% Terphenyl-d14	71		%	1	12/29/23	MR	30 - 130 %

TCLP Acid/Base-Neutral

1,4-Dichlorobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	01/04/24	MR	SW-846 1311/8270

QA/QC Surrogates

% 2,4,6-Tribromophenol	94		%	1	01/04/24	MR	15 - 110 %
% 2-Fluorobiphenyl	82		%	1	01/04/24	MR	30 - 130 %
% 2-Fluorophenol	61		%	1	01/04/24	MR	15 - 110 %
% Nitrobenzene-d5	82		%	1	01/04/24	MR	30 - 130 %
% Phenol-d5	55		%	1	01/04/24	MR	15 - 110 %
% Terphenyl-d14	84		%	1	01/04/24	MR	30 - 130 %

Semivolatile Library Search Completed 01/07/24 MR

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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.

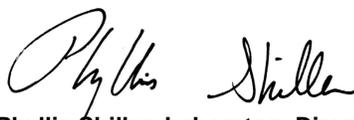
The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Cyanide. This method is no longer listed in the current version of SW-846.

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.

Hexavalent Chromium:
This sample is in a reducing state.

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

January 10, 2024

Reviewed and Released by: Sarah Bell, Project Manager



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



QA/QC Report

January 10, 2024

QA/QC Data

SDG I.D.: GCP74370

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
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QA/QC Batch 712307 (mg/kg), QC Sample No: CP74661 40X (CP74370, CP74371, CP74372, CP74373, CP74374, CP74375, CP74376, CP74377, CP74378)

Chromium, Hexavalent - Soil

Chromium, Hexavalent	BRL	0.40	<0.41	<0.40	NC	89.7						85 - 115	30
Chromium, Hexavalent (Ins)						92.1			87.4			85 - 115	30
Chromium, Hexavalent (Sol)						92.0			56.4			85 - 115	30

Comment:

The QC sample is in a reducing state, acceptance criteria are not applicable for samples in a reducing state. The soluble spike was analyzed twice with similar recoveries.

QA/QC Batch 712334 (mg/kg), QC Sample No: CP75042 40X (CP74379, CP74380, CP74381, CP74382, CP74383, CP74384, CP74385, CP74386)

Chromium, Hexavalent - Soil

Chromium, Hexavalent	BRL	0.40	<0.39	<0.38	NC	90.2						85 - 115	30
Chromium, Hexavalent (Ins)						91.5			85.6			85 - 115	30
Chromium, Hexavalent (Sol)						90.4			35.4			85 - 115	30

Comment:

The QC sample is in a reducing state, acceptance criteria are not applicable for samples in a reducing state. The soluble spike was analyzed twice with similar recoveries.

QA/QC Batch 712079 (mg/L), QC Sample No: CP64081 (CP74370, CP74371, CP74372, CP74373, CP74374, CP74375, CP74376, CP74377, CP74378, CP74379, CP74380, CP74381, CP74382, CP74383, CP74384, CP74385, CP74386)

Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	102			102			80 - 120	20
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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 711923 (mg/kg), QC Sample No: CP74102 2X (CP74370, CP74371, CP74372, CP74373, CP74374, CP74375, CP74376, CP74377, CP74378, CP74379, CP74380, CP74381, CP74382, CP74383)

Mercury - Soil	BRL	0.03	0.10	0.12	18.2	109	115	5.4	103	104	1.0	70 - 130	30
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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 711924 (mg/kg), QC Sample No: CP74248 2X (CP74384, CP74385, CP74386)

Mercury - Soil	BRL	0.02	<0.03	<0.03	NC	105	104	1.0	95.9	105	9.1	70 - 130	30
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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 712090 (mg/L), QC Sample No: CP64082 (CP74370, CP74371, CP74372, CP74373, CP74374, CP74375, CP74376, CP74377, CP74378, CP74379, CP74380, CP74381, CP74382, CP74383, CP74384, CP74386)

ICP Metals - TCLP Extraction

Arsenic	BRL	0.10	<0.10	<0.10	NC	110	109	0.9	103			80 - 120	20
Barium	BRL	0.10	0.86	0.76	12.3	97.6	97.0	0.6	96.7			80 - 120	20
Cadmium	BRL	0.050	<0.050	<0.050	NC	102	102	0.0	102			80 - 120	20
Chromium	BRL	0.10	<0.10	<0.10	NC	98.8	98.3	0.5	99.5			80 - 120	20
Lead	BRL	0.10	0.57	0.48	NC	100	99.6	0.4	101			80 - 120	20
Selenium	BRL	0.10	<0.10	<0.10	NC	112	111	0.9	104			80 - 120	20
Silver	BRL	0.10	<0.10	<0.10	NC	102	101	1.0	98.8			80 - 120	20

QA/QC Data

SDG I.D.: GCP74370

Parameter	Blk Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
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Comment:

Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%.

QA/QC Batch 711881 (mg/kg), QC Sample No: CP74404 (CP74386)

ICP Metals - Soil

Aluminum	BRL	5.0	7760	7480	3.70	106	111	4.6	NC			75 - 125	35
Antimony	BRL	3.3	<3.5	<3.5	NC	112	119	6.1	87.2			75 - 125	35
Arsenic	BRL	0.67	11.5	12.8	10.7	92.4	96.9	4.8	90.6			75 - 125	35
Barium	BRL	0.33	143	140	2.10	97.7	108	10.0	>130			75 - 125	35
Beryllium	BRL	0.27	0.41	0.35	NC	95.1	106	10.8	93.9			75 - 125	35
Cadmium	BRL	0.33	<0.35	<0.35	NC	89.2	98.1	9.5	83.6			75 - 125	35
Calcium	BRL	5.0	104000	92600	11.6	99.8	106	6.0	NC			75 - 125	35
Chromium	BRL	0.33	13.3	14.1	5.80	98.6	105	6.3	91.4			75 - 125	35
Cobalt	BRL	0.33	7.08	6.49	8.70	95.5	103	7.6	86.8			75 - 125	35
Copper	BRL	0.67	19.7	19.9	1.00	105	110	4.7	102			75 - 125	35
Iron	BRL	5.0	16300	15000	8.30	102	108	5.7	NC			75 - 125	35
Lead	BRL	0.33	23.0	24.3	5.50	95.2	99.0	3.9	91.8			75 - 125	35
Magnesium	BRL	5.0	6370	6440	1.10	102	108	5.7	NC			75 - 125	35
Manganese	BRL	0.33	203	190	6.60	103	114	10.1	67.0			75 - 125	35
Nickel	BRL	0.33	16.8	17.4	3.50	95.5	102	6.6	84.9			75 - 125	35
Potassium	BRL	5.0	1570	1380	12.9	97.7	102	4.3	>130			75 - 125	35
Selenium	BRL	1.3	<1.4	<1.4	NC	84.0	89.2	6.0	81.9			75 - 125	35
Silver	BRL	0.33	<0.35	<0.35	NC	99.5	104	4.4	103			75 - 125	35
Sodium	BRL	5.0	3080	4080	27.9	98.3	103	4.7	NC			75 - 125	35
Thallium	BRL	3.0	<3.2	<3.2	NC	95.7	104	8.3	86.7			75 - 125	35
Vanadium	BRL	0.33	20.7	19.3	7.00	104	109	4.7	95.4			75 - 125	35
Zinc	BRL	0.67	66.2	63.8	3.70	96.8	103	6.2	82.7			75 - 125	35

Comment:

Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%.

QA/QC Batch 711880 (mg/kg), QC Sample No: CP74408 (CP74370, CP74371, CP74372, CP74373, CP74374, CP74375, CP74376, CP74377, CP74378, CP74379, CP74380, CP74381, CP74382, CP74383, CP74384)

ICP Metals - Soil

Aluminum	BRL	5.0	7110	7560	6.10	104	106	1.9	NC			75 - 125	35
Antimony	BRL	3.3	<3.9	<4.1	NC	124	124	0.0	89.6			75 - 125	35
Arsenic	BRL	0.67	3.54	4.37	NC	98.1	98.4	0.3	90.9			75 - 125	35
Barium	BRL	0.33	106	496	130	105	104	1.0	104			75 - 125	35
Beryllium	BRL	0.27	0.40	0.52	NC	105	103	1.9	96.0			75 - 125	35
Cadmium	BRL	0.33	<0.39	<0.41	NC	98.6	98.5	0.1	88.7			75 - 125	35
Calcium	BRL	5.0	9840	10200	3.60	106	105	0.9	NC			75 - 125	35
Chromium	BRL	0.33	17.4	25.0	35.8	105	104	1.0	98.9			75 - 125	35
Cobalt	BRL	0.33	8.85	8.83	0.20	103	103	0.0	92.2			75 - 125	35
Copper	BRL	0.67	26.5	29.5	10.7	111	111	0.0	109			75 - 125	35
Iron	BRL	5.0	14400	16400	13.0	106	108	1.9	NC			75 - 125	35
Lead	BRL	0.33	139	141	1.40	101	101	0.0	107			75 - 125	35
Magnesium	BRL	5.0	3700	4050	9.00	107	108	0.9	NC			75 - 125	35
Manganese	BRL	0.33	245	255	4.00	111	112	0.9	98.5			75 - 125	35
Nickel	BRL	0.33	36.7	32.2	13.1	102	102	0.0	90.0			75 - 125	35
Potassium	BRL	5.0	1360	893	41.5	99.0	95.7	3.4	>130			75 - 125	35
Selenium	BRL	1.3	<1.5	<1.7	NC	88.8	88.2	0.7	80.2			75 - 125	35
Silver	BRL	0.33	<0.39	<0.41	NC	106	105	0.9	98.3			75 - 125	35
Sodium	BRL	5.0	447	383	15.4	104	99.2	4.7	>130			75 - 125	35
Thallium	BRL	3.0	<3.5	<3.7	NC	103	104	1.0	92.5			75 - 125	35

QA/QC Data

SDG I.D.: GCP74370

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Vanadium	BRL	0.33	26.3	27.7	5.20	108	109	0.9	97.3			75 - 125	35
Zinc	BRL	0.67	79.6	85.0	6.60	103	103	0.0	99.3			75 - 125	35

Comment:

Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%.

QA/QC Batch 713350 (mg/L), QC Sample No: CP80220 (CP74385)

ICP Metals - TCLP Extraction

Arsenic	BRL	0.05	<0.05	<0.05	NC	104	103	1.0	102			80 - 120	20
Barium	BRL	0.01	0.86	0.84	2.40	97.7	96.8	0.9	96.9			80 - 120	20
Cadmium	BRL	0.005	<0.005	<0.005	NC	95.2	94.0	1.3	94.1			80 - 120	20
Chromium	BRL	0.010	<0.010	<0.010	NC	93.5	92.9	0.6	94.0			80 - 120	20
Lead	BRL	0.010	<0.010	<0.010	NC	96.6	96.4	0.2	97.4			80 - 120	20
Selenium	BRL	0.05	<0.05	<0.05	NC	110	110	0.0	109			80 - 120	20
Silver	BRL	0.010	<0.010	<0.010	NC	106	106	0.0	108			80 - 120	20

Comment:

Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%.

QA/QC Batch 713307 (mg/kg), QC Sample No: CP80523 (CP74385)

ICP Metals - Soil

Aluminum	BRL	5.0	17700	16200	8.80	109	117	7.1	NC			75 - 125	35
Antimony	BRL	3.3	<3.5	<3.3	NC	108	117	8.0	83.7			75 - 125	35
Arsenic	BRL	0.67	2.37	2.54	NC	91.6	99.1	7.9	90.5			75 - 125	35
Barium	BRL	0.33	209	169	21.2	112	120	6.9	91.8			75 - 125	35
Beryllium	BRL	0.27	0.59	0.60	NC	105	115	9.1	100			75 - 125	35
Cadmium	BRL	0.33	1.65	1.54	NC	113	120	6.0	102			75 - 125	35
Calcium	BRL	5.0	7030	7540	7.00	105	114	8.2	NC			75 - 125	35
Chromium	BRL	0.33	28.6	28.2	1.40	112	121	7.7	106			75 - 125	35
Cobalt	BRL	0.33	16.6	16.0	3.70	112	120	6.9	105			75 - 125	35
Copper	BRL	0.67	48.9	49.5	1.20	115	124	7.5	112			75 - 125	35
Iron	BRL	5.0	29000	26500	9.00	104	115	10.0	NC			75 - 125	35
Lead	BRL	0.33	57.8	53.0	8.70	112	120	6.9	102			75 - 125	35
Magnesium	BRL	5.0	8800	8370	5.00	111	121	8.6	NC			75 - 125	35
Manganese	BRL	0.33	438	389	11.9	105	115	9.1	91.9			75 - 125	35
Nickel	BRL	0.33	16.3	16.2	0.60	111	121	8.6	105			75 - 125	35
Potassium	BRL	5.0	6770	5580	19.3	107	115	7.2	NC			75 - 125	35
Selenium	BRL	1.3	<1.4	<1.3	NC	94.4	99.8	5.6	79.9			75 - 125	35
Silver	BRL	0.33	<0.35	<0.33	NC	104	113	8.3	100			75 - 125	35
Sodium	BRL	5.0	500	513	2.60	118	125	5.8	>130			75 - 125	35 m
Thallium	BRL	3.0	<3.2	<3.0	NC	104	110	5.6	101			75 - 125	35
Vanadium	BRL	0.33	54.8	50.0	9.20	112	122	8.5	102			75 - 125	35
Zinc	BRL	0.67	81.4	74.7	8.60	99.6	109	9.0	96.5			75 - 125	35

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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QA/QC Report

January 10, 2024

QA/QC Data

SDG I.D.: GCP74370

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 711941 (mg/Kg), QC Sample No: CP73040 (CP74383, CP74384, CP74385, CP74386)													
Reactivity Cyanide	BRL	1	<5	<5.1	NC	103						85 - 115	30
Reactivity Sulfide	BRL	20	<20	<20	NC	94.5						80 - 120	30
QA/QC Batch 712067 (mg/Kg), QC Sample No: CP73411 50X (CP74370, CP74371, CP74372, CP74373, CP74374, CP74375, CP74376, CP74377, CP74378, CP74379)													
Total Cyanide (SW9010C Distill.)	BRL	0.50	<0.56	1.13	NC	94.4			68.0			80 - 120	30 m
Comment: Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils													
QA/QC Batch 711932 (mg/Kg), QC Sample No: CP73682 (CP74370, CP74371, CP74372, CP74373, CP74374, CP74375, CP74376, CP74377, CP74378, CP74379, CP74380, CP74381, CP74382)													
Reactivity Cyanide	BRL	1	<5	<5.2	NC	102						85 - 115	30
Reactivity Sulfide	BRL	20	<20	<20	NC	94.5						80 - 120	30
QA/QC Batch 712311 (mg/Kg), QC Sample No: CP74380 50X (CP74380, CP74381, CP74382, CP74383, CP74384, CP74385, CP74386)													
Total Cyanide (SW9010C Distill.)	BRL	0.50	2.71	4.32	45.8	86.9			99.6			80 - 120	30 r
Comment: Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils													
QA/QC Batch 711914 (PH), QC Sample No: CP74267 (CP74370, CP74371, CP74372, CP74373, CP74374, CP74375, CP74376, CP74377, CP74378, CP74379, CP74380, CP74381, CP74382, CP74383)													
pH			8.23	8.23	0	101						85 - 115	20
QA/QC Batch 712528 (Degree F), QC Sample No: CP74379 (CP74379, CP74380, CP74381, CP74382, CP74383, CP74384, CP74385, CP74386)													
Flash Point			>200	>200	NC	103						75 - 125	30
Comment: Additional criteria matrix spike acceptance range is 75-125%.													
QA/QC Batch 711916 (PH), QC Sample No: CP74384 (CP74384, CP74385, CP74386)													
pH			7.82	7.81	0.10	101						85 - 115	20
QA/QC Batch 712529 (Degree F), QC Sample No: CP74562 (CP74370, CP74371, CP74372, CP74373, CP74374, CP74375, CP74376, CP74377, CP74378)													
Flash Point			>200	>200	NC	101						75 - 125	30
Comment: Additional criteria matrix spike acceptance range is 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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QA/QC Report

January 10, 2024

QA/QC Data

SDG I.D.: GCP74370

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 711890 (mg/kg), QC Sample No: CP73462 (CP74370, CP74371, CP74372)										
Extractable Petroleum Hydrocarbons - Soil										
C9-C28	ND	10	86	85	1.2	81	93	13.8	40 - 140	25
C9-C28 #2 Fuel / Diesel			92	105	13.2				40 - 140	25
>C28-C40	ND	10	71	73	2.8	70	80	13.3	40 - 140	25
C9 - Nonane	ND	3.3	72	68	5.7	69	82	17.2	40 - 140	25
C10 - Decane	ND	3.3	78	75	3.9	74	87	16.1	40 - 140	25
C12 - Dodecane	ND	3.3	84	82	2.4	81	94	14.9	40 - 140	25
C14 - Tetradecane	ND	3.3	86	85	1.2	85	97	13.2	40 - 140	25
C16 - Hexadecane	ND	3.3	86	86	0.0	85	96	12.2	40 - 140	25
C18 - Octadecane	ND	3.3	111	116	4.4	106	122	14.0	40 - 140	25
C20 - Eicosane	ND	3.3	88	87	1.1	83	107	25.3	40 - 140	25
C21 - Heneicosane	ND	3.3	81	79	2.5	71	79	10.7	40 - 140	25
C22 - Docosane	ND	3.3	105	108	2.8	95	103	8.1	40 - 140	25
C24 - Tetracosane	ND	3.3	81	80	1.2	74	81	9.0	40 - 140	25
C26 - Hexacosane	ND	3.3	81	80	1.2	75	82	8.9	40 - 140	25
C28 - Octacosane	ND	3.3	80	79	1.3	76	84	10.0	40 - 140	25
C30 - Tricotane	ND	3.3	79	78	1.3	75	82	8.9	40 - 140	25
C32 - Dotriacontane	ND	3.3	75	76	1.3	74	82	10.3	40 - 140	25
C34 - Tetratriacontane	ND	3.3	73	74	1.4	72	80	10.5	40 - 140	25
C36 - Hexatriacontane	ND	3.3	66	69	4.4	67	75	11.3	40 - 140	25
C38 - Octatriacontane	ND	3.3	65	70	7.4	67	78	15.2	40 - 140	25
C40 - Tetracontane	ND	3.3	66	72	8.7	68	81	17.4	40 - 140	25
% COD (surr)	82	%	81	81	0.0	77	99	25.0	40 - 140	25
% Terphenyl (surr)	80	%	79	79	0.0	78	88	12.0	40 - 140	25

Comment:

Additional EPH fractionation criteria: Breakthrough criteria (BT) is 0 to 5%

QA/QC Batch 712062 (mg/kg), QC Sample No: CP74462 (CP74375, CP74376, CP74377, CP74378, CP74379, CP74380, CP74381, CP74382, CP74383, CP74384, CP74385, CP74386)

Extractable Petroleum Hydrocarbons - Soil

C9-C28	ND	10	101	78	25.7	63	71	11.9	40 - 140	25	r
C9-C28 #2 Fuel / Diesel			70	86	20.5				40 - 140	25	
>C28-C40	ND	10	84	64	27.0	58	62	6.7	40 - 140	25	r
C9 - Nonane	ND	3.3	68	45	40.7	36	44	20.0	40 - 140	25	m,r
C10 - Decane	ND	3.3	78	54	36.4	53	59	10.7	40 - 140	25	r
C12 - Dodecane	ND	3.3	96	68	34.1	61	67	9.4	40 - 140	25	r
C14 - Tetradecane	ND	3.3	109	78	33.2	65	71	8.8	40 - 140	25	r
C16 - Hexadecane	ND	3.3	109	83	27.1	68	76	11.1	40 - 140	25	r
C18 - Octadecane	ND	3.3	138	100	31.9	83	93	11.4	40 - 140	25	r
C20 - Eicosane	ND	3.3	115	94	20.1	70	78	10.8	40 - 140	25	
C21 - Heneicosane	ND	3.3	93	80	15.0	65	70	7.4	40 - 140	25	
C22 - Docosane	ND	3.3	123	100	20.6	77	88	13.3	40 - 140	25	
C24 - Tetracosane	ND	3.3	95	79	18.4	62	70	12.1	40 - 140	25	

QA/QC Data

SDG I.D.: GCP74370

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
C26 - Hexacosane	ND	3.3	97	79	20.5	62	69	10.7	40 - 140	25
C28 - Octacosane	ND	3.3	95	81	15.9	62	71	13.5	40 - 140	25
C30 - Tricotane	ND	3.3	95	78	19.7	63	72	13.3	40 - 140	25
C32 - Dotriacontane	ND	3.3	90	70	25.0	58	64	9.8	40 - 140	25
C34 - Tetratriacontane	ND	3.3	87	66	27.5	62	65	4.7	40 - 140	25
C36 - Hexatriacontane	ND	3.3	76	56	30.3	60	62	3.3	40 - 140	25
C38 - Octatriacontane	ND	3.3	75	55	30.8	52	52	0.0	40 - 140	25
C40 - Tetracontane	ND	3.3	79	58	30.7	51	57	11.1	40 - 140	25
% COD (surr)	74	%	106	80	28.0	59	66	11.2	40 - 140	25
% Terphenyl (surr)	82	%	97	78	21.7	63	69	9.1	40 - 140	25

Comment:

Additional EPH fractionation criteria: Breakthrough criteria (BT) is 0 to 5%

QA/QC Batch 712061 (mg/kg), QC Sample No: CP75079 (CP74373, CP74374)

Extractable Petroleum Hydrocarbons - Soil

C9-C28	ND	10	75	63	17.4	77	94	19.9	40 - 140	25
C9-C28 #2 Fuel / Diesel			62	78	22.9				40 - 140	25
>C28-C40	ND	10	74	63	16.1	71	85	17.9	40 - 140	25
C9 - Nonane	ND	3.3	49	38	25.3	45	57	23.5	40 - 140	25
C10 - Decane	ND	3.3	54	43	22.7	54	71	27.2	40 - 140	25
C12 - Dodecane	ND	3.3	60	47	24.3	66	73	10.1	40 - 140	25
C14 - Tetradecane	ND	3.3	68	56	19.4	72	88	20.0	40 - 140	25
C16 - Hexadecane	ND	3.3	75	64	15.8	77	94	19.9	40 - 140	25
C18 - Octadecane	ND	3.3	97	81	18.0	100	126	23.0	40 - 140	25
C20 - Eicosane	ND	3.3	83	71	15.6	84	102	19.4	40 - 140	25
C21 - Heneicosane	ND	3.3	80	70	13.3	78	98	22.7	40 - 140	25
C22 - Docosane	ND	3.3	100	84	17.4	106	131	21.1	40 - 140	25
C24 - Tetracosane	ND	3.3	78	67	15.2	81	97	18.0	40 - 140	25
C26 - Hexacosane	ND	3.3	78	68	13.7	81	99	20.0	40 - 140	25
C28 - Octacosane	ND	3.3	78	68	13.7	78	94	18.6	40 - 140	25
C30 - Tricotane	ND	3.3	78	68	13.7	79	95	18.4	40 - 140	25
C32 - Dotriacontane	ND	3.3	76	66	14.1	75	90	18.2	40 - 140	25
C34 - Tetratriacontane	ND	3.3	76	65	15.6	73	88	18.6	40 - 140	25
C36 - Hexatriacontane	ND	3.3	75	63	17.4	70	84	18.2	40 - 140	25
C38 - Octatriacontane	ND	3.3	69	58	17.3	64	77	18.4	40 - 140	25
C40 - Tetracontane	ND	3.3	70	59	17.1	66	78	16.7	40 - 140	25
% COD (surr)	76	%	72	60	18.2	74	87	16.1	40 - 140	25
% Terphenyl (surr)	79	%	68	56	19.4	73	88	18.6	40 - 140	25

