HD161E - Field Sampling Summary Report

AMERICAN ENVIRONMENTAL SOLUTIONS INC.

AES

42 West Avenue
Patchogue, NY 11772

(631) 475-0020
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June 9, 2023

Mr. William Svilar, P.E.
CAC Industries, Inc.
54-08 Vernon Boulevard
Long Island City, NY 11101

Re: Reconstruction of Gateway Estates Phase E
Brooklyn, NY
NYCDDC HD161E
Field Sampling Summary Report #8 – Piles 70-71-72-73 – Rev. #3
AES Project # 0703

Dear Mr. Svilar:

American Environmental Solutions, Inc. (AES) collected soil samples from four stockpiles of material located at the above-referenced site on May 1st and 15th, 2023. Each stockpile contained approximately 2,000 cubic yards of soil. The piles sampled contain overburden and have remained undisturbed since the contract's inception. The piles are located on lots bordered by Ashford Street to the east, Locke Street to the north, Egan Street to the south and Gateway Drive to the west. The overburden material is excess soil stockpiled on lots that will be redeveloped with housing by New York City Department of Housing Preservation & Development (NYCHPD). The stockpiles sampled were identified as Pile 70, Pile 71, Pile 72, and Pile 73. Four samples were collected from each stockpile based on the sampling frequency of 1 per 500 cubic yards. The stockpile yard location is shown on Figure 1. Site photographs are attached.

At each sampling location a five-point composite sample and one grab sample were collected. The grab samples were submitted for Volatile Organic Compound (VOC) analysis. Samples were collected using stainless steel trowels from at least two feet below the soil surface. The soil samples were delivered to Phoenix Environmental Laboratories, Inc. (NYSDOH ELAP # 11301) in a cooler with ice and analyzed for spec requirements (Full TCLP, RIC, TPH) and Target Analyte List/Target Compound List (TAL/TCL+30) per disposal facility requirements. Stockpile sampling locations are shown on Figure 2. Lab analysis and Tables 1 and 2 summarizing analysis are also attached.

Compounds detected in the samples are discussed below:

Piles 70 and 73

RCRA and TCLP analysis of all 8 samples collected from Piles 70 and 73 indicated the material sampled is non-hazardous. Laboratory analysis indicated metals, SVOCs and pesticides were generally detected in all 8 samples collected. Metals and pesticides were detected in all 8 samples collected in concentrations exceeding Unrestricted Use Soil Cleanup Objectives (UUSCOs). Two samples collected from Pile 70 (#110 and #112) contained the SVOC benzo(a)pyrene in concentrations exceeding NYSDEC Part 375 Commercial Use Soil Cleanup Objectives (CUSCOs). There were no VOCs detected in the 8 samples collected from Piles 70 and 73. Total Petroleum Hydrocarbons (TPH) Diesel Range Organics were detected in one sample collected (Pile 70 - # 109). There is no regulatory criteria available for TPH. A summary of compounds detected and exceedances is shown on Table 1.

Based on this analysis, AES recommends all soil contained in Piles 70 and 73 be transported off-site to a permitted disposal facility in accordance with NYSDEC Part 360 Solid Waste Regulations. Piles 70 and 73 contain solid wastes and fill debris and should be managed as non-hazardous contaminated soil.

The soil piles on-site contain various types of miscellaneous wastes such as wood, plastic, glass, asphalt, concrete, etc. These wastes were left on-site from previous dumping activities.

The proposed facility to accept material stored in Piles 70 and 73 pursuant to all federal, state and local regulations is Bethlehem Earth in association with Clean Earth Bethlehem.

Piles 71 and 72

Laboratory analysis of samples collected from Piles 71 and 72 indicated metals, SVOCs, PCBS and pesticides were generally detected in all 8 samples collected. Metals and pesticides were detected in all eight samples collected in concentrations exceeding UUSCOs. The samples identified as Pile 71 - #114, Pile 71 - #115 and Pile 72 - #118 contained compound concentrations exceeding CUSCOs. There were no VOCs detected in the 8 samples. Total Petroleum Hydrocarbons (TPH) were detected in 2 of 8 samples collected. There is no regulatory criteria available for TPH. Laboratory analysis of the sample identified as Pile 72 - #118 contained lead in a concentration exceeding CUSCOs at 1,420 parts per million (ppm). Material stored in Pile 72 would be characterized as non-hazardous contaminated soil. A summary of compounds detected and exceedances is shown on Table 1.

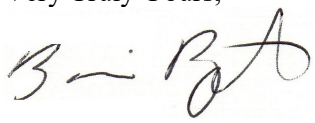
TCLP lead was detected at a concentration of 6.98 mg/L in soil sample Pile 71 - #116. This exceeds the USEPA Toxicity Characteristic Regulatory Criteria of 5 mg/L. Approximately 500 cubic yards of material represented by sample Pile 71 - #116 will be characterized as hazardous lead soil, pending results of delineation and confirmation sampling and analysis to be performed at a later date.

The facility proposed to accept hazardous materials generated is Clean Earth of North Jersey located in Kearny, New Jersey. An EPA ID number will be required to obtain approval of hazardous material for acceptance at the proposed disposal facility. Further delineation sampling and analysis may be performed to segregate and minimize the hazardous lead area.

Completed waste profiles, disposal facility permits, transporter permits and approval letters will be submitted to NYCDDC for review and approval prior to shipment of materials from the site.

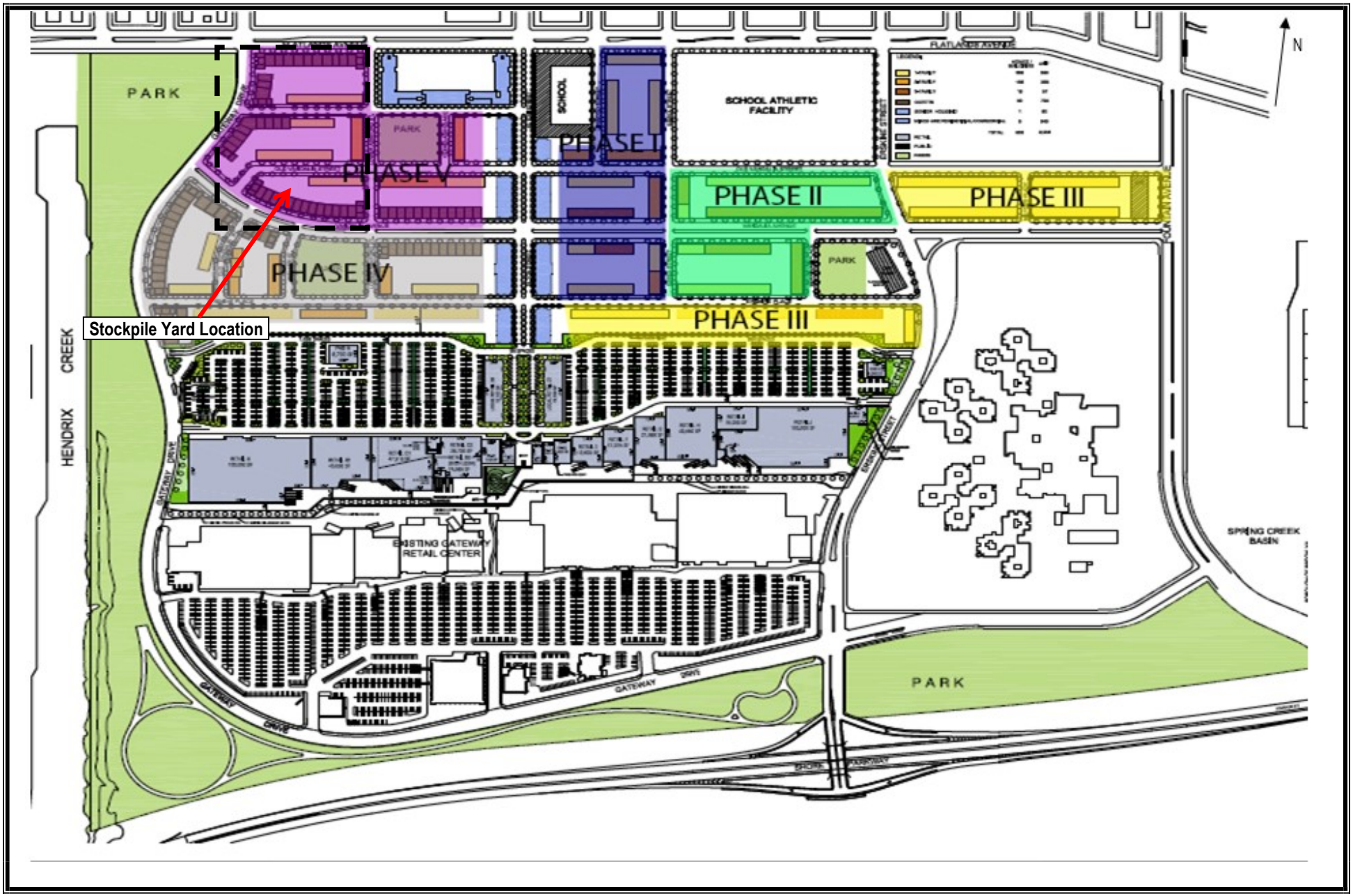
I hope this information satisfies your request. Please contact me if you have any questions.

Very Truly Yours,

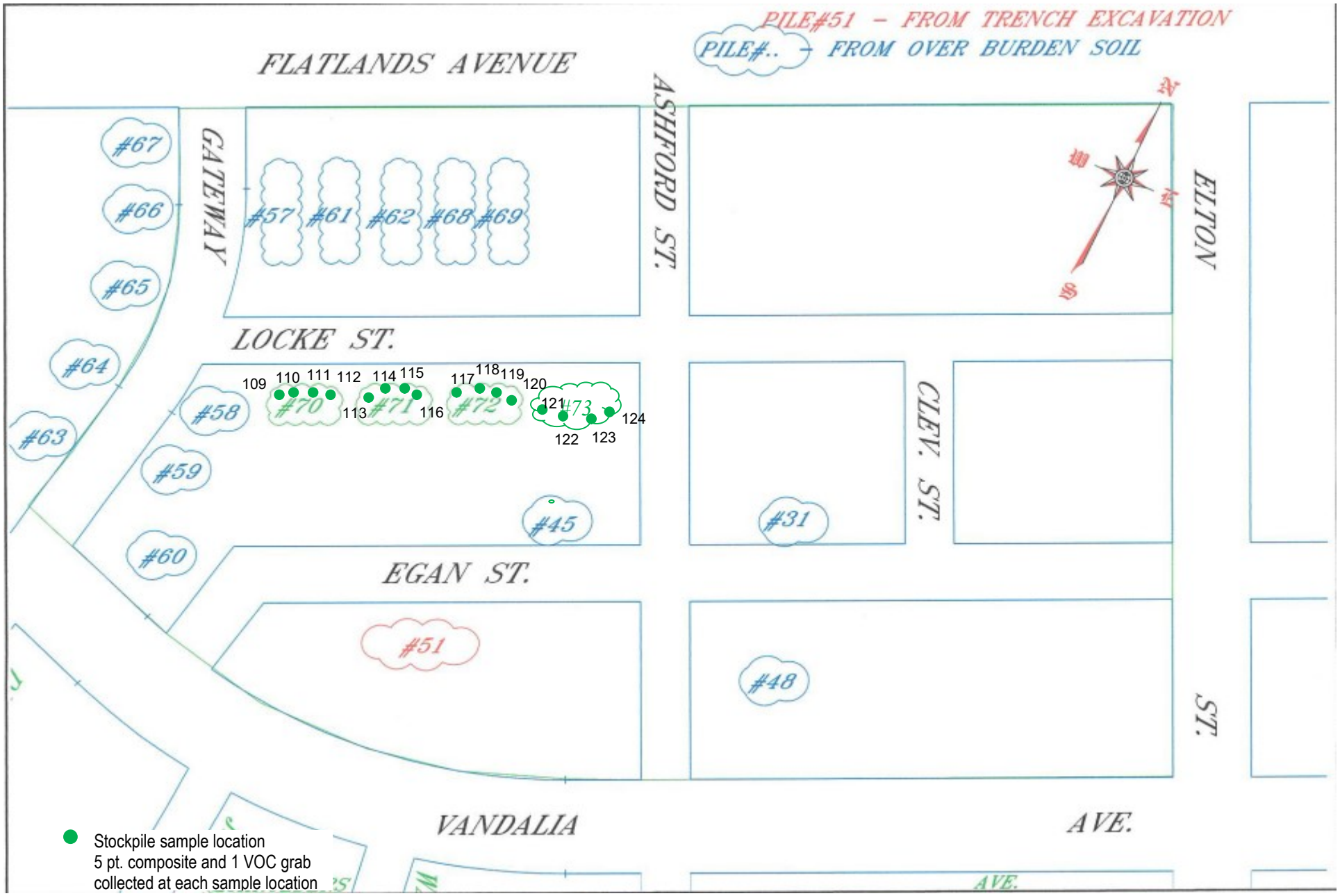


Brian Pendergast
President

FIGURES



Gateway Estates HD161E **Brooklyn, New York**	**American Environmental Solutions, Inc.** AES Project Number 0703 FSSR #8	Figure 1: Location Map



Reconstruction of Gateway Estates Phase E Brooklyn, NY	American Environmental Solutions, Inc. Project No. 0703	**Figure 2 Stockpile Sample Location Map**

TABLES

RECONSTRUCTION OF GATEWAY ESTATES, PHASE E, BROOKLYN
NYCDDC PROJECT HD-161E
CAC INDUSTRIES, INC.
TABLE 1: SUMMARY OF SOIL ANALYSIS - STOCKPILE SAMPLING 5/1/2023 + 5/15/2023

Parameter	Compounds Detected	Unit	NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives	NYSDEC Part 375 Commercial Soil Cleanup Objectives	PILE 70 - #109	PILE 70 - #110	PILE 70 - #111	PILE 70 - #112	PILE 73 - #121	PILE 73 - #122	PILE 73 - #123	PILE 73 - #124
Mercury 7471	Mercury	ppm	0.18	2.8	**0.25**	0.07	**0.23**	**0.23**	**0.19**	0.11	0.15	0.17
PCBs	PCB-1254	ppm	0.1	1	ND	**0.66**	**0.52**	**0.11**	ND	0.094	**0.11**	**0.11**
Pesticides/Herbicides	4,4-DDD	ppm	0.0033	92	0.0031	ND	**0.077**	**0.028**	**0.0059**	**0.0091**	**0.01**	**0.0087**
	4,4-DDE	ppm	0.0033	62	ND	ND	**0.011**	**0.0067**	0.0033	ND	0.0032	**0.0039**
	4,4-DDT	ppm	0.0033	47	ND	ND	**0.011**	**0.0065**	0.003	**0.0045**	**0.0048**	**0.0046**
	Dieldrin	ppm	0.005	1.4	ND	ND	**0.0078**	0.0044	ND	ND	ND	ND
	a-Chlordane	ppm	0.094	24	ND	ND	0.012	0.014	ND	ND	ND	0.0073
	g-Chlordane	ppm	NS	NS	ND	ND	0.02	0.011	ND	ND	ND	0.0083
	Chlordane	ppm	NS	NS	ND	ND	0.088	0.075	ND	ND	ND	0.047
Metals	Aluminum	ppm	NS	NS	8710	7560	5680	4850	4900	3580	5740	5590
	Silver	ppm	-	-	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic	ppm	13	16	4.38	3.78	3.77	2.74	2.34	2.13	4.3	4.31
	Barium	ppm	350	400	151	73.2	72.8	79.6	60.6	59.3	76.8	137
	Beryllium	ppm	7.2	590	.42	.37	ND	ND	ND	ND	.31	.33
	Cadmium	ppm	2.5	9.3	1.08	.78	.76	.57	.78	.73	.94	1.03
	Calcium	ppm	NS	NS	11,100	12,300	8280	4970	4870	4540	5540	4720
	Chromium	ppm	30	1500	**33.2**	27.7	22.3	12.2	12	10.3	18.6	29.7
	Cobalt	ppm	NS	NS	8	6.7	5.22	3.96	4.19	3.5	5.1	6.9
	Copper	ppm	50	270	**80**	45.2	38.1	29.7	19.7	22.5	30.7	37.1
	Iron	ppm	NS	NS	24,000	23,300	18,600	10,100	12,200	9,020	13,300	13,500
	Lead	ppm	63	1000	55.4	**69.6**	**104**	**115**	**77.3**	**104**	**93.4**	**122**
	Manganese	ppm	1,600	10,000	262	329	227	133	189	125	184	177
	Magnesium	ppm	NS	NS	6180	6150	3470	2240	2070	1690	2420	2800
	Nickel	ppm	30	310	24.1	22.3	18.2	13.3	14.2	11.3	25.6	**34.6**
	Antimony	ppm	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
	Selenium	ppm	3.9	1500	ND	ND	ND	ND	ND	ND	ND	ND
	Sodium	ppm	NS	NS	268	212	151	162	143	92.6	137	151
	Potassium	ppm	NS	NS	1300	1120	881	609	680	581	733	847
	Vanadium	ppm	NS	NS	38.6	28.9	24.4	20.5	21.2	16.6	25.1	24.6
	Thallium	ppm	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
	Zinc	ppm	109	10,000	**366**	**124**	**113**	99.6	62.7	65.2	91.9	90
Semi-Volatile Organic Compounds	2-Methylnapthalene	ppm	NS	NS	ND	ND	ND	.28	ND	ND	ND	ND
	Anthracene	ppm	100	500	ND	.31	ND	.48	ND	ND	ND	.38
	Benz(a)anthracene	ppm	1	5.6	.36	**1.2**	.45	**1.2**	.4	ND	.4	.78
	Benzo(a)pyrene	ppm	1	1	.49	**1.1**	.52	**1.2**	.5	.27	.45	.87
	Benzo(b)fluoranthene	ppm	1	5.6	.56	**1.4**	.63	**1.5**	.59	.32	.51	.98
	Benzo(k)fluoranthene	ppm	0.8	56	ND	.51	ND	.57	ND	ND	ND	.32
	Benzo(ghi)perylene	ppm	100	500	.39	.51	.3	.62	.32	ND	.28	.51
	Benzyl butyl phthalate	ppm	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
	Bis(2-ethylhexyl)phthlate	ppm	NS	NS	11	ND	ND	ND	ND	ND	ND	ND
	Chrysene	ppm	1	56	.4	**1.2**	.48	**1.2**	.42	ND	.38	.79
	Fluoranthene	ppm	100	500	.68	2.3	.81	2.4	.74	.37	.74	1.9
	Indeno(1,2,3)cdpyrene	ppm	0.5	5.6	.38	**.55**	.32	**.67**	.3	ND	.25	.49
	Phenanthrene	ppm	100	500	.4	1.5	.46	1.9	.39	ND	.38	1.5
	Pyrene	ppm	100	500	.64	1.9	.76	2.0	.78	.39	.81	1.7
Cyanide	Cyanide	ppm	27	27	ND	ND	ND	ND	ND	ND	ND	ND
Volatile Organic Compounds	None Detected	ppm	_	-	ND	ND	ND	ND	ND	ND	ND	ND
TPH DRO + GRO	Gasoline Range Organics	ppm	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
	Diesel Range Organics	ppm	NS	NS	310	ND	ND	ND	ND	ND	ND	ND

Notes:
NS No regulatory standard
ND Not detected
ppm Parts per million
Green highlighted concentrations exceed NYSDEC Part 375 Commercial Use Soil Cleanup Objectives
Yellow highlighted concentrations exceed NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives

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RECONSTRUCTION OF GATEWAY ESTATES, PHASE E, BROOKLYN
NYCDDC PROJECT HD-161E
CAC INDUSTRIES, INC.
TABLE 1: SUMMARY OF SOIL ANALYSIS - STOCKPILE SAMPLING 5/1/2023

Parameter	Compounds Detected	Unit	NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives	NYSDEC Part 375 Commercial Soil Cleanup Objectives	PILE 71 - #113	PILE 71 - #114	PILE 71 - #115	PILE 71 - #116	PILE 72 - #117	PILE 72 - #118	PILE 72 - #119	PILE 72 - #120
Mercury 7471	Mercury	ppm	0.18	2.8	**0.26**	**0.38**	**1.01**	**0.35**	**0.4**	**0.71**	0.17	**1.16**
PCBs	PCB-1254	ppm	0.1	1	**0.53**	**0.82**	**0.11**	**0.49**	**0.45**	**0.47**	ND	**0.46**
Pesticides/Herbicides	4,4-DDD	ppm	0.0033	92	**0.062**	**0.017**	**0.048**	**0.096**	**0.089**	**0.11**	**0.026**	**0.073**
	4,4-DDE	ppm	0.0033	62	**0.016**	ND	**0.013**	**0.021**	**0.012**	**0.027**	ND	**0.02**
	4,4-DDT	ppm	0.0033	47	**0.015**	**0.0052**	**0.018**	**0.014**	**0.011**	ND	**0.0051**	**0.011**
	Aldrin	ppm	0.005	0.68	**0.03**	ND	ND	ND	ND	ND	ND	ND
	Dieldrin	ppm	0.005	1.4	0.033	ND	ND	0.014	0.023	ND	ND	0.012
	a-Chlordane	ppm	0.094	24	0.0086	0.0089	ND	0.016	ND	ND	ND	ND
	g-Chlordane	ppm	NS	NS	0.022	0.0082	0.021	ND	ND	ND	ND	ND
	Chlordane	ppm	NS	NS	0.056	0.05	ND	0.1	ND	ND	ND	0.15
Metals	Aluminum	ppm	NS	NS	6170	7740	4460	4610	4780	4640	4310	3890
	Silver	ppm	-	-	ND	.62	.52	.64	.5	.74	.37	.43
	Arsenic	ppm	13	16	3.06	6.23	7.22	6.18	8.48	5.43	5.42	8.19
	Barium	ppm	350	400	93.8	**454**	**806**	328	**364**	299	**371**	196
	Beryllium	ppm	7.2	590	ND	.91	.59	.54	.57	.62	.34	.45
	Cadmium	ppm	2.5	9.3	.64	1.79	2.12	**4.06**	1.63	1.21	1.28	2.21
	Calcium	ppm	NS	NS	5480	6470	14,300	8070	6690	6320	9350	8100
	Chromium	ppm	30	1500	13.5	26.7	26.8	21.1	26.7	19.3	24.2	27.7
	Cobalt	ppm	NS	NS	4.28	9.92	7.15	11.3	7.12	6.7	5.27	13.5
	Copper	ppm	50	270	29.3	**245**	**153**	**152**	**158**	**135**	**94.3**	**117**
	Iron	ppm	NS	NS	13,400	27,500	21,500	20,600	26,600	17,100	18,900	28,000
	Lead	ppm	63	1000	**111**	**852**	**738**	**852**	**880**	**1420**	**921**	**502**
	Manganese	ppm	1,600	10,000	164	264	203	177	197	148	176	240
	Magnesium	ppm	NS	NS	2090	1490	2700	1640	1550	1920	2110	1600
	Nickel	ppm	30	310	15.4	**72.8**	**49.4**	**44.5**	**58**	**45.7**	**34.8**	**39.6**
	Antimony	ppm	NS	NS	ND	4.4	4	5.1	5.5	10.3	ND	ND
	Selenium	ppm	3.9	1500	ND	ND	ND	ND	ND	ND	ND	ND
	Sodium	ppm	NS	NS	112	216	218	175	175	153	144	155
	Potassium	ppm	NS	NS	770	633	623	580	567	637	555	586
	Vanadium	ppm	NS	NS	22.7	77.2	90.6	81.5	74.7	96.7	88.6	86.6
	Thallium	ppm	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
	Zinc	ppm	109	10,000	107	**1480**	**1050**	**574**	**713**	**625**	**608**	**507**
Semi-Volatile Organic Compounds	Anthracene	ppm	100	500	ND	.29	ND	ND	ND	ND	ND	ND
	Benz(a)anthracene	ppm	1	5.6	.55	.96	.51	.41	.47	.43	.55	.6
	Benzo(a)pyrene	ppm	1	1	.62	**1.1**	.55	.47	.5	.44	.58	.67
	Benzo(b)fluoranthene	ppm	1	5.6	.71	**1.3**	.63	.56	.59	.55	.73	.76
	Benzo(k)fluoranthene	ppm	0.8	56	.27	.46	ND	ND	ND	ND	ND	.27
	Benzo(ghi)perylene	ppm	100	500	.34	.55	.29	ND	ND	ND	.32	.36
	Benzyl butyl phthalate	ppm	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND
	Bis(2-ethylhexyl)phthlate	ppm	NS	NS	ND	ND	.76	ND	ND	ND	ND	ND
	Chrysene	ppm	1	56	.58	1	.53	.43	.47	.47	.58	.64
	Fluoranthene	ppm	100	500	.94	1.7	.96	.8	.93	.88	.94	1.2
	Indeno(1,2,3)cdpyrene	ppm	0.5	5.6	.38	**.6**	.3	ND	ND	ND	.32	.38
	Phenanthrene	ppm	100	500	.5	.79	.62	.46	.61	.58	.47	.8
	Pyrene	ppm	100	500	.86	1.7	.95	.76	.86	.8	.88	1.2
Cyanide	Cyanide	ppm	27	27	ND	2	2.35	3.63	0.79	2.33	ND	1.83
Volatile Organic Compounds	None Detected	ppm	_	-	ND	ND	ND	ND	ND	ND	ND	ND
TPH DRO + GRO	Gasoline Range Organics	ppm	NS	NS	ND	ND	ND	ND	ND	ND	ND	30
	Diesel Range Organics	ppm	NS	NS	ND	ND	ND	ND	320	ND	ND	ND

Notes:
NS No regulatory standard
ND Not detected
ppm Parts per million
Green highlighted concentrations exceed NYSDEC Part 375 Commercial Use Soil Cleanup Objectives
Yellow highlighted concentrations exceed NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives

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RECONSTRUCTION OF GATEWAY ESTATES, PHASE E, BROOKLYN
NYCDDC PROJECT HD-161E
CAC INDUSTRIES
TABLE 2: SUMMARY OFSOIL ANALYSIS - SAMPLES COLLECTED 5/1/23 + 5/15/23

Parameter	Compounds Detected	Unit	Regulatory Criteria	PILE 70 - #109	PILE 70 - #110	PILE 70 - #111	PILE 70 - #112	PILE 73 - #121	PILE 73 - #122	PILE 73 - #123	PILE 73 - #124
RCRA Characteristics	pH	pH units	<2 or >12.5	8.49	7.65	7.57	7.39	8.17	8.35	8.29	8.24
	Flashpoint	º F	>200º F	>200°F	>200°F	>200°F	>200°F	>200°F	>200°F	>200°F	>200°F
	Ignitability	º F	<140º F	passed	passed	passed	passed	passed	passed	passed	passed
	Reactivity - Cyanide	ppm	_	ND	ND	ND	ND	ND	ND	ND	ND
	Reactivity - Sulfide	ppm		ND	ND	ND	ND	ND	ND	ND	ND
TOXICITY		**Unit**	**USEPA Toxicity Characteristic Regulatory Criteria**	**PILE 70 - #109**	**PILE 70 - #110**	**PILE 70 - #111**	**PILE 70 - #112**	**PILE 73 - #121**	**PILE 73 - #122**	**PILE 73 - #123**	**PILE 73 - #124**
TCLP Metals	Barium	mg/L	100	0.61	0.6	0.44	0.43	0.63	0.64	0.74	0.7
	Cadmium	mg/L	1	ND	ND	ND	ND	ND	ND	ND	ND
	Lead	mg/L	5	ND	1.34	0.53	0.13	0.33	0.24	0.29	0.27
TCLP VOCs	None Detected	_		ND	ND	ND	ND	ND	ND	ND	ND
TCLP SVOCs	None Detected	_	_	ND	ND	ND	ND	ND	ND	ND	ND
TCLP Pests/Herbicides	None Detected	_	_	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
NS No regulatory criteria available
ND Not detected

RECONSTRUCTION OF GATEWAY ESTATES, PHASE E, BROOKLYN
NYCDDC PROJECT HD-161E
CAC INDUSTRIES
TABLE 2: SUMMARY OFSOIL ANALYSIS - SAMPLES COLLECTED 5/1/23

Parameter	Compounds Detected	Unit	Regulatory Criteria	PILE 71 - #113	PILE 71 - #114	PILE 71 - #115	PILE 71 - #116	PILE 72 - #117	PILE 72 - #118	PILE 72 - #119	PILE 72 - #120
RCRA Characteristics	pH	pH units	<2 or >12.5	8.42	8.02	7.76	7.8	7.66	7.78	7.6	7.71
	Flashpoint	º F	>200º F	>200°F	>200°F	>200°F	>200°F	>200°F	>200°F	>200°F	>200°F
	Ignitability	º F	<140º F	passed	passed	passed	passed	passed	passed	passed	passed
	Reactivity - Cyanide	ppm	_	ND	ND	ND	ND	ND	ND	ND	ND
	Reactivity - Sulfide	ppm		ND	ND	ND	ND	ND	ND	ND	ND
TOXICITY		**Unit**	**USEPA Toxicity Characteristic Regulatory Criteria**	**PILE 71 - #113**	**PILE 71 - #114**	**PILE 71 - #115**	**PILE 71 - #116**	**PILE 72 - #117**	**PILE 72 - #118**	**PILE 72 - #119**	**PILE 72 - #120**
TCLP Metals	Barium	mg/L	100	0.66	0.58	0.89	1.04	0.63	0.97	0.53	0.98
	Cadmium	mg/L	1	ND	ND	ND	ND	ND	ND	ND	ND
	Lead	mg/L	5	0.15	2.54	4.91	**6.98**	1.15	2.63	0.42	2.3
TCLP VOCs	None Detected	_		ND	ND	ND	ND	ND	ND	ND	ND
TCLP SVOCs	None Detected	_	_	ND	ND	ND	ND	ND	ND	ND	ND
TCLP Pests/Herbicides	None Detected	_	_	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
NS No regulatory criteria available
ND Not detected
Green highlighted concentrations exceed regulatory criteria.

SITE PHOTOGRAPHS

Sample 109, Pile 70

Sample 110, Pile 70

Sample 112, Pile 70

Sample 111, Pile 70

Sample 112, Pile 70

Sample 114, Pile 71

Sample 117, Pile 72

Sample 118, Pile 72

Sample 119, Pile 72

Sample 120, Pile 72

Sample 116, Pile 71

Stockpiled material

Sample 121, Pile 73

Sample 122, Pile 73

Sample 123, Pile 73

Sample 124, Pile 73

LABORATORY ANALYSIS

PHOENIX
Environmental Laboratories, Inc.

Tuesday, May 16, 2023

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

Project ID: GATEWAY ESTATES-HD161E
SDG ID: GCN95988
Sample ID#s: CN95988 - CN95999

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,

Phyllis Shiller
Laboratory Director

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

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

NY # 11301

SDG Comments

May 16, 2023

SDG I.D.: GCN95988

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

NY # 11301

Sample Id Cross Reference

May 16, 2023

SDG I.D.: GCN95988

Project ID: GATEWAY ESTATES-HD161E

Client Id	Lab Id	Matrix
PILE 70 - #109	CN95988	SOIL
PILE 70 - #110	CN95989	SOIL
PILE 70 - #111	CN95990	SOIL
PILE 70 - #112	CN95991	SOIL
PILE 71 - #113	CN95992	SOIL
PILE 71 - #114	CN95993	SOIL
PILE 71 - #115	CN95994	SOIL
PILE 71 - #116	CN95995	SOIL
PILE 72 - #117	CN95996	SOIL
PILE 72 - #118	CN95997	SOIL
PILE 72 - #119	CN95998	SOIL
PILE 72 - #120	CN95999	SOIL

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

May 16, 2023

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

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/01/23	8:20
Location Code:	AES-INC	Received by:	SW	05/02/23	17:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:	0703				

Laboratory Data

SDG ID: GCN95988
Phoenix ID: CN95988

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 70 - #109

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.0	1.0	mg/Kg	1	05/03/23	CPP	SW6010D
Aluminum	8710	53	mg/Kg	10	05/03/23	CPP	SW6010D
Arsenic	4.38	0.71	mg/Kg	1	05/03/23	CPP	SW6010D
Barium	151	0.35	mg/Kg	1	05/03/23	CPP	SW6010D
Beryllium	0.42	0.28	mg/Kg	1	05/03/23	CPP	SW6010D
Calcium	11100	53	mg/Kg	10	05/03/23	CPP	SW6010D
Cadmium	1.08	0.35	mg/Kg	1	05/03/23	CPP	SW6010D
Cobalt	8.00	0.35	mg/Kg	1	05/03/23	CPP	SW6010D
Chromium	33.2	0.35	mg/Kg	1	05/03/23	CPP	SW6010D
Copper	80.0	0.7	mg/kg	1	05/03/23	CPP	SW6010D
Iron	24000	53	mg/Kg	10	05/03/23	CPP	SW6010D
Mercury	0.25	0.03	mg/Kg	2	05/03/23	PM	SW7471B
Potassium	1300	53	mg/Kg	10	05/03/23	CPP	SW6010D
Magnesium	6180	53	mg/Kg	10	05/03/23	CPP	SW6010D
Manganese	262	3.5	mg/Kg	10	05/03/23	CPP	SW6010D
Sodium	268	5.3	mg/Kg	1	05/03/23	CPP	SW6010D
Nickel	24.1	0.35	mg/Kg	1	05/03/23	CPP	SW6010D
Lead	55.4	0.35	mg/Kg	1	05/03/23	CPP	SW6010D
Antimony	< 4.0	4.0	mg/Kg	1	05/03/23	IE	SW6010D
Selenium	< 1.4	1.4	mg/Kg	1	05/03/23	CPP	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Barium	0.61	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	05/03/23	PM	SW846 1311/7470
TCLP Lead	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010D

Ver 1

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 70 - #109

Phoenix I.D.: CN95988

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Thallium	< 3.2	3.2	mg/Kg	1	05/03/23	CPP	SW6010D	
TCLP Metals Digestion	Completed				05/03/23	ZT/W/ZT	SW3010A	
Vanadium	38.6	0.35	mg/Kg	1	05/03/23	CPP	SW6010D	
Zinc	366	7.1	mg/Kg	10	05/03/23	CPP	SW6010D	
Percent Solid	85		%		05/02/23	CV	SW846-%Solid	
Corrosivity	Negative		Pos/Neg	1	05/02/23	PK	SW846-Corr	1
Flash Point	>200	200	Degree F	1	05/08/23	G	SW1010B	
Ignitability	Passed	140	degree F	1	05/08/23	G	SW846-Ignit	1
pH at 25C - Soil	8.49	1.00	pH Units	1	05/02/23 22:57	PK	SW846 9045D	1
Reactivity Cyanide	< 6	6	mg/Kg	1	05/04/23	DK/GD	SW846 7.3.3.1/90	1
Reactivity Sulfide	< 20	20	mg/Kg	1	05/05/23	DK/GD	SW846 CH7	1
Reactivity	Negative		Pos/Neg	1	05/05/23	DK/GD	SW846-React	1
Total Cyanide (SW9010C Distill.)	< 0.59	0.59	mg/Kg	1	05/06/23	CL/GD	SW9012B	
Mercury Digestion	Completed				05/03/23	W/W	SW7471B	
Extraction of NY ETPH	Completed				05/03/23	MO/M	SW3546	
Soil Extraction for PCB	Completed				05/03/23	B/K/Y/MO	SW3546	
Soil Extraction for Pesticides	Completed				05/03/23	B/K/Y/MO	SW3546	
Soil Extraction for SVOA	Completed				05/02/23	B/M	SW3546	
TCLP Digestion Mercury	Completed				05/03/23	W/ZT/AL	SW7470A	
TCLP Herbicides Extraction	Completed				05/03/23	CV/KW	SW8150 MOD	
TCLP Extraction for Metals	Completed				05/02/23	ZT	SW1311	
TCLP Extraction for Organics	Completed				05/02/23	ZT	SW1311	
TCLP Pesticides Extraction	Completed				05/03/23	S/S	SW3510C	
TCLP Semi-Volatile Extraction	Completed				05/04/23	S/S	SW3510C	
TCLP Extraction Volatiles	Completed				05/02/23	CV	SW1311	
Total Metals Digest	Completed				05/02/23	L/AG	SW3050B	
Gasoline Range Hydrocarbons (C6-C10)								
GRO (C6-C10)	ND	6.1	mg/Kg	50	05/03/23	V	SW8015D GRO	
QA/QC Surrogates								
% 2,5-Dibromotoluene (FID)	79		%	50	05/03/23	V	70 - 130 %	
Polychlorinated Biphenyls								
PCB-1016	ND	76	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1221	ND	76	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1232	ND	76	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1242	ND	76	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1248	ND	76	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1254	ND	76	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1260	ND	76	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1262	ND	76	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1268	ND	76	ug/Kg	2	05/04/23	SC	SW8082A	
QA/QC Surrogates								
% DCBP	71		%	2	05/04/23	SC	30 - 150 %	
% DCBP (Confirmation)	64		%	2	05/04/23	SC	30 - 150 %	
% TCMX	73		%	2	05/04/23	SC	30 - 150 %	
% TCMX (Confirmation)	70		%	2	05/04/23	SC	30 - 150 %	

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 70 - #109

Phoenix I.D.: CN95988

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Pesticides - Soil								
4,4' -DDD	3.1	2.3	ug/Kg	2	05/04/23	AW	SW8081B	
4,4' -DDE	ND	2.3	ug/Kg	2	05/04/23	AW	SW8081B	
4,4' -DDT	ND	2.3	ug/Kg	2	05/04/23	AW	SW8081B	
a-BHC	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
a-Chlordane	ND	10	ug/Kg	2	05/04/23	AW	SW8081B	
Aldrin	ND	3.8	ug/Kg	2	05/04/23	AW	SW8081B	
b-BHC	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Chlordane	ND	38	ug/Kg	2	05/04/23	AW	SW8081B	
d-BHC	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Dieldrin	ND	3.8	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan I	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan II	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan sulfate	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin aldehyde	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin ketone	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
g-BHC	ND	1.5	ug/Kg	2	05/04/23	AW	SW8081B	
g-Chlordane	ND	10	ug/Kg	2	05/04/23	AW	SW8081B	
Heptachlor	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Heptachlor epoxide	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Methoxychlor	ND	38	ug/Kg	2	05/04/23	AW	SW8081B	
Toxaphene	ND	150	ug/Kg	2	05/04/23	AW	SW8081B	
QA/QC Surrogates								
% DCBP	59		%	2	05/04/23	AW	30 - 150 %	
% DCBP (Confirmation)	47		%	2	05/04/23	AW	30 - 150 %	
% TCMX	71		%	2	05/04/23	AW	30 - 150 %	
% TCMX (Confirmation)	82		%	2	05/04/23	AW	30 - 150 %	
TCLP Herbicides								
2,4,5-TP (Silvex)	ND	50	ug/L	10	05/05/23	PS	SW846 1311/8151	
2,4-D	ND	100	ug/L	10	05/05/23	PS	SW846 1311/8151	
QA/QC Surrogates								
% DCAA	66		%	10	05/05/23	PS	30 - 150 %	
% DCAA (Confirmation)	64		%	10	05/05/23	PS	30 - 150 %	
TCLP Pesticides								
4,4' -DDD	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
4,4' -DDE	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
4,4' -DDT	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
a-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Alachlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	1
Aldrin	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
b-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Chlordane	ND	5.0	ug/L	10	05/04/23	AW	SW8081B	
d-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Dieldrin	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
Endosulfan I	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Endosulfan II	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Endosulfan Sulfate	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
Endrin	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Toxaphene	ND	20	ug/L	10	05/04/23	AW	SW8081B
QA/QC Surrogates							
%DCBP (Surrogate Rec)	87		%	10	05/04/23	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	86		%	10	05/04/23	AW	30 - 150 %
%TCMX (Surrogate Rec)	82		%	10	05/04/23	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	80		%	10	05/04/23	AW	30 - 150 %
TPH DRO (C10-C28)							
Diesel Range Organics (C10-C28)	310	290	mg/Kg	5	05/04/23	JRB	SW-846 8015
QA/QC Surrogates							
% COD (surr)	72		%	5	05/04/23	JRB	50 - 150 %
% Terphenyl (surr)	70		%	5	05/04/23	JRB	50 - 150 %
Volatiles (TCL)							
1,1,1-Trichloroethane	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
1,1,2,2-Tetrachloroethane	ND	310	ug/kg	50	05/03/23	HM	SW8260C
1,1,2-Trichloroethane	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
1,1-Dichloroethane	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
1,1-Dichloroethene	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
1,2,3-Trichlorobenzene	ND	310	ug/kg	50	05/03/23	HM	SW8260C
1,2,4-Trichlorobenzene	ND	310	ug/kg	50	05/03/23	HM	SW8260C
1,2-Dibromo-3-chloropropane	ND	310	ug/kg	50	05/03/23	HM	SW8260C
1,2-Dibromoethane	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichlorobenzene	ND	310	ug/kg	50	05/03/23	HM	SW8260C
1,2-Dichloroethane	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichloropropane	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
1,3-Dichlorobenzene	ND	310	ug/kg	50	05/03/23	HM	SW8260C
1,4-Dichlorobenzene	ND	310	ug/kg	50	05/03/23	HM	SW8260C
2-Hexanone	ND	26	ug/kg	1	05/03/23	HM	SW8260C
4-Methyl-2-pentanone	ND	26	ug/kg	1	05/03/23	HM	SW8260C
Acetone	ND	50	ug/kg	1	05/03/23	HM	SW8260C
Benzene	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
Bromochloromethane	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
Bromodichloromethane	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
Bromoform	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
Bromomethane	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
Carbon Disulfide	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
Carbon tetrachloride	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
Chlorobenzene	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
Chloroethane	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
Chloroform	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
Chloromethane	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
cis-1,2-Dichloroethene	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
cis-1,3-Dichloropropene	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
Cyclohexane	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
Dibromochloromethane	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
Dichlorodifluoromethane	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
Ethylbenzene	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
Isopropylbenzene	ND	310	ug/kg	50	05/03/23	HM	SW8260C
m&p-Xylene	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
Methyl ethyl ketone	ND	31	ug/kg	1	05/03/23	HM	SW8260C
Methyl t-butyl ether (MTBE)	ND	10	ug/kg	1	05/03/23	HM	SW8260C
Methylacetate	ND	4.2	ug/kg	1	05/03/23	HM	SW8260C
Methylcyclohexane	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
Methylene chloride	ND	26	ug/kg	1	05/03/23	HM	SW8260C
o-Xylene	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
Styrene	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
Tetrachloroethene	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
Toluene	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
Total Xylenes	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
trans-1,2-Dichloroethene	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
trans-1,3-Dichloropropene	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
Trichloroethene	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
Trichlorofluoromethane	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
Trichlorotrifluoroethane	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
Vinyl chloride	ND	5.2	ug/kg	1	05/03/23	HM	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	94		%	1	05/03/23	HM	70 - 130 %
% Bromofluorobenzene	71		%	1	05/03/23	HM	70 - 130 %
% Dibromofluoromethane	112		%	1	05/03/23	HM	70 - 130 %
% Toluene-d8	80		%	1	05/03/23	HM	70 - 130 %
% 1,2-dichlorobenzene-d4 (50x)	100		%	50	05/03/23	HM	70 - 130 %
% Bromofluorobenzene (50x)	93		%	50	05/03/23	HM	70 - 130 %
% Dibromofluoromethane (50x)	93		%	50	05/03/23	HM	70 - 130 %
% Toluene-d8 (50x)	93		%	50	05/03/23	HM	70 - 130 %
1,4-dioxane							
1,4-dioxane	ND	79	ug/kg	1	05/03/23	HM	SW8260C
TCLP Volatiles							
1,1-Dichloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4 (10x)	100		%	10	05/03/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	96		%	10	05/03/23	HM	70 - 130 %

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 70 - #109

Phoenix I.D.: CN95988

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
% Dibromofluoromethane (10x)	100		%	10	05/03/23	HM	70 - 130 %	
% Toluene-d8 (10x)	96		%	10	05/03/23	HM	70 - 130 %	
Volatile Library Search	Completed				05/04/23	HM		
Semivolatiles								
1,1-Biphenyl	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,2'-Oxybis(1-Chloropropane)	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	1
2,3,4,6-tetrachlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4,5-Trichlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4,6-Trichlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dichlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dimethylphenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dinitrophenol	ND	620	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dinitrotoluene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,6-Dinitrotoluene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Chloronaphthalene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Chlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Methylnaphthalene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Methylphenol (o-cresol)	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Nitroaniline	ND	620	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Nitrophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
3&4-Methylphenol (m&p-cresol)	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D	1
3,3'-Dichlorobenzidine	ND	460	ug/Kg	1	05/03/23	KCA	SW8270D	
3-Nitroaniline	ND	620	ug/Kg	1	05/03/23	KCA	SW8270D	
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Bromophenyl phenyl ether	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chloro-3-methylphenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chloroaniline	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Nitroaniline	ND	620	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Nitrophenol	ND	1100	ug/Kg	1	05/03/23	KCA	SW8270D	
Acenaphthene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Acenaphthylene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Acetophenone	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Anthracene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Atrazine	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benz(a)anthracene	360	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzaldehyde	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(a)pyrene	490	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(b)fluoranthene	560	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(ghi)perylene	390	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(k)fluoranthene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzyl butyl phthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-chloroethyl)ether	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-ethylhexyl)phthalate	11000	1400	ug/Kg	5	05/03/23	KCA	SW8270D	
Caprolactam	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Carbazole	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Chrysene	400	270	ug/Kg	1	05/03/23	KCA	SW8270D
Dibenz(a,h)anthracene	ND	190	ug/Kg	1	05/03/23	KCA	SW8270D
Dibenzofuran	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Diethyl phthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Dimethylphthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Di-n-butylphthalate	ND	770	ug/Kg	1	05/03/23	KCA	SW8270D
Di-n-octylphthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Fluoranthene	680	270	ug/Kg	1	05/03/23	KCA	SW8270D
Fluorene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorobenzene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorobutadiene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorocyclopentadiene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachloroethane	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	380	270	ug/Kg	1	05/03/23	KCA	SW8270D
Isophorone	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Naphthalene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Nitrobenzene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodimethylamine	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	190	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodiphenylamine	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D
Pentachlorophenol	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D
Phenanthrene	400	270	ug/Kg	1	05/03/23	KCA	SW8270D
Phenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Pyrene	640	270	ug/Kg	1	05/03/23	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	74		%	1	05/03/23	KCA	30 - 130 %
% 2-Fluorobiphenyl	71		%	1	05/03/23	KCA	30 - 130 %
% 2-Fluorophenol	75		%	1	05/03/23	KCA	30 - 130 %
% Nitrobenzene-d5	86		%	1	05/03/23	KCA	30 - 130 %
% Phenol-d5	88		%	1	05/03/23	KCA	30 - 130 %
% Terphenyl-d14	59		%	1	05/03/23	KCA	30 - 130 %
TCLP Acid/Base-Neutral							
1,4-Dichlorobenzene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	99		%	1	05/05/23	KCA	15 - 110 %
% 2-Fluorobiphenyl	82		%	1	05/05/23	KCA	30 - 130 %
% 2-Fluorophenol	71		%	1	05/05/23	KCA	15 - 110 %
% Nitrobenzene-d5	81		%	1	05/05/23	KCA	30 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Phenol-d5	67		%	1	05/05/23	KCA	15 - 110 %
% Terphenyl-d14	99		%	1	05/05/23	KCA	30 - 130 %
Semivolatile Library Search	Completed				05/09/23	MR	

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

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

Comments:

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

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

Corrosivity is based solely on the pH analysis performed above.

