PEER
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Engineers • Scientists • Planners

May 3, 2024

Katy Lillich, AIA, LEED AP, MCPPO
Associate Principal
Arrowstreet
10 Post Office Square, Suite 700N
Boston MA 02109

Re: MARGARET A. NEARY ELEMENTARY SCHOOL
55 Parkerville Road, Southborough, MA 01772
Limited Subsurface Soil Investigation Memorandum

Dear Ms. Lillich:

PEER Consultants P.C. (PEER) completed an initial review of the environmental laboratory analytical results for the initial four (4) combined geotechnical/geo-environmental borings completed at Margaret A. Neary Elementary School on April 15, 2024. The weather on this date was sunny, and 44°F. PEER understands that Soil X was the drilling contractor on the project site, and utilized a Diedrich D70 Turbo Drill Rig, with hollow stem augers (and no drive and wash) to complete the borings. Soil X was represented by a driller, and driller's assistance. Lahlaf Geotechnical Consulting, Inc., the geotechnical contractor, was represented by Ms. Sharon Guan. PEER was represented by Mr. Dave Gorden, Board Certified Environmental Scientist and Certified Professional Soil Scientist.

During the limited subsurface soil investigation at the Margaret A. Neary Elementary School, PEER collected two (2) separate, composited soil samples from specific boring depths, to be analyzed for the following parameter: Volatile Organic Compounds (VOCs).

In addition, during the limited subsurface soil investigation, PEER collected four (4) separate, composited soil samples from specific boring depths, to be analyzed for the following parameters: Semivolatile Organic Compounds (SVOCs), Metals, Polychlorinated Biphenyls (PCBs), Total Petroleum Hydrocarbons (TPH) DRO, and TPH GRO, and for General Chemistry parameters such as Percent Solids, Conductivity, Corrosivity (pH), Flashpoint/Ignitability, Reactive Cyanide, and Reactive Sulfide.

Finally, during the limited subsurface soil investigation, PEER collected one (1) composited soil sample from specific boring depths, to be analyzed for the following parameters: Pesticides and Herbicides. PEER also collected one (1) composited soil sample from the specific boring depths, to be analyzed for the following

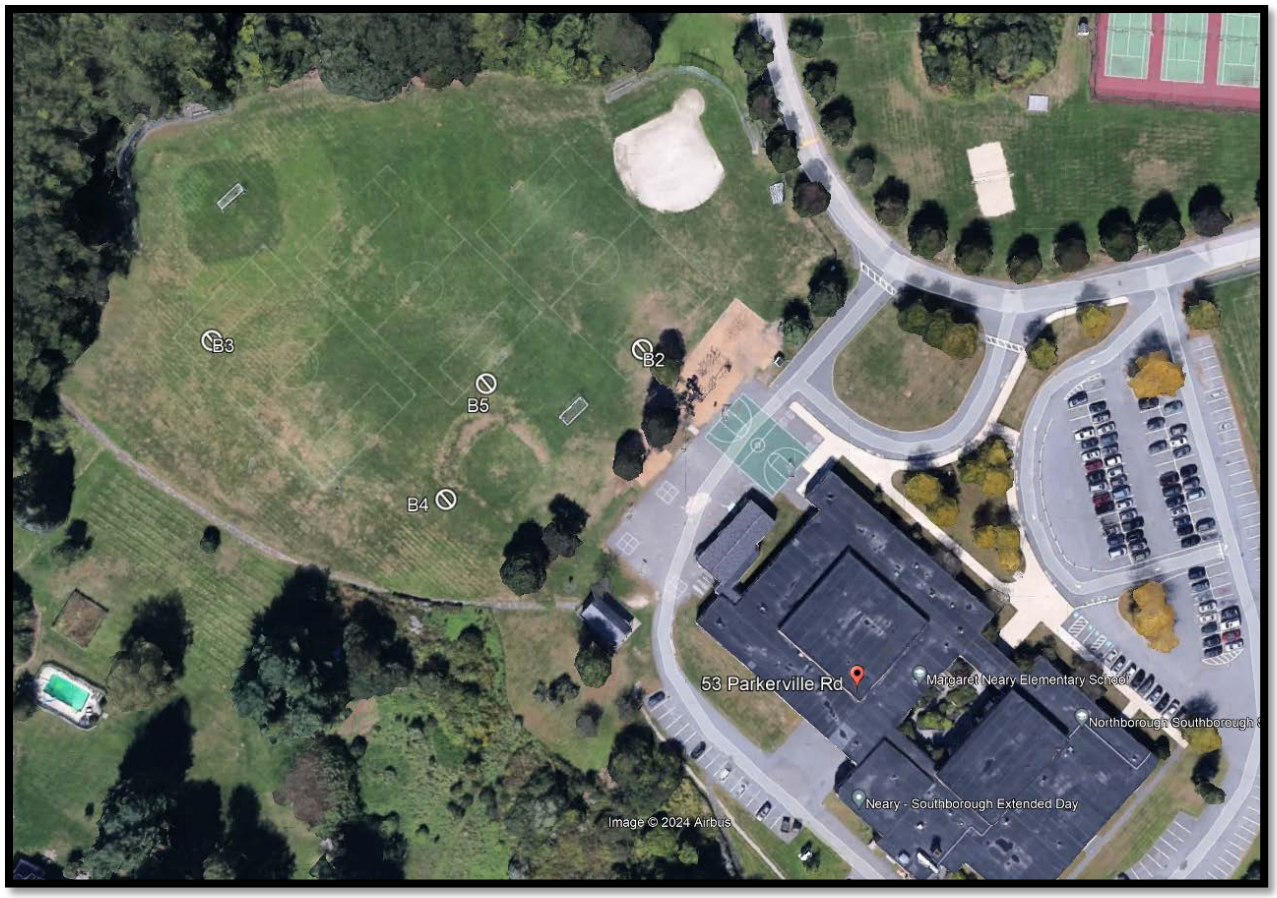
parameters: Chloride, Fecal Coliforms, Nitrite as Nitrogen, Nitrate as Nitrogen, Phosphorus, Total as Phosphate.

PEER compared the laboratory analytical results to Massachusetts Department of Environmental Protection (MADEP) Policy # COMM-97-001, Reuse and Disposal of Contaminated Soil at Massachusetts Landfills, August 1997. PEER also compared the laboratory analytical results to 310 CMR 40.00, the Massachusetts Contingency Plan (MCP) reporting category RCS-1 and reporting category RCS-2. General chemistry laboratory results were separately compared with RCRA Characteristics under 40 CFR 261. Additional discussions pertaining to the comparison of results may be read below.

Due to the predominance of gravel and split spoon fractured gravel/till and/or other coarse material within the soil borings, and considering that in general, soil material beneath the top soil layer appeared similar to the boring termination depth, PEER collected samples based on the following depth intervals:

- **B2 Full** included soil from soil boring B2 at depths of 2-4', 4-6', 