Comment:

Additional EPH fractionation criteria: Breakthrough criteria (BT) is 0 to 5%

QA/QC Batch 711889 (mg/Kg), QC Sample No: CP74386 (CP74370, CP74371, CP74372, CP74373, CP74374, CP74375, CP74376, CP74377, CP74378, CP74379, CP74380, CP74381, CP74382, CP74383, CP74384, CP74385, CP74386)

TPH by GC (Extractable Products) - Soil

Ext. Petroleum HC	ND	50	58	68	15.9	53	62	15.7	30 - 130	30
% COD (surr)	75	%	86	105	19.9	87	99	12.9	50 - 150	30
% Terphenyl (surr)	75	%	77	85	9.9	72	78	8.0	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 Data

SDG I.D.: GCP74370

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								

QA/QC Batch 712172 (mg/Kg), QC Sample No: CP74372 50X (CP74370 (50X) , CP74371 (50X) , CP74372 (50X) , CP74373 (50X) , CP74374 (50X) , CP74375 (50X) , CP74376 (50X) , CP74377 (50X) , CP74378 (50X) , CP74379 (50X) , CP74380 (50X) , CP74381 (50X) , CP74382 (50X) , CP74383 (50X) , CP74384 (50X) , CP74385 (50X) , CP74386 (50X))

Gasoline Range Hydrocarbons (C6C10) - Soil

GRO (C6-C10)	ND	5.0	90	91	1.1	89	90	1.1	70 - 130	30
% 2,5-Dibromotoluene (FID)	95	%	94	91	3.2	93	96	3.2	70 - 130	30

QA/QC Batch 712250 (ug/Kg), QC Sample No: CP71827 10X (CP74375, CP74376, CP74377, CP74378, CP74379, CP74380, CP74381, CP74382, CP74383, CP74384, CP74385, CP74386)

Chlorinated Herbicides - Soil

2,4,5-T	ND	130	70	55	24.0	60	59	1.7	40 - 140	30
2,4,5-TP (Silvex)	ND	130	77	60	24.8	64	62	3.2	40 - 140	30
2,4-D	ND	250	79	65	19.4	52	55	5.6	40 - 140	30
2,4-DB	ND	2500	58	46	23.1	61	57	6.8	40 - 140	30
Dalapon	ND	130	42	37	12.7	30	37	20.9	40 - 140	30
Dicamba	ND	130	84	65	25.5	57	65	13.1	40 - 140	30
Dichloroprop	ND	130	86	68	23.4	63	73	14.7	40 - 140	30
Dinoseb	ND	130	92	75	20.4	65	59	9.7	40 - 140	30
% DCAA (Surrogate Rec)	101	%	102	81	23.0	73	75	2.7	30 - 150	30
% DCAA (Surrogate Rec) (Confirm	75	%	80	62	25.4	96	87	9.8	30 - 150	30

Comment:

Additional criteria: LCS acceptance range is 40-140% MS acceptance range 30-150%.

QA/QC Batch 712104 (ug/L), QC Sample No: CP74370 10X (CP74370, CP74371, CP74372, CP74373, CP74374, CP74375, CP74376, CP74377, CP74378, CP74379, CP74380, CP74381, CP74382, CP74383, CP74384, CP74385, CP74386)

TCLP Herbicides

2,4,5-TP (Silvex)	ND	50	86	78	9.8	75			40 - 140	20
2,4-D	ND	100	86	79	8.5	78			40 - 140	20
% DCAA	63	%	67	62	7.8	60			30 - 150	20
% DCAA (Confirmation)	65	%	74	64	14.5	66			30 - 150	20

Comment:

Additional criteria: LCS acceptance range is 40-140% MS acceptance range 30-150%.

QA/QC Batch 712047 (ug/Kg), QC Sample No: CP74562 10X (CP74370, CP74371, CP74372, CP74373, CP74374)

Chlorinated Herbicides - Soil

2,4,5-T	ND	130	49	48	2.1	48	49	2.1	40 - 140	30
2,4,5-TP (Silvex)	ND	130	58	56	3.5	55	55	0.0	40 - 140	30
2,4-D	ND	250	61	57	6.8	52	65	22.2	40 - 140	30
2,4-DB	ND	2500	44	42	4.7	48	50	4.1	40 - 140	30
Dalapon	ND	130	44	47	6.6	45	46	2.2	40 - 140	30
Dicamba	ND	130	69	64	7.5	67	69	2.9	40 - 140	30
Dichloroprop	ND	130	64	63	1.6	65	61	6.3	40 - 140	30
Dinoseb	ND	130	75	71	5.5	51	56	9.3	40 - 140	30
% DCAA (Surrogate Rec)	76	%	78	77	1.3	77	78	1.3	30 - 150	30
% DCAA (Surrogate Rec) (Confirm	68	%	62	57	8.4	60	66	9.5	30 - 150	30

Comment:

Additional criteria: LCS acceptance range is 40-140% MS acceptance range 30-150%.

QA/QC Batch 712211 (ug/Kg), QC Sample No: CP73040 2X (CP74371, CP74372, CP74373, CP74374, CP74375, CP74376, CP74377, CP74378)

Polychlorinated Biphenyls - Soil

PCB-1016	ND	33	97	103	6.0	100	92	8.3	40 - 140	30
PCB-1221	ND	33							40 - 140	30
PCB-1232	ND	33							40 - 140	30

QA/QC Data

SDG I.D.: GCP74370

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
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	105	110	4.7	107	96	10.8	40 - 140	30
PCB-1262	ND	33							40 - 140	30
PCB-1268	ND	33							40 - 140	30
% DCBP (Surrogate Rec)	110	%	114	121	6.0	119	105	12.5	30 - 150	30
% DCBP (Surrogate Rec) (Confirm	114	%	118	125	5.8	130	115	12.2	30 - 150	30
% TCMX (Surrogate Rec)	95	%	97	101	4.0	92	84	9.1	30 - 150	30
% TCMX (Surrogate Rec) (Confirm	93	%	98	101	3.0	94	85	10.1	30 - 150	30

QA/QC Batch 712418 (ug/Kg), QC Sample No: CP73042 2X (CP74379, CP74380, CP74381, CP74382, CP74383, CP74384, CP74385, CP74386)

Polychlorinated Biphenyls - Soil

PCB-1016	ND	33	88	89	1.1	86	88	2.3	40 - 140	30
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	80	83	3.7	78	80	2.5	40 - 140	30
PCB-1262	ND	33							40 - 140	30
PCB-1268	ND	33							40 - 140	30
% DCBP (Surrogate Rec)	83	%	85	90	5.7	82	85	3.6	30 - 150	30
% DCBP (Surrogate Rec) (Confirm	74	%	82	84	2.4	78	81	3.8	30 - 150	30
% TCMX (Surrogate Rec)	78	%	87	89	2.3	85	86	1.2	30 - 150	30
% TCMX (Surrogate Rec) (Confirm	76	%	85	86	1.2	83	84	1.2	30 - 150	30

QA/QC Batch 712063 (ug/Kg), QC Sample No: CP74661 2X (CP74370)

Polychlorinated Biphenyls - Soil

PCB-1016	ND	33	93	92	1.1	90	93	3.3	40 - 140	30
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	98	96	2.1	91	90	1.1	40 - 140	30
PCB-1262	ND	33							40 - 140	30
PCB-1268	ND	33							40 - 140	30
% DCBP (Surrogate Rec)	91	%	106	100	5.8	94	98	4.2	30 - 150	30
% DCBP (Surrogate Rec) (Confirm	93	%	108	104	3.8	96	100	4.1	30 - 150	30
% TCMX (Surrogate Rec)	88	%	98	90	8.5	90	94	4.3	30 - 150	30
% TCMX (Surrogate Rec) (Confirm	88	%	97	91	6.4	91	95	4.3	30 - 150	30

QA/QC Batch 712212 (ug/Kg), QC Sample No: CP73040 2X (CP74371, CP74372, CP74373, CP74374, CP74375, CP74376, CP74377, CP74378)

Pesticides - Soil

4,4' -DDD	ND	1.7	101	110	8.5	92	90	2.2	40 - 140	30
4,4' -DDE	ND	1.7	103	110	6.6	91	91	0.0	40 - 140	30
4,4' -DDT	ND	1.7	112	116	3.5	94	94	0.0	40 - 140	30
a-BHC	ND	1.0	98	102	4.0	75	75	0.0	40 - 140	30
a-Chlordane	ND	3.3	113	118	4.3	99	97	2.0	40 - 140	30
Aldrin	ND	1.0	106	112	5.5	87	88	1.1	40 - 140	30
b-BHC	ND	1.0	95	100	5.1	73	73	0.0	40 - 140	30

QA/QC Data

SDG I.D.: GCP74370

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
Chlordane	ND	33	104	110	5.6	85	107	22.9	40 - 140	30
d-BHC	ND	3.3	85	95	11.1	69	70	1.4	40 - 140	30
Dieldrin	ND	1.0	107	115	7.2	92	92	0.0	40 - 140	30
Endosulfan I	ND	3.3	109	121	10.4	97	99	2.0	40 - 140	30
Endosulfan II	ND	3.3	107	117	8.9	94	96	2.1	40 - 140	30
Endosulfan sulfate	ND	3.3	106	105	0.9	84	83	1.2	40 - 140	30
Endrin	ND	3.3	110	117	6.2	96	96	0.0	40 - 140	30
Endrin aldehyde	ND	3.3	93	100	7.3	69	65	6.0	40 - 140	30
Endrin ketone	ND	3.3	108	118	8.8	97	96	1.0	40 - 140	30
g-BHC	ND	1.0	101	105	3.9	79	80	1.3	40 - 140	30
g-Chlordane	ND	3.3	104	110	5.6	85	107	22.9	40 - 140	30
Heptachlor	ND	3.3	106	115	8.1	88	89	1.1	40 - 140	30
Heptachlor epoxide	ND	3.3	106	112	5.5	92	92	0.0	40 - 140	30
Methoxychlor	ND	3.3	96	104	8.0	88	92	4.4	40 - 140	30
Toxaphene	ND	130	NA	NA	NC	NA	NA	NC	40 - 140	30
% DCBP	87	%	105	103	1.9	89	87	2.3	30 - 150	30
% DCBP (Confirmation)	110	%	122	157	25.1	134	135	0.7	30 - 150	30
% TCMX	72	%	83	84	1.2	68	67	1.5	30 - 150	30
% TCMX (Confirmation)	117	%	120	117	2.5	76	78	2.6	30 - 150	30

QA/QC Batch 712419 (ug/Kg), QC Sample No: CP73042 2X (CP74379, CP74380, CP74381, CP74382, CP74383, CP74384, CP74385, CP74386)

Pesticides - Soil

4,4' -DDD	ND	1.7	62	66	6.3	57	59	3.4	40 - 140	30
4,4' -DDE	ND	1.7	66	70	5.9	61	58	5.0	40 - 140	30
4,4' -DDT	ND	1.7	71	74	4.1	65	63	3.1	40 - 140	30
a-BHC	ND	1.0	62	65	4.7	54	53	1.9	40 - 140	30
a-Chlordane	ND	3.3	73	77	5.3	64	65	1.6	40 - 140	30
Aldrin	ND	1.0	69	72	4.3	61	61	0.0	40 - 140	30
b-BHC	ND	1.0	62	65	4.7	54	55	1.8	40 - 140	30
Chlordane	ND	33	66	70	5.9	64	67	4.6	40 - 140	30
d-BHC	ND	3.3	58	50	14.8	51	51	0.0	40 - 140	30
Dieldrin	ND	1.0	70	73	4.2	62	61	1.6	40 - 140	30
Endosulfan I	ND	3.3	71	75	5.5	69	65	6.0	40 - 140	30
Endosulfan II	ND	3.3	73	76	4.0	66	64	3.1	40 - 140	30
Endosulfan sulfate	ND	3.3	65	67	3.0	59	59	0.0	40 - 140	30
Endrin	ND	3.3	72	76	5.4	65	63	3.1	40 - 140	30
Endrin aldehyde	ND	3.3	63	64	1.6	48	49	2.1	40 - 140	30
Endrin ketone	ND	3.3	73	77	5.3	67	66	1.5	40 - 140	30
g-BHC	ND	1.0	62	65	4.7	58	58	0.0	40 - 140	30
g-Chlordane	ND	3.3	66	70	5.9	64	67	4.6	40 - 140	30
Heptachlor	ND	3.3	71	75	5.5	64	63	1.6	40 - 140	30
Heptachlor epoxide	ND	3.3	68	72	5.7	63	61	3.2	40 - 140	30
Methoxychlor	ND	3.3	66	67	1.5	63	62	1.6	40 - 140	30
Toxaphene	ND	130	NA	NA	NC	NA	NA	NC	40 - 140	30
% DCBP	65	%	62	63	1.6	57	56	1.8	30 - 150	30
% DCBP (Confirmation)	75	%	73	69	5.6	65	67	3.0	30 - 150	30
% TCMX	53	%	51	53	3.8	45	47	4.3	30 - 150	30
% TCMX (Confirmation)	59	%	57	61	6.8	48	53	9.9	30 - 150	30

QA/QC Batch 712189 (ug/L), QC Sample No: CP73455 10X (CP74370, CP74371, CP74372, CP74373, CP74374, CP74375, CP74376, CP74377)

Pesticides

4,4' -DDD	ND	0.25	97	99	2.0	97			40 - 140	20
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QA/QC Data

SDG I.D.: GCP74370

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
4,4' -DDE	ND	0.25	99	100	1.0	99			40 - 140	20
4,4' -DDT	ND	0.25	102	102	0.0	102			40 - 140	20
a-BHC	ND	0.15	99	97	2.0	94			40 - 140	20
Alachlor	ND	0.50	NA	NA	NC	NA			40 - 140	20
Aldrin	ND	0.15	104	103	1.0	100			40 - 140	20
b-BHC	ND	0.15	95	96	1.0	97			40 - 140	20
Chlordane	ND	5.0	97	97	0.0	96			40 - 140	20
d-BHC	ND	0.50	95	87	8.8	95			40 - 140	20
Dieldrin	ND	0.15	105	105	0.0	103			40 - 140	20
Endosulfan I	ND	0.50	114	110	3.6	109			40 - 140	20
Endosulfan II	ND	0.50	110	108	1.8	109			40 - 140	20
Endosulfan sulfate	ND	0.50	96	97	1.0	97			40 - 140	20
Endrin	ND	0.50	105	104	1.0	103			40 - 140	20
Endrin aldehyde	ND	0.50	92	92	0.0	92			40 - 140	20
g-BHC	ND	0.15	100	108	7.7	96			40 - 140	20
Heptachlor	ND	0.50	109	105	3.7	106			40 - 140	20
Heptachlor epoxide	ND	0.50	106	101	4.8	103			40 - 140	20
Methoxychlor	ND	0.50	97	96	1.0	97			40 - 140	20
Toxaphene	ND	20	NA	NA	NC	NA			40 - 140	20
% DCBP	81	%	90	87	3.4	85			30 - 150	20
% DCBP (Confirmation)	101	%	110	110	0.0	109			30 - 150	20
% TCMX	77	%	78	74	5.3	75			30 - 150	20
% TCMX (Confirmation)	87	%	85	83	2.4	84			30 - 150	20

QA/QC Batch 712374 (ug/L), QC Sample No: CP74381 10X (CP74378, CP74379, CP74380, CP74381, CP74384)

Pesticides

4,4' -DDD	ND	0.25	76	67	12.6	68			40 - 140	20
4,4' -DDE	ND	0.25	76	69	9.7	71			40 - 140	20
4,4' -DDT	ND	0.25	75	66	12.8	69			40 - 140	20
a-BHC	ND	0.15	75	67	11.3	70			40 - 140	20
Alachlor	ND	0.50	NA	NA	NC	NA			40 - 140	20
Aldrin	ND	0.15	74	71	4.1	73			40 - 140	20
b-BHC	ND	0.15	84	70	18.2	72			40 - 140	20
Chlordane	ND	5.0	76	69	9.7	71			40 - 140	20
d-BHC	ND	0.50	97	64	41.0	66			40 - 140	20
Dieldrin	ND	0.15	82	76	7.6	77			40 - 140	20
Endosulfan I	ND	0.50	79	78	1.3	81			40 - 140	20
Endosulfan II	ND	0.50	85	79	7.3	81			40 - 140	20
Endosulfan sulfate	ND	0.50	83	69	18.4	70			40 - 140	20
Endrin	ND	0.50	82	73	11.6	75			40 - 140	20
Endrin aldehyde	ND	0.50	78	67	15.2	69			40 - 140	20
g-BHC	ND	0.15	76	70	8.2	71			40 - 140	20
Heptachlor	ND	0.50	77	74	4.0	76			40 - 140	20
Heptachlor epoxide	ND	0.50	77	75	2.6	76			40 - 140	20
Methoxychlor	ND	0.50	80	64	22.2	66			40 - 140	20
Toxaphene	ND	20	NA	NA	NC	NA			40 - 140	20
% DCBP	65	%	80	73	9.2	78			30 - 150	20
% DCBP (Confirmation)	56	%	73	83	12.8	88			30 - 150	20
% TCMX	55	%	67	59	12.7	59			30 - 150	20
% TCMX (Confirmation)	56	%	69	65	6.0	65			30 - 150	20

QA/QC Batch 712532 (ug/L), QC Sample No: CP74385 10X (CP74385, CP74386)

Pesticides

4,4' -DDD	ND	0.25	81	76	6.4	85			40 - 140	20
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QA/QC Data

SDG I.D.: GCP74370

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
4,4' -DDE	ND	0.25	87	79	9.6	86			40 - 140	20
4,4' -DDT	ND	0.25	82	77	6.3	82			40 - 140	20
a-BHC	ND	0.15	83	76	8.8	85			40 - 140	20
Alachlor	ND	0.50	NA	NA	NC	NA			40 - 140	20
Aldrin	ND	0.15	89	83	7.0	92			40 - 140	20
b-BHC	ND	0.15	85	80	6.1	86			40 - 140	20
Chlordane	ND	5.0	84	80	4.9	87			40 - 140	20
d-BHC	ND	0.50	77	71	8.1	79			40 - 140	20
Dieldrin	ND	0.15	103	87	16.8	94			40 - 140	20
Endosulfan I	ND	0.50	99	93	6.3	98			40 - 140	20
Endosulfan II	ND	0.50	97	97	0.0	101			40 - 140	20
Endosulfan sulfate	ND	0.50	84	79	6.1	84			40 - 140	20
Endrin	ND	0.50	83	80	3.7	86			40 - 140	20
Endrin aldehyde	ND	0.50	87	83	4.7	89			40 - 140	20
g-BHC	ND	0.15	85	79	7.3	87			40 - 140	20
Heptachlor	ND	0.50	92	85	7.9	96			40 - 140	20
Heptachlor epoxide	ND	0.50	91	85	6.8	92			40 - 140	20
Methoxychlor	ND	0.50	78	73	6.6	78			40 - 140	20
Toxaphene	ND	20	NA	NA	NC	NA			40 - 140	20
% DCBP	71	%	70	72	2.8	68			30 - 150	20
% DCBP (Confirmation)	89	%	82	87	5.9	82			30 - 150	20
% TCMX	61	%	67	64	4.6	73			30 - 150	20
% TCMX (Confirmation)	68	%	75	72	4.1	82			30 - 150	20

QA/QC Batch 712064 (ug/Kg), QC Sample No: CP74661 2X (CP74370)

Pesticides - Soil

4,4' -DDD	ND	1.7	103	115	11.0	100	103	3.0	40 - 140	30
4,4' -DDE	ND	1.7	97	108	10.7	101	107	5.8	40 - 140	30
4,4' -DDT	ND	1.7	106	110	3.7	98	98	0.0	40 - 140	30
a-BHC	ND	1.0	80	87	8.4	78	80	2.5	40 - 140	30
a-Chlordane	ND	3.3	98	104	5.9	98	95	3.1	40 - 140	30
Aldrin	ND	1.0	90	105	15.4	90	92	2.2	40 - 140	30
b-BHC	ND	1.0	103	106	2.9	101	102	1.0	40 - 140	30
Chlordane	ND	33	96	102	6.1	95	95	0.0	40 - 140	30
d-BHC	ND	3.3	96	101	5.1	92	94	2.2	40 - 140	30
Dieldrin	ND	1.0	95	106	10.9	95	96	1.0	40 - 140	30
Endosulfan I	ND	3.3	88	97	9.7	87	90	3.4	40 - 140	30
Endosulfan II	ND	3.3	97	110	12.6	93	95	2.1	40 - 140	30
Endosulfan sulfate	ND	3.3	102	106	3.8	93	93	0.0	40 - 140	30
Endrin	ND	3.3	102	114	11.1	98	101	3.0	40 - 140	30
Endrin aldehyde	ND	3.3	97	103	6.0	75	71	5.5	40 - 140	30
Endrin ketone	ND	3.3	94	107	12.9	97	98	1.0	40 - 140	30
g-BHC	ND	1.0	108	112	3.6	105	108	2.8	40 - 140	30
g-Chlordane	ND	3.3	96	102	6.1	95	95	0.0	40 - 140	30
Heptachlor	ND	3.3	89	95	6.5	85	88	3.5	40 - 140	30
Heptachlor epoxide	ND	3.3	96	103	7.0	91	92	1.1	40 - 140	30
Methoxychlor	ND	3.3	97	106	8.9	98	98	0.0	40 - 140	30
Toxaphene	ND	130	NA	NA	NC	NA	NA	NC	40 - 140	30
% DCBP	83	%	82	90	9.3	85	84	1.2	30 - 150	30
% DCBP (Confirmation)	69	%	72	76	5.4	79	72	9.3	30 - 150	30
% TCMX	79	%	79	84	6.1	77	78	1.3	30 - 150	30
% TCMX (Confirmation)	77	%	77	81	5.1	73	73	0.0	30 - 150	30

QA/QC Data

SDG I.D.: GCP74370

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
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QA/QC Batch 712697 (ug/L), QC Sample No: CP76546 10X (CP74382, CP74383)