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

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

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

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

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

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

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
May 16, 2023
Reviewed and Released by: Phyllis Shiller, Laboratory Director

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

May 16, 2023

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

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/01/23	8:25
Location Code:	AES-INC	Received by:	SW	05/02/23	17:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:	0703				

Laboratory Data

SDG ID: GCN95988
Phoenix ID: CN95989

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 70 - #110

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.0	1.0	mg/Kg	1	05/03/23	CPP	SW6010D
Aluminum	7560	53	mg/Kg	10	05/03/23	CPP	SW6010D
Arsenic	3.78	0.71	mg/Kg	1	05/03/23	CPP	SW6010D
Barium	73.2	0.35	mg/Kg	1	05/03/23	CPP	SW6010D
Beryllium	0.37	0.28	mg/Kg	1	05/03/23	CPP	SW6010D
Calcium	12300	53	mg/Kg	10	05/03/23	CPP	SW6010D
Cadmium	0.78	0.35	mg/Kg	1	05/03/23	CPP	SW6010D
Cobalt	6.70	0.35	mg/Kg	1	05/03/23	CPP	SW6010D
Chromium	27.7	0.35	mg/Kg	1	05/03/23	CPP	SW6010D
Copper	45.2	0.7	mg/kg	1	05/03/23	CPP	SW6010D
Iron	23300	53	mg/Kg	10	05/03/23	CPP	SW6010D
Mercury	0.07	0.03	mg/Kg	2	05/03/23	PM	SW7471B
Potassium	1120	53	mg/Kg	10	05/03/23	CPP	SW6010D
Magnesium	6150	53	mg/Kg	10	05/03/23	CPP	SW6010D
Manganese	329	3.5	mg/Kg	10	05/03/23	CPP	SW6010D
Sodium	212	5.3	mg/Kg	1	05/03/23	CPP	SW6010D
Nickel	22.3	0.35	mg/Kg	1	05/03/23	CPP	SW6010D
Lead	69.6	0.35	mg/Kg	1	05/03/23	CPP	SW6010D
Antimony	< 3.5	3.5	mg/Kg	1	05/03/23	CPP	SW6010D
Selenium	< 1.4	1.4	mg/Kg	1	05/03/23	CPP	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Barium	0.60	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	05/03/23	PM	SW846 1311/7470
TCLP Lead	1.34	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010D

Ver 1

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 70 - #110

Phoenix I.D.: CN95989

Parameter	Result		RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Thallium	< 3.2		3.2	mg/Kg	1	05/03/23	CPP	SW6010D	
TCLP Metals Digestion	Completed					05/03/23	ZT/W/ZT	SW3010A	
Vanadium	28.9		0.35	mg/Kg	1	05/03/23	CPP	SW6010D	
Zinc	124		0.7	mg/Kg	1	05/03/23	CPP	SW6010D	
Percent Solid	86			%		05/02/23	CV	SW846-%Solid	
Corrosivity	Negative			Pos/Neg	1	05/02/23	PK	SW846-Corr	1
Flash Point	>200		200	Degree F	1	05/08/23	G	SW1010B	
Ignitability	Passed		140	degree F	1	05/08/23	G	SW846-Ignit	1
pH at 25C - Soil	7.65		1.00	pH Units	1	05/02/23 22:57	PK	SW846 9045D	1
Reactivity Cyanide	< 6		6	mg/Kg	1	05/04/23	DK/GD	SW846 7.3.3.1/90	1
Reactivity Sulfide	< 20		20	mg/Kg	1	05/05/23	DK/GD	SW846 CH7	1
Reactivity	Negative			Pos/Neg	1	05/05/23	DK/GD	SW846-React	1
Total Cyanide (SW9010C Distill.)	< 0.58		0.58	mg/Kg	1	05/06/23	CL/GD	SW9012B	
Mercury Digestion	Completed					05/03/23	W/W	SW7471B	
Extraction of NY ETPH	Completed					05/05/23	C/MO/M	SW3546	
Soil Extraction for PCB	Completed					05/03/23	B/K/Y/MO	SW3546	
Soil Extraction for Pesticides	Completed					05/03/23	B/K/Y/MO	SW3546	
Soil Extraction for SVOA	Completed					05/02/23	B/M	SW3546	
TCLP Digestion Mercury	Completed					05/03/23	W/ZT/AL	SW7470A	
TCLP Herbicides Extraction	Completed					05/03/23	CV/KW	SW8150 MOD	
TCLP Extraction for Metals	Completed					05/02/23	ZT	SW1311	
TCLP Extraction for Organics	Completed					05/02/23	ZT	SW1311	
TCLP Pesticides Extraction	Completed					05/03/23	S/S	SW3510C	
TCLP Semi-Volatile Extraction	Completed					05/04/23	S/S	SW3510C	
TCLP Extraction Volatiles	Completed					05/02/23	CV	SW1311	
Total Metals Digest	Completed					05/02/23	L/AG	SW3050B	
Gasoline Range Hydrocarbons (C6-C10)									
GRO (C6-C10)	ND		7.1	mg/Kg	50	05/03/23	V	SW8015D GRO	
QA/QC Surrogates									
% 2,5-Dibromotoluene (FID)	82			%	50	05/03/23	V	70 - 130 %	
Polychlorinated Biphenyls									
PCB-1016	ND		76	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1221	ND		76	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1232	ND		76	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1242	ND		76	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1248	*	*	76	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1254	660	*	76	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1260	*	*	76	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1262	ND		76	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1268	ND		76	ug/Kg	2	05/05/23	SC	SW8082A	
QA/QC Surrogates									
% DCBP	92			%	2	05/05/23	SC	30 - 150 %	
% DCBP (Confirmation)	81			%	2	05/05/23	SC	30 - 150 %	
% TCMX	77			%	2	05/05/23	SC	30 - 150 %	
% TCMX (Confirmation)	77			%	2	05/05/23	SC	30 - 150 %	

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 70 - #110

Phoenix I.D.: CN95989

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Pesticides - Soil								
4,4' -DDD	ND	2.3	ug/Kg	2	05/04/23	PS	SW8081B	
4,4' -DDE	ND	3.3	ug/Kg	2	05/04/23	PS	SW8081B	
4,4' -DDT	ND	3.3	ug/Kg	2	05/04/23	PS	SW8081B	
a-BHC	ND	7.6	ug/Kg	2	05/04/23	PS	SW8081B	
a-Chlordane	ND	3.8	ug/Kg	2	05/04/23	PS	SW8081B	
Aldrin	ND	3.8	ug/Kg	2	05/04/23	PS	SW8081B	
b-BHC	ND	7.6	ug/Kg	2	05/04/23	PS	SW8081B	
Chlordane	ND	38	ug/Kg	2	05/04/23	PS	SW8081B	
d-BHC	ND	7.6	ug/Kg	2	05/04/23	PS	SW8081B	
Dieldrin	ND	5.0	ug/Kg	2	05/04/23	PS	SW8081B	
Endosulfan I	ND	7.6	ug/Kg	2	05/04/23	PS	SW8081B	
Endosulfan II	ND	7.6	ug/Kg	2	05/04/23	PS	SW8081B	
Endosulfan sulfate	ND	7.6	ug/Kg	2	05/04/23	PS	SW8081B	
Endrin	ND	7.6	ug/Kg	2	05/04/23	PS	SW8081B	
Endrin aldehyde	ND	7.6	ug/Kg	2	05/04/23	PS	SW8081B	
Endrin ketone	ND	7.6	ug/Kg	2	05/04/23	PS	SW8081B	
g-BHC	ND	10	ug/Kg	2	05/04/23	PS	SW8081B	
g-Chlordane	ND	15	ug/Kg	2	05/04/23	PS	SW8081B	
Heptachlor	ND	7.6	ug/Kg	2	05/04/23	PS	SW8081B	
Heptachlor epoxide	ND	7.6	ug/Kg	2	05/04/23	PS	SW8081B	
Methoxychlor	ND	38	ug/Kg	2	05/04/23	PS	SW8081B	
Toxaphene	ND	150	ug/Kg	2	05/04/23	PS	SW8081B	
QA/QC Surrogates								
% DCBP	119		%	2	05/04/23	PS	30 - 150 %	
% DCBP (Confirmation)	76		%	2	05/04/23	PS	30 - 150 %	
% TCMX	102		%	2	05/04/23	PS	30 - 150 %	
% TCMX (Confirmation)	69		%	2	05/04/23	PS	30 - 150 %	
TCLP Herbicides								
2,4,5-TP (Silvex)	ND	50	ug/L	10	05/05/23	PS	SW846 1311/8151	
2,4-D	ND	100	ug/L	10	05/05/23	PS	SW846 1311/8151	
QA/QC Surrogates								
% DCAA	67		%	10	05/05/23	PS	30 - 150 %	
% DCAA (Confirmation)	65		%	10	05/05/23	PS	30 - 150 %	
TCLP Pesticides								
4,4' -DDD	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
4,4' -DDE	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
4,4' -DDT	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
a-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Alachlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	1
Aldrin	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
b-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Chlordane	ND	5.0	ug/L	10	05/04/23	AW	SW8081B	
d-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Dieldrin	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
Endosulfan I	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Endosulfan II	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	

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Phoenix I.D.: CN95989

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Endosulfan Sulfate	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
Endrin	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Toxaphene	ND	20	ug/L	10	05/04/23	AW	SW8081B
QA/QC Surrogates							
%DCBP (Surrogate Rec)	88		%	10	05/04/23	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	85		%	10	05/04/23	AW	30 - 150 %
%TCMX (Surrogate Rec)	77		%	10	05/04/23	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	72		%	10	05/04/23	AW	30 - 150 %
TPH DRO (C10-C28)							
Diesel Range Organics (C10-C28)	ND	280	mg/Kg	5	05/08/23	JRB	SW-846 8015
QA/QC Surrogates							
% COD (surr)	50		%	5	05/08/23	JRB	50 - 150 %
% Terphenyl (surr)	51		%	5	05/08/23	JRB	50 - 150 %
Volatiles (TCL)							
1,1,1-Trichloroethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
1,1,2,2-Tetrachloroethane	ND	350	ug/kg	50	05/03/23	HM	SW8260C
1,1,2-Trichloroethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
1,1-Dichloroethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
1,1-Dichloroethene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
1,2,3-Trichlorobenzene	ND	350	ug/kg	50	05/03/23	HM	SW8260C
1,2,4-Trichlorobenzene	ND	350	ug/kg	50	05/03/23	HM	SW8260C
1,2-Dibromo-3-chloropropane	ND	350	ug/kg	50	05/03/23	HM	SW8260C
1,2-Dibromoethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichlorobenzene	ND	350	ug/kg	50	05/03/23	HM	SW8260C
1,2-Dichloroethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichloropropane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
1,3-Dichlorobenzene	ND	350	ug/kg	50	05/03/23	HM	SW8260C
1,4-Dichlorobenzene	ND	350	ug/kg	50	05/03/23	HM	SW8260C
2-Hexanone	ND	31	ug/kg	1	05/03/23	HM	SW8260C
4-Methyl-2-pentanone	ND	31	ug/kg	1	05/03/23	HM	SW8260C
Acetone	ND	50	ug/kg	1	05/03/23	HM	SW8260C
Benzene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Bromochloromethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Bromodichloromethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Bromoform	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Bromomethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Carbon Disulfide	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Carbon tetrachloride	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Chlorobenzene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Chloroethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Chloroform	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Chloromethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
cis-1,2-Dichloroethene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
cis-1,3-Dichloropropene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Cyclohexane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Dibromochloromethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Dichlorodifluoromethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Ethylbenzene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Isopropylbenzene	ND	350	ug/kg	50	05/03/23	HM	SW8260C
m&p-Xylene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Methyl ethyl ketone	ND	38	ug/kg	1	05/03/23	HM	SW8260C
Methyl t-butyl ether (MTBE)	ND	13	ug/kg	1	05/03/23	HM	SW8260C
Methylacetate	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Methylcyclohexane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Methylene chloride	ND	31	ug/kg	1	05/03/23	HM	SW8260C
o-Xylene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Styrene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Tetrachloroethene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Toluene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Total Xylenes	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
trans-1,2-Dichloroethene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
trans-1,3-Dichloropropene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Trichloroethene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Trichlorofluoromethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Trichlorotrifluoroethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Vinyl chloride	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	94		%	1	05/03/23	HM	70 - 130 %
% Bromofluorobenzene	74		%	1	05/03/23	HM	70 - 130 %
% Dibromofluoromethane	106		%	1	05/03/23	HM	70 - 130 %
% Toluene-d8	86		%	1	05/03/23	HM	70 - 130 %
% 1,2-dichlorobenzene-d4 (50x)	99		%	50	05/03/23	HM	70 - 130 %
% Bromofluorobenzene (50x)	91		%	50	05/03/23	HM	70 - 130 %
% Dibromofluoromethane (50x)	93		%	50	05/03/23	HM	70 - 130 %
% Toluene-d8 (50x)	94		%	50	05/03/23	HM	70 - 130 %
1,4-dioxane							
1,4-dioxane	ND	94	ug/kg	1	05/03/23	HM	SW8260C
TCLP Volatiles							
1,1-Dichloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4 (10x)	100		%	10	05/03/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	96		%	10	05/03/23	HM	70 - 130 %

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
% Dibromofluoromethane (10x)	102		%	10	05/03/23	HM	70 - 130 %	
% Toluene-d8 (10x)	97		%	10	05/03/23	HM	70 - 130 %	
Volatile Library Search	Completed				05/04/23	HM		
Semivolatiles								
1,1-Biphenyl	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,2'-Oxybis(1-Chloropropane)	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	1
2,3,4,6-tetrachlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4,5-Trichlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4,6-Trichlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dichlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dimethylphenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dinitrophenol	ND	620	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dinitrotoluene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,6-Dinitrotoluene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Chloronaphthalene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Chlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Methylnaphthalene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Methylphenol (o-cresol)	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Nitroaniline	ND	620	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Nitrophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
3&4-Methylphenol (m&p-cresol)	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D	1
3,3'-Dichlorobenzidine	ND	460	ug/Kg	1	05/03/23	KCA	SW8270D	
3-Nitroaniline	ND	620	ug/Kg	1	05/03/23	KCA	SW8270D	
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Bromophenyl phenyl ether	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chloro-3-methylphenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chloroaniline	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Nitroaniline	ND	620	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Nitrophenol	ND	1100	ug/Kg	1	05/03/23	KCA	SW8270D	
Acenaphthene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Acenaphthylene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Acetophenone	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Anthracene	310	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Atrazine	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benz(a)anthracene	1200	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzaldehyde	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(a)pyrene	1100	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(b)fluoranthene	1400	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(ghi)perylene	510	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(k)fluoranthene	510	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzyl butyl phthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-chloroethyl)ether	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-ethylhexyl)phthalate	ND	450	ug/Kg	1	05/03/23	KCA	SW8270D	
Caprolactam	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Carbazole	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Chrysene	1200	270	ug/Kg	1	05/03/23	KCA	SW8270D
Dibenz(a,h)anthracene	ND	190	ug/Kg	1	05/03/23	KCA	SW8270D
Dibenzofuran	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Diethyl phthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Dimethylphthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Di-n-butylphthalate	ND	770	ug/Kg	1	05/03/23	KCA	SW8270D
Di-n-octylphthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Fluoranthene	2300	270	ug/Kg	1	05/03/23	KCA	SW8270D
Fluorene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorobenzene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorobutadiene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorocyclopentadiene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachloroethane	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	550	270	ug/Kg	1	05/03/23	KCA	SW8270D
Isophorone	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Naphthalene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Nitrobenzene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodimethylamine	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	190	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodiphenylamine	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D
Pentachlorophenol	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D
Phenanthrene	1500	270	ug/Kg	1	05/03/23	KCA	SW8270D
Phenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Pyrene	1900	270	ug/Kg	1	05/03/23	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	87		%	1	05/03/23	KCA	30 - 130 %
% 2-Fluorobiphenyl	69		%	1	05/03/23	KCA	30 - 130 %
% 2-Fluorophenol	72		%	1	05/03/23	KCA	30 - 130 %
% Nitrobenzene-d5	80		%	1	05/03/23	KCA	30 - 130 %
% Phenol-d5	85		%	1	05/03/23	KCA	30 - 130 %
% Terphenyl-d14	61		%	1	05/03/23	KCA	30 - 130 %
TCLP Acid/Base-Neutral							
1,4-Dichlorobenzene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	73		%	1	05/05/23	KCA	15 - 110 %
% 2-Fluorobiphenyl	62		%	1	05/05/23	KCA	30 - 130 %
% 2-Fluorophenol	60		%	1	05/05/23	KCA	15 - 110 %
% Nitrobenzene-d5	58		%	1	05/05/23	KCA	30 - 130 %

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 70 - #110

Phoenix I.D.: CN95989

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Phenol-d5	56		%	1	05/05/23	KCA	15 - 110 %
% Terphenyl-d14	79		%	1	05/05/23	KCA	30 - 130 %
Semivolatile Library Search	Completed				05/09/23	MR	

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

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

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

Comments:

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

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

Corrosivity is based solely on the pH analysis performed above.

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

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

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

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

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

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

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.

PCB Comment:
* For PCBs, as per section 11.9.3 of SW846 method 8082, when multiple Aroclor's of PCBs are present and the aroclor is no longer recognizable, quantitation may be performed by comparing the total area of the PCB pattern to that of the aroclor it mostly resembles. The PCB pattern did not resemble any of the standards, but most closely resembles a mixture of the Aroclors 1248 and 1254 and 1260. The PCB is quantitated as a timed group and is reported as the Aroclor 1254.

Pesticide Comment:
Matrix interference was observed due to the presence of PCB in the sample.

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
May 16, 2023
Reviewed and Released by: Phyllis Shiller, Laboratory Director

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

May 16, 2023

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

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/01/23	8:30
Location Code:	AES-INC	Received by:	SW	05/02/23	17:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:	0703				

Laboratory Data

SDG ID: GCN95988
Phoenix ID: CN95990

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 70 - #111

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.0	1.0	mg/Kg	1	05/03/23	CPP	SW6010D
Aluminum	5680	53	mg/Kg	10	05/03/23	CPP	SW6010D
Arsenic	3.77	0.71	mg/Kg	1	05/03/23	CPP	SW6010D
Barium	72.8	0.36	mg/Kg	1	05/03/23	CPP	SW6010D
Beryllium	< 0.28	0.28	mg/Kg	1	05/03/23	CPP	SW6010D
Calcium	8280	5.3	mg/Kg	1	05/03/23	CPP	SW6010D
Cadmium	0.76	0.36	mg/Kg	1	05/03/23	CPP	SW6010D
Cobalt	5.22	0.36	mg/Kg	1	05/03/23	CPP	SW6010D
Chromium	22.3	0.36	mg/Kg	1	05/03/23	CPP	SW6010D
Copper	38.1	0.7	mg/kg	1	05/03/23	CPP	SW6010D
Iron	18600	53	mg/Kg	10	05/03/23	CPP	SW6010D
Mercury	0.23	0.03	mg/Kg	2	05/03/23	PM	SW7471B
Potassium	881	53	mg/Kg	10	05/03/23	CPP	SW6010D
Magnesium	3470	5.3	mg/Kg	1	05/03/23	CPP	SW6010D
Manganese	227	3.6	mg/Kg	10	05/03/23	CPP	SW6010D
Sodium	151	5.3	mg/Kg	1	05/03/23	CPP	SW6010D
Nickel	18.2	0.36	mg/Kg	1	05/03/23	CPP	SW6010D
Lead	104	0.36	mg/Kg	1	05/03/23	CPP	SW6010D
Antimony	< 3.6	3.6	mg/Kg	1	05/03/23	CPP	SW6010D
Selenium	< 1.4	1.4	mg/Kg	1	05/03/23	CPP	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Barium	0.44	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	05/03/23	PM	SW846 1311/7470
TCLP Lead	0.53	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010D

Ver 1

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 70 - #111

Phoenix I.D.: CN95990

Parameter	Result		RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Thallium	< 3.2		3.2	mg/Kg	1	05/03/23	CPP	SW6010D	
TCLP Metals Digestion	Completed					05/03/23	ZT/W/ZT	SW3010A	
Vanadium	24.4		0.36	mg/Kg	1	05/03/23	CPP	SW6010D	
Zinc	113		0.7	mg/Kg	1	05/03/23	CPP	SW6010D	
Percent Solid	90			%		05/02/23	CV	SW846-%Solid	
Corrosivity	Negative			Pos/Neg	1	05/02/23	PK	SW846-Corr	1
Flash Point	>200		200	Degree F	1	05/08/23	G	SW1010B	
Ignitability	Passed		140	degree F	1	05/08/23	G	SW846-Ignit	1
pH at 25C - Soil	7.57		1.00	pH Units	1	05/02/23 22:57	PK	SW846 9045D	1
Reactivity Cyanide	< 5		5	mg/Kg	1	05/04/23	DK/GD	SW846 7.3.3.1/90	1
Reactivity Sulfide	< 20		20	mg/Kg	1	05/05/23	DK/GD	SW846 CH7	1
Reactivity	Negative			Pos/Neg	1	05/05/23	DK/GD	SW846-React	1
Total Cyanide (SW9010C Distill.)	< 0.56		0.56	mg/Kg	1	05/06/23	CL/GD	SW9012B	
Mercury Digestion	Completed					05/03/23	W/W	SW7471B	
Extraction of NY ETPH	Completed					05/03/23	MO/M	SW3546	
Soil Extraction for PCB	Completed					05/03/23	B/K/Y/MO	SW3546	
Soil Extraction for Pesticides	Completed					05/03/23	B/K/Y/MO	SW3546	
Soil Extraction for SVOA	Completed					05/02/23	B/M	SW3546	
TCLP Digestion Mercury	Completed					05/03/23	W/ZT/AL	SW7470A	
TCLP Herbicides Extraction	Completed					05/03/23	CV/KW	SW8150 MOD	
TCLP Extraction for Metals	Completed					05/02/23	ZT	SW1311	
TCLP Extraction for Organics	Completed					05/02/23	ZT	SW1311	
TCLP Pesticides Extraction	Completed					05/03/23	S/S	SW3510C	
TCLP Semi-Volatile Extraction	Completed					05/04/23	S/S	SW3510C	
TCLP Extraction Volatiles	Completed					05/02/23	CV	SW1311	
Total Metals Digest	Completed					05/02/23	L/AG	SW3050B	
Gasoline Range Hydrocarbons (C6-C10)									
GRO (C6-C10)	ND		6.0	mg/Kg	50	05/03/23	V	SW8015D GRO	
QA/QC Surrogates									
% 2,5-Dibromotoluene (FID)	81			%	50	05/03/23	V	70 - 130 %	
Polychlorinated Biphenyls									
PCB-1016	ND		73	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1221	ND		73	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1232	ND		73	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1242	ND		73	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1248	*	*	73	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1254	520	*	73	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1260	*	*	73	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1262	ND		73	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1268	ND		73	ug/Kg	2	05/05/23	SC	SW8082A	
QA/QC Surrogates									
% DCBP	76			%	2	05/05/23	SC	30 - 150 %	
% DCBP (Confirmation)	67			%	2	05/05/23	SC	30 - 150 %	
% TCMX	69			%	2	05/05/23	SC	30 - 150 %	
% TCMX (Confirmation)	68			%	2	05/05/23	SC	30 - 150 %	

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 70 - #111

Phoenix I.D.: CN95990

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Pesticides - Soil								
4,4' -DDD	77	2.2	ug/Kg	2	05/04/23	AW	SW8081B	
4,4' -DDE	11	2.2	ug/Kg	2	05/04/23	AW	SW8081B	
4,4' -DDT	11	2.2	ug/Kg	2	05/04/23	AW	SW8081B	
a-BHC	ND	7.3	ug/Kg	2	05/04/23	AW	SW8081B	
a-Chlordane	12	3.6	ug/Kg	2	05/04/23	AW	SW8081B	
Aldrin	ND	3.6	ug/Kg	2	05/04/23	AW	SW8081B	
b-BHC	ND	7.3	ug/Kg	2	05/04/23	AW	SW8081B	
Chlordane	88	36	ug/Kg	2	05/04/23	AW	SW8081B	
d-BHC	ND	7.3	ug/Kg	2	05/04/23	AW	SW8081B	
Dieldrin	7.8	3.6	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan I	ND	7.3	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan II	ND	7.3	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan sulfate	ND	7.3	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin	ND	7.3	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin aldehyde	ND	7.3	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin ketone	ND	7.3	ug/Kg	2	05/04/23	AW	SW8081B	
g-BHC	ND	2.0	ug/Kg	2	05/04/23	AW	SW8081B	
g-Chlordane	20	3.6	ug/Kg	2	05/04/23	AW	SW8081B	
Heptachlor	ND	7.3	ug/Kg	2	05/04/23	AW	SW8081B	
Heptachlor epoxide	ND	7.3	ug/Kg	2	05/04/23	AW	SW8081B	
Methoxychlor	ND	36	ug/Kg	2	05/04/23	AW	SW8081B	
Toxaphene	ND	150	ug/Kg	2	05/04/23	AW	SW8081B	
QA/QC Surrogates								
% DCBP	71		%	2	05/04/23	AW	30 - 150 %	
% DCBP (Confirmation)	60		%	2	05/04/23	AW	30 - 150 %	
% TCMX	65		%	2	05/04/23	AW	30 - 150 %	
% TCMX (Confirmation)	71		%	2	05/04/23	AW	30 - 150 %	
TCLP Herbicides								
2,4,5-TP (Silvex)	ND	50	ug/L	10	05/05/23	PS	SW846 1311/8151	
2,4-D	ND	100	ug/L	10	05/05/23	PS	SW846 1311/8151	
QA/QC Surrogates								
% DCAA	67		%	10	05/05/23	PS	30 - 150 %	
% DCAA (Confirmation)	65		%	10	05/05/23	PS	30 - 150 %	
TCLP Pesticides								
4,4' -DDD	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
4,4' -DDE	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
4,4' -DDT	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
a-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Alachlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	1
Aldrin	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
b-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Chlordane	ND	5.0	ug/L	10	05/04/23	AW	SW8081B	
d-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Dieldrin	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
Endosulfan I	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Endosulfan II	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Endosulfan Sulfate	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
Endrin	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Toxaphene	ND	20	ug/L	10	05/04/23	AW	SW8081B
QA/QC Surrogates							
%DCBP (Surrogate Rec)	88		%	10	05/04/23	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	80		%	10	05/04/23	AW	30 - 150 %
%TCMX (Surrogate Rec)	78		%	10	05/04/23	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	75		%	10	05/04/23	AW	30 - 150 %
TPH DRO (C10-C28)							
Diesel Range Organics (C10-C28)	ND	270	mg/Kg	5	05/05/23	JRB	SW-846 8015
QA/QC Surrogates							
% COD (surr)	74		%	5	05/05/23	JRB	50 - 150 %
% Terphenyl (surr)	75		%	5	05/05/23	JRB	50 - 150 %
Volatiles (TCL)							
1,1,1-Trichloroethane	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
1,1,2,2-Tetrachloroethane	ND	300	ug/kg	50	05/03/23	HM	SW8260C
1,1,2-Trichloroethane	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
1,1-Dichloroethane	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
1,1-Dichloroethene	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
1,2,3-Trichlorobenzene	ND	300	ug/kg	50	05/03/23	HM	SW8260C
1,2,4-Trichlorobenzene	ND	300	ug/kg	50	05/03/23	HM	SW8260C
1,2-Dibromo-3-chloropropane	ND	300	ug/kg	50	05/03/23	HM	SW8260C
1,2-Dibromoethane	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichlorobenzene	ND	300	ug/kg	50	05/03/23	HM	SW8260C
1,2-Dichloroethane	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichloropropane	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
1,3-Dichlorobenzene	ND	300	ug/kg	50	05/03/23	HM	SW8260C
1,4-Dichlorobenzene	ND	300	ug/kg	50	05/03/23	HM	SW8260C
2-Hexanone	ND	25	ug/kg	1	05/03/23	HM	SW8260C
4-Methyl-2-pentanone	ND	25	ug/kg	1	05/03/23	HM	SW8260C
Acetone	ND	50	ug/kg	1	05/03/23	HM	SW8260C
Benzene	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Bromochloromethane	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Bromodichloromethane	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Bromoform	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Bromomethane	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Carbon Disulfide	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Carbon tetrachloride	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Chlorobenzene	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Chloroethane	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Chloroform	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Chloromethane	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
cis-1,2-Dichloroethene	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
cis-1,3-Dichloropropene	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Cyclohexane	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Dibromochloromethane	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Dichlorodifluoromethane	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Ethylbenzene	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Isopropylbenzene	ND	300	ug/kg	50	05/03/23	HM	SW8260C
m&p-Xylene	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Methyl ethyl ketone	ND	30	ug/kg	1	05/03/23	HM	SW8260C
Methyl t-butyl ether (MTBE)	ND	10	ug/kg	1	05/03/23	HM	SW8260C
Methylacetate	ND	4.0	ug/kg	1	05/03/23	HM	SW8260C
Methylcyclohexane	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Methylene chloride	ND	25	ug/kg	1	05/03/23	HM	SW8260C
o-Xylene	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Styrene	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Tetrachloroethene	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Toluene	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Total Xylenes	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
trans-1,2-Dichloroethene	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
trans-1,3-Dichloropropene	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Trichloroethene	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Trichlorofluoromethane	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Trichlorotrifluoroethane	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Vinyl chloride	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	1	05/03/23	HM	70 - 130 %
% Bromofluorobenzene	76		%	1	05/03/23	HM	70 - 130 %
% Dibromofluoromethane	107		%	1	05/03/23	HM	70 - 130 %
% Toluene-d8	87		%	1	05/03/23	HM	70 - 130 %
% 1,2-dichlorobenzene-d4 (50x)	100		%	50	05/03/23	HM	70 - 130 %
% Bromofluorobenzene (50x)	93		%	50	05/03/23	HM	70 - 130 %
% Dibromofluoromethane (50x)	95		%	50	05/03/23	HM	70 - 130 %
% Toluene-d8 (50x)	93		%	50	05/03/23	HM	70 - 130 %
1,4-dioxane							
1,4-dioxane	ND	75	ug/kg	1	05/03/23	HM	SW8260C
TCLP Volatiles							
1,1-Dichloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4 (10x)	100		%	10	05/03/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	96		%	10	05/03/23	HM	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
% Dibromofluoromethane (10x)	99		%	10	05/03/23	HM	70 - 130 %	
% Toluene-d8 (10x)	97		%	10	05/03/23	HM	70 - 130 %	
Volatile Library Search	Completed				05/04/23	HM		

Semivolatiles

1,1-Biphenyl	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
2,2'-Oxybis(1-Chloropropane)	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	1
2,3,4,6-tetrachlorophenol	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dichlorophenol	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dimethylphenol	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dinitrophenol	ND	590	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dinitrotoluene	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
2,6-Dinitrotoluene	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Chloronaphthalene	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Chlorophenol	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Methylnaphthalene	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Nitroaniline	ND	590	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Nitrophenol	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	1	05/03/23	KCA	SW8270D	1
3,3'-Dichlorobenzidine	ND	440	ug/Kg	1	05/03/23	KCA	SW8270D	
3-Nitroaniline	ND	590	ug/Kg	1	05/03/23	KCA	SW8270D	
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Bromophenyl phenyl ether	ND	370	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chloroaniline	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Nitroaniline	ND	590	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Nitrophenol	ND	1100	ug/Kg	1	05/03/23	KCA	SW8270D	
Acenaphthene	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
Acenaphthylene	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
Acetophenone	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
Anthracene	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
Atrazine	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
Benz(a)anthracene	450	260	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzaldehyde	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(a)pyrene	520	260	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(b)fluoranthene	630	260	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(ghi)perylene	300	260	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(k)fluoranthene	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzyl butyl phthalate	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-chloroethyl)ether	ND	370	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-ethylhexyl)phthalate	ND	360	ug/Kg	1	05/03/23	KCA	SW8270D	
Caprolactam	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D	
Carbazole	ND	370	ug/Kg	1	05/03/23	KCA	SW8270D	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Chrysene	480	260	ug/Kg	1	05/03/23	KCA	SW8270D
Dibenz(a,h)anthracene	ND	180	ug/Kg	1	05/03/23	KCA	SW8270D
Dibenzofuran	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D
Diethyl phthalate	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D
Dimethylphthalate	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D
Di-n-butylphthalate	ND	730	ug/Kg	1	05/03/23	KCA	SW8270D
Di-n-octylphthalate	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D
Fluoranthene	810	260	ug/Kg	1	05/03/23	KCA	SW8270D
Fluorene	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorobenzene	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorobutadiene	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachloroethane	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	320	260	ug/Kg	1	05/03/23	KCA	SW8270D
Isophorone	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D
Naphthalene	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D
Nitrobenzene	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodimethylamine	ND	370	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	180	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodiphenylamine	ND	370	ug/Kg	1	05/03/23	KCA	SW8270D
Pentachlorophenol	ND	370	ug/Kg	1	05/03/23	KCA	SW8270D
Phenanthrene	460	260	ug/Kg	1	05/03/23	KCA	SW8270D
Phenol	ND	260	ug/Kg	1	05/03/23	KCA	SW8270D
Pyrene	760	260	ug/Kg	1	05/03/23	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	85		%	1	05/03/23	KCA	30 - 130 %
% 2-Fluorobiphenyl	65		%	1	05/03/23	KCA	30 - 130 %
% 2-Fluorophenol	67		%	1	05/03/23	KCA	30 - 130 %
% Nitrobenzene-d5	77		%	1	05/03/23	KCA	30 - 130 %
% Phenol-d5	79		%	1	05/03/23	KCA	30 - 130 %
% Terphenyl-d14	61		%	1	05/03/23	KCA	30 - 130 %

TCLP Acid/Base-Neutral

1,4-Dichlorobenzene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	90		%	1	05/05/23	KCA	15 - 110 %
% 2-Fluorobiphenyl	74		%	1	05/05/23	KCA	30 - 130 %
% 2-Fluorophenol	65		%	1	05/05/23	KCA	15 - 110 %
% Nitrobenzene-d5	73		%	1	05/05/23	KCA	30 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Phenol-d5	64		%	1	05/05/23	KCA	15 - 110 %
% Terphenyl-d14	90		%	1	05/05/23	KCA	30 - 130 %
Semivolatile Library Search	Completed				05/09/23	MR	

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

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

Comments:

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

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

Corrosivity is based solely on the pH analysis performed above.

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

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

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

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

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

Volatile Comment:
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.

PCB Comment:
* For PCBs, as per section 11.9.3 of SW846 method 8082, when multiple Aroclor's of PCBs are present and the aroclor is no longer recognizable, quantitation may be performed by comparing the total area of the PCB pattern to that of the aroclor it mostly resembles. The PCB pattern did not resemble any of the standards, but most closely resembles a mixture of the Aroclors 1248 and 1254 and 1260. The PCB is quantitated as a timed group and is reported as the Aroclor 1254.

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
May 16, 2023
Reviewed and Released by: Phyllis Shiller, Laboratory Director

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

May 16, 2023

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

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/01/23	8:40
Location Code:	AES-INC	Received by:	SW	05/02/23	17:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:	0703				

Laboratory Data

SDG ID: GCN95988
Phoenix ID: CN95991

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 70 - #112

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.0	1.0	mg/Kg	1	05/03/23	CPP	SW6010D
Aluminum	4850	59	mg/Kg	10	05/03/23	CPP	SW6010D
Arsenic	2.74	0.79	mg/Kg	1	05/03/23	CPP	SW6010D
Barium	79.6	0.40	mg/Kg	1	05/03/23	CPP	SW6010D
Beryllium	< 0.32	0.32	mg/Kg	1	05/03/23	CPP	SW6010D
Calcium	4970	5.9	mg/Kg	1	05/03/23	CPP	SW6010D
Cadmium	0.57	0.40	mg/Kg	1	05/03/23	CPP	SW6010D
Cobalt	3.96	0.40	mg/Kg	1	05/03/23	CPP	SW6010D
Chromium	12.2	0.40	mg/Kg	1	05/03/23	CPP	SW6010D
Copper	29.7	0.8	mg/kg	1	05/03/23	CPP	SW6010D
Iron	10100	5.9	mg/Kg	1	05/03/23	CPP	SW6010D
Mercury	0.23	0.03	mg/Kg	2	05/03/23	PM	SW7471B
Potassium	609	5.9	mg/Kg	1	05/03/23	CPP	SW6010D
Magnesium	2240	5.9	mg/Kg	1	05/03/23	CPP	SW6010D
Manganese	133	0.40	mg/Kg	1	05/03/23	CPP	SW6010D
Sodium	162	5.9	mg/Kg	1	05/03/23	CPP	SW6010D
Nickel	13.3	0.40	mg/Kg	1	05/03/23	CPP	SW6010D
Lead	115	0.40	mg/Kg	1	05/03/23	CPP	SW6010D
Antimony	< 4.0	4.0	mg/Kg	1	05/03/23	CPP	SW6010D
Selenium	< 1.6	1.6	mg/Kg	1	05/03/23	CPP	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Barium	0.43	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	05/03/23	PM	SW846 1311/7470
TCLP Lead	0.13	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010D

Ver 1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Thallium	< 3.6	3.6	mg/Kg	1	05/03/23	CPP	SW6010D	
TCLP Metals Digestion	Completed				05/03/23	ZT/W/ZT	SW3010A	
Vanadium	20.5	0.40	mg/Kg	1	05/03/23	CPP	SW6010D	
Zinc	99.6	0.8	mg/Kg	1	05/03/23	CPP	SW6010D	
Percent Solid	83		%		05/02/23	CV	SW846-%Solid	
Corrosivity	Negative		Pos/Neg	1	05/02/23	PK	SW846-Corr	1
Flash Point	>200	200	Degree F	1	05/08/23	G	SW1010B	
Ignitability	Passed	140	degree F	1	05/08/23	G	SW846-Ignit	1
pH at 25C - Soil	7.39	1.00	pH Units	1	05/02/23 22:57	PK	SW846 9045D	1
Reactivity Cyanide	< 6	6	mg/Kg	1	05/04/23	DK/GD	SW846 7.3.3.1/90	1
Reactivity Sulfide	< 20	20	mg/Kg	1	05/05/23	DK/GD	SW846 CH7	1
Reactivity	Negative		Pos/Neg	1	05/05/23	DK/GD	SW846-React	1
Total Cyanide (SW9010C Distill.)	< 0.60	0.60	mg/Kg	1	05/04/23	CL/GD	SW9012B	
Mercury Digestion	Completed				05/03/23	W/W	SW7471B	
Extraction of NY ETPH	Completed				05/03/23	MO/M	SW3546	
Soil Extraction for PCB	Completed				05/03/23	B/K/Y/MO	SW3546	
Soil Extraction for Pesticides	Completed				05/03/23	B/K/Y/MO	SW3546	
Soil Extraction for SVOA	Completed				05/02/23	B/M	SW3546	
TCLP Digestion Mercury	Completed				05/03/23	W/ZT/AL	SW7470A	
TCLP Herbicides Extraction	Completed				05/03/23	CV/KW	SW8150 MOD	
TCLP Extraction for Metals	Completed				05/02/23	ZT	SW1311	
TCLP Extraction for Organics	Completed				05/02/23	ZT	SW1311	
TCLP Pesticides Extraction	Completed				05/03/23	S/S	SW3510C	
TCLP Semi-Volatile Extraction	Completed				05/04/23	S/S	SW3510C	
TCLP Extraction Volatiles	Completed				05/02/23	CV	SW1311	
Total Metals Digest	Completed				05/02/23	L/AG	SW3050B	
Gasoline Range Hydrocarbons (C6-C10)								
GRO (C6-C10)	ND	6.6	mg/Kg	50	05/03/23	V	SW8015D GRO	
QA/QC Surrogates								
% 2,5-Dibromotoluene (FID)	88		%	50	05/03/23	V	70 - 130 %	
Polychlorinated Biphenyls								
PCB-1016	ND	78	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1221	ND	78	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1232	ND	78	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1242	ND	78	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1248	ND	78	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1254	110	78	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1260	ND	78	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1262	ND	78	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1268	ND	78	ug/Kg	2	05/04/23	SC	SW8082A	
QA/QC Surrogates								
% DCBP	78		%	2	05/04/23	SC	30 - 150 %	
% DCBP (Confirmation)	71		%	2	05/04/23	SC	30 - 150 %	
% TCMX	72		%	2	05/04/23	SC	30 - 150 %	
% TCMX (Confirmation)	70		%	2	05/04/23	SC	30 - 150 %	

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 70 - #112

Phoenix I.D.: CN95991

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Pesticides - Soil								
4,4' -DDD	28	2.3	ug/Kg	2	05/04/23	AW	SW8081B	
4,4' -DDE	6.7	2.3	ug/Kg	2	05/04/23	AW	SW8081B	
4,4' -DDT	6.5	2.3	ug/Kg	2	05/04/23	AW	SW8081B	
a-BHC	ND	7.8	ug/Kg	2	05/04/23	AW	SW8081B	
a-Chlordane	14	3.9	ug/Kg	2	05/04/23	AW	SW8081B	
Aldrin	ND	3.9	ug/Kg	2	05/04/23	AW	SW8081B	
b-BHC	ND	7.8	ug/Kg	2	05/04/23	AW	SW8081B	
Chlordane	75	39	ug/Kg	2	05/04/23	AW	SW8081B	
d-BHC	ND	7.8	ug/Kg	2	05/04/23	AW	SW8081B	
Dieldrin	4.4	3.9	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan I	ND	7.8	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan II	ND	7.8	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan sulfate	ND	7.8	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin	ND	7.8	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin aldehyde	ND	7.8	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin ketone	ND	7.8	ug/Kg	2	05/04/23	AW	SW8081B	
g-BHC	ND	1.6	ug/Kg	2	05/04/23	AW	SW8081B	
g-Chlordane	11	3.9	ug/Kg	2	05/04/23	AW	SW8081B	
Heptachlor	ND	7.8	ug/Kg	2	05/04/23	AW	SW8081B	
Heptachlor epoxide	ND	7.8	ug/Kg	2	05/04/23	AW	SW8081B	
Methoxychlor	ND	39	ug/Kg	2	05/04/23	AW	SW8081B	
Toxaphene	ND	160	ug/Kg	2	05/04/23	AW	SW8081B	
QA/QC Surrogates								
% DCBP	76		%	2	05/04/23	AW	30 - 150 %	
% DCBP (Confirmation)	82		%	2	05/04/23	AW	30 - 150 %	
% TCMX	73		%	2	05/04/23	AW	30 - 150 %	
% TCMX (Confirmation)	86		%	2	05/04/23	AW	30 - 150 %	
TCLP Herbicides								
2,4,5-TP (Silvex)	ND	50	ug/L	10	05/05/23	PS	SW846 1311/8151	
2,4-D	ND	100	ug/L	10	05/05/23	PS	SW846 1311/8151	
QA/QC Surrogates								
% DCAA	70		%	10	05/05/23	PS	30 - 150 %	
% DCAA (Confirmation)	70		%	10	05/05/23	PS	30 - 150 %	
TCLP Pesticides								
4,4' -DDD	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
4,4' -DDE	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
4,4' -DDT	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
a-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Alachlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	1
Aldrin	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
b-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Chlordane	ND	5.0	ug/L	10	05/04/23	AW	SW8081B	
d-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Dieldrin	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
Endosulfan I	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Endosulfan II	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Endosulfan Sulfate	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
Endrin	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Toxaphene	ND	20	ug/L	10	05/04/23	AW	SW8081B
QA/QC Surrogates							
%DCBP (Surrogate Rec)	92		%	10	05/04/23	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	88		%	10	05/04/23	AW	30 - 150 %
%TCMX (Surrogate Rec)	79		%	10	05/04/23	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	75		%	10	05/04/23	AW	30 - 150 %
TPH DRO (C10-C28)							
Diesel Range Organics (C10-C28)	ND	300	mg/Kg	5	05/05/23	JRB	SW-846 8015
QA/QC Surrogates							
% COD (surr)	100		%	5	05/05/23	JRB	50 - 150 %
% Terphenyl (surr)	86		%	5	05/05/23	JRB	50 - 150 %
Volatiles (TCL)							
1,1,1-Trichloroethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
1,1,2,2-Tetrachloroethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
1,1,2-Trichloroethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
1,1-Dichloroethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
1,1-Dichloroethene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
1,2,3-Trichlorobenzene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
1,2,4-Trichlorobenzene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dibromoethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichlorobenzene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichloroethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichloropropane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
1,3-Dichlorobenzene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
1,4-Dichlorobenzene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
2-Hexanone	ND	31	ug/kg	1	05/03/23	HM	SW8260C
4-Methyl-2-pentanone	ND	31	ug/kg	1	05/03/23	HM	SW8260C
Acetone	ND	50	ug/kg	1	05/03/23	HM	SW8260C
Benzene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Bromochloromethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Bromodichloromethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Bromoform	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Bromomethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Carbon Disulfide	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Carbon tetrachloride	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Chlorobenzene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Chloroethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Chloroform	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Chloromethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
cis-1,2-Dichloroethene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
cis-1,3-Dichloropropene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Cyclohexane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Dibromochloromethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Dichlorodifluoromethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Ethylbenzene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Isopropylbenzene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
m&p-Xylene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Methyl ethyl ketone	ND	38	ug/kg	1	05/03/23	HM	SW8260C
Methyl t-butyl ether (MTBE)	ND	13	ug/kg	1	05/03/23	HM	SW8260C
Methylacetate	ND	5.0	ug/kg	1	05/03/23	HM	SW8260C
Methylcyclohexane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Methylene chloride	ND	31	ug/kg	1	05/03/23	HM	SW8260C
o-Xylene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Styrene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Tetrachloroethene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Toluene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Total Xylenes	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
trans-1,2-Dichloroethene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
trans-1,3-Dichloropropene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Trichloroethene	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Trichlorofluoromethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Trichlorotrifluoroethane	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Vinyl chloride	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	1	05/03/23	HM	70 - 130 %
% Bromofluorobenzene	85		%	1	05/03/23	HM	70 - 130 %
% Dibromofluoromethane	100		%	1	05/03/23	HM	70 - 130 %
% Toluene-d8	93		%	1	05/03/23	HM	70 - 130 %
1,4-dioxane							
1,4-dioxane	ND	94	ug/kg	1	05/03/23	HM	SW8260C
TCLP Volatiles							
1,1-Dichloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4 (10x)	100		%	10	05/03/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	96		%	10	05/03/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	99		%	10	05/03/23	HM	70 - 130 %
% Toluene-d8 (10x)	97		%	10	05/03/23	HM	70 - 130 %
Volatile Library Search	Completed				05/03/23	HM	

Ver 1

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 70 - #112

Phoenix I.D.: CN95991

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Semivolatiles								
1,1-Biphenyl	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
1,2,4,5-Tetrachlorobenzene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
2,2'-Oxybis(1-Chloropropane)	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	1
2,3,4,6-tetrachlorophenol	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4,5-Trichlorophenol	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4,6-Trichlorophenol	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dichlorophenol	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dimethylphenol	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dinitrophenol	ND	630	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dinitrotoluene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
2,6-Dinitrotoluene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Chloronaphthalene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Chlorophenol	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Methylnaphthalene	280	280	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Methylphenol (o-cresol)	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Nitroaniline	ND	630	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Nitrophenol	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
3&4-Methylphenol (m&p-cresol)	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D	1
3,3'-Dichlorobenzidine	ND	470	ug/Kg	1	05/03/23	KCA	SW8270D	
3-Nitroaniline	ND	630	ug/Kg	1	05/03/23	KCA	SW8270D	
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Bromophenyl phenyl ether	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chloro-3-methylphenol	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chloroaniline	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chlorophenyl phenyl ether	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Nitroaniline	ND	630	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Nitrophenol	ND	1100	ug/Kg	1	05/03/23	KCA	SW8270D	
Acenaphthene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Acenaphthylene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Acetophenone	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Anthracene	480	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Atrazine	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Benz(a)anthracene	1200	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzaldehyde	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(a)pyrene	1200	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(b)fluoranthene	1500	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(ghi)perylene	620	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(k)fluoranthene	570	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzyl butyl phthalate	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-chloroethoxy)methane	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-chloroethyl)ether	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-ethylhexyl)phthalate	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Caprolactam	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Carbazole	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D	
Chrysene	1200	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Dibenz(a,h)anthracene	ND	200	ug/Kg	1	05/03/23	KCA	SW8270D	
Dibenzofuran	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Diethyl phthalate	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dimethylphthalate	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D
Di-n-butylphthalate	ND	790	ug/Kg	1	05/03/23	KCA	SW8270D
Di-n-octylphthalate	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D
Fluoranthene	2400	280	ug/Kg	1	05/03/23	KCA	SW8270D
Fluorene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorobenzene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorobutadiene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorocyclopentadiene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachloroethane	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	670	280	ug/Kg	1	05/03/23	KCA	SW8270D
Isophorone	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D
Naphthalene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D
Nitrobenzene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodimethylamine	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodiphenylamine	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D
Pentachlorophenol	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D
Phenanthrene	1900	280	ug/Kg	1	05/03/23	KCA	SW8270D
Phenol	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D
Pyrene	2000	280	ug/Kg	1	05/03/23	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	60		%	1	05/03/23	KCA	30 - 130 %
% 2-Fluorobiphenyl	69		%	1	05/03/23	KCA	30 - 130 %
% 2-Fluorophenol	72		%	1	05/03/23	KCA	30 - 130 %
% Nitrobenzene-d5	82		%	1	05/03/23	KCA	30 - 130 %
% Phenol-d5	86		%	1	05/03/23	KCA	30 - 130 %
% Terphenyl-d14	65		%	1	05/03/23	KCA	30 - 130 %
TCLP Acid/Base-Neutral							
1,4-Dichlorobenzene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	87		%	1	05/05/23	KCA	15 - 110 %
% 2-Fluorobiphenyl	74		%	1	05/05/23	KCA	30 - 130 %
% 2-Fluorophenol	63		%	1	05/05/23	KCA	15 - 110 %
% Nitrobenzene-d5	70		%	1	05/05/23	KCA	30 - 130 %
% Phenol-d5	61		%	1	05/05/23	KCA	15 - 110 %
% Terphenyl-d14	89		%	1	05/05/23	KCA	30 - 130 %
Semivolatile Library Search	Completed				05/09/23	MR	

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

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

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

Comments:

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

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

Corrosivity is based solely on the pH analysis performed above.

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

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

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

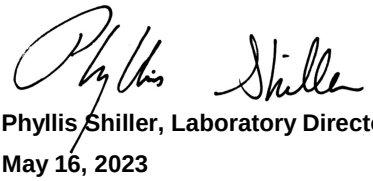
The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Cyanide. This method is no longer listed in the current version of SW-846.

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

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

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

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



Phyllis Shiller, Laboratory Director

May 16, 2023

Reviewed and Released by: Phyllis Shiller, Laboratory Director

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

May 16, 2023

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

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/01/23	8:37
Location Code:	AES-INC	Received by:	SW	05/02/23	17:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:	0703				

Laboratory Data

SDG ID: GCN95988
Phoenix ID: CN95992

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 71 - #113

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.0	1.0	mg/Kg	1	05/03/23	CPP	SW6010D
Aluminum	6170	60	mg/Kg	10	05/03/23	CPP	SW6010D
Arsenic	3.06	0.80	mg/Kg	1	05/03/23	CPP	SW6010D
Barium	93.8	0.40	mg/Kg	1	05/03/23	CPP	SW6010D
Beryllium	< 0.32	0.32	mg/Kg	1	05/03/23	CPP	SW6010D
Calcium	5480	6.0	mg/Kg	1	05/03/23	CPP	SW6010D
Cadmium	0.64	0.40	mg/Kg	1	05/03/23	CPP	SW6010D
Cobalt	4.28	0.40	mg/Kg	1	05/03/23	CPP	SW6010D
Chromium	13.5	0.40	mg/Kg	1	05/03/23	CPP	SW6010D
Copper	29.3	0.8	mg/kg	1	05/03/23	CPP	SW6010D
Iron	13400	60	mg/Kg	10	05/03/23	CPP	SW6010D
Mercury	0.26	0.03	mg/Kg	2	05/03/23	PM	SW7471B
Potassium	770	6.0	mg/Kg	1	05/03/23	CPP	SW6010D
Magnesium	2090	6.0	mg/Kg	1	05/03/23	CPP	SW6010D
Manganese	164	0.40	mg/Kg	1	05/03/23	CPP	SW6010D
Sodium	112	6.0	mg/Kg	1	05/03/23	CPP	SW6010D
Nickel	15.4	0.40	mg/Kg	1	05/03/23	CPP	SW6010D
Lead	111	0.40	mg/Kg	1	05/03/23	CPP	SW6010D
Antimony	< 4.0	4.0	mg/Kg	1	05/03/23	CPP	SW6010D
Selenium	< 1.6	1.6	mg/Kg	1	05/03/23	CPP	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Barium	0.66	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	05/03/23	AL1	SW846 1311/7470
TCLP Lead	0.15	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010D

Ver 1

Parameter	Result		RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Thallium	< 3.6		3.6	mg/Kg	1	05/03/23	CPP	SW6010D	
TCLP Metals Digestion	Completed					05/03/23	ZT/W/ZT	SW3010A	
Vanadium	22.7		0.40	mg/Kg	1	05/03/23	CPP	SW6010D	
Zinc	107		0.8	mg/Kg	1	05/03/23	CPP	SW6010D	
Percent Solid	87			%		05/02/23	CV	SW846-%Solid	
Corrosivity	Negative			Pos/Neg	1	05/02/23	PK	SW846-Corr	1
Flash Point	>200		200	Degree F	1	05/08/23	G	SW1010B	
Ignitability	Passed		140	degree F	1	05/08/23	G	SW846-Ignit	1
pH at 25C - Soil	8.42		1.00	pH Units	1	05/02/23 22:57	PK	SW846 9045D	1
Reactivity Cyanide	< 6		6	mg/Kg	1	05/05/23	D/E/G	SW846 7.3.3.1/90	1
Reactivity Sulfide	< 20		20	mg/Kg	1	05/05/23	DK/GD	SW846 CH7	1
Reactivity	Negative			Pos/Neg	1	05/05/23	DK/GD	SW846-React	1
Total Cyanide (SW9010C Distill.)	< 0.57		0.57	mg/Kg	1	05/04/23	CL/GD	SW9012B	
Mercury Digestion	Completed					05/03/23	W/W	SW7471B	
Extraction of NY ETPH	Completed					05/03/23	MO/M	SW3546	
Soil Extraction for PCB	Completed					05/03/23	B/K/Y/MO	SW3546	
Soil Extraction for Pesticides	Completed					05/03/23	B/K/Y/MO	SW3546	
Soil Extraction for SVOA	Completed					05/02/23	B/M	SW3546	
TCLP Digestion Mercury	Completed					05/03/23	W/ZT/AL	SW7470A	
TCLP Herbicides Extraction	Completed					05/03/23	CV/KW	SW8150 MOD	
TCLP Extraction for Metals	Completed					05/02/23	ZT	SW1311	
TCLP Extraction for Organics	Completed					05/02/23	ZT	SW1311	
TCLP Pesticides Extraction	Completed					05/03/23	S/S	SW3510C	
TCLP Semi-Volatile Extraction	Completed					05/04/23	S/S	SW3510C	
TCLP Extraction Volatiles	Completed					05/02/23	CV	SW1311	
Total Metals Digest	Completed					05/02/23	L/AG	SW3050B	
Gasoline Range Hydrocarbons (C6-C10)									
GRO (C6-C10)	ND		5.9	mg/Kg	50	05/03/23	V	SW8015D GRO	
QA/QC Surrogates									
% 2,5-Dibromotoluene (FID)	86			%	50	05/03/23	V	70 - 130 %	
Polychlorinated Biphenyls									
PCB-1016	ND		76	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1221	ND		76	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1232	ND		76	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1242	ND		76	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1248	*	*	76	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1254	530	*	76	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1260	*	*	76	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1262	ND		76	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1268	ND		76	ug/Kg	2	05/05/23	SC	SW8082A	
QA/QC Surrogates									
% DCBP	90			%	2	05/05/23	SC	30 - 150 %	
% DCBP (Confirmation)	82			%	2	05/05/23	SC	30 - 150 %	
% TCMX	77			%	2	05/05/23	SC	30 - 150 %	
% TCMX (Confirmation)	79			%	2	05/05/23	SC	30 - 150 %	

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 71 - #113

Phoenix I.D.: CN95992

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Pesticides - Soil								
4,4' -DDD	62	2.3	ug/Kg	2	05/04/23	AW	SW8081B	
4,4' -DDE	16	2.3	ug/Kg	2	05/04/23	AW	SW8081B	
4,4' -DDT	15	2.3	ug/Kg	2	05/04/23	AW	SW8081B	
a-BHC	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
a-Chlordane	8.6	3.8	ug/Kg	2	05/04/23	AW	SW8081B	
Aldrin	30	3.8	ug/Kg	2	05/04/23	AW	SW8081B	
b-BHC	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Chlordane	56	38	ug/Kg	2	05/04/23	AW	SW8081B	
d-BHC	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Dieldrin	33	3.8	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan I	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan II	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan sulfate	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin aldehyde	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin ketone	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
g-BHC	ND	1.5	ug/Kg	2	05/04/23	AW	SW8081B	
g-Chlordane	22	3.8	ug/Kg	2	05/04/23	AW	SW8081B	
Heptachlor	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Heptachlor epoxide	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Methoxychlor	ND	38	ug/Kg	2	05/04/23	AW	SW8081B	
Toxaphene	ND	150	ug/Kg	2	05/04/23	AW	SW8081B	
QA/QC Surrogates								
% DCBP	75		%	2	05/04/23	AW	30 - 150 %	
% DCBP (Confirmation)	62		%	2	05/04/23	AW	30 - 150 %	
% TCMX	71		%	2	05/04/23	AW	30 - 150 %	
% TCMX (Confirmation)	74		%	2	05/04/23	AW	30 - 150 %	
TCLP Herbicides								
2,4,5-TP (Silvex)	ND	50	ug/L	10	05/05/23	PS	SW846 1311/8151	
2,4-D	ND	100	ug/L	10	05/05/23	PS	SW846 1311/8151	
QA/QC Surrogates								
% DCAA	72		%	10	05/05/23	PS	30 - 150 %	
% DCAA (Confirmation)	71		%	10	05/05/23	PS	30 - 150 %	
TCLP Pesticides								
4,4' -DDD	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
4,4' -DDE	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
4,4' -DDT	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
a-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Alachlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	1
Aldrin	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
b-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Chlordane	ND	5.0	ug/L	10	05/04/23	AW	SW8081B	
d-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Dieldrin	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
Endosulfan I	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Endosulfan II	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 71 - #113

Phoenix I.D.: CN95992

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Endosulfan Sulfate	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
Endrin	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Toxaphene	ND	20	ug/L	10	05/04/23	AW	SW8081B
QA/QC Surrogates							
%DCBP (Surrogate Rec)	86		%	10	05/04/23	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	80		%	10	05/04/23	AW	30 - 150 %
%TCMX (Surrogate Rec)	73		%	10	05/04/23	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	70		%	10	05/04/23	AW	30 - 150 %
TPH DRO (C10-C28)							
Diesel Range Organics (C10-C28)	ND	280	mg/Kg	5	05/05/23	JRB	SW-846 8015
QA/QC Surrogates							
% COD (surr)	137		%	5	05/05/23	JRB	50 - 150 %
% Terphenyl (surr)	93		%	5	05/05/23	JRB	50 - 150 %
Volatiles (TCL)							
1,1,1-Trichloroethane	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
1,1,2-Trichloroethane	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
1,1-Dichloroethane	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
1,1-Dichloroethene	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
1,2,3-Trichlorobenzene	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
1,2,4-Trichlorobenzene	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dibromoethane	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichlorobenzene	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichloroethane	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichloropropane	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
1,3-Dichlorobenzene	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
1,4-Dichlorobenzene	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
2-Hexanone	ND	26	ug/kg	1	05/03/23	HM	SW8260C
4-Methyl-2-pentanone	ND	26	ug/kg	1	05/03/23	HM	SW8260C
Acetone	ND	50	ug/kg	1	05/03/23	HM	SW8260C
Benzene	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Bromochloromethane	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Bromodichloromethane	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Bromoform	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Bromomethane	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Carbon Disulfide	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Carbon tetrachloride	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Chlorobenzene	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Chloroethane	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Chloroform	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Chloromethane	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
cis-1,2-Dichloroethene	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
cis-1,3-Dichloropropene	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Cyclohexane	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Dibromochloromethane	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Dichlorodifluoromethane	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Ethylbenzene	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Isopropylbenzene	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
m&p-Xylene	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Methyl ethyl ketone	ND	31	ug/kg	1	05/03/23	HM	SW8260C
Methyl t-butyl ether (MTBE)	ND	10	ug/kg	1	05/03/23	HM	SW8260C
Methylacetate	ND	4.1	ug/kg	1	05/03/23	HM	SW8260C
Methylcyclohexane	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Methylene chloride	ND	26	ug/kg	1	05/03/23	HM	SW8260C
o-Xylene	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Styrene	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Tetrachloroethene	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Toluene	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Total Xylenes	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
trans-1,2-Dichloroethene	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
trans-1,3-Dichloropropene	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Trichloroethene	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Trichlorofluoromethane	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Trichlorotrifluoroethane	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Vinyl chloride	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	1	05/03/23	HM	70 - 130 %
% Bromofluorobenzene	86		%	1	05/03/23	HM	70 - 130 %
% Dibromofluoromethane	99		%	1	05/03/23	HM	70 - 130 %
% Toluene-d8	93		%	1	05/03/23	HM	70 - 130 %
1,4-dioxane							
1,4-dioxane	ND	77	ug/kg	1	05/03/23	HM	SW8260C
TCLP Volatiles							
1,1-Dichloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4 (10x)	99		%	10	05/03/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	96		%	10	05/03/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	100		%	10	05/03/23	HM	70 - 130 %
% Toluene-d8 (10x)	98		%	10	05/03/23	HM	70 - 130 %
Volatile Library Search	Completed				05/03/23	HM	

Project ID: GATEWAY ESTATES-HD161E
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Phoenix I.D.: CN95992

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Semivolatiles								
1,1-Biphenyl	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,2'-Oxybis(1-Chloropropane)	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	1
2,3,4,6-tetrachlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4,5-Trichlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4,6-Trichlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dichlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dimethylphenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dinitrophenol	ND	610	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dinitrotoluene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,6-Dinitrotoluene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Chloronaphthalene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Chlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Methylnaphthalene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Methylphenol (o-cresol)	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Nitroaniline	ND	610	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Nitrophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
3&4-Methylphenol (m&p-cresol)	ND	380	ug/Kg	1	05/03/23	KCA	SW8270D	1
3,3'-Dichlorobenzidine	ND	460	ug/Kg	1	05/03/23	KCA	SW8270D	
3-Nitroaniline	ND	610	ug/Kg	1	05/03/23	KCA	SW8270D	
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Bromophenyl phenyl ether	ND	380	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chloro-3-methylphenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chloroaniline	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Nitroaniline	ND	610	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Nitrophenol	ND	1100	ug/Kg	1	05/03/23	KCA	SW8270D	
Acenaphthene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Acenaphthylene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Acetophenone	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Anthracene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Atrazine	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benz(a)anthracene	550	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzaldehyde	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(a)pyrene	620	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(b)fluoranthene	710	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(ghi)perylene	340	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(k)fluoranthene	270	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzyl butyl phthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-chloroethyl)ether	ND	380	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-ethylhexyl)phthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Caprolactam	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Carbazole	ND	380	ug/Kg	1	05/03/23	KCA	SW8270D	
Chrysene	580	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Dibenz(a,h)anthracene	ND	190	ug/Kg	1	05/03/23	KCA	SW8270D	
Dibenzofuran	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Diethyl phthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dimethylphthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Di-n-butylphthalate	ND	760	ug/Kg	1	05/03/23	KCA	SW8270D
Di-n-octylphthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Fluoranthene	940	270	ug/Kg	1	05/03/23	KCA	SW8270D
Fluorene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorobenzene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorobutadiene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorocyclopentadiene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachloroethane	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	380	270	ug/Kg	1	05/03/23	KCA	SW8270D
Isophorone	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Naphthalene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Nitrobenzene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodimethylamine	ND	380	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	190	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodiphenylamine	ND	380	ug/Kg	1	05/03/23	KCA	SW8270D
Pentachlorophenol	ND	380	ug/Kg	1	05/03/23	KCA	SW8270D
Phenanthrene	500	270	ug/Kg	1	05/03/23	KCA	SW8270D
Phenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Pyrene	860	270	ug/Kg	1	05/03/23	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	60		%	1	05/03/23	KCA	30 - 130 %
% 2-Fluorobiphenyl	63		%	1	05/03/23	KCA	30 - 130 %
% 2-Fluorophenol	68		%	1	05/03/23	KCA	30 - 130 %
% Nitrobenzene-d5	74		%	1	05/03/23	KCA	30 - 130 %
% Phenol-d5	77		%	1	05/03/23	KCA	30 - 130 %
% Terphenyl-d14	59		%	1	05/03/23	KCA	30 - 130 %
TCLP Acid/Base-Neutral							
1,4-Dichlorobenzene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	101		%	1	05/05/23	KCA	15 - 110 %
% 2-Fluorobiphenyl	89		%	1	05/05/23	KCA	30 - 130 %
% 2-Fluorophenol	72		%	1	05/05/23	KCA	15 - 110 %
% Nitrobenzene-d5	87		%	1	05/05/23	KCA	30 - 130 %
% Phenol-d5	72		%	1	05/05/23	KCA	15 - 110 %
% Terphenyl-d14	106		%	1	05/05/23	KCA	30 - 130 %
Semivolatile Library Search	Completed				05/09/23	MR	

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

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

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

Comments:

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

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

Corrosivity is based solely on the pH analysis performed above.

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

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

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

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

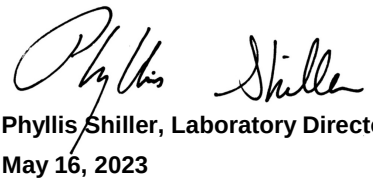
The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Sulfide. This method is no longer listed in the current version of SW-846.

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

PCB Comment:
* For PCBs, as per section 11.9.3 of SW846 method 8082, when multiple Aroclor's of PCBs are present and the aroclor is no longer recognizable, quantitation may be performed by comparing the total area of the PCB pattern to that of the aroclor it mostly resembles. The PCB pattern did not resemble any of the standards, but most closely resembles a mixture of the Aroclors 1248 and 1254 and 1260. The PCB is quantitated as a timed group and is reported as the Aroclor 1254.

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
May 16, 2023
Reviewed and Released by: Phyllis Shiller, Laboratory Director

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

May 16, 2023

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

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/01/23	8:42
Location Code:	AES-INC	Received by:	SW	05/02/23	17:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:	0703				

Laboratory Data

SDG ID: GCN95988
Phoenix ID: CN95993

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 71 - #114

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.0	1.0	mg/Kg	1	05/03/23	IE	SW6010D
Aluminum	7740	57	mg/Kg	10	05/03/23	CPP	SW6010D
Arsenic	6.23	0.77	mg/Kg	1	05/03/23	CPP	SW6010D
Barium	434	0.38	mg/Kg	1	05/03/23	CPP	SW6010D
Beryllium	0.91	0.31	mg/Kg	1	05/03/23	CPP	SW6010D
Calcium	6470	5.7	mg/Kg	1	05/03/23	CPP	SW6010D
Cadmium	1.79	0.38	mg/Kg	1	05/03/23	CPP	SW6010D
Cobalt	9.92	0.38	mg/Kg	1	05/03/23	CPP	SW6010D
Chromium	26.7	0.38	mg/Kg	1	05/03/23	CPP	SW6010D
Copper	245	7.7	mg/kg	10	05/03/23	CPP	SW6010D
Iron	27500	57	mg/Kg	10	05/03/23	CPP	SW6010D
Mercury	0.38	0.03	mg/Kg	2	05/03/23	PM	SW7471B
Potassium	633	5.7	mg/Kg	1	05/03/23	CPP	SW6010D
Magnesium	1490	5.7	mg/Kg	1	05/03/23	CPP	SW6010D
Manganese	264	3.8	mg/Kg	10	05/03/23	CPP	SW6010D
Sodium	216	5.7	mg/Kg	1	05/03/23	CPP	SW6010D
Nickel	72.8	0.38	mg/Kg	1	05/03/23	CPP	SW6010D
Lead	852	3.8	mg/Kg	10	05/03/23	CPP	SW6010D
Antimony	4.4	3.8	mg/Kg	1	05/03/23	IE	SW6010D
Selenium	< 1.5	1.5	mg/Kg	1	05/03/23	CPP	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Barium	0.58	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	05/03/23	AL1	SW846 1311/7470
TCLP Lead	2.54	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010D

Ver 1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Thallium	< 3.4	3.4	mg/Kg	1	05/03/23	CPP	SW6010D	
TCLP Metals Digestion	Completed				05/03/23	ZT/W/ZT	SW3010A	
Vanadium	77.2	0.38	mg/Kg	1	05/03/23	CPP	SW6010D	
Zinc	1480	7.7	mg/Kg	10	05/03/23	CPP	SW6010D	
Percent Solid	87		%		05/02/23	CV	SW846-%Solid	
Corrosivity	Negative		Pos/Neg	1	05/02/23	PK	SW846-Corr	1
Flash Point	>200	200	Degree F	1	05/08/23	G	SW1010B	
Ignitability	Passed	140	degree F	1	05/08/23	G	SW846-Ignit	1
pH at 25C - Soil	8.02	1.00	pH Units	1	05/02/23 22:57	PK	SW846 9045D	1
Reactivity Cyanide	< 6	6	mg/Kg	1	05/04/23	DK/GD	SW846 7.3.3.1/90	1
Reactivity Sulfide	< 20	20	mg/Kg	1	05/05/23	DK/GD	SW846 CH7	1
Reactivity	Negative		Pos/Neg	1	05/05/23	DK/GD	SW846-React	1
Total Cyanide (SW9010C Distill.)	2.00	0.57	mg/Kg	1	05/04/23	CL/GD	SW9012B	
Mercury Digestion	Completed				05/03/23	W/W	SW7471B	
Extraction of NY ETPH	Completed				05/03/23	MO/M	SW3546	
Soil Extraction for PCB	Completed				05/03/23	B/K/Y/MO	SW3546	
Soil Extraction for Pesticides	Completed				05/03/23	B/K/Y/MO	SW3546	
Soil Extraction for SVOA	Completed				05/02/23	B/M	SW3546	
TCLP Digestion Mercury	Completed				05/03/23	W/ZT/AL	SW7470A	
TCLP Herbicides Extraction	Completed				05/03/23	CV/KW	SW8150 MOD	
TCLP Extraction for Metals	Completed				05/02/23	ZT	SW1311	
TCLP Extraction for Organics	Completed				05/02/23	ZT	SW1311	
TCLP Pesticides Extraction	Completed				05/03/23	S/S	SW3510C	
TCLP Semi-Volatile Extraction	Completed				05/04/23	S/S	SW3510C	
TCLP Extraction Volatiles	Completed				05/02/23	CV	SW1311	
Total Metals Digest	Completed				05/02/23	L/AG	SW3050B	
Gasoline Range Hydrocarbons (C6-C10)								
GRO (C6-C10)	ND	7.0	mg/Kg	50	05/03/23	V	SW8015D GRO	
QA/QC Surrogates								
% 2,5-Dibromotoluene (FID)	85		%	50	05/03/23	V	70 - 130 %	
Polychlorinated Biphenyls								
PCB-1016	ND	76	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1221	ND	76	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1232	ND	76	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1242	ND	76	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1248	ND	76	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1254	82	76	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1260	ND	76	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1262	ND	76	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1268	ND	76	ug/Kg	2	05/04/23	SC	SW8082A	
QA/QC Surrogates								
% DCBP	73		%	2	05/04/23	SC	30 - 150 %	
% DCBP (Confirmation)	68		%	2	05/04/23	SC	30 - 150 %	
% TCMX	76		%	2	05/04/23	SC	30 - 150 %	
% TCMX (Confirmation)	79		%	2	05/04/23	SC	30 - 150 %	

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 71 - #114

Phoenix I.D.: CN95993

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Pesticides - Soil								
4,4' -DDD	17	2.3	ug/Kg	2	05/04/23	AW	SW8081B	
4,4' -DDE	ND	2.3	ug/Kg	2	05/04/23	AW	SW8081B	
4,4' -DDT	5.2	2.3	ug/Kg	2	05/04/23	AW	SW8081B	
a-BHC	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
a-Chlordane	8.9	3.8	ug/Kg	2	05/04/23	AW	SW8081B	
Aldrin	ND	3.8	ug/Kg	2	05/04/23	AW	SW8081B	
b-BHC	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Chlordane	50	38	ug/Kg	2	05/04/23	AW	SW8081B	
d-BHC	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Dieldrin	ND	3.8	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan I	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan II	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan sulfate	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin aldehyde	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin ketone	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
g-BHC	ND	1.5	ug/Kg	2	05/04/23	AW	SW8081B	
g-Chlordane	8.2	3.8	ug/Kg	2	05/04/23	AW	SW8081B	
Heptachlor	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Heptachlor epoxide	ND	7.6	ug/Kg	2	05/04/23	AW	SW8081B	
Methoxychlor	ND	38	ug/Kg	2	05/04/23	AW	SW8081B	
Toxaphene	ND	150	ug/Kg	2	05/04/23	AW	SW8081B	
QA/QC Surrogates								
% DCBP	76		%	2	05/04/23	AW	30 - 150 %	
% DCBP (Confirmation)	83		%	2	05/04/23	AW	30 - 150 %	
% TCMX	76		%	2	05/04/23	AW	30 - 150 %	
% TCMX (Confirmation)	95		%	2	05/04/23	AW	30 - 150 %	
TCLP Herbicides								
2,4,5-TP (Silvex)	ND	50	ug/L	10	05/05/23	PS	SW846 1311/8151	
2,4-D	ND	100	ug/L	10	05/05/23	PS	SW846 1311/8151	
QA/QC Surrogates								
% DCAA	66		%	10	05/05/23	PS	30 - 150 %	
% DCAA (Confirmation)	57		%	10	05/05/23	PS	30 - 150 %	
TCLP Pesticides								
4,4' -DDD	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
4,4' -DDE	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
4,4' -DDT	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
a-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Alachlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	1
Aldrin	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
b-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Chlordane	ND	5.0	ug/L	10	05/04/23	AW	SW8081B	
d-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Dieldrin	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
Endosulfan I	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Endosulfan II	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Endosulfan Sulfate	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
Endrin	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Toxaphene	ND	20	ug/L	10	05/04/23	AW	SW8081B
QA/QC Surrogates							
%DCBP (Surrogate Rec)	90		%	10	05/04/23	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	85		%	10	05/04/23	AW	30 - 150 %
%TCMX (Surrogate Rec)	84		%	10	05/04/23	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	79		%	10	05/04/23	AW	30 - 150 %
TPH DRO (C10-C28)							
Diesel Range Organics (C10-C28)	ND	290	mg/Kg	5	05/05/23	JRB	SW-846 8015
QA/QC Surrogates							
% COD (surr)	109		%	5	05/05/23	JRB	50 - 150 %
% Terphenyl (surr)	89		%	5	05/05/23	JRB	50 - 150 %
Volatiles (TCL)							
1,1,1-Trichloroethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,1,2,2-Tetrachloroethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,1,2-Trichloroethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,1-Dichloroethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,1-Dichloroethene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,2,3-Trichlorobenzene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,2,4-Trichlorobenzene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dibromoethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichlorobenzene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichloroethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichloropropane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,3-Dichlorobenzene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,4-Dichlorobenzene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
2-Hexanone	ND	32	ug/kg	1	05/03/23	HM	SW8260C
4-Methyl-2-pentanone	ND	32	ug/kg	1	05/03/23	HM	SW8260C
Acetone	ND	50	ug/kg	1	05/03/23	HM	SW8260C
Benzene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Bromochloromethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Bromodichloromethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Bromoform	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Bromomethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Carbon Disulfide	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Carbon tetrachloride	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Chlorobenzene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Chloroethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Chloroform	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Chloromethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
cis-1,2-Dichloroethene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
cis-1,3-Dichloropropene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Cyclohexane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Dibromochloromethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Dichlorodifluoromethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Ethylbenzene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Isopropylbenzene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
m&p-Xylene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Methyl ethyl ketone	ND	39	ug/kg	1	05/03/23	HM	SW8260C
Methyl t-butyl ether (MTBE)	ND	13	ug/kg	1	05/03/23	HM	SW8260C
Methylacetate	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Methylcyclohexane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Methylene chloride	ND	32	ug/kg	1	05/03/23	HM	SW8260C
o-Xylene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Styrene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Tetrachloroethene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Toluene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Total Xylenes	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
trans-1,2-Dichloroethene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
trans-1,3-Dichloropropene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Trichloroethene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Trichlorofluoromethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Trichlorotrifluoroethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Vinyl chloride	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	1	05/03/23	HM	70 - 130 %
% Bromofluorobenzene	83		%	1	05/03/23	HM	70 - 130 %
% Dibromofluoromethane	100		%	1	05/03/23	HM	70 - 130 %
% Toluene-d8	92		%	1	05/03/23	HM	70 - 130 %
1,4-dioxane							
1,4-dioxane	ND	97	ug/kg	1	05/03/23	HM	SW8260C
TCLP Volatiles							
1,1-Dichloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4 (10x)	99		%	10	05/03/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	95		%	10	05/03/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	98		%	10	05/03/23	HM	70 - 130 %
% Toluene-d8 (10x)	97		%	10	05/03/23	HM	70 - 130 %
Volatile Library Search	Completed				05/03/23	HM	

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 71 - #114

Phoenix I.D.: CN95993

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Semivolatiles								
1,1-Biphenyl	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,2'-Oxybis(1-Chloropropane)	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	1
2,3,4,6-tetrachlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4,5-Trichlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4,6-Trichlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dichlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dimethylphenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dinitrophenol	ND	610	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dinitrotoluene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,6-Dinitrotoluene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Chloronaphthalene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Chlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Methylnaphthalene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Methylphenol (o-cresol)	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Nitroaniline	ND	610	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Nitrophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
3&4-Methylphenol (m&p-cresol)	ND	380	ug/Kg	1	05/03/23	KCA	SW8270D	1
3,3'-Dichlorobenzidine	ND	460	ug/Kg	1	05/03/23	KCA	SW8270D	
3-Nitroaniline	ND	610	ug/Kg	1	05/03/23	KCA	SW8270D	
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Bromophenyl phenyl ether	ND	380	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chloro-3-methylphenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chloroaniline	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Nitroaniline	ND	610	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Nitrophenol	ND	1100	ug/Kg	1	05/03/23	KCA	SW8270D	
Acenaphthene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Acenaphthylene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Acetophenone	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Anthracene	290	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Atrazine	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benz(a)anthracene	960	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzaldehyde	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(a)pyrene	1100	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(b)fluoranthene	1300	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(ghi)perylene	550	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(k)fluoranthene	460	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzyl butyl phthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-chloroethyl)ether	ND	380	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-ethylhexyl)phthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Caprolactam	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Carbazole	ND	380	ug/Kg	1	05/03/23	KCA	SW8270D	
Chrysene	1000	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Dibenz(a,h)anthracene	ND	190	ug/Kg	1	05/03/23	KCA	SW8270D	
Dibenzofuran	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Diethyl phthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dimethylphthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Di-n-butylphthalate	ND	770	ug/Kg	1	05/03/23	KCA	SW8270D
Di-n-octylphthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Fluoranthene	1700	270	ug/Kg	1	05/03/23	KCA	SW8270D
Fluorene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorobenzene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorobutadiene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorocyclopentadiene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachloroethane	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	600	270	ug/Kg	1	05/03/23	KCA	SW8270D
Isophorone	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Naphthalene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Nitrobenzene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodimethylamine	ND	380	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	190	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodiphenylamine	ND	380	ug/Kg	1	05/03/23	KCA	SW8270D
Pentachlorophenol	ND	380	ug/Kg	1	05/03/23	KCA	SW8270D
Phenanthrene	790	270	ug/Kg	1	05/03/23	KCA	SW8270D
Phenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Pyrene	1700	270	ug/Kg	1	05/03/23	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	84		%	1	05/03/23	KCA	30 - 130 %
% 2-Fluorobiphenyl	72		%	1	05/03/23	KCA	30 - 130 %
% 2-Fluorophenol	79		%	1	05/03/23	KCA	30 - 130 %
% Nitrobenzene-d5	90		%	1	05/03/23	KCA	30 - 130 %
% Phenol-d5	93		%	1	05/03/23	KCA	30 - 130 %
% Terphenyl-d14	69		%	1	05/03/23	KCA	30 - 130 %
TCLP Acid/Base-Neutral							
1,4-Dichlorobenzene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	104		%	1	05/05/23	KCA	15 - 110 %
% 2-Fluorobiphenyl	88		%	1	05/05/23	KCA	30 - 130 %
% 2-Fluorophenol	74		%	1	05/05/23	KCA	15 - 110 %
% Nitrobenzene-d5	87		%	1	05/05/23	KCA	30 - 130 %
% Phenol-d5	72		%	1	05/05/23	KCA	15 - 110 %
% Terphenyl-d14	102		%	1	05/05/23	KCA	30 - 130 %
Semivolatile Library Search	Completed				05/09/23	MR	

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

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

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

Comments:

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

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

Corrosivity is based solely on the pH analysis performed above.

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

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

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

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

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

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

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

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

Phyllis Shiller, Laboratory Director

May 16, 2023

Reviewed and Released by: Phyllis Shiller, Laboratory Director

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

May 16, 2023

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

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/01/23	8:35
Location Code:	AES-INC	Received by:	SW	05/02/23	17:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:	0703				

Laboratory Data

SDG ID: GCN95988
Phoenix ID: CN95994

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 71 - #115

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.0	1.0	mg/Kg	1	05/03/23	IE	SW6010D
Aluminum	4460	56	mg/Kg	10	05/03/23	CPP	SW6010D
Arsenic	7.22	0.74	mg/Kg	1	05/03/23	CPP	SW6010D
Barium	806	0.37	mg/Kg	1	05/03/23	CPP	SW6010D
Beryllium	0.59	0.30	mg/Kg	1	05/03/23	CPP	SW6010D
Calcium	14300	56	mg/Kg	10	05/03/23	CPP	SW6010D
Cadmium	2.12	0.37	mg/Kg	1	05/03/23	CPP	SW6010D
Cobalt	7.15	0.37	mg/Kg	1	05/03/23	CPP	SW6010D
Chromium	26.8	0.37	mg/Kg	1	05/03/23	CPP	SW6010D
Copper	153	7.4	mg/kg	10	05/03/23	CPP	SW6010D
Iron	21500	56	mg/Kg	10	05/03/23	CPP	SW6010D
Mercury	1.01	0.03	mg/Kg	2	05/03/23	AL1	SW7471B
Potassium	623	5.6	mg/Kg	1	05/03/23	CPP	SW6010D
Magnesium	2700	5.6	mg/Kg	1	05/03/23	CPP	SW6010D
Manganese	203	3.7	mg/Kg	10	05/03/23	CPP	SW6010D
Sodium	218	5.6	mg/Kg	1	05/03/23	CPP	SW6010D
Nickel	49.4	0.37	mg/Kg	1	05/03/23	CPP	SW6010D
Lead	738	3.7	mg/Kg	10	05/03/23	CPP	SW6010D
Antimony	4.0	3.7	mg/Kg	1	05/03/23	IE	SW6010D
Selenium	< 1.5	1.5	mg/Kg	1	05/03/23	CPP	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Barium	0.89	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	05/03/23	AL1	SW846 1311/7470
TCLP Lead	4.91	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010D

Ver 1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Thallium	< 3.3	3.3	mg/Kg	1	05/03/23	CPP	SW6010D	
TCLP Metals Digestion	Completed				05/03/23	ZT/W/ZT	SW3010A	
Vanadium	90.6	0.37	mg/Kg	1	05/03/23	CPP	SW6010D	
Zinc	1050	7.4	mg/Kg	10	05/03/23	CPP	SW6010D	
Percent Solid	82		%		05/02/23	CV	SW846-%Solid	
Corrosivity	Negative		Pos/Neg	1	05/02/23	PK	SW846-Corr	1
Flash Point	>200	200	Degree F	1	05/08/23	G	SW1010B	
Ignitability	Passed	140	degree F	1	05/08/23	G	SW846-Ignit	1
pH at 25C - Soil	7.76	1.00	pH Units	1	05/02/23 22:57	PK	SW846 9045D	1
Reactivity Cyanide	< 6	6	mg/Kg	1	05/04/23	DK/GD	SW846 7.3.3.1/90	1
Reactivity Sulfide	< 20	20	mg/Kg	1	05/05/23	DK/GD	SW846 CH7	1
Reactivity	Negative		Pos/Neg	1	05/05/23	DK/GD	SW846-React	1
Total Cyanide (SW9010C Distill.)	2.35	0.61	mg/Kg	1	05/04/23	CL/GD	SW9012B	
Mercury Digestion	Completed				05/03/23	W/W	SW7471B	
Extraction of NY ETPH	Completed				05/03/23	MO/M	SW3546	
Soil Extraction for PCB	Completed				05/03/23	B/K/Y/MO	SW3546	
Soil Extraction for Pesticides	Completed				05/03/23	B/K/Y/MO	SW3546	
Soil Extraction for SVOA	Completed				05/03/23	B/R/F	SW3546	
TCLP Digestion Mercury	Completed				05/03/23	W/ZT/AL	SW7470A	
TCLP Herbicides Extraction	Completed				05/03/23	CV/KW	SW8150 MOD	
TCLP Extraction for Metals	Completed				05/02/23	ZT	SW1311	
TCLP Extraction for Organics	Completed				05/02/23	ZT	SW1311	
TCLP Pesticides Extraction	Completed				05/03/23	S/S	SW3510C	
TCLP Semi-Volatile Extraction	Completed				05/04/23	S/S	SW3510C	
TCLP Extraction Volatiles	Completed				05/02/23	CV	SW1311	
Total Metals Digest	Completed				05/02/23	L/AG	SW3050B	
Gasoline Range Hydrocarbons (C6-C10)								
GRO (C6-C10)	ND	8.9	mg/Kg	50	05/03/23	V	SW8015D GRO	
QA/QC Surrogates								
% 2,5-Dibromotoluene (FID)	83		%	50	05/03/23	V	70 - 130 %	
Polychlorinated Biphenyls								
PCB-1016	ND	80	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1221	ND	80	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1232	ND	80	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1242	ND	80	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1248	ND	80	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1254	110	80	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1260	ND	80	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1262	ND	80	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1268	ND	80	ug/Kg	2	05/04/23	SC	SW8082A	
QA/QC Surrogates								
% DCBP	78		%	2	05/04/23	SC	30 - 150 %	
% DCBP (Confirmation)	77		%	2	05/04/23	SC	30 - 150 %	
% TCMX	65		%	2	05/04/23	SC	30 - 150 %	
% TCMX (Confirmation)	64		%	2	05/04/23	SC	30 - 150 %	

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 71 - #115

Phoenix I.D.: CN95994

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Pesticides - Soil								
4,4' -DDD	48	2.4	ug/Kg	2	05/04/23	AW	SW8081B	
4,4' -DDE	13	2.4	ug/Kg	2	05/04/23	AW	SW8081B	
4,4' -DDT	18	2.4	ug/Kg	2	05/04/23	AW	SW8081B	
a-BHC	ND	8.0	ug/Kg	2	05/04/23	AW	SW8081B	
a-Chlordane	ND	4.0	ug/Kg	2	05/04/23	AW	SW8081B	
Aldrin	ND	4.0	ug/Kg	2	05/04/23	AW	SW8081B	
b-BHC	ND	8.0	ug/Kg	2	05/04/23	AW	SW8081B	
Chlordane	ND	40	ug/Kg	2	05/04/23	AW	SW8081B	
d-BHC	ND	8.0	ug/Kg	2	05/04/23	AW	SW8081B	
Dieldrin	ND	4.0	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan I	ND	8.0	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan II	ND	8.0	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan sulfate	ND	8.0	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin	ND	8.0	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin aldehyde	ND	8.0	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin ketone	ND	8.0	ug/Kg	2	05/04/23	AW	SW8081B	
g-BHC	ND	1.6	ug/Kg	2	05/04/23	AW	SW8081B	
g-Chlordane	ND	6.0	ug/Kg	2	05/04/23	AW	SW8081B	
Heptachlor	ND	8.0	ug/Kg	2	05/04/23	AW	SW8081B	
Heptachlor epoxide	ND	8.0	ug/Kg	2	05/04/23	AW	SW8081B	
Methoxychlor	ND	40	ug/Kg	2	05/04/23	AW	SW8081B	
Toxaphene	ND	160	ug/Kg	2	05/04/23	AW	SW8081B	
QA/QC Surrogates								
% DCBP	67		%	2	05/04/23	AW	30 - 150 %	
% DCBP (Confirmation)	56		%	2	05/04/23	AW	30 - 150 %	
% TCMX	57		%	2	05/04/23	AW	30 - 150 %	
% TCMX (Confirmation)	38		%	2	05/04/23	AW	30 - 150 %	
TCLP Herbicides								
2,4,5-TP (Silvex)	ND	50	ug/L	10	05/05/23	PS	SW846 1311/8151	
2,4-D	ND	100	ug/L	10	05/05/23	PS	SW846 1311/8151	
QA/QC Surrogates								
% DCAA	67		%	10	05/05/23	PS	30 - 150 %	
% DCAA (Confirmation)	57		%	10	05/05/23	PS	30 - 150 %	
TCLP Pesticides								
4,4' -DDD	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
4,4' -DDE	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
4,4' -DDT	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
a-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Alachlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	1
Aldrin	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
b-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Chlordane	ND	5.0	ug/L	10	05/04/23	AW	SW8081B	
d-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Dieldrin	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
Endosulfan I	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Endosulfan II	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 71 - #115

Phoenix I.D.: CN95994

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Endosulfan Sulfate	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
Endrin	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Toxaphene	ND	20	ug/L	10	05/04/23	AW	SW8081B
QA/QC Surrogates							
%DCBP (Surrogate Rec)	92		%	10	05/04/23	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	88		%	10	05/04/23	AW	30 - 150 %
%TCMX (Surrogate Rec)	81		%	10	05/04/23	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	78		%	10	05/04/23	AW	30 - 150 %
TPH DRO (C10-C28)							
Diesel Range Organics (C10-C28)	ND	300	mg/Kg	5	05/05/23	JRB	SW-846 8015
QA/QC Surrogates							
% COD (surr)	51		%	5	05/05/23	JRB	50 - 150 %
% Terphenyl (surr)	75		%	5	05/05/23	JRB	50 - 150 %
Volatiles (TCL)							
1,1,1-Trichloroethane	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
1,1,2,2-Tetrachloroethane	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
1,1,2-Trichloroethane	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
1,1-Dichloroethane	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
1,1-Dichloroethene	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
1,2,3-Trichlorobenzene	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
1,2,4-Trichlorobenzene	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dibromo-3-chloropropane	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dibromoethane	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichlorobenzene	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichloroethane	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichloropropane	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
1,3-Dichlorobenzene	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
1,4-Dichlorobenzene	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
2-Hexanone	ND	35	ug/kg	1	05/03/23	HM	SW8260C
4-Methyl-2-pentanone	ND	35	ug/kg	1	05/03/23	HM	SW8260C
Acetone	ND	50	ug/kg	1	05/03/23	HM	SW8260C
Benzene	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
Bromochloromethane	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
Bromodichloromethane	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
Bromoform	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
Bromomethane	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
Carbon Disulfide	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
Carbon tetrachloride	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
Chlorobenzene	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
Chloroethane	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
Chloroform	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
Chloromethane	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
cis-1,2-Dichloroethene	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
cis-1,3-Dichloropropene	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
Cyclohexane	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
Dibromochloromethane	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
Dichlorodifluoromethane	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
Ethylbenzene	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
Isopropylbenzene	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
m&p-Xylene	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
Methyl ethyl ketone	ND	42	ug/kg	1	05/03/23	HM	SW8260C
Methyl t-butyl ether (MTBE)	ND	14	ug/kg	1	05/03/23	HM	SW8260C
Methylacetate	ND	5.7	ug/kg	1	05/03/23	HM	SW8260C
Methylcyclohexane	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
Methylene chloride	ND	35	ug/kg	1	05/03/23	HM	SW8260C
o-Xylene	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
Styrene	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
Tetrachloroethene	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
Toluene	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
Total Xylenes	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
trans-1,2-Dichloroethene	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
trans-1,3-Dichloropropene	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
Trichloroethene	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
Trichlorofluoromethane	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
Trichlorotrifluoroethane	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
Vinyl chloride	ND	7.1	ug/kg	1	05/03/23	HM	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	96		%	1	05/03/23	HM	70 - 130 %
% Bromofluorobenzene	83		%	1	05/03/23	HM	70 - 130 %
% Dibromofluoromethane	101		%	1	05/03/23	HM	70 - 130 %
% Toluene-d8	92		%	1	05/03/23	HM	70 - 130 %
1,4-dioxane							
1,4-dioxane	ND	100	ug/kg	1	05/03/23	HM	SW8260C
TCLP Volatiles							
1,1-Dichloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4 (10x)	99		%	10	05/03/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	95		%	10	05/03/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	99		%	10	05/03/23	HM	70 - 130 %
% Toluene-d8 (10x)	96		%	10	05/03/23	HM	70 - 130 %
Volatile Library Search	Completed				05/03/23	HM	

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 71 - #115

Phoenix I.D.: CN95994

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Semivolatiles								
1,1-Biphenyl	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
1,2,4,5-Tetrachlorobenzene	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
2,2'-Oxybis(1-Chloropropane)	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	1
2,3,4,6-tetrachlorophenol	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
2,4,5-Trichlorophenol	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
2,4,6-Trichlorophenol	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
2,4-Dichlorophenol	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
2,4-Dimethylphenol	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
2,4-Dinitrophenol	ND	640	ug/Kg	1	05/04/23	KCA	SW8270D	
2,4-Dinitrotoluene	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
2,6-Dinitrotoluene	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
2-Chloronaphthalene	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
2-Chlorophenol	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
2-Methylnaphthalene	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
2-Methylphenol (o-cresol)	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
2-Nitroaniline	ND	640	ug/Kg	1	05/04/23	KCA	SW8270D	
2-Nitrophenol	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
3&4-Methylphenol (m&p-cresol)	ND	400	ug/Kg	1	05/04/23	KCA	SW8270D	1
3,3'-Dichlorobenzidine	ND	480	ug/Kg	1	05/04/23	KCA	SW8270D	
3-Nitroaniline	ND	640	ug/Kg	1	05/04/23	KCA	SW8270D	
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	1	05/04/23	KCA	SW8270D	
4-Bromophenyl phenyl ether	ND	400	ug/Kg	1	05/04/23	KCA	SW8270D	
4-Chloro-3-methylphenol	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
4-Chloroaniline	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
4-Chlorophenyl phenyl ether	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
4-Nitroaniline	ND	640	ug/Kg	1	05/04/23	KCA	SW8270D	
4-Nitrophenol	ND	1200	ug/Kg	1	05/04/23	KCA	SW8270D	
Acenaphthene	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
Acenaphthylene	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
Acetophenone	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
Anthracene	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
Atrazine	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
Benz(a)anthracene	510	280	ug/Kg	1	05/04/23	KCA	SW8270D	
Benzaldehyde	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
Benzo(a)pyrene	550	280	ug/Kg	1	05/04/23	KCA	SW8270D	
Benzo(b)fluoranthene	630	280	ug/Kg	1	05/04/23	KCA	SW8270D	
Benzo(ghi)perylene	290	280	ug/Kg	1	05/04/23	KCA	SW8270D	
Benzo(k)fluoranthene	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
Benzyl butyl phthalate	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
Bis(2-chloroethoxy)methane	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
Bis(2-chloroethyl)ether	ND	400	ug/Kg	1	05/04/23	KCA	SW8270D	
Bis(2-ethylhexyl)phthalate	760	280	ug/Kg	1	05/04/23	KCA	SW8270D	
Caprolactam	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
Carbazole	ND	400	ug/Kg	1	05/04/23	KCA	SW8270D	
Chrysene	530	280	ug/Kg	1	05/04/23	KCA	SW8270D	
Dibenz(a,h)anthracene	ND	200	ug/Kg	1	05/04/23	KCA	SW8270D	
Dibenzofuran	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	
Diethyl phthalate	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dimethylphthalate	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D
Di-n-butylphthalate	ND	800	ug/Kg	1	05/04/23	KCA	SW8270D
Di-n-octylphthalate	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D
Fluoranthene	960	280	ug/Kg	1	05/04/23	KCA	SW8270D
Fluorene	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D
Hexachlorobenzene	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D
Hexachlorobutadiene	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D
Hexachlorocyclopentadiene	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D
Hexachloroethane	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	300	280	ug/Kg	1	05/04/23	KCA	SW8270D
Isophorone	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D
Naphthalene	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D
Nitrobenzene	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D
N-Nitrosodimethylamine	ND	400	ug/Kg	1	05/04/23	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	1	05/04/23	KCA	SW8270D
N-Nitrosodiphenylamine	ND	400	ug/Kg	1	05/04/23	KCA	SW8270D
Pentachlorophenol	ND	400	ug/Kg	1	05/04/23	KCA	SW8270D
Phenanthrene	620	280	ug/Kg	1	05/04/23	KCA	SW8270D
Phenol	ND	280	ug/Kg	1	05/04/23	KCA	SW8270D
Pyrene	950	280	ug/Kg	1	05/04/23	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	73		%	1	05/04/23	KCA	30 - 130 %
% 2-Fluorobiphenyl	60		%	1	05/04/23	KCA	30 - 130 %
% 2-Fluorophenol	58		%	1	05/04/23	KCA	30 - 130 %
% Nitrobenzene-d5	61		%	1	05/04/23	KCA	30 - 130 %
% Phenol-d5	67		%	1	05/04/23	KCA	30 - 130 %
% Terphenyl-d14	56		%	1	05/04/23	KCA	30 - 130 %
TCLP Acid/Base-Neutral							
1,4-Dichlorobenzene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	96		%	1	05/05/23	KCA	15 - 110 %
% 2-Fluorobiphenyl	80		%	1	05/05/23	KCA	30 - 130 %
% 2-Fluorophenol	68		%	1	05/05/23	KCA	15 - 110 %
% Nitrobenzene-d5	78		%	1	05/05/23	KCA	30 - 130 %
% Phenol-d5	67		%	1	05/05/23	KCA	15 - 110 %
% Terphenyl-d14	98		%	1	05/05/23	KCA	30 - 130 %
Semivolatile Library Search	Completed				05/09/23	MR	

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

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

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

Comments:

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

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

Corrosivity is based solely on the pH analysis performed above.

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

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

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

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

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

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

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

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

Phyllis Shiller, Laboratory Director

May 16, 2023

Reviewed and Released by: Phyllis Shiller, Laboratory Director

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

May 16, 2023

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

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/01/23	8:40
Location Code:	AES-INC	Received by:	SW	05/02/23	17:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:	0703				

Laboratory Data

SDG ID: GCN95988
Phoenix ID: CN95995

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 71 - #116

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.0	1.0	mg/Kg	1	05/03/23	IE	SW6010D
Aluminum	4610	57	mg/Kg	10	05/03/23	CPP	SW6010D
Arsenic	6.18	0.76	mg/Kg	1	05/03/23	CPP	SW6010D
Barium	328	0.38	mg/Kg	1	05/03/23	CPP	SW6010D
Beryllium	0.54	0.31	mg/Kg	1	05/03/23	CPP	SW6010D
Calcium	8070	5.7	mg/Kg	1	05/03/23	CPP	SW6010D
Cadmium	4.06	0.38	mg/Kg	1	05/03/23	CPP	SW6010D
Cobalt	11.3	0.38	mg/Kg	1	05/03/23	CPP	SW6010D
Chromium	21.1	0.38	mg/Kg	1	05/03/23	CPP	SW6010D
Copper	152	0.8	mg/kg	1	05/03/23	CPP	SW6010D
Iron	20600	57	mg/Kg	10	05/03/23	CPP	SW6010D
Mercury	0.35	0.03	mg/Kg	2	05/03/23	AL1	SW7471B
Potassium	580	5.7	mg/Kg	1	05/03/23	CPP	SW6010D
Magnesium	1640	5.7	mg/Kg	1	05/03/23	CPP	SW6010D
Manganese	177	3.8	mg/Kg	10	05/03/23	CPP	SW6010D
Sodium	175	5.7	mg/Kg	1	05/03/23	CPP	SW6010D
Nickel	44.5	0.38	mg/Kg	1	05/03/23	CPP	SW6010D
Lead	852	3.8	mg/Kg	10	05/03/23	CPP	SW6010D
Antimony	5.1	3.8	mg/Kg	1	05/03/23	IE	SW6010D
Selenium	< 1.5	1.5	mg/Kg	1	05/03/23	CPP	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Barium	1.04	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	05/03/23	AL1	SW846 1311/7470
TCLP Lead	6.98	0.10	mg/L	1	05/09/23	TH	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010D

Ver 1

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 71 - #116

Phoenix I.D.: CN95995

Parameter	Result		RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Thallium	< 3.4		3.4	mg/Kg	1	05/03/23	CPP	SW6010D	
TCLP Metals Digestion	Completed					05/09/23	AL/ZT/AL	SW3010A	
Vanadium	81.5		0.38	mg/Kg	1	05/03/23	CPP	SW6010D	
Zinc	574		7.6	mg/Kg	10	05/03/23	CPP	SW6010D	
Percent Solid	85			%		05/02/23	CV	SW846-%Solid	
Corrosivity	Negative			Pos/Neg	1	05/02/23	PK	SW846-Corr	1
Flash Point	>200		200	Degree F	1	05/08/23	G	SW1010B	
Ignitability	Passed		140	degree F	1	05/08/23	G	SW846-Ignit	1
pH at 25C - Soil	7.80		1.00	pH Units	1	05/02/23 22:57	PK	SW846 9045D	1
Reactivity Cyanide	< 6		6	mg/Kg	1	05/04/23	DK/GD	SW846 7.3.3.1/90	1
Reactivity Sulfide	< 20		20	mg/Kg	1	05/05/23	DK/GD	SW846 CH7	1
Reactivity	Negative			Pos/Neg	1	05/05/23	DK/GD	SW846-React	1
Total Cyanide (SW9010C Distill.)	3.63		0.59	mg/Kg	1	05/04/23	CL/GD	SW9012B	
Mercury Digestion	Completed					05/03/23	W/W	SW7471B	
Extraction of NY ETPH	Completed					05/03/23	MO/M	SW3546	
Soil Extraction for PCB	Completed					05/03/23	B/K/Y/MO	SW3546	
Soil Extraction for Pesticides	Completed					05/03/23	B/K/Y/MO	SW3546	
Soil Extraction for SVOA	Completed					05/02/23	B/M	SW3546	
TCLP Digestion Mercury	Completed					05/03/23	W/ZT/AL	SW7470A	
TCLP Herbicides Extraction	Completed					05/03/23	CV/KW	SW8150 MOD	
TCLP Extraction for Metals	Completed					05/08/23	AL	SW1311	
TCLP Extraction for Organics	Completed					05/02/23	ZT	SW1311	
TCLP Pesticides Extraction	Completed					05/03/23	S/S	SW3510C	
TCLP Semi-Volatile Extraction	Completed					05/04/23	S/S	SW3510C	
TCLP Extraction Volatiles	Completed					05/02/23	CV	SW1311	
Total Metals Digest	Completed					05/02/23	L/AG	SW3050B	
Gasoline Range Hydrocarbons (C6-C10)									
GRO (C6-C10)	ND		8.0	mg/Kg	50	05/03/23	V	SW8015D GRO	
QA/QC Surrogates									
% 2,5-Dibromotoluene (FID)	83			%	50	05/03/23	V	70 - 130 %	
Polychlorinated Biphenyls									
PCB-1016	ND		77	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1221	ND		77	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1232	ND		77	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1242	ND		77	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1248	*	*	77	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1254	490	*	77	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1260	*	*	77	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1262	ND		77	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1268	ND		77	ug/Kg	2	05/05/23	SC	SW8082A	
QA/QC Surrogates									
% DCBP	85			%	2	05/05/23	SC	30 - 150 %	
% DCBP (Confirmation)	76			%	2	05/05/23	SC	30 - 150 %	
% TCMX	74			%	2	05/05/23	SC	30 - 150 %	
% TCMX (Confirmation)	73			%	2	05/05/23	SC	30 - 150 %	

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 71 - #116

Phoenix I.D.: CN95995

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Pesticides - Soil								
4,4' -DDD	96	2.3	ug/Kg	2	05/05/23	AW	SW8081B	
4,4' -DDE	21	2.3	ug/Kg	2	05/05/23	AW	SW8081B	
4,4' -DDT	14	2.3	ug/Kg	2	05/05/23	AW	SW8081B	
a-BHC	ND	7.7	ug/Kg	2	05/05/23	AW	SW8081B	
a-Chlordane	16	3.8	ug/Kg	2	05/05/23	AW	SW8081B	
Aldrin	ND	3.8	ug/Kg	2	05/05/23	AW	SW8081B	
b-BHC	ND	7.7	ug/Kg	2	05/05/23	AW	SW8081B	
Chlordane	100	38	ug/Kg	2	05/05/23	AW	SW8081B	
d-BHC	ND	7.7	ug/Kg	2	05/05/23	AW	SW8081B	
Dieldrin	14	3.8	ug/Kg	2	05/05/23	AW	SW8081B	
Endosulfan I	ND	7.7	ug/Kg	2	05/05/23	AW	SW8081B	
Endosulfan II	ND	7.7	ug/Kg	2	05/05/23	AW	SW8081B	
Endosulfan sulfate	ND	7.7	ug/Kg	2	05/05/23	AW	SW8081B	
Endrin	ND	7.7	ug/Kg	2	05/05/23	AW	SW8081B	
Endrin aldehyde	ND	7.7	ug/Kg	2	05/05/23	AW	SW8081B	
Endrin ketone	ND	7.7	ug/Kg	2	05/05/23	AW	SW8081B	
g-BHC	ND	3.0	ug/Kg	2	05/05/23	AW	SW8081B	
g-Chlordane	21	3.8	ug/Kg	2	05/05/23	AW	SW8081B	
Heptachlor	ND	7.7	ug/Kg	2	05/05/23	AW	SW8081B	
Heptachlor epoxide	ND	7.7	ug/Kg	2	05/05/23	AW	SW8081B	
Methoxychlor	ND	38	ug/Kg	2	05/05/23	AW	SW8081B	
Toxaphene	ND	150	ug/Kg	2	05/05/23	AW	SW8081B	
QA/QC Surrogates								
% DCBP	72		%	2	05/05/23	AW	30 - 150 %	
% DCBP (Confirmation)	100		%	2	05/05/23	AW	30 - 150 %	
% TCMX	70		%	2	05/05/23	AW	30 - 150 %	
% TCMX (Confirmation)	101		%	2	05/05/23	AW	30 - 150 %	
TCLP Herbicides								
2,4,5-TP (Silvex)	ND	50	ug/L	10	05/05/23	PS	SW846 1311/8151	
2,4-D	ND	100	ug/L	10	05/05/23	PS	SW846 1311/8151	
QA/QC Surrogates								
% DCAA	66		%	10	05/05/23	PS	30 - 150 %	
% DCAA (Confirmation)	57		%	10	05/05/23	PS	30 - 150 %	
TCLP Pesticides								
4,4' -DDD	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
4,4' -DDE	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
4,4' -DDT	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
a-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Alachlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	1
Aldrin	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
b-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Chlordane	ND	5.0	ug/L	10	05/04/23	AW	SW8081B	
d-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Dieldrin	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
Endosulfan I	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Endosulfan II	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Endosulfan Sulfate	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
Endrin	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Toxaphene	ND	20	ug/L	10	05/04/23	AW	SW8081B
QA/QC Surrogates							
%DCBP (Surrogate Rec)	90		%	10	05/04/23	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	86		%	10	05/04/23	AW	30 - 150 %
%TCMX (Surrogate Rec)	72		%	10	05/04/23	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	70		%	10	05/04/23	AW	30 - 150 %
TPH DRO (C10-C28)							
Diesel Range Organics (C10-C28)	ND	280	mg/Kg	5	05/05/23	JRB	SW-846 8015
QA/QC Surrogates							
% COD (surr)	98		%	5	05/05/23	JRB	50 - 150 %
% Terphenyl (surr)	111		%	5	05/05/23	JRB	50 - 150 %
Volatiles (TCL)							
1,1,1-Trichloroethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,1,2,2-Tetrachloroethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,1,2-Trichloroethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,1-Dichloroethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,1-Dichloroethene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,2,3-Trichlorobenzene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,2,4-Trichlorobenzene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dibromo-3-chloropropane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dibromoethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichlorobenzene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichloroethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichloropropane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,3-Dichlorobenzene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,4-Dichlorobenzene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
2-Hexanone	ND	41	ug/kg	1	05/03/23	HM	SW8260C
4-Methyl-2-pentanone	ND	41	ug/kg	1	05/03/23	HM	SW8260C
Acetone	ND	50	ug/kg	1	05/03/23	HM	SW8260C
Benzene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Bromochloromethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Bromodichloromethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Bromoform	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Bromomethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Carbon Disulfide	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Carbon tetrachloride	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Chlorobenzene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Chloroethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Chloroform	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Chloromethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
cis-1,2-Dichloroethene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
cis-1,3-Dichloropropene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Cyclohexane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Dibromochloromethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Dichlorodifluoromethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Ethylbenzene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Isopropylbenzene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
m&p-Xylene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Methyl ethyl ketone	ND	49	ug/kg	1	05/03/23	HM	SW8260C
Methyl t-butyl ether (MTBE)	ND	16	ug/kg	1	05/03/23	HM	SW8260C
Methylacetate	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Methylcyclohexane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Methylene chloride	ND	41	ug/kg	1	05/03/23	HM	SW8260C
o-Xylene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Styrene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Tetrachloroethene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Toluene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Total Xylenes	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
trans-1,2-Dichloroethene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
trans-1,3-Dichloropropene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Trichloroethene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Trichlorofluoromethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Trichlorotrifluoroethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Vinyl chloride	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	1	05/03/23	HM	70 - 130 %
% Bromofluorobenzene	81		%	1	05/03/23	HM	70 - 130 %
% Dibromofluoromethane	102		%	1	05/03/23	HM	70 - 130 %
% Toluene-d8	92		%	1	05/03/23	HM	70 - 130 %
1,4-dioxane							
1,4-dioxane	ND	100	ug/kg	1	05/03/23	HM	SW8260C
TCLP Volatiles							
1,1-Dichloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4 (10x)	100		%	10	05/03/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	96		%	10	05/03/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	101		%	10	05/03/23	HM	70 - 130 %
% Toluene-d8 (10x)	97		%	10	05/03/23	HM	70 - 130 %
Volatile Library Search	Completed				05/03/23	HM	

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 71 - #116

Phoenix I.D.: CN95995

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Semivolatiles								
1,1-Biphenyl	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,2'-Oxybis(1-Chloropropane)	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	1
2,3,4,6-tetrachlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4,5-Trichlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4,6-Trichlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dichlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dimethylphenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dinitrophenol	ND	630	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dinitrotoluene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,6-Dinitrotoluene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Chloronaphthalene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Chlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Methylnaphthalene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Methylphenol (o-cresol)	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Nitroaniline	ND	630	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Nitrophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
3&4-Methylphenol (m&p-cresol)	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D	1
3,3'-Dichlorobenzidine	ND	470	ug/Kg	1	05/03/23	KCA	SW8270D	
3-Nitroaniline	ND	630	ug/Kg	1	05/03/23	KCA	SW8270D	
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Bromophenyl phenyl ether	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chloro-3-methylphenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chloroaniline	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Nitroaniline	ND	630	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Nitrophenol	ND	1100	ug/Kg	1	05/03/23	KCA	SW8270D	
Acenaphthene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Acenaphthylene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Acetophenone	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Anthracene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Atrazine	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benz(a)anthracene	410	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzaldehyde	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(a)pyrene	470	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(b)fluoranthene	560	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(ghi)perylene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(k)fluoranthene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzyl butyl phthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-chloroethyl)ether	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-ethylhexyl)phthalate	ND	350	ug/Kg	1	05/03/23	KCA	SW8270D	
Caprolactam	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Carbazole	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D	
Chrysene	430	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Dibenz(a,h)anthracene	ND	200	ug/Kg	1	05/03/23	KCA	SW8270D	
Dibenzofuran	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Diethyl phthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dimethylphthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Di-n-butylphthalate	ND	780	ug/Kg	1	05/03/23	KCA	SW8270D
Di-n-octylphthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Fluoranthene	800	270	ug/Kg	1	05/03/23	KCA	SW8270D
Fluorene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorobenzene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorobutadiene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorocyclopentadiene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachloroethane	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Isophorone	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Naphthalene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Nitrobenzene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodimethylamine	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodiphenylamine	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D
Pentachlorophenol	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D
Phenanthrene	460	270	ug/Kg	1	05/03/23	KCA	SW8270D
Phenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Pyrene	760	270	ug/Kg	1	05/03/23	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	75		%	1	05/03/23	KCA	30 - 130 %
% 2-Fluorobiphenyl	58		%	1	05/03/23	KCA	30 - 130 %
% 2-Fluorophenol	61		%	1	05/03/23	KCA	30 - 130 %
% Nitrobenzene-d5	70		%	1	05/03/23	KCA	30 - 130 %
% Phenol-d5	72		%	1	05/03/23	KCA	30 - 130 %
% Terphenyl-d14	53		%	1	05/03/23	KCA	30 - 130 %
TCLP Acid/Base-Neutral							
1,4-Dichlorobenzene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	05/05/23	KCA	SW-846 1311/8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	94		%	1	05/05/23	KCA	15 - 110 %
% 2-Fluorobiphenyl	81		%	1	05/05/23	KCA	30 - 130 %
% 2-Fluorophenol	71		%	1	05/05/23	KCA	15 - 110 %
% Nitrobenzene-d5	79		%	1	05/05/23	KCA	30 - 130 %
% Phenol-d5	67		%	1	05/05/23	KCA	15 - 110 %
% Terphenyl-d14	96		%	1	05/05/23	KCA	30 - 130 %
Semivolatile Library Search	Completed				05/09/23	MR	

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

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

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

Comments:

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

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

Corrosivity is based solely on the pH analysis performed above.

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

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

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

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

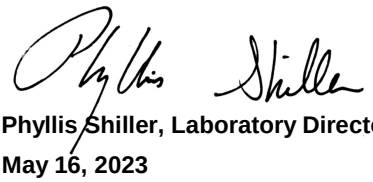
The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Sulfide. This method is no longer listed in the current version of SW-846.

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

PCB Comment:
* For PCBs, as per section 11.9.3 of SW846 method 8082, when multiple Aroclor's of PCBs are present and the aroclor is no longer recognizable, quantitation may be performed by comparing the total area of the PCB pattern to that of the aroclor it mostly resembles. The PCB pattern did not resemble any of the standards, but most closely resembles a mixture of the Aroclors 1248 and 1254 and 1260. The PCB is quantitated as a timed group and is reported as the Aroclor 1254.