Pesticides

4,4' -DDD	ND	0.25	53	47	12.0	53			40 - 140	20
4,4' -DDE	ND	0.25	54	49	9.7	56			40 - 140	20
4,4' -DDT	ND	0.25	51	45	12.5	51			40 - 140	20
a-BHC	ND	0.15	51	45	12.5	50			40 - 140	20
Alachlor	ND	0.50	NA	NA	NC	NA			40 - 140	20
Aldrin	ND	0.15	49	45	8.5	50			40 - 140	20
b-BHC	ND	0.15	60	54	10.5	60			40 - 140	20
Chlordane	ND	5.0	52	46	12.2	52			40 - 140	20
d-BHC	ND	0.50	59	52	12.6	55			40 - 140	20
Dieldrin	ND	0.15	56	50	11.3	57			40 - 140	20
Endosulfan I	ND	0.50	55	50	9.5	54			40 - 140	20
Endosulfan II	ND	0.50	61	54	12.2	62			40 - 140	20
Endosulfan sulfate	ND	0.50	54	49	9.7	55			40 - 140	20
Endrin	ND	0.50	56	50	11.3	57			40 - 140	20
Endrin aldehyde	ND	0.50	53	44	18.6	57			40 - 140	20
g-BHC	ND	0.15	53	47	12.0	51			40 - 140	20
Heptachlor	ND	0.50	52	48	8.0	53			40 - 140	20
Heptachlor epoxide	ND	0.50	53	47	12.0	53			40 - 140	20
Methoxychlor	ND	0.50	56	51	9.3	57			40 - 140	20
Toxaphene	ND	20	NA	NA	NC	NA			40 - 140	20
% DCBP	45	%	50	45	10.5	52			30 - 150	20
% DCBP (Confirmation)	49	%	52	47	10.1	51			30 - 150	20
% TCMX	45	%	42	40	4.9	44			30 - 150	20
% TCMX (Confirmation)	47	%	43	41	4.8	44			30 - 150	20

QA/QC Batch 712200 (ug/kg), QC Sample No: CP73351 (CP74379, CP74380, CP74381, CP74382, CP74383, CP74384, CP74385, CP74386)

Semivolatiles - Soil

1,1-Biphenyl	ND	230	82	83	1.2	77	72	6.7	40 - 140	30
1,2,4,5-Tetrachlorobenzene	ND	230	83	83	0.0	80	73	9.2	40 - 140	30
2,2'-Oxybis(1-Chloropropane)	ND	230	55	59	7.0	56	52	7.4	40 - 140	30
2,3,4,6-tetrachlorophenol	ND	230	99	100	1.0	92	85	7.9	30 - 130	30
2,4,5-Trichlorophenol	ND	230	101	105	3.9	98	91	7.4	40 - 140	30
2,4,6-Trichlorophenol	ND	130	102	103	1.0	99	91	8.4	30 - 130	30
2,4-Dichlorophenol	ND	130	93	95	2.1	89	82	8.2	30 - 130	30
2,4-Dimethylphenol	ND	230	95	97	2.1	93	87	6.7	30 - 130	30
2,4-Dinitrophenol	ND	230	53	49	7.8	63	52	19.1	30 - 130	30
2,4-Dinitrotoluene	ND	130	98	99	1.0	90	84	6.9	30 - 130	30
2,6-Dinitrotoluene	ND	130	98	97	1.0	88	84	4.7	40 - 140	30
2-Chloronaphthalene	ND	230	82	82	0.0	77	72	6.7	40 - 140	30
2-Chlorophenol	ND	230	75	81	7.7	78	70	10.8	30 - 130	30
2-Methylnaphthalene	ND	230	80	83	3.7	78	73	6.6	40 - 140	30
2-Methylphenol (o-cresol)	ND	230	87	91	4.5	87	78	10.9	40 - 140	30
2-Nitroaniline	ND	330	137	139	1.4	122	111	9.4	40 - 140	30
2-Nitrophenol	ND	230	78	82	5.0	75	72	4.1	40 - 140	30
3&4-Methylphenol (m&p-cresol)	ND	230	77	79	2.6	77	70	9.5	30 - 130	30
3,3'-Dichlorobenzidine	ND	130	105	108	2.8	96	92	4.3	40 - 140	30
3-Nitroaniline	ND	330	114	115	0.9	102	92	10.3	40 - 140	30
4,6-Dinitro-2-methylphenol	ND	230	79	81	2.5	87	73	17.5	30 - 130	30
4-Bromophenyl phenyl ether	ND	230	89	87	2.3	79	76	3.9	40 - 140	30
4-Chloro-3-methylphenol	ND	230	102	100	2.0	96	87	9.8	30 - 130	30

QA/QC Data

SDG I.D.: GCP74370

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
4-Chloroaniline	ND	230	77	79	2.6	71	62	13.5	40 - 140	30
4-Chlorophenyl phenyl ether	ND	230	88	87	1.1	79	75	5.2	40 - 140	30
4-Nitroaniline	ND	230	95	96	1.0	87	82	5.9	40 - 140	30
4-Nitrophenol	ND	230	84	88	4.7	83	75	10.1	30 - 130	30
Acenaphthene	ND	230	87	88	1.1	82	76	7.6	30 - 130	30
Acenaphthylene	ND	130	76	76	0.0	73	69	5.6	40 - 140	30
Acetophenone	ND	230	72	74	2.7	71	66	7.3	40 - 140	30
Anthracene	ND	230	92	89	3.3	82	79	3.7	40 - 140	30
Atrazine	ND	130	91	91	0.0	82	77	6.3	40 - 140	30
Benz(a)anthracene	ND	230	96	95	1.0	88	83	5.8	40 - 140	30
Benzaldehyde	ND	230	39	35	10.8	20	22	9.5	40 - 140	30
Benzo(a)pyrene	ND	130	100	99	1.0	88	85	3.5	40 - 140	30
Benzo(b)fluoranthene	ND	160	89	90	1.1	84	79	6.1	40 - 140	30
Benzo(ghi)perylene	ND	230	101	104	2.9	82	76	7.6	40 - 140	30
Benzo(k)fluoranthene	ND	230	86	84	2.4	79	77	2.6	40 - 140	30
Benzyl butyl phthalate	ND	230	104	101	2.9	92	86	6.7	40 - 140	30
Bis(2-chloroethoxy)methane	ND	230	77	78	1.3	73	68	7.1	40 - 140	30
Bis(2-chloroethyl)ether	ND	130	61	66	7.9	62	58	6.7	40 - 140	30
Bis(2-ethylhexyl)phthalate	ND	230	107	105	1.9	97	92	5.3	40 - 140	30
Caprolactam	ND	230	111	106	4.6	100	89	11.6	40 - 140	30
Carbazole	ND	230	93	92	1.1	84	79	6.1	40 - 140	30
Chrysene	ND	230	98	97	1.0	88	84	4.7	40 - 140	30
Dibenz(a,h)anthracene	ND	130	92	95	3.2	79	73	7.9	40 - 140	30
Dibenzofuran	ND	230	85	85	0.0	79	74	6.5	40 - 140	30
Diethyl phthalate	ND	230	93	93	0.0	84	79	6.1	40 - 140	30
Dimethylphthalate	ND	230	90	89	1.1	83	77	7.5	40 - 140	30
Di-n-butylphthalate	ND	670	89	90	1.1	80	75	6.5	40 - 140	30
Di-n-octylphthalate	ND	230	96	95	1.0	85	79	7.3	40 - 140	30
Fluoranthene	ND	230	82	81	1.2	75	70	6.9	40 - 140	30
Fluorene	ND	230	90	91	1.1	83	78	6.2	40 - 140	30
Hexachlorobenzene	ND	130	85	83	2.4	76	73	4.0	40 - 140	30
Hexachlorobutadiene	ND	230	72	77	6.7	72	69	4.3	40 - 140	30
Hexachlorocyclopentadiene	ND	230	53	49	7.8	43	38	12.3	40 - 140	30
Hexachloroethane	ND	130	61	67	9.4	63	60	4.9	40 - 140	30
Indeno(1,2,3-cd)pyrene	ND	230	106	107	0.9	83	77	7.5	40 - 140	30
Isophorone	ND	130	71	70	1.4	67	64	4.6	40 - 140	30
Naphthalene	ND	230	74	77	4.0	73	68	7.1	40 - 140	30
Nitrobenzene	ND	130	68	71	4.3	69	63	9.1	40 - 140	30
N-Nitrosodimethylamine	ND	230	53	61	14.0	56	52	7.4	40 - 140	30
N-Nitrosodi-n-propylamine	ND	130	73	75	2.7	72	67	7.2	40 - 140	30
N-Nitrosodiphenylamine	ND	130	89	87	2.3	80	76	5.1	40 - 140	30
Pentachlorophenol	ND	230	92	89	3.3	89	80	10.7	30 - 130	30
Phenanthrene	ND	130	91	90	1.1	83	79	4.9	40 - 140	30
Phenol	ND	230	77	80	3.8	82	74	10.3	30 - 130	30
Pyrene	ND	230	78	79	1.3	74	69	7.0	30 - 130	30
% 2,4,6-Tribromophenol	99	%	89	91	2.2	81	78	3.8	30 - 130	30
% 2-Fluorobiphenyl	78	%	76	80	5.1	74	70	5.6	30 - 130	30
% 2-Fluorophenol	59	%	65	71	8.8	66	62	6.3	30 - 130	30
% Nitrobenzene-d5	72	%	71	74	4.1	70	67	4.4	30 - 130	30
% Phenol-d5	66	%	74	78	5.3	76	70	8.2	30 - 130	30
% Terphenyl-d14	71	%	75	76	1.3	68	63	7.6	30 - 130	30

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QA/QC Data

SDG I.D.: GCP74370

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
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 711954 (ug/kg), QC Sample No: CP73462 (CP74370, CP74371, CP74372, CP74373, CP74374, CP74375, CP74376, CP74377, CP74378)										
Semivolatiles - Soil										
1,1-Biphenyl	ND	230	79	81	2.5	84	74	12.7	40 - 140	30
1,2,4,5-Tetrachlorobenzene	ND	230	80	82	2.5	85	75	12.5	40 - 140	30
2,2'-Oxybis(1-Chloropropane)	ND	230	52	60	14.3	62	56	10.2	40 - 140	30
2,3,4,6-tetrachlorophenol	ND	230	96	95	1.0	103	94	9.1	30 - 130	30
2,4,5-Trichlorophenol	ND	230	90	93	3.3	97	86	12.0	40 - 140	30
2,4,6-Trichlorophenol	ND	130	92	94	2.2	100	87	13.9	30 - 130	30
2,4-Dichlorophenol	ND	130	90	91	1.1	94	85	10.1	30 - 130	30
2,4-Dimethylphenol	ND	230	91	93	2.2	86	77	11.0	30 - 130	30
2,4-Dinitrophenol	ND	230	48	53	9.9	93	85	9.0	30 - 130	30
2,4-Dinitrotoluene	ND	130	95	95	0.0	97	87	10.9	30 - 130	30
2,6-Dinitrotoluene	ND	130	89	90	1.1	92	83	10.3	40 - 140	30
2-Chloronaphthalene	ND	230	79	81	2.5	83	74	11.5	40 - 140	30
2-Chlorophenol	ND	230	75	82	8.9	84	76	10.0	30 - 130	30
2-Methylnaphthalene	ND	230	81	82	1.2	88	79	10.8	40 - 140	30
2-Methylphenol (o-cresol)	ND	230	78	84	7.4	90	80	11.8	40 - 140	30
2-Nitroaniline	ND	330	111	112	0.9	89	86	3.4	40 - 140	30
2-Nitrophenol	ND	230	80	83	3.7	85	77	9.9	40 - 140	30
3&4-Methylphenol (m&p-cresol)	ND	230	79	82	3.7	83	73	12.8	30 - 130	30
3,3'-Dichlorobenzidine	ND	130	82	76	7.6	45	41	9.3	40 - 140	30
3-Nitroaniline	ND	330	95	91	4.3	73	74	1.4	40 - 140	30
4,6-Dinitro-2-methylphenol	ND	230	60	70	15.4	98	89	9.6	30 - 130	30
4-Bromophenyl phenyl ether	ND	230	89	88	1.1	92	81	12.7	40 - 140	30
4-Chloro-3-methylphenol	ND	230	94	95	1.1	98	90	8.5	30 - 130	30
4-Chloroaniline	ND	230	71	70	1.4	51	56	9.3	40 - 140	30
4-Chlorophenyl phenyl ether	ND	230	88	88	0.0	91	81	11.6	40 - 140	30
4-Nitroaniline	ND	230	87	90	3.4	90	84	6.9	40 - 140	30
4-Nitrophenol	ND	230	92	93	1.1	98	94	4.2	30 - 130	30
Acenaphthene	ND	230	82	83	1.2	87	78	10.9	30 - 130	30
Acenaphthylene	ND	130	75	75	0.0	78	71	9.4	40 - 140	30
Acetophenone	ND	230	70	76	8.2	78	70	10.8	40 - 140	30
Anthracene	ND	230	88	88	0.0	90	82	9.3	40 - 140	30
Atrazine	ND	130	94	94	0.0	92	83	10.3	40 - 140	30
Benz(a)anthracene	ND	230	92	89	3.3	98	85	14.2	40 - 140	30
Benzaldehyde	ND	230	20	30	40.0	55	59	7.0	40 - 140	30
Benzo(a)pyrene	ND	130	99	96	3.1	108	92	16.0	40 - 140	30
Benzo(b)fluoranthene	ND	160	91	88	3.4	111	91	19.8	40 - 140	30
Benzo(ghi)perylene	ND	230	98	92	6.3	93	79	16.3	40 - 140	30
Benzo(k)fluoranthene	ND	230	95	92	3.2	99	93	6.3	40 - 140	30
Benzyl butyl phthalate	ND	230	95	92	3.2	100	89	11.6	40 - 140	30
Bis(2-chloroethoxy)methane	ND	230	74	77	4.0	80	72	10.5	40 - 140	30
Bis(2-chloroethyl)ether	ND	130	60	69	14.0	72	65	10.2	40 - 140	30
Bis(2-ethylhexyl)phthalate	ND	230	91	90	1.1	104	84	21.3	40 - 140	30
Caprolactam	ND	230	92	92	0.0	93	90	3.3	40 - 140	30
Carbazole	ND	230	88	89	1.1	89	82	8.2	40 - 140	30
Chrysene	ND	230	91	88	3.4	94	82	13.6	40 - 140	30
Dibenz(a,h)anthracene	ND	130	95	91	4.3	88	79	10.8	40 - 140	30

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QA/QC Data

SDG I.D.: GCP74370

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
Dibenzofuran	ND	230	84	85	1.2	87	79	9.6	40 - 140	30
Diethyl phthalate	ND	230	89	90	1.1	93	84	10.2	40 - 140	30
Dimethylphthalate	ND	230	86	87	1.2	89	78	13.2	40 - 140	30
Di-n-butylphthalate	ND	670	91	92	1.1	92	86	6.7	40 - 140	30
Di-n-octylphthalate	ND	230	98	98	0.0	95	88	7.7	40 - 140	30
Fluoranthene	ND	230	88	91	3.4	106	92	14.1	40 - 140	30
Fluorene	ND	230	89	90	1.1	94	85	10.1	40 - 140	30
Hexachlorobenzene	ND	130	87	86	1.2	89	79	11.9	40 - 140	30
Hexachlorobutadiene	ND	230	65	70	7.4	75	65	14.3	40 - 140	30
Hexachlorocyclopentadiene	ND	230	66	70	5.9	54	32	51.2	40 - 140	30
Hexachloroethane	ND	130	53	64	18.8	67	58	14.4	40 - 140	30
Indeno(1,2,3-cd)pyrene	ND	230	104	98	5.9	100	85	16.2	40 - 140	30
Isophorone	ND	130	69	70	1.4	72	65	10.2	40 - 140	30
Naphthalene	ND	230	69	73	5.6	75	69	8.3	40 - 140	30
Nitrobenzene	ND	130	68	75	9.8	77	70	9.5	40 - 140	30
N-Nitrosodimethylamine	ND	230	48	61	23.9	59	49	18.5	40 - 140	30
N-Nitrosodi-n-propylamine	ND	130	74	79	6.5	81	72	11.8	40 - 140	30
N-Nitrosodiphenylamine	ND	130	87	86	1.2	86	78	9.8	40 - 140	30
Pentachlorophenol	ND	230	94	94	0.0	114	103	10.1	30 - 130	30
Phenanthrene	ND	130	87	87	0.0	99	86	14.1	40 - 140	30
Phenol	ND	230	82	87	5.9	90	78	14.3	30 - 130	30
Pyrene	ND	230	87	91	4.5	101	88	13.8	30 - 130	30
% 2,4,6-Tribromophenol	99	%	92	94	2.2	98	90	8.5	30 - 130	30
% 2-Fluorobiphenyl	77	%	80	82	2.5	82	74	10.3	30 - 130	30
% 2-Fluorophenol	67	%	68	78	13.7	79	71	10.7	30 - 130	30
% Nitrobenzene-d5	68	%	69	78	12.2	78	72	8.0	30 - 130	30
% Phenol-d5	72	%	79	85	7.3	85	78	8.6	30 - 130	30
% Terphenyl-d14	94	%	84	90	6.9	84	81	3.6	30 - 130	30

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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 712190 (ug/L), QC Sample No: CP74370 (CP74370, CP74371, CP74372, CP74373, CP74374, CP74375, CP74376)

Semivolatiles - TCLP

1,4-Dichlorobenzene	ND	17	63	61	3.2	63			40 - 140	20
2,4,5-Trichlorophenol	ND	17	85	87	2.3	86			40 - 140	20
2,4,6-Trichlorophenol	ND	17	81	84	3.6	83			30 - 130	20
2,4-Dinitrotoluene	ND	58	95	99	4.1	99			30 - 130	20
2-Methylphenol (o-cresol)	ND	17	86	87	1.2	89			40 - 140	20
3&4-Methylphenol (m&p-cresol)	ND	17	70	69	1.4	73			30 - 130	20
Hexachlorobenzene	ND	58	85	86	1.2	86			40 - 140	20
Hexachlorobutadiene	ND	58	73	70	4.2	70			40 - 140	20
Hexachloroethane	ND	58	69	65	6.0	67			40 - 140	20
Nitrobenzene	ND	58	78	76	2.6	82			40 - 140	20
Pentachlorophenol	ND	58	79	84	6.1	86			30 - 130	20
Pyridine	ND	83	40	33	19.2	44			40 - 140	20
% 2,4,6-Tribromophenol	85	%	82	86	4.8	88			15 - 110	20
% 2-Fluorobiphenyl	79	%	76	79	3.9	78			30 - 130	20
% 2-Fluorophenol	68	%	61	61	0.0	63			15 - 110	20
% Nitrobenzene-d5	79	%	77	78	1.3	80			30 - 130	20
% Phenol-d5	56	%	55	56	1.8	57			15 - 110	20
% Terphenyl-d14	91	%	89	95	6.5	98			30 - 130	20

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QA/QC Data

SDG I.D.: GCP74370

Parameter	Blank	Bik RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
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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 712696 (ug/L), QC Sample No: CP74377 (CP74377, CP74378, CP74379, CP74380, CP74381, CP74382, CP74383, CP74384, CP74385, CP74386)

Semivolatiles - TCLP

1,4-Dichlorobenzene	ND	17	67	65	3.0	55			40 - 140	20
2,4,5-Trichlorophenol	ND	17	101	103	2.0	88			40 - 140	20
2,4,6-Trichlorophenol	ND	17	102	100	2.0	92			30 - 130	20
2,4-Dinitrotoluene	ND	58	102	99	3.0	88			30 - 130	20
2-Methylphenol (o-cresol)	ND	17	90	87	3.4	76			40 - 140	20
3&4-Methylphenol (m&p-cresol)	ND	17	82	78	5.0	69			30 - 130	20
Hexachlorobenzene	ND	58	90	85	5.7	76			40 - 140	20
Hexachlorobutadiene	ND	58	78	75	3.9	67			40 - 140	20
Hexachloroethane	ND	58	67	67	0.0	60			40 - 140	20
Nitrobenzene	ND	58	74	75	1.3	65			40 - 140	20
Pentachlorophenol	ND	58	86	85	1.2	84			30 - 130	20
Pyridine	ND	83	58	57	1.7	60			40 - 140	20
% 2,4,6-Tribromophenol	90	%	87	86	1.2	76			15 - 110	20
% 2-Fluorobiphenyl	82	%	86	83	3.6	73			30 - 130	20
% 2-Fluorophenol	62	%	67	65	3.0	58			15 - 110	20
% Nitrobenzene-d5	77	%	78	78	0.0	66			30 - 130	20
% Phenol-d5	54	%	58	57	1.7	51			15 - 110	20
% Terphenyl-d14	85	%	86	85	1.2	74			30 - 130	20

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 712382 (ug/kg), QC Sample No: CP74304 (CP74370, CP74371, CP74372, CP74373, CP74374, CP74375, CP74376)

Volatiles - Soil (Low Level)

1,1,1-Trichloroethane	ND	5.0	100	92	8.3	91	90	1.1	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	3.0	86	86	0.0	82	78	5.0	70 - 130	30	
1,1,2-Trichloroethane	ND	5.0	95	94	1.1	84	85	1.2	70 - 130	30	
1,1-Dichloroethane	ND	5.0	95	88	7.7	86	86	0.0	70 - 130	30	
1,1-Dichloroethene	ND	5.0	101	92	9.3	88	90	2.2	70 - 130	30	
1,2,3-Trichlorobenzene	ND	5.0	106	107	0.9	61	75	20.6	70 - 130	30	m
1,2,3-Trichloropropane	ND	5.0	83	84	1.2	78	74	5.3	70 - 130	30	
1,2,4-Trichlorobenzene	ND	5.0	108	108	0.0	57	72	23.3	70 - 130	30	m
1,2,4-Trimethylbenzene	ND	1.0	105	102	2.9	99	99	0.0	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	5.0	89	93	4.4	74	74	0.0	70 - 130	30	
1,2-Dibromoethane	ND	5.0	97	96	1.0	78	82	5.0	70 - 130	30	
1,2-Dichlorobenzene	ND	5.0	102	100	2.0	84	89	5.8	70 - 130	30	
1,2-Dichloroethane	ND	5.0	92	91	1.1	81	82	1.2	70 - 130	30	
1,2-Dichloropropane	ND	5.0	97	95	2.1	89	90	1.1	70 - 130	30	
1,3,5-Trimethylbenzene	ND	1.0	106	102	3.8	104	102	1.9	70 - 130	30	
1,3-Dichlorobenzene	ND	5.0	104	102	1.9	82	89	8.2	70 - 130	30	
1,3-Dichloropropane	ND	5.0	94	94	0.0	82	83	1.2	70 - 130	30	
1,4-Dichlorobenzene	ND	5.0	102	101	1.0	76	85	11.2	70 - 130	30	
1,4-dioxane	ND	100	102	101	1.0	119	133	11.1	70 - 130	30	m
2-Hexanone	ND	25	70	73	4.2	55	56	1.8	70 - 130	30	m
4-Methyl-2-pentanone	ND	25	74	77	4.0	63	61	3.2	70 - 130	30	m
Acetone	ND	10	61	60	1.7	54	56	3.6	70 - 130	30	l,m
Benzene	ND	1.0	102	98	4.0	93	94	1.1	70 - 130	30	