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
May 16, 2023
Reviewed and Released by: Phyllis Shiller, Laboratory Director

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

May 16, 2023

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

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/01/23	8:45
Location Code:	AES-INC	Received by:	SW	05/02/23	17:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:	0703				

Laboratory Data

SDG ID: GCN95988
Phoenix ID: CN95996

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 72 - #117

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.0	1.0	mg/Kg	1	05/03/23	IE	SW6010D
Aluminum	4780	59	mg/Kg	10	05/03/23	CPP	SW6010D
Arsenic	8.48	0.78	mg/Kg	1	05/03/23	CPP	SW6010D
Barium	364	0.39	mg/Kg	1	05/03/23	CPP	SW6010D
Beryllium	0.57	0.31	mg/Kg	1	05/03/23	CPP	SW6010D
Calcium	6690	5.9	mg/Kg	1	05/03/23	CPP	SW6010D
Cadmium	1.63	0.39	mg/Kg	1	05/03/23	CPP	SW6010D
Cobalt	7.12	0.39	mg/Kg	1	05/03/23	CPP	SW6010D
Chromium	26.7	0.39	mg/Kg	1	05/03/23	CPP	SW6010D
Copper	158	0.8	mg/kg	1	05/03/23	CPP	SW6010D
Iron	26600	59	mg/Kg	10	05/03/23	CPP	SW6010D
Mercury	0.40	0.03	mg/Kg	2	05/03/23	AL1	SW7471B
Potassium	567	5.9	mg/Kg	1	05/03/23	CPP	SW6010D
Magnesium	1550	5.9	mg/Kg	1	05/03/23	CPP	SW6010D
Manganese	197	3.9	mg/Kg	10	05/03/23	CPP	SW6010D
Sodium	175	5.9	mg/Kg	1	05/03/23	CPP	SW6010D
Nickel	58.0	0.39	mg/Kg	1	05/03/23	CPP	SW6010D
Lead	880	3.9	mg/Kg	10	05/03/23	CPP	SW6010D
Antimony	5.5	3.9	mg/Kg	1	05/03/23	IE	SW6010D
Selenium	< 1.6	1.6	mg/Kg	1	05/03/23	CPP	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Barium	0.63	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	05/03/23	AL1	SW846 1311/7470
TCLP Lead	1.15	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010D

Ver 1

Parameter	Result		RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Thallium	< 3.5		3.5	mg/Kg	1	05/03/23	CPP	SW6010D	
TCLP Metals Digestion	Completed					05/03/23	ZT/W/ZT	SW3010A	
Vanadium	74.7		0.39	mg/Kg	1	05/03/23	CPP	SW6010D	
Zinc	713		7.8	mg/Kg	10	05/03/23	CPP	SW6010D	
Percent Solid	82			%		05/02/23	CV	SW846-%Solid	
Corrosivity	Negative			Pos/Neg	1	05/02/23	PK	SW846-Corr	1
Flash Point	>200		200	Degree F	1	05/08/23	G	SW1010B	
Ignitability	Passed		140	degree F	1	05/08/23	G	SW846-Ignit	1
pH at 25C - Soil	7.66		1.00	pH Units	1	05/02/23 22:57	PK	SW846 9045D	1
Reactivity Cyanide	< 6		6	mg/Kg	1	05/04/23	DK/GD	SW846 7.3.3.1/90	1
Reactivity Sulfide	< 20		20	mg/Kg	1	05/05/23	DK/GD	SW846 CH7	1
Reactivity	Negative			Pos/Neg	1	05/05/23	DK/GD	SW846-React	1
Total Cyanide (SW9010C Distill.)	0.79		0.61	mg/Kg	1	05/04/23	CL/GD	SW9012B	
Mercury Digestion	Completed					05/03/23	W/W	SW7471B	
Extraction of NY ETPH	Completed					05/03/23	MO/M	SW3546	
Soil Extraction for PCB	Completed					05/03/23	B/K/Y/MO	SW3546	
Soil Extraction for Pesticides	Completed					05/03/23	B/K/Y/MO	SW3546	
Soil Extraction for SVOA	Completed					05/02/23	B/M	SW3546	
TCLP Digestion Mercury	Completed					05/03/23	W/ZT/AL	SW7470A	
TCLP Herbicides Extraction	Completed					05/03/23	CV/KW	SW8150 MOD	
TCLP Extraction for Metals	Completed					05/02/23	ZT	SW1311	
TCLP Extraction for Organics	Completed					05/02/23	ZT	SW1311	
TCLP Pesticides Extraction	Completed					05/03/23	S/S	SW3510C	
TCLP Semi-Volatile Extraction	Completed					05/05/23	S/S	SW3510C	
TCLP Extraction Volatiles	Completed					05/02/23	CV	SW1311	
Total Metals Digest	Completed					05/02/23	L/AG	SW3050B	
Gasoline Range Hydrocarbons (C6-C10)									
GRO (C6-C10)	ND		7.4	mg/Kg	50	05/03/23	V	SW8015D GRO	
QA/QC Surrogates									
% 2,5-Dibromotoluene (FID)	82			%	50	05/03/23	V	70 - 130 %	
Polychlorinated Biphenyls									
PCB-1016	ND		81	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1221	ND		81	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1232	ND		81	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1242	ND		81	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1248	*	*	81	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1254	450	*	81	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1260	*	*	81	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1262	ND		81	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1268	ND		81	ug/Kg	2	05/05/23	SC	SW8082A	
QA/QC Surrogates									
% DCBP	97			%	2	05/05/23	SC	30 - 150 %	
% DCBP (Confirmation)	107			%	2	05/05/23	SC	30 - 150 %	
% TCMX	74			%	2	05/05/23	SC	30 - 150 %	
% TCMX (Confirmation)	73			%	2	05/05/23	SC	30 - 150 %	

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 72 - #117

Phoenix I.D.: CN95996

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Pesticides - Soil								
4,4' -DDD	89	2.4	ug/Kg	2	05/04/23	AW	SW8081B	
4,4' -DDE	12	2.4	ug/Kg	2	05/04/23	AW	SW8081B	
4,4' -DDT	11	2.4	ug/Kg	2	05/04/23	AW	SW8081B	
a-BHC	ND	8.1	ug/Kg	2	05/04/23	AW	SW8081B	
a-Chlordane	ND	4.0	ug/Kg	2	05/04/23	AW	SW8081B	
Aldrin	ND	4.0	ug/Kg	2	05/04/23	AW	SW8081B	
b-BHC	ND	8.1	ug/Kg	2	05/04/23	AW	SW8081B	
Chlordane	ND	40	ug/Kg	2	05/04/23	AW	SW8081B	
d-BHC	ND	8.1	ug/Kg	2	05/04/23	AW	SW8081B	
Dieldrin	23	4.0	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan I	ND	8.1	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan II	ND	8.1	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan sulfate	ND	8.1	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin	ND	8.1	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin aldehyde	ND	8.1	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin ketone	ND	8.1	ug/Kg	2	05/04/23	AW	SW8081B	
g-BHC	ND	5.0	ug/Kg	2	05/04/23	AW	SW8081B	
g-Chlordane	ND	5.0	ug/Kg	2	05/04/23	AW	SW8081B	
Heptachlor	ND	8.1	ug/Kg	2	05/04/23	AW	SW8081B	
Heptachlor epoxide	ND	8.1	ug/Kg	2	05/04/23	AW	SW8081B	
Methoxychlor	ND	40	ug/Kg	2	05/04/23	AW	SW8081B	
Toxaphene	ND	160	ug/Kg	2	05/04/23	AW	SW8081B	
QA/QC Surrogates								
% DCBP	75		%	2	05/04/23	AW	30 - 150 %	
% DCBP (Confirmation)	64		%	2	05/04/23	AW	30 - 150 %	
% TCMX	53		%	2	05/04/23	AW	30 - 150 %	
% TCMX (Confirmation)	56		%	2	05/04/23	AW	30 - 150 %	
TCLP Herbicides								
2,4,5-TP (Silvex)	ND	50	ug/L	10	05/05/23	PS	SW846 1311/8151	
2,4-D	ND	100	ug/L	10	05/05/23	PS	SW846 1311/8151	
QA/QC Surrogates								
% DCAA	56		%	10	05/05/23	PS	30 - 150 %	
% DCAA (Confirmation)	48		%	10	05/05/23	PS	30 - 150 %	
TCLP Pesticides								
4,4' -DDD	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
4,4' -DDE	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
4,4' -DDT	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
a-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Alachlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	1
Aldrin	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
b-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Chlordane	ND	5.0	ug/L	10	05/04/23	AW	SW8081B	
d-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Dieldrin	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
Endosulfan I	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Endosulfan II	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Endosulfan Sulfate	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
Endrin	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Toxaphene	ND	20	ug/L	10	05/04/23	AW	SW8081B
QA/QC Surrogates							
%DCBP (Surrogate Rec)	86		%	10	05/04/23	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	73		%	10	05/04/23	AW	30 - 150 %
%TCMX (Surrogate Rec)	70		%	10	05/04/23	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	64		%	10	05/04/23	AW	30 - 150 %
TPH DRO (C10-C28)							
Diesel Range Organics (C10-C28)	320	300	mg/Kg	5	05/05/23	JRB	SW-846 8015
QA/QC Surrogates							
% COD (surr)	135		%	5	05/05/23	JRB	50 - 150 %
% Terphenyl (surr)	120		%	5	05/05/23	JRB	50 - 150 %
Volatiles (TCL)							
1,1,1-Trichloroethane	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
1,1,2,2-Tetrachloroethane	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
1,1,2-Trichloroethane	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
1,1-Dichloroethane	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
1,1-Dichloroethene	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
1,2,3-Trichlorobenzene	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
1,2,4-Trichlorobenzene	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dibromo-3-chloropropane	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dibromoethane	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichlorobenzene	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichloroethane	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichloropropane	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
1,3-Dichlorobenzene	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
1,4-Dichlorobenzene	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
2-Hexanone	ND	40	ug/kg	1	05/03/23	HM	SW8260C
4-Methyl-2-pentanone	ND	40	ug/kg	1	05/03/23	HM	SW8260C
Acetone	ND	50	ug/kg	1	05/03/23	HM	SW8260C
Benzene	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
Bromochloromethane	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
Bromodichloromethane	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
Bromoform	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
Bromomethane	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
Carbon Disulfide	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
Carbon tetrachloride	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
Chlorobenzene	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
Chloroethane	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
Chloroform	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
Chloromethane	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
cis-1,2-Dichloroethene	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
cis-1,3-Dichloropropene	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
Cyclohexane	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
Dibromochloromethane	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
Dichlorodifluoromethane	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
Ethylbenzene	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
Isopropylbenzene	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
m&p-Xylene	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
Methyl ethyl ketone	ND	48	ug/kg	1	05/03/23	HM	SW8260C
Methyl t-butyl ether (MTBE)	ND	16	ug/kg	1	05/03/23	HM	SW8260C
Methylacetate	ND	6.3	ug/kg	1	05/03/23	HM	SW8260C
Methylcyclohexane	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
Methylene chloride	ND	40	ug/kg	1	05/03/23	HM	SW8260C
o-Xylene	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
Styrene	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
Tetrachloroethene	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
Toluene	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
Total Xylenes	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
trans-1,2-Dichloroethene	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
trans-1,3-Dichloropropene	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
Trichloroethene	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
Trichlorofluoromethane	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
Trichlorotrifluoroethane	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
Vinyl chloride	ND	7.9	ug/kg	1	05/03/23	HM	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	1	05/03/23	HM	70 - 130 %
% Bromofluorobenzene	81		%	1	05/03/23	HM	70 - 130 %
% Dibromofluoromethane	99		%	1	05/03/23	HM	70 - 130 %
% Toluene-d8	91		%	1	05/03/23	HM	70 - 130 %
1,4-dioxane							
1,4-dioxane	ND	100	ug/kg	1	05/03/23	HM	SW8260C
TCLP Volatiles							
1,1-Dichloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4 (10x)	99		%	10	05/03/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	96		%	10	05/03/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	97		%	10	05/03/23	HM	70 - 130 %
% Toluene-d8 (10x)	97		%	10	05/03/23	HM	70 - 130 %
Volatile Library Search	Completed				05/04/23	HM	

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 72 - #117

Phoenix I.D.: CN95996

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Semivolatiles								
1,1-Biphenyl	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
1,2,4,5-Tetrachlorobenzene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
2,2'-Oxybis(1-Chloropropane)	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	1
2,3,4,6-tetrachlorophenol	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4,5-Trichlorophenol	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4,6-Trichlorophenol	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dichlorophenol	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dimethylphenol	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dinitrophenol	ND	640	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dinitrotoluene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
2,6-Dinitrotoluene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Chloronaphthalene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Chlorophenol	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Methylnaphthalene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Methylphenol (o-cresol)	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Nitroaniline	ND	640	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Nitrophenol	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
3&4-Methylphenol (m&p-cresol)	ND	400	ug/Kg	1	05/03/23	KCA	SW8270D	1
3,3'-Dichlorobenzidine	ND	480	ug/Kg	1	05/03/23	KCA	SW8270D	
3-Nitroaniline	ND	640	ug/Kg	1	05/03/23	KCA	SW8270D	
4,6-Dinitro-2-methylphenol	ND	1200	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Bromophenyl phenyl ether	ND	400	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chloro-3-methylphenol	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chloroaniline	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chlorophenyl phenyl ether	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Nitroaniline	ND	640	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Nitrophenol	ND	1200	ug/Kg	1	05/03/23	KCA	SW8270D	
Acenaphthene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Acenaphthylene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Acetophenone	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Anthracene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Atrazine	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Benz(a)anthracene	470	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzaldehyde	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(a)pyrene	500	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(b)fluoranthene	590	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(ghi)perylene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(k)fluoranthene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzyl butyl phthalate	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-chloroethoxy)methane	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-chloroethyl)ether	ND	400	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-ethylhexyl)phthalate	ND	400	ug/Kg	1	05/03/23	KCA	SW8270D	
Caprolactam	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Carbazole	ND	400	ug/Kg	1	05/03/23	KCA	SW8270D	
Chrysene	470	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Dibenz(a,h)anthracene	ND	200	ug/Kg	1	05/03/23	KCA	SW8270D	
Dibenzofuran	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	
Diethyl phthalate	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dimethylphthalate	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D
Di-n-butylphthalate	ND	810	ug/Kg	1	05/03/23	KCA	SW8270D
Di-n-octylphthalate	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D
Fluoranthene	930	280	ug/Kg	1	05/03/23	KCA	SW8270D
Fluorene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorobenzene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorobutadiene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorocyclopentadiene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachloroethane	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D
Isophorone	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D
Naphthalene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D
Nitrobenzene	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodimethylamine	ND	400	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	200	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodiphenylamine	ND	400	ug/Kg	1	05/03/23	KCA	SW8270D
Pentachlorophenol	ND	400	ug/Kg	1	05/03/23	KCA	SW8270D
Phenanthrene	610	280	ug/Kg	1	05/03/23	KCA	SW8270D
Phenol	ND	280	ug/Kg	1	05/03/23	KCA	SW8270D
Pyrene	860	280	ug/Kg	1	05/03/23	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	75		%	1	05/03/23	KCA	30 - 130 %
% 2-Fluorobiphenyl	62		%	1	05/03/23	KCA	30 - 130 %
% 2-Fluorophenol	59		%	1	05/03/23	KCA	30 - 130 %
% Nitrobenzene-d5	72		%	1	05/03/23	KCA	30 - 130 %
% Phenol-d5	70		%	1	05/03/23	KCA	30 - 130 %
% Terphenyl-d14	58		%	1	05/03/23	KCA	30 - 130 %
TCLP Acid/Base-Neutral							
1,4-Dichlorobenzene	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	67		%	1	05/06/23	KCA	15 - 110 %
% 2-Fluorobiphenyl	61		%	1	05/06/23	KCA	30 - 130 %
% 2-Fluorophenol	61		%	1	05/06/23	KCA	15 - 110 %
% Nitrobenzene-d5	75		%	1	05/06/23	KCA	30 - 130 %
% Phenol-d5	59		%	1	05/06/23	KCA	15 - 110 %
% Terphenyl-d14	78		%	1	05/06/23	KCA	30 - 130 %
Semivolatile Library Search	Completed				05/09/23	MR	

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

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

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

Comments:

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

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

Corrosivity is based solely on the pH analysis performed above.

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

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

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

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

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

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

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.

PCB Comment:
* For PCBs, as per section 11.9.3 of SW846 method 8082, when multiple Aroclor's of PCBs are present and the aroclor is no longer recognizable, quantitation may be performed by comparing the total area of the PCB pattern to that of the aroclor it mostly resembles. The PCB pattern did not resemble any of the standards, but most closely resembles a mixture of the Aroclors 1248 and 1254 and 1260. The PCB is quantitated as a timed group and is reported as the Aroclor 1254.

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
May 16, 2023
Reviewed and Released by: Phyllis Shiller, Laboratory Director

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

May 16, 2023

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

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/01/23	8:50
Location Code:	AES-INC	Received by:	SW	05/02/23	17:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:	0703				

Laboratory Data

SDG ID: GCN95988
Phoenix ID: CN95997

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 72 - #118

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.0	1.0	mg/Kg	1	05/03/23	IE	SW6010D
Aluminum	4640	61	mg/Kg	10	05/03/23	CPP	SW6010D
Arsenic	5.43	0.82	mg/Kg	1	05/03/23	CPP	SW6010D
Barium	299	0.41	mg/Kg	1	05/03/23	CPP	SW6010D
Beryllium	0.62	0.33	mg/Kg	1	05/03/23	CPP	SW6010D
Calcium	6320	6.1	mg/Kg	1	05/03/23	CPP	SW6010D
Cadmium	1.21	0.41	mg/Kg	1	05/03/23	CPP	SW6010D
Cobalt	6.70	0.41	mg/Kg	1	05/03/23	CPP	SW6010D
Chromium	19.3	0.41	mg/Kg	1	05/03/23	CPP	SW6010D
Copper	135	0.8	mg/kg	1	05/03/23	CPP	SW6010D
Iron	17100	61	mg/Kg	10	05/03/23	CPP	SW6010D
Mercury	0.71	0.03	mg/Kg	2	05/03/23	AL1	SW7471B
Potassium	637	6.1	mg/Kg	1	05/03/23	CPP	SW6010D
Magnesium	1920	6.1	mg/Kg	1	05/03/23	CPP	SW6010D
Manganese	148	0.41	mg/Kg	1	05/03/23	CPP	SW6010D
Sodium	153	6.1	mg/Kg	1	05/03/23	CPP	SW6010D
Nickel	45.7	0.41	mg/Kg	1	05/03/23	CPP	SW6010D
Lead	1420	4.1	mg/Kg	10	05/03/23	CPP	SW6010D
Antimony	10.3	4.1	mg/Kg	1	05/03/23	IE	SW6010D
Selenium	< 1.6	1.6	mg/Kg	1	05/03/23	CPP	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Barium	0.97	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	05/03/23	AL1	SW846 1311/7470
TCLP Lead	2.63	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010D

Ver 1

Parameter	Result		RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Thallium	< 3.7		3.7	mg/Kg	1	05/03/23	CPP	SW6010D	
TCLP Metals Digestion	Completed					05/03/23	ZT/W/ZT	SW3010A	
Vanadium	96.7		0.41	mg/Kg	1	05/03/23	CPP	SW6010D	
Zinc	625		8.2	mg/Kg	10	05/03/23	CPP	SW6010D	
Percent Solid	84			%		05/02/23	CV	SW846-%Solid	
Corrosivity	Negative			Pos/Neg	1	05/02/23	PK	SW846-Corr	1
Flash Point	>200		200	Degree F	1	05/08/23	G	SW1010B	
Ignitability	Passed		140	degree F	1	05/08/23	G	SW846-Ignit	1
pH at 25C - Soil	7.78		1.00	pH Units	1	05/02/23 22:57	PK	SW846 9045D	1
Reactivity Cyanide	< 6		6	mg/Kg	1	05/04/23	DK/GD	SW846 7.3.3.1/90	1
Reactivity Sulfide	< 20		20	mg/Kg	1	05/05/23	DK/GD	SW846 CH7	1
Reactivity	Negative			Pos/Neg	1	05/05/23	DK/GD	SW846-React	1
Total Cyanide (SW9010C Distill.)	2.33		0.60	mg/Kg	1	05/04/23	CL/GD	SW9012B	
Mercury Digestion	Completed					05/03/23	W/W	SW7471B	
Extraction of NY ETPH	Completed					05/03/23	MO/M	SW3546	
Soil Extraction for PCB	Completed					05/03/23	B/K/Y/MO	SW3546	
Soil Extraction for Pesticides	Completed					05/03/23	B/K/Y/MO	SW3546	
Soil Extraction for SVOA	Completed					05/02/23	B/M	SW3546	
TCLP Digestion Mercury	Completed					05/03/23	W/ZT/AL	SW7470A	
TCLP Herbicides Extraction	Completed					05/03/23	CV/KW	SW8150 MOD	
TCLP Extraction for Metals	Completed					05/02/23	ZT	SW1311	
TCLP Extraction for Organics	Completed					05/02/23	ZT	SW1311	
TCLP Pesticides Extraction	Completed					05/03/23	S/S	SW3510C	
TCLP Semi-Volatile Extraction	Completed					05/05/23	S/S	SW3510C	
TCLP Extraction Volatiles	Completed					05/02/23	CV	SW1311	
Total Metals Digest	Completed					05/02/23	L/AG	SW3050B	
Gasoline Range Hydrocarbons (C6-C10)									
GRO (C6-C10)	ND		8.9	mg/Kg	50	05/03/23	V	SW8015D GRO	
QA/QC Surrogates									
% 2,5-Dibromotoluene (FID)	83			%	50	05/03/23	V	70 - 130 %	
Polychlorinated Biphenyls									
PCB-1016	ND		77	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1221	ND		77	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1232	ND		77	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1242	ND		77	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1248	*	*	77	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1254	470	*	77	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1260	*	*	77	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1262	ND		77	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1268	ND		77	ug/Kg	2	05/05/23	SC	SW8082A	
QA/QC Surrogates									
% DCBP	125			%	2	05/05/23	SC	30 - 150 %	
% DCBP (Confirmation)	111			%	2	05/05/23	SC	30 - 150 %	
% TCMX	68			%	2	05/05/23	SC	30 - 150 %	
% TCMX (Confirmation)	71			%	2	05/05/23	SC	30 - 150 %	

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 72 - #118

Phoenix I.D.: CN95997

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Pesticides - Soil								
4,4' -DDD	110	3.3	ug/Kg	10	05/05/23	PS	SW8081B	
4,4' -DDE	27	3.3	ug/Kg	10	05/05/23	PS	SW8081B	
4,4' -DDT	ND	3.3	ug/Kg	10	05/05/23	PS	SW8081B	
a-BHC	ND	7.7	ug/Kg	2	05/05/23	PS	SW8081B	
a-Chlordane	ND	3.9	ug/Kg	2	05/05/23	PS	SW8081B	
Aldrin	ND	3.9	ug/Kg	2	05/05/23	PS	SW8081B	
b-BHC	ND	7.7	ug/Kg	2	05/05/23	PS	SW8081B	
Chlordane	ND	39	ug/Kg	2	05/05/23	PS	SW8081B	
d-BHC	ND	7.7	ug/Kg	2	05/05/23	PS	SW8081B	
Dieldrin	ND	5.0	ug/Kg	10	05/05/23	PS	SW8081B	
Endosulfan I	ND	7.7	ug/Kg	2	05/05/23	PS	SW8081B	
Endosulfan II	ND	7.7	ug/Kg	2	05/05/23	PS	SW8081B	
Endosulfan sulfate	ND	7.7	ug/Kg	2	05/05/23	PS	SW8081B	
Endrin	ND	7.7	ug/Kg	2	05/05/23	PS	SW8081B	
Endrin aldehyde	ND	39	ug/Kg	10	05/05/23	PS	SW8081B	
Endrin ketone	ND	7.7	ug/Kg	2	05/05/23	PS	SW8081B	
g-BHC	ND	1.5	ug/Kg	2	05/05/23	PS	SW8081B	
g-Chlordane	ND	19	ug/Kg	10	05/05/23	PS	SW8081B	
Heptachlor	ND	7.7	ug/Kg	2	05/05/23	PS	SW8081B	
Heptachlor epoxide	ND	7.7	ug/Kg	2	05/05/23	PS	SW8081B	
Methoxychlor	ND	39	ug/Kg	2	05/05/23	PS	SW8081B	
Toxaphene	ND	150	ug/Kg	2	05/05/23	PS	SW8081B	
QA/QC Surrogates								
% DCBP	101		%	2	05/05/23	PS	30 - 150 %	
% DCBP (Confirmation)	139		%	2	05/05/23	PS	30 - 150 %	
% TCMX	76		%	2	05/05/23	PS	30 - 150 %	
% TCMX (Confirmation)	124		%	2	05/05/23	PS	30 - 150 %	
TCLP Herbicides								
2,4,5-TP (Silvex)	ND	50	ug/L	10	05/05/23	PS	SW846 1311/8151	
2,4-D	ND	100	ug/L	10	05/05/23	PS	SW846 1311/8151	
QA/QC Surrogates								
% DCAA	62		%	10	05/05/23	PS	30 - 150 %	
% DCAA (Confirmation)	55		%	10	05/05/23	PS	30 - 150 %	
TCLP Pesticides								
4,4' -DDD	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
4,4' -DDE	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
4,4' -DDT	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
a-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Alachlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	1
Aldrin	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
b-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Chlordane	ND	5.0	ug/L	10	05/04/23	AW	SW8081B	
d-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Dieldrin	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
Endosulfan I	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Endosulfan II	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 72 - #118

Phoenix I.D.: CN95997

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Endosulfan Sulfate	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
Endrin	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Toxaphene	ND	20	ug/L	10	05/04/23	AW	SW8081B
QA/QC Surrogates							
%DCBP (Surrogate Rec)	82		%	10	05/04/23	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	73		%	10	05/04/23	AW	30 - 150 %
%TCMX (Surrogate Rec)	67		%	10	05/04/23	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	65		%	10	05/04/23	AW	30 - 150 %
TPH DRO (C10-C28)							
Diesel Range Organics (C10-C28)	ND	290	mg/Kg	5	05/05/23	JRB	SW-846 8015
QA/QC Surrogates							
% COD (surr)	114		%	5	05/05/23	JRB	50 - 150 %
% Terphenyl (surr)	106		%	5	05/05/23	JRB	50 - 150 %
Volatiles (TCL)							
1,1,1-Trichloroethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,1,2,2-Tetrachloroethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,1,2-Trichloroethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,1-Dichloroethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,1-Dichloroethene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,2,3-Trichlorobenzene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,2,4-Trichlorobenzene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dibromo-3-chloropropane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dibromoethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichlorobenzene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichloroethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichloropropane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,3-Dichlorobenzene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
1,4-Dichlorobenzene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
2-Hexanone	ND	41	ug/kg	1	05/03/23	HM	SW8260C
4-Methyl-2-pentanone	ND	41	ug/kg	1	05/03/23	HM	SW8260C
Acetone	ND	50	ug/kg	1	05/03/23	HM	SW8260C
Benzene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Bromochloromethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Bromodichloromethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Bromoform	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Bromomethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Carbon Disulfide	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Carbon tetrachloride	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Chlorobenzene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Chloroethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Chloroform	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Chloromethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
cis-1,2-Dichloroethene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
cis-1,3-Dichloropropene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Cyclohexane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Dibromochloromethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Dichlorodifluoromethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Ethylbenzene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Isopropylbenzene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
m&p-Xylene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Methyl ethyl ketone	ND	49	ug/kg	1	05/03/23	HM	SW8260C
Methyl t-butyl ether (MTBE)	ND	16	ug/kg	1	05/03/23	HM	SW8260C
Methylacetate	ND	6.5	ug/kg	1	05/03/23	HM	SW8260C
Methylcyclohexane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Methylene chloride	ND	41	ug/kg	1	05/03/23	HM	SW8260C
o-Xylene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Styrene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Tetrachloroethene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Toluene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Total Xylenes	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
trans-1,2-Dichloroethene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
trans-1,3-Dichloropropene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Trichloroethene	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Trichlorofluoromethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Trichlorotrifluoroethane	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
Vinyl chloride	ND	8.2	ug/kg	1	05/03/23	HM	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	96		%	1	05/03/23	HM	70 - 130 %
% Bromofluorobenzene	83		%	1	05/03/23	HM	70 - 130 %
% Dibromofluoromethane	99		%	1	05/03/23	HM	70 - 130 %
% Toluene-d8	92		%	1	05/03/23	HM	70 - 130 %
1,4-dioxane							
1,4-dioxane	ND	100	ug/kg	1	05/03/23	HM	SW8260C
TCLP Volatiles							
1,1-Dichloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4 (10x)	100		%	10	05/03/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	95		%	10	05/03/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	99		%	10	05/03/23	HM	70 - 130 %
% Toluene-d8 (10x)	97		%	10	05/03/23	HM	70 - 130 %
Volatile Library Search	Completed				05/03/23	HM	

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 72 - #118

Phoenix I.D.: CN95997

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Semivolatiles								
1,1-Biphenyl	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,2'-Oxybis(1-Chloropropane)	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	1
2,3,4,6-tetrachlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4,5-Trichlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4,6-Trichlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dichlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dimethylphenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dinitrophenol	ND	620	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dinitrotoluene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,6-Dinitrotoluene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Chloronaphthalene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Chlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Methylnaphthalene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Methylphenol (o-cresol)	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Nitroaniline	ND	620	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Nitrophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
3&4-Methylphenol (m&p-cresol)	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D	1
3,3'-Dichlorobenzidine	ND	470	ug/Kg	1	05/03/23	KCA	SW8270D	
3-Nitroaniline	ND	620	ug/Kg	1	05/03/23	KCA	SW8270D	
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Bromophenyl phenyl ether	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chloro-3-methylphenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chloroaniline	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Nitroaniline	ND	620	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Nitrophenol	ND	1100	ug/Kg	1	05/03/23	KCA	SW8270D	
Acenaphthene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Acenaphthylene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Acetophenone	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Anthracene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Atrazine	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benz(a)anthracene	430	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzaldehyde	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(a)pyrene	440	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(b)fluoranthene	550	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(ghi)perylene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(k)fluoranthene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzyl butyl phthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-chloroethyl)ether	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-ethylhexyl)phthalate	ND	400	ug/Kg	1	05/03/23	KCA	SW8270D	
Caprolactam	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Carbazole	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D	
Chrysene	470	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Dibenz(a,h)anthracene	ND	190	ug/Kg	1	05/03/23	KCA	SW8270D	
Dibenzofuran	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Diethyl phthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dimethylphthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Di-n-butylphthalate	ND	780	ug/Kg	1	05/03/23	KCA	SW8270D
Di-n-octylphthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Fluoranthene	880	270	ug/Kg	1	05/03/23	KCA	SW8270D
Fluorene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorobenzene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorobutadiene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorocyclopentadiene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachloroethane	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Isophorone	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Naphthalene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Nitrobenzene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodimethylamine	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	190	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodiphenylamine	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D
Pentachlorophenol	ND	390	ug/Kg	1	05/03/23	KCA	SW8270D
Phenanthrene	580	270	ug/Kg	1	05/03/23	KCA	SW8270D
Phenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Pyrene	800	270	ug/Kg	1	05/03/23	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	61		%	1	05/03/23	KCA	30 - 130 %
% 2-Fluorobiphenyl	58		%	1	05/03/23	KCA	30 - 130 %
% 2-Fluorophenol	60		%	1	05/03/23	KCA	30 - 130 %
% Nitrobenzene-d5	64		%	1	05/03/23	KCA	30 - 130 %
% Phenol-d5	71		%	1	05/03/23	KCA	30 - 130 %
% Terphenyl-d14	51		%	1	05/03/23	KCA	30 - 130 %
TCLP Acid/Base-Neutral							
1,4-Dichlorobenzene	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	88		%	1	05/06/23	KCA	15 - 110 %
% 2-Fluorobiphenyl	76		%	1	05/06/23	KCA	30 - 130 %
% 2-Fluorophenol	68		%	1	05/06/23	KCA	15 - 110 %
% Nitrobenzene-d5	101		%	1	05/06/23	KCA	30 - 130 %
% Phenol-d5	65		%	1	05/06/23	KCA	15 - 110 %
% Terphenyl-d14	90		%	1	05/06/23	KCA	30 - 130 %
Semivolatile Library Search	Completed				05/09/23	MR	

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

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

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

Comments:

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

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

Corrosivity is based solely on the pH analysis performed above.

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

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

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

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

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

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

PCB Comment:
* For PCBs, as per section 11.9.3 of SW846 method 8082, when multiple Aroclor's of PCBs are present and the aroclor is no longer recognizable, quantitation may be performed by comparing the total area of the PCB pattern to that of the aroclor it mostly resembles. The PCB pattern did not resemble any of the standards, but most closely resembles a mixture of the Aroclors 1248 and 1254 and 1260. The PCB is quantitated as a timed group and is reported as the Aroclor 1254.

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

May 16, 2023

Reviewed and Released by: Phyllis Shiller, Laboratory Director

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

May 16, 2023

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

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/01/23	8:55
Location Code:	AES-INC	Received by:	SW	05/02/23	17:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:	0703				

Laboratory Data

SDG ID: GCN95988
Phoenix ID: CN95998

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 72 - #119

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.0	1.0	mg/Kg	1	05/03/23	IE	SW6010D
Aluminum	4310	52	mg/Kg	10	05/03/23	CPP	SW6010D
Arsenic	5.42	0.70	mg/Kg	1	05/03/23	CPP	SW6010D
Barium	371	0.35	mg/Kg	1	05/03/23	CPP	SW6010D
Beryllium	0.34	0.28	mg/Kg	1	05/03/23	CPP	SW6010D
Calcium	9350	5.2	mg/Kg	1	05/03/23	CPP	SW6010D
Cadmium	1.28	0.35	mg/Kg	1	05/03/23	CPP	SW6010D
Cobalt	5.27	0.35	mg/Kg	1	05/03/23	CPP	SW6010D
Chromium	24.2	0.35	mg/Kg	1	05/03/23	CPP	SW6010D
Copper	94.8	0.7	mg/kg	1	05/03/23	CPP	SW6010D
Iron	18900	52	mg/Kg	10	05/03/23	CPP	SW6010D
Mercury	0.17	0.03	mg/Kg	2	05/03/23	AL1	SW7471B
Potassium	555	5.2	mg/Kg	1	05/03/23	CPP	SW6010D
Magnesium	2110	5.2	mg/Kg	1	05/03/23	CPP	SW6010D
Manganese	176	3.5	mg/Kg	10	05/03/23	CPP	SW6010D
Sodium	144	5.2	mg/Kg	1	05/03/23	CPP	SW6010D
Nickel	34.8	0.35	mg/Kg	1	05/03/23	CPP	SW6010D
Lead	921	3.5	mg/Kg	10	05/03/23	CPP	SW6010D
Antimony	< 3.5	3.5	mg/Kg	1	05/03/23	CPP	SW6010D
Selenium	< 1.4	1.4	mg/Kg	1	05/03/23	CPP	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Barium	0.53	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	05/03/23	AL1	SW846 1311/7470
TCLP Lead	0.42	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010D

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Thallium	< 3.1	3.1	mg/Kg	1	05/03/23	CPP	SW6010D	
TCLP Metals Digestion	Completed				05/03/23	ZT/W/ZT	SW3010A	
Vanadium	88.6	0.35	mg/Kg	1	05/03/23	CPP	SW6010D	
Zinc	608	7.0	mg/Kg	10	05/03/23	CPP	SW6010D	
Percent Solid	94		%		05/02/23	CV	SW846-%Solid	
Corrosivity	Negative		Pos/Neg	1	05/02/23	PK	SW846-Corr	1
Flash Point	>200	200	Degree F	1	05/08/23	G	SW1010B	
Ignitability	Passed	140	degree F	1	05/08/23	G	SW846-Ignit	1
pH at 25C - Soil	7.60	1.00	pH Units	1	05/02/23 22:57	PK	SW846 9045D	1
Reactivity Cyanide	< 5	5	mg/Kg	1	05/04/23	DK/GD	SW846 7.3.3.1/90	1
Reactivity Sulfide	< 20	20	mg/Kg	1	05/05/23	DK/GD	SW846 CH7	1
Reactivity	Negative		Pos/Neg	1	05/05/23	DK/GD	SW846-React	1
Total Cyanide (SW9010C Distill.)	< 0.53	0.53	mg/Kg	1	05/04/23	CL/GD	SW9012B	
Mercury Digestion	Completed				05/03/23	W/W	SW7471B	
Extraction of NY ETPH	Completed				05/03/23	MO/M	SW3546	
Soil Extraction for PCB	Completed				05/03/23	B/K/Y/MO	SW3546	
Soil Extraction for Pesticides	Completed				05/03/23	B/K/Y/MO	SW3546	
Soil Extraction for SVOA	Completed				05/02/23	B/M	SW3546	
TCLP Digestion Mercury	Completed				05/03/23	W/ZT/AL	SW7470A	
TCLP Herbicides Extraction	Completed				05/03/23	CV/KW	SW8150 MOD	
TCLP Extraction for Metals	Completed				05/02/23	ZT	SW1311	
TCLP Extraction for Organics	Completed				05/02/23	ZT	SW1311	
TCLP Pesticides Extraction	Completed				05/03/23	S/S	SW3510C	
TCLP Semi-Volatile Extraction	Completed				05/05/23	S/S	SW3510C	
TCLP Extraction Volatiles	Completed				05/02/23	CV	SW1311	
Total Metals Digest	Completed				05/02/23	L/AG	SW3050B	
Gasoline Range Hydrocarbons (C6-C10)								
GRO (C6-C10)	ND	7.5	mg/Kg	50	05/03/23	V	SW8015D GRO	
QA/QC Surrogates								
% 2,5-Dibromotoluene (FID)	81		%	50	05/03/23	V	70 - 130 %	
Polychlorinated Biphenyls								
PCB-1016	ND	70	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1221	ND	70	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1232	ND	70	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1242	ND	70	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1248	ND	70	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1254	ND	70	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1260	ND	70	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1262	ND	70	ug/Kg	2	05/04/23	SC	SW8082A	
PCB-1268	ND	70	ug/Kg	2	05/04/23	SC	SW8082A	
QA/QC Surrogates								
% DCBP	71		%	2	05/04/23	SC	30 - 150 %	
% DCBP (Confirmation)	61		%	2	05/04/23	SC	30 - 150 %	
% TCMX	77		%	2	05/04/23	SC	30 - 150 %	
% TCMX (Confirmation)	74		%	2	05/04/23	SC	30 - 150 %	

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Pesticides - Soil								
4,4' -DDD	26	2.1	ug/Kg	2	05/04/23	AW	SW8081B	
4,4' -DDE	ND	3.0	ug/Kg	2	05/04/23	AW	SW8081B	
4,4' -DDT	5.1	2.1	ug/Kg	2	05/04/23	AW	SW8081B	
a-BHC	ND	7.0	ug/Kg	2	05/04/23	AW	SW8081B	
a-Chlordane	ND	10	ug/Kg	2	05/04/23	AW	SW8081B	
Aldrin	ND	3.5	ug/Kg	2	05/04/23	AW	SW8081B	
b-BHC	ND	7.0	ug/Kg	2	05/04/23	AW	SW8081B	
Chlordane	ND	75	ug/Kg	2	05/04/23	AW	SW8081B	
d-BHC	ND	7.0	ug/Kg	2	05/04/23	AW	SW8081B	
Dieldrin	ND	3.5	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan I	ND	7.0	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan II	ND	7.0	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan sulfate	ND	7.0	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin	ND	7.0	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin aldehyde	ND	7.0	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin ketone	ND	7.0	ug/Kg	2	05/04/23	AW	SW8081B	
g-BHC	ND	1.4	ug/Kg	2	05/04/23	AW	SW8081B	
g-Chlordane	ND	10	ug/Kg	2	05/04/23	AW	SW8081B	
Heptachlor	ND	7.0	ug/Kg	2	05/04/23	AW	SW8081B	
Heptachlor epoxide	ND	7.0	ug/Kg	2	05/04/23	AW	SW8081B	
Methoxychlor	ND	35	ug/Kg	2	05/04/23	AW	SW8081B	
Toxaphene	ND	140	ug/Kg	2	05/04/23	AW	SW8081B	
QA/QC Surrogates								
% DCBP	66		%	2	05/04/23	AW	30 - 150 %	
% DCBP (Confirmation)	98		%	2	05/04/23	AW	30 - 150 %	
% TCMX	72		%	2	05/04/23	AW	30 - 150 %	
% TCMX (Confirmation)	141		%	2	05/04/23	AW	30 - 150 %	
TCLP Herbicides								
2,4,5-TP (Silvex)	ND	50	ug/L	10	05/05/23	PS	SW846 1311/8151	
2,4-D	ND	100	ug/L	10	05/05/23	PS	SW846 1311/8151	
QA/QC Surrogates								
% DCAA	62		%	10	05/05/23	PS	30 - 150 %	
% DCAA (Confirmation)	52		%	10	05/05/23	PS	30 - 150 %	
TCLP Pesticides								
4,4' -DDD	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
4,4' -DDE	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
4,4' -DDT	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
a-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Alachlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	1
Aldrin	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
b-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Chlordane	ND	5.0	ug/L	10	05/04/23	AW	SW8081B	
d-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Dieldrin	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
Endosulfan I	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Endosulfan II	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Endosulfan Sulfate	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
Endrin	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Toxaphene	ND	20	ug/L	10	05/04/23	AW	SW8081B
QA/QC Surrogates							
%DCBP (Surrogate Rec)	89		%	10	05/04/23	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	83		%	10	05/04/23	AW	30 - 150 %
%TCMX (Surrogate Rec)	74		%	10	05/04/23	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	69		%	10	05/04/23	AW	30 - 150 %
TPH DRO (C10-C28)							
Diesel Range Organics (C10-C28)	ND	270	mg/Kg	5	05/05/23	JRB	SW-846 8015
QA/QC Surrogates							
% COD (surr)	110		%	5	05/05/23	JRB	50 - 150 %
% Terphenyl (surr)	85		%	5	05/05/23	JRB	50 - 150 %
Volatiles (TCL)							
1,1,1-Trichloroethane	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
1,1,2,2-Tetrachloroethane	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
1,1,2-Trichloroethane	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
1,1-Dichloroethane	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
1,1-Dichloroethene	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
1,2,3-Trichlorobenzene	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
1,2,4-Trichlorobenzene	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dibromoethane	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichlorobenzene	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichloroethane	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichloropropane	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
1,3-Dichlorobenzene	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
1,4-Dichlorobenzene	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
2-Hexanone	ND	33	ug/kg	1	05/03/23	HM	SW8260C
4-Methyl-2-pentanone	ND	33	ug/kg	1	05/03/23	HM	SW8260C
Acetone	ND	50	ug/kg	1	05/03/23	HM	SW8260C
Benzene	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Bromochloromethane	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Bromodichloromethane	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Bromoform	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Bromomethane	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Carbon Disulfide	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Carbon tetrachloride	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Chlorobenzene	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Chloroethane	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Chloroform	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Chloromethane	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
cis-1,2-Dichloroethene	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
cis-1,3-Dichloropropene	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Cyclohexane	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Dibromochloromethane	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Dichlorodifluoromethane	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Ethylbenzene	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Isopropylbenzene	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
m&p-Xylene	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Methyl ethyl ketone	ND	40	ug/kg	1	05/03/23	HM	SW8260C
Methyl t-butyl ether (MTBE)	ND	13	ug/kg	1	05/03/23	HM	SW8260C
Methylacetate	ND	5.3	ug/kg	1	05/03/23	HM	SW8260C
Methylcyclohexane	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Methylene chloride	ND	33	ug/kg	1	05/03/23	HM	SW8260C
o-Xylene	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Styrene	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Tetrachloroethene	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Toluene	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Total Xylenes	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
trans-1,2-Dichloroethene	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
trans-1,3-Dichloropropene	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Trichloroethene	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Trichlorofluoromethane	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Trichlorotrifluoroethane	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
Vinyl chloride	ND	6.6	ug/kg	1	05/03/23	HM	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	97		%	1	05/03/23	HM	70 - 130 %
% Bromofluorobenzene	82		%	1	05/03/23	HM	70 - 130 %
% Dibromofluoromethane	102		%	1	05/03/23	HM	70 - 130 %
% Toluene-d8	92		%	1	05/03/23	HM	70 - 130 %
1,4-dioxane							
1,4-dioxane	ND	99	ug/kg	1	05/03/23	HM	SW8260C
TCLP Volatiles							
1,1-Dichloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4 (10x)	99		%	10	05/03/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	96		%	10	05/03/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	100		%	10	05/03/23	HM	70 - 130 %
% Toluene-d8 (10x)	97		%	10	05/03/23	HM	70 - 130 %
Volatile Library Search	Completed				05/03/23	HM	

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Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Semivolatiles								
1,1-Biphenyl	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
1,2,4,5-Tetrachlorobenzene	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
2,2'-Oxybis(1-Chloropropane)	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	1
2,3,4,6-tetrachlorophenol	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4,5-Trichlorophenol	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4,6-Trichlorophenol	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dichlorophenol	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dimethylphenol	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dinitrophenol	ND	570	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dinitrotoluene	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
2,6-Dinitrotoluene	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Chloronaphthalene	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Chlorophenol	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Methylnaphthalene	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Methylphenol (o-cresol)	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Nitroaniline	ND	570	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Nitrophenol	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
3&4-Methylphenol (m&p-cresol)	ND	350	ug/Kg	1	05/03/23	KCA	SW8270D	1
3,3'-Dichlorobenzidine	ND	430	ug/Kg	1	05/03/23	KCA	SW8270D	
3-Nitroaniline	ND	570	ug/Kg	1	05/03/23	KCA	SW8270D	
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Bromophenyl phenyl ether	ND	350	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chloro-3-methylphenol	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chloroaniline	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chlorophenyl phenyl ether	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Nitroaniline	ND	570	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Nitrophenol	ND	1000	ug/Kg	1	05/03/23	KCA	SW8270D	
Acenaphthene	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
Acenaphthylene	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
Acetophenone	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
Anthracene	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
Atrazine	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
Benz(a)anthracene	550	250	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzaldehyde	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(a)pyrene	580	250	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(b)fluoranthene	730	250	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(ghi)perylene	320	250	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(k)fluoranthene	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzyl butyl phthalate	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-chloroethoxy)methane	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-chloroethyl)ether	ND	350	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-ethylhexyl)phthalate	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
Caprolactam	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
Carbazole	ND	350	ug/Kg	1	05/03/23	KCA	SW8270D	
Chrysene	580	250	ug/Kg	1	05/03/23	KCA	SW8270D	
Dibenz(a,h)anthracene	ND	180	ug/Kg	1	05/03/23	KCA	SW8270D	
Dibenzofuran	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	
Diethyl phthalate	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dimethylphthalate	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D
Di-n-butylphthalate	ND	710	ug/Kg	1	05/03/23	KCA	SW8270D
Di-n-octylphthalate	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D
Fluoranthene	940	250	ug/Kg	1	05/03/23	KCA	SW8270D
Fluorene	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorobenzene	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorobutadiene	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorocyclopentadiene	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachloroethane	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	320	250	ug/Kg	1	05/03/23	KCA	SW8270D
Isophorone	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D
Naphthalene	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D
Nitrobenzene	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodimethylamine	ND	350	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	180	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodiphenylamine	ND	350	ug/Kg	1	05/03/23	KCA	SW8270D
Pentachlorophenol	ND	350	ug/Kg	1	05/03/23	KCA	SW8270D
Phenanthrene	470	250	ug/Kg	1	05/03/23	KCA	SW8270D
Phenol	ND	250	ug/Kg	1	05/03/23	KCA	SW8270D
Pyrene	880	250	ug/Kg	1	05/03/23	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	68		%	1	05/03/23	KCA	30 - 130 %
% 2-Fluorobiphenyl	71		%	1	05/03/23	KCA	30 - 130 %
% 2-Fluorophenol	73		%	1	05/03/23	KCA	30 - 130 %
% Nitrobenzene-d5	82		%	1	05/03/23	KCA	30 - 130 %
% Phenol-d5	85		%	1	05/03/23	KCA	30 - 130 %
% Terphenyl-d14	62		%	1	05/03/23	KCA	30 - 130 %
TCLP Acid/Base-Neutral							
1,4-Dichlorobenzene	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	93		%	1	05/06/23	KCA	15 - 110 %
% 2-Fluorobiphenyl	82		%	1	05/06/23	KCA	30 - 130 %
% 2-Fluorophenol	73		%	1	05/06/23	KCA	15 - 110 %
% Nitrobenzene-d5	107		%	1	05/06/23	KCA	30 - 130 %
% Phenol-d5	67		%	1	05/06/23	KCA	15 - 110 %
% Terphenyl-d14	99		%	1	05/06/23	KCA	30 - 130 %
Semivolatile Library Search	Completed				05/09/23	MR	

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

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

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

Comments:

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

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

Corrosivity is based solely on the pH analysis performed above.

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

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

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

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

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

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

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

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

Phyllis Shiller, Laboratory Director

May 16, 2023

Reviewed and Released by: Phyllis Shiller, Laboratory Director

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

May 16, 2023

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

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/01/23	9:00
Location Code:	AES-INC	Received by:	SW	05/02/23	17:15
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:	0703				

Laboratory Data

SDG ID: GCN95988
Phoenix ID: CN95999

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 72 - #120

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 1.0	1.0	mg/Kg	1	05/03/23	IE	SW6010D
Aluminum	3890	59	mg/Kg	10	05/03/23	CPP	SW6010D
Arsenic	8.19	0.79	mg/Kg	1	05/03/23	CPP	SW6010D
Barium	196	0.39	mg/Kg	1	05/03/23	CPP	SW6010D
Beryllium	0.45	0.31	mg/Kg	1	05/03/23	CPP	SW6010D
Calcium	8100	5.9	mg/Kg	1	05/03/23	CPP	SW6010D
Cadmium	2.21	0.39	mg/Kg	1	05/03/23	CPP	SW6010D
Cobalt	13.5	0.39	mg/Kg	1	05/03/23	CPP	SW6010D
Chromium	27.7	0.39	mg/Kg	1	05/03/23	CPP	SW6010D
Copper	117	0.8	mg/kg	1	05/03/23	CPP	SW6010D
Iron	28000	59	mg/Kg	10	05/03/23	CPP	SW6010D
Mercury	1.16	0.03	mg/Kg	2	05/03/23	AL1	SW7471B
Potassium	586	5.9	mg/Kg	1	05/03/23	CPP	SW6010D
Magnesium	1600	5.9	mg/Kg	1	05/03/23	CPP	SW6010D
Manganese	240	3.9	mg/Kg	10	05/03/23	CPP	SW6010D
Sodium	155	5.9	mg/Kg	1	05/03/23	CPP	SW6010D
Nickel	39.6	0.39	mg/Kg	1	05/03/23	CPP	SW6010D
Lead	502	3.9	mg/Kg	10	05/03/23	CPP	SW6010D
Antimony	< 3.9	3.9	mg/Kg	1	05/03/23	CPP	SW6010D
Selenium	< 1.6	1.6	mg/Kg	1	05/03/23	CPP	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Barium	0.98	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	05/03/23	AL1	SW846 1311/7470
TCLP Lead	2.30	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	05/03/23	CPP	SW846 1311/6010D

Ver 1

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 72 - #120

Phoenix I.D.: CN95999

Parameter	Result		RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Thallium	< 3.5		3.5	mg/Kg	1	05/03/23	CPP	SW6010D	
TCLP Metals Digestion	Completed					05/03/23	ZT/W/ZT	SW3010A	
Vanadium	86.6		0.39	mg/Kg	1	05/03/23	CPP	SW6010D	
Zinc	507		7.9	mg/Kg	10	05/03/23	CPP	SW6010D	
Percent Solid	86			%		05/02/23	CV	SW846-%Solid	
Corrosivity	Negative			Pos/Neg	1	05/02/23	PK	SW846-Corr	1
Flash Point	>200		200	Degree F	1	05/08/23	G	SW1010B	
Ignitability	Passed		140	degree F	1	05/08/23	G	SW846-Ignit	1
pH at 25C - Soil	7.71		1.00	pH Units	1	05/02/23 22:57	PK	SW846 9045D	1
Reactivity Cyanide	< 6		6	mg/Kg	1	05/04/23	DK/GD	SW846 7.3.3.1/90	1
Reactivity Sulfide	< 20		20	mg/Kg	1	05/05/23	DK/GD	SW846 CH7	1
Reactivity	Negative			Pos/Neg	1	05/05/23	DK/GD	SW846-React	1
Total Cyanide (SW9010C Distill.)	1.83		0.58	mg/Kg	1	05/04/23	CL/GD	SW9012B	
Mercury Digestion	Completed					05/03/23	W/W	SW7471B	
Extraction of NY ETPH	Completed					05/03/23	MO/M	SW3546	
Soil Extraction for PCB	Completed					05/03/23	B/K/Y/MO	SW3546	
Soil Extraction for Pesticides	Completed					05/03/23	B/K/Y/MO	SW3546	
Soil Extraction for SVOA	Completed					05/02/23	B/M	SW3546	
TCLP Digestion Mercury	Completed					05/03/23	W/ZT/AL	SW7470A	
TCLP Herbicides Extraction	Completed					05/03/23	CV/KW	SW8150 MOD	
TCLP Extraction for Metals	Completed					05/02/23	ZT	SW1311	
TCLP Extraction for Organics	Completed					05/02/23	ZT	SW1311	
TCLP Pesticides Extraction	Completed					05/03/23	S/S	SW3510C	
TCLP Semi-Volatile Extraction	Completed					05/05/23	S/S	SW3510C	
TCLP Extraction Volatiles	Completed					05/02/23	CV	SW1311	
Total Metals Digest	Completed					05/02/23	L/AG	SW3050B	
Gasoline Range Hydrocarbons (C6-C10)									
GRO (C6-C10)	30		6.9	mg/Kg	50	05/03/23	V	SW8015D GRO	
QA/QC Surrogates									
% 2,5-Dibromotoluene (FID)	82			%	50	05/03/23	V	70 - 130 %	
Polychlorinated Biphenyls									
PCB-1016	ND		75	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1221	ND		75	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1232	ND		75	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1242	ND		75	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1248	*	*	75	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1254	460	*	75	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1260	*	*	75	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1262	ND		75	ug/Kg	2	05/05/23	SC	SW8082A	
PCB-1268	ND		75	ug/Kg	2	05/05/23	SC	SW8082A	
QA/QC Surrogates									
% DCBP	76			%	2	05/05/23	SC	30 - 150 %	
% DCBP (Confirmation)	88			%	2	05/05/23	SC	30 - 150 %	
% TCMX	65			%	2	05/05/23	SC	30 - 150 %	
% TCMX (Confirmation)	67			%	2	05/05/23	SC	30 - 150 %	

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 72 - #120

Phoenix I.D.: CN95999

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Pesticides - Soil								
4,4' -DDD	73	2.3	ug/Kg	2	05/04/23	AW	SW8081B	
4,4' -DDE	20	2.3	ug/Kg	2	05/04/23	AW	SW8081B	
4,4' -DDT	11	2.3	ug/Kg	2	05/04/23	AW	SW8081B	
a-BHC	ND	7.5	ug/Kg	2	05/04/23	AW	SW8081B	
a-Chlordane	ND	3.8	ug/Kg	2	05/04/23	AW	SW8081B	
Aldrin	ND	3.8	ug/Kg	2	05/04/23	AW	SW8081B	
b-BHC	ND	7.5	ug/Kg	2	05/04/23	AW	SW8081B	
Chlordane	150	38	ug/Kg	2	05/04/23	AW	SW8081B	
d-BHC	ND	7.5	ug/Kg	2	05/04/23	AW	SW8081B	
Dieldrin	12	3.8	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan I	ND	7.5	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan II	ND	7.5	ug/Kg	2	05/04/23	AW	SW8081B	
Endosulfan sulfate	ND	7.5	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin	ND	7.5	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin aldehyde	ND	7.5	ug/Kg	2	05/04/23	AW	SW8081B	
Endrin ketone	ND	7.5	ug/Kg	2	05/04/23	AW	SW8081B	
g-BHC	ND	1.5	ug/Kg	2	05/04/23	AW	SW8081B	
g-Chlordane	ND	3.8	ug/Kg	2	05/04/23	AW	SW8081B	
Heptachlor	ND	7.5	ug/Kg	2	05/04/23	AW	SW8081B	
Heptachlor epoxide	ND	7.5	ug/Kg	2	05/04/23	AW	SW8081B	
Methoxychlor	ND	38	ug/Kg	2	05/04/23	AW	SW8081B	
Toxaphene	ND	150	ug/Kg	2	05/04/23	AW	SW8081B	
QA/QC Surrogates								
% DCBP	76		%	2	05/04/23	AW	30 - 150 %	
% DCBP (Confirmation)	83		%	2	05/04/23	AW	30 - 150 %	
% TCMX	67		%	2	05/04/23	AW	30 - 150 %	
% TCMX (Confirmation)	80		%	2	05/04/23	AW	30 - 150 %	
TCLP Herbicides								
2,4,5-TP (Silvex)	ND	50	ug/L	10	05/05/23	PS	SW846 1311/8151	
2,4-D	ND	100	ug/L	10	05/05/23	PS	SW846 1311/8151	
QA/QC Surrogates								
% DCAA	62		%	10	05/05/23	PS	30 - 150 %	
% DCAA (Confirmation)	56		%	10	05/05/23	PS	30 - 150 %	
TCLP Pesticides								
4,4' -DDD	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
4,4' -DDE	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
4,4' -DDT	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
a-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Alachlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	1
Aldrin	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
b-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Chlordane	ND	5.0	ug/L	10	05/04/23	AW	SW8081B	
d-BHC	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Dieldrin	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	
Endosulfan I	ND	0.50	ug/L	10	05/04/23	AW	SW8081B	
Endosulfan II	ND	1.0	ug/L	10	05/04/23	AW	SW8081B	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Endosulfan Sulfate	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
Endrin	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	05/04/23	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	05/04/23	AW	SW8081B
Toxaphene	ND	20	ug/L	10	05/04/23	AW	SW8081B
QA/QC Surrogates							
%DCBP (Surrogate Rec)	89		%	10	05/04/23	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	83		%	10	05/04/23	AW	30 - 150 %
%TCMX (Surrogate Rec)	72		%	10	05/04/23	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	69		%	10	05/04/23	AW	30 - 150 %
TPH DRO (C10-C28)							
Diesel Range Organics (C10-C28)	ND	280	mg/Kg	5	05/06/23	JRB	SW-846 8015
QA/QC Surrogates							
% COD (surr)	91		%	5	05/06/23	JRB	50 - 150 %
% Terphenyl (surr)	79		%	5	05/06/23	JRB	50 - 150 %
Volatiles (TCL)							
1,1,1-Trichloroethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,1,2,2-Tetrachloroethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,1,2-Trichloroethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,1-Dichloroethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,1-Dichloroethene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,2,3-Trichlorobenzene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,2,4-Trichlorobenzene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dibromoethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichlorobenzene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichloroethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,2-Dichloropropane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,3-Dichlorobenzene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
1,4-Dichlorobenzene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
2-Hexanone	ND	32	ug/kg	1	05/03/23	HM	SW8260C
4-Methyl-2-pentanone	ND	32	ug/kg	1	05/03/23	HM	SW8260C
Acetone	ND	50	ug/kg	1	05/03/23	HM	SW8260C
Benzene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Bromochloromethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Bromodichloromethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Bromoform	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Bromomethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Carbon Disulfide	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Carbon tetrachloride	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Chlorobenzene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Chloroethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Chloroform	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Chloromethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
cis-1,2-Dichloroethene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 72 - #120

Phoenix I.D.: CN95999

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
cis-1,3-Dichloropropene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Cyclohexane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Dibromochloromethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Dichlorodifluoromethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Ethylbenzene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Isopropylbenzene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
m&p-Xylene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Methyl ethyl ketone	ND	38	ug/kg	1	05/03/23	HM	SW8260C
Methyl t-butyl ether (MTBE)	ND	13	ug/kg	1	05/03/23	HM	SW8260C
Methylacetate	ND	5.1	ug/kg	1	05/03/23	HM	SW8260C
Methylcyclohexane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Methylene chloride	ND	32	ug/kg	1	05/03/23	HM	SW8260C
o-Xylene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Styrene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Tetrachloroethene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Toluene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Total Xylenes	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
trans-1,2-Dichloroethene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
trans-1,3-Dichloropropene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Trichloroethene	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Trichlorofluoromethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Trichlorotrifluoroethane	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
Vinyl chloride	ND	6.4	ug/kg	1	05/03/23	HM	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	1	05/03/23	HM	70 - 130 %
% Bromofluorobenzene	81		%	1	05/03/23	HM	70 - 130 %
% Dibromofluoromethane	102		%	1	05/03/23	HM	70 - 130 %
% Toluene-d8	91		%	1	05/03/23	HM	70 - 130 %
1,4-dioxane							
1,4-dioxane	ND	96	ug/kg	1	05/03/23	HM	SW8260C
TCLP Volatiles							
1,1-Dichloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	05/03/23	HM	SW846 1311/8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4 (10x)	99		%	10	05/03/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	96		%	10	05/03/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	100		%	10	05/03/23	HM	70 - 130 %
% Toluene-d8 (10x)	97		%	10	05/03/23	HM	70 - 130 %
Volatile Library Search	Completed				05/03/23	HM	

Ver 1

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 72 - #120

Phoenix I.D.: CN95999

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Semivolatiles								
1,1-Biphenyl	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,2'-Oxybis(1-Chloropropane)	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	1
2,3,4,6-tetrachlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4,5-Trichlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4,6-Trichlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dichlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dimethylphenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dinitrophenol	ND	610	ug/Kg	1	05/03/23	KCA	SW8270D	
2,4-Dinitrotoluene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2,6-Dinitrotoluene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Chloronaphthalene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Chlorophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Methylnaphthalene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Methylphenol (o-cresol)	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Nitroaniline	ND	610	ug/Kg	1	05/03/23	KCA	SW8270D	
2-Nitrophenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
3&4-Methylphenol (m&p-cresol)	ND	380	ug/Kg	1	05/03/23	KCA	SW8270D	1
3,3'-Dichlorobenzidine	ND	460	ug/Kg	1	05/03/23	KCA	SW8270D	
3-Nitroaniline	ND	610	ug/Kg	1	05/03/23	KCA	SW8270D	
4,6-Dinitro-2-methylphenol	ND	1100	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Bromophenyl phenyl ether	ND	380	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chloro-3-methylphenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chloroaniline	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Nitroaniline	ND	610	ug/Kg	1	05/03/23	KCA	SW8270D	
4-Nitrophenol	ND	1100	ug/Kg	1	05/03/23	KCA	SW8270D	
Acenaphthene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Acenaphthylene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Acetophenone	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Anthracene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Atrazine	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benz(a)anthracene	600	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzaldehyde	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(a)pyrene	670	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(b)fluoranthene	760	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(ghi)perylene	360	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzo(k)fluoranthene	270	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Benzyl butyl phthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-chloroethyl)ether	ND	380	ug/Kg	1	05/03/23	KCA	SW8270D	
Bis(2-ethylhexyl)phthalate	ND	360	ug/Kg	1	05/03/23	KCA	SW8270D	
Caprolactam	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Carbazole	ND	380	ug/Kg	1	05/03/23	KCA	SW8270D	
Chrysene	640	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Dibenz(a,h)anthracene	ND	190	ug/Kg	1	05/03/23	KCA	SW8270D	
Dibenzofuran	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	
Diethyl phthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dimethylphthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Di-n-butylphthalate	ND	760	ug/Kg	1	05/03/23	KCA	SW8270D
Di-n-octylphthalate	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Fluoranthene	1200	270	ug/Kg	1	05/03/23	KCA	SW8270D
Fluorene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorobenzene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorobutadiene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachlorocyclopentadiene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Hexachloroethane	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	380	270	ug/Kg	1	05/03/23	KCA	SW8270D
Isophorone	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Naphthalene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Nitrobenzene	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodimethylamine	ND	380	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	190	ug/Kg	1	05/03/23	KCA	SW8270D
N-Nitrosodiphenylamine	ND	380	ug/Kg	1	05/03/23	KCA	SW8270D
Pentachlorophenol	ND	380	ug/Kg	1	05/03/23	KCA	SW8270D
Phenanthrene	800	270	ug/Kg	1	05/03/23	KCA	SW8270D
Phenol	ND	270	ug/Kg	1	05/03/23	KCA	SW8270D
Pyrene	1200	270	ug/Kg	1	05/03/23	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	64		%	1	05/03/23	KCA	30 - 130 %
% 2-Fluorobiphenyl	67		%	1	05/03/23	KCA	30 - 130 %
% 2-Fluorophenol	69		%	1	05/03/23	KCA	30 - 130 %
% Nitrobenzene-d5	69		%	1	05/03/23	KCA	30 - 130 %
% Phenol-d5	81		%	1	05/03/23	KCA	30 - 130 %
% Terphenyl-d14	62		%	1	05/03/23	KCA	30 - 130 %
TCLP Acid/Base-Neutral							
1,4-Dichlorobenzene	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	05/06/23	KCA	SW-846 1311/8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	89		%	1	05/06/23	KCA	15 - 110 %
% 2-Fluorobiphenyl	81		%	1	05/06/23	KCA	30 - 130 %
% 2-Fluorophenol	73		%	1	05/06/23	KCA	15 - 110 %
% Nitrobenzene-d5	102		%	1	05/06/23	KCA	30 - 130 %
% Phenol-d5	68		%	1	05/06/23	KCA	15 - 110 %
% Terphenyl-d14	97		%	1	05/06/23	KCA	30 - 130 %
Semivolatile Library Search	Completed				05/09/23	MR	

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

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

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

Comments:

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

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

Corrosivity is based solely on the pH analysis performed above.

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

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

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

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

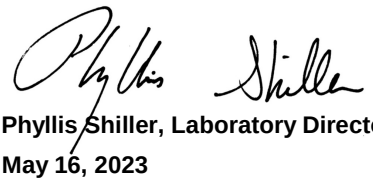
The reactivity, reported above, is based only on the EPA Interim Guidance for Reactive Sulfide. This method is no longer listed in the current version of SW-846.

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

PCB Comment:
* For PCBs, as per section 11.9.3 of SW846 method 8082, when multiple Aroclor's of PCBs are present and the aroclor is no longer recognizable, quantitation may be performed by comparing the total area of the PCB pattern to that of the aroclor it mostly resembles. The PCB pattern did not resemble any of the standards, but most closely resembles a mixture of the Aroclors 1248 and 1254 and 1260. The PCB is quantitated as a timed group and is reported as the Aroclor 1254.

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
May 16, 2023
Reviewed and Released by: Phyllis Shiller, Laboratory Director

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 70 - #109

Lab Name: Phoenix Environmental Labs Client: AES-INC

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCN95988

Matrix:(soil/water): SOIL Lab Sample ID: CN95988

Sample wt/vol: 5.6 (g/mL) g Lab File ID: 0502_54.D

Level: (low/med): Low Date Received: 05/02/23

% Moisture: not dec. 15 Date Analyzed: 05/03/23

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

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

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 70 - #110

Lab Name: Phoenix Environmental Labs Client: AES-INC

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCN95988

Matrix:(soil/water): SOIL Lab Sample ID: CN95989

Sample wt/vol: 4.64 (g/mL) g Lab File ID: 0502_55.D

Level: (low/med): Low Date Received: 05/02/23

% Moisture: not dec. 14 Date Analyzed: 05/03/23

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

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

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

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

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 70 - #111

Lab Name: Phoenix Environmental Labs Client: AES-INC

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCN95988

Matrix:(soil/water): SOIL Lab Sample ID: CN95990

Sample wt/vol: 5.57 (g/mL) g Lab File ID: 0502_56.D

Level: (low/med): Low Date Received: 05/02/23

% Moisture: not dec. 10 Date Analyzed: 05/03/23

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

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

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

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

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 70 - #112

Lab Name: Phoenix Environmental Labs Client: AES-INC

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCN95988

Matrix:(soil/water) SOIL Lab Sample ID: CN95991

Sample wt/vol: 4.82 (g/mL) g Lab File ID: 0502_57.D

Level: (low/med) Low Date Received: 05/02/23

% Moisture: not dec. 17 Date Analyzed: 05/03/23

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

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

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 70 - #123

Lab Name: Phoenix Environmental Labs Client: AES-INC

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCN95988

Matrix:(soil/water): SOIL Lab Sample ID: CN95992

Sample wt/vol: 5.59 (g/mL) g Lab File ID: 0502_58.D

Level: (low/med): Low Date Received: 05/02/23

% Moisture: not dec. 13 Date Analyzed: 05/03/23

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

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

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

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

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 70 - #114

Lab Name: Phoenix Environmental Labs Client: AES-INC

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCN95988

Matrix:(soil/water): SOIL Lab Sample ID: CN95993

Sample wt/vol: 4.45 (g/mL) g Lab File ID: 0502_59.D

Level: (low/med): Low Date Received: 05/02/23

% Moisture: not dec. 13 Date Analyzed: 05/03/23

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

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

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

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

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 70 - #115

Lab Name: Phoenix Environmental Labs Client: AES-INC

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCN95988

Matrix:(soil/water): SOIL Lab Sample ID: CN95994

Sample wt/vol: 4.31 (g/mL) g Lab File ID: 0502_60.D

Level: (low/med): Low Date Received: 05/02/23

% Moisture: not dec. 18 Date Analyzed: 05/03/23

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

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

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

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

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 70 - #116

Lab Name: Phoenix Environmental Labs Client: AES-INC

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCN95988

Matrix:(soil/water): SOIL Lab Sample ID: CN95995

Sample wt/vol: 3.57 (g/mL) g Lab File ID: 0502_61.D

Level: (low/med): Low Date Received: 05/02/23

% Moisture: not dec. 15 Date Analyzed: 05/03/23

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

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

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

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

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 72 - #117

Lab Name: Phoenix Environmental Labs Client: AES-INC

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCN95988

Matrix:(soil/water): SOIL Lab Sample ID: CN95996

Sample wt/vol: 4.06 (g/mL) g Lab File ID: 0502_62.D

Level: (low/med): Low Date Received: 05/02/23

% Moisture: not dec. 18 Date Analyzed: 05/03/23

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

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

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000138-86-3	Limonene	6.551	23	JN

FORM I VOA-TIC

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

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 70 - #118

Lab Name: Phoenix Environmental Labs Client: AES-INC

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCN95988

Matrix:(soil/water): SOIL Lab Sample ID: CN95997

Sample wt/vol: 3.64 (g/mL) g Lab File ID: 0502_63.D

Level: (low/med): Low Date Received: 05/02/23

% Moisture: not dec. 16 Date Analyzed: 05/03/23

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

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

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

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

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 70 - #119

Lab Name: Phoenix Environmental Labs Client: AES-INC

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCN95988

Matrix:(soil/water): SOIL Lab Sample ID: CN95998

Sample wt/vol: 4.02 (g/mL) g Lab File ID: 0502_64.D

Level: (low/med): Low Date Received: 05/02/23

% Moisture: not dec. 6 Date Analyzed: 05/03/23

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

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

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

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

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 70 - #120

Lab Name: Phoenix Environmental Labs Client: AES-INC

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCN95988

Matrix:(soil/water): SOIL Lab Sample ID: CN95999

Sample wt/vol: 4.56 (g/mL) g Lab File ID: 0502_65.D

Level: (low/med): Low Date Received: 05/02/23

% Moisture: not dec. 14 Date Analyzed: 05/03/23

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

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

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

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

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

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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 70 - #109

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

Lab Code: Phoenix | Case No.: | SAS No.: | SDG No.: GCN95988

Matrix:(soil/water): SOIL | Lab Sample ID: CN95988

Sample wt/vol: 15.19 (g/mL) g | Lab File ID: 0502_18.D

Level: (low/med): Low | Date Received: 05/02/23

% Moisture: not dec. 15 | decanted:(Y/N) NA | Date Extracted: 05/03/23

GPC Cleanup (Y/N): N | pH: NA | Date Analyzed: 5/3/2023

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

Injection Volume: 1 (uL)

Number TICs found: 12 | CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000141-79-7	3-Penten-2-one, 4-methyl-	2.452	480	JNA
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.698	4700	JNA
	unknown	3.709	370	J
	unknown	5.431	320	J
023676-09-7	Benzoic acid, 4-ethoxy-, ethyl est	6.441	1000	JNC
	unknown	7.170	320	J
	unknown	7.199	480	J
	unknown	7.375	330	J
	unknown	7.422	370	J
074685-29-3	9-Eicosene, (E)-	7.528	860	JN
000057-10-3	n-Hexadecanoic acid	8.145	2100	JN
000057-11-4	Octadecanoic acid	8.891	690	JN

FORM I SEMIVOA-TIC

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

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

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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 70 - #110

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

Lab Code: Phoenix | Case No.: | SAS No.: | SDG No.: GCN95988

Matrix:(soil/water): SOIL | Lab Sample ID: CN95989

Sample wt/vol: 15.08 (g/mL) g | Lab File ID: 0502_19.D

Level: (low/med): Low | Date Received: 05/02/23

% Moisture: not dec. 14 | decanted:(Y/N) NA | Date Extracted: 05/03/23

GPC Cleanup (Y/N): N | pH: NA | Date Analyzed: 5/3/2023

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

Injection Volume: 1 (uL)

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000141-79-7	3-Penten-2-one, 4-methyl-	2.446	900	JNA
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.710	26000	JNA
	unknown	3.315	390	JNC
	unknown	3.991	330	J
023676-09-7	Benzoic acid, 4-ethoxy-, ethyl est	6.447	780	JNC
018435-45-5	1-Nonadecene	7.528	690	JN
000610-48-0	Anthracene, 1-methyl-	8.139	670	JN
	unknown	8.210	460	J

FORM I SEMIVOA-TIC

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

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

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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 70 - #111

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

Lab Code: Phoenix | Case No.: | SAS No.: | SDG No.: GCN95988

Matrix:(soil/water): SOIL | Lab Sample ID: CN95990

Sample wt/vol: 15.17 (g/mL) g | Lab File ID: 0502_20.D

Level: (low/med): Low | Date Received: 05/02/23

% Moisture: not dec. 10 | decanted:(Y/N) NA | Date Extracted: 05/03/23

GPC Cleanup (Y/N): N | pH: NA | Date Analyzed: 5/3/2023

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

Injection Volume: 1 (uL)

Number TICs found: 4 | CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000141-79-7	3-Penten-2-one, 4-methyl-	2.452	470	JNA
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.704	8800	JNA
023676-09-7	Benzoic acid, 4-ethoxy-, ethyl est	6.447	1000	JNC
007206-19-1	3-Octadecene, (E)-	7.528	880	JN

FORM I SEMIVOA-TIC

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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 70 - #112

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

Lab Code: Phoenix | Case No.: | SAS No.: | SDG No.: GCN9598

Matrix:(soil/water): SOIL | Lab Sample ID: CN95991

Sample wt/vol: 15.26 (g/mL) g | Lab File ID: 0502_21.D

Level: (low/med): Low | Date Received: 05/02/23

% Moisture: not dec. 17 | decanted:(Y/N) NA | Date Extracted: 05/03/23

GPC Cleanup (Y/N): N | pH: NA | Date Analyzed: 5/3/2023

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

Injection Volume: 1 (uL)

Number TICs found: 9 | CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000141-79-7	3-Penten-2-one, 4-methyl-	2.452	2000	JNA
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.704	4900	JNA
	unknown	3.315	380	JNC
	unknown	6.236	330	J
023676-09-7	Benzoic acid, 4-ethoxy-, ethyl est	6.447	830	JNC
007206-19-1	3-Octadecene, (E)-	7.528	750	JN
	unknown	7.804	500	J
002531-84-2	Phenanthrene, 2-methyl-	8.139	570	JN
	unknown	8.210	550	J

FORM I SEMIVOA-TIC

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

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

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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 71 - #113

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

Lab Code: Phoenix | Case No.: | SAS No.: | SDG No.: GCN9598

Matrix:(soil/water): SOIL | Lab Sample ID: CN95992

Sample wt/vol: 15.12 (g/mL) g | Lab File ID: 0502_22.D

Level: (low/med): Low | Date Received: 05/02/23

% Moisture: not dec. 13 | decanted:(Y/N) NA | Date Extracted: 05/03/23

GPC Cleanup (Y/N): N | pH: NA | Date Analyzed: 5/3/2023

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

Injection Volume: 1 (uL)

Number TICs found: 7 | CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000141-79-7	3-Penten-2-one, 4-methyl-	2.446	640	JNA
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.704	4100	JNA
	unknown	3.991	360	J
023676-09-7	Benzoic acid, 4-ethoxy-, ethyl est	6.447	930	JNC
007206-19-1	3-Octadecene, (E)-	7.528	720	JN
	unknown	7.810	400	J
000613-12-7	Anthracene, 2-methyl-	8.139	310	JN

FORM I SEMIVOA-TIC

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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 71 - #114

Lab Name: Phoenix Environmental Labs Client: AES-INC

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCN9598

Matrix:(soil/water): SOIL Lab Sample ID: CN95993

Sample wt/vol: 15.02 (g/mL) g Lab File ID: 0502_23.D

Level: (low/med): Low Date Received: 05/02/23

% Moisture: not dec. 13 decanted:(Y/N) NA Date Extracted: 05/03/23

GPC Cleanup (Y/N): N pH: NA Date Analyzed: 5/3/2023

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

Injection Volume: 1 (uL)

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000141-79-7	3-Penten-2-one, 4-methyl-	2.452	390	JNA
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.704	3400	JNA
	unknown	3.315	780	JNC
	unknown	3.991	310	J
	unknown	6.235	440	J
023676-09-7	Benzoic acid, 4-ethoxy-, ethyl est	6.447	1200	JNC
	unknown	6.729	790	J
055045-11-9	Tridecane, 5-propyl-	7.170	570	JN
	unknown	7.363	460	J
074685-33-9	3-Eicosene, (E)-	7.528	1100	JN

FORM I SEMIVOA-TIC

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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 71 - #115

Lab Name: Phoenix Environmental Labs Client: AES-INC

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCN95988

Matrix:(soil/water) SOIL Lab Sample ID: CN95994

Sample wt/vol: 15.33 (g/mL) g Lab File ID: 0503_27.D

Level: (low/med) Low Date Received: 05/02/23

% Moisture: not dec. 18 decanted:(Y/N) NA Date Extracted: 05/04/23

GPC Cleanup (Y/N): N pH: NA Date Analyzed: 5/4/2023

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

Injection Volume: 1 (uL)

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.675	830	JNA
	unknown	3.292	370	JNC
	unknown hydrocarbon	6.194	340	J
023676-09-7	Benzoic acid, 4-ethoxy-, ethyl est	6.418	1200	JNC
	unknown	6.876	350	J
018435-45-5	1-Nonadecene	7.499	1000	JN
055045-10-8	Tridecane, 6-propyl-	9.455	410	JN
017312-62-8	Decane, 5-propyl-	9.955	370	JN
	unknown hydrocarbon	10.143	490	J
007225-66-3	Tridecane, 7-hexyl-	10.536	600	JN
000629-78-7	Heptadecane	11.212	430	JN
000544-76-3	Hexadecane	12.005	700	JN
	Hexadecane Isomer	16.447	440	JN
	unknown hydrocarbon	17.411	1000	J
	unknown hydrocarbon	18.468	450	J

FORM I SEMIVOA-TIC

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

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

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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 71 - #116

Lab Name: Phoenix Environmental Labs Client: AES-INC

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCN9598

Matrix:(soil/water): SOIL Lab Sample ID: CN95995

Sample wt/vol: 15.05 (g/mL) g Lab File ID: 0502_25.D

Level: (low/med): Low Date Received: 05/02/23

% Moisture: not dec. 15 decanted:(Y/N) NA Date Extracted: 05/03/23

GPC Cleanup (Y/N): N pH: NA Date Analyzed: 5/3/2023

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

Injection Volume: 1 (uL)

Number TICs found: 6 CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000141-79-7	3-Penten-2-one, 4-methyl-	2.451	390	JNA
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.710	7500	JNA
	unknown	3.321	430	JNC
023676-09-7	Benzoic acid, 4-ethoxy-, ethyl est	6.447	1100	JNC
074685-29-3	9-Eicosene, (E)-	7.528	980	JN
000057-10-3	n-Hexadecanoic acid	8.139	370	JN

FORM I SEMIVOA-TIC

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

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

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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 72 - #117

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

Lab Code: Phoenix | Case No.: | SAS No.: | SDG No.: GCN9598

Matrix:(soil/water): SOIL | Lab Sample ID: CN95996

Sample wt/vol: 15.14 (g/mL) g | Lab File ID: 0502_26.D

Level: (low/med): Low | Date Received: 05/02/23

% Moisture: not dec. 18 | decanted:(Y/N) NA | Date Extracted: 05/03/23

GPC Cleanup (Y/N): N | pH: NA | Date Analyzed: 5/3/2023

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

Injection Volume: 1 (uL)

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000141-79-7	3-Penten-2-one, 4-methyl-	2.452	2000	JNA
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.704	6400	JNA
	unknown	3.321	460	JNC
023676-09-7	Benzoic acid, 4-ethoxy-, ethyl est	6.447	1000	JNC
007206-19-1	3-Octadecene, (E)-	7.528	840	JN

FORM I SEMIVOA-TIC

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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 72 - #118

Lab Name: Phoenix Environmental Labs Client: AES-INC

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCN9598

Matrix:(soil/water) SOIL Lab Sample ID: CN95997

Sample wt/vol: 15.27 (g/mL) g Lab File ID: 0502_27.D

Level: (low/med) Low Date Received: 05/02/23

% Moisture: not dec. 16 decanted:(Y/N) NA Date Extracted: 05/03/23

GPC Cleanup (Y/N): N pH: NA Date Analyzed: 5/3/2023

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

Injection Volume: 1 (uL)

Number TICs found: 14 CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000590-90-9	2-Butanone, 4-hydroxy-	2.404	420	JN
000141-79-7	3-Penten-2-one, 4-methyl-	2.451	650	JNA
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.704	4500	JNA
	unknown	3.321	480	JNC
	unknown	3.715	350	J
	unknown	6.229	350	J
023676-09-7	Benzoic acid, 4-ethoxy-, ethyl est	6.453	1300	JNC
	unknown	6.735	620	J
	unknown	7.158	600	J
	unknown	7.369	400	J
074685-33-9	3-Eicosene, (E)-	7.534	1000	JN
000057-10-3	n-Hexadecanoic acid	8.145	1200	JN
000629-98-1	13-Docosen-1-ol, (Z)-	10.201	480	JN
	unknown	11.776	860	J

FORM I SEMIVOA-TIC

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

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

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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 72 - #119

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

Lab Code: Phoenix | Case No.: | SAS No.: | SDG No.: GCN95988

Matrix:(soil/water): SOIL | Lab Sample ID: CN95998

Sample wt/vol: 15.01 (g/mL) g | Lab File ID: 0502_28.D

Level: (low/med): Low | Date Received: 05/02/23

% Moisture: not dec. 6 | decanted:(Y/N) NA | Date Extracted: 05/03/23

GPC Cleanup (Y/N): N | pH: NA | Date Analyzed: 5/3/2023

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

Injection Volume: 1 (uL)

Number TICs found: 6 | CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000141-79-7	3-Penten-2-one, 4-methyl-	2.457	790	JNA
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.704	2600	JNA
	unknown	3.321	480	JNC
023676-09-7	Benzoic acid, 4-ethoxy-, ethyl est	6.453	980	JNC
074685-29-3	9-Eicosene, (E)-	7.534	820	JN
000057-10-3	n-Hexadecanoic acid	8.145	460	JN

FORM I SEMIVOA-TIC

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

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

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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 72 - #120

Lab Name: Phoenix Environmental Labs Client: AES-INC

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCN95988

Matrix:(soil/water) SOIL Lab Sample ID: CN95999

Sample wt/vol: 15.26 (g/mL) g Lab File ID: 0502_29.D

Level: (low/med) Low Date Received: 05/02/23

% Moisture: not dec. 14 decanted:(Y/N) NA Date Extracted: 05/03/23

GPC Cleanup (Y/N): N pH: NA Date Analyzed: 5/3/2023

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

Injection Volume: 1 (uL)

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000590-90-9	2-Butanone, 4-hydroxy-	2.405	1500	JN
000763-93-9	3-Hexen-2-one	2.458	1300	JN
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.710	6700	JNA
	unknown	3.321	580	JNC
	unknown	3.715	520	J
000289-16-7	1,2,4-Trithiolane	4.379	540	JN
	unknown	6.236	440	J
023676-09-7	Benzoic acid, 4-ethoxy-, ethyl est	6.453	1400	JNC
	unknown	6.735	530	J
	unknown	7.164	1300	J
	unknown hydrocarbon	7.370	710	J
007206-25-9	9-Octadecene, (E)-	7.534	1200	JN
000057-11-4	Octadecanoic acid	8.903	470	JN
	unknown	9.690	1200	J
014811-95-1	1,19-Eicosadiene	10.207	760	JN

FORM I SEMIVOA-TIC

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

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

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

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

NY # 11301

QA/QC Report

May 16, 2023

QA/QC Data

SDG I.D.: GCN95988

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 675804 (mg/L), QC Sample No: CN92732 (CN95988, CN95989, CN95990, CN95991, CN95992, CN95993, CN95994, CN95995, CN95996, CN95997, CN95998, CN95999)														
Mercury - Water	BRL	0.0002	0.0032	0.0032	0	104			99.7			80 - 120	20	
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.														
QA/QC Batch 675798 (mg/kg), QC Sample No: CN93186 2X (CN95988, CN95989, CN95990, CN95991, CN95992, CN95993)														
Mercury - Soil	BRL	0.03	0.11	0.06	NC	116	111	4.4	90.3	81.4	10.4	70 - 130	30	
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.														
QA/QC Batch 675799 (mg/kg), QC Sample No: CN95825 2X (CN95994, CN95995, CN95996, CN95997, CN95998, CN95999)														
Mercury - Soil	BRL	0.03	0.05	0.09	NC	116	109	6.2	120	100	18.2	70 - 130	30	
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.														
QA/QC Batch 675737 (mg/kg), QC Sample No: CN87763 (CN95988, CN95989, CN95990, CN95991, CN95992, CN95993, CN95994, CN95995, CN95996, CN95997, CN95998, CN95999)														
ICP Metals - Soil														
Aluminum	BRL	5.0	8690	8450	2.80	102			NC			75 - 125	35	
Antimony	BRL	3.3	54.35	97.5	56.8	103			92.1			75 - 125	35	r
Arsenic	BRL	0.67	5.76	9.2	46.0	100			91.4			75 - 125	35	r
Barium	BRL	0.33	120	160	28.6	106			65.0			75 - 125	35	m
Beryllium	BRL	0.27	0.49	0.54	NC	99.3			96.9			75 - 125	35	
Cadmium	BRL	0.33	0.96	1.20	NC	103			95.6			75 - 125	35	
Calcium	BRL	5.0	3960	5410	30.9	80.3			NC			75 - 125	35	
Chromium	BRL	0.33	18.1	20.2	11.0	102			93.7			75 - 125	35	
Cobalt	BRL	0.33	7.92	8.0	1.00	103			90.7			75 - 125	35	
Copper	BRL	0.67	66.9	103	42.5	99.3			64.6			75 - 125	35	m,r
Iron	BRL	5.0	23900	26500	10.3	95.4			NC			75 - 125	35	
Lead	BRL	0.33	994	1060	6.40	94.9			NC			75 - 125	35	
Magnesium	BRL	5.0	1970	2440	21.3	104			NC			75 - 125	35	
Manganese	BRL	0.33	479	537	11.4	95.1			78.6			75 - 125	35	
Nickel	BRL	0.33	18.3	22.6	21.0	102			86.9			75 - 125	35	
Potassium	BRL	5.0	1370	1000	31.2	97.7			NC			75 - 125	35	
Selenium	BRL	1.3	<1.5	<1.6	NC	101			93.3			75 - 125	35	
Silver	BRL	0.33	8.338	6.99	17.6	94.7			93.9			75 - 125	35	
Sodium	BRL	5.0	160	155	3.20	92.5			99.1			75 - 125	35	
Thallium	BRL	3.0	<1.5	<3.5	NC	99.3			94.3			75 - 125	35	
Vanadium	BRL	0.33	29.4	31.3	6.30	102			95.7			75 - 125	35	
Zinc	BRL	0.67	144	257	56.4	102			71.7			75 - 125	35	m,r
Comment:														
This batch consists of a Blank, LCS, duplicate, and MS.														
Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%.														

QA/QC Data

SDG I.D.: GCN95988

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 675806 (mg/L), QC Sample No: CN95854 (CN95988, CN95989, CN95990, CN95991, CN95992, CN95993, CN95994, CN95996, CN95997, CN95998, CN95999)													
ICP Metals - TCLP Extraction													
Arsenic	BRL	0.05	0.02	0.02	NC	107	106	0.9	106			80 - 120	20
Barium	BRL	0.01	0.26	0.25	3.90	101	100	1.0	98.8			80 - 120	20
Cadmium	BRL	0.005	<0.005	<0.005	NC	102	102	0.0	94.0			80 - 120	20
Chromium	BRL	0.010	<0.010	<0.010	NC	98.0	97.6	0.4	95.0			80 - 120	20
Lead	BRL	0.010	<0.010	<0.010	NC	99.7	98.8	0.9	94.7			80 - 120	20
Selenium	BRL	0.05	0.03	0.03	NC	110	109	0.9	107			80 - 120	20
Silver	BRL	0.010	<0.010	<0.010	NC	106	105	0.9	112			80 - 120	20
Comment:													
Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%.													
QA/QC Batch 676739 (mg/L), QC Sample No: CN99851 (CN95995)													
ICP Metals - TCLP Extraction													
Arsenic	BRL	0.05	<0.05	<0.05	NC	111	112	0.9	118	113	4.3	80 - 120	20
Barium	BRL	0.01	0.16	0.16	0	105	106	0.9	112	108	3.6	80 - 120	20
Cadmium	BRL	0.005	<0.005	<0.005	NC	104	104	0.0	108	106	1.9	80 - 120	20
Chromium	BRL	0.010	<0.010	<0.010	NC	99.1	101	1.9	105	102	2.9	80 - 120	20
Lead	BRL	0.010	<0.010	<0.010	NC	102	103	1.0	108	104	3.8	80 - 120	20
Selenium	BRL	0.05	<0.05	<0.05	NC	114	115	0.9	118	113	4.3	80 - 120	20
Silver	BRL	0.010	<0.010	<0.010	NC	109	110	0.9	116	111	4.4	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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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

QA/QC Report

May 16, 2023

QA/QC Data

SDG I.D.: GCN95988

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 675861 (mg/Kg), QC Sample No: CN89000 5X (CN95988, CN95989, CN95990, CN95991, CN95993, CN95994, CN95995, CN95996, CN95997, CN95998, CN95999)													
Reactivity Cyanide	BRL	5	<5	<5.0	NC	95.0						85 - 115	30
Reactivity Sulfide	BRL	20	<20	<20	NC	99.5						80 - 120	30
QA/QC Batch 675935 (mg/Kg), QC Sample No: CN93668 50X (CN95988, CN95989, CN95990)													
Total Cyanide (SW9010C Distill.)	BRL	0.50	<0.53	<0.53	NC	108			100			80 - 120	30
Comment:													
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils													
QA/QC Batch 676046 (mg/Kg), QC Sample No: CN95281 5X (CN95992)													
Reactivity Cyanide	BRL	5	<6	<6.1	NC	96.0						85 - 115	30
Reactivity Sulfide	BRL	20	<20	<20	NC	99.5						80 - 120	30
QA/QC Batch 675970 (mg/Kg), QC Sample No: CN95991 50X (CN95991, CN95992, CN95993, CN95994, CN95995, CN95996, CN95997, CN95998, CN95999)													
Total Cyanide (SW9010C Distill.)	BRL	0.50	<0.60	<0.60	NC	109			100			80 - 120	30
Comment:													
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils													
QA/QC Batch 675779 (PH), QC Sample No: CN95974 (CN95988, CN95989, CN95990, CN95991, CN95992, CN95993, CN95994, CN95995, CN95996, CN95997, CN95998, CN95999)													
pH			10.8	10.8	0	100						85 - 115	20
QA/QC Batch 676631 (Degree F), QC Sample No: CN95988 (CN95988, CN95989, CN95990, CN95991, CN95992, CN95993, CN95994, CN95995, CN95996, CN95997, CN95998, CN95999)													
Flash Point			>200	>200	NC	101						75 - 125	30
Comment:													
Additional criteria matrix spike acceptance range is 75-125%.													

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NY # 11301

QA/QC Report

May 16, 2023

QA/QC Data

SDG I.D.: GCN95988

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 675984 (mg/Kg), QC Sample No: CN93019 (CN95988, CN95990, CN95991, CN95992, CN95993, CN95994, CN95995, CN95996, CN95997, CN95998, CN95999)										
TPH by GC (Extractable Products) - Soil										
Ext. Petroleum HC	ND	50	78	103	27.6	72	66	8.7	30 - 130	30
% COD (surr)	75	%	100	112	11.3	60	63	4.9	50 - 150	30
% Terphenyl (surr)	77	%	84	108	25.0	104	94	10.1	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 676471 (mg/Kg), QC Sample No: CN99203 (CN95989)										
TPH by GC (Extractable Products) - Soil										
Ext. Petroleum HC	ND	50	59	72	19.8				30 - 130	30
% COD (surr)	86	%	91	78	15.4				50 - 150	30
% Terphenyl (surr)	86	%	85	75	12.5				50 - 150	30
Comment:										
This batch consists of a Blank, LCS and LCSD.										
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 676093 (mg/Kg), QC Sample No: CN95991 50X (CN95988 (50X) , CN95989 (50X) , CN95990 (50X) , CN95991 (50X) , CN95992 (50X) , CN95993 (50X) , CN95994 (50X) , CN95995 (50X) , CN95996 (50X) , CN95997 (50X) , CN95998 (50X) , CN95999 (50X))										
Gasoline Range Hydrocarbons (C6C10) - Soil										
GRO (C6-C10)	ND	5.0	87	85	2.3	93	92	1.1	70 - 130	30
% 2,5-Dibromotoluene (FID)	93	%	98	95	3.1	91	92	1.1	70 - 130	30
QA/QC Batch 675812 (ug/L), QC Sample No: CN94141 10X (CN95988, CN95989, CN95990, CN95991, CN95992, CN95993, CN95994, CN95995, CN95996, CN95997, CN95998, CN95999)										
TCLP Herbicides										
2,4,5-TP (Silvex)	ND	50	87	88	1.1	84			40 - 140	20
2,4-D	ND	100	78	87	10.9	80			40 - 140	20
% DCAA	104	%	64	68	6.1	65			30 - 150	20
% DCAA (Confirmation)	101	%	73	80	9.2	80			30 - 150	20
Comment:										
Additional criteria: LCS acceptance range is 40-140% MS acceptance range 30-150%.										
QA/QC Batch 675753 (ug/Kg), QC Sample No: CN94646 2X (CN95988, CN95989, CN95990, CN95991, CN95992, CN95993, CN95994, CN95995, CN95996, CN95997, CN95998, CN95999)										
Polychlorinated Biphenyls - Soil										
PCB-1016	ND	33	100	82	19.8	88	85	3.5	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

QA/QC Data

SDG I.D.: GCN95988

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
PCB-1254	ND	33							40 - 140	30	
PCB-1260	ND	33	102	88	14.7	91	87	4.5	40 - 140	30	
PCB-1262	ND	33							40 - 140	30	
PCB-1268	ND	33							40 - 140	30	
% DCBP (Surrogate Rec)	96	%	106	90	16.3	94	91	3.2	30 - 150	30	
% DCBP (Surrogate Rec) (Confirm	93	%	108	92	16.0	95	91	4.3	30 - 150	30	
% TCMX (Surrogate Rec)	60	%	81	65	21.9	70	66	5.9	30 - 150	30	
% TCMX (Surrogate Rec) (Confirm	76	%	95	76	22.2	83	79	4.9	30 - 150	30	
QA/QC Batch 675955 (ug/L), QC Sample No: CN94141 10X (CN95988, CN95989, CN95990, CN95991, CN95992, CN95993, CN95994, CN95995, CN95996, CN95997, CN95998, CN95999)											
Pesticides											
4,4' -DDD	ND	0.25	110	117	6.2	116			40 - 140	20	
4,4' -DDE	ND	0.25	111	118	6.1	121			40 - 140	20	
4,4' -DDT	ND	0.25	107	113	5.5	115			40 - 140	20	
a-BHC	ND	0.15	96	104	8.0	108			40 - 140	20	
Alachlor	ND	0.50	NA	NA	NC	NA			40 - 140	20	
Aldrin	ND	0.15	99	107	7.8	111			40 - 140	20	
b-BHC	ND	0.15	106	113	6.4	116			40 - 140	20	
Chlordane	ND	5.0	96	103	7.0	106			40 - 140	20	
d-BHC	ND	0.50	79	86	8.5	86			40 - 140	20	
Dieldrin	ND	0.15	104	111	6.5	114			40 - 140	20	
Endosulfan I	ND	0.50	96	103	7.0	102			40 - 140	20	
Endosulfan II	ND	0.50	109	115	5.4	120			40 - 140	20	
Endosulfan sulfate	ND	0.50	95	100	5.1	103			40 - 140	20	
Endrin	ND	0.50	115	123	6.7	126			40 - 140	20	
Endrin aldehyde	ND	0.50	104	110	5.6	113			40 - 140	20	
g-BHC	ND	0.15	92	99	7.3	103			40 - 140	20	
Heptachlor	ND	0.50	100	108	7.7	112			40 - 140	20	
Heptachlor epoxide	ND	0.50	106	113	6.4	116			40 - 140	20	
Methoxychlor	ND	0.50	106	112	5.5	115			40 - 140	20	
Toxaphene	ND	20	NA	NA	NC	NA			40 - 140	20	
% DCBP	80	%	91	90	1.1	81			30 - 150	20	
% DCBP (Confirmation)	93	%	91	87	4.5	88			30 - 150	20	
% TCMX	78	%	76	84	10.0	88			30 - 150	20	
% TCMX (Confirmation)	82	%	74	79	6.5	84			30 - 150	20	
QA/QC Batch 675755 (ug/Kg), QC Sample No: CN94646 2X (CN95988, CN95989, CN95990, CN95991, CN95992, CN95993, CN95994, CN95995, CN95996, CN95997, CN95998, CN95999)											
Pesticides - Soil											
4,4' -DDD	ND	1.7	87	86	1.2	81	96	16.9	40 - 140	30	
4,4' -DDE	ND	1.7	85	85	0.0	80	91	12.9	40 - 140	30	
4,4' -DDT	ND	1.7	104	102	1.9	83	106	24.3	40 - 140	30	
a-BHC	ND	1.0	73	75	2.7	72	80	10.5	40 - 140	30	
a-Chlordane	ND	3.3	82	84	2.4	79	94	17.3	40 - 140	30	
Aldrin	ND	1.0	84	85	1.2	80	91	12.9	40 - 140	30	
b-BHC	ND	1.0	81	82	1.2	72	83	14.2	40 - 140	30	
Chlordane	ND	33	86	87	1.2	85	99	15.2	40 - 140	30	
d-BHC	ND	3.3	43	44	2.3	34	40	16.2	40 - 140	30	
Dieldrin	ND	1.0	90	90	0.0	84	94	11.2	40 - 140	30	
Endosulfan I	ND	3.3	82	82	0.0	83	95	13.5	40 - 140	30	
Endosulfan II	ND	3.3	106	106	0.0	83	113	30.6	40 - 140	30	r
Endosulfan sulfate	ND	3.3	91	91	0.0	71	89	22.5	40 - 140	30	
Endrin	ND	3.3	87	87	0.0	81	95	15.9	40 - 140	30	

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Endrin aldehyde	ND	3.3	91	90	1.1	81	94	14.9	40 - 140	30	
Endrin ketone	ND	3.3	84	84	0.0	78	90	14.3	40 - 140	30	
g-BHC	ND	1.0	74	76	2.7	75	84	11.3	40 - 140	30	
g-Chlordane	ND	3.3	86	87	1.2	85	99	15.2	40 - 140	30	
Heptachlor	ND	3.3	81	82	1.2	77	87	12.2	40 - 140	30	
Heptachlor epoxide	ND	3.3	86	87	1.2	81	92	12.7	40 - 140	30	
Methoxychlor	ND	3.3	82	83	1.2	81	94	14.9	40 - 140	30	
Toxaphene	ND	130	NA	NA	NC	NA	NA	NC	40 - 140	30	
% DCBP	83	%	77	73	5.3	69	83	18.4	30 - 150	30	
% DCBP (Confirmation)	78	%	74	71	4.1	65	87	28.9	30 - 150	30	
% TCMX	77	%	72	70	2.8	66	80	19.2	30 - 150	30	
% TCMX (Confirmation)	81	%	77	72	6.7	69	82	17.2	30 - 150	30	
QA/QC Batch 676129 (ug/L), QC Sample No: CN92942 (CN95988, CN95989, CN95990, CN95991, CN95992, CN95993, CN95994, CN95995)											
Semivolatiles - TCLP											
1,4-Dichlorobenzene	ND	17	49	60	20.2	63			40 - 140	20	
2,4,5-Trichlorophenol	ND	17	79	95	18.4	100			40 - 140	20	
2,4,6-Trichlorophenol	ND	17	72	91	23.3	91			30 - 130	20	r
2,4-Dinitrotoluene	ND	58	72	93	25.5	97			30 - 130	20	r
2-Methylphenol (o-cresol)	ND	17	72	83	14.2	89			40 - 140	20	
3&4-Methylphenol (m&p-cresol)	ND	17	76	84	10.0	93			30 - 130	20	
Hexachlorobenzene	ND	58	75	95	23.5	98			40 - 140	20	r
Hexachlorobutadiene	ND	58	52	64	20.7	67			40 - 140	20	r
Hexachloroethane	ND	58	46	54	16.0	60			40 - 140	20	
Nitrobenzene	ND	58	65	79	19.4	84			40 - 140	20	
Pentachlorophenol	ND	58	69	83	18.4	91			30 - 130	20	
Pyridine	ND	83	59	56	5.2	65			40 - 140	20	
% 2,4,6-Tribromophenol	101	%	78	101	25.7	102			15 - 110	20	r
% 2-Fluorobiphenyl	82	%	65	82	23.1	84			30 - 130	20	r
% 2-Fluorophenol	71	%	57	68	17.6	70			15 - 110	20	
% Nitrobenzene-d5	80	%	60	75	22.2	77			30 - 130	20	r
% Phenol-d5	67	%	56	65	14.9	68			15 - 110	20	
% Terphenyl-d14	98	%	81	94	14.9	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 675901 (ug/kg), QC Sample No: CN93943 (CN95994)											
Semivolatiles - Soil											
1,1-Biphenyl	ND	230	54	62	13.8	54	55	1.8	40 - 140	30	
1,2,4,5-Tetrachlorobenzene	ND	230	54	63	15.4	57	57	0.0	40 - 140	30	
2,2'-Oxybis(1-Chloropropane)	ND	230	58	66	12.9	62	65	4.7	40 - 140	30	
2,3,4,6-tetrachlorophenol	ND	230	54	67	21.5	60	61	1.7	30 - 130	30	
2,4,5-Trichlorophenol	ND	230	60	73	19.5	63	64	1.6	40 - 140	30	
2,4,6-Trichlorophenol	ND	130	61	70	13.7	62	62	0.0	30 - 130	30	
2,4-Dichlorophenol	ND	130	60	72	18.2	64	65	1.6	30 - 130	30	
2,4-Dimethylphenol	ND	230	62	71	13.5	65	66	1.5	30 - 130	30	
2,4-Dinitrophenol	ND	230	18	21	15.4	58	53	9.0	30 - 130	30	l
2,4-Dinitrotoluene	ND	130	47	64	30.6	55	59	7.0	30 - 130	30	r
2,6-Dinitrotoluene	ND	130	49	65	28.1	55	58	5.3	40 - 140	30	
2-Chloronaphthalene	ND	230	57	65	13.1	57	60	5.1	40 - 140	30	
2-Chlorophenol	ND	230	57	67	16.1	62	63	1.6	30 - 130	30	
2-Methylnaphthalene	ND	230	57	69	19.0	61	61	0.0	40 - 140	30	

QA/QC Data

SDG I.D.: GCN95988

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
2-Methylphenol (o-cresol)	ND	230	63	71	11.9	66	68	3.0	40 - 140	30	
2-Nitroaniline	ND	330	77	97	23.0	76	84	10.0	40 - 140	30	
2-Nitrophenol	ND	230	48	61	23.9	56	63	11.8	40 - 140	30	
3&4-Methylphenol (m&p-cresol)	ND	230	67	77	13.9	73	71	2.8	30 - 130	30	
3,3'-Dichlorobenzidine	ND	130	65	73	11.6	66	69	4.4	40 - 140	30	
3-Nitroaniline	ND	330	63	80	23.8	66	68	3.0	40 - 140	30	
4,6-Dinitro-2-methylphenol	ND	230	31	37	17.6	58	59	1.7	30 - 130	30	
4-Bromophenyl phenyl ether	ND	230	60	66	9.5	63	59	6.6	40 - 140	30	
4-Chloro-3-methylphenol	ND	230	66	79	17.9	70	72	2.8	30 - 130	30	
4-Chloroaniline	ND	230	65	75	14.3	60	64	6.5	40 - 140	30	
4-Chlorophenyl phenyl ether	ND	230	59	73	21.2	60	60	0.0	40 - 140	30	
4-Nitroaniline	ND	230	53	71	29.0	63	66	4.7	40 - 140	30	
4-Nitrophenol	ND	230	69	93	29.6	85	91	6.8	30 - 130	30	
Acenaphthene	ND	230	59	67	12.7	60	60	0.0	30 - 130	30	
Acenaphthylene	ND	130	55	64	15.1	56	56	0.0	40 - 140	30	
Acetophenone	ND	230	56	65	14.9	59	59	0.0	40 - 140	30	
Anthracene	ND	230	61	70	13.7	64	64	0.0	40 - 140	30	
Atrazine	ND	130	60	69	14.0	58	58	0.0	40 - 140	30	
Benz(a)anthracene	ND	230	61	70	13.7	63	63	0.0	40 - 140	30	
Benzaldehyde	ND	230	26	29	10.9	58	41	34.3	40 - 140	30	l,r
Benzo(a)pyrene	ND	130	67	77	13.9	67	69	2.9	40 - 140	30	
Benzo(b)fluoranthene	ND	160	62	71	13.5	63	67	6.2	40 - 140	30	
Benzo(ghi)perylene	ND	230	62	71	13.5	56	58	3.5	40 - 140	30	
Benzo(k)fluoranthene	ND	230	60	68	12.5	58	61	5.0	40 - 140	30	
Benzyl butyl phthalate	ND	230	66	78	16.7	72	72	0.0	40 - 140	30	
Bis(2-chloroethoxy)methane	ND	230	57	66	14.6	59	61	3.3	40 - 140	30	
Bis(2-chloroethyl)ether	ND	130	54	63	15.4	56	59	5.2	40 - 140	30	
Bis(2-ethylhexyl)phthalate	ND	230	66	78	16.7	72	73	1.4	40 - 140	30	
Caprolactam	ND	230	60	79	27.3	63	66	4.7	40 - 140	30	
Carbazole	ND	230	64	73	13.1	64	64	0.0	40 - 140	30	
Chrysene	ND	230	65	75	14.3	64	65	1.6	40 - 140	30	
Dibenz(a,h)anthracene	ND	130	62	72	14.9	57	59	3.4	40 - 140	30	
Dibenzofuran	ND	230	58	70	18.8	60	61	1.7	40 - 140	30	
Diethyl phthalate	ND	230	62	76	20.3	63	63	0.0	40 - 140	30	
Dimethylphthalate	ND	230	61	74	19.3	61	60	1.7	40 - 140	30	
Di-n-butylphthalate	ND	670	67	78	15.2	69	67	2.9	40 - 140	30	
Di-n-octylphthalate	ND	230	67	83	21.3	73	76	4.0	40 - 140	30	
Fluoranthene	ND	230	64	72	11.8	66	65	1.5	40 - 140	30	
Fluorene	ND	230	62	77	21.6	64	65	1.6	40 - 140	30	
Hexachlorobenzene	ND	130	62	72	14.9	64	65	1.6	40 - 140	30	
Hexachlorobutadiene	ND	230	51	57	11.1	51	54	5.7	40 - 140	30	
Hexachlorocyclopentadiene	ND	230	45	52	14.4	24	20	18.2	40 - 140	30	m
Hexachloroethane	ND	130	51	59	14.5	52	54	3.8	40 - 140	30	
Indeno(1,2,3-cd)pyrene	ND	230	62	72	14.9	57	59	3.4	40 - 140	30	
Isophorone	ND	130	52	63	19.1	54	56	3.6	40 - 140	30	
Naphthalene	ND	230	55	62	12.0	57	56	1.8	40 - 140	30	
Nitrobenzene	ND	130	53	65	20.3	61	61	0.0	40 - 140	30	
N-Nitrosodimethylamine	ND	230	48	55	13.6	47	51	8.2	40 - 140	30	
N-Nitrosodi-n-propylamine	ND	130	60	70	15.4	63	64	1.6	40 - 140	30	
N-Nitrosodiphenylamine	ND	130	61	74	19.3	62	62	0.0	40 - 140	30	
Pentachlorophenol	ND	230	49	57	15.1	64	61	4.8	30 - 130	30	
Phenanthrene	ND	130	62	69	10.7	65	64	1.6	40 - 140	30	
Phenol	ND	230	62	70	12.1	67	69	2.9	30 - 130	30	

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Pyrene	ND	230	64	73	13.1	65	66	1.5	30 - 130	30	
% 2,4,6-Tribromophenol	61	%	60	73	19.5	72	71	1.4	30 - 130	30	
% 2-Fluorobiphenyl	55	%	55	59	7.0	54	55	1.8	30 - 130	30	
% 2-Fluorophenol	56	%	54	60	10.5	54	56	3.6	30 - 130	30	
% Nitrobenzene-d5	49	%	47	56	17.5	52	54	3.8	30 - 130	30	
% Phenol-d5	63	%	62	69	10.7	64	65	1.6	30 - 130	30	
% Terphenyl-d14	64	%	57	63	10.0	57	56	1.8	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 675739 (ug/kg), QC Sample No: CN95974 (CN95988, CN95989, CN95990, CN95991, CN95992, CN95993, CN95995, CN95996, CN95997, CN95998, CN95999)

Semivolatiles - Soil

1,1-Biphenyl	ND	230	69	76	9.7	59	64	8.1	40 - 140	30	
1,2,4,5-Tetrachlorobenzene	ND	230	65	73	11.6	53	57	7.3	40 - 140	30	
2,2'-Oxybis(1-Chloropropane)	ND	230	68	79	15.0	54	60	10.5	40 - 140	30	
2,3,4,6-tetrachlorophenol	ND	230	78	84	7.4	50	54	7.7	30 - 130	30	
2,4,5-Trichlorophenol	ND	230	82	89	8.2	56	60	6.9	40 - 140	30	
2,4,6-Trichlorophenol	ND	130	78	87	10.9	52	55	5.6	30 - 130	30	
2,4-Dichlorophenol	ND	130	74	83	11.5	59	61	3.3	30 - 130	30	
2,4-Dimethylphenol	ND	230	68	79	15.0	68	74	8.5	30 - 130	30	
2,4-Dinitrophenol	ND	230	116	140	18.8	46	48	4.3	30 - 130	30	l
2,4-Dinitrotoluene	ND	130	86	95	9.9	73	80	9.2	30 - 130	30	
2,6-Dinitrotoluene	ND	130	84	90	6.9	71	78	9.4	40 - 140	30	
2-Chloronaphthalene	ND	230	74	81	9.0	61	66	7.9	40 - 140	30	
2-Chlorophenol	ND	230	69	79	13.5	58	63	8.3	30 - 130	30	
2-Methylnaphthalene	ND	230	70	76	8.2	55	63	13.6	40 - 140	30	
2-Methylphenol (o-cresol)	ND	230	70	80	13.3	66	70	5.9	40 - 140	30	
2-Nitroaniline	ND	330	90	97	7.5	87	95	8.8	40 - 140	30	
2-Nitrophenol	ND	230	74	84	12.7	59	71	18.5	40 - 140	30	
3&4-Methylphenol (m&p-cresol)	ND	230	74	85	13.8	69	75	8.3	30 - 130	30	
3,3'-Dichlorobenzidine	ND	130	74	84	12.7	68	74	8.5	40 - 140	30	
3-Nitroaniline	ND	330	84	85	1.2	81	86	6.0	40 - 140	30	
4,6-Dinitro-2-methylphenol	ND	230	114	125	9.2	67	68	1.5	30 - 130	30	
4-Bromophenyl phenyl ether	ND	230	76	83	8.8	63	69	9.1	40 - 140	30	
4-Chloro-3-methylphenol	ND	230	78	88	12.0	71	75	5.5	30 - 130	30	
4-Chloroaniline	ND	230	54	59	8.8	62	69	10.7	40 - 140	30	
4-Chlorophenyl phenyl ether	ND	230	76	84	10.0	59	66	11.2	40 - 140	30	
4-Nitroaniline	ND	230	81	93	13.8	75	84	11.3	40 - 140	30	
4-Nitrophenol	ND	230	105	114	8.2	84	<10	NC	30 - 130	30	m
Acenaphthene	ND	230	77	86	11.0	63	69	9.1	30 - 130	30	
Acenaphthylene	ND	130	68	75	9.8	57	63	10.0	40 - 140	30	
Acetophenone	ND	230	65	76	15.6	56	60	6.9	40 - 140	30	
Anthracene	ND	230	76	84	10.0	65	73	11.6	40 - 140	30	
Atrazine	ND	130	63	67	6.2	64	69	7.5	40 - 140	30	
Benz(a)anthracene	ND	230	73	83	12.8	62	70	12.1	40 - 140	30	
Benzaldehyde	ND	230	82	90	9.3	29	29	0.0	40 - 140	30	m
Benzo(a)pyrene	ND	130	80	92	14.0	70	79	12.1	40 - 140	30	
Benzo(b)fluoranthene	ND	160	75	87	14.8	65	74	12.9	40 - 140	30	
Benzo(ghi)perylene	ND	230	75	88	16.0	65	73	11.6	40 - 140	30	
Benzo(k)fluoranthene	ND	230	72	81	11.8	60	68	12.5	40 - 140	30	
Benzyl butyl phthalate	ND	230	79	91	14.1	70	81	14.6	40 - 140	30	