QA/QC Data

SDG I.D.: GCP74370

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
Bromochloromethane	ND	5.0	97	92	5.3	85	85	0.0	70 - 130	30
Bromodichloromethane	ND	5.0	102	100	2.0	93	94	1.1	70 - 130	30
Bromoform	ND	5.0	102	101	1.0	86	88	2.3	70 - 130	30
Bromomethane	ND	5.0	97	91	6.4	89	89	0.0	70 - 130	30
Carbon Disulfide	ND	5.0	101	92	9.3	86	87	1.2	70 - 130	30
Carbon tetrachloride	ND	5.0	106	97	8.9	92	94	2.2	70 - 130	30
Chlorobenzene	ND	5.0	107	104	2.8	91	96	5.3	70 - 130	30
Chloroethane	ND	5.0	102	92	10.3	95	94	1.1	70 - 130	30
Chloroform	ND	5.0	90	85	5.7	85	82	3.6	70 - 130	30
Chloromethane	ND	5.0	95	86	9.9	83	81	2.4	70 - 130	30
cis-1,2-Dichloroethene	ND	5.0	98	92	6.3	86	86	0.0	70 - 130	30
cis-1,3-Dichloropropene	ND	5.0	101	99	2.0	80	86	7.2	70 - 130	30
Cyclohexane	ND	5.0	94	86	8.9	83	83	0.0	70 - 130	30
Dibromochloromethane	ND	3.0	107	105	1.9	95	97	2.1	70 - 130	30
Dichlorodifluoromethane	ND	5.0	89	81	9.4	77	76	1.3	70 - 130	30
Ethylbenzene	ND	1.0	108	104	3.8	96	99	3.1	70 - 130	30
Isopropylbenzene	ND	1.0	108	103	4.7	107	105	1.9	70 - 130	30
m&p-Xylene	ND	2.0	107	103	3.8	94	98	4.2	70 - 130	30
Methyl ethyl ketone	ND	5.0	62	65	4.7	51	49	4.0	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	82	80	2.5	74	71	4.1	70 - 130	30
Methylacetate	ND	5.0	70	69	1.4	61	59	3.3	70 - 130	30
Methylcyclohexane	ND	5.0	98	93	5.2	90	90	0.0	70 - 130	30
Methylene chloride	ND	5.0	92	86	6.7	90	89	1.1	70 - 130	30
n-Butylbenzene	ND	1.0	105	101	3.9	84	89	5.8	70 - 130	30
n-Propylbenzene	ND	1.0	107	103	3.8	99	100	1.0	70 - 130	30
o-Xylene	ND	2.0	106	103	2.9	98	100	2.0	70 - 130	30
p-Isopropyltoluene	ND	1.0	107	105	1.9	100	101	1.0	70 - 130	30
sec-Butylbenzene	ND	1.0	106	103	2.9	102	101	1.0	70 - 130	30
Styrene	ND	5.0	102	100	2.0	83	89	7.0	70 - 130	30
tert-Butylbenzene	ND	1.0	108	104	3.8	109	106	2.8	70 - 130	30
Tetrachloroethene	ND	5.0	111	108	2.7	101	104	2.9	70 - 130	30
Toluene	ND	1.0	105	101	3.9	93	95	2.1	70 - 130	30
trans-1,2-Dichloroethene	ND	5.0	102	94	8.2	86	88	2.3	70 - 130	30
trans-1,3-Dichloropropene	ND	5.0	99	98	1.0	70	78	10.8	70 - 130	30
Trichloroethene	ND	5.0	111	106	4.6	97	100	3.0	70 - 130	30
Trichlorofluoromethane	ND	5.0	105	95	10.0	93	93	0.0	70 - 130	30
Trichlorotrifluoroethane	ND	5.0	108	99	8.7	98	98	0.0	70 - 130	30
Vinyl chloride	ND	5.0	97	88	9.7	83	84	1.2	70 - 130	30
% 1,2-dichlorobenzene-d4	98	%	99	98	1.0	101	98	3.0	70 - 130	30
% Bromofluorobenzene	95	%	95	95	0.0	92	93	1.1	70 - 130	30
% Dibromofluoromethane	92	%	97	93	4.2	95	93	2.1	70 - 130	30
% Toluene-d8	96	%	97	98	1.0	96	96	0.0	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 712296 (ug/L), QC Sample No: CP74370 (CP74370 (10X), CP74371 (10X), CP74372 (10X), CP74373 (10X), CP74374 (10X), CP74375 (10X), CP74376 (10X), CP74377 (10X), CP74378 (10X), CP74379 (10X), CP74380 (10X), CP74381 (10X), CP74382 (10X), CP74383 (10X), CP74384 (10X), CP74385 (10X), CP74386 (10X))

Volatiles - TCLP

1,1-Dichloroethene	ND	5.0	100	99	1.0	116	116	0.0	70 - 130	30
1,2-Dichloroethane	ND	0.60	92	91	1.1	94	98	4.2	70 - 130	30
Benzene	ND	0.70	104	102	1.9	110	114	3.6	70 - 130	30
Carbon tetrachloride	ND	5.0	124	123	0.8	113	120	6.0	70 - 130	30

QA/QC Data

SDG I.D.: GCP74370

Parameter	BIK		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
Chlorobenzene	ND	1.0	104	103	1.0	110	114	3.6	70 - 130	30
Chloroform	ND	5.0	101	100	1.0	106	111	4.6	70 - 130	30
Methyl ethyl ketone	ND	5.0	93	94	1.1	88	92	4.4	70 - 130	30
Tetrachloroethene	ND	1.0	102	100	2.0	109	111	1.8	70 - 130	30
Trichloroethene	ND	5.0	102	99	3.0	108	112	3.6	70 - 130	30
Vinyl chloride	ND	5.0	110	107	2.8	117	124	5.8	70 - 130	30
% 1,2-dichlorobenzene-d4	98	%	97	99	2.0	98	98	0.0	70 - 130	30
% Bromofluorobenzene	90	%	97	99	2.0	98	98	0.0	70 - 130	30
% Dibromofluoromethane	97	%	92	93	1.1	93	94	1.1	70 - 130	30
% Toluene-d8	94	%	97	97	0.0	97	97	0.0	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 712524 (ug/kg), QC Sample No: CP74462 (CP74377, CP74378, CP74379, CP74380, CP74381, CP74382, CP74383, CP74384, CP74385, CP74386)

Volatiles - Soil (Low Level)

1,1,1-Trichloroethane	ND	5.0	102	97	5.0	94	94	0.0	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	96	92	4.3	93	95	2.1	70 - 130	30
1,1,2-Trichloroethane	ND	5.0	100	95	5.1	88	89	1.1	70 - 130	30
1,1-Dichloroethane	ND	5.0	103	98	5.0	94	95	1.1	70 - 130	30
1,1-Dichloroethene	ND	5.0	110	101	8.5	99	99	0.0	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	100	96	4.1	37	38	2.7	70 - 130	30 m
1,2,3-Trichloropropane	ND	5.0	101	93	8.2	91	92	1.1	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	99	95	4.1	44	45	2.2	70 - 130	30 m
1,2,4-Trimethylbenzene	ND	1.0	110	103	6.6	82	85	3.6	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0	96	91	5.3	76	76	0.0	70 - 130	30
1,2-Dibromoethane	ND	5.0	98	94	4.2	85	88	3.5	70 - 130	30
1,2-Dichlorobenzene	ND	5.0	104	99	4.9	74	77	4.0	70 - 130	30
1,2-Dichloroethane	ND	5.0	97	91	6.4	88	89	1.1	70 - 130	30
1,2-Dichloropropane	ND	5.0	106	99	6.8	95	96	1.0	70 - 130	30
1,3,5-Trimethylbenzene	ND	1.0	112	104	7.4	95	96	1.0	70 - 130	30
1,3-Dichlorobenzene	ND	5.0	107	99	7.8	84	84	0.0	70 - 130	30
1,3-Dichloropropane	ND	5.0	100	95	5.1	90	90	0.0	70 - 130	30
1,4-Dichlorobenzene	ND	5.0	106	99	6.8	81	82	1.2	70 - 130	30
1,4-dioxane	ND	100	106	107	0.9	110	103	6.6	70 - 130	30
2-Hexanone	ND	25	83	80	3.7	13	15	14.3	70 - 130	30 m
4-Methyl-2-pentanone	ND	25	86	82	4.8	24	25	4.1	70 - 130	30 m
Acetone	ND	10	71	71	0.0	35	36	2.8	70 - 130	30 m
Benzene	ND	1.0	108	101	6.7	97	97	0.0	70 - 130	30
Bromochloromethane	ND	5.0	92	88	4.4	84	85	1.2	70 - 130	30
Bromodichloromethane	ND	5.0	107	101	5.8	97	95	2.1	70 - 130	30
Bromoform	ND	5.0	105	102	2.9	83	84	1.2	70 - 130	30
Bromomethane	ND	5.0	114	106	7.3	102	101	1.0	70 - 130	30
Carbon Disulfide	ND	5.0	107	100	6.8	92	93	1.1	70 - 130	30
Carbon tetrachloride	ND	5.0	105	99	5.9	94	96	2.1	70 - 130	30
Chlorobenzene	ND	5.0	111	103	7.5	92	93	1.1	70 - 130	30
Chloroethane	ND	5.0	115	105	9.1	106	109	2.8	70 - 130	30
Chloroform	ND	5.0	99	94	5.2	92	92	0.0	70 - 130	30
Chloromethane	ND	5.0	96	89	7.6	86	88	2.3	70 - 130	30
cis-1,2-Dichloroethene	ND	5.0	89	92	3.3	83	88	5.8	70 - 130	30
cis-1,3-Dichloropropene	ND	5.0	105	98	6.9	83	82	1.2	70 - 130	30
Cyclohexane	ND	5.0	103	94	9.1	86	87	1.2	70 - 130	30

QA/QC Data

SDG I.D.: GCP74370

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
	Blank	RL									
Dibromochloromethane	ND	3.0	107	103	3.8	93	94	1.1	70 - 130	30	
Dichlorodifluoromethane	ND	5.0	81	73	10.4	72	73	1.4	70 - 130	30	
Ethylbenzene	ND	1.0	114	104	9.2	90	91	1.1	70 - 130	30	
Isopropylbenzene	ND	1.0	117	108	8.0	106	108	1.9	70 - 130	30	
m&p-Xylene	ND	2.0	112	104	7.4	85	88	3.5	70 - 130	30	
Methyl ethyl ketone	ND	5.0	74	72	2.7	30	31	3.3	70 - 130	30	m
Methyl t-butyl ether (MTBE)	ND	1.0	85	83	2.4	78	78	0.0	70 - 130	30	
Methylacetate	ND	5.0	86	83	3.6	40	42	4.9	70 - 130	30	m
Methylcyclohexane	ND	5.0	112	100	11.3	85	89	4.6	70 - 130	30	
Methylene chloride	ND	5.0	100	97	3.0	93	93	0.0	70 - 130	30	
n-Butylbenzene	ND	1.0	114	105	8.2	52	54	3.8	70 - 130	30	m
n-Propylbenzene	ND	1.0	115	106	8.1	90	91	1.1	70 - 130	30	
o-Xylene	ND	2.0	111	104	6.5	92	94	2.2	70 - 130	30	
p-Isopropyltoluene	ND	1.0	115	106	8.1	47	50	6.2	70 - 130	30	m
sec-Butylbenzene	ND	1.0	116	106	9.0	85	88	3.5	70 - 130	30	
Styrene	ND	5.0	109	104	4.7	72	76	5.4	70 - 130	30	
tert-Butylbenzene	ND	1.0	115	108	6.3	101	102	1.0	70 - 130	30	
Tetrachloroethene	ND	5.0	112	102	9.3	96	95	1.0	70 - 130	30	
Toluene	ND	1.0	110	101	8.5	89	92	3.3	70 - 130	30	
trans-1,2-Dichloroethene	ND	5.0	109	103	5.7	100	102	2.0	70 - 130	30	
trans-1,3-Dichloropropene	ND	5.0	103	99	4.0	80	78	2.5	70 - 130	30	
Trichloroethene	ND	5.0	116	107	8.1	103	102	1.0	70 - 130	30	
Trichlorofluoromethane	ND	5.0	115	107	7.2	106	106	0.0	70 - 130	30	
Trichlorotrifluoroethane	ND	5.0	111	108	2.7	103	107	3.8	70 - 130	30	
Vinyl chloride	ND	5.0	102	94	8.2	92	91	1.1	70 - 130	30	
% 1,2-dichlorobenzene-d4	97	%	97	96	1.0	93	95	2.1	70 - 130	30	
% Bromofluorobenzene	94	%	97	95	2.1	89	90	1.1	70 - 130	30	
% Dibromofluoromethane	89	%	85	89	4.6	88	92	4.4	70 - 130	30	
% Toluene-d8	102	%	99	97	2.0	97	97	0.0	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 712509H (ug/kg), QC Sample No: CP76500 50X (CP74374 (50X) , CP74381 (50X) , CP74384 (50X))

Volatiles - Soil (High Level)

1,1,2,2-Tetrachloroethane	ND	250	106	104	1.9	110	108	1.8	70 - 130	30	
1,2,3-Trichlorobenzene	ND	250	108	106	1.9	110	109	0.9	70 - 130	30	
1,2,4-Trichlorobenzene	ND	250	104	103	1.0	109	108	0.9	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	250	117	112	4.4	118	116	1.7	70 - 130	30	
1,2-Dichlorobenzene	ND	250	107	106	0.9	110	110	0.0	70 - 130	30	
1,3-Dichlorobenzene	ND	250	105	104	1.0	109	109	0.0	70 - 130	30	
1,4-Dichlorobenzene	ND	250	108	108	0.0	111	112	0.9	70 - 130	30	
Ethylbenzene	ND	250	107	106	0.9	115	117	1.7	70 - 130	30	
Isopropylbenzene	ND	250	108	107	0.9	116	117	0.9	70 - 130	30	
m&p-Xylene	ND	250	105	103	1.9	112	113	0.9	70 - 130	30	
o-Xylene	ND	250	106	106	0.0	111	113	1.8	70 - 130	30	
% 1,2-dichlorobenzene-d4	95	%	101	100	1.0	101	99	2.0	70 - 130	30	
% Bromofluorobenzene	100	%	100	98	2.0	99	98	1.0	70 - 130	30	
% Dibromofluoromethane	95	%	95	97	2.1	98	98	0.0	70 - 130	30	
% Toluene-d8	96	%	100	101	1.0	102	102	0.0	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 Data

SDG I.D.: GCP74370

Parameter	Blank		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	BLK	RL								

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
January 10, 2024

Wednesday, January 10, 2024

Criteria: NY: 375, 375COM, 375RRS

State: NY

Sample Criteria Exceedances Report

GCP74370 - AES-EASTSIDE

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CP74370	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Commercial	2500	300	1000	1000	ug/Kg
CP74370	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	2500	300	1000	1000	ug/Kg
CP74370	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	3000	300	1000	1000	ug/Kg
CP74370	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	1300	300	500	500	ug/Kg
CP74370	\$8270_TCLR	Benzo(a)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	2300	300	1000	1000	ug/Kg
CP74370	\$8270_TCLR	Benzo(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2300	300	1000	1000	ug/Kg
CP74370	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2500	300	1000	1000	ug/Kg
CP74370	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	3000	300	1000	1000	ug/Kg
CP74370	\$8270_TCLR	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1000	300	800	800	ug/Kg
CP74370	\$8270_TCLR	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2300	300	1000	1000	ug/Kg
CP74370	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1300	300	500	500	ug/Kg
CP74370	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	8.0	2.5	3.3	3.3	ug/Kg
CP74370	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	3.6	2.5	3.3	3.3	ug/Kg
CP74370	CU-SM	Copper	NY / 375-6.8 Metals / Commercial	517	0.8	270	270	mg/kg
CP74370	CU-SM	Copper	NY / 375-6.8 Metals / Residential Restricted	517	0.8	270	270	mg/kg
CP74370	CU-SM	Copper	NY / 375-6.8 Metals / Unrestricted Use Soil	517	0.8	50	50	mg/kg
CP74370	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.77	0.03	0.18	0.18	mg/Kg
CP74370	NI-SM	Nickel	NY / 375-6.8 Metals / Unrestricted Use Soil	233	4.2	30	30	mg/Kg
CP74370	PB-SM	Lead	NY / 375-6.8 Metals / Residential Restricted	705	0.42	400	400	mg/Kg
CP74370	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	705	0.42	63	63	mg/Kg
CP74370	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	287	0.8	109	109	mg/Kg
CP74371	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Commercial	2400	260	1000	1000	ug/Kg
CP74371	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	1200	260	500	500	ug/Kg
CP74371	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	2600	260	1000	1000	ug/Kg
CP74371	\$8270_TCLR	Benzo(a)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	2200	260	1000	1000	ug/Kg
CP74371	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	2400	260	1000	1000	ug/Kg
CP74371	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2400	260	1000	1000	ug/Kg
CP74371	\$8270_TCLR	Benzo(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2200	260	1000	1000	ug/Kg
CP74371	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2600	260	1000	1000	ug/Kg
CP74371	\$8270_TCLR	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	830	260	800	800	ug/Kg
CP74371	\$8270_TCLR	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2300	260	1000	1000	ug/Kg
CP74371	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1200	260	500	500	ug/Kg
CP74371	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.53	0.03	0.18	0.18	mg/Kg
CP74371	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	149	0.38	63	63	mg/Kg
CP74371	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	112	0.8	109	109	mg/Kg
CP74372	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Commercial	1600	280	1000	1000	ug/Kg
CP74372	\$8270_TCLR	Benzo(a)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	1500	280	1000	1000	ug/Kg
CP74372	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	930	280	500	500	ug/Kg
CP74372	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	1600	280	1000	1000	ug/Kg
CP74372	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	1800	280	1000	1000	ug/Kg

Wednesday, January 10, 2024

Criteria: NY: 375, 375COM, 375RRS

State: NY

Sample Criteria Exceedances Report

GCP74370 - AES-EASTSIDE

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CP74372	\$8270_TCLR	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1400	280	1000	1000	ug/Kg
CP74372	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	930	280	500	500	ug/Kg
CP74372	\$8270_TCLR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1500	280	1000	1000	ug/Kg
CP74372	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1600	280	1000	1000	ug/Kg
CP74372	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1800	280	1000	1000	ug/Kg
CP74372	HG-SM	Mercury	NY / 375-6.8 Metals / Residential Restricted	1.24	0.03	0.81	0.81	mg/Kg
CP74372	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	1.24	0.03	0.18	0.18	mg/Kg
CP74372	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	95.4	0.42	63	63	mg/Kg
CP74372	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	110	0.8	109	109	mg/Kg
CP74373	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.75	0.03	0.18	0.18	mg/Kg
CP74373	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	133	0.34	63	63	mg/Kg
CP74374	\$8260_TCL_SM	Total Xylenes	NY / 375-6.8 Volatiles / Unrestricted Use Soil	760	130	260	260	ug/kg
CP74374	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	1100	250	1000	1000	ug/Kg
CP74374	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1100	250	1000	1000	ug/Kg
CP74374	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	9.1	2.1	3.3	3.3	ug/Kg
CP74374	AS-SM	Arsenic	NY / 375-6.8 Metals / Commercial	39.7	0.70	16	16	mg/Kg
CP74374	AS-SM	Arsenic	NY / 375-6.8 Metals / Residential Restricted	39.7	0.70	16	16	mg/Kg
CP74374	AS-SM	Arsenic	NY / 375-6.8 Metals / Unrestricted Use Soil	39.7	0.70	13	13	mg/Kg
CP74374	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.21	0.03	0.18	0.18	mg/Kg
CP74374	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	162	0.35	63	63	mg/Kg
CP74374	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	126	0.7	109	109	mg/Kg
CP74375	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Commercial	2500	260	1000	1000	ug/Kg
CP74375	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	2500	260	1000	1000	ug/Kg
CP74375	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	1200	260	500	500	ug/Kg
CP74375	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	2800	260	1000	1000	ug/Kg
CP74375	\$8270_TCLR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	2700	260	1000	1000	ug/Kg
CP74375	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2800	260	1000	1000	ug/Kg
CP74375	\$8270_TCLR	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1100	260	800	800	ug/Kg
CP74375	\$8270_TCLR	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2600	260	1000	1000	ug/Kg
CP74375	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1200	260	500	500	ug/Kg
CP74375	\$8270_TCLR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2700	260	1000	1000	ug/Kg
CP74375	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2500	260	1000	1000	ug/Kg
CP74375	BA-SM	Barium	NY / 375-6.8 Metals / Commercial	1240	0.39	400	400	mg/Kg
CP74375	BA-SM	Barium	NY / 375-6.8 Metals / Residential Restricted	1240	0.39	400	400	mg/Kg
CP74375	BA-SM	Barium	NY / 375-6.8 Metals / Unrestricted Use Soil	1240	0.39	350	350	mg/Kg
CP74375	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	302	0.39	63	63	mg/Kg
CP74375	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	286	0.8	109	109	mg/Kg
CP74376	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Commercial	2600	250	1000	1000	ug/Kg
CP74376	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	1500	250	500	500	ug/Kg

Wednesday, January 10, 2024

Criteria: NY: 375, 375COM, 375RRS

State: NY

Sample Criteria Exceedances Report GCP74370 - AES-EASTSIDE

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CP74376	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	3000	250	1000	1000	ug/Kg
CP74376	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	2600	250	1000	1000	ug/Kg
CP74376	\$8270_TCLR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	2500	250	1000	1000	ug/Kg
CP74376	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2600	250	1000	1000	ug/Kg
CP74376	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	3000	250	1000	1000	ug/Kg
CP74376	\$8270_TCLR	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	970	250	800	800	ug/Kg
CP74376	\$8270_TCLR	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2400	250	1000	1000	ug/Kg
CP74376	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1500	250	500	500	ug/Kg
CP74376	\$8270_TCLR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2500	250	1000	1000	ug/Kg
CP74376	BA-SM	Barium	NY / 375-6.8 Metals / Commercial	471	0.33	400	400	mg/Kg
CP74376	BA-SM	Barium	NY / 375-6.8 Metals / Residential Restricted	471	0.33	400	400	mg/Kg
CP74376	BA-SM	Barium	NY / 375-6.8 Metals / Unrestricted Use Soil	471	0.33	350	350	mg/Kg
CP74376	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.38	0.03	0.18	0.18	mg/Kg
CP74376	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	274	0.33	63	63	mg/Kg
CP74376	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	170	0.7	109	109	mg/Kg
CP74377	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Commercial	1900	270	1000	1000	ug/Kg
CP74377	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	2300	270	1000	1000	ug/Kg
CP74377	\$8270_TCLR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	1900	270	1000	1000	ug/Kg
CP74377	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	1900	270	1000	1000	ug/Kg
CP74377	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	1100	270	500	500	ug/Kg
CP74377	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1100	270	500	500	ug/Kg
CP74377	\$8270_TCLR	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1700	270	1000	1000	ug/Kg
CP74377	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2300	270	1000	1000	ug/Kg
CP74377	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1900	270	1000	1000	ug/Kg
CP74377	\$8270_TCLR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1900	270	1000	1000	ug/Kg
CP74377	\$8270_TCLR	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	840	270	800	800	ug/Kg
CP74377	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	15	2.4	3.3	3.3	ug/Kg
CP74377	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	5.5	2.4	3.3	3.3	ug/Kg
CP74377	BA-SM	Barium	NY / 375-6.8 Metals / Commercial	431	0.42	400	400	mg/Kg
CP74377	BA-SM	Barium	NY / 375-6.8 Metals / Residential Restricted	431	0.42	400	400	mg/Kg
CP74377	BA-SM	Barium	NY / 375-6.8 Metals / Unrestricted Use Soil	431	0.42	350	350	mg/Kg
CP74377	CU-SM	Copper	NY / 375-6.8 Metals / Unrestricted Use Soil	94.2	0.8	50	50	mg/kg
CP74377	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.25	0.03	0.18	0.18	mg/Kg
CP74377	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	234	0.42	63	63	mg/Kg
CP74377	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	468	0.8	109	109	mg/Kg
CP74378	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.22	0.03	0.18	0.18	mg/Kg
CP74379	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Commercial	1800	270	1000	1000	ug/Kg
CP74379	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	1100	270	500	500	ug/Kg
CP74379	\$8270_TCLR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	1900	270	1000	1000	ug/Kg
CP74379	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	1800	270	1000	1000	ug/Kg

Wednesday, January 10, 2024

Criteria: NY: 375, 375COM, 375RRS

State: NY

Sample Criteria Exceedances Report

GCP74370 - AES-EASTSIDE

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CP74379	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	2200	270	1000	1000	ug/Kg
CP74379	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1100	270	500	500	ug/Kg
CP74379	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2200	270	1000	1000	ug/Kg
CP74379	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1800	270	1000	1000	ug/Kg
CP74379	\$8270_TCLR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1900	270	1000	1000	ug/Kg
CP74379	\$8270_TCLR	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1700	270	1000	1000	ug/Kg
CP74379	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.34	0.03	0.18	0.18	mg/Kg
CP74379	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	87.7	0.41	63	63	mg/Kg
CP74380	\$PESTSM_NY	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	6.6	2.3	3.3	3.3	ug/Kg
CP74380	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	38	2.3	3.3	3.3	ug/Kg
CP74380	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	55	2.3	3.3	3.3	ug/Kg
CP74380	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.26	0.03	0.18	0.18	mg/Kg
CP74380	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	143	0.40	63	63	mg/Kg
CP74380	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	178	0.8	109	109	mg/Kg
CP74381	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	14	2.4	3.3	3.3	ug/Kg
CP74381	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	13	2.4	3.3	3.3	ug/Kg
CP74381	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.26	0.03	0.18	0.18	mg/Kg
CP74381	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	107	0.37	63	63	mg/Kg
CP74381	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	125	0.7	109	109	mg/Kg
CP74382	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	1100	260	1000	1000	ug/Kg
CP74382	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	520	260	500	500	ug/Kg
CP74382	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	520	260	500	500	ug/Kg
CP74382	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1100	260	1000	1000	ug/Kg
CP74382	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	254	0.39	63	63	mg/Kg
CP74382	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	128	0.8	109	109	mg/Kg
CP74383	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Commercial	9100	1300	5600	5600	ug/Kg
CP74383	\$8270_TCLR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Commercial	7000	1300	5600	5600	ug/Kg
CP74383	\$8270_TCLR	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Commercial	1300	180	560	560	ug/Kg
CP74383	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Commercial	7800	1300	1000	1000	ug/Kg
CP74383	\$8270_TCLR	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	1300	180	330	330	ug/Kg
CP74383	\$8270_TCLR	Chrysene	NY / 375-6.8 Semivolatiles / Residential Restricted	7000	1300	3900	3900	ug/Kg
CP74383	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	5300	250	500	500	ug/Kg
CP74383	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	7800	1300	1000	1000	ug/Kg
CP74383	\$8270_TCLR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	7000	1300	1000	1000	ug/Kg
CP74383	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	9100	1300	1000	1000	ug/Kg
CP74383	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	9100	1300	1000	1000	ug/Kg
CP74383	\$8270_TCLR	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2600	250	800	800	ug/Kg
CP74383	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	7800	1300	1000	1000	ug/Kg
CP74383	\$8270_TCLR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	7000	1300	1000	1000	ug/Kg

Wednesday, January 10, 2024

Criteria: NY: 375, 375COM, 375RRS

State: NY

Sample Criteria Exceedances Report GCP74370 - AES-EASTSIDE

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CP74383	\$8270_TCLR	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1300	180	330	330	ug/Kg
CP74383	\$8270_TCLR	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	7000	1300	1000	1000	ug/Kg
CP74383	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	5300	250	500	500	ug/Kg
CP74383	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.22	0.03	0.18	0.18	mg/Kg
CP74383	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	112	0.37	63	63	mg/Kg
CP74384	\$8260_TCL_SM	Total Xylenes	NY / 375-6.8 Volatiles / Unrestricted Use Soil	440.0	7.7	260	260	ug/kg
CP74384	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	6.3	2.5	3.3	3.3	ug/Kg
CP74384	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	6.6	2.5	3.3	3.3	ug/Kg
CP74384	HG-SM	Mercury	NY / 375-6.8 Metals / Residential Restricted	1.09	0.08	0.81	0.81	mg/Kg
CP74384	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	1.09	0.08	0.18	0.18	mg/Kg
CP74384	NI-SM	Nickel	NY / 375-6.8 Metals / Unrestricted Use Soil	30.5	0.37	30	30	mg/Kg
CP74384	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	114	0.37	63	63	mg/Kg
CP74384	TRI-CRSM	Trivalent Chromium	NY / 375-6.8 Metals / Unrestricted Use Soil	31.1	0.37	30	30	mg/kg
CP74384	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	112	0.7	109	109	mg/Kg
CP74385	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	9.4	2.2	3.3	3.3	ug/Kg
CP74385	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	11	2.2	3.3	3.3	ug/Kg
CP74385	AG-SM	Silver	NY / 375-6.8 Metals / Unrestricted Use Soil	10.1	0.40	2	2	mg/Kg
CP74385	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.59	0.03	0.18	0.18	mg/Kg
CP74385	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	150	0.35	63	63	mg/Kg
CP74386	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	69.2	0.36	63	63	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.



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Analysis Comments

January 10, 2024

SDG I.D.: GCP74370

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

Herbicide Narration

AU-ECD12 12/29/23-1: CP74370, CP74371, CP74372, CP74373, CP74374, CP74375, CP74376, CP74377, CP74378, CP74379, CP74380, CP74381, CP74382, CP74383, CP74384, CP74385, CP74386

The following Continuing Calibration compounds did not meet % deviation criteria:

Samples: CP74370, CP74371, CP74372, CP74373, CP74374

Preceding CC D29A015 - 2,4,5-T (11) 17%H (15%), 2,4,5-TP (10) 21%H (15%), 2,4-D (8) 22%H (15%), Dicamba (4) 19%H (15%), Dichloroprop (7) 16%H (15%), Dinoseb 45%H (15%)

Succeeding CC D29A027 - Dinoseb 30%H (15%)

Samples: CP74375, CP74376, CP74377, CP74378, CP74379, CP74380, CP74381, CP74382, CP74383, CP74384

Preceding CC D29A027 - Dinoseb 30%H (15%)

Succeeding CC D29A039 - 2,4,5-T (11) 100%L (15%), 2,4,5-TP (10) 100%L (15%), 2,4-D (8) 100%L (15%), 2,4-DB (12) 100%L (15%), Dalapon (1) 100%L (15%), Dicamba (4) 100%L (15%), Dichloroprop (7) 100%L (15%), Dinoseb 100%L (15%)

Samples: CP74385, CP74386

Preceding CC D29A039 - 2,4,5-T (11) 100%L (15%), 2,4,5-TP (10) 100%L (15%), 2,4-D (8) 100%L (15%), 2,4-DB (12) 100%L (15%), Dalapon (1) 100%L (15%), Dicamba (4) 100%L (15%), Dichloroprop (7) 100%L (15%), Dinoseb 100%L (15%)

Succeeding CC D29A043 - 2,4,5-TP (10) 18%H (15%), 2,4-D (8) 17%H (15%), Dicamba (4) 16%H (15%), Dinoseb 49%H (15%)

PEST Narration

AU-ECD33 12/29/23-1: CP74370, CP74371, CP74372, CP74375, CP74376, CP74377, CP74378

The following Continuing Calibration compounds did not meet % deviation criteria:

Samples: CP74371

Preceding CC D29B044 - None.

Succeeding CC D29B057 - Methoxychlor 21%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.

Samples: CP74375, CP74376, CP74377

Preceding CC D29B057 - Methoxychlor 21%L (20%)

Succeeding CC D29B065 - Methoxychlor 23%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-ECD33 01/02/24-1: CP74381, CP74382, CP74386

The following Continuing Calibration compounds did not meet % deviation criteria:

Samples: CP74382

Preceding CC 102B043 - None.

Succeeding CC 102B057 - Methoxychlor 23%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-ECD4 12/29/23-1: CP74370, CP74371, CP74372, CP74373, CP74374, CP74375, CP74376, CP74377



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Analysis Comments

January 10, 2024

SDG I.D.: GCP74370

The following Continuing Calibration compounds did not meet % deviation criteria:

Samples: CP74370, CP74371, CP74372, CP74373, CP74374, CP74375, CP74376, CP74377

Preceding CC D29A030 - % DCBP 25%H (20%), Endosulfan sulfate 24%H (20%), Endrin 25%H (20%), Endrin Ketone 26%H (20%), Methoxychlor 32%H (20%)

Succeeding CC D29A044 - Methoxychlor 26%H (20%)

Samples: CP74373, CP74374

Preceding CC D29A057 - d-BHC 23%L (20%), Endosulfan sulfate 27%H (20%), Endrin 23%H (20%), Methoxychlor 24%H (20%)

Succeeding CC D29A066 - d-BHC 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.

Samples: CP74370, CP74371, CP74372, CP74373, CP74374, CP74375, CP74376, CP74377

Preceding CC D29B030 - b-BHC 24%L (20%), d-BHC 22%L (20%)

Succeeding CC D29B044 - None.

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.

Samples: CP74373, CP74374

Preceding CC D29B057 - b-BHC 23%L (20%)

Succeeding CC D29B066 - b-BHC 22%L (20%), Methoxychlor 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.

AU-ECD4 01/02/24-1: CP74378, CP74379, CP74380, CP74381, CP74383, CP74384, CP74385

The following Continuing Calibration compounds did not meet % deviation criteria:

Samples: CP74380, CP74383, CP74385

Preceding CC 102B029 - b-BHC 22%L (20%)

Succeeding CC 102B042 - b-BHC 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.

Samples: CP74378, CP74379, CP74380, CP74381, CP74383, CP74384

Preceding CC 102B056 - None.

Succeeding CC 102B067 - b-BHC 23%L (20%), d-BHC 22%L (20%), Methoxychlor 24%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-ECD4 01/04/24-1: CP74382, CP74383

The following Continuing Calibration compounds did not meet % deviation criteria:

Samples: CP74382, CP74383

Preceding CC 104B004 - d-BHC 28%L (20%)

Succeeding CC 104B016 - None.

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

CHEM06 12/29/23-1: CP74370, CP74371, CP74372, CP74373, CP74374, CP74375, CP74376

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 Continuing Calibration compounds did not meet % deviation criteria: Pyridine 37%L (30%)

The following Continuing Calibration compounds did not meet Maximum % deviation 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%.

CHEM19 12/28/23-1: CP74379, CP74380, CP74381, CP74382, CP74383, CP74384, CP74385, CP74386



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



Analysis Comments

January 10, 2024

SDG I.D.: GCP74370

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: 2-Nitrophenol 0.071 (0.1), Hexachlorobenzene 0.084 (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: 2-Nitrophenol 0.071 (0.1), Hexachlorobenzene 0.078 (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%.

CHEM19 01/03/24-1: CP74377, CP74378, CP74379, CP74380, CP74381, CP74382, CP74383, CP74384, CP74385, CP74386

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 0.084 (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 0.082 (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%.

CHEM22 12/28/23-1: CP74370, CP74371, CP74372, CP74374, CP74375, CP74376, CP74377, CP74378

The following Initial Calibration compounds did not meet recommended response factors: 2-Nitrophenol 0.090 (0.1), Hexachlorobenzene 0.096 (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: 2-Nitrophenol 0.092 (0.1), Hexachlorobenzene 0.091 (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 12/27/23-2: CP74373

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: 2-Nitrophenol 0.079 (0.1), Hexachlorobenzene 0.091 (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: 2-Nitrophenol 0.084 (0.1), Hexachlorobenzene 0.090 (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



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Analysis Comments

January 10, 2024

SDG I.D.: GCP74370

CHEM14 12/29/23-2: CP74374, CP74381, CP74384

The following Initial Calibration compounds did not meet RSD% criteria: 1,2-Dibromo-3-chloropropane 21% (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%.

CHEM26 12/28/23-2: CP74370, CP74371, CP74372, CP74373, CP74374, CP74375, CP74376

The following Initial Calibration compounds did not meet recommended response factors: Bromodichloromethane 0.293 (0.3), Ethylbenzene 0.399 (0.4)

The following Initial Calibration compounds did not meet minimum response factors: None.

The following Continuing Calibration compounds did not meet % deviation criteria: Acetone 36%L (30%), Methyl ethyl ketone 32%L (30%)

The following Continuing Calibration compounds did not meet Maximum % deviation criteria: None.

The following Continuing Calibration compounds did not meet recommended response factors: Bromodichloromethane 0.286 (0.3)

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%.

CHEM31 12/28/23-2: CP74377, CP74378, CP74379, CP74380, CP74381, CP74382, CP74383, CP74384, CP74385, CP74386

The following Initial Calibration compounds did not meet RSD% criteria: Acetone 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: 1,1,2-Trichloroethane 0.173 (0.2), 1,2-Dibromoethane 0.192 (0.2), Bromodichloromethane 0.290 (0.3), Ethylbenzene 0.371 (0.4), trans-1,3-Dichloropropene 0.284 (0.3)

The following Initial Calibration compounds did not meet minimum response factors: None.

The following Continuing Calibration compounds did not meet % deviation criteria: Acetone 31%L (30%)

The following Continuing Calibration compounds did not meet Maximum % deviation criteria: None.

The following Continuing Calibration compounds did not meet recommended response factors: 1,1,2-Trichloroethane 0.165 (0.2), 1,2-Dibromoethane 0.180 (0.2), Bromodichloromethane 0.294 (0.3), Ethylbenzene 0.397 (0.4), trans-1,3-Dichloropropene 0.269 (0.3)

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%.



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NY Temperature Narration

January 10, 2024

SDG I.D.: GCP74370

The samples in this delivery group were received at 1.7°C.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)



NY/NJ/PA CHAIN OF CUSTODY RECORD

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

Project: East Side Coastal Resiliency Project P.O.: 0897

Report to: AES
 Invoice to: AES
 QUOTE #: AEO90921BA

Customer: AES
 Address: 42 West Avenue
Patchogue, NY 11772

Coolant: Yes No
 IPK ICE

Temp: 17 °C Pg 2 of 2

Contact Options:

Phone:
 Fax: pendyenveng@phoenixlabs.com
 Email: empende.gast@aol.com

This section MUST be completed with Bottle Quantities.

Sampler's Signature: [Signature] Date: 12/21/23
 Matrix Code: SW
 GW=Ground Water SW=Surface Water WW=Waste Water OIL=Oil
 RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe
 B=Bulk L=Liquid

Analysis Request: TAU/TCLP Hex/Tric/Chromium
TPH EPH
UV EPH
GL Amber 8 oz [W/H] PO [MNSO 4
GL Soil container (8) oz
GL Amber 100ml [As] [HCl
PL H₂SO₄ [250ml] [As] [H₂SO₄
PL MAOH 250ml [1500ml]
PL HNO₃ 250ml [1500ml]
Bacteria Bottle with

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Analysis Request	MS/MSD (May be billed as separate site sample)
74370	DEP80	S	12/21/23	7:45	XX	GL Amber 8 oz [W/H] PO [MNSO 4
74371	DEP81	S	8:00	8:00	XX	GL Amber 8 oz [W/H] PO [MNSO 4
74372	DEP82	S	8:15	8:15	XX	GL Amber 8 oz [W/H] PO [MNSO 4
74373	DEP83	S	8:45	8:45	XX	GL Amber 8 oz [W/H] PO [MNSO 4
74374	DEP84	S	12:30	12:30	XX	GL Amber 8 oz [W/H] PO [MNSO 4
74375	DEP89	S	12:45	12:45	XX	GL Amber 8 oz [W/H] PO [MNSO 4
74376	DEP90	S	1:00	1:00	XX	GL Amber 8 oz [W/H] PO [MNSO 4
74377	DEP91	S	1:20	1:20	XX	GL Amber 8 oz [W/H] PO [MNSO 4
74378	DEP92	S	1:40	1:40	XX	GL Amber 8 oz [W/H] PO [MNSO 4
74379	DM103	S	9:30	9:30	XX	GL Amber 8 oz [W/H] PO [MNSO 4

Relinquished by: [Signature] Date: 12/26/23 Accepted by: [Signature] Date: 12/26/23

Turnaround: 1 Day* 2 Days* 3 Days* 4 Days* 5 Days* Standard

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

NY TOGS GW GP-51 SOIL 375SSCO Unrestricted Soil 375SSCO Residential Soil 375SSCO Residential Restricted Soil 375SSCO Commercial Soil 375SSCO Industrial Soil Subpart 5 DW

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

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

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

Comments, Special Requirements or Regulations:

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

State Samples Collected? NY

Sarah Bell

From: Eileen Pendergast <empendergast@aol.com>
Sent: Monday, January 08, 2024 1:48 PM
To: Sarah Bell
Subject: Fw: Phoenix Labs - GCP74370, EAST SIDE COASTAL RESILIENCY - Report Ready

Hi Sarah

Can you check the total lead result in DEP149? (CP74385)
It's 13,900 ppm but TCLP lead is ND.

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: Monday, January 8, 2024 at 08:32:56 AM EST
Subject: Phoenix Labs - GCP74370, EAST SIDE COASTAL RESILIENCY - Report Ready

Delivery group GCP74370 (EAST SIDE COASTAL RESILIENCY) for the following samples:

CP74370 - DEP 80
CP74371 - DEP 81
CP74372 - DEP 82
CP74373 - DEP 83
CP74374 - DEP 84
CP74375 - DEP 89
CP74376 - DEP 90
CP74377 - DEP 91
CP74378 - DEP 92
CP74379 - DM 103

CP74380 - DEP 135
CP74381 - DEP 136
CP74382 - DEP 137
CP74383 - DEP 138
CP74384 - DEP 148
CP74385 - DEP 149
CP74386 - DEP 150

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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www.phoenixlabs.com

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



Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
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Analysis Report

January 18, 2024

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

Sample Information

Matrix: SOIL
Location Code: AES-EASTSIDE
Rush Request: 72 Hour
P.O.#: 0897

Custody Information

Collected by:
Received by: SW
Analyzed by: see "By" below

Date

01/11/24
01/12/24

Time

8:30
16:51

Laboratory Data

SDG ID: GCP87395
Phoenix ID: CP87395

Project ID: EAST SIDE COASTAL RESILIENCY
Client ID: NCM-57

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	1	01/17/24	TH	SW6010D
Aluminum	6940	54	mg/Kg	10	01/13/24	TH	SW6010D
Arsenic	8.02	0.72	mg/Kg	1	01/17/24	TH	SW6010D
Barium	605	0.36	mg/Kg	1	01/17/24	TH	SW6010D
Beryllium	< 0.29	0.29	mg/Kg	1	01/17/24	TH	SW6010D
Calcium	25200	54	mg/Kg	10	01/13/24	TH	SW6010D
Cadmium	2.07	0.36	mg/Kg	1	01/17/24	TH	SW6010D
Cobalt	6.73	0.36	mg/Kg	1	01/17/24	TH	SW6010D
Chromium	18.2	0.36	mg/Kg	1	01/17/24	TH	SW6010D
Copper	55.8	0.7	mg/kg	1	01/17/24	TH	SW6010D
Iron	47800	54	mg/Kg	10	01/13/24	TH	SW6010D
Mercury	0.21	0.03	mg/Kg	2	01/15/24	ZT	SW7471B
Potassium	1210	54	mg/Kg	10	01/13/24	TH	SW6010D
Magnesium	8040	5.4	mg/Kg	1	01/17/24	TH	SW6010D
Manganese	386	0.36	mg/Kg	1	01/17/24	TH	SW6010D
Sodium	3300	54	mg/Kg	10	01/13/24	TH	SW6010D
Nickel	19.1	0.36	mg/Kg	1	01/17/24	TH	SW6010D
Lead	3610	3.6	mg/Kg	10	01/13/24	TH	SW6010D
Antimony	< 3.6	3.6	mg/Kg	1	01/17/24	TH	SW6010D
Selenium	< 1.4	1.4	mg/Kg	1	01/17/24	TH	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	01/15/24	CPP	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	01/15/24	CPP	SW846 1311/6010
TCLP Barium	0.46	0.10	mg/L	1	01/15/24	CPP	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	01/15/24	CPP	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	01/15/24	CPP	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	01/15/24	GW	SW846 1311/7470
TCLP Lead	< 0.10	0.10	mg/L	1	01/15/24	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	01/15/24	TH	SW846 1311/6010D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Thallium	< 3.2	3.2	mg/Kg	1	01/17/24	TH	SW6010D
TCLP Metals Digestion	Completed				01/15/24	AL/AL	SW3010A
Trivalent Chromium	18.2	0.36	mg/kg	1	01/17/24		CALC 6010-7196
Vanadium	25.8	0.36	mg/Kg	1	01/17/24	TH	SW6010D
Zinc	406	0.7	mg/Kg	1	01/17/24	TH	SW6010D
Percent Solid	86		%		01/12/24	AC1	SW846-%Solid
Corrosivity	Negative		Pos/Neg	1	01/12/24	ER	SW846-Corr
Flash Point	>200	200	Degree F	1	01/17/24	G	SW1010B
Chromium, Hex. (SW3060A digestion)	< 0.40	0.40	mg/Kg	1	01/16/24	NP	SW7196A
Ignitability	Passed	140	degree F	1	01/17/24	G	SW846-Ignit
pH at 25C - Soil	9.42	1.00	pH Units	1	01/12/24 20:20	ER	SW846 9045D
Reactivity Cyanide	< 6	6	mg/Kg	1	01/15/24	EG/GD	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	01/15/24	EG/GD	SW846 CH7
Reactivity	Negative		Pos/Neg	1	01/15/24	EG/GD	SW846-React
Redox Potential	3.4		mV	1	01/12/24	ER	SM2580B-09
Total Cyanide (SW9010C Distill.)	< 0.58	0.58	mg/Kg	1	01/15/24	CL/GD	SW9012B
Mercury Digestion	Completed				01/15/24	HL/HL	SW7471B
Extraction of NY ETPH	Completed				01/12/24	H/JDW	SW3546
Soil Extraction for Herbicide	Completed				01/15/24	L/D	SW3546
NJ EPH Extraction	Completed				01/12/24	C/U	NJDEP 10-08 R3
Soil Extraction for PCB	Completed				01/15/24	R/H/A	SW3546
Soil Extraction for Pesticides	Completed				01/15/24	R/H/A	SW3546
Soil Extraction for SVOA	Completed				01/15/24	AC1/AC1	SW3546
TCLP Digestion Mercury	Completed				01/15/24	AL/AL	SW7470A
TCLP Herbicides Extraction	Completed				01/16/24	CV/D	SW8150 MOD
TCLP Extraction for Metals	Completed				01/12/24	AL	SW1311
TCLP Extraction for Organics	Completed				01/12/24	AL	SW1311
TCLP Pesticides Extraction	Completed				01/17/24	CV/CV	SW3510C
TCLP Semi-Volatile Extraction	Completed				01/17/24	S/S	SW3510C
TCLP Extraction Volatiles	Completed				01/12/24	CV	SW1311
Total Metals Digest	Completed				01/12/24	P/AG	SW3050B

NJ EPH Category 1 (Fuel #2/Diesel)

>C28-C40	ND	46	mg/kg	5	01/15/24	JRB	NJEPH 10-08 R3
C9-C28	140	91	mg/kg	5	01/15/24	JRB	NJEPH 10-08 R3
Total EPH	140	46	mg/kg	5	01/15/24	JRB	NJEPH 10-08 R3

QA/QC Surrogates

% COD (surr)	66		%	5	01/15/24	JRB	40 - 140 %
% Terphenyl (surr)	88		%	5	01/15/24	JRB	40 - 140 %

Gasoline Range Hydrocarbons (C6-C10)

GRO (C6-C10)	12	8.9	mg/Kg	50	01/16/24	V	SW8015D GRO
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QA/QC Surrogates

% 2,5-Dibromotoluene (FID)	96		%	50	01/16/24	V	70 - 130 %
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Chlorinated Herbicides

2,4,5-T	ND	140	ug/Kg	10	01/16/24	JRB	SW8151A
2,4,5-TP (Silvex)	ND	140	ug/Kg	10	01/16/24	JRB	SW8151A
2,4-D	ND	290	ug/Kg	10	01/16/24	JRB	SW8151A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	2900	ug/Kg	10	01/16/24	JRB	SW8151A
Dalapon	ND	140	ug/Kg	10	01/16/24	JRB	SW8151A
Dicamba	ND	140	ug/Kg	10	01/16/24	JRB	SW8151A
Dichloroprop	ND	290	ug/Kg	10	01/16/24	JRB	SW8151A
Dinoseb	ND	290	ug/Kg	10	01/16/24	JRB	SW8151A
<u>QA/QC Surrogates</u>							
% DCAA	60		%	10	01/16/24	JRB	30 - 150 %
% DCAA (Confirmation)	47		%	10	01/16/24	JRB	30 - 150 %
<u>Polychlorinated Biphenyls</u>							
PCB-1016	ND	75	ug/Kg	2	01/16/24	SC	SW8082A
PCB-1221	ND	75	ug/Kg	2	01/16/24	SC	SW8082A
PCB-1232	ND	75	ug/Kg	2	01/16/24	SC	SW8082A
PCB-1242	ND	75	ug/Kg	2	01/16/24	SC	SW8082A
PCB-1248	ND	75	ug/Kg	2	01/16/24	SC	SW8082A
PCB-1254	ND	75	ug/Kg	2	01/16/24	SC	SW8082A
PCB-1260	ND	75	ug/Kg	2	01/16/24	SC	SW8082A
PCB-1262	ND	75	ug/Kg	2	01/16/24	SC	SW8082A
PCB-1268	ND	75	ug/Kg	2	01/16/24	SC	SW8082A
<u>QA/QC Surrogates</u>							
% DCBP	83		%	2	01/16/24	SC	30 - 150 %
% DCBP (Confirmation)	73		%	2	01/16/24	SC	30 - 150 %
% TCMX	90		%	2	01/16/24	SC	30 - 150 %
% TCMX (Confirmation)	89		%	2	01/16/24	SC	30 - 150 %
<u>Pesticides - Soil</u>							
4,4' -DDD	6.6	2.3	ug/Kg	2	01/16/24	AW	SW8081B
4,4' -DDE	5.6	2.3	ug/Kg	2	01/16/24	AW	SW8081B
4,4' -DDT	15	2.3	ug/Kg	2	01/16/24	AW	SW8081B
a-BHC	ND	7.5	ug/Kg	2	01/16/24	AW	SW8081B
a-Chlordane	ND	3.8	ug/Kg	2	01/16/24	AW	SW8081B
Aldrin	ND	3.8	ug/Kg	2	01/16/24	AW	SW8081B
b-BHC	ND	7.5	ug/Kg	2	01/16/24	AW	SW8081B
Chlordane	ND	38	ug/Kg	2	01/16/24	AW	SW8081B
d-BHC	ND	7.5	ug/Kg	2	01/16/24	AW	SW8081B
Dieldrin	ND	3.8	ug/Kg	2	01/16/24	AW	SW8081B
Endosulfan I	ND	7.5	ug/Kg	2	01/16/24	AW	SW8081B
Endosulfan II	ND	7.5	ug/Kg	2	01/16/24	AW	SW8081B
Endosulfan sulfate	ND	7.5	ug/Kg	2	01/16/24	AW	SW8081B
Endrin	ND	7.5	ug/Kg	2	01/16/24	AW	SW8081B
Endrin aldehyde	ND	7.5	ug/Kg	2	01/16/24	AW	SW8081B
Endrin ketone	ND	7.5	ug/Kg	2	01/16/24	AW	SW8081B
g-BHC	ND	1.5	ug/Kg	2	01/16/24	AW	SW8081B
g-Chlordane	ND	3.8	ug/Kg	2	01/16/24	AW	SW8081B
Heptachlor	ND	7.5	ug/Kg	2	01/16/24	AW	SW8081B
Heptachlor epoxide	ND	7.5	ug/Kg	2	01/16/24	AW	SW8081B
Methoxychlor	ND	38	ug/Kg	2	01/16/24	AW	SW8081B
Toxaphene	ND	150	ug/Kg	2	01/16/24	AW	SW8081B
<u>QA/QC Surrogates</u>							
% DCBP	81		%	2	01/16/24	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% DCBP (Confirmation)	100		%	2	01/16/24	AW	30 - 150 %
% TCMX	73		%	2	01/16/24	AW	30 - 150 %
% TCMX (Confirmation)	89		%	2	01/16/24	AW	30 - 150 %
<u>TCLP Herbicides</u>							
2,4,5-TP (Silvex)	ND	50	ug/L	10	01/17/24	JRB	SW846 1311/8151
2,4-D	ND	100	ug/L	10	01/17/24	JRB	SW846 1311/8151
<u>QA/QC Surrogates</u>							
% DCAA	76		%	10	01/17/24	JRB	30 - 150 %
% DCAA (Confirmation)	63		%	10	01/17/24	JRB	30 - 150 %
<u>TCLP Pesticides</u>							
4,4' -DDD	ND	1.0	ug/L	10	01/18/24	AW	SW8081B
4,4' -DDE	ND	1.0	ug/L	10	01/18/24	AW	SW8081B
4,4' -DDT	ND	1.0	ug/L	10	01/18/24	AW	SW8081B
a-BHC	ND	0.50	ug/L	10	01/18/24	AW	SW8081B
Alachlor	ND	0.50	ug/L	10	01/18/24	AW	SW8081B
Aldrin	ND	0.50	ug/L	10	01/18/24	AW	SW8081B
b-BHC	ND	0.50	ug/L	10	01/18/24	AW	SW8081B
Chlordane	ND	5.0	ug/L	10	01/18/24	AW	SW8081B
d-BHC	ND	0.50	ug/L	10	01/18/24	AW	SW8081B
Dieldrin	ND	1.0	ug/L	10	01/18/24	AW	SW8081B
Endosulfan I	ND	0.50	ug/L	10	01/18/24	AW	SW8081B
Endosulfan II	ND	1.0	ug/L	10	01/18/24	AW	SW8081B
Endosulfan Sulfate	ND	1.0	ug/L	10	01/18/24	AW	SW8081B
Endrin	ND	1.0	ug/L	10	01/18/24	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	01/18/24	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	01/18/24	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	01/18/24	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	01/18/24	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	01/18/24	AW	SW8081B
Toxaphene	ND	20	ug/L	10	01/18/24	AW	SW8081B
<u>QA/QC Surrogates</u>							
%DCBP (Surrogate Rec)	87		%	10	01/18/24	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	104		%	10	01/18/24	AW	30 - 150 %
%TCMX (Surrogate Rec)	77		%	10	01/18/24	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	87		%	10	01/18/24	AW	30 - 150 %
<u>TPH DRO (C10-C28)</u>							
Diesel Range Organics (C10-C28)	ND	290	mg/Kg	5	01/15/24	JRB	SW-846 8015
<u>QA/QC Surrogates</u>							
% COD (surr)	96		%	5	01/15/24	JRB	50 - 150 %
% Terphenyl (surr)	71		%	5	01/15/24	JRB	50 - 150 %
<u>Volatiles (TCL)</u>							
1,1,1-Trichloroethane	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
1,1,2,2-Tetrachloroethane	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
1,1,2-Trichloroethane	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
1,1-Dichloroethane	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
1,1-Dichloroethene	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2,3-Trichlorobenzene	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
1,2,4-Trichlorobenzene	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
1,2-Dibromo-3-chloropropane	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
1,2-Dibromoethane	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
1,2-Dichlorobenzene	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
1,2-Dichloroethane	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
1,2-Dichloropropane	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
1,3-Dichlorobenzene	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
1,4-Dichlorobenzene	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
2-Hexanone	ND	40	ug/kg	1	01/14/24	PS	SW8260D
4-Methyl-2-pentanone	ND	40	ug/kg	1	01/14/24	PS	SW8260D
Acetone	ND	50	ug/kg	1	01/14/24	PS	SW8260D
Benzene	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
Bromochloromethane	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
Bromodichloromethane	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
Bromoform	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
Bromomethane	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
Carbon Disulfide	13	8.0	ug/kg	1	01/14/24	PS	SW8260D
Carbon tetrachloride	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
Chlorobenzene	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
Chloroethane	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
Chloroform	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
Chloromethane	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
cis-1,2-Dichloroethene	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
cis-1,3-Dichloropropene	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
Cyclohexane	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
Dibromochloromethane	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
Dichlorodifluoromethane	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
Ethylbenzene	20	8.0	ug/kg	1	01/14/24	PS	SW8260D
Isopropylbenzene	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
m&p-Xylene	200	180	ug/kg	50	01/14/24	PS	SW8260D
Methyl ethyl ketone	ND	48	ug/kg	1	01/14/24	PS	SW8260D
Methyl t-butyl ether (MTBE)	ND	16	ug/kg	1	01/14/24	PS	SW8260D
Methylacetate	ND	160	ug/kg	1	01/14/24	PS	SW8260D
Methylcyclohexane	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
Methylene chloride	ND	40	ug/kg	1	01/14/24	PS	SW8260D
o-Xylene	46	8.0	ug/kg	1	01/14/24	PS	SW8260D
Styrene	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
Tetrachloroethene	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
Toluene	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
Total Xylenes	246.0	8.0	ug/kg	1	01/14/24	PS	SW8260D
trans-1,2-Dichloroethene	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
trans-1,3-Dichloropropene	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
Trichloroethene	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
Trichlorofluoromethane	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
Trichlorotrifluoroethane	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
Vinyl chloride	ND	8.0	ug/kg	1	01/14/24	PS	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	1	01/14/24	PS	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	87		%	1	01/14/24	PS	70 - 130 %
% Dibromofluoromethane	100		%	1	01/14/24	PS	70 - 130 %
% Toluene-d8	91		%	1	01/14/24	PS	70 - 130 %
% 1,2-dichlorobenzene-d4 (50x)	95		%	50	01/14/24	PS	70 - 130 %
% Bromofluorobenzene (50x)	100		%	50	01/14/24	PS	70 - 130 %
% Dibromofluoromethane (50x)	103		%	50	01/14/24	PS	70 - 130 %
% Toluene-d8 (50x)	96		%	50	01/14/24	PS	70 - 130 %

1,4-dioxane

1,4-dioxane	ND	100	ug/kg	1	01/14/24	PS	SW8260D
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Volatiles

1,2,3-Trichloropropane	ND	8.0	ug/Kg	1	01/14/24	JLI	SW8260D
1,2,4-Trimethylbenzene	40	8.0	ug/Kg	1	01/14/24	JLI	SW8260D
1,3,5-Trimethylbenzene	15	8.0	ug/Kg	1	01/14/24	JLI	SW8260D
1,3-Dichloropropane	ND	8.0	ug/Kg	1	01/14/24	JLI	SW8260D
n-Butylbenzene	ND	8.0	ug/Kg	1	01/14/24	JLI	SW8260D
n-Propylbenzene	ND	8.0	ug/Kg	1	01/14/24	JLI	SW8260D
p-Isopropyltoluene	48	8.0	ug/Kg	1	01/14/24	JLI	SW8260D
sec-Butylbenzene	ND	8.0	ug/Kg	1	01/14/24	JLI	SW8260D
tert-Butylbenzene	ND	8.0	ug/Kg	1	01/14/24	JLI	SW8260D

QA/QC Surrogates

% 1,2-dichlorobenzene-d4	99		%	1	01/14/24	JLI	70 - 130 %
% Bromofluorobenzene	87		%	1	01/14/24	JLI	70 - 130 %
% Dibromofluoromethane	100		%	1	01/14/24	JLI	70 - 130 %
% Toluene-d8	91		%	1	01/14/24	JLI	70 - 130 %

TCLP Volatiles

1,1-Dichloroethene	ND	50	ug/L	10	01/15/24	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	01/15/24	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	01/15/24	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	01/15/24	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	01/15/24	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	01/15/24	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	01/15/24	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	01/15/24	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	01/15/24	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	01/15/24	HM	SW846 1311/8260

QA/QC Surrogates

% 1,2-dichlorobenzene-d4 (10x)	98		%	10	01/15/24	HM	70 - 130 %
% Bromofluorobenzene (10x)	98		%	10	01/15/24	HM	70 - 130 %
% Dibromofluoromethane (10x)	106		%	10	01/15/24	HM	70 - 130 %
% Toluene-d8 (10x)	98		%	10	01/15/24	HM	70 - 130 %

Volatile Library Search Completed 01/15/24 JLI

Semivolatiles

1,1-Biphenyl	370	270	ug/Kg	1	01/15/24	MR	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	270	ug/Kg	1	01/15/24	MR	SW8270E

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
2,3,4,6-tetrachlorophenol	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
2,4,5-Trichlorophenol	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
2,4,6-Trichlorophenol	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
2,4-Dichlorophenol	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
2,4-Dimethylphenol	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
2,4-Dinitrophenol	ND	620	ug/Kg	1	01/15/24	MR	SW8270E
2,4-Dinitrotoluene	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
2,6-Dinitrotoluene	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
2-Chloronaphthalene	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
2-Chlorophenol	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
2-Methylnaphthalene	1600	270	ug/Kg	1	01/15/24	MR	SW8270E
2-Methylphenol (o-cresol)	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
2-Nitroaniline	ND	620	ug/Kg	1	01/15/24	MR	SW8270E
2-Nitrophenol	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	390	ug/Kg	1	01/15/24	MR	SW8270E
3,3'-Dichlorobenzidine	ND	460	ug/Kg	1	01/15/24	MR	SW8270E
3-Nitroaniline	ND	620	ug/Kg	1	01/15/24	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	01/15/24	MR	SW8270E
4-Bromophenyl phenyl ether	ND	390	ug/Kg	1	01/15/24	MR	SW8270E
4-Chloro-3-methylphenol	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
4-Chloroaniline	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
4-Nitroaniline	ND	620	ug/Kg	1	01/15/24	MR	SW8270E
4-Nitrophenol	ND	1100	ug/Kg	1	01/15/24	MR	SW8270E
Acenaphthene	2600	270	ug/Kg	1	01/15/24	MR	SW8270E
Acenaphthylene	330	270	ug/Kg	1	01/15/24	MR	SW8270E
Acetophenone	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
Anthracene	2000	270	ug/Kg	1	01/15/24	MR	SW8270E
Atrazine	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
Benz(a)anthracene	3100	270	ug/Kg	1	01/15/24	MR	SW8270E
Benzaldehyde	510	270	ug/Kg	1	01/15/24	MR	SW8270E
Benzo(a)pyrene	2600	270	ug/Kg	1	01/15/24	MR	SW8270E
Benzo(b)fluoranthene	3100	270	ug/Kg	1	01/15/24	MR	SW8270E
Benzo(ghi)perylene	1400	270	ug/Kg	1	01/15/24	MR	SW8270E
Benzo(k)fluoranthene	1100	270	ug/Kg	1	01/15/24	MR	SW8270E
Benzyl butyl phthalate	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
Bis(2-chloroethyl)ether	ND	390	ug/Kg	1	01/15/24	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
Caprolactam	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
Carbazole	680	390	ug/Kg	1	01/15/24	MR	SW8270E
Chrysene	3000	270	ug/Kg	1	01/15/24	MR	SW8270E
Dibenz(a,h)anthracene	360	190	ug/Kg	1	01/15/24	MR	SW8270E
Dibenzofuran	1600	270	ug/Kg	1	01/15/24	MR	SW8270E
Diethyl phthalate	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
Dimethylphthalate	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
Di-n-butylphthalate	ND	770	ug/Kg	1	01/15/24	MR	SW8270E
Di-n-octylphthalate	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
Fluoranthene	8100	1400	ug/Kg	5	01/16/24	MR	SW8270E

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Fluorene	2500	270	ug/Kg	1	01/15/24	MR	SW8270E
Hexachlorobenzene	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
Hexachlorobutadiene	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
Hexachlorocyclopentadiene	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
Hexachloroethane	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
Indeno(1,2,3-cd)pyrene	1500	270	ug/Kg	1	01/15/24	MR	SW8270E
Isophorone	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
Naphthalene	5100	270	ug/Kg	1	01/15/24	MR	SW8270E
Nitrobenzene	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
N-Nitrosodimethylamine	ND	390	ug/Kg	1	01/15/24	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	190	ug/Kg	1	01/15/24	MR	SW8270E
N-Nitrosodiphenylamine	ND	390	ug/Kg	1	01/15/24	MR	SW8270E
Pentachlorophenol	ND	390	ug/Kg	1	01/15/24	MR	SW8270E
Phenanthrene	8800	1400	ug/Kg	5	01/16/24	MR	SW8270E
Phenol	ND	270	ug/Kg	1	01/15/24	MR	SW8270E
Pyrene	5400	270	ug/Kg	1	01/15/24	MR	SW8270E
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	65		%	1	01/15/24	MR	30 - 130 %
% 2-Fluorobiphenyl	74		%	1	01/15/24	MR	30 - 130 %
% 2-Fluorophenol	77		%	1	01/15/24	MR	30 - 130 %
% Nitrobenzene-d5	80		%	1	01/15/24	MR	30 - 130 %
% Phenol-d5	82		%	1	01/15/24	MR	30 - 130 %
% Terphenyl-d14	77		%	1	01/15/24	MR	30 - 130 %
% 2-Fluorobiphenyl (5x)	77		%	5	01/16/24	MR	30 - 130 %
% Nitrobenzene-d5 (5x)	64		%	5	01/16/24	MR	30 - 130 %
% Terphenyl-d14 (5x)	65		%	5	01/16/24	MR	30 - 130 %
<u>TCLP Acid/Base-Neutral</u>							
1,4-Dichlorobenzene	ND	83	ug/L	1	01/18/24	MR	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	01/18/24	MR	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	01/18/24	MR	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	01/18/24	MR	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	01/18/24	MR	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	01/18/24	MR	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	01/18/24	MR	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	01/18/24	MR	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	01/18/24	MR	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	01/18/24	MR	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	01/18/24	MR	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	01/18/24	MR	SW-846 1311/8270
<u>QA/QC Surrogates</u>							
% 2,4,6-Tribromophenol	86		%	1	01/18/24	MR	15 - 110 %
% 2-Fluorobiphenyl	62		%	1	01/18/24	MR	30 - 130 %
% 2-Fluorophenol	68		%	1	01/18/24	MR	15 - 110 %
% Nitrobenzene-d5	78		%	1	01/18/24	MR	30 - 130 %
% Phenol-d5	62		%	1	01/18/24	MR	15 - 110 %
% Terphenyl-d14	89		%	1	01/18/24	MR	30 - 130 %
Semivolatile Library Search	Completed				01/16/24	MR	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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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 (preceded 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.

Volatile Comment:

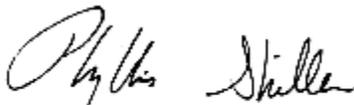
Elevated reporting limits for volatiles due to the presence of target and/or non-target compounds.

Hexavalent Chromium:

This sample is in a reducing state.

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

January 18, 2024

Official Report Release To Follow

Criteria: NY: 375, 375COM, 375RRS

State: NY

Sample Criteria Exceedances Report

GCP87395 - AES-EASTSIDE

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CP87395	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Commercial	2600	270	1000	1000	ug/Kg
CP87395	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	1500	270	500	500	ug/Kg
CP87395	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	2600	270	1000	1000	ug/Kg
CP87395	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	3100	270	1000	1000	ug/Kg
CP87395	\$8270_TCLR	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	360	190	330	330	ug/Kg
CP87395	\$8270_TCLR	Benzo(a)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	3100	270	1000	1000	ug/Kg
CP87395	\$8270_TCLR	Benzo(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	3100	270	1000	1000	ug/Kg
CP87395	\$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	2600	270	1000	1000	ug/Kg
CP87395	\$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	3100	270	1000	1000	ug/Kg
CP87395	\$8270_TCLR	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1100	270	800	800	ug/Kg
CP87395	\$8270_TCLR	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	3000	270	1000	1000	ug/Kg
CP87395	\$8270_TCLR	Dibenz(a,h)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	360	190	330	330	ug/Kg
CP87395	\$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1500	270	500	500	ug/Kg
CP87395	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	5.6	2.3	3.3	3.3	ug/Kg
CP87395	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	15	2.3	3.3	3.3	ug/Kg
CP87395	\$PESTSM_NY	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	6.6	2.3	3.3	3.3	ug/Kg
CP87395	BA-SM	Barium	NY / 375-6.8 Metals / Commercial	605	0.36	400	400	mg/Kg
CP87395	BA-SM	Barium	NY / 375-6.8 Metals / Residential Restricted	605	0.36	400	400	mg/Kg
CP87395	BA-SM	Barium	NY / 375-6.8 Metals / Unrestricted Use Soil	605	0.36	350	350	mg/Kg
CP87395	CU-SM	Copper	NY / 375-6.8 Metals / Unrestricted Use Soil	55.8	0.7	50	50	mg/kg
CP87395	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.21	0.03	0.18	0.18	mg/Kg
CP87395	PB-SM	Lead	NY / 375-6.8 Metals / Commercial	3610	3.6	1000	1000	mg/Kg
CP87395	PB-SM	Lead	NY / 375-6.8 Metals / Residential Restricted	3610	3.6	400	400	mg/Kg
CP87395	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	3610	3.6	63	63	mg/Kg
CP87395	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	406	0.7	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.

APPENDIX D
CENJ LABORATORY ANALYSIS

CleanEarth●

May 16th 2024

Division of Waste & UST Compliance & Enforcement
9 Ewing St, 2nd. fl.
Mail Code 09-03, PO Box 420
Trenton, NJ 08625 Becky Mullens

RE: Un-manifested Waste Report: 2437268-11

Dear Sir/Madam:

Based upon requirements of paragraph 264.76 of 40 CFR Parts 260-265, please accept this un-manifested waste report.

Facility's EPA ID Number, Name and Address: NJD991291105
Clean Earth of North Jersey
105 Jacobus Avenue
South Kearny, NJ 07032

Generator's EPA ID Number, Name and Address: EPA ID Number:
NYC Department of Design and Construction
299B South Street
New York, NY 10021

Facility Received Shipment: 5/14/2024

Transporter's EPA ID Number and Name: EPA ID Number: NJR986652006
Munoz Trucking

Description and Quantity of Un-manifested Hazardous Waste:

Generator referenced above brought in 8 loads of non-hazardous soil into our facility on 5/14/2024. This soil was then transferred into our containment building unit (CBU) for processing. After following our waste analysis plan for our batch sampling protocol, it was discovered that this batch had an elevated lead level of 5.56 mg/L from our lab testing for TCLP metals. The total tonnage of this material that became hazardous in our processing pit was 230.49 tons.

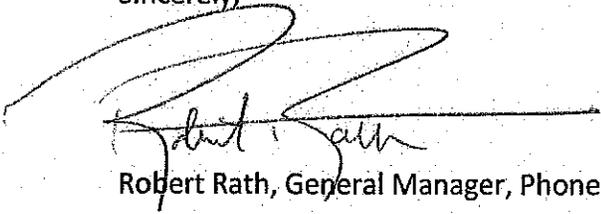
Method of Treatment: Stabilization

Explanation of Why the Waste Material was Un-manifested:

Per our waste analysis plan with analytical testing, it was determined that this non-hazardous soil was hazardous for lead, above the EPA limit of 5 mg/L. This soil will be treated to meet the non hazardous level for lead in a subtitle D landfill.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert Rath", is written over a horizontal line. The signature is stylized with a large, sweeping initial "R" that loops back under the line.

Robert Rath, General Manager, Phone (973) 344-4004 ext. 1772

LABORATORY ANALYSES



CLEAN EARTH

Faster, smarter, greener solutions..

ANALYSES

LSR NO.	
DATE/TIME	05-14-24 10:49
GENERATOR	CENJ
CUSTOMER#	
CUSTOMER	CBU
ADDRESS	
LOCATION	Pit 2 NHS Comp.
TECH CONTRACT	
TECH REP:	JE.
RETURN REPORT TO	
Check One: Typed Copy Required?	Comp.
<input type="checkbox"/> YES <input type="checkbox"/> NO	

ops #3
NHS
Pit 2

Comp.

CENJ LAB CONTRACT LAB SPECIAL ANALYTICAL REQUESTS

CLIENT SAMPLE IDENTIFICATION	SHIPPING NAME WASTE TYPE	SAMPLING VISUAL & COMMENTS	LAB VISUAL

PAINT FILTER TEST	FLASH POINT (°F)	IGN	BTU TOP/BOTTOM	%C/CI SPOT/TOX	SPECIFIC GRAVITY	MISCIBILITY		pH	T.O.C (ppm)	OXIDIZER TEST		DOT OXIDIZER TEST	CHEMICAL COMPATIBILITY A-B-KD-S
						SOLVENT	WATER			POS	NEG		
LIQUID										POS	NEG	POS	
SOLID										NEG		NEG	

REACTIVITY			TOTAL SULFIDES	KARL FISCHER WATER (%)	B'S & W CENTRIFUGING	ORGANIC PEROXIDE SPOT TEST		LIQUEFACTION		LATEX TEST		ALUMINUM TEST		%ASH	PCB'S (ppm)	
WATER	SULFIDE TEST	CYANIDE TEST				TOP	MIDDLE	POS	NEG	POS	NEG	PASS	FAIL			POS
					TOP			POS	NEG	POS	NEG	PASS	FAIL	POS	NEG	
					MIDDLE											
					BOTTOM											

METALS	<input type="checkbox"/> RCRA	<input type="checkbox"/> TOTAL	<input checked="" type="checkbox"/> TCLP	<input type="checkbox"/> VOL WEIGHTED AVERAGE	<input checked="" type="checkbox"/> Mg/L	<input type="checkbox"/> Mg/Kg	LAB COMMENTS
ANTIMONY	—				CHROMIUM <0.1		RECHECK: Pb - 5.46 mg/l RUN1 - Pb - 5.46 mg/l RUN2 - Pb - 5.38 mg/l
ARSENIC	<0.25				COPPER —		
BARIUM	0.42				LEAD 6.11		
BERYLLIUM	—				MERCURY —		
CADMIUM	<0.1				NICKEL —		
					SELENIUM <0.25		
					SILVER <0.1		
					THALLIUM —		
					ZINC —		

DATE	TIME	COMPLETED	ANALYST (PRINT)	(INITIAL)	APPROVED BY
05-15-24	7:58am		RADHIKATALLAM	J. R. [Signature]	[Signature]

CleanEarth

LSR # 05/14/2024 OPS 4

CBU 2 (NH-S)
CDMP

DATE 05/15/2024

RCRA LIMIT/DM

<u>TCLP</u>	<u>RESULT</u>	<u>NIAGARA LIMIT</u>	<u>UTS=DTM LIMIT</u>	<u>G.R.O.W.S LIMIT</u>
Arsenic	<u>LT 0.25</u>	<u>5.00</u>	<u>5.00</u>	<u>4.25</u>
Barium	0.42	<u>100</u>	<u>21.0</u>	<u>85.0</u>
Cadmium	<u>LT 0.1</u>	<u>1.00</u>	<u>0.11</u>	<u>0.85</u>
Chromium	<u>LT 0.1</u>	<u>5.00</u>	<u>0.60</u>	<u>4.25</u>
Lead	<u>6.11</u>	<u>5.00</u>	<u>0.75</u>	<u>4.25</u>
Mercury	*	<u>0.20</u>	<u>0.025</u>	<u>0.17</u>
Selenium	<u>LT 0.25</u>	<u>1.00</u>	<u>1.00</u>	<u>0.85</u>
Silver	<u>LT 0.1</u>	<u>5.00</u>	<u>0.14</u>	<u>4.25</u>

*All concentrations are in mg/L

**Laboratory does not perform mercury analysis, as the stabilization process treats for metals D004-D008 and D10-D11 so mercury is not applicable.

SIGNATURE



DATE

05/15/2024

Radhika Tallam
Assistant Laboratory Manager

CleanEarth

LSR # 05/01/2024 OPS 3

CBU 1A (H-S)
GRAB

DATE 05/02/2024

RCRA LIMIT/DM

<u>TCLP</u>	RESULT	NIAGARA LIMIT	UTS=DTM LIMIT	G.R.O.W.S LIMIT
Arsenic	<u>LT 0.25</u>	<u>5.00</u>	<u>5.00</u>	<u>4.25</u>
Barium	0.95	<u>100</u>	<u>21.0</u>	<u>85.0</u>
Cadmium	<u>LT 0.1</u>	<u>1.00</u>	<u>0.11</u>	<u>0.85</u>
Chromium	<u>2.67</u>	<u>5.00</u>	<u>0.60</u>	<u>4.25</u>
Lead	<u>LT 0.1</u>	<u>5.00</u>	<u>0.75</u>	<u>4.25</u>
Mercury	*	<u>0.20</u>	<u>0.025</u>	<u>0.17</u>
Selenium	<u>LT 0.25</u>	<u>1.00</u>	<u>1.00</u>	<u>0.85</u>
Silver	<u>LT 0.1</u>	<u>5.00</u>	<u>0.14</u>	<u>4.25</u>

*All concentrations are in mg/L

**Laboratory does not perform mercury analysis, as the stabilization process treats for metals D004-D008 and D10-D11 so mercury is not applicable.

SIGNATURE



DATE

05/02/2024

Radhika Tallam
Assistant Laboratory Manager

CleanEarth

LSR # 05/01/2024 OPS 4

CBU 1B (NH-S)
COMP

DATE 05/02/2024

RCRA LIMIT/DM

<u>TCLP</u>	<u>RESULT</u>	<u>NIAGARA LIMIT</u>	<u>UTS=DTM LIMIT</u>	<u>G.R.O.W.S LIMIT</u>
Arsenic	<u>LT 0.25</u>	<u>5.00</u>	<u>5.00</u>	<u>4.25</u>
Barium	0.61	<u>100</u>	<u>21.0</u>	<u>85.0</u>
Cadmium	<u>LT 0.1</u>	<u>1.00</u>	<u>0.11</u>	<u>0.85</u>
Chromium	<u>LT 0.1</u>	<u>5.00</u>	<u>0.60</u>	<u>4.25</u>
Lead	<u>0.15</u>	<u>5.00</u>	<u>0.75</u>	<u>4.25</u>
Mercury	*	<u>0.20</u>	<u>0.025</u>	<u>0.17</u>
Selenium	<u>LT 0.25</u>	<u>1.00</u>	<u>1.00</u>	<u>0.85</u>
Silver	<u>LT 0.1</u>	<u>5.00</u>	<u>0.14</u>	<u>4.25</u>

*All concentrations are in mg/L

**Laboratory does not perform mercury analysis, as the stabilization process treats for metals D004-D008 and D10-D11 so mercury is not applicable.

SIGNATURE



DATE

05/02/2024

Radhika Tallam
Assistant Laboratory Manager

CleanEarth

LSR # 05/01/2024 OPS 5

CBU 1B (NH-S)
GRAB

DATE 05/02/2024

RCRA LIMIT/DM

<u>TCLP</u>	<u>RESULT</u>	<u>NIAGARA LIMIT</u>	<u>UTS=DTM LIMIT</u>	<u>G.R.O.W.S LIMIT</u>
Arsenic	<u>LT 0.25</u>	<u>5.00</u>	<u>5.00</u>	<u>4.25</u>
Barium	0.61	<u>100</u>	<u>21.0</u>	<u>85.0</u>
Cadmium	<u>LT 0.1</u>	<u>1.00</u>	<u>0.11</u>	<u>0.85</u>
Chromium	<u>LT 0.1</u>	<u>5.00</u>	<u>0.60</u>	<u>4.25</u>
Lead	<u>0.10</u>	<u>5.00</u>	<u>0.75</u>	<u>4.25</u>
Mercury	*	<u>0.20</u>	<u>0.025</u>	<u>0.17</u>
Selenium	<u>LT 0.25</u>	<u>1.00</u>	<u>1.00</u>	<u>0.85</u>
Silver	<u>LT 0.1</u>	<u>5.00</u>	<u>0.14</u>	<u>4.25</u>

*All concentrations are in mg/L

**Laboratory does not perform mercury analysis, as the stabilization process treats for metals D004-D008 and D10-D11 so mercury is not applicable.

SIGNATURE



DATE

05/02/2024

Radhika Tallam
Assistant Laboratory Manager

CleanEarth

LSR # 05/01/2024 OPS 6

CBU 4 (H-NS)
COMP

DATE 05/02/2024

RCRA LIMIT/DM

<u>TCLP</u>	<u>RESULT</u>	<u>NIAGARA LIMIT</u>	<u>UTS=DTM LIMIT</u>	<u>G.R.O.W.S LIMIT</u>
Arsenic	<u>LT 0.25</u>	<u>5.00</u>	<u>5.00</u>	<u>4.25</u>
Barium	0.51	<u>100</u>	<u>21.0</u>	<u>85.0</u>
Cadmium	<u>LT 0.1</u>	<u>1.00</u>	<u>0.11</u>	<u>0.85</u>
Chromium	<u>LT 0.1</u>	<u>5.00</u>	<u>0.60</u>	<u>4.25</u>
Lead	<u>LT 0.1</u>	<u>5.00</u>	<u>0.75</u>	<u>4.25</u>
Mercury	*	<u>0.20</u>	<u>0.025</u>	<u>0.17</u>
Selenium	<u>LT 0.25</u>	<u>1.00</u>	<u>1.00</u>	<u>0.85</u>
Silver	<u>LT 0.1</u>	<u>5.00</u>	<u>0.14</u>	<u>4.25</u>

*All concentrations are in mg/L

**Laboratory does not perform mercury analysis, as the stabilization process treats for metals D004-D008 and D10-D11 so mercury is not applicable.

SIGNATURE



DATE

05/02/2024

Radhika Tallam
Assistant Laboratory Manager

CleanEarth

LSR # 05/01/2024 OPS 7

CBU 4 (H-NS)
GRAB

DATE 05/02/2024

RCRA LIMIT/DM

<u>TCLP</u>	RESULT	NIAGARA LIMIT	UTS=DTM LIMIT	G.R.O.W.S LIMIT
Arsenic	<u>LT 0.25</u>	<u>5.00</u>	<u>5.00</u>	<u>4.25</u>
Barium	0.48	<u>100</u>	<u>21.0</u>	<u>85.0</u>
Cadmium	<u>LT 0.1</u>	<u>1.00</u>	<u>0.11</u>	<u>0.85</u>
Chromium	<u>LT 0.1</u>	<u>5.00</u>	<u>0.60</u>	<u>4.25</u>
Lead	<u>LT 0.1</u>	<u>5.00</u>	<u>0.75</u>	<u>4.25</u>
Mercury	*	<u>0.20</u>	<u>0.025</u>	<u>0.17</u>
Selenium	<u>LT 0.25</u>	<u>1.00</u>	<u>1.00</u>	<u>0.85</u>
Silver	<u>LT 0.1</u>	<u>5.00</u>	<u>0.14</u>	<u>4.25</u>

*All concentrations are in mg/L

**Laboratory does not perform mercury analysis, as the stabilization process treats for metals D004-D008 and D10-D11 so mercury is not applicable.

SIGNATURE



DATE

05/02/2024

Radhika Tallam
Assistant Laboratory Manager

CleanEarth●

LSR # 05/01/2024 OPS 8

CBU 3 (NH-NS)
COMP

DATE 05/02/2024

RCRA LIMIT/DM

<u>TCLP</u>	RESULT	NIAGARA LIMIT	UTS=DTM LIMIT	G.R.O.W.S LIMIT
Arsenic	<u>LT 0.25</u>	<u>5.00</u>	<u>5.00</u>	<u>4.25</u>
Barium	0.48	<u>100</u>	<u>21.0</u>	<u>85.0</u>
Cadmium	<u>LT 0.1</u>	<u>1.00</u>	<u>0.11</u>	<u>0.85</u>
Chromium	<u>LT 0.1</u>	<u>5.00</u>	<u>0.60</u>	<u>4.25</u>
Lead	<u>LT 0.1</u>	<u>5.00</u>	<u>0.75</u>	<u>4.25</u>
Mercury	*	<u>0.20</u>	<u>0.025</u>	<u>0.17</u>
Selenium	<u>LT 0.25</u>	<u>1.00</u>	<u>1.00</u>	<u>0.85</u>
Silver	<u>LT 0.1</u>	<u>5.00</u>	<u>0.14</u>	<u>4.25</u>

*All concentrations are in mg/L

**Laboratory does not perform mercury analysis, as the stabilization process treats for metals D004-D008 and D10-D11 so mercury is not applicable.

SIGNATURE



DATE

05/02/2024

Radhika Tallam
Assistant Laboratory Manager

CleanEarth

LSR # 05/01/2024 OPS 9

CBU 3 (NH-NS)
GRAB

DATE 05/02/2024

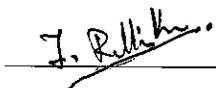
RCRA LIMIT/DM

<u>TCLP</u>	RESULT	NIAGARA LIMIT	UTS=DTM LIMIT	G.R.O.W.S LIMIT
Arsenic	<u>LT 0.25</u>	<u>5.00</u>	<u>5.00</u>	<u>4.25</u>
Barium	0.50	<u>100</u>	<u>21.0</u>	<u>85.0</u>
Cadmium	<u>LT 0.1</u>	<u>1.00</u>	<u>0.11</u>	<u>0.85</u>
Chromium	<u>LT 0.1</u>	<u>5.00</u>	<u>0.60</u>	<u>4.25</u>
Lead	<u>LT 0.1</u>	<u>5.00</u>	<u>0.75</u>	<u>4.25</u>
Mercury	*	<u>0.20</u>	<u>0.025</u>	<u>0.17</u>
Selenium	<u>LT 0.25</u>	<u>1.00</u>	<u>1.00</u>	<u>0.85</u>
Silver	<u>LT 0.1</u>	<u>5.00</u>	<u>0.14</u>	<u>4.25</u>

*All concentrations are in mg/L

**Laboratory does not perform mercury analysis, as the stabilization process treats for metals D004-D008 and D10-D11 so mercury is not applicable.

SIGNATURE



DATE

05/02/2024

Radhika Tallam
Assistant Laboratory Manager



Q.A./Q.C. REPORT# 2510584

Trailer/R.O.O./R.O.T./Tanker 109
 MANIFEST NO. 2437268-012
 NYC Department of Design and Construction-
 GENERATOR 299B
 CUSTOMER# IPC Resiliency Partners
 TRANSPORTER _____
 DRIVER _____
 TRACTOR _____
 DISPOSAL SITE GENS
 DATE/TIME ARRIVAL 5/14/24 814

115 Jacobus Ave., So. Kearny, NJ 07032 (973-344-4004)
 DATE/TIME OF SAMPLING 5/14/24 814
 SAMPLER WJ
 NO. OF DRUMS/GALS/YDS 251
 NO. OF DRUMS SAMPLED 0
 NO. OF DRUMS OVERPACKED 0
 TOTAL NO. OF SAMPLES 1
 SAMPLING CONDITIONS TEMP 59 °F (IN/OUTDOORS)
 WEATHER Sunny INDOORS _____ OUTDOORS _____

PAGE 1 of 1

DATE/TIME/INITIALS 5/14/24 814
 SAMPLES IN LAB MR 5/14/24 814
 WORK COMPLETED DG 5/14/24
 ENVL. REVIEW _____
 OPERATIONS REVIEW _____
 TRAILER# (AFTER QC) _____
 DECAL # _____
 COMMENTS/NOTES _____

LAB ANALYSIS (CHECK ONE)
 OUTGOING STABILIZED
 INCOMING DRUMS
 YARD
 TURNAROUND
 OUTGOING LIQUIDS
 INCOMING BULK
 OTHER: _____

SAMPLE IDENTIFICATION		SHIPPING NAME	WASTE TYPE	DRUM No.(s)	DM. SIZE	DM. COND.	SAMPLING VISUAL & COMMENTS		COLOR								
8050940		NYC DEP NR	1527				Full										
DRI, Bricks + Deice																	
RF TEST	FLASH PT. (°F)	IGN (Solids)	BTU/gal.	BTU/lb	% CL	CL SPOT TEST	TOX	SR GR.	MISCIBILITY	pH	T.O.C. (ppm)	CHEMICAL	TOTAL SULFIDES (PPM RANGE)	Water Pos/Neg	Reactivity Sulfide Test	Cyanide Test	PGB's (ppm)
Liquid:									Solvent	Water		A - B - KD - S					
		C				Ng				7.0		Comp	Ng		Ng	Ng	<1
Solid:																	
Karl Fischer % Water	Oxidizer Spot Test	DOT Oxidizer Test		Organic Peroxide Spot Test	Liquefaction		Latex Test		Aluminum Test		Acidity (mg CaCO ₃ /L)	Cr+6 ppm-Range	% Ash	BS & W after Centrifuging			
	Ng	POS	NEG		POS	NEG	PASS	FAIL	POS	NEG				TOP	MID	BTM	
VISUAL:														Approval Code			
VISUAL (after centrifuging):														2430815899			
METALS: <input type="checkbox"/> RC <input type="checkbox"/> TOTAL <input checked="" type="checkbox"/> TGLP <input type="checkbox"/> VOL WEIGHTED AVG <input checked="" type="checkbox"/> Mg/L <input type="checkbox"/> Mg/Kg														LAB COMMENTS			
ANTIMONY	BERYLLIUM	COPPER		NICKEL		THALLIUM		NH-S-10									
ARSENIC <0.25	CADMIUM <0.1	LEAD 2.65 2.65		SELENIUM <0.25		ZINC											
BARIUM 0.87	CHROMIUM <0.1	MERCURY		SILVER <0.1		05-16-24 RT											
Comments:																	
PH: WIDE RANGE: 7.0 DUP NARROW RANGE: 7.0 LMT. ACID NI BASE NI.																	



CLEAN EARTH

Faster. Smarter. Greener.

Q.A./Q.C. REPORT#

133

Trailer/R.O.O./R.O.T./Tanker

2437208-011

115 Jacobus Ave., So. Kearny, NJ 07032 (973-344-4004)

DATE/TIME OF SAMPLING

SAMPLER

NO. OF DRUMS/GALS/YDS

NO. OF DRUMS SAMPLED

NO. OF DRUMS OVERPACKED

TOTAL NO. OF SAMPLES

SAMPLING CONDITIONS: TEMP °F (IN/OUTDOORS)

WEATHER INDOORS OUTDOORS

PAGE 1 of

1

DATE/TIME/INITIALS

5/15/24 8:30 MR

SAMPLES IN LAB

8:30 5/15/24 ED

WORK COMPLETED

MR 5/16/24 9:00

ENVL REVIEW

OPERATIONS REVIEW

TRAILER# (AFTER QC)

DECAL #

COMMENTS/NOTES

LAB ANALYSIS (CHECK ONE)

OUTGOING STABILIZED
 OUTGOING LIQUIDS

INCOMING DRUMS
 INCOMING BULK

YARD
 OTHER:

TURNAROUND

SAMPLE IDENTIFICATION			SHIPPING NAME	WASTE TYPE	DRUM No. (s)	DM SIZE	DM COND.	SAMPLING VISUAL & COMMENTS		COLOR									
X/ADOC			AD37					DIRTY Lg chunks rocks											
P.F. TEST	FLASH PT. (°F)	IGN (Solids)	BTU/gal.	BTU/lb	% CL	CL SPOT TEST	TOX	SP. GR.	MISCIBILITY		pH	T.O.C. (ppm)	CHEMICAL A-B-KD-S	TOTAL SULFIDES (PPM RANGE)	REACTIVITY		PCB's (ppm)		
									Solvent	Water					Water Pos	Neg		Sulfide Test	Cyanide Test
Liquid																			
Solid																			
Karl Fischer % Water		Oxidizer Spot Test	DOT Oxidizer Test		Organic Peroxide Spot Test		Liquefaction		Latex Test		Aluminum Test		Acidity (mg CaCO ₃ /L)	Cr+6 ppm Range	% Ash	BS & W after Centrifuging			
			POS	NEG			POS	NEG	PASS	FAIL	POS	NEG				TOP	MID	BTM	
VISUAL:															Approval Code				
VISUAL (after centrifuging):															Priced For:				
METALS:			<input type="checkbox"/> RC	<input type="checkbox"/> TOTAL	<input checked="" type="checkbox"/> TCLP	<input type="checkbox"/> VOL WEIGHTED AVG			<input checked="" type="checkbox"/> Mg/L	<input type="checkbox"/> Mg/Kg			LAB COMMENTS						
ANTIMONY	—		BERYLLIUM		—		COPPER		—		NICKEL		—		THALLIUM			—	
ARSENIC	20.25		CADMIUM		20.1		LEAD		5.56		SELENIUM		20.25		ZINC			—	
BARIUM	1.91		CHROMIUM		20.1		MERCURY		—		SILVER		20.1		05-16-24 RT				

Comments:

6

2510584



Q.A./Q.C. REPORT#

Trailer/R.O.O./R.O.T./Tanker 135
 MANIFEST NO. 2457208-013
 GENERATOR X/CDOC
 CUSTOMER# _____
 TRANSPORTER MDP02
 DRIVER _____
 TRACTOR _____
 DISPOSAL SITE _____
 DATE/TIME ARRIVAL 5/14/24-825

115 Jacobus Ave., So. Kearny, NJ 07032 (973-344-4004)
 DATE/TIME OF SAMPLING _____
 SAMPLER _____
 NO. OF DRUMS/GALS/YDS _____
 NO. OF DRUMS SAMPLED _____
 NO. OF DRUMS OVERPACKED _____
 TOTAL NO. OF SAMPLES _____
 SAMPLING CONDITIONS: TEMP _____ °F (IN/OUTDOORS)
 WEATHER _____ INDOORS _____ OUTDOORS _____

PAGE 1 of

DATE/TIME/INITIALS 5/14/24 8:30 AM
 SAMPLES IN LAB 8:30 5/15/24 RD
 WORK COMPLETED MR 5/16/24 9:00
 ENVL. REVIEW _____
 OPERATIONS REVIEW _____
 TRAILER# (AFTER QC) _____
 DECAL # _____
 COMMENTS/NOTES _____

LAB ANALYSIS (CHECK ONE) OUTGOING STABILIZED INCOMING DRUMS YARD TURNAROUND
 OUTGOING LIQUIDS INCOMING BULK OTHER: _____

SAMPLE IDENTIFICATION		SHIPPING NAME	WASTE TYPE	DRUM No.'(s)	DM SIZE	DM COND.	SAMPLING VISUAL & COMMENTS	COLOR									
<u>X/CDOC</u>		<u>AD30</u>					<u>DIRT, CHUNKS ROCKS</u>										
P.F. TEST	FLASH PT. (° F)	IGN (Solids)	BTU/gal.	BTU/lb	% CL / CL SPOT TEST / TOX	SP. GR.	MISCIBILITY Solvent / Water	pH	T.O.C. (ppm)	CHEMICAL A - B - KD - S	TOTAL SULFIDES (PPM RANGE)	Water Pos / Neg	REACTIVITY Sulfide Test	Cyanide Test	PCB's (ppm)		
Liquid																	
Solid																	
Karl Fischer % Water		Oxidizer Spot Test	DOT Oxidizer Test POS / NEG		Organic Peroxide Spot Test	Liquefaction POS / NEG		Latex Test PASS / FAIL		Aluminum Test POS / NEG		Acidity (mg CaCO ₃ /L)	Cr+6 ppm Range	% Ash	BS & W after Centrifuging TOP / MID / BTM		
VISUAL:														Approval Code			
VISUAL (after centrifuging):														Priced For:			
METALS:		<input type="checkbox"/> RC	<input type="checkbox"/> TOTAL	<input checked="" type="checkbox"/> TCLP	<input type="checkbox"/> VOL WEIGHTED AVG	<input checked="" type="checkbox"/> Mg/L	<input type="checkbox"/> Mg/Kg	LAB COMMENTS									
ANTIMONY	—	BERYLLIUM	—	COPPER	—	NICKEL	—	THALLIUM	—								
ARSENIC	< 0.25	CADMIUM	< 0.1	LEAD	1.92	SELENIUM	< 0.25	ZINC	—								
BARIUM	0.62	CHROMIUM	< 0.1	MERCURY	—	SILVER	< 0.1	05-16-24 RT									

Comments:

6

Q.A./Q.C. REPORT# 75

Trailer/R.O.O./R.O.T./Tanker 243738-014
 MANIFEST NO. X/CDOE
 GENERATOR X/CDOE
 CUSTOMER# 100000
 TRANSPORTER 100000
 DRIVER 100000
 TRACTOR 100000
 DISPOSAL SITE 5/14/24 - 243
 DATE/TIME ARRIVAL 5/14/24 - 8:30

115 Jacobus Ave., So. Kearny, NJ 07032 (973-344-4004)

DATE/TIME OF SAMPLING _____
 SAMPLER _____
 NO. OF DRUMS/GALS/YDS _____
 NO. OF DRUMS SAMPLED _____
 NO. OF DRUMS OVERPACKED _____
 TOTAL NO. OF SAMPLES _____
 SAMPLING CONDITIONS: TEMP _____ °F (IN/OUTDOORS)
 WEATHER _____ INDOORS _____ OUTDOORS _____

DATE/TIME/INITIALS 5/16/24 8:30 MR
 SAMPLES IN LAB 5/15/24 RD
 WORK COMPLETED 5/16/24 9:00
 ENVL. REVIEW _____
 OPERATIONS REVIEW _____
 TRAILER# (AFTER QC) _____
 DECAL # _____
 COMMENTS/NOTES _____

LAB ANALYSIS (CHECK ONE) OUTGOING STABILIZED INCOMING DRUMS YARD TURNAROUND
 OUTGOING LIQUIDS INCOMING BULK OTHER: _____

SAMPLE IDENTIFICATION		SHIPPING NAME	WASTE TYPE	DRUM No. (s)	DM SIZE	DM COND.	SAMPLING VISUAL & COMMENTS		COLOR											
<u>X/CDOE</u>		<u>AD37</u>					<u>DIRT, rocks</u>													
P.F. TEST	FLASH P.T. (°F)	IGN (Solids)	BTU/gal.	BTU/lb	% CL	CL SPOT TEST	TOX	SP. GR.	MISCIBILITY Solvent	Water	pH	T.O.C. (ppm)	CHEMICAL A-B-KD-S	TOTAL SULFIDES (PPM RANGE)	Water Pos	Neg	REACTIVITY Sulfide Test	Cyanide Test	PCB's (ppm)	
Liquid																				
Solid																				
Karl Fischer % Water		Oxidizer Spot Test	DOT Oxidizer Test		Organic Peroxide Spot Test		Liquefaction		Latex Test		Aluminum Test		Acidity (mg CaCO ₃ /L)	Cr+6 ppm Range	% Ash		BS & W after Centrifuging			
			POS	NEG			POS	NEG	PASS	FAIL	POS	NEG					TOP	MID	BTM	
VISUAL:																	Approval Code			
VISUAL (after centrifuging):																	Priced For:			
METALS: <input type="checkbox"/> RC		<input type="checkbox"/> TOTAL		<input checked="" type="checkbox"/> TCLP		<input type="checkbox"/> VOL WEIGHTED AVG		<input checked="" type="checkbox"/> Mg/L		<input type="checkbox"/> Mg/Kg		LAB COMMENTS								
ANTIMONY	—	BERYLLIUM	—	COPPER	—	NICKEL	—	THALLIUM	—											
ARSENIC	<u>0.25</u>	CADMIUM	<u><0.1</u>	LEAD	<u>1.00</u>	SELENIUM	<u><0.25</u>	ZINC	—											
BARIUM	<u>0.87</u>	CHROMIUM	<u><0.1</u>	MERCURY	—	SILVER	<u><0.1</u>				<u>D5-16-24 RT</u>									

Comments:

6

Q.A./Q.C. REPORT# 109

Trailer/R.O.O./R.O.T./Tanker 313768-015
 MANIFEST NO. X11000C
 GENERATOR X11000C
 CUSTOMER# _____
 TRANSPORTER MP02
 DRIVER _____
 TRACTOR _____
 DISPOSAL SITE 5/14/24-1206
 DATE/TIME ARRIVAL _____

115 Jacobus Ave., So. Kearny, NJ 07032 (973-344-4004)

DATE/TIME OF SAMPLING _____
 SAMPLER _____
 NO. OF DRUMS/GALS/YDS _____
 NO. OF DRUMS SAMPLED _____
 NO. OF DRUMS OVERPACKED _____
 TOTAL NO. OF SAMPLES _____
 SAMPLING CONDITIONS: TEMP _____ °F (IN/OUTDOORS)
 WEATHER _____ INDOORS _____ OUTDOORS

DATE/TIME/INITIALS 5/15/24 8:30 MR
 SAMPLES IN LAB 5/15/24 RD.
 WORK COMPLETED 5/16/24 9:00
 ENVL. REVIEW _____
 OPERATIONS REVIEW _____
 TRAILER# (AFTER QC) _____
 DECAL # _____
 COMMENTS/NOTES _____

LAB ANALYSIS (CHECK ONE)
 OUTGOING STABILIZED
 INCOMING DRUMS
 YARD
 TURNAROUND
 OUTGOING LIQUIDS
 INCOMING BULK
 OTHER: _____

SAMPLE IDENTIFICATION		SHIPPING NAME	WASTE TYPE	DRUM No.:(s)	DM SIZE	DM COND.	SAMPLING VISUAL & COMMENTS		COLOR									
<u>X11000C</u>		<u>AD27</u>					<u>Dirt, debris chunk rocks</u>											
P.F. TEST	FLASH PT. (°F)	IGN (Solids)	BTU/gal.	BTU/lb	% CL	CL SPOT TEST	TOX	SP. GR.	MISCIBILITY	pH	T.O.C. (ppm)	CHEMICAL A-B-KD-S	TOTAL SULFIDES (PPM RANGE)	Water Pos Neg	REACTIVITY Sulfide Test	Cyanide Test	PCB's (ppm)	
Liquid																		
Solid																		
Karl Fischer % Water	Oxidizer Spot Test	DOT-Oxidizer Test		Organic Peroxide Spot Test		Liquefaction		Latex Test		Aluminum Test		Acidity (mg CaCO ₃ /L)	Cr+6 ppm Range	% Ash	BS & W after Centrifuging			
		POS	NEG	POS	NEG	POS	NEG	PASS	FAIL	POS	NEG				TOP	MID	BTM	

VISUAL: _____

VISUAL (after centrifuging): _____

Approval Code: _____

Metals: RC TOTAL TCLP VOL WEIGHTED AVG Mg/L Mg/Kg

LAB COMMENTS: _____

ANTIMONY —	BERYLLIUM —	COPPER —	NICKEL —	THALLIUM —
ARSENIC <0.25	CADMIUM <0.1	LEAD <0.12	SELENIUM <0.25	ZINC —
BARIUM 0.57	CHROMIUM <0.1	MERCURY —	SILVER <0.1	05-16-24 RT

Comments: _____

6



Q.A./Q.C. REPORT# 133

Trailer/R.O.O./R.O.T./Tanker 133 1268-016
 MANIFEST NO. 133 1268-016
 GENERATOR X/1000C
 CUSTOMER# 133 1268-016
 TRANSPORTER 133 1268-016
 DRIVER 133 1268-016
 TRACTOR 133 1268-016
 DISPOSAL SITE 5/16/24-1319
 DATE/TIME ARRIVAL 5/16/24-1319

115 Jacobus Ave., So. Kearny, NJ 07032 (973-344-4004)

DATE/TIME OF SAMPLING _____
 SAMPLER _____
 NO. OF DRUMS/GALS/YDS _____
 NO. OF DRUMS SAMPLED _____
 NO. OF DRUMS OVERPACKED _____
 TOTAL NO. OF SAMPLES _____
 SAMPLING CONDITIONS: TEMP _____ °F (IN/OUTDOORS)
 WEATHER _____ INDOORS _____ OUTDOORS _____

PAGE 1 of 1

DATE/TIME/INITIALS 5/16/24 8:30 MR
 SAMPLES IN LAB 5/15/24 RD
 WORK COMPLETED 5/16/24 MR
 ENVL. REVIEW _____
 OPERATIONS REVIEW _____
 TRAILER# (AFTER QC) _____
 DECAL # _____
 COMMENTS/NOTES _____

LAB ANALYSIS (CHECK ONE) OUTGOING STABILIZED INCOMING DRUMS YARD TURNAROUND
 OUTGOING LIQUIDS INCOMING BULK OTHER: _____

SAMPLE IDENTIFICATION		SHIPPING NAME	WASTE TYPE	DRUM No.'(s)	DM SIZE	DM COND.	SAMPLING VISUAL & COMMENTS	COLOR										
<u>X/1000C</u>		<u>AD37</u>					<u>DIRT, CHUNKS ROCKS</u>											
P.F. TEST	FLASH PT. (°F)	IGN (Solids)	BTU/gal.	BTU/lb	% CL	CL SPOT TEST	TOX	SP. GR.	MISCIBILITY		pH	T.O.C. (ppm)	CHEMICAL A - B - KD - S	TOTAL SULFIDES (PPM RANGE)	Water Pos Neg	REACTIVITY Sulfide Test	Cyanide Test	PCB's (ppm)
Liquid									Solvent	Water								
Solid																		
Karl Fischer % Water		Oxidizer Spot Test	DOT Oxidizer Test		Organic Peroxide Spot Test		Liquefaction		Latex Test		Aluminum Test		Acidity (mg CaCO ₃ /L)	Cr+6 ppm Range	% Ash	BS & W after Centrifuging		
			POS	NEG	POS	NEG	POS	NEG	PASS	FAIL	POS	NEG				TOP	MID	BTM
VISUAL:															Approval Code			
VISUAL (after centrifuging):															Priced For:			
METALS: <input type="checkbox"/> RC		<input type="checkbox"/> TOTAL		<input checked="" type="checkbox"/> TOLP		<input type="checkbox"/> VOL WEIGHTED AVG		<input checked="" type="checkbox"/> Mg/L		<input type="checkbox"/> Mg/Kg		LAB COMMENTS						
ANTIMONY	BERYLLIUM	COPPER	NICKEL	THALLIUM														
ARSENIC < 0.25	CADMIUM < 0.1	LEAD 1.19	SELENIUM < 0.25	ZINC														
BARIUM < 0.68	CHROMIUM < 0.1	MERCURY	SILVER < 0.1		<u>05-16-24 RT</u>													

Comments:

6



Q.A./Q.C. REPORT# 125

Trailer/R.O.O./R.O.T./Tanker 245 1208-017
 MANIFEST NO. X/CDOO
 GENERATOR X/CDOO
 CUSTOMER#
 TRANSPORTER
 DRIVER
 TRACTOR
 DISPOSAL SITE 5/14/24-1238
 DATE/TIME ARRIVAL

115 Jacobus Ave., So. Kearny, NJ 07032 (973-344-4004)
 DATE/TIME OF SAMPLING
 SAMPLER
 NO. OF DRUMS/GALS/YDS
 NO. OF DRUMS SAMPLED
 NO. OF DRUMS OVERPACKED
 TOTAL NO. OF SAMPLES
 SAMPLING CONDITIONS: TEMP °F (IN/OUTDOORS)
 WEATHER INDOORS OUTDOORS

PAGE 1 of 1

DATE/TIME/INITIALS 5/15/24 8:30 ms
 SAMPLES IN LAB 8:30 RD 5/15/24
 WORK COMPLETED MR 5/16/24 9:00
 ENVL. REVIEW
 OPERATIONS REVIEW
 TRAILER# (AFTER QC)
 DECAL #
 COMMENTS/NOTES

LAB ANALYSIS (CHECK ONE) OUTGOING STABILIZED INCOMING DRUMS YARD TURNAROUND
 OUTGOING LIQUIDS INCOMING BULK OTHER:

SAMPLE IDENTIFICATION		SHIPPING NAME	WASTE TYPE	DRUM No. (s)	DM SIZE	DM COND.	SAMPLING VISUAL & COMMENTS										COLOR		
<u>X/CDOO</u>		<u>AD37</u>					<u>DIRT, gravel, rocks</u>												
P.F. TEST	FLASH PT. (°F)	IGN (Solids)	BTU/gal.	BTU/lb	% CL	CL SPOT TEST	TOX	SP. GR.	MISCIBILITY		pH	T.O.C. (ppm)	CHEMICAL		TOTAL SULFIDES (PPM RANGE)	REACTIVITY		PCB's (ppm)	
									Solvent	Water			A - B - KD - S	Water Pos		Neg	Sulfide Test		Cyanide Test
Liquid																			
Solid																			
Karl Fischer % Water		Oxidizer Spot Test	DOT Oxidizer Test		Organic Peroxide Spot Test		Liquefaction		Latex Test		Aluminum Test		Acidity (mg CaCO ₃ /L)	Cr+6 ppm Range	% Ash	BS & W after Centrifuging			
			POS	NEG			POS	NEG	PASS	FAIL	POS	NEG				TOP	MID	BTM	

VISUAL: Approval Code
 VISUAL (after centrifuging): Priced For:
 METALS: RC TOTAL TCLP VOL WEIGHTED AVG Mg/L Mg/Kg LAB COMMENTS

ANTIMONY <u> </u>	BERYLLIUM <u> </u>	COPPER <u> </u>	NICKEL <u> </u>	THALLIUM <u> </u>
ARSENIC <u>0.25</u>	CADMIUM <u><0.1</u>	LEAD <u>0.29</u>	SELENIUM <u><0.25</u>	ZINC <u> </u>
BARIUM <u>0.70</u>	CHROMIUM <u><0.1</u>	MERCURY <u> </u>	SILVER <u><0.1</u>	<u>05-16-24 RT</u>

Comments:

Q.A./Q.C. REPORT# 75

Trailer/R.O.O./R.O.T./Tanker PLB 1628-018
 MANIFEST NO. 11/10/00
 GENERATOR 11/10/00
 CUSTOMER# 11/10/00
 TRANSPORTER 11/10/00
 DRIVER 11/10/00
 TRACTOR 11/10/00
 DISPOSAL SITE 5/14/04-1011
 DATE/TIME ARRIVAL 5/14/04-1011

115 Jacobus Ave., So. Kearny, NJ 07032 (973-344-4004)
 DATE/TIME OF SAMPLING _____
 SAMPLER _____
 NO. OF DRUMS/GALS/YDS _____
 NO. OF DRUMS SAMPLED _____
 NO. OF DRUMS OVERPACKED _____
 TOTAL NO. OF SAMPLES _____
 SAMPLING CONDITIONS: TEMP _____ °F (IN/OUTDOORS)
 WEATHER _____ INDOORS _____ OUTDOORS _____

DATE/TIME/INITIALS 5/14/04 8:30 AM
 SAMPLES IN LAB 8:30 10/5/15/21
 WORK COMPLETED MR 5/16/24 9:00
 ENVL. REVIEW _____
 OPERATIONS REVIEW _____
 TRAILER# (AFTER QC) _____
 DECAL # _____
 COMMENTS/NOTES _____

LAB ANALYSIS (CHECK ONE) OUTGOING STABILIZED INCOMING DRUMS YARD TURNAROUND
 OUTGOING LIQUIDS INCOMING BULK OTHER: _____

SAMPLE IDENTIFICATION		SHIPPING NAME	WASTE TYPE	DRUM No.:(s)	DM SIZE	DM COND.	SAMPLING VISUAL & COMMENTS		COLOR								
<u>11/10/00</u>		<u>AD37</u>					<u>DIRTY LG ROCKS</u>										
P.F. TEST	FLASH PT. (°F)	IGN (Solids)	BTU/gal.	BTU/lb	% CL / CL SPOT TEST / TOX	SP. GR.	MISCIBILITY		pH	T.O.C. (ppm)	CHEMICAL A-B-KD-S	TOTAL SULFIDES (PPM RANGE)	REACTIVITY		PCB's (ppm)		
							Solvent	Water					Water Pos	Neg		Sulfide Test	Cyanide Test
Liquid																	
Solid																	
Karl Fischer % Water		Oxidizer Spot Test	DOT Oxidizer Test		Organic Peroxide Spot Test	Liquefaction		Latex Test		Aluminum Test		Acidity (mg CaCO ₃ /L)	Cr+6 ppm Range	% Ash	BS & W after Centrifuging		
			POS	NEG		POS	NEG	PASS	FAIL	POS	NEG				TOP	MID	BTM
VISUAL:															Approval Code		
VISUAL (after centrifuging):															Priced For:		
METALS:		<input type="checkbox"/> RC	<input type="checkbox"/> TOTAL	<input checked="" type="checkbox"/> TCLP	<input type="checkbox"/> VOL WEIGHTED AVG	<input checked="" type="checkbox"/> Mg/L	<input type="checkbox"/> Mg/Kg	LAB COMMENTS									
ANTIMONY	—	BERYLLIUM	—	COPPER	—	NICKEL	—	THALLIUM	—								
ARSENIC	<u><0.25</u>	CADMIUM	<u><0.1</u>	LEAD	<u>0.33</u>	SELENIUM	<u><0.25</u>	ZINC	—								
BARIUM	<u>0.75</u>	CHROMIUM	<u><0.1</u>	MERCURY	—	SILVER	<u><0.1</u>	<u>05-16-24 RT</u>									

Comments:

6