QA/QC Data

SDG I.D.: GCN95988

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Bis(2-chloroethoxy)methane	ND	230	69	80	14.8	61	67	9.4	40 - 140	30	
Bis(2-chloroethyl)ether	ND	130	67	81	18.9	53	57	7.3	40 - 140	30	
Bis(2-ethylhexyl)phthalate	ND	230	79	91	14.1	71	84	16.8	40 - 140	30	
Caprolactam	ND	230	69	77	11.0	68	72	5.7	40 - 140	30	
Carbazole	ND	230	73	81	10.4	65	74	12.9	40 - 140	30	
Chrysene	ND	230	78	87	10.9	66	76	14.1	40 - 140	30	
Dibenz(a,h)anthracene	ND	130	76	87	13.5	67	74	9.9	40 - 140	30	
Dibenzofuran	ND	230	75	83	10.1	62	68	9.2	40 - 140	30	
Diethyl phthalate	ND	230	78	85	8.6	65	72	10.2	40 - 140	30	
Dimethylphthalate	ND	230	79	84	6.1	67	70	4.4	40 - 140	30	
Di-n-butylphthalate	ND	670	80	91	12.9	68	77	12.4	40 - 140	30	
Di-n-octylphthalate	ND	230	81	95	15.9	74	87	16.1	40 - 140	30	
Fluoranthene	ND	230	77	86	11.0	64	70	9.0	40 - 140	30	
Fluorene	ND	230	78	87	10.9	64	71	10.4	40 - 140	30	
Hexachlorobenzene	ND	130	77	84	8.7	67	72	7.2	40 - 140	30	
Hexachlorobutadiene	ND	230	65	75	14.3	49	53	7.8	40 - 140	30	
Hexachlorocyclopentadiene	ND	230	62	71	13.5	26	29	10.9	40 - 140	30	m
Hexachloroethane	ND	130	64	72	11.8	45	48	6.5	40 - 140	30	
Indeno(1,2,3-cd)pyrene	ND	230	76	88	14.6	65	74	12.9	40 - 140	30	
Isophorone	ND	130	62	72	14.9	56	62	10.2	40 - 140	30	
Naphthalene	ND	230	65	77	16.9	55	61	10.3	40 - 140	30	
Nitrobenzene	ND	130	68	79	15.0	59	64	8.1	40 - 140	30	
N-Nitrosodimethylamine	ND	230	62	72	14.9	52	55	5.6	40 - 140	30	
N-Nitrosodi-n-propylamine	ND	130	66	78	16.7	59	65	9.7	40 - 140	30	
N-Nitrosodiphenylamine	ND	130	75	80	6.5	68	74	8.5	40 - 140	30	
Pentachlorophenol	ND	230	87	100	13.9	61	66	7.9	30 - 130	30	
Phenanthrene	ND	130	74	83	11.5	65	71	8.8	40 - 140	30	
Phenol	ND	230	71	83	15.6	68	72	5.7	30 - 130	30	
Pyrene	ND	230	76	87	13.5	65	70	7.4	30 - 130	30	
% 2,4,6-Tribromophenol	80	%	76	87	13.5	59	64	8.1	30 - 130	30	
% 2-Fluorobiphenyl	74	%	71	78	9.4	58	64	9.8	30 - 130	30	
% 2-Fluorophenol	69	%	63	76	18.7	53	56	5.5	30 - 130	30	
% Nitrobenzene-d5	69	%	69	72	4.3	58	58	0.0	30 - 130	30	
% Phenol-d5	74	%	68	81	17.4	65	70	7.4	30 - 130	30	
% Terphenyl-d14	78	%	69	77	11.0	55	61	10.3	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 676373 (ug/L), QC Sample No: CN95996 (CN95996, CN95997, CN95998, CN95999)

Semivolatiles - TCLP

1,4-Dichlorobenzene	ND	17	58	61	5.0	57			40 - 140	20	
2,4,5-Trichlorophenol	ND	17	97	104	7.0	97			40 - 140	20	
2,4,6-Trichlorophenol	ND	17	98	105	6.9	99			30 - 130	20	
2,4-Dinitrotoluene	ND	58	92	101	9.3	96			30 - 130	20	
2-Methylphenol (o-cresol)	ND	17	78	85	8.6	76			40 - 140	20	
3&4-Methylphenol (m&p-cresol)	ND	17	84	91	8.0	81			30 - 130	20	
Hexachlorobenzene	ND	58	79	87	9.6	81			40 - 140	20	
Hexachlorobutadiene	ND	58	62	67	7.8	63			40 - 140	20	
Hexachloroethane	ND	58	57	61	6.8	57			40 - 140	20	
Nitrobenzene	ND	58	81	90	10.5	80			40 - 140	20	
Pentachlorophenol	ND	58	107	115	7.2	110			30 - 130	20	
Pyridine	ND	83	55	33	50.0	59			40 - 140	20	l,r

Parameter	Blank	Blk RL		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
% 2,4,6-Tribromophenol	61	%		86	94	8.9	85			15 - 110	20	
% 2-Fluorobiphenyl	55	%		74	80	7.8	75			30 - 130	20	
% 2-Fluorophenol	52	%		63	68	7.6	61			15 - 110	20	
% Nitrobenzene-d5	60	%		87	94	7.7	83			30 - 130	20	
% Phenol-d5	49	%		60	67	11.0	57			15 - 110	20	
% Terphenyl-d14	76	%		89	96	7.6	90			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 676039 (ug/L), QC Sample No: CN95504 (CN95988 (10X) , CN95989 (10X) , CN95990 (10X) , CN95991 (10X) , CN95992 (10X) , CN95993 (10X) , CN95994 (10X) , CN95995 (10X) , CN95996 (10X) , CN95997 (10X) , CN95998 (10X) , CN95999 (10X))

Volatiles - TCLP

1,1-Dichloroethene	ND	5.0		98	99	1.0	111	110	0.9	70 - 130	30	
1,2-Dichloroethane	ND	0.60		94	97	3.1	100	100	0.0	70 - 130	30	
Benzene	ND	0.70		96	98	2.1	105	105	0.0	70 - 130	30	
Carbon tetrachloride	ND	5.0		100	102	2.0	112	112	0.0	70 - 130	30	
Chlorobenzene	ND	1.0		96	98	2.1	105	104	1.0	70 - 130	30	
Chloroform	ND	5.0		95	97	2.1	103	104	1.0	70 - 130	30	
Methyl ethyl ketone	ND	5.0		93	96	3.2	90	94	4.3	70 - 130	30	
Tetrachloroethene	ND	1.0		99	100	1.0	109	105	3.7	70 - 130	30	
Trichloroethene	ND	5.0		98	102	4.0	108	107	0.9	70 - 130	30	
Vinyl chloride	ND	5.0		97	100	3.0	112	112	0.0	70 - 130	30	
% 1,2-dichlorobenzene-d4	99	%		99	100	1.0	100	100	0.0	70 - 130	30	
% Bromofluorobenzene	95	%		101	101	0.0	102	101	1.0	70 - 130	30	
% Dibromofluoromethane	101	%		100	99	1.0	99	100	1.0	70 - 130	30	
% Toluene-d8	97	%		100	102	2.0	100	99	1.0	70 - 130	30	

Comment:

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

QA/QC Batch 676057 (ug/kg), QC Sample No: CN96022 (CN95996)

Volatiles - Soil (Low Level)

1,1,1-Trichloroethane	ND	5.0		92	98	6.3	90	92	2.2	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	3.0		92	97	5.3	108	108	0.0	70 - 130	30	
1,1,2-Trichloroethane	ND	5.0		90	94	4.3	83	86	3.6	70 - 130	30	
1,1-Dichloroethane	ND	5.0		88	93	5.5	88	91	3.4	70 - 130	30	
1,1-Dichloroethene	ND	5.0		88	92	4.4	87	89	2.3	70 - 130	30	
1,2,3-Trichlorobenzene	ND	5.0		97	99	2.0	50	53	5.8	70 - 130	30	m
1,2,4-Trichlorobenzene	ND	5.0		94	97	3.1	56	59	5.2	70 - 130	30	m
1,2-Dibromo-3-chloropropane	ND	5.0		101	106	4.8	97	101	4.0	70 - 130	30	
1,2-Dibromoethane	ND	5.0		95	101	6.1	92	94	2.2	70 - 130	30	
1,2-Dichlorobenzene	ND	5.0		92	98	6.3	86	86	0.0	70 - 130	30	
1,2-Dichloroethane	ND	5.0		91	95	4.3	83	86	3.6	70 - 130	30	
1,2-Dichloropropane	ND	5.0		87	93	6.7	87	90	3.4	70 - 130	30	
1,3-Dichlorobenzene	ND	5.0		90	97	7.5	89	90	1.1	70 - 130	30	
1,4-Dichlorobenzene	ND	5.0		90	96	6.5	88	88	0.0	70 - 130	30	
1,4-dioxane	ND	100		89	133	39.6	118	118	0.0	70 - 130	30	l,r
2-Hexanone	ND	25		89	94	5.5	84	86	2.4	70 - 130	30	
4-Methyl-2-pentanone	ND	25		88	92	4.4	79	83	4.9	70 - 130	30	
Acetone	ND	10		75	81	7.7	73	76	4.0	70 - 130	30	
Benzene	ND	1.0		90	96	6.5	91	94	3.2	70 - 130	30	
Bromochloromethane	ND	5.0		91	97	6.4	86	90	4.5	70 - 130	30	

QA/QC Data

SDG I.D.: GCN95988

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Bromodichloromethane	ND	5.0	93	97	4.2	86	90	4.5	70 - 130	30
Bromoform	ND	5.0	99	108	8.7	84	91	8.0	70 - 130	30
Bromomethane	ND	5.0	90	93	3.3	89	91	2.2	70 - 130	30
Carbon Disulfide	ND	5.0	80	87	8.4	78	81	3.8	70 - 130	30
Carbon tetrachloride	ND	5.0	94	100	6.2	90	93	3.3	70 - 130	30
Chlorobenzene	ND	5.0	91	98	7.4	89	91	2.2	70 - 130	30
Chloroethane	ND	5.0	85	93	9.0	89	91	2.2	70 - 130	30
Chloroform	ND	5.0	89	94	5.5	87	89	2.3	70 - 130	30
Chloromethane	ND	5.0	86	91	5.6	90	93	3.3	70 - 130	30
cis-1,2-Dichloroethene	ND	5.0	90	95	5.4	89	91	2.2	70 - 130	30
cis-1,3-Dichloropropene	ND	5.0	91	98	7.4	85	89	4.6	70 - 130	30
Cyclohexane	ND	5.0	91	95	4.3	91	92	1.1	70 - 130	30
Dibromochloromethane	ND	3.0	98	105	6.9	94	96	2.1	70 - 130	30
Dichlorodifluoromethane	ND	5.0	99	100	1.0	106	107	0.9	70 - 130	30
Ethylbenzene	ND	1.0	94	99	5.2	98	99	1.0	70 - 130	30
Isopropylbenzene	ND	1.0	96	102	6.1	123	121	1.6	70 - 130	30
m&p-Xylene	ND	2.0	93	99	6.3	97	98	1.0	70 - 130	30
Methyl ethyl ketone	ND	5.0	85	86	1.2	75	77	2.6	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	87	91	4.5	84	87	3.5	70 - 130	30
Methylacetate	ND	5.0	95	98	3.1	104	107	2.8	70 - 130	30
Methylcyclohexane	ND	5.0	87	91	4.5	80	81	1.2	70 - 130	30
Methylene chloride	ND	5.0	79	84	6.1	89	87	2.3	70 - 130	30
o-Xylene	ND	2.0	93	99	6.3	95	96	1.0	70 - 130	30
Styrene	ND	5.0	91	97	6.4	85	88	3.5	70 - 130	30
Tetrachloroethene	ND	5.0	89	94	5.5	114	108	5.4	70 - 130	30
Toluene	ND	1.0	90	96	6.5	89	92	3.3	70 - 130	30
trans-1,2-Dichloroethene	ND	5.0	79	83	4.9	78	80	2.5	70 - 130	30
trans-1,3-Dichloropropene	ND	5.0	93	100	7.3	81	85	4.8	70 - 130	30
Trichloroethene	ND	5.0	90	97	7.5	88	90	2.2	70 - 130	30
Trichlorofluoromethane	ND	5.0	92	96	4.3	90	92	2.2	70 - 130	30
Trichlorotrifluoroethane	ND	5.0	82	86	4.8	82	82	0.0	70 - 130	30
Vinyl chloride	ND	5.0	88	93	5.5	92	95	3.2	70 - 130	30
% 1,2-dichlorobenzene-d4	100	%	99	100	1.0	96	97	1.0	70 - 130	30
% Bromofluorobenzene	93	%	97	97	0.0	87	89	2.3	70 - 130	30
% Dibromofluoromethane	98	%	100	98	2.0	98	98	0.0	70 - 130	30
% Toluene-d8	94	%	97	97	0.0	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 676057H (ug/kg), QC Sample No: CN96022 50X (CN95988 (50X) , CN95989 (50X) , CN95990 (50X))

Volatiles - Soil (High Level)

1,1,2,2-Tetrachloroethane	ND	250	102	98	4.0	90	95	5.4	70 - 130	30
1,2,3-Trichlorobenzene	ND	250	110	104	5.6	99	104	4.9	70 - 130	30
1,2,4-Trichlorobenzene	ND	250	113	106	6.4	101	105	3.9	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	250	111	104	6.5	92	98	6.3	70 - 130	30
1,2-Dichlorobenzene	ND	250	104	98	5.9	91	95	4.3	70 - 130	30
1,3-Dichlorobenzene	ND	250	105	99	5.9	91	95	4.3	70 - 130	30
1,4-Dichlorobenzene	ND	250	105	99	5.9	91	95	4.3	70 - 130	30
Isopropylbenzene	ND	250	110	106	3.7	95	101	6.1	70 - 130	30
% 1,2-dichlorobenzene-d4	98	%	99	98	1.0	99	99	0.0	70 - 130	30
% Bromofluorobenzene	92	%	97	96	1.0	97	98	1.0	70 - 130	30
% Dibromofluoromethane	94	%	95	96	1.0	96	96	0.0	70 - 130	30

Parameter	Blank	Blk RL		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
% Toluene-d8	94	%		96	97	1.0	97	98	1.0	70 - 130	30	

Comment:

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

QA/QC Batch 675830 (ug/kg), QC Sample No: CN96028 (CN95988, CN95989, CN95990, CN95991, CN95992, CN95993, CN95994, CN95995, CN95997, CN95998, CN95999)

Volatiles - Soil (Low Level)

1,1,1-Trichloroethane	ND	5.0		97	96	1.0	94	99	5.2	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	3.0		99	98	1.0	91	98	7.4	70 - 130	30	
1,1,2-Trichloroethane	ND	5.0		99	96	3.1	90	96	6.5	70 - 130	30	
1,1-Dichloroethane	ND	5.0		97	95	2.1	89	95	6.5	70 - 130	30	
1,1-Dichloroethene	ND	5.0		96	94	2.1	89	94	5.5	70 - 130	30	
1,2,3-Trichlorobenzene	ND	5.0		97	95	2.1	90	97	7.5	70 - 130	30	
1,2,4-Trichlorobenzene	ND	5.0		92	89	3.3	86	93	7.8	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	5.0		112	110	1.8	100	106	5.8	70 - 130	30	
1,2-Dibromoethane	ND	5.0		106	103	2.9	96	103	7.0	70 - 130	30	
1,2-Dichlorobenzene	ND	5.0		97	95	2.1	90	96	6.5	70 - 130	30	
1,2-Dichloroethane	ND	5.0		97	94	3.1	92	98	6.3	70 - 130	30	
1,2-Dichloropropane	ND	5.0		97	95	2.1	88	94	6.6	70 - 130	30	
1,3-Dichlorobenzene	ND	5.0		94	91	3.2	88	94	6.6	70 - 130	30	
1,4-Dichlorobenzene	ND	5.0		94	91	3.2	88	94	6.6	70 - 130	30	
1,4-dioxane	ND	100		97	97	0.0	100	111	10.4	70 - 130	30	
2-Hexanone	ND	25		98	99	1.0	92	98	6.3	70 - 130	30	
4-Methyl-2-pentanone	ND	25		97	96	1.0	89	95	6.5	70 - 130	30	
Acetone	ND	10		85	85	0.0	71	78	9.4	70 - 130	30	
Benzene	ND	1.0		100	97	3.0	91	97	6.4	70 - 130	30	
Bromochloromethane	ND	5.0		100	98	2.0	92	98	6.3	70 - 130	30	
Bromodichloromethane	ND	5.0		100	97	3.0	92	98	6.3	70 - 130	30	
Bromoform	ND	5.0		112	107	4.6	99	109	9.6	70 - 130	30	
Bromomethane	ND	5.0		97	98	1.0	91	98	7.4	70 - 130	30	
Carbon Disulfide	ND	5.0		91	88	3.4	82	87	5.9	70 - 130	30	
Carbon tetrachloride	ND	5.0		98	95	3.1	96	101	5.1	70 - 130	30	
Chlorobenzene	ND	5.0		100	96	4.1	91	98	7.4	70 - 130	30	
Chloroethane	ND	5.0		95	95	0.0	88	94	6.6	70 - 130	30	
Chloroform	ND	5.0		95	93	2.1	90	96	6.5	70 - 130	30	
Chloromethane	ND	5.0		95	95	0.0	88	94	6.6	70 - 130	30	
cis-1,2-Dichloroethene	ND	5.0		98	98	0.0	94	97	3.1	70 - 130	30	
cis-1,3-Dichloropropene	ND	5.0		101	97	4.0	90	98	8.5	70 - 130	30	
Cyclohexane	ND	5.0		97	95	2.1	93	98	5.2	70 - 130	30	
Dibromochloromethane	ND	3.0		107	104	2.8	98	106	7.8	70 - 130	30	
Dichlorodifluoromethane	ND	5.0		107	103	3.8	103	108	4.7	70 - 130	30	
Ethylbenzene	ND	1.0		102	99	3.0	94	101	7.2	70 - 130	30	
Isopropylbenzene	ND	1.0		103	101	2.0	96	103	7.0	70 - 130	30	
m&p-Xylene	ND	2.0		101	98	3.0	95	100	5.1	70 - 130	30	
Methyl ethyl ketone	ND	5.0		92	89	3.3	85	90	5.7	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	1.0		95	93	2.1	87	94	7.7	70 - 130	30	
Methylacetate	ND	5.0		104	101	2.9	98	102	4.0	70 - 130	30	
Methylcyclohexane	ND	5.0		91	85	6.8	90	95	5.4	70 - 130	30	
Methylene chloride	ND	5.0		89	87	2.3	80	86	7.2	70 - 130	30	
o-Xylene	ND	2.0		101	98	3.0	94	101	7.2	70 - 130	30	
Styrene	ND	5.0		99	96	3.1	91	98	7.4	70 - 130	30	
Tetrachloroethene	ND	5.0		95	90	5.4	59	65	9.7	70 - 130	30	m

QA/QC Data

SDG I.D.: GCN95988

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Toluene	ND	1.0	99	96	3.1	91	97	6.4	70 - 130	30
trans-1,2-Dichloroethene	ND	5.0	86	84	2.4	80	84	4.9	70 - 130	30
trans-1,3-Dichloropropene	ND	5.0	101	98	3.0	92	99	7.3	70 - 130	30
Trichloroethene	ND	5.0	100	97	3.0	92	98	6.3	70 - 130	30
Trichlorofluoromethane	ND	5.0	97	93	4.2	94	99	5.2	70 - 130	30
Trichlorotrifluoroethane	ND	5.0	88	83	5.8	83	88	5.8	70 - 130	30
Vinyl chloride	ND	5.0	97	96	1.0	90	95	5.4	70 - 130	30
% 1,2-dichlorobenzene-d4	99	%	98	99	1.0	99	99	0.0	70 - 130	30
% Bromofluorobenzene	93	%	97	97	0.0	97	97	0.0	70 - 130	30
% Dibromofluoromethane	97	%	100	99	1.0	99	101	2.0	70 - 130	30
% Toluene-d8	95	%	98	97	1.0	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.

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
May 16, 2023

Tuesday, May 16, 2023

Criteria: NY: 375, 375COM

State: NY

Sample Criteria Exceedances Report

GCN95988 - AES-INC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CN95988	CU-SM	Copper	NY / 375-6.8 Metals / Unrestricted Use Soil	80.0	0.7	50	50	mg/kg
CN95988	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.25	0.03	0.18	0.18	mg/Kg
CN95988	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	366	7.1	109	109	mg/Kg
CN95989	$8270_TCLR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1200	270	1000	1000	ug/Kg
CN95989	$8270_TCLR	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1200	270	1000	1000	ug/Kg
CN95989	$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1400	270	1000	1000	ug/Kg
CN95989	$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Commercial	1100	270	1000	1000	ug/Kg
CN95989	$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1100	270	1000	1000	ug/Kg
CN95989	$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	550	270	500	500	ug/Kg
CN95989	$PCB_SMR	PCB-1254	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	660	76	100	100	ug/Kg
CN95989	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	69.6	0.35	63	63	mg/Kg
CN95989	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	124	0.7	109	109	mg/Kg
CN95990	$PCB_SMR	PCB-1254	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	520	73	100	100	ug/Kg
CN95990	$PESTSM_NY	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	77	2.2	3.3	3.3	ug/Kg
CN95990	$PESTSM_NY	Dieldrin	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	7.8	3.6	5	5	ug/Kg
CN95990	$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	11	2.2	3.3	3.3	ug/Kg
CN95990	$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	11	2.2	3.3	3.3	ug/Kg
CN95990	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.23	0.03	0.18	0.18	mg/Kg
CN95990	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	104	0.36	63	63	mg/Kg
CN95990	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	113	0.7	109	109	mg/Kg
CN95991	$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Commercial	1200	280	1000	1000	ug/Kg
CN95991	$8270_TCLR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1200	280	1000	1000	ug/Kg
CN95991	$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1200	280	1000	1000	ug/Kg
CN95991	$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1500	280	1000	1000	ug/Kg
CN95991	$8270_TCLR	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1200	280	1000	1000	ug/Kg
CN95991	$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	670	280	500	500	ug/Kg
CN95991	$PCB_SMR	PCB-1254	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	110	78	100	100	ug/Kg
CN95991	$PESTSM_NY	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	28	2.3	3.3	3.3	ug/Kg
CN95991	$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	6.5	2.3	3.3	3.3	ug/Kg
CN95991	$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	6.7	2.3	3.3	3.3	ug/Kg
CN95991	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.23	0.03	0.18	0.18	mg/Kg
CN95991	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	115	0.40	63	63	mg/Kg
CN95992	$PCB_SMR	PCB-1254	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	530	76	100	100	ug/Kg
CN95992	$PESTSM_NY	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	62	2.3	3.3	3.3	ug/Kg
CN95992	$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	16	2.3	3.3	3.3	ug/Kg
CN95992	$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	15	2.3	3.3	3.3	ug/Kg
CN95992	$PESTSM_NY	Aldrin	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	30	3.8	5	5	ug/Kg
CN95992	$PESTSM_NY	Dieldrin	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	33	3.8	5	5	ug/Kg
CN95992	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.26	0.03	0.18	0.18	mg/Kg

Tuesday, May 16, 2023

Criteria: NY: 375, 375COM

State: NY

Sample Criteria Exceedances Report

GCN95988 - AES-INC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CN95992	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	111	0.40	63	63	mg/Kg
CN95993	$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Commercial	1100	270	1000	1000	ug/Kg
CN95993	$8270_TCLR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1100	270	1000	1000	ug/Kg
CN95993	$8270_TCLR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1300	270	1000	1000	ug/Kg
CN95993	$8270_TCLR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	600	270	500	500	ug/Kg
CN95993	$PESTSM_NY	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	17	2.3	3.3	3.3	ug/Kg
CN95993	$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	5.2	2.3	3.3	3.3	ug/Kg
CN95993	BA-SM	Barium	NY / 375-6.8 Metals / Commercial	434	0.38	400	400	mg/Kg
CN95993	BA-SM	Barium	NY / 375-6.8 Metals / Unrestricted Use Soil	434	0.38	350	350	mg/Kg
CN95993	CU-SM	Copper	NY / 375-6.8 Metals / Unrestricted Use Soil	245	7.7	50	50	mg/kg
CN95993	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.38	0.03	0.18	0.18	mg/Kg
CN95993	NI-SM	Nickel	NY / 375-6.8 Metals / Unrestricted Use Soil	72.8	0.38	30	30	mg/Kg
CN95993	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	852	3.8	63	63	mg/Kg
CN95993	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	1480	7.7	109	109	mg/Kg
CN95994	$PCB_SMR	PCB-1254	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	110	80	100	100	ug/Kg
CN95994	$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	18	2.4	3.3	3.3	ug/Kg
CN95994	$PESTSM_NY	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	48	2.4	3.3	3.3	ug/Kg
CN95994	$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	13	2.4	3.3	3.3	ug/Kg
CN95994	BA-SM	Barium	NY / 375-6.8 Metals / Commercial	806	0.37	400	400	mg/Kg
CN95994	BA-SM	Barium	NY / 375-6.8 Metals / Unrestricted Use Soil	806	0.37	350	350	mg/Kg
CN95994	CU-SM	Copper	NY / 375-6.8 Metals / Unrestricted Use Soil	153	7.4	50	50	mg/kg
CN95994	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	1.01	0.03	0.18	0.18	mg/Kg
CN95994	NI-SM	Nickel	NY / 375-6.8 Metals / Unrestricted Use Soil	49.4	0.37	30	30	mg/Kg
CN95994	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	738	3.7	63	63	mg/Kg
CN95994	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	1050	7.4	109	109	mg/Kg
CN95995	$PCB_SMR	PCB-1254	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	490	77	100	100	ug/Kg
CN95995	$PESTSM_NY	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	96	2.3	3.3	3.3	ug/Kg
CN95995	$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	21	2.3	3.3	3.3	ug/Kg
CN95995	$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	14	2.3	3.3	3.3	ug/Kg
CN95995	$PESTSM_NY	Dieldrin	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	14	3.8	5	5	ug/Kg
CN95995	CD-SM	Cadmium	NY / 375-6.8 Metals / Unrestricted Use Soil	4.06	0.38	2.5	2.5	mg/Kg
CN95995	CU-SM	Copper	NY / 375-6.8 Metals / Unrestricted Use Soil	152	0.8	50	50	mg/kg
CN95995	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.35	0.03	0.18	0.18	mg/Kg
CN95995	NI-SM	Nickel	NY / 375-6.8 Metals / Unrestricted Use Soil	44.5	0.38	30	30	mg/Kg
CN95995	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	852	3.8	63	63	mg/Kg
CN95995	TCLP-PB	TCLP Lead	EPA / 40 CFR 261.24 / Toxicity Characteristics	6.98	0.10	5	5	mg/L
CN95995	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	574	7.6	109	109	mg/Kg
CN95996	$PCB_SMR	PCB-1254	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	450	81	100	100	ug/Kg
CN95996	$PESTSM_NY	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	89	2.4	3.3	3.3	ug/Kg

Tuesday, May 16, 2023

Criteria: NY: 375, 375COM

State: NY

Sample Criteria Exceedances Report

GCN95988 - AES-INC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CN95996	$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	12	2.4	3.3	3.3	ug/Kg
CN95996	$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	11	2.4	3.3	3.3	ug/Kg
CN95996	$PESTSM_NY	Dieldrin	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	23	4.0	5	5	ug/Kg
CN95996	BA-SM	Barium	NY / 375-6.8 Metals / Unrestricted Use Soil	364	0.39	350	350	mg/Kg
CN95996	CU-SM	Copper	NY / 375-6.8 Metals / Unrestricted Use Soil	158	0.8	50	50	mg/kg
CN95996	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.40	0.03	0.18	0.18	mg/Kg
CN95996	NI-SM	Nickel	NY / 375-6.8 Metals / Unrestricted Use Soil	58.0	0.39	30	30	mg/Kg
CN95996	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	880	3.9	63	63	mg/Kg
CN95996	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	713	7.8	109	109	mg/Kg
CN95997	$PCB_SMR	PCB-1254	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	470	77	100	100	ug/Kg
CN95997	$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	27	3.3	3.3	3.3	ug/Kg
CN95997	$PESTSM_NY	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	110	3.3	3.3	3.3	ug/Kg
CN95997	CU-SM	Copper	NY / 375-6.8 Metals / Unrestricted Use Soil	135	0.8	50	50	mg/kg
CN95997	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.71	0.03	0.18	0.18	mg/Kg
CN95997	NI-SM	Nickel	NY / 375-6.8 Metals / Unrestricted Use Soil	45.7	0.41	30	30	mg/Kg
CN95997	PB-SM	Lead	NY / 375-6.8 Metals / Commercial	1420	4.1	1000	1000	mg/Kg
CN95997	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	1420	4.1	63	63	mg/Kg
CN95997	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	625	8.2	109	109	mg/Kg
CN95998	$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	5.1	2.1	3.3	3.3	ug/Kg
CN95998	$PESTSM_NY	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	26	2.1	3.3	3.3	ug/Kg
CN95998	BA-SM	Barium	NY / 375-6.8 Metals / Unrestricted Use Soil	371	0.35	350	350	mg/Kg
CN95998	CU-SM	Copper	NY / 375-6.8 Metals / Unrestricted Use Soil	94.8	0.7	50	50	mg/kg
CN95998	NI-SM	Nickel	NY / 375-6.8 Metals / Unrestricted Use Soil	34.8	0.35	30	30	mg/Kg
CN95998	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	921	3.5	63	63	mg/Kg
CN95998	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	608	7.0	109	109	mg/Kg
CN95999	$PCB_SMR	PCB-1254	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	460	75	100	100	ug/Kg
CN95999	$PESTSM_NY	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	73	2.3	3.3	3.3	ug/Kg
CN95999	$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	20	2.3	3.3	3.3	ug/Kg
CN95999	$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	11	2.3	3.3	3.3	ug/Kg
CN95999	$PESTSM_NY	Dieldrin	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	12	3.8	5	5	ug/Kg
CN95999	CU-SM	Copper	NY / 375-6.8 Metals / Unrestricted Use Soil	117	0.8	50	50	mg/kg
CN95999	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	1.16	0.03	0.18	0.18	mg/Kg
CN95999	NI-SM	Nickel	NY / 375-6.8 Metals / Unrestricted Use Soil	39.6	0.39	30	30	mg/Kg
CN95999	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	502	3.9	63	63	mg/Kg
CN95999	ZN-SM	Zinc	NY / 375-6.8 Metals / Unrestricted Use Soil	507	7.9	109	109	mg/Kg

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Comments

May 16, 2023 SDG I.D.: GCN95988

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

ETPH Narration

AU-FID1 05/04/23-1: CN95988, CN95990, CN95994, CN95995, CN95996, CN95997, CN95998

The following Continuing Calibration compounds did not meet % deviation criteria:
Samples: CN95988, CN95990
Preceding CC 504A003A - None.
Succeeding CC 504A029 - % COD (surr) 42%L (30%)
Samples: CN95994, CN95995, CN95996, CN95997, CN95998
Preceding CC 504A029 - % COD (surr) 42%L (30%)
Succeeding CC 504A038 - % COD (surr) 63%L (30%)

The ETPH method allows for one discrimination check standard outlier.

PCB Narration

AU-ECD1 05/05/23-1: CN95989, CN95990, CN95992, CN95995, CN95996, CN95997, CN95999

The following Continuing Calibration compounds did not meet % deviation criteria:
Samples: CN95989, CN95990, CN95992, CN95995, CN95996, CN95999
Preceding CC 505A003 - None.
Succeeding CC 505A020 - DCBP SURR 18%L (15%)

PEST Narration

AU-ECD4 05/04/23-1: CN95988, CN95991, CN95993, CN95994, CN95998, CN95999

The following Continuing Calibration compounds did not meet % deviation criteria:
Samples: CN95999
Preceding CC 504B004 - Endrin 25%H (20%)
Succeeding CC 504B020 - None.
Samples: CN95988, CN95991, CN95993, CN95994, CN95998, CN95999
Preceding CC 504B020 - None.
Succeeding CC 504B033 - % DCBP 23%L (20%), 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 05/05/23-1: CN95995, CN95997

The following Continuing Calibration compounds did not meet % deviation criteria:
Samples: CN95995, CN95997
Preceding CC 505B015 - Endrin 27%H (20%)
Succeeding CC 505B029 - % DCBP 29%L (20%)

AU-ECD6 05/04/23-1: CN95988, CN95989, CN95990, CN95991, CN95992, CN95993, CN95994, CN95995, CN95996, CN95997, CN95998, CN95999

The following Continuing Calibration compounds did not meet % deviation criteria:
Samples: CN95988, CN95989, CN95990, CN95991
Preceding CC 504B020 - d-BHC 31%H (20%)
Succeeding CC 504B034 - d-BHC 28%H (20%)
Samples: CN95992, CN95993, CN95994, CN95995, CN95996, CN95997, CN95998, CN95999
Preceding CC 504B034 - d-BHC 28%H (20%)
Succeeding CC 504B045 - d-BHC 43%H (20%)

SVOA Narration

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Analysis Comments

May 16, 2023 SDG I.D.: GCN95988

CHEM28 05/05/23-1: CN95996, CN95997, CN95998, CN95999

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: % 2,4,6-Tribromophenol 0.049 (0.05), Hexachlorobenzene 0.082 (0.1)
The following Initial Calibration compounds did not meet minimum response factors: % 2,4,6-Tribromophenol 0.049 (0.05)

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%.

CHEM29 05/02/23-1: CN95988, CN95989, CN95990, CN95991, CN95992, CN95993, CN95995, CN95996, CN95997, CN95998, CN95999

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 0.076 (0.1), Hexachlorobenzene 0.089 (0.1)
The following Initial Calibration compounds did not meet minimum response factors: None.

The following Continuing Calibration compounds did not meet % deviation criteria: 2,4-Dinitrophenol 52%H (30%), 4,6-Dinitro-2-methylphenol 44%H (30%)
The following Continuing Calibration compounds did not meet Maximum % deviation criteria: 2,4-Dinitrophenol 52%H (40%), 4,6-Dinitro-2-methylphenol 44%H (40%)
The following Continuing Calibration compounds did not meet recommended response factors: 2-Nitrophenol 0.078 (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%.

CHEM29 05/03/23-1: CN95994

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 0.076 (0.1), Hexachlorobenzene 0.089 (0.1)
The following Initial Calibration compounds did not meet minimum response factors: None.

The following Continuing Calibration compounds did not meet % deviation criteria: 2-Nitroaniline 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: 2-Nitrophenol 0.059 (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%.

CHEM29 05/04/23-1: CN95988, CN95989, CN95990, CN95991, CN95992, CN95993, CN95994, CN95995

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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Comments

May 16, 2023 SDG I.D.: GCN95988

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

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

The following Continuing Calibration compounds did not meet recommended response factors: Hexachlorobenzene 0.090 (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

CHEM03 05/02/23-2: CN95988, CN95989, CN95990, CN95991, CN95992, CN95993, CN95994, CN95995, CN95997, CN95998, CN95999

The following Initial Calibration compounds did not meet RSD% criteria: Chloroethane 21% (20%)
The following Initial Calibration compounds did not meet maximum RSD% criteria: None.
The following Initial Calibration compounds did not meet recommended response factors: Acetone 0.085 (0.1)
The following Initial 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%.

CHEM03 05/03/23-1: CN95988, CN95989, CN95990, CN95996

The following Initial Calibration compounds did not meet RSD% criteria: Chloroethane 21% (20%)
The following Initial Calibration compounds did not meet maximum RSD% criteria: None.
The following Initial Calibration compounds did not meet recommended response factors: Acetone 0.085 (0.1)
The following Initial 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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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY Temperature Narration

May 16, 2023

SDG I.D.: GCN95988

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)

Cooler: Yes [x] No [ ]
Coolant: IPK [x] ICE [ ] No [ ]

NY/NJ/PA CHAIN OF CUSTODY RECORD

Temp 1.7° C Pg 1 of 2

PHOENIX Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Contact Options:
[ ] Phone:
[ ] Fax: pendyenveng@optonline.net
[x] Email: empendergast@aol.com

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

Project: GATEWAY ESTATES - HD/61E
Report to: AES
Invoice to: AES
QUOTE # : 100622BA
Project P.O: 0703

This section MUST be completed with Bottle Quantities.

Sampler's Signature: [signature] Date: 5/1/23

Client Sample - Information - Identification

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

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	TAL/TCL+30	Full TCLP	RIC	TPH/DRO/GRO	GL Amber 8 oz. w/H3PO4	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container (8) oz	GL Soil container (4) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml [ ] 1000ml	PL NaOH 250ml	PL HNO3 250ml	Bacteria Bottle w/thio	Bacteria Bottle as is
95988	Pile 70 - #109	S	5.1.23	8:20	X	X	X	X			2	1	3							
95989	Pile 70 - #110			8:25																
95990	Pile 70 - #111			8:30																
95991	Pile 70 - #112			8:40																
95992	Pile 71 - #113			8:37																
95993	Pile 71 - #114			8:42																
95994	Pile 71 - #115			8:35																
95995	Pile 71 - #116			8:40																
95996	Pile 72 - #117			8:45																
95997	Pile 72 - #118			8:50																
95998	Pile 72 - #119			8:55																

Relinquished by:	Accepted by:	Date:	Time:
[signature]	2m	5/2/23	11.02
2m	[signature]	5.2.23	17 15

Turnaround:
[ ] 1 Day*
[ ] 2 Days*
[ ] 3 Days*
[x] 5 Days
[ ] 10 Days
[ ] Other
* SURCHARGE APPLIES

NJ
[ ] Res. Criteria
[ ] Non-Res. Criteria
[ ] Impact to GW Soil Cleanup Criteria
[ ] Impact to GW soil screen Criteria
[ ] GW Criteria

NY
[ ] TOGS GW
[ ] CP-51 SOIL
[x] 375SCO Unrestricted Soil
[ ] 375SCO Residential Soil
[ ] 375SCO Residential Restricted Soil
[x] 375SCO Commercial Soil
[ ] 375SCO Industrial Soil
[ ] Subpart 5 DW

PA
[ ] Clean Fill Limits
[ ] PA-GW
[ ] Reg Fill Limits
[ ] PA Soil Restricted
[ ] PA Soil non-restricted

State Samples Collected? NY

Comments, Special Requirements or Regulations:

Data Format:
[ ] Phoenix Std Report
[x] Excel
[x] PDF
[ ] GIS/Key
[ ] EQuIS
[ ] NJ Hazsite EDD
[ ] NY EZ EDD
[ ] Other

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

PEL-111 Rev 10/2021

Cooler: Yes [X] No [ ]
Coolant: IPK [X] ICE [ ] No [ ]
Temp 1.7°C Pg 2 of 2

NY/NJ/PA CHAIN OF CUSTODY RECORD

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[ ] Phone:
[ ] Fax:
[X] Email: empendergast@aol.com

Customer: AES
Address: 42 West Ave.
Patchogue NY 11772

Project: GATEWAY ESTATES - HD161E Project P.O: 0703
Report to: AES
Invoice to: AES
QUOTE # : 100622BA

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 5/1/23

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

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	TAL/TCL+30	RIC	Full TCLP	TPH DRO+GRO	GL Amber 8 oz. w/H3PO4	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container (8) oz	GL Soil container (4) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml [ ] 1000ml	PL NaOH 250ml	PL HNO3 250ml	Bacteria Bottle w/thio	Bacteria Bottle as is
95999	Pile 72 - #120	S	5.1.23	9:00	X	X	X	X			2	1	3							

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	5/2/23	1102
[signature]	[signature]	5/2/23	1715

Turnaround:
[ ] 1 Day*
[ ] 2 Days*
[ ] 3 Days*
[X] 5 Days
[ ] 10 Days
[ ] Other
* SURCHARGE APPLIES

NJ
[ ] Res. Criteria
[ ] Non-Res. Criteria
[ ] Impact to GW Soil Cleanup Criteria
[ ] Impact to GW soil screen Criteria
[ ] GW Criteria

NY
[ ] TOGS GW
[ ] CP-51 SOIL
[X] 375SCO Unrestricted Soil
[ ] 375SCO Residential Soil
[ ] 375SCO Residential Restricted Soil
[X] 375SCO Commercial Soil
[ ] 375SCO Industrial Soil
[ ] Subpart 5 DW

PA
[ ] Clean Fill Limits
[ ] PA-GW
[ ] Reg Fill Limits
[ ] PA Soil Restricted
[ ] PA Soil non-restricted

State Samples Collected? NY

Comments, Special Requirements or Regulations:

Data Format:
[ ] Phoenix Std Report
[X] Excel
[X] PDF
[ ] GIS/Key
[ ] EQuIS
[ ] NJ Hazsite EDD
[ ] NY EZ EDD
[ ] Other

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

PEL-111 Rev 10/2021

Thursday, May 25, 2023

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

Project ID: **GATEWAY ESTATES-HD161E**
SDG ID: **GCO06895**
Sample ID#s: **CO06895 - CO06898**

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,

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.
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NY # 11301

SDG Comments

May 25, 2023

SDG I.D.: GCO06895

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

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

NY # 11301

Sample Id Cross Reference

May 25, 2023

SDG I.D.: GCO06895

Project ID: GATEWAY ESTATES-HD161E

Client Id	Lab Id	Matrix
PILE 73-#121	CO06895	SOIL
PILE 73-#122	CO06896	SOIL
PILE 73-#123	CO06897	SOIL
PILE 73-#124	CO06898	SOIL

Environmental Laboratories, Inc.
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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

May 25, 2023

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

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/15/23	9:15
Location Code:	AES-INC	Received by:	CP	05/16/23	16:20
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCO06895
Phoenix ID: CO06895

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 73-#121

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.33	0.33	mg/Kg	1	05/18/23	CPP	SW6010D
Aluminum	4900	50	mg/Kg	10	05/18/23	CPP	SW6010D
Arsenic	2.34	0.67	mg/Kg	1	05/18/23	CPP	SW6010D
Barium	60.6	0.33	mg/Kg	1	05/18/23	TH	SW6010D
Beryllium	< 0.27	0.27	mg/Kg	1	05/18/23	CPP	SW6010D
Calcium	4870	5.0	mg/Kg	1	05/18/23	CPP	SW6010D
Cadmium	0.78	0.33	mg/Kg	1	05/18/23	CPP	SW6010D
Cobalt	4.19	0.33	mg/Kg	1	05/18/23	CPP	SW6010D
Chromium	12.0	0.33	mg/Kg	1	05/18/23	CPP	SW6010D
Copper	19.7	0.7	mg/kg	1	05/18/23	CPP	SW6010D
Iron	12200	50	mg/Kg	10	05/18/23	CPP	SW6010D
Mercury	0.19	0.03	mg/Kg	2	05/18/23	PM	SW7471B
Potassium	680	5.0	mg/Kg	1	05/18/23	CPP	SW6010D
Magnesium	2070	5.0	mg/Kg	1	05/18/23	CPP	SW6010D
Manganese	189	3.3	mg/Kg	10	05/18/23	TH	SW6010D
Sodium	143	5.0	mg/Kg	1	05/18/23	CPP	SW6010D
Nickel	14.2	0.33	mg/Kg	1	05/18/23	CPP	SW6010D
Lead	77.3	0.33	mg/Kg	1	05/18/23	CPP	SW6010D
Antimony	< 3.3	3.3	mg/Kg	1	05/18/23	CPP	SW6010D
Selenium	< 1.3	1.3	mg/Kg	1	05/18/23	CPP	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	05/17/23	IE	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	05/17/23	IE	SW846 1311/6010
TCLP Barium	0.63	0.10	mg/L	1	05/17/23	IE	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	05/17/23	IE	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	05/17/23	IE	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	05/17/23	AL1	SW846 1311/7470
TCLP Lead	0.33	0.10	mg/L	1	05/17/23	IE	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	05/17/23	IE	SW846 1311/6010D

Ver 1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Thallium	< 3.0	3.0	mg/Kg	1	05/18/23	CPP	SW6010D	
TCLP Metals Digestion	Completed				05/17/23	ZT/AL/ZT	SW3010A	
Vanadium	21.2	0.33	mg/Kg	1	05/18/23	CPP	SW6010D	
Zinc	62.7	0.7	mg/Kg	1	05/18/23	CPP	SW6010D	
Percent Solid	95		%		05/16/23	CV	SW846-%Solid	
Corrosivity	Negative		Pos/Neg	1	05/16/23	ER	SW846-Corr	1
Flash Point	>200	200	Degree F	1	05/19/23	G	SW1010B	
Ignitability	Passed	140	degree F	1	05/19/23	G	SW846-Ignit	1
pH at 25C - Soil	8.17	1.00	pH Units	1	05/16/23 22:42	ER	SW846 9045D	1
Reactivity Cyanide	< 5	5	mg/Kg	1	05/18/23	DK/GD	SW846 7.3.3.1/90	1
Reactivity Sulfide	< 20	20	mg/Kg	1	05/18/23	DK/GD	SW846 CH7	1
Reactivity	Negative		Pos/Neg	1	05/18/23	DK/GD	SW846-React	1
Total Cyanide (SW9010C Distill.)	< 0.53	0.53	mg/Kg	1	05/17/23	CL/GD	SW9012B	
Mercury Digestion	Completed				05/18/23	AL/AL	SW7471B	
Extraction of NY ETPH	Completed				05/17/23	MO/M	SW3546	
Soil Extraction for PCB	Completed				05/18/23	C/Y	SW3546	
Soil Extraction for Pesticides	Completed				05/18/23	C/Y	SW3546	
Soil Extraction for SVOA	Completed				05/17/23	B/F	SW3546	
TCLP Digestion Mercury	Completed				05/17/23	ZT/AL/ZT	SW7470A	
TCLP Herbicides Extraction	Completed				05/18/23	CV/D	SW8150 MOD	
TCLP Extraction for Metals	Completed				05/16/23	AL	SW1311	
TCLP Extraction for Organics	Completed				05/16/23	AL	SW1311	
TCLP Pesticides Extraction	Completed				05/18/23	I/I	SW3510C	
TCLP Semi-Volatile Extraction	Completed				05/17/23	I/I	SW3510C	
TCLP Extraction Volatiles	Completed				05/16/23	CV	SW1311	
Total Metals Digest	Completed				05/16/23	L/AG	SW3050B	
Gasoline Range Hydrocarbons (C6-C10)								
GRO (C6-C10)	ND	5.2	mg/Kg	50	05/17/23	V	SW8015D GRO	
QA/QC Surrogates								
% 2,5-Dibromotoluene (FID)	78		%	50	05/17/23	V	70 - 130 %	
Polychlorinated Biphenyls								
PCB-1016	ND	69	ug/Kg	2	05/22/23	SC	SW8082A	
PCB-1221	ND	69	ug/Kg	2	05/22/23	SC	SW8082A	
PCB-1232	ND	69	ug/Kg	2	05/22/23	SC	SW8082A	
PCB-1242	ND	69	ug/Kg	2	05/22/23	SC	SW8082A	
PCB-1248	ND	69	ug/Kg	2	05/22/23	SC	SW8082A	
PCB-1254	ND	69	ug/Kg	2	05/22/23	SC	SW8082A	
PCB-1260	ND	69	ug/Kg	2	05/22/23	SC	SW8082A	
PCB-1262	ND	69	ug/Kg	2	05/22/23	SC	SW8082A	
PCB-1268	ND	69	ug/Kg	2	05/22/23	SC	SW8082A	
QA/QC Surrogates								
% DCBP	70		%	2	05/22/23	SC	30 - 150 %	
% DCBP (Confirmation)	74		%	2	05/22/23	SC	30 - 150 %	
% TCMX	71		%	2	05/22/23	SC	30 - 150 %	
% TCMX (Confirmation)	75		%	2	05/22/23	SC	30 - 150 %	

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 73-#121

Phoenix I.D.: CO06895

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Pesticides - Soil								
4,4' -DDD	5.9	2.1	ug/Kg	2	05/22/23	AW	SW8081B	
4,4' -DDE	3.3	2.1	ug/Kg	2	05/22/23	AW	SW8081B	
4,4' -DDT	3.0	2.1	ug/Kg	2	05/22/23	AW	SW8081B	
a-BHC	ND	6.9	ug/Kg	2	05/22/23	AW	SW8081B	
a-Chlordane	ND	6.0	ug/Kg	2	05/22/23	AW	SW8081B	
Aldrin	ND	3.5	ug/Kg	2	05/22/23	AW	SW8081B	
b-BHC	ND	6.9	ug/Kg	2	05/22/23	AW	SW8081B	
Chlordane	ND	35	ug/Kg	2	05/22/23	AW	SW8081B	
d-BHC	ND	6.9	ug/Kg	2	05/22/23	AW	SW8081B	
Dieldrin	ND	3.5	ug/Kg	2	05/22/23	AW	SW8081B	
Endosulfan I	ND	6.9	ug/Kg	2	05/22/23	AW	SW8081B	
Endosulfan II	ND	6.9	ug/Kg	2	05/22/23	AW	SW8081B	
Endosulfan sulfate	ND	6.9	ug/Kg	2	05/22/23	AW	SW8081B	
Endrin	ND	6.9	ug/Kg	2	05/22/23	AW	SW8081B	
Endrin aldehyde	ND	6.9	ug/Kg	2	05/22/23	AW	SW8081B	
Endrin ketone	ND	6.9	ug/Kg	2	05/22/23	AW	SW8081B	
g-BHC	ND	1.4	ug/Kg	2	05/22/23	AW	SW8081B	
g-Chlordane	ND	6.0	ug/Kg	2	05/22/23	AW	SW8081B	
Heptachlor	ND	6.9	ug/Kg	2	05/22/23	AW	SW8081B	
Heptachlor epoxide	ND	6.9	ug/Kg	2	05/22/23	AW	SW8081B	
Methoxychlor	ND	35	ug/Kg	2	05/22/23	AW	SW8081B	
Toxaphene	ND	140	ug/Kg	2	05/22/23	AW	SW8081B	
QA/QC Surrogates								
% DCBP	70		%	2	05/22/23	AW	30 - 150 %	
% DCBP (Confirmation)	60		%	2	05/22/23	AW	30 - 150 %	
% TCMX	69		%	2	05/22/23	AW	30 - 150 %	
% TCMX (Confirmation)	66		%	2	05/22/23	AW	30 - 150 %	
TCLP Herbicides								
2,4,5-TP (Silvex)	ND	100	ug/L	20	05/22/23	JRB	SW846 1311/8151	
2,4-D	ND	200	ug/L	20	05/22/23	JRB	SW846 1311/8151	
QA/QC Surrogates								
% DCAA	106		%	20	05/22/23	JRB	30 - 150 %	
% DCAA (Confirmation)	131		%	20	05/22/23	JRB	30 - 150 %	
TCLP Pesticides								
4,4' -DDD	ND	1.0	ug/L	10	05/19/23	AW	SW8081B	
4,4' -DDE	ND	1.0	ug/L	10	05/19/23	AW	SW8081B	
4,4' -DDT	ND	1.0	ug/L	10	05/19/23	AW	SW8081B	
a-BHC	ND	0.50	ug/L	10	05/19/23	AW	SW8081B	
Alachlor	ND	0.50	ug/L	10	05/19/23	AW	SW8081B	1
Aldrin	ND	0.50	ug/L	10	05/19/23	AW	SW8081B	
b-BHC	ND	0.50	ug/L	10	05/19/23	AW	SW8081B	
Chlordane	ND	5.0	ug/L	10	05/19/23	AW	SW8081B	
d-BHC	ND	0.50	ug/L	10	05/19/23	AW	SW8081B	
Dieldrin	ND	1.0	ug/L	10	05/19/23	AW	SW8081B	
Endosulfan I	ND	0.50	ug/L	10	05/19/23	AW	SW8081B	
Endosulfan II	ND	1.0	ug/L	10	05/19/23	AW	SW8081B	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Endosulfan Sulfate	ND	1.0	ug/L	10	05/19/23	AW	SW8081B
Endrin	ND	1.0	ug/L	10	05/19/23	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	05/19/23	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	05/19/23	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	05/19/23	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	05/19/23	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	05/19/23	AW	SW8081B
Toxaphene	ND	20	ug/L	10	05/19/23	AW	SW8081B
QA/QC Surrogates							
%DCBP (Surrogate Rec)	81		%	10	05/19/23	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	79		%	10	05/19/23	AW	30 - 150 %
%TCMX (Surrogate Rec)	72		%	10	05/19/23	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	75		%	10	05/19/23	AW	30 - 150 %
TPH DRO (C10-C28)							
Diesel Range Organics (C10-C28)	ND	260	mg/Kg	5	05/18/23	JRB	SW-846 8015
QA/QC Surrogates							
% COD (surr)	62		%	5	05/18/23	JRB	50 - 150 %
% Terphenyl (surr)	52		%	5	05/18/23	JRB	50 - 150 %
Volatiles (TCL)							
1,1,1-Trichloroethane	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
1,1,2-Trichloroethane	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
1,1-Dichloroethane	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
1,1-Dichloroethene	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
1,2-Dibromoethane	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
1,2-Dichlorobenzene	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
1,2-Dichloroethane	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
1,2-Dichloropropane	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
1,3-Dichlorobenzene	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
1,4-Dichlorobenzene	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
2-Hexanone	ND	41	ug/kg	1	05/18/23	JLI	SW8260C
4-Methyl-2-pentanone	ND	41	ug/kg	1	05/18/23	JLI	SW8260C
Acetone	ND	50	ug/kg	1	05/18/23	JLI	SW8260C
Benzene	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
Bromochloromethane	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
Bromodichloromethane	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
Bromoform	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
Bromomethane	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
Carbon Disulfide	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
Carbon tetrachloride	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
Chlorobenzene	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
Chloroethane	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
Chloroform	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
Chloromethane	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
cis-1,2-Dichloroethene	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
cis-1,3-Dichloropropene	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
Cyclohexane	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
Dibromochloromethane	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
Dichlorodifluoromethane	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
Ethylbenzene	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
Isopropylbenzene	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
m&p-Xylene	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
Methyl ethyl ketone	ND	49	ug/kg	1	05/18/23	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	16	ug/kg	1	05/18/23	JLI	SW8260C
Methylacetate	ND	6.6	ug/kg	1	05/18/23	JLI	SW8260C
Methylcyclohexane	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
Methylene chloride	ND	41	ug/kg	1	05/18/23	JLI	SW8260C
o-Xylene	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
Styrene	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
Tetrachloroethene	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
Toluene	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
Total Xylenes	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
trans-1,2-Dichloroethene	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
trans-1,3-Dichloropropene	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
Trichloroethene	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
Trichlorofluoromethane	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
Trichlorotrifluoroethane	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
Vinyl chloride	ND	8.2	ug/kg	1	05/18/23	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	1	05/18/23	JLI	70 - 130 %
% Bromofluorobenzene	90		%	1	05/18/23	JLI	70 - 130 %
% Dibromofluoromethane	99		%	1	05/18/23	JLI	70 - 130 %
% Toluene-d8	99		%	1	05/18/23	JLI	70 - 130 %
1,4-dioxane							
1,4-dioxane	ND	100	ug/kg	1	05/18/23	JLI	SW8260C
TCLP Volatiles							
1,1-Dichloroethene	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4 (10x)	100		%	10	05/18/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	94		%	10	05/18/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	98		%	10	05/18/23	HM	70 - 130 %
% Toluene-d8 (10x)	96		%	10	05/18/23	HM	70 - 130 %
Volatile Library Search	Completed				05/18/23	JLI	

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 73-#121

Phoenix I.D.: CO06895

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Semivolatiles								
1,1-Biphenyl	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
1,2,4,5-Tetrachlorobenzene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
2,2'-Oxybis(1-Chloropropane)	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	1
2,3,4,6-tetrachlorophenol	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
2,4,5-Trichlorophenol	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
2,4,6-Trichlorophenol	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
2,4-Dichlorophenol	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
2,4-Dimethylphenol	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
2,4-Dinitrophenol	ND	560	ug/Kg	1	05/18/23	KCA	SW8270D	
2,4-Dinitrotoluene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
2,6-Dinitrotoluene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
2-Chloronaphthalene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
2-Chlorophenol	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
2-Methylnaphthalene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
2-Methylphenol (o-cresol)	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
2-Nitroaniline	ND	560	ug/Kg	1	05/18/23	KCA	SW8270D	
2-Nitrophenol	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
3&4-Methylphenol (m&p-cresol)	ND	350	ug/Kg	1	05/18/23	KCA	SW8270D	1
3,3'-Dichlorobenzidine	ND	420	ug/Kg	1	05/18/23	KCA	SW8270D	
3-Nitroaniline	ND	560	ug/Kg	1	05/18/23	KCA	SW8270D	
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	1	05/18/23	KCA	SW8270D	
4-Bromophenyl phenyl ether	ND	350	ug/Kg	1	05/18/23	KCA	SW8270D	
4-Chloro-3-methylphenol	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
4-Chloroaniline	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
4-Chlorophenyl phenyl ether	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
4-Nitroaniline	ND	560	ug/Kg	1	05/18/23	KCA	SW8270D	
4-Nitrophenol	ND	1000	ug/Kg	1	05/18/23	KCA	SW8270D	
Acenaphthene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Acenaphthylene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Acetophenone	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Anthracene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Atrazine	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Benz(a)anthracene	400	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Benzaldehyde	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Benzo(a)pyrene	500	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Benzo(b)fluoranthene	590	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Benzo(ghi)perylene	320	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Benzo(k)fluoranthene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Benzyl butyl phthalate	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Bis(2-chloroethoxy)methane	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Bis(2-chloroethyl)ether	ND	350	ug/Kg	1	05/18/23	KCA	SW8270D	
Bis(2-ethylhexyl)phthalate	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Caprolactam	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Carbazole	ND	350	ug/Kg	1	05/18/23	KCA	SW8270D	
Chrysene	420	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Dibenz(a,h)anthracene	ND	180	ug/Kg	1	05/18/23	KCA	SW8270D	
Dibenzofuran	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Diethyl phthalate	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Dimethylphthalate	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Di-n-butylphthalate	ND	700	ug/Kg	1	05/18/23	KCA	SW8270D	
Di-n-octylphthalate	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Fluoranthene	740	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Fluorene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Hexachlorobenzene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Hexachlorobutadiene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Hexachlorocyclopentadiene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Hexachloroethane	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Indeno(1,2,3-cd)pyrene	300	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Isophorone	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Naphthalene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Nitrobenzene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
N-Nitrosodimethylamine	ND	350	ug/Kg	1	05/18/23	KCA	SW8270D	
N-Nitrosodi-n-propylamine	ND	180	ug/Kg	1	05/18/23	KCA	SW8270D	
N-Nitrosodiphenylamine	ND	350	ug/Kg	1	05/18/23	KCA	SW8270D	
Pentachlorophenol	ND	350	ug/Kg	1	05/18/23	KCA	SW8270D	
Phenanthrene	390	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Phenol	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Pyrene	780	250	ug/Kg	1	05/18/23	KCA	SW8270D	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	112		%	1	05/18/23	KCA	30 - 130 %	
% 2-Fluorobiphenyl	84		%	1	05/18/23	KCA	30 - 130 %	
% 2-Fluorophenol	71		%	1	05/18/23	KCA	30 - 130 %	
% Nitrobenzene-d5	94		%	1	05/18/23	KCA	30 - 130 %	
% Phenol-d5	78		%	1	05/18/23	KCA	30 - 130 %	
% Terphenyl-d14	73		%	1	05/18/23	KCA	30 - 130 %	
TCLP Acid/Base-Neutral								
1,4-Dichlorobenzene	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
2,4,5-Trichlorophenol	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
2,4,6-Trichlorophenol	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
2,4-Dinitrotoluene	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
2-Methylphenol (o-cresol)	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
Hexachlorobenzene	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
Hexachlorobutadiene	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
Hexachloroethane	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
Nitrobenzene	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
Pentachlorophenol	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
Pyridine	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	127		%	1	05/18/23	KCA	15 - 110 %	3
% 2-Fluorobiphenyl	76		%	1	05/18/23	KCA	30 - 130 %	
% 2-Fluorophenol	59		%	1	05/18/23	KCA	15 - 110 %	
% Nitrobenzene-d5	72		%	1	05/18/23	KCA	30 - 130 %	
% Phenol-d5	61		%	1	05/18/23	KCA	15 - 110 %	
% Terphenyl-d14	108		%	1	05/18/23	KCA	30 - 130 %	
Semivolatile Library Search	Completed				05/24/23	MR		

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

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.

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

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

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

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

Phyllis Shiller, Laboratory Director
May 25, 2023
Reviewed and Released by: Phyllis Shiller, Laboratory Director

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

May 25, 2023

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

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/15/23	9:20
Location Code:	AES-INC	Received by:	CP	05/16/23	16:20
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCO06895
Phoenix ID: CO06896

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 73-#122

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.37	0.37	mg/Kg	1	05/18/23	CPP	SW6010D
Aluminum	3580	56	mg/Kg	10	05/18/23	CPP	SW6010D
Arsenic	2.13	0.74	mg/Kg	1	05/18/23	CPP	SW6010D
Barium	59.3	0.37	mg/Kg	1	05/18/23	TH	SW6010D
Beryllium	< 0.30	0.30	mg/Kg	1	05/18/23	CPP	SW6010D
Calcium	4540	5.6	mg/Kg	1	05/18/23	CPP	SW6010D
Cadmium	0.73	0.37	mg/Kg	1	05/18/23	CPP	SW6010D
Cobalt	3.50	0.37	mg/Kg	1	05/18/23	CPP	SW6010D
Chromium	10.3	0.37	mg/Kg	1	05/18/23	CPP	SW6010D
Copper	22.5	0.7	mg/kg	1	05/18/23	CPP	SW6010D
Iron	9020	5.6	mg/Kg	1	05/18/23	CPP	SW6010D
Mercury	0.11	0.03	mg/Kg	2	05/18/23	PM	SW7471B
Potassium	581	5.6	mg/Kg	1	05/18/23	CPP	SW6010D
Magnesium	1690	5.6	mg/Kg	1	05/18/23	CPP	SW6010D
Manganese	125	0.37	mg/Kg	1	05/18/23	TH	SW6010D
Sodium	92.6	5.6	mg/Kg	1	05/18/23	CPP	SW6010D
Nickel	11.3	0.37	mg/Kg	1	05/18/23	CPP	SW6010D
Lead	104	0.37	mg/Kg	1	05/18/23	CPP	SW6010D
Antimony	< 3.7	3.7	mg/Kg	1	05/18/23	CPP	SW6010D
Selenium	< 1.5	1.5	mg/Kg	1	05/18/23	CPP	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	05/17/23	IE	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	05/17/23	IE	SW846 1311/6010
TCLP Barium	0.64	0.10	mg/L	1	05/17/23	IE	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	05/17/23	IE	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	05/17/23	IE	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	05/17/23	AL1	SW846 1311/7470
TCLP Lead	0.24	0.10	mg/L	1	05/17/23	IE	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	05/17/23	IE	SW846 1311/6010D

Ver 1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Thallium	< 3.3	3.3	mg/Kg	1	05/18/23	CPP	SW6010D	
TCLP Metals Digestion	Completed				05/17/23	ZT/AL/ZT	SW3010A	
Vanadium	16.6	0.37	mg/Kg	1	05/18/23	CPP	SW6010D	
Zinc	65.2	0.7	mg/Kg	1	05/18/23	CPP	SW6010D	
Percent Solid	96		%		05/16/23	CV	SW846-%Solid	
Corrosivity	Negative		Pos/Neg	1	05/16/23	ER	SW846-Corr	1
Flash Point	>200	200	Degree F	1	05/19/23	G	SW1010B	
Ignitability	Passed	140	degree F	1	05/19/23	G	SW846-Ignit	1
pH at 25C - Soil	8.35	1.00	pH Units	1	05/16/23 22:42	ER	SW846 9045D	1
Reactivity Cyanide	< 5	5	mg/Kg	1	05/18/23	DK/GD	SW846 7.3.3.1/90	1
Reactivity Sulfide	< 20	20	mg/Kg	1	05/18/23	DK/GD	SW846 CH7	1
Reactivity	Negative		Pos/Neg	1	05/18/23	DK/GD	SW846-React	1
Total Cyanide (SW9010C Distill.)	< 0.52	0.52	mg/Kg	1	05/17/23	CL/GD	SW9012B	
Mercury Digestion	Completed				05/18/23	AL/AL	SW7471B	
Extraction of NY ETPH	Completed				05/17/23	MO/M	SW3546	
Soil Extraction for PCB	Completed				05/18/23	C/Y	SW3546	
Soil Extraction for Pesticides	Completed				05/18/23	C/Y	SW3546	
Soil Extraction for SVOA	Completed				05/17/23	B/F	SW3546	
TCLP Digestion Mercury	Completed				05/17/23	ZT/AL/ZT	SW7470A	
TCLP Herbicides Extraction	Completed				05/18/23	CV/D	SW8150 MOD	
TCLP Extraction for Metals	Completed				05/16/23	AL	SW1311	
TCLP Extraction for Organics	Completed				05/16/23	AL	SW1311	
TCLP Pesticides Extraction	Completed				05/18/23	I/I	SW3510C	
TCLP Semi-Volatile Extraction	Completed				05/17/23	I/I	SW3510C	
TCLP Extraction Volatiles	Completed				05/16/23	CV	SW1311	
Total Metals Digest	Completed				05/16/23	L/AG	SW3050B	
Gasoline Range Hydrocarbons (C6-C10)								
GRO (C6-C10)	ND	6.0	mg/Kg	50	05/17/23	V	SW8015D GRO	
QA/QC Surrogates								
% 2,5-Dibromotoluene (FID)	81		%	50	05/17/23	V	70 - 130 %	
Polychlorinated Biphenyls								
PCB-1016	ND	69	ug/Kg	2	05/19/23	SC	SW8082A	
PCB-1221	ND	69	ug/Kg	2	05/19/23	SC	SW8082A	
PCB-1232	ND	69	ug/Kg	2	05/19/23	SC	SW8082A	
PCB-1242	ND	69	ug/Kg	2	05/19/23	SC	SW8082A	
PCB-1248	ND	69	ug/Kg	2	05/19/23	SC	SW8082A	
PCB-1254	94	69	ug/Kg	2	05/19/23	SC	SW8082A	
PCB-1260	ND	69	ug/Kg	2	05/19/23	SC	SW8082A	
PCB-1262	ND	69	ug/Kg	2	05/19/23	SC	SW8082A	
PCB-1268	ND	69	ug/Kg	2	05/19/23	SC	SW8082A	
QA/QC Surrogates								
% DCBP	75		%	2	05/19/23	SC	30 - 150 %	
% DCBP (Confirmation)	71		%	2	05/19/23	SC	30 - 150 %	
% TCMX	77		%	2	05/19/23	SC	30 - 150 %	
% TCMX (Confirmation)	72		%	2	05/19/23	SC	30 - 150 %	

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 73-#122

Phoenix I.D.: CO06896

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Pesticides - Soil								
4,4' -DDD	9.1	2.1	ug/Kg	2	05/19/23	AW	SW8081B	
4,4' -DDE	ND	2.1	ug/Kg	2	05/19/23	AW	SW8081B	
4,4' -DDT	4.5	2.1	ug/Kg	2	05/19/23	AW	SW8081B	
a-BHC	ND	6.9	ug/Kg	2	05/19/23	AW	SW8081B	
a-Chlordane	ND	5.0	ug/Kg	2	05/19/23	AW	SW8081B	
Aldrin	ND	3.4	ug/Kg	2	05/19/23	AW	SW8081B	
b-BHC	ND	6.9	ug/Kg	2	05/19/23	AW	SW8081B	
Chlordane	ND	34	ug/Kg	2	05/19/23	AW	SW8081B	
d-BHC	ND	6.9	ug/Kg	2	05/19/23	AW	SW8081B	
Dieldrin	ND	3.4	ug/Kg	2	05/19/23	AW	SW8081B	
Endosulfan I	ND	6.9	ug/Kg	2	05/19/23	AW	SW8081B	
Endosulfan II	ND	6.9	ug/Kg	2	05/19/23	AW	SW8081B	
Endosulfan sulfate	ND	6.9	ug/Kg	2	05/19/23	AW	SW8081B	
Endrin	ND	6.9	ug/Kg	2	05/19/23	AW	SW8081B	
Endrin aldehyde	ND	6.9	ug/Kg	2	05/19/23	AW	SW8081B	
Endrin ketone	ND	6.9	ug/Kg	2	05/19/23	AW	SW8081B	
g-BHC	ND	1.4	ug/Kg	2	05/19/23	AW	SW8081B	
g-Chlordane	ND	8.0	ug/Kg	2	05/19/23	AW	SW8081B	
Heptachlor	ND	6.9	ug/Kg	2	05/19/23	AW	SW8081B	
Heptachlor epoxide	ND	6.9	ug/Kg	2	05/19/23	AW	SW8081B	
Methoxychlor	ND	34	ug/Kg	2	05/19/23	AW	SW8081B	
Toxaphene	ND	140	ug/Kg	2	05/19/23	AW	SW8081B	
QA/QC Surrogates								
% DCBP	70		%	2	05/19/23	AW	30 - 150 %	
% DCBP (Confirmation)	70		%	2	05/19/23	AW	30 - 150 %	
% TCMX	68		%	2	05/19/23	AW	30 - 150 %	
% TCMX (Confirmation)	74		%	2	05/19/23	AW	30 - 150 %	
TCLP Herbicides								
2,4,5-TP (Silvex)	ND	50	ug/L	10	05/19/23	PS	SW846 1311/8151	
2,4-D	ND	100	ug/L	10	05/19/23	PS	SW846 1311/8151	
QA/QC Surrogates								
% DCAA	73		%	10	05/19/23	PS	30 - 150 %	
% DCAA (Confirmation)	83		%	10	05/19/23	PS	30 - 150 %	
TCLP Pesticides								
4,4' -DDD	ND	1.0	ug/L	10	05/19/23	AW	SW8081B	
4,4' -DDE	ND	1.0	ug/L	10	05/19/23	AW	SW8081B	
4,4' -DDT	ND	1.0	ug/L	10	05/19/23	AW	SW8081B	
a-BHC	ND	0.50	ug/L	10	05/19/23	AW	SW8081B	
Alachlor	ND	0.50	ug/L	10	05/19/23	AW	SW8081B	1
Aldrin	ND	0.50	ug/L	10	05/19/23	AW	SW8081B	
b-BHC	ND	0.50	ug/L	10	05/19/23	AW	SW8081B	
Chlordane	ND	5.0	ug/L	10	05/19/23	AW	SW8081B	
d-BHC	ND	0.50	ug/L	10	05/19/23	AW	SW8081B	
Dieldrin	ND	1.0	ug/L	10	05/19/23	AW	SW8081B	
Endosulfan I	ND	0.50	ug/L	10	05/19/23	AW	SW8081B	
Endosulfan II	ND	1.0	ug/L	10	05/19/23	AW	SW8081B	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Endosulfan Sulfate	ND	1.0	ug/L	10	05/19/23	AW	SW8081B
Endrin	ND	1.0	ug/L	10	05/19/23	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	05/19/23	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	05/19/23	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	05/19/23	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	05/19/23	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	05/19/23	AW	SW8081B
Toxaphene	ND	20	ug/L	10	05/19/23	AW	SW8081B
QA/QC Surrogates							
%DCBP (Surrogate Rec)	88		%	10	05/19/23	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	87		%	10	05/19/23	AW	30 - 150 %
%TCMX (Surrogate Rec)	77		%	10	05/19/23	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	75		%	10	05/19/23	AW	30 - 150 %
TPH DRO (C10-C28)							
Diesel Range Organics (C10-C28)	ND	260	mg/Kg	5	05/18/23	JRB	SW-846 8015
QA/QC Surrogates							
% COD (surr)	73		%	5	05/18/23	JRB	50 - 150 %
% Terphenyl (surr)	78		%	5	05/18/23	JRB	50 - 150 %
Volatiles (TCL)							
1,1,1-Trichloroethane	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
1,1-Dichloroethane	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
1,1-Dichloroethene	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
1,2-Dibromoethane	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
1,2-Dichloroethane	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
1,2-Dichloropropane	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
2-Hexanone	ND	24	ug/kg	1	05/18/23	JLI	SW8260C
4-Methyl-2-pentanone	ND	24	ug/kg	1	05/18/23	JLI	SW8260C
Acetone	ND	48	ug/kg	1	05/18/23	JLI	SW8260C
Benzene	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
Bromochloromethane	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
Bromodichloromethane	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
Bromoform	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
Bromomethane	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
Carbon Disulfide	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
Carbon tetrachloride	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
Chlorobenzene	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
Chloroethane	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
Chloroform	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
Chloromethane	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
cis-1,3-Dichloropropene	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
Cyclohexane	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
Dibromochloromethane	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
Dichlorodifluoromethane	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
Ethylbenzene	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
Isopropylbenzene	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
m&p-Xylene	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
Methyl ethyl ketone	ND	29	ug/kg	1	05/18/23	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.7	ug/kg	1	05/18/23	JLI	SW8260C
Methylacetate	ND	3.9	ug/kg	1	05/18/23	JLI	SW8260C
Methylcyclohexane	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
Methylene chloride	ND	24	ug/kg	1	05/18/23	JLI	SW8260C
o-Xylene	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
Styrene	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
Tetrachloroethene	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
Toluene	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
Total Xylenes	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
Trichloroethene	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
Trichlorofluoromethane	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
Vinyl chloride	ND	4.8	ug/kg	1	05/18/23	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	1	05/18/23	JLI	70 - 130 %
% Bromofluorobenzene	91		%	1	05/18/23	JLI	70 - 130 %
% Dibromofluoromethane	98		%	1	05/18/23	JLI	70 - 130 %
% Toluene-d8	101		%	1	05/18/23	JLI	70 - 130 %
1,4-dioxane							
1,4-dioxane	ND	73	ug/kg	1	05/18/23	JLI	SW8260C
TCLP Volatiles							
1,1-Dichloroethene	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4 (10x)	100		%	10	05/18/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	94		%	10	05/18/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	98		%	10	05/18/23	HM	70 - 130 %
% Toluene-d8 (10x)	96		%	10	05/18/23	HM	70 - 130 %
Volatile Library Search	Completed				05/18/23	JLI	

Ver 1

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 73-#122

Phoenix I.D.: CO06896

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Semivolatiles								
1,1-Biphenyl	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
2,2'-Oxybis(1-Chloropropane)	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	1
2,3,4,6-tetrachlorophenol	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
2,4,5-Trichlorophenol	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
2,4,6-Trichlorophenol	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
2,4-Dichlorophenol	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
2,4-Dimethylphenol	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
2,4-Dinitrophenol	ND	550	ug/Kg	1	05/18/23	KCA	SW8270D	
2,4-Dinitrotoluene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
2,6-Dinitrotoluene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
2-Chloronaphthalene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
2-Chlorophenol	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
2-Methylnaphthalene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
2-Methylphenol (o-cresol)	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
2-Nitroaniline	ND	550	ug/Kg	1	05/18/23	KCA	SW8270D	
2-Nitrophenol	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
3&4-Methylphenol (m&p-cresol)	ND	340	ug/Kg	1	05/18/23	KCA	SW8270D	1
3,3'-Dichlorobenzidine	ND	410	ug/Kg	1	05/18/23	KCA	SW8270D	
3-Nitroaniline	ND	550	ug/Kg	1	05/18/23	KCA	SW8270D	
4,6-Dinitro-2-methylphenol	ND	990	ug/Kg	1	05/18/23	KCA	SW8270D	
4-Bromophenyl phenyl ether	ND	340	ug/Kg	1	05/18/23	KCA	SW8270D	
4-Chloro-3-methylphenol	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
4-Chloroaniline	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
4-Nitroaniline	ND	550	ug/Kg	1	05/18/23	KCA	SW8270D	
4-Nitrophenol	ND	990	ug/Kg	1	05/18/23	KCA	SW8270D	
Acenaphthene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Acenaphthylene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Acetophenone	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Anthracene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Atrazine	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Benz(a)anthracene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Benzaldehyde	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Benzo(a)pyrene	270	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Benzo(b)fluoranthene	320	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Benzo(ghi)perylene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Benzo(k)fluoranthene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Benzyl butyl phthalate	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Bis(2-chloroethyl)ether	ND	340	ug/Kg	1	05/18/23	KCA	SW8270D	
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Caprolactam	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Carbazole	ND	340	ug/Kg	1	05/18/23	KCA	SW8270D	
Chrysene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Dibenz(a,h)anthracene	ND	170	ug/Kg	1	05/18/23	KCA	SW8270D	
Dibenzofuran	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Diethyl phthalate	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Dimethylphthalate	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D
Di-n-butylphthalate	ND	680	ug/Kg	1	05/18/23	KCA	SW8270D
Di-n-octylphthalate	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D
Fluoranthene	370	240	ug/Kg	1	05/18/23	KCA	SW8270D
Fluorene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D
Hexachlorobenzene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D
Hexachlorobutadiene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D
Hexachlorocyclopentadiene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D
Hexachloroethane	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D
Indeno(1,2,3-cd)pyrene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D
Isophorone	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D
Naphthalene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D
Nitrobenzene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D
N-Nitrosodimethylamine	ND	340	ug/Kg	1	05/18/23	KCA	SW8270D
N-Nitrosodi-n-propylamine	ND	170	ug/Kg	1	05/18/23	KCA	SW8270D
N-Nitrosodiphenylamine	ND	340	ug/Kg	1	05/18/23	KCA	SW8270D
Pentachlorophenol	ND	340	ug/Kg	1	05/18/23	KCA	SW8270D
Phenanthrene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D
Phenol	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D
Pyrene	390	240	ug/Kg	1	05/18/23	KCA	SW8270D
QA/QC Surrogates							
% 2,4,6-Tribromophenol	108		%	1	05/18/23	KCA	30 - 130 %
% 2-Fluorobiphenyl	79		%	1	05/18/23	KCA	30 - 130 %
% 2-Fluorophenol	67		%	1	05/18/23	KCA	30 - 130 %
% Nitrobenzene-d5	90		%	1	05/18/23	KCA	30 - 130 %
% Phenol-d5	74		%	1	05/18/23	KCA	30 - 130 %
% Terphenyl-d14	72		%	1	05/18/23	KCA	30 - 130 %
TCLP Acid/Base-Neutral							
1,4-Dichlorobenzene	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270
2,4,5-Trichlorophenol	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270
2,4,6-Trichlorophenol	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270
2,4-Dinitrotoluene	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270
2-Methylphenol (o-cresol)	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270
Hexachlorobenzene	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270
Hexachlorobutadiene	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270
Hexachloroethane	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270
Nitrobenzene	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270
Pentachlorophenol	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270
Pyridine	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	83		%	1	05/18/23	KCA	15 - 110 %
% 2-Fluorobiphenyl	54		%	1	05/18/23	KCA	30 - 130 %
% 2-Fluorophenol	50		%	1	05/18/23	KCA	15 - 110 %
% Nitrobenzene-d5	53		%	1	05/18/23	KCA	30 - 130 %
% Phenol-d5	52		%	1	05/18/23	KCA	15 - 110 %
% Terphenyl-d14	78		%	1	05/18/23	KCA	30 - 130 %
Semivolatile Library Search	Completed				05/24/23	MR	

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

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.

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

May 25, 2023

Reviewed and Released by: Phyllis Shiller, Laboratory Director

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

May 25, 2023

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

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/15/23	9:25
Location Code:	AES-INC	Received by:	CP	05/16/23	16:20
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCO06895
Phoenix ID: CO06897

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 73-#123

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.33	0.33	mg/Kg	1	05/18/23	CPP	SW6010D
Aluminum	5740	49	mg/Kg	10	05/18/23	CPP	SW6010D
Arsenic	4.30	0.66	mg/Kg	1	05/18/23	CPP	SW6010D
Barium	76.8	0.33	mg/Kg	1	05/18/23	TH	SW6010D
Beryllium	0.31	0.26	mg/Kg	1	05/18/23	CPP	SW6010D
Calcium	5540	4.9	mg/Kg	1	05/18/23	CPP	SW6010D
Cadmium	0.94	0.33	mg/Kg	1	05/18/23	CPP	SW6010D
Cobalt	5.10	0.33	mg/Kg	1	05/18/23	CPP	SW6010D
Chromium	18.6	0.33	mg/Kg	1	05/18/23	CPP	SW6010D
Copper	30.7	0.7	mg/kg	1	05/18/23	CPP	SW6010D
Iron	13300	49	mg/Kg	10	05/18/23	CPP	SW6010D
Mercury	0.15	0.03	mg/Kg	2	05/18/23	PM	SW7471B
Potassium	733	49	mg/Kg	10	05/18/23	CPP	SW6010D
Magnesium	2420	4.9	mg/Kg	1	05/18/23	CPP	SW6010D
Manganese	184	3.3	mg/Kg	10	05/18/23	TH	SW6010D
Sodium	137	4.9	mg/Kg	1	05/18/23	CPP	SW6010D
Nickel	25.6	0.33	mg/Kg	1	05/18/23	CPP	SW6010D
Lead	93.4	0.33	mg/Kg	1	05/18/23	CPP	SW6010D
Antimony	< 3.3	3.3	mg/Kg	1	05/18/23	CPP	SW6010D
Selenium	< 1.3	1.3	mg/Kg	1	05/18/23	CPP	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	05/17/23	IE	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	05/17/23	IE	SW846 1311/6010
TCLP Barium	0.74	0.10	mg/L	1	05/17/23	IE	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	05/17/23	IE	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	05/17/23	IE	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	05/17/23	AL1	SW846 1311/7470
TCLP Lead	0.29	0.10	mg/L	1	05/17/23	IE	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	05/17/23	IE	SW846 1311/6010D

Ver 1

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 73-#123

Phoenix I.D.: CO06897

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Thallium	< 3.0	3.0	mg/Kg	1	05/18/23	CPP	SW6010D	
TCLP Metals Digestion	Completed				05/17/23	ZT/AL/ZT	SW3010A	
Vanadium	25.1	0.33	mg/Kg	1	05/18/23	CPP	SW6010D	
Zinc	91.9	0.7	mg/Kg	1	05/18/23	CPP	SW6010D	
Percent Solid	95		%		05/16/23	CV	SW846-%Solid	
Corrosivity	Negative		Pos/Neg	1	05/16/23	ER	SW846-Corr	1
Flash Point	>200	200	Degree F	1	05/19/23	G	SW1010B	
Ignitability	Passed	140	degree F	1	05/19/23	G	SW846-Ignit	1
pH at 25C - Soil	8.29	1.00	pH Units	1	05/16/23 22:42	ER	SW846 9045D	1
Reactivity Cyanide	< 5	5	mg/Kg	1	05/18/23	DK/GD	SW846 7.3.3.1/90	1
Reactivity Sulfide	< 20	20	mg/Kg	1	05/18/23	DK/GD	SW846 CH7	1
Reactivity	Negative		Pos/Neg	1	05/18/23	DK/GD	SW846-React	1
Total Cyanide (SW9010C Distill.)	< 0.53	0.53	mg/Kg	1	05/17/23	CL/GD	SW9012B	
Mercury Digestion	Completed				05/18/23	AL/AL	SW7471B	
Extraction of NY ETPH	Completed				05/17/23	MO/M	SW3546	
Soil Extraction for PCB	Completed				05/18/23	C/Y	SW3546	
Soil Extraction for Pesticides	Completed				05/18/23	C/Y	SW3546	
Soil Extraction for SVOA	Completed				05/17/23	B/F	SW3546	
TCLP Digestion Mercury	Completed				05/17/23	ZT/AL/ZT	SW7470A	
TCLP Herbicides Extraction	Completed				05/18/23	CV/D	SW8150 MOD	
TCLP Extraction for Metals	Completed				05/16/23	AL	SW1311	
TCLP Extraction for Organics	Completed				05/16/23	AL	SW1311	
TCLP Pesticides Extraction	Completed				05/18/23	I/I	SW3510C	
TCLP Semi-Volatile Extraction	Completed				05/17/23	I/I	SW3510C	
TCLP Extraction Volatiles	Completed				05/16/23	CV	SW1311	
Total Metals Digest	Completed				05/16/23	L/AG	SW3050B	
Gasoline Range Hydrocarbons (C6-C10)								
GRO (C6-C10)	ND	6.5	mg/Kg	50	05/17/23	V	SW8015D GRO	
QA/QC Surrogates								
% 2,5-Dibromotoluene (FID)	81		%	50	05/17/23	V	70 - 130 %	
Polychlorinated Biphenyls								
PCB-1016	ND	70	ug/Kg	2	05/20/23	SC	SW8082A	
PCB-1221	ND	70	ug/Kg	2	05/20/23	SC	SW8082A	
PCB-1232	ND	70	ug/Kg	2	05/20/23	SC	SW8082A	
PCB-1242	ND	70	ug/Kg	2	05/20/23	SC	SW8082A	
PCB-1248	ND	70	ug/Kg	2	05/20/23	SC	SW8082A	
PCB-1254	110	70	ug/Kg	2	05/20/23	SC	SW8082A	
PCB-1260	ND	70	ug/Kg	2	05/20/23	SC	SW8082A	
PCB-1262	ND	70	ug/Kg	2	05/20/23	SC	SW8082A	
PCB-1268	ND	70	ug/Kg	2	05/20/23	SC	SW8082A	
QA/QC Surrogates								
% DCBP	75		%	2	05/20/23	SC	30 - 150 %	
% DCBP (Confirmation)	76		%	2	05/20/23	SC	30 - 150 %	
% TCMX	78		%	2	05/20/23	SC	30 - 150 %	
% TCMX (Confirmation)	76		%	2	05/20/23	SC	30 - 150 %	

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 73-#123

Phoenix I.D.: CO06897

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Pesticides - Soil								
4,4' -DDD	10	2.1	ug/Kg	2	05/19/23	AW	SW8081B	
4,4' -DDE	3.2	2.1	ug/Kg	2	05/19/23	AW	SW8081B	
4,4' -DDT	4.8	2.1	ug/Kg	2	05/19/23	AW	SW8081B	
a-BHC	ND	7.0	ug/Kg	2	05/19/23	AW	SW8081B	
a-Chlordane	ND	8.0	ug/Kg	2	05/19/23	AW	SW8081B	
Aldrin	ND	3.5	ug/Kg	2	05/19/23	AW	SW8081B	
b-BHC	ND	7.0	ug/Kg	2	05/19/23	AW	SW8081B	
Chlordane	ND	35	ug/Kg	2	05/19/23	AW	SW8081B	
d-BHC	ND	7.0	ug/Kg	2	05/19/23	AW	SW8081B	
Dieldrin	ND	3.5	ug/Kg	2	05/19/23	AW	SW8081B	
Endosulfan I	ND	7.0	ug/Kg	2	05/19/23	AW	SW8081B	
Endosulfan II	ND	7.0	ug/Kg	2	05/19/23	AW	SW8081B	
Endosulfan sulfate	ND	7.0	ug/Kg	2	05/19/23	AW	SW8081B	
Endrin	ND	7.0	ug/Kg	2	05/19/23	AW	SW8081B	
Endrin aldehyde	ND	7.0	ug/Kg	2	05/19/23	AW	SW8081B	
Endrin ketone	ND	7.0	ug/Kg	2	05/19/23	AW	SW8081B	
g-BHC	ND	1.4	ug/Kg	2	05/19/23	AW	SW8081B	
g-Chlordane	ND	8.0	ug/Kg	2	05/19/23	AW	SW8081B	
Heptachlor	ND	7.0	ug/Kg	2	05/19/23	AW	SW8081B	
Heptachlor epoxide	ND	7.0	ug/Kg	2	05/19/23	AW	SW8081B	
Methoxychlor	ND	35	ug/Kg	2	05/19/23	AW	SW8081B	
Toxaphene	ND	140	ug/Kg	2	05/19/23	AW	SW8081B	
QA/QC Surrogates								
% DCBP	68		%	2	05/19/23	AW	30 - 150 %	
% DCBP (Confirmation)	72		%	2	05/19/23	AW	30 - 150 %	
% TCMX	68		%	2	05/19/23	AW	30 - 150 %	
% TCMX (Confirmation)	74		%	2	05/19/23	AW	30 - 150 %	
TCLP Herbicides								
2,4,5-TP (Silvex)	ND	50	ug/L	10	05/19/23	PS	SW846 1311/8151	
2,4-D	ND	100	ug/L	10	05/19/23	PS	SW846 1311/8151	
QA/QC Surrogates								
% DCAA	73		%	10	05/19/23	PS	30 - 150 %	
% DCAA (Confirmation)	87		%	10	05/19/23	PS	30 - 150 %	
TCLP Pesticides								
4,4' -DDD	ND	1.0	ug/L	10	05/19/23	AW	SW8081B	
4,4' -DDE	ND	1.0	ug/L	10	05/19/23	AW	SW8081B	
4,4' -DDT	ND	1.0	ug/L	10	05/19/23	AW	SW8081B	
a-BHC	ND	0.50	ug/L	10	05/19/23	AW	SW8081B	
Alachlor	ND	0.50	ug/L	10	05/19/23	AW	SW8081B	1
Aldrin	ND	0.50	ug/L	10	05/19/23	AW	SW8081B	
b-BHC	ND	0.50	ug/L	10	05/19/23	AW	SW8081B	
Chlordane	ND	5.0	ug/L	10	05/19/23	AW	SW8081B	
d-BHC	ND	0.50	ug/L	10	05/19/23	AW	SW8081B	
Dieldrin	ND	1.0	ug/L	10	05/19/23	AW	SW8081B	
Endosulfan I	ND	0.50	ug/L	10	05/19/23	AW	SW8081B	
Endosulfan II	ND	1.0	ug/L	10	05/19/23	AW	SW8081B	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Endosulfan Sulfate	ND	1.0	ug/L	10	05/19/23	AW	SW8081B
Endrin	ND	1.0	ug/L	10	05/19/23	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	05/19/23	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	05/19/23	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	05/19/23	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	05/19/23	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	05/19/23	AW	SW8081B
Toxaphene	ND	20	ug/L	10	05/19/23	AW	SW8081B
QA/QC Surrogates							
%DCBP (Surrogate Rec)	85		%	10	05/19/23	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	83		%	10	05/19/23	AW	30 - 150 %
%TCMX (Surrogate Rec)	75		%	10	05/19/23	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	75		%	10	05/19/23	AW	30 - 150 %
TPH DRO (C10-C28)							
Diesel Range Organics (C10-C28)	ND	260	mg/Kg	5	05/18/23	JRB	SW-846 8015
QA/QC Surrogates							
% COD (surr)	77		%	5	05/18/23	JRB	50 - 150 %
% Terphenyl (surr)	94		%	5	05/18/23	JRB	50 - 150 %
Volatiles (TCL)							
1,1,1-Trichloroethane	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
1,1-Dichloroethane	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
1,1-Dichloroethene	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
1,2-Dibromoethane	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
1,2-Dichloroethane	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
1,2-Dichloropropane	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
2-Hexanone	ND	29	ug/kg	1	05/18/23	JLI	SW8260C
4-Methyl-2-pentanone	ND	29	ug/kg	1	05/18/23	JLI	SW8260C
Acetone	ND	50	ug/kg	1	05/18/23	JLI	SW8260C
Benzene	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
Bromochloromethane	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
Bromodichloromethane	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
Bromoform	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
Bromomethane	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
Carbon Disulfide	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
Carbon tetrachloride	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
Chlorobenzene	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
Chloroethane	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
Chloroform	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
Chloromethane	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
cis-1,3-Dichloropropene	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
Cyclohexane	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
Dibromochloromethane	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
Dichlorodifluoromethane	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
Ethylbenzene	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
Isopropylbenzene	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
m&p-Xylene	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
Methyl ethyl ketone	ND	35	ug/kg	1	05/18/23	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	12	ug/kg	1	05/18/23	JLI	SW8260C
Methylacetate	ND	4.7	ug/kg	1	05/18/23	JLI	SW8260C
Methylcyclohexane	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
Methylene chloride	ND	29	ug/kg	1	05/18/23	JLI	SW8260C
o-Xylene	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
Styrene	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
Tetrachloroethene	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
Toluene	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
Total Xylenes	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
Trichloroethene	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
Trichlorofluoromethane	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
Vinyl chloride	ND	5.8	ug/kg	1	05/18/23	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	1	05/18/23	JLI	70 - 130 %
% Bromofluorobenzene	87		%	1	05/18/23	JLI	70 - 130 %
% Dibromofluoromethane	99		%	1	05/18/23	JLI	70 - 130 %
% Toluene-d8	98		%	1	05/18/23	JLI	70 - 130 %
1,4-dioxane							
1,4-dioxane	ND	88	ug/kg	1	05/18/23	JLI	SW8260C
TCLP Volatiles							
1,1-Dichloroethene	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4 (10x)	99		%	10	05/18/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	94		%	10	05/18/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	98		%	10	05/18/23	HM	70 - 130 %
% Toluene-d8 (10x)	95		%	10	05/18/23	HM	70 - 130 %
Volatile Library Search	Completed				05/18/23	JLI	

Ver 1

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 73-#123

Phoenix I.D.: CO06897

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Semivolatiles								
1,1-Biphenyl	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
1,2,4,5-Tetrachlorobenzene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
2,2'-Oxybis(1-Chloropropane)	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	1
2,3,4,6-tetrachlorophenol	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
2,4,5-Trichlorophenol	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
2,4,6-Trichlorophenol	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
2,4-Dichlorophenol	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
2,4-Dimethylphenol	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
2,4-Dinitrophenol	ND	560	ug/Kg	1	05/18/23	KCA	SW8270D	
2,4-Dinitrotoluene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
2,6-Dinitrotoluene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
2-Chloronaphthalene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
2-Chlorophenol	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
2-Methylnaphthalene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
2-Methylphenol (o-cresol)	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
2-Nitroaniline	ND	560	ug/Kg	1	05/18/23	KCA	SW8270D	
2-Nitrophenol	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
3&4-Methylphenol (m&p-cresol)	ND	350	ug/Kg	1	05/18/23	KCA	SW8270D	1
3,3'-Dichlorobenzidine	ND	420	ug/Kg	1	05/18/23	KCA	SW8270D	
3-Nitroaniline	ND	560	ug/Kg	1	05/18/23	KCA	SW8270D	
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	1	05/18/23	KCA	SW8270D	
4-Bromophenyl phenyl ether	ND	350	ug/Kg	1	05/18/23	KCA	SW8270D	
4-Chloro-3-methylphenol	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
4-Chloroaniline	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
4-Chlorophenyl phenyl ether	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
4-Nitroaniline	ND	560	ug/Kg	1	05/18/23	KCA	SW8270D	
4-Nitrophenol	ND	1000	ug/Kg	1	05/18/23	KCA	SW8270D	
Acenaphthene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Acenaphthylene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Acetophenone	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Anthracene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Atrazine	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Benz(a)anthracene	400	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Benzaldehyde	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Benzo(a)pyrene	450	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Benzo(b)fluoranthene	510	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Benzo(ghi)perylene	280	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Benzo(k)fluoranthene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Benzyl butyl phthalate	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Bis(2-chloroethoxy)methane	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Bis(2-chloroethyl)ether	ND	350	ug/Kg	1	05/18/23	KCA	SW8270D	
Bis(2-ethylhexyl)phthalate	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Caprolactam	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Carbazole	ND	350	ug/Kg	1	05/18/23	KCA	SW8270D	
Chrysene	380	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Dibenz(a,h)anthracene	ND	170	ug/Kg	1	05/18/23	KCA	SW8270D	
Dibenzofuran	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Diethyl phthalate	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Dimethylphthalate	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Di-n-butylphthalate	ND	700	ug/Kg	1	05/18/23	KCA	SW8270D	
Di-n-octylphthalate	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Fluoranthene	740	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Fluorene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Hexachlorobenzene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Hexachlorobutadiene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Hexachlorocyclopentadiene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Hexachloroethane	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Indeno(1,2,3-cd)pyrene	250	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Isophorone	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Naphthalene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Nitrobenzene	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
N-Nitrosodimethylamine	ND	350	ug/Kg	1	05/18/23	KCA	SW8270D	
N-Nitrosodi-n-propylamine	ND	170	ug/Kg	1	05/18/23	KCA	SW8270D	
N-Nitrosodiphenylamine	ND	350	ug/Kg	1	05/18/23	KCA	SW8270D	
Pentachlorophenol	ND	350	ug/Kg	1	05/18/23	KCA	SW8270D	
Phenanthrene	380	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Phenol	ND	240	ug/Kg	1	05/18/23	KCA	SW8270D	
Pyrene	810	240	ug/Kg	1	05/18/23	KCA	SW8270D	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	110		%	1	05/18/23	KCA	30 - 130 %	
% 2-Fluorobiphenyl	79		%	1	05/18/23	KCA	30 - 130 %	
% 2-Fluorophenol	65		%	1	05/18/23	KCA	30 - 130 %	
% Nitrobenzene-d5	87		%	1	05/18/23	KCA	30 - 130 %	
% Phenol-d5	74		%	1	05/18/23	KCA	30 - 130 %	
% Terphenyl-d14	75		%	1	05/18/23	KCA	30 - 130 %	
TCLP Acid/Base-Neutral								
1,4-Dichlorobenzene	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
2,4,5-Trichlorophenol	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
2,4,6-Trichlorophenol	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
2,4-Dinitrotoluene	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
2-Methylphenol (o-cresol)	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
Hexachlorobenzene	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
Hexachlorobutadiene	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
Hexachloroethane	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
Nitrobenzene	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
Pentachlorophenol	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
Pyridine	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	113		%	1	05/18/23	KCA	15 - 110 %	3
% 2-Fluorobiphenyl	84		%	1	05/18/23	KCA	30 - 130 %	
% 2-Fluorophenol	77		%	1	05/18/23	KCA	15 - 110 %	
% Nitrobenzene-d5	90		%	1	05/18/23	KCA	30 - 130 %	
% Phenol-d5	72		%	1	05/18/23	KCA	15 - 110 %	
% Terphenyl-d14	100		%	1	05/18/23	KCA	30 - 130 %	
Semivolatile Library Search	Completed				05/24/23	MR		

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

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.

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
May 25, 2023
Reviewed and Released by: Phyllis Shiller, Laboratory Director

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

May 25, 2023

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

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		05/15/23	9:30
Location Code:	AES-INC	Received by:	CP	05/16/23	16:20
Rush Request:	5 Day	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCO06895
Phoenix ID: CO06898

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 73-#124

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.37	0.37	mg/Kg	1	05/18/23	CPP	SW6010D
Aluminum	5590	55	mg/Kg	10	05/18/23	CPP	SW6010D
Arsenic	4.31	0.74	mg/Kg	1	05/18/23	CPP	SW6010D
Barium	137	0.37	mg/Kg	1	05/18/23	TH	SW6010D
Beryllium	0.33	0.29	mg/Kg	1	05/18/23	CPP	SW6010D
Calcium	4720	5.5	mg/Kg	1	05/18/23	CPP	SW6010D
Cadmium	1.03	0.37	mg/Kg	1	05/18/23	CPP	SW6010D
Cobalt	6.90	0.37	mg/Kg	1	05/18/23	CPP	SW6010D
Chromium	29.7	0.37	mg/Kg	1	05/18/23	CPP	SW6010D
Copper	37.1	0.7	mg/kg	1	05/18/23	CPP	SW6010D
Iron	13500	55	mg/Kg	10	05/18/23	CPP	SW6010D
Mercury	0.17	0.03	mg/Kg	2	05/18/23	PM	SW7471B
Potassium	847	55	mg/Kg	10	05/18/23	CPP	SW6010D
Magnesium	2800	5.5	mg/Kg	1	05/18/23	CPP	SW6010D
Manganese	177	3.7	mg/Kg	10	05/18/23	TH	SW6010D
Sodium	151	5.5	mg/Kg	1	05/18/23	CPP	SW6010D
Nickel	34.6	0.37	mg/Kg	1	05/18/23	CPP	SW6010D
Lead	122	0.37	mg/Kg	1	05/18/23	CPP	SW6010D
Antimony	< 3.7	3.7	mg/Kg	1	05/18/23	CPP	SW6010D
Selenium	< 1.5	1.5	mg/Kg	1	05/18/23	CPP	SW6010D
TCLP Silver	< 0.10	0.10	mg/L	1	05/17/23	IE	SW846 1311/6010
TCLP Arsenic	< 0.10	0.10	mg/L	1	05/17/23	IE	SW846 1311/6010
TCLP Barium	0.70	0.10	mg/L	1	05/17/23	IE	SW846 1311/6010
TCLP Cadmium	< 0.050	0.050	mg/L	1	05/17/23	IE	SW846 1311/6010
TCLP Chromium	< 0.10	0.10	mg/L	1	05/17/23	IE	SW846 1311/6010
TCLP Mercury	< 0.0002	0.0002	mg/L	1	05/17/23	AL1	SW846 1311/7470
TCLP Lead	0.27	0.10	mg/L	1	05/17/23	IE	SW846 1311/6010
TCLP Selenium	< 0.10	0.10	mg/L	1	05/17/23	IE	SW846 1311/6010D

Ver 1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Thallium	< 3.3	3.3	mg/Kg	1	05/18/23	CPP	SW6010D	
TCLP Metals Digestion	Completed				05/17/23	ZT/AL/ZT	SW3010A	
Vanadium	24.6	0.37	mg/Kg	1	05/18/23	CPP	SW6010D	
Zinc	90.0	0.7	mg/Kg	1	05/18/23	CPP	SW6010D	
Percent Solid	93		%		05/16/23	CV	SW846-%Solid	
Corrosivity	Negative		Pos/Neg	1	05/16/23	ER	SW846-Corr	1
Flash Point	>200	200	Degree F	1	05/19/23	G	SW1010B	
Ignitability	Passed	140	degree F	1	05/19/23	G	SW846-Ignit	1
pH at 25C - Soil	8.24	1.00	pH Units	1	05/16/23 22:42	ER	SW846 9045D	1
Reactivity Cyanide	< 5	5	mg/Kg	1	05/18/23	DK/GD	SW846 7.3.3.1/90	1
Reactivity Sulfide	< 20	20	mg/Kg	1	05/18/23	DK/GD	SW846 CH7	1
Reactivity	Negative		Pos/Neg	1	05/18/23	DK/GD	SW846-React	1
Total Cyanide (SW9010C Distill.)	< 0.54	0.54	mg/Kg	1	05/17/23	CL/GD	SW9012B	
Mercury Digestion	Completed				05/18/23	AL/AL	SW7471B	
Extraction of NY ETPH	Completed				05/17/23	MO/M	SW3546	
Soil Extraction for PCB	Completed				05/18/23	C/Y	SW3546	
Soil Extraction for Pesticides	Completed				05/18/23	C/Y	SW3546	
Soil Extraction for SVOA	Completed				05/17/23	B/F	SW3546	
TCLP Digestion Mercury	Completed				05/17/23	ZT/AL/ZT	SW7470A	
TCLP Herbicides Extraction	Completed				05/18/23	CV/D	SW8150 MOD	
TCLP Extraction for Metals	Completed				05/16/23	AL	SW1311	
TCLP Extraction for Organics	Completed				05/16/23	AL	SW1311	
TCLP Pesticides Extraction	Completed				05/18/23	I/I	SW3510C	
TCLP Semi-Volatile Extraction	Completed				05/17/23	I/I	SW3510C	
TCLP Extraction Volatiles	Completed				05/16/23	CV	SW1311	
Total Metals Digest	Completed				05/16/23	L/AG	SW3050B	
Gasoline Range Hydrocarbons (C6-C10)								
GRO (C6-C10)	ND	6.5	mg/Kg	50	05/17/23	V	SW8015D GRO	
QA/QC Surrogates								
% 2,5-Dibromotoluene (FID)	81		%	50	05/17/23	V	70 - 130 %	
Polychlorinated Biphenyls								
PCB-1016	ND	71	ug/Kg	2	05/19/23	SC	SW8082A	
PCB-1221	ND	71	ug/Kg	2	05/19/23	SC	SW8082A	
PCB-1232	ND	71	ug/Kg	2	05/19/23	SC	SW8082A	
PCB-1242	ND	71	ug/Kg	2	05/19/23	SC	SW8082A	
PCB-1248	ND	71	ug/Kg	2	05/19/23	SC	SW8082A	
PCB-1254	110	71	ug/Kg	2	05/19/23	SC	SW8082A	
PCB-1260	ND	71	ug/Kg	2	05/19/23	SC	SW8082A	
PCB-1262	ND	71	ug/Kg	2	05/19/23	SC	SW8082A	
PCB-1268	ND	71	ug/Kg	2	05/19/23	SC	SW8082A	
QA/QC Surrogates								
% DCBP	96		%	2	05/19/23	SC	30 - 150 %	
% DCBP (Confirmation)	89		%	2	05/19/23	SC	30 - 150 %	
% TCMX	93		%	2	05/19/23	SC	30 - 150 %	
% TCMX (Confirmation)	84		%	2	05/19/23	SC	30 - 150 %	

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 73-#124

Phoenix I.D.: CO06898

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Pesticides - Soil								
4,4' -DDD	8.7	2.1	ug/Kg	2	05/19/23	AW	SW8081B	
4,4' -DDE	3.9	2.1	ug/Kg	2	05/19/23	AW	SW8081B	
4,4' -DDT	4.6	2.1	ug/Kg	2	05/19/23	AW	SW8081B	
a-BHC	ND	7.1	ug/Kg	2	05/19/23	AW	SW8081B	
a-Chlordane	7.3	3.6	ug/Kg	2	05/19/23	AW	SW8081B	
Aldrin	ND	3.6	ug/Kg	2	05/19/23	AW	SW8081B	
b-BHC	ND	7.1	ug/Kg	2	05/19/23	AW	SW8081B	
Chlordane	47	36	ug/Kg	2	05/19/23	AW	SW8081B	
d-BHC	ND	7.1	ug/Kg	2	05/19/23	AW	SW8081B	
Dieldrin	ND	3.6	ug/Kg	2	05/19/23	AW	SW8081B	
Endosulfan I	ND	7.1	ug/Kg	2	05/19/23	AW	SW8081B	
Endosulfan II	ND	7.1	ug/Kg	2	05/19/23	AW	SW8081B	
Endosulfan sulfate	ND	7.1	ug/Kg	2	05/19/23	AW	SW8081B	
Endrin	ND	7.1	ug/Kg	2	05/19/23	AW	SW8081B	
Endrin aldehyde	ND	7.1	ug/Kg	2	05/19/23	AW	SW8081B	
Endrin ketone	ND	7.1	ug/Kg	2	05/19/23	AW	SW8081B	
g-BHC	ND	1.4	ug/Kg	2	05/19/23	AW	SW8081B	
g-Chlordane	8.3	3.6	ug/Kg	2	05/19/23	AW	SW8081B	
Heptachlor	ND	7.1	ug/Kg	2	05/19/23	AW	SW8081B	
Heptachlor epoxide	ND	7.1	ug/Kg	2	05/19/23	AW	SW8081B	
Methoxychlor	ND	36	ug/Kg	2	05/19/23	AW	SW8081B	
Toxaphene	ND	140	ug/Kg	2	05/19/23	AW	SW8081B	
QA/QC Surrogates								
% DCBP	83		%	2	05/19/23	AW	30 - 150 %	
% DCBP (Confirmation)	90		%	2	05/19/23	AW	30 - 150 %	
% TCMX	75		%	2	05/19/23	AW	30 - 150 %	
% TCMX (Confirmation)	86		%	2	05/19/23	AW	30 - 150 %	
TCLP Herbicides								
2,4,5-TP (Silvex)	ND	50	ug/L	10	05/19/23	PS	SW846 1311/8151	
2,4-D	ND	100	ug/L	10	05/19/23	PS	SW846 1311/8151	
QA/QC Surrogates								
% DCAA	73		%	10	05/19/23	PS	30 - 150 %	
% DCAA (Confirmation)	85		%	10	05/19/23	PS	30 - 150 %	
TCLP Pesticides								
4,4' -DDD	ND	1.0	ug/L	10	05/19/23	AW	SW8081B	
4,4' -DDE	ND	1.0	ug/L	10	05/19/23	AW	SW8081B	
4,4' -DDT	ND	1.0	ug/L	10	05/19/23	AW	SW8081B	
a-BHC	ND	0.50	ug/L	10	05/19/23	AW	SW8081B	
Alachlor	ND	0.50	ug/L	10	05/19/23	AW	SW8081B	1
Aldrin	ND	0.50	ug/L	10	05/19/23	AW	SW8081B	
b-BHC	ND	0.50	ug/L	10	05/19/23	AW	SW8081B	
Chlordane	ND	5.0	ug/L	10	05/19/23	AW	SW8081B	
d-BHC	ND	0.50	ug/L	10	05/19/23	AW	SW8081B	
Dieldrin	ND	1.0	ug/L	10	05/19/23	AW	SW8081B	
Endosulfan I	ND	0.50	ug/L	10	05/19/23	AW	SW8081B	
Endosulfan II	ND	1.0	ug/L	10	05/19/23	AW	SW8081B	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Endosulfan Sulfate	ND	1.0	ug/L	10	05/19/23	AW	SW8081B
Endrin	ND	1.0	ug/L	10	05/19/23	AW	SW8081B
Endrin Aldehyde	ND	1.0	ug/L	10	05/19/23	AW	SW8081B
g-BHC (Lindane)	ND	0.50	ug/L	10	05/19/23	AW	SW8081B
Heptachlor	ND	0.50	ug/L	10	05/19/23	AW	SW8081B
Heptachlor epoxide	ND	0.50	ug/L	10	05/19/23	AW	SW8081B
Methoxychlor	ND	0.50	ug/L	10	05/19/23	AW	SW8081B
Toxaphene	ND	20	ug/L	10	05/19/23	AW	SW8081B
QA/QC Surrogates							
%DCBP (Surrogate Rec)	82		%	10	05/19/23	AW	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	79		%	10	05/19/23	AW	30 - 150 %
%TCMX (Surrogate Rec)	63		%	10	05/19/23	AW	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	62		%	10	05/19/23	AW	30 - 150 %
TPH DRO (C10-C28)							
Diesel Range Organics (C10-C28)	ND	270	mg/Kg	5	05/18/23	JRB	SW-846 8015
QA/QC Surrogates							
% COD (surr)	82		%	5	05/18/23	JRB	50 - 150 %
% Terphenyl (surr)	88		%	5	05/18/23	JRB	50 - 150 %
Volatiles (TCL)							
1,1,1-Trichloroethane	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
1,1-Dichloroethane	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
1,1-Dichloroethene	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
1,2-Dibromoethane	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
1,2-Dichloroethane	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
1,2-Dichloropropane	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
2-Hexanone	ND	23	ug/kg	1	05/18/23	JLI	SW8260C
4-Methyl-2-pentanone	ND	23	ug/kg	1	05/18/23	JLI	SW8260C
Acetone	ND	46	ug/kg	1	05/18/23	JLI	SW8260C
Benzene	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
Bromochloromethane	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
Bromodichloromethane	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
Bromoform	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
Bromomethane	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
Carbon Disulfide	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
Carbon tetrachloride	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
Chlorobenzene	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
Chloroethane	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
Chloroform	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
Chloromethane	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
cis-1,3-Dichloropropene	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
Cyclohexane	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
Dibromochloromethane	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
Dichlorodifluoromethane	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
Ethylbenzene	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
Isopropylbenzene	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
m&p-Xylene	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
Methyl ethyl ketone	ND	27	ug/kg	1	05/18/23	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.1	ug/kg	1	05/18/23	JLI	SW8260C
Methylacetate	ND	3.7	ug/kg	1	05/18/23	JLI	SW8260C
Methylcyclohexane	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
Methylene chloride	ND	23	ug/kg	1	05/18/23	JLI	SW8260C
o-Xylene	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
Styrene	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
Tetrachloroethene	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
Toluene	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
Total Xylenes	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
Trichloroethene	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
Trichlorofluoromethane	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
Vinyl chloride	ND	4.6	ug/kg	1	05/18/23	JLI	SW8260C
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	96		%	1	05/18/23	JLI	70 - 130 %
% Bromofluorobenzene	91		%	1	05/18/23	JLI	70 - 130 %
% Dibromofluoromethane	96		%	1	05/18/23	JLI	70 - 130 %
% Toluene-d8	99		%	1	05/18/23	JLI	70 - 130 %
1,4-dioxane							
1,4-dioxane	ND	69	ug/kg	1	05/18/23	JLI	SW8260C
TCLP Volatiles							
1,1-Dichloroethene	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
1,2-Dichloroethane	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Benzene	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Carbon tetrachloride	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Chlorobenzene	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Chloroform	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Methyl ethyl ketone	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Tetrachloroethene	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Trichloroethene	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
Vinyl chloride	ND	50	ug/L	10	05/18/23	HM	SW846 1311/8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4 (10x)	101		%	10	05/18/23	HM	70 - 130 %
% Bromofluorobenzene (10x)	95		%	10	05/18/23	HM	70 - 130 %
% Dibromofluoromethane (10x)	98		%	10	05/18/23	HM	70 - 130 %
% Toluene-d8 (10x)	96		%	10	05/18/23	HM	70 - 130 %
Volatile Library Search	Completed				05/19/23	JLI	

Project ID: GATEWAY ESTATES-HD161E
Client ID: PILE 73-#124

Phoenix I.D.: CO06898

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Semivolatiles								
1,1-Biphenyl	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
1,2,4,5-Tetrachlorobenzene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
2,2'-Oxybis(1-Chloropropane)	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	1
2,3,4,6-tetrachlorophenol	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
2,4,5-Trichlorophenol	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
2,4,6-Trichlorophenol	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
2,4-Dichlorophenol	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
2,4-Dimethylphenol	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
2,4-Dinitrophenol	ND	570	ug/Kg	1	05/18/23	KCA	SW8270D	
2,4-Dinitrotoluene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
2,6-Dinitrotoluene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
2-Chloronaphthalene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
2-Chlorophenol	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
2-Methylnaphthalene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
2-Methylphenol (o-cresol)	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
2-Nitroaniline	ND	570	ug/Kg	1	05/18/23	KCA	SW8270D	
2-Nitrophenol	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
3&4-Methylphenol (m&p-cresol)	ND	360	ug/Kg	1	05/18/23	KCA	SW8270D	1
3,3'-Dichlorobenzidine	ND	430	ug/Kg	1	05/18/23	KCA	SW8270D	
3-Nitroaniline	ND	570	ug/Kg	1	05/18/23	KCA	SW8270D	
4,6-Dinitro-2-methylphenol	ND	1000	ug/Kg	1	05/18/23	KCA	SW8270D	
4-Bromophenyl phenyl ether	ND	360	ug/Kg	1	05/18/23	KCA	SW8270D	
4-Chloro-3-methylphenol	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
4-Chloroaniline	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
4-Chlorophenyl phenyl ether	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
4-Nitroaniline	ND	570	ug/Kg	1	05/18/23	KCA	SW8270D	
4-Nitrophenol	ND	1000	ug/Kg	1	05/18/23	KCA	SW8270D	
Acenaphthene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Acenaphthylene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Acetophenone	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Anthracene	380	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Atrazine	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Benz(a)anthracene	780	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Benzaldehyde	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Benzo(a)pyrene	870	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Benzo(b)fluoranthene	980	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Benzo(ghi)perylene	510	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Benzo(k)fluoranthene	320	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Benzyl butyl phthalate	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Bis(2-chloroethoxy)methane	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Bis(2-chloroethyl)ether	ND	360	ug/Kg	1	05/18/23	KCA	SW8270D	
Bis(2-ethylhexyl)phthalate	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Caprolactam	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Carbazole	ND	360	ug/Kg	1	05/18/23	KCA	SW8270D	
Chrysene	790	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Dibenz(a,h)anthracene	ND	180	ug/Kg	1	05/18/23	KCA	SW8270D	
Dibenzofuran	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Diethyl phthalate	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Dimethylphthalate	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Di-n-butylphthalate	ND	720	ug/Kg	1	05/18/23	KCA	SW8270D	
Di-n-octylphthalate	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Fluoranthene	1900	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Fluorene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Hexachlorobenzene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Hexachlorobutadiene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Hexachlorocyclopentadiene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Hexachloroethane	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Indeno(1,2,3-cd)pyrene	490	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Isophorone	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Naphthalene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Nitrobenzene	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
N-Nitrosodimethylamine	ND	360	ug/Kg	1	05/18/23	KCA	SW8270D	
N-Nitrosodi-n-propylamine	ND	180	ug/Kg	1	05/18/23	KCA	SW8270D	
N-Nitrosodiphenylamine	ND	360	ug/Kg	1	05/18/23	KCA	SW8270D	
Pentachlorophenol	ND	360	ug/Kg	1	05/18/23	KCA	SW8270D	
Phenanthrene	1500	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Phenol	ND	250	ug/Kg	1	05/18/23	KCA	SW8270D	
Pyrene	1700	250	ug/Kg	1	05/18/23	KCA	SW8270D	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	106		%	1	05/18/23	KCA	30 - 130 %	
% 2-Fluorobiphenyl	79		%	1	05/18/23	KCA	30 - 130 %	
% 2-Fluorophenol	66		%	1	05/18/23	KCA	30 - 130 %	
% Nitrobenzene-d5	90		%	1	05/18/23	KCA	30 - 130 %	
% Phenol-d5	75		%	1	05/18/23	KCA	30 - 130 %	
% Terphenyl-d14	75		%	1	05/18/23	KCA	30 - 130 %	
TCLP Acid/Base-Neutral								
1,4-Dichlorobenzene	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
2,4,5-Trichlorophenol	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
2,4,6-Trichlorophenol	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
2,4-Dinitrotoluene	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
2-Methylphenol (o-cresol)	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
3&4-Methylphenol (m&p-Cresol)	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
Hexachlorobenzene	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
Hexachlorobutadiene	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
Hexachloroethane	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
Nitrobenzene	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
Pentachlorophenol	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
Pyridine	ND	83	ug/L	1	05/18/23	KCA	SW-846 1311/8270	
QA/QC Surrogates								
% 2,4,6-Tribromophenol	115		%	1	05/18/23	KCA	15 - 110 %	3
% 2-Fluorobiphenyl	63		%	1	05/18/23	KCA	30 - 130 %	
% 2-Fluorophenol	52		%	1	05/18/23	KCA	15 - 110 %	
% Nitrobenzene-d5	61		%	1	05/18/23	KCA	30 - 130 %	
% Phenol-d5	50		%	1	05/18/23	KCA	15 - 110 %	
% Terphenyl-d14	104		%	1	05/18/23	KCA	30 - 130 %	
Semivolatile Library Search	Completed				05/24/23	MR		

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

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.

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
May 25, 2023
Reviewed and Released by: Phyllis Shiller, Laboratory Director

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 73-#121

Lab Name: Phoenix Environmental Labs Client: AES-INC

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCO0689

Matrix:(soil/water): SOIL Lab Sample ID: CO06895

Sample wt/vol: 3.21 (g/mL) g Lab File ID: 0517_61.D

Level: (low/med): Low Date Received: 05/16/23

% Moisture: not dec.: 5 Date Analyzed: 05/18/23

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

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

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

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

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

PILE 73-#122

Lab Name: Phoenix Environmental Labs Client: AES-INC

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCO0689

Matrix:(soil/water) SOIL Lab Sample ID: CO06896

Sample wt/vol: 5.39 (g/mL) g Lab File ID: 0517_62.D

Level: (low/med) Low Date Received: 05/16/23

% Moisture: not dec. 4 Date Analyzed: 05/18/23

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

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

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

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

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 73-#123

Lab Name: Phoenix Environmental Labs Client: AES-INC

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCO0689

Matrix:(soil/water): SOIL Lab Sample ID: CO06897

Sample wt/vol: 4.52 (g/mL) g Lab File ID: 0517_63.D

Level: (low/med): Low Date Received: 05/16/23

% Moisture: not dec. 5 Date Analyzed: 05/18/23

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

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

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

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

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

PILE 73-#124

Lab Name: Phoenix Environmental Labs Client: AES-INC

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCO0689

Matrix:(soil/water) SOIL Lab Sample ID: CO06898

Sample wt/vol: 5.85 (g/mL) g Lab File ID: 0518_20.D

Level: (low/med) Low Date Received: 05/16/23

% Moisture: not dec. 7 Date Analyzed: 05/18/23

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

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

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

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

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

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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 73-#121

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

Lab Code: Phoenix | Case No.: | SAS No.: | SDG No.: GCO0689

Matrix:(soil/water): SOIL | Lab Sample ID: CO06895

Sample wt/vol: 15.02 (g/mL) g | Lab File ID: 0517_19.D

Level: (low/med): Low | Date Received: 05/16/23

% Moisture: not dec. 5 | decanted:(Y/N) NA | Date Extracted: 05/18/23

GPC Cleanup (Y/N): N | pH: NA | Date Analyzed: 5/18/2023

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

Injection Volume: 1 (uL)

Number TICs found: 7 | CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	1.790	970	JNA
	unknown hydrocarbon	2.318	370	J
004436-75-3	3-Hexene-2,5-dione	2.389	390	JN
023676-09-7	Benzoic acid, 4-ethoxy-, ethyl est	5.444	1500	JNC
018435-45-5	1-Nonadecene	6.537	830	JN
001599-67-3	1-Docosene	7.953	620	JN
000192-97-2	Benzo[e]pyrene	11.091	450	JN

FORM I SEMIVOA-TIC

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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 73-#122

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

Lab Code: Phoenix | Case No.: | SAS No.: | SDG No.: GCO0689

Matrix:(soil/water): SOIL | Lab Sample ID: CO06896

Sample wt/vol: 15.29 (g/mL) g | Lab File ID: 0517_20.D

Level: (low/med): Low | Date Received: 05/16/23

% Moisture: not dec. 4 | decanted:(Y/N) NA | Date Extracted: 05/18/23

GPC Cleanup (Y/N): N | pH: NA | Date Analyzed: 5/18/2023

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

Injection Volume: 1 (uL)

Number TICs found: 6 | CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	1.790	700	JNA
	unknown hydrocarbon	2.389	620	J
023676-09-7	Benzoic acid, 4-ethoxy-, ethyl est	5.450	1100	JNC
018435-45-5	1-Nonadecene	6.537	620	JN
000057-10-3	n-Hexadecanoic acid	7.154	300	JN
001599-67-3	1-Docosene	7.953	530	JN

FORM I SEMIVOA-TIC

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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PILE 73-#123

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

Lab Code: Phoenix | Case No.: | SAS No.: | SDG No.: GCO0689

Matrix:(soil/water): SOIL | Lab Sample ID: CO06897

Sample wt/vol: 15.14 (g/mL) g | Lab File ID: 0517_21.D

Level: (low/med): Low | Date Received: 05/16/23

% Moisture: not dec. 5 | decanted:(Y/N) NA | Date Extracted: 05/18/23

GPC Cleanup (Y/N): N | pH: NA | Date Analyzed: 5/18/2023

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

Injection Volume: 1 (uL)

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000141-79-7	3-Penten-2-one, 4-methyl-	1.566	370	JNA
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	1.790	840	JNA
	unknown	2.313	380	J
	unknown	2.389	330	J
023676-09-7	Benzoic acid, 4-ethoxy-, ethyl est	5.450	1300	JNC
000112-88-9	1-Octadecene	6.537	740	JN
000057-10-3	n-Hexadecanoic acid	7.154	620	JN
001599-67-3	1-Docosene	7.953	650	JN

FORM I SEMIVOA-TIC

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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

PILE 73-#124

Lab Name: Phoenix Environmental Labs Client: AES-INC

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCO0689

Matrix:(soil/water) SOIL Lab Sample ID: CO06898

Sample wt/vol: 15.02 (g/mL) g Lab File ID: 0517_22.D

Level: (low/med) Low Date Received: 05/16/23

% Moisture: not dec. 7 decanted:(Y/N) NA Date Extracted: 05/18/23

GPC Cleanup (Y/N): N pH: NA Date Analyzed: 5/18/2023

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

Injection Volume: 1 (uL)

Number TICs found: 9 CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	1.789	840	JNA
	unknown	2.312	390	J
018435-45-5	1-Nonadecene	6.543	680	JN
002531-84-2	Phenanthrene, 2-methyl-	7.072	300	JN
000203-64-5	4H-Cyclopenta[def]phenanthrene	7.142	390	JN
000057-10-3	n-Hexadecanoic acid	7.154	420	JN
001599-67-3	1-Docosene	7.959	550	JN
000238-84-6	11H-Benzo[a]fluorene	8.159	300	JN
000198-55-0	Perylene	11.114	670	JN

FORM I SEMIVOA-TIC

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

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

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

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

QA/QC Report

May 25, 2023

QA/QC Data

SDG I.D.: GCO06895

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 678332 (mg/kg), QC Sample No: CN93005 2X (CO06895, CO06896, CO06897)														
Mercury - Soil	BRL	0.03	0.44	0.47	6.60	117	115	1.7	93.9			70 - 130	30	
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.														
QA/QC Batch 678095 (mg/L), QC Sample No: CO07068 (CO06895, CO06896, CO06897, CO06898)														
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	104			94.5			80 - 120	20	
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.														
QA/QC Batch 678333 (mg/kg), QC Sample No: CO08466 2X (CO06898)														
Mercury - Soil	BRL	0.02	0.06	0.08	NC	116	113	2.6	112	121	7.7	70 - 130	30	
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.														
QA/QC Batch 678099 (mg/L), QC Sample No: CO06731 (CO06895, CO06896, CO06897, CO06898)														
ICP Metals - TCLP Extraction														
Arsenic	BRL	0.10	<0.10	<0.10	NC	104	101	2.9	97.5			80 - 120	20	
Barium	BRL	0.10	0.61	0.48	NC	99.3	95.3	4.1	97.7			80 - 120	20	
Cadmium	BRL	0.050	<0.050	<0.050	NC	102	97.7	4.3	101			80 - 120	20	
Chromium	BRL	0.10	<0.10	<0.10	NC	95.1	90.6	4.8	95.6			80 - 120	20	
Lead	BRL	0.10	0.17	0.12	NC	96.9	94.6	2.4	98.0			80 - 120	20	
Selenium	BRL	0.10	<0.10	<0.10	NC	108	105	2.8	98.9			80 - 120	20	
Silver	BRL	0.10	<0.10	<0.10	NC	101	99.5	1.5	98.9			80 - 120	20	
Comment:														
Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%.														
QA/QC Batch 678026 (mg/kg), QC Sample No: CO07080 (CO06895, CO06896, CO06897, CO06898)														
ICP Metals - Soil														
Aluminum	BRL	5.0	9740	12000	20.8	99.0	97.2	1.8	NC			75 - 125	35	
Antimony	BRL	3.3	<3.6	<3.2	NC	105	102	2.9	87.8			75 - 125	35	
Arsenic	BRL	0.67	<0.72	<0.64	NC	101	98.0	3.0	90.8			75 - 125	35	
Barium	BRL	0.33	115	136	16.7	112	104	7.4	127			75 - 125	35	m
Beryllium	BRL	0.27	0.32	0.36	NC	102	96.8	5.2	93.4			75 - 125	35	
Cadmium	BRL	0.33	1.00	1.08	NC	101	100	1.0	97.4			75 - 125	35	
Calcium	BRL	5.0	2940	4280	37.1	97.5	94.5	3.1	NC			75 - 125	35	r
Chromium	BRL	0.33	21.3	23.4	9.40	104	99.6	4.3	102			75 - 125	35	
Cobalt	BRL	0.33	14.6	15.6	6.60	103	98.1	4.9	99.4			75 - 125	35	
Copper	BRL	0.67	33.3	33.5	0.60	100	96.6	3.5	92.7			75 - 125	35	
Iron	BRL	5.0	20100	23800	16.9	96.2	101	4.9	NC			75 - 125	35	
Lead	BRL	0.33	17.4	20.4	15.9	98.9	96.8	2.1	99.6			75 - 125	35	
Magnesium	BRL	5.0	5780	6860	17.1	104	103	1.0	NC			75 - 125	35	
Manganese	BRL	0.33	168	192	13.3	102	99.9	2.1	125			75 - 125	35	
Nickel	BRL	0.33	25.9	29.7	13.7	104	99.3	4.6	101			75 - 125	35	
Potassium	BRL	5.0	6720	8220	20.1	101	99.5	1.5	NC			75 - 125	35	

QA/QC Data

SDG I.D.: GCO06895

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Selenium	BRL	1.3	<1.4	<1.3	NC	99.3	94.7	4.7	90.1			75 - 125	35	
Silver	BRL	0.33	<0.36	<0.32	NC	96.4	95.0	1.5	94.3			75 - 125	35	
Sodium	BRL	5.0	240	279	15.0	94.8	91.8	3.2	>130			75 - 125	35	m
Thallium	BRL	3.0	<1.4	<2.9	NC	102	103	1.0	95.2			75 - 125	35	
Vanadium	BRL	0.33	29.8	33.1	10.5	103	100	3.0	105			75 - 125	35	
Zinc	BRL	0.67	56.8	68.9	19.3	103	103	0.0	111			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.

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

NY # 11301

QA/QC Report

May 25, 2023

QA/QC Data

SDG I.D.: GCO06895

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 678024 (mg/Kg), QC Sample No: CO05883 50X (CO06895, CO06896, CO06897, CO06898)													
Total Cyanide (SW9010C Distill.)	BRL	0.50	<0.55	<0.55	NC	86.3			101			80 - 120	30
Comment:													
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils													
QA/QC Batch 678352 (mg/Kg), QC Sample No: CO06592 5X (CO06895, CO06896, CO06897, CO06898)													
Reactivity Cyanide	BRL	5	<6	<5.6	NC	93.8						85 - 115	30
Reactivity Sulfide	BRL	20	<20	<20	NC	95.5						80 - 120	30
QA/QC Batch 678074 (PH), QC Sample No: CO06630 (CO06895, CO06896, CO06897, CO06898)													
pH			8.53	8.54	0.10	101						85 - 115	20
QA/QC Batch 678655 (Degree F), QC Sample No: CO06898 (CO06895, CO06896, CO06897, CO06898)													
Flash Point			>200	>200	NC	101						75 - 125	30
Comment:													
Additional criteria matrix spike acceptance range is 75-125%.													

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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

QA/QC Report

May 25, 2023

QA/QC Data

SDG I.D.: GCO06895

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 678226 (mg/Kg), QC Sample No: CO08490 (CO06895, CO06896, CO06897, CO06898)										
TPH by GC (Extractable Products) - Soil										
Ext. Petroleum HC	ND	50	101	101	0.0				30 - 130	30
% COD (surr)	56	%	135	124	8.5				50 - 150	30
% Terphenyl (surr)	62	%	90	97	7.5				50 - 150	30
Comment:										
The MS/MSD could not be reported due to the presence of ETPH in the original sample.										
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 678172 (mg/Kg), QC Sample No: CO06892 50X (CO06895 (50X) , CO06896 (50X) , CO06897 (50X) , CO06898 (50X))										
Gasoline Range Hydrocarbons (C6C10) - Soil										
GRO (C6-C10)	ND	5.0	93	93	0.0	98	97	1.0	70 - 130	30
% 2,5-Dibromotoluene (FID)	79	%	84	83	1.2	83	86	3.6	70 - 130	30
QA/QC Batch 678342 (ug/L), QC Sample No: CO05436 10X (CO06895, CO06896, CO06897, CO06898)										
TCLP Herbicides										
2,4,5-TP (Silvex)	ND	50	78	78	0.0	87			40 - 140	20
2,4-D	ND	100	82	81	1.2	93			40 - 140	20
% DCAA	72	%	65	73	11.6	82			30 - 150	20
% DCAA (Confirmation)	70	%	83	86	3.6	94			30 - 150	20
Comment:										
Additional criteria: LCS acceptance range is 40-140% MS acceptance range 30-150%.										
QA/QC Batch 678494 (ug/Kg), QC Sample No: CO01342 2X (CO06895, CO06896, CO06898)										
Polychlorinated Biphenyls - Soil										
PCB-1016	ND	33	85	87	2.3	69	78	12.2	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	99	78	23.7	54	57	5.4	40 - 140	30
PCB-1262	ND	33							40 - 140	30
PCB-1268	ND	33							40 - 140	30
% DCBP (Surrogate Rec)	82	%	105	87	18.8	57	62	8.4	30 - 150	30
% DCBP (Surrogate Rec) (Confirm	79	%	81	95	15.9	56	68	19.4	30 - 150	30
% TCMX (Surrogate Rec)	58	%	80	82	2.5	68	57	17.6	30 - 150	30
% TCMX (Surrogate Rec) (Confirm	38	%	47	95	67.6	76	65	15.6	30 - 150	30 r
QA/QC Batch 678492 (ug/Kg), QC Sample No: CO08482 2X (CO06897)										
Polychlorinated Biphenyls - Soil										
PCB-1016	ND	33	99	75	27.6	89	92	3.3	40 - 140	30
PCB-1221	ND	33							40 - 140	30

QA/QC Data

SDG I.D.: GCO06895

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
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	76	25.3	84	92	9.1	40 - 140	30	
PCB-1262	ND	33							40 - 140	30	
PCB-1268	ND	33							40 - 140	30	
% DCBP (Surrogate Rec)	87	%	102	77	27.9	84	93	10.2	30 - 150	30	
% DCBP (Surrogate Rec) (Confirm	90	%	108	83	26.2	86	95	9.9	30 - 150	30	
% TCMX (Surrogate Rec)	83	%	98	73	29.2	83	94	12.4	30 - 150	30	
% TCMX (Surrogate Rec) (Confirm	78	%	93	70	28.2	76	87	13.5	30 - 150	30	
QA/QC Batch 678496 (ug/Kg), QC Sample No: CO01342 2X (CO06895, CO06896, CO06898)											
Pesticides - Soil											
4,4' -DDD	ND	1.7	94	82	13.6	51	66	25.6	40 - 140	30	
4,4' -DDE	ND	1.7	93	83	11.4	69	85	20.8	40 - 140	30	
4,4' -DDT	ND	1.7	96	82	15.7	69	93	29.6	40 - 140	30	
a-BHC	ND	1.0	88	72	20.0	52	55	5.6	40 - 140	30	
a-Chlordane	ND	3.3	85	86	1.2	55	64	15.1	40 - 140	30	
Aldrin	ND	1.0	96	87	9.8	57	63	10.0	40 - 140	30	
b-BHC	ND	1.0	91	78	15.4	50	60	18.2	40 - 140	30	
Chlordane	ND	33	94	88	6.6	59	67	12.7	40 - 140	30	
d-BHC	ND	3.3	80	75	6.5	38	48	23.3	40 - 140	30	
Dieldrin	ND	1.0	103	91	12.4	54	66	20.0	40 - 140	30	
Endosulfan I	ND	3.3	99	85	15.2	57	66	14.6	40 - 140	30	
Endosulfan II	ND	3.3	114	93	20.3	52	65	22.2	40 - 140	30	
Endosulfan sulfate	ND	3.3	102	85	18.2	40	52	26.1	40 - 140	30	
Endrin	ND	3.3	89	88	1.1	50	61	19.8	40 - 140	30	
Endrin aldehyde	ND	3.3	87	81	7.1	33	47	35.0	40 - 140	30	r
Endrin ketone	ND	3.3	103	86	18.0	47	62	27.5	40 - 140	30	
g-BHC	ND	1.0	87	80	8.4	56	58	3.5	40 - 140	30	
g-Chlordane	ND	3.3	94	88	6.6	59	67	12.7	40 - 140	30	
Heptachlor	ND	3.3	89	81	9.4	52	55	5.6	40 - 140	30	
Heptachlor epoxide	ND	3.3	95	87	8.8	56	64	13.3	40 - 140	30	
Methoxychlor	ND	3.3	95	76	22.2	43	56	26.3	40 - 140	30	
Toxaphene	ND	130	NA	NA	NC	NA	NA	NC	40 - 140	30	
% DCBP	83	%	95	74	24.9	43	56	26.3	30 - 150	30	
% DCBP (Confirmation)	84	%	99	67	38.6	37	53	35.6	30 - 150	30	r
% TCMX	80	%	84	75	11.3	64	53	18.8	30 - 150	30	
% TCMX (Confirmation)	85	%	88	84	4.7	68	58	15.9	30 - 150	30	
QA/QC Batch 678524 (ug/L), QC Sample No: CO05482 10X (CO06895, CO06896, CO06897, CO06898)											
Pesticides											
4,4' -DDD	ND	0.25	109	108	0.9	103			40 - 140	20	
4,4' -DDE	ND	0.25	102	104	1.9	98			40 - 140	20	
4,4' -DDT	ND	0.25	97	97	0.0	91			40 - 140	20	
a-BHC	ND	0.15	87	92	5.6	88			40 - 140	20	
Alachlor	ND	0.50	NA	NA	NC	NA			40 - 140	20	
Aldrin	ND	0.15	94	95	1.1	92			40 - 140	20	
b-BHC	ND	0.15	100	100	0.0	95			40 - 140	20	
Chlordane	ND	5.0	103	105	1.9	99			40 - 140	20	
d-BHC	ND	0.50	127	137	7.6	111			40 - 140	20	
Dieldrin	ND	0.15	99	105	5.9	100			40 - 140	20	
Endosulfan I	ND	0.50	109	107	1.9	105			40 - 140	20	

QA/QC Data

SDG I.D.: GCO06895

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Endosulfan II	ND	0.50	107	110	2.8	103			40 - 140	20	
Endosulfan sulfate	ND	0.50	109	111	1.8	104			40 - 140	20	
Endrin	ND	0.50	111	115	3.5	109			40 - 140	20	
Endrin aldehyde	ND	0.50	98	100	2.0	95			40 - 140	20	
g-BHC	ND	0.15	115	118	2.6	113			40 - 140	20	
Heptachlor	ND	0.50	99	100	1.0	96			40 - 140	20	
Heptachlor epoxide	ND	0.50	96	97	1.0	94			40 - 140	20	
Methoxychlor	ND	0.50	108	110	1.8	103			40 - 140	20	
Toxaphene	ND	20	NA	NA	NC	NA			40 - 140	20	
% DCBP	100	%	100	103	3.0	87			30 - 150	20	
% DCBP (Confirmation)	90	%	85	89	4.6	74			30 - 150	20	
% TCMX	75	%	77	80	3.8	80			30 - 150	20	
% TCMX (Confirmation)	78	%	77	80	3.8	83			30 - 150	20	
QA/QC Batch 678493 (ug/Kg), QC Sample No: CO08482 2X (CO06897)											
Pesticides - Soil											
4,4' -DDD	ND	1.7	89	101	12.6	64	85	28.2	40 - 140	30	
4,4' -DDE	ND	1.7	82	98	17.8	65	82	23.1	40 - 140	30	
4,4' -DDT	ND	1.7	89	100	11.6	63	82	26.2	40 - 140	30	
a-BHC	ND	1.0	88	81	8.3	55	64	15.1	40 - 140	30	
a-Chlordane	ND	3.3	84	100	17.4	58	86	38.9	40 - 140	30	r
Aldrin	ND	1.0	87	97	10.9	62	77	21.6	40 - 140	30	
b-BHC	ND	1.0	87	85	2.3	59	82	32.6	40 - 140	30	r
Chlordane	ND	33	85	104	20.1	55	85	42.9	40 - 140	30	r
d-BHC	ND	3.3	90	76	16.9	48	65	30.1	40 - 140	30	
Dieldrin	ND	1.0	87	102	15.9	68	81	17.4	40 - 140	30	
Endosulfan I	ND	3.3	94	99	5.2	56	80	35.3	40 - 140	30	r
Endosulfan II	ND	3.3	86	107	21.8	69	84	19.6	40 - 140	30	
Endosulfan sulfate	ND	3.3	94	100	6.2	61	78	24.5	40 - 140	30	
Endrin	ND	3.3	94	100	6.2	65	73	11.6	40 - 140	30	
Endrin aldehyde	ND	3.3	88	95	7.7	50	68	30.5	40 - 140	30	
Endrin ketone	ND	3.3	89	104	15.5	62	80	25.4	40 - 140	30	
g-BHC	ND	1.0	90	88	2.2	79	88	10.8	40 - 140	30	
g-Chlordane	ND	3.3	85	104	20.1	55	85	42.9	40 - 140	30	r
Heptachlor	ND	3.3	88	89	1.1	58	74	24.2	40 - 140	30	
Heptachlor epoxide	ND	3.3	89	98	9.6	64	81	23.4	40 - 140	30	
Methoxychlor	ND	3.3	90	92	2.2	60	77	24.8	40 - 140	30	
Toxaphene	ND	130	NA	NA	NC	NA	NA	NC	40 - 140	30	
% DCBP	74	%	73	90	20.9	62	76	20.3	30 - 150	30	
% DCBP (Confirmation)	66	%	81	83	2.4	61	77	23.2	30 - 150	30	
% TCMX	73	%	86	85	1.2	56	64	13.3	30 - 150	30	
% TCMX (Confirmation)	81	%	77	95	20.9	64	79	21.0	30 - 150	30	
QA/QC Batch 678194 (ug/L), QC Sample No: CO06165 (CO06895, CO06896, CO06897, CO06898)											
Semivolatiles - TCLP											
1,4-Dichlorobenzene	ND	17	28	48	52.6	42			40 - 140	20	l,r
2,4,5-Trichlorophenol	ND	17	102	115	12.0	104			40 - 140	20	
2,4,6-Trichlorophenol	ND	17	94	112	17.5	98			30 - 130	20	
2,4-Dinitrotoluene	ND	58	111	120	7.8	110			30 - 130	20	
2-Methylphenol (o-cresol)	ND	17	73	89	19.8	71			40 - 140	20	
3&4-Methylphenol (m&p-cresol)	ND	17	74	88	17.3	75			30 - 130	20	
Hexachlorobenzene	ND	58	91	103	12.4	96			40 - 140	20	
Hexachlorobutadiene	ND	58	30	48	46.2	45			40 - 140	20	l,r
Hexachloroethane	ND	58	24	42	54.5	40			40 - 140	20	l,r

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Nitrobenzene	ND	58	64	80	22.2	68			40 - 140	20	r
Pentachlorophenol	ND	58	111	111	0.0	112			30 - 130	20	
Pyridine	ND	83	70	76	8.2	64			40 - 140	20	
% 2,4,6-Tribromophenol	106	%	101	110	8.5	108			15 - 110	20	
% 2-Fluorobiphenyl	54	%	68	84	21.1	73			30 - 130	20	r
% 2-Fluorophenol	47	%	49	67	31.0	57			15 - 110	20	r
% Nitrobenzene-d5	54	%	65	79	19.4	68			30 - 130	20	
% Phenol-d5	49	%	51	64	22.6	53			15 - 110	20	r
% Terphenyl-d14	97	%	91	97	6.4	96			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 678066 (ug/kg), QC Sample No: CO06731 (CO06895, CO06896, CO06897, CO06898)

Semivolatiles - Soil

1,1-Biphenyl	ND	230	67	61	9.4	71	70	1.4	40 - 140	30	
1,2,4,5-Tetrachlorobenzene	ND	230	92	81	12.7	96	90	6.5	40 - 140	30	
2,2'-Oxybis(1-Chloropropane)	ND	230	73	65	11.6	76	69	9.7	40 - 140	30	
2,3,4,6-tetrachlorophenol	ND	230	81	74	9.0	87	85	2.3	30 - 130	30	
2,4,5-Trichlorophenol	ND	230	81	76	6.4	90	87	3.4	40 - 140	30	
2,4,6-Trichlorophenol	ND	130	85	77	9.9	92	90	2.2	30 - 130	30	
2,4-Dichlorophenol	ND	130	88	79	10.8	91	88	3.4	30 - 130	30	
2,4-Dimethylphenol	ND	230	104	88	16.7	106	97	8.9	30 - 130	30	
2,4-Dinitrophenol	ND	230	85	83	2.4	81	87	7.1	30 - 130	30	
2,4-Dinitrotoluene	ND	130	78	73	6.6	85	84	1.2	30 - 130	30	
2,6-Dinitrotoluene	ND	130	89	80	10.7	96	94	2.1	40 - 140	30	
2-Chloronaphthalene	ND	230	71	65	8.8	75	73	2.7	40 - 140	30	
2-Chlorophenol	ND	230	71	66	7.3	75	69	8.3	30 - 130	30	
2-Methylnaphthalene	ND	230	76	69	9.7	83	76	8.8	40 - 140	30	
2-Methylphenol (o-cresol)	ND	230	77	71	8.1	84	76	10.0	40 - 140	30	
2-Nitroaniline	ND	330	161	146	9.8	172	174	1.2	40 - 140	30	l,m
2-Nitrophenol	ND	230	118	102	14.5	126	111	12.7	40 - 140	30	
3&4-Methylphenol (m&p-cresol)	ND	230	72	66	8.7	77	72	6.7	30 - 130	30	
3,3'-Dichlorobenzidine	ND	130	28	50	56.4	55	50	9.5	40 - 140	30	l,r
3-Nitroaniline	ND	330	44	46	4.4	62	66	6.3	40 - 140	30	
4,6-Dinitro-2-methylphenol	ND	230	86	80	7.2	94	97	3.1	30 - 130	30	
4-Bromophenyl phenyl ether	ND	230	84	77	8.7	87	89	2.3	40 - 140	30	
4-Chloro-3-methylphenol	ND	230	105	94	11.1	110	110	0.0	30 - 130	30	
4-Chloroaniline	ND	230	38	40	5.1	64	55	15.1	40 - 140	30	l
4-Chlorophenyl phenyl ether	ND	230	71	67	5.8	76	76	0.0	40 - 140	30	
4-Nitroaniline	ND	230	93	86	7.8	100	100	0.0	40 - 140	30	
4-Nitrophenol	ND	230	81	75	7.7	92	92	0.0	30 - 130	30	
Acenaphthene	ND	230	74	68	8.5	78	77	1.3	30 - 130	30	
Acenaphthylene	ND	130	68	63	7.6	76	73	4.0	40 - 140	30	
Acetophenone	ND	230	78	70	10.8	83	75	10.1	40 - 140	30	
Anthracene	ND	230	77	72	6.7	82	83	1.2	40 - 140	30	
Atrazine	ND	130	67	60	11.0	65	70	7.4	40 - 140	30	
Benz(a)anthracene	ND	230	72	67	7.2	79	79	0.0	40 - 140	30	
Benzaldehyde	ND	230	133	117	12.8	130	119	8.8	40 - 140	30	
Benzo(a)pyrene	ND	130	87	80	8.4	92	95	3.2	40 - 140	30	
Benzo(b)fluoranthene	ND	160	82	71	14.4	88	89	1.1	40 - 140	30	
Benzo(ghi)perylene	ND	230	97	90	7.5	102	103	1.0	40 - 140	30	
Benzo(k)fluoranthene	ND	230	70	61	13.7	72	75	4.1	40 - 140	30	

QA/QC Data

SDG I.D.: GCO06895

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Benzyl butyl phthalate	ND	230	83	76	8.8	88	91	3.4	40 - 140	30
Bis(2-chloroethoxy)methane	ND	230	81	73	10.4	84	81	3.6	40 - 140	30
Bis(2-chloroethyl)ether	ND	130	69	62	10.7	73	63	14.7	40 - 140	30
Bis(2-ethylhexyl)phthalate	ND	230	91	87	4.5	100	100	0.0	40 - 140	30
Caprolactam	ND	230	95	86	9.9	95	102	7.1	40 - 140	30
Carbazole	ND	230	75	70	6.9	79	80	1.3	40 - 140	30
Chrysene	ND	230	75	70	6.9	84	85	1.2	40 - 140	30
Dibenz(a,h)anthracene	ND	130	92	83	10.3	91	93	2.2	40 - 140	30
Dibenzofuran	ND	230	74	68	8.5	82	80	2.5	40 - 140	30
Diethyl phthalate	ND	230	85	80	6.1	91	92	1.1	40 - 140	30
Dimethylphthalate	ND	230	82	75	8.9	85	86	1.2	40 - 140	30
Di-n-butylphthalate	ND	670	85	80	6.1	88	89	1.1	40 - 140	30
Di-n-octylphthalate	ND	230	81	78	3.8	85	86	1.2	40 - 140	30
Fluoranthene	ND	230	74	72	2.7	86	84	2.4	40 - 140	30
Fluorene	ND	230	81	76	6.4	88	87	1.1	40 - 140	30
Hexachlorobenzene	ND	130	83	79	4.9	84	83	1.2	40 - 140	30
Hexachlorobutadiene	ND	230	95	84	12.3	95	88	7.7	40 - 140	30
Hexachlorocyclopentadiene	ND	230	68	66	3.0	77	68	12.4	40 - 140	30
Hexachloroethane	ND	130	71	64	10.4	73	67	8.6	40 - 140	30
Indeno(1,2,3-cd)pyrene	ND	230	97	88	9.7	99	98	1.0	40 - 140	30
Isophorone	ND	130	79	70	12.1	83	77	7.5	40 - 140	30
Naphthalene	ND	230	89	80	10.7	95	86	9.9	40 - 140	30
Nitrobenzene	ND	130	78	72	8.0	81	75	7.7	40 - 140	30
N-Nitrosodimethylamine	ND	230	68	62	9.2	68	59	14.2	40 - 140	30
N-Nitrosodi-n-propylamine	ND	130	80	73	9.2	85	78	8.6	40 - 140	30
N-Nitrosodiphenylamine	ND	130	74	70	5.6	79	82	3.7	40 - 140	30
Pentachlorophenol	ND	230	71	56	23.6	69	74	7.0	30 - 130	30
Phenanthrene	ND	130	77	72	6.7	84	84	0.0	40 - 140	30
Phenol	ND	230	79	74	6.5	86	76	12.3	30 - 130	30
Pyrene	ND	230	73	70	4.2	84	82	2.4	30 - 130	30
% 2,4,6-Tribromophenol	107	%	90	83	8.1	96	99	3.1	30 - 130	30
% 2-Fluorobiphenyl	78	%	68	63	7.6	74	69	7.0	30 - 130	30
% 2-Fluorophenol	65	%	70	65	7.4	75	66	12.8	30 - 130	30
% Nitrobenzene-d5	83	%	76	69	9.7	79	72	9.3	30 - 130	30
% Phenol-d5	71	%	72	66	8.7	77	68	12.4	30 - 130	30
% Terphenyl-d14	74	%	67	64	4.6	70	70	0.0	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 678370 (ug/L), QC Sample No: CO06165 (CO06895 (10X) , CO06896 (10X) , CO06897 (10X) , CO06898 (10X))

Volatiles - TCLP

1,1-Dichloroethene	ND	5.0	100	96	4.1	108	116	7.1	70 - 130	30
1,2-Dichloroethane	ND	0.60	90	89	1.1	93	99	6.3	70 - 130	30
Benzene	ND	0.70	96	93	3.2	103	109	5.7	70 - 130	30
Carbon tetrachloride	ND	5.0	100	97	3.0	111	121	8.6	70 - 130	30
Chlorobenzene	ND	1.0	96	95	1.0	101	108	6.7	70 - 130	30
Chloroform	ND	5.0	93	91	2.2	100	106	5.8	70 - 130	30
Methyl ethyl ketone	ND	5.0	78	82	5.0	85	87	2.3	70 - 130	30
Tetrachloroethene	ND	1.0	97	94	3.1	105	113	7.3	70 - 130	30
Trichloroethene	ND	5.0	100	96	4.1	106	114	7.3	70 - 130	30
Vinyl chloride	ND	5.0	103	98	5.0	112	117	4.4	70 - 130	30
% 1,2-dichlorobenzene-d4	101	%	100	100	0.0	100	101	1.0	70 - 130	30

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
% Bromofluorobenzene	95	%	98	98	0.0	99	99	0.0	70 - 130	30	
% Dibromofluoromethane	96	%	98	98	0.0	97	97	0.0	70 - 130	30	
% Toluene-d8	96	%	99	98	1.0	99	100	1.0	70 - 130	30	

Comment:

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

QA/QC Batch 678620 (ug/kg), QC Sample No: CO08476 (CO06898)

Volatiles - Soil (Low Level)

1,1,1-Trichloroethane	ND	5.0	98	109	10.6	100			70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	3.0	95	109	13.7	103			70 - 130	30	
1,1,2-Trichloroethane	ND	5.0	96	105	9.0	84			70 - 130	30	
1,1-Dichloroethane	ND	5.0	95	105	10.0	102			70 - 130	30	
1,1-Dichloroethene	ND	5.0	103	112	8.4	110			70 - 130	30	
1,2,3-Trichlorobenzene	ND	5.0	107	117	8.9	39			70 - 130	30	m
1,2,4-Trichlorobenzene	ND	5.0	104	112	7.4	40			70 - 130	30	m
1,2-Dibromo-3-chloropropane	ND	5.0	95	110	14.6	71			70 - 130	30	
1,2-Dibromoethane	ND	5.0	98	109	10.6	97			70 - 130	30	
1,2-Dichlorobenzene	ND	5.0	98	109	10.6	66			70 - 130	30	m
1,2-Dichloroethane	ND	5.0	100	110	9.5	100			70 - 130	30	
1,2-Dichloropropane	ND	5.0	92	100	8.3	92			70 - 130	30	
1,3-Dichlorobenzene	ND	5.0	98	109	10.6	79			70 - 130	30	
1,4-Dichlorobenzene	ND	5.0	99	109	9.6	81			70 - 130	30	
1,4-dioxane	ND	100	96	109	12.7	106			70 - 130	30	
2-Hexanone	ND	25	91	102	11.4	71			70 - 130	30	
4-Methyl-2-pentanone	ND	25	91	101	10.4	78			70 - 130	30	
Acetone	ND	10	89	103	14.6	83			70 - 130	30	
Benzene	ND	1.0	94	102	8.2	96			70 - 130	30	
Bromochloromethane	ND	5.0	98	110	11.5	100			70 - 130	30	
Bromodichloromethane	ND	5.0	95	105	10.0	90			70 - 130	30	
Bromoform	ND	5.0	94	107	12.9	67			70 - 130	30	m
Bromomethane	ND	5.0	111	124	11.1	124			70 - 130	30	
Carbon Disulfide	ND	5.0	94	105	11.1	83			70 - 130	30	
Carbon tetrachloride	ND	5.0	97	108	10.7	92			70 - 130	30	
Chlorobenzene	ND	5.0	97	108	10.7	90			70 - 130	30	
Chloroethane	ND	5.0	94	104	10.1	108			70 - 130	30	
Chloroform	ND	5.0	98	107	8.8	100			70 - 130	30	
Chloromethane	ND	5.0	96	104	8.0	99			70 - 130	30	
cis-1,2-Dichloroethene	ND	5.0	96	107	10.8	100			70 - 130	30	
cis-1,3-Dichloropropene	ND	5.0	95	104	9.0	84			70 - 130	30	
Cyclohexane	ND	5.0	95	103	8.1	76			70 - 130	30	
Dibromochloromethane	ND	3.0	98	109	10.6	90			70 - 130	30	
Dichlorodifluoromethane	ND	5.0	108	115	6.3	107			70 - 130	30	
Ethylbenzene	ND	1.0	96	104	8.0	88			70 - 130	30	
Isopropylbenzene	ND	1.0	99	110	10.5	107			70 - 130	30	
m&p-Xylene	ND	2.0	97	107	9.8	83			70 - 130	30	
Methyl ethyl ketone	ND	5.0	90	103	13.5	74			70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	1.0	93	103	10.2	96			70 - 130	30	
Methylacetate	ND	5.0	105	118	11.7	69			70 - 130	30	m
Methylcyclohexane	ND	5.0	98	103	5.0	53			70 - 130	30	m
Methylene chloride	ND	5.0	94	104	10.1	104			70 - 130	30	
o-Xylene	ND	2.0	94	103	9.1	82			70 - 130	30	
Styrene	ND	5.0	89	98	9.6	69			70 - 130	30	m

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Tetrachloroethene	ND	5.0	96	104	8.0	79			70 - 130	30	
Toluene	ND	1.0	95	103	8.1	88			70 - 130	30	
trans-1,2-Dichloroethene	ND	5.0	96	105	9.0	101			70 - 130	30	
trans-1,3-Dichloropropene	ND	5.0	97	106	8.9	81			70 - 130	30	
Trichloroethene	ND	5.0	97	107	9.8	95			70 - 130	30	
Trichlorofluoromethane	ND	5.0	110	120	8.7	116			70 - 130	30	
Trichlorotrifluoroethane	ND	5.0	98	107	8.8	94			70 - 130	30	
Vinyl chloride	ND	5.0	99	109	9.6	106			70 - 130	30	
% 1,2-dichlorobenzene-d4	98	%	100	99	1.0	91			70 - 130	30	
% Bromofluorobenzene	96	%	101	101	0.0	85			70 - 130	30	
% Dibromofluoromethane	97	%	100	100	0.0	99			70 - 130	30	
% Toluene-d8	101	%	102	101	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 678357 (ug/kg), QC Sample No: CO08477 (CO06895, CO06896, CO06897)

Volatiles - Soil (Low Level)

1,1,1-Trichloroethane	ND	5.0	105	105	0.0	103	103	0.0	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	3.0	106	103	2.9	110	115	4.4	70 - 130	30	
1,1,2-Trichloroethane	ND	5.0	100	102	2.0	86	90	4.5	70 - 130	30	
1,1-Dichloroethane	ND	5.0	105	105	0.0	107	106	0.9	70 - 130	30	
1,1-Dichloroethene	ND	5.0	107	106	0.9	113	112	0.9	70 - 130	30	
1,2,3-Trichlorobenzene	ND	5.0	106	107	0.9	41	34	18.7	70 - 130	30	m
1,2,4-Trichlorobenzene	ND	5.0	100	100	0.0	43	39	9.8	70 - 130	30	m
1,2-Dibromo-3-chloropropane	ND	5.0	105	102	2.9	76	83	8.8	70 - 130	30	
1,2-Dibromoethane	ND	5.0	105	105	0.0	101	104	2.9	70 - 130	30	
1,2-Dichlorobenzene	ND	5.0	103	103	0.0	69	71	2.9	70 - 130	30	m
1,2-Dichloroethane	ND	5.0	106	106	0.0	104	105	1.0	70 - 130	30	
1,2-Dichloropropane	ND	5.0	99	100	1.0	96	96	0.0	70 - 130	30	
1,3-Dichlorobenzene	ND	5.0	102	101	1.0	80	84	4.9	70 - 130	30	
1,4-Dichlorobenzene	ND	5.0	103	102	1.0	80	87	8.4	70 - 130	30	
1,4-dioxane	ND	100	105	106	0.9	118	118	0.0	70 - 130	30	
2-Hexanone	ND	25	99	99	0.0	61	63	3.2	70 - 130	30	m
4-Methyl-2-pentanone	ND	25	99	98	1.0	79	84	6.1	70 - 130	30	
Acetone	ND	10	103	100	3.0	94	98	4.2	70 - 130	30	
Benzene	ND	1.0	101	100	1.0	98	98	0.0	70 - 130	30	
Bromochloromethane	ND	5.0	106	107	0.9	104	106	1.9	70 - 130	30	
Bromodichloromethane	ND	5.0	103	103	0.0	92	95	3.2	70 - 130	30	
Bromoform	ND	5.0	101	100	1.0	69	73	5.6	70 - 130	30	m
Bromomethane	ND	5.0	111	106	4.6	126	122	3.2	70 - 130	30	
Carbon Disulfide	ND	5.0	97	95	2.1	83	82	1.2	70 - 130	30	
Carbon tetrachloride	ND	5.0	104	107	2.8	98	96	2.1	70 - 130	30	
Chlorobenzene	ND	5.0	104	104	0.0	92	94	2.2	70 - 130	30	
Chloroethane	ND	5.0	95	95	0.0	114	110	3.6	70 - 130	30	
Chloroform	ND	5.0	106	107	0.9	104	104	0.0	70 - 130	30	
Chloromethane	ND	5.0	91	92	1.1	107	107	0.0	70 - 130	30	
cis-1,2-Dichloroethene	ND	5.0	104	105	1.0	104	103	1.0	70 - 130	30	
cis-1,3-Dichloropropene	ND	5.0	100	102	2.0	82	87	5.9	70 - 130	30	
Cyclohexane	ND	5.0	100	100	0.0	81	82	1.2	70 - 130	30	
Dibromochloromethane	ND	3.0	104	106	1.9	92	97	5.3	70 - 130	30	
Dichlorodifluoromethane	ND	5.0	82	81	1.2	121	119	1.7	70 - 130	30	

QA/QC Data

SDG I.D.: GCO06895

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Ethylbenzene	ND	1.0	101	101	0.0	88	90	2.2	70 - 130	30	
Isopropylbenzene	ND	1.0	107	106	0.9	105	106	0.9	70 - 130	30	
m&p-Xylene	ND	2.0	102	102	0.0	78	79	1.3	70 - 130	30	
Methyl ethyl ketone	ND	5.0	102	101	1.0	78	81	3.8	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	1.0	100	102	2.0	101	103	2.0	70 - 130	30	
Methylacetate	ND	5.0	115	116	0.9	61	62	1.6	70 - 130	30	m
Methylcyclohexane	ND	5.0	99	99	0.0	58	58	0.0	70 - 130	30	m
Methylene chloride	ND	5.0	101	101	0.0	104	104	0.0	70 - 130	30	
o-Xylene	ND	2.0	100	100	0.0	80	81	1.2	70 - 130	30	
Styrene	ND	5.0	94	95	1.1	66	67	1.5	70 - 130	30	m
Tetrachloroethene	ND	5.0	96	96	0.0	79	81	2.5	70 - 130	30	
Toluene	ND	1.0	99	99	0.0	88	89	1.1	70 - 130	30	
trans-1,2-Dichloroethene	ND	5.0	103	102	1.0	104	101	2.9	70 - 130	30	
trans-1,3-Dichloropropene	ND	5.0	102	104	1.9	80	84	4.9	70 - 130	30	
Trichloroethene	ND	5.0	103	102	1.0	96	97	1.0	70 - 130	30	
Trichlorofluoromethane	ND	5.0	110	108	1.8	120	119	0.8	70 - 130	30	
Trichlorotrifluoroethane	ND	5.0	98	97	1.0	97	99	2.0	70 - 130	30	
Vinyl chloride	ND	5.0	96	95	1.0	113	110	2.7	70 - 130	30	
% 1,2-dichlorobenzene-d4	99	%	99	99	0.0	92	92	0.0	70 - 130	30	
% Bromofluorobenzene	97	%	100	100	0.0	85	86	1.2	70 - 130	30	
% Dibromofluoromethane	97	%	97	101	4.0	101	101	0.0	70 - 130	30	
% Toluene-d8	101	%	100	101	1.0	96	97	1.0	70 - 130	30	

Comment:

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

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

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

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

Phyllis Shiller, Laboratory Director
May 25, 2023

Thursday, May 25, 2023

Criteria: NY: 375, 375COM

State: NY

Sample Criteria Exceedances Report

GCO06895 - AES-INC

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CO06895	$PESTSM_NY	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	5.9	2.1	3.3	3.3	ug/Kg
CO06895	HG-SM	Mercury	NY / 375-6.8 Metals / Unrestricted Use Soil	0.19	0.03	0.18	0.18	mg/Kg
CO06895	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	77.3	0.33	63	63	mg/Kg
CO06896	$PESTSM_NY	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	9.1	2.1	3.3	3.3	ug/Kg
CO06896	$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	4.5	2.1	3.3	3.3	ug/Kg
CO06896	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	104	0.37	63	63	mg/Kg
CO06897	$PCB_SMR	PCB-1254	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	110	70	100	100	ug/Kg
CO06897	$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	4.8	2.1	3.3	3.3	ug/Kg
CO06897	$PESTSM_NY	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	10	2.1	3.3	3.3	ug/Kg
CO06897	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	93.4	0.33	63	63	mg/Kg
CO06898	$PCB_SMR	PCB-1254	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	110	71	100	100	ug/Kg
CO06898	$PESTSM_NY	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	8.7	2.1	3.3	3.3	ug/Kg
CO06898	$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	3.9	2.1	3.3	3.3	ug/Kg
CO06898	$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	4.6	2.1	3.3	3.3	ug/Kg
CO06898	NI-SM	Nickel	NY / 375-6.8 Metals / Unrestricted Use Soil	34.6	0.37	30	30	mg/Kg
CO06898	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	122	0.37	63	63	mg/Kg

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Comments

May 25, 2023 SDG I.D.: GCO06895

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

PEST Narration

AU-ECD33 05/22/23-1: CO06895

The following Continuing Calibration compounds did not meet % deviation criteria:
Samples: CO06895
Preceding CC 522B004 - None.
Succeeding CC 522B021 - 4,4'-DDD 23%L (20%), Methoxychlor 29%L (20%)
A low "1A" standard was run after the samples to demonstrate capability to detect any compounds outside of the CC acceptance criteria. All reported samples were ND for the affected compounds.

AU-ECD35 05/19/23-1: CO06896, CO06897, CO06898

The following Continuing Calibration compounds did not meet % deviation criteria:
Samples: CO06896
Preceding CC 519B017 - d-BHC 24%L (20%)
Succeeding CC 519B030 - d-BHC 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.
Samples: CO06898
Preceding CC 519B030 - d-BHC 23%L (20%)
Succeeding CC 519B044 - 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: CO06897
Preceding CC 519B044 - d-BHC 22%L (20%)
Succeeding CC 519B057 - 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

CHEM19 05/17/23-1: CO06895, CO06896, CO06897, CO06898

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: % 2,4,6-Tribromophenol 0.048 (0.05), Hexachlorobenzene 0.080 (0.1)
The following Initial Calibration compounds did not meet minimum response factors: % 2,4,6-Tribromophenol 0.048 (0.05)

The following Continuing Calibration compounds did not meet % deviation criteria: Pentachlorophenol 35%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: Hexachlorobenzene 0.080 (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

CHEM03 05/17/23-2: CO06895, CO06896, CO06897

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Comments

May 25, 2023 SDG I.D.: GCO06895

The following Initial Calibration compounds did not meet RSD% criteria: Chloroethane 22% (20%)
The following Initial Calibration compounds did not meet maximum RSD% criteria: None.
The following Initial Calibration compounds did not meet recommended response factors: Tetrachloroethene 0.163 (0.2)
The following Initial 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%.

CHEM03 05/18/23-1: CO06898

The following Initial Calibration compounds did not meet RSD% criteria: Chloroethane 22% (20%)
The following Initial Calibration compounds did not meet maximum RSD% criteria: None.
The following Initial Calibration compounds did not meet recommended response factors: Tetrachloroethene 0.163 (0.2)
The following Initial 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

May 25, 2023

SDG I.D.: GCO06895

The samples in this delivery group were received at 1.3°C.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

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

PHOENIX
Environmental Laboratories, Inc.

NY/NJ/PA CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 1.3 °C Pg 1 of 1

Contact Options:
☐ Phone:
☐ Fax: pendyenvenv@optonline.net
☒ Email: empendergast@aol.com

Customer: AES
Address: 42 West Avenue
Patchogue, NY 11772

Project: GATEWAY ESTATES-HDIGE Project P.O: 0703
Report to: AES
Invoice to: AES
QUOTE # : AE19622BA

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: [signature] Date: 5.15.23

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

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	TAL/TCL+30	Full TCLP	RIC	TPH DRO/GRO	GL Amber 8 oz. w/H3PO4	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container (8) oz	GL Soil container (4) oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml [ ] 1000ml	PL NaOH 250ml	PL HNO3 250ml	Bacteria Bottle w/thio	Bacteria Bottle as is
06895	PILE 73-#121	S	5.15.23	9:15	X	X	X	X			2	1	3							
06896	PILE 73-#122	↓	↓	9:20	↓	↓	↓	↓			↓	↓	↓							
06897	PILE-73-#123			9:25																
06898	PILE 73-#124			9:30																

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	5/16/23	9.13
[signature]	[signature]	5-16-23	1620

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ 5 Days
☐ 10 Days
☐ Other
* SURCHARGE APPLIES

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

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

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

State Samples Collected? NY

Comments, Special Requirements or Regulations:

Data Format:
☐ Phoenix Std Report ☐ EQuIS
☒ Excel ☐ NJ Hazsite EDD
☒ PDF ☐ NY EZ EDD
☐ GIS/Key ☐ Other

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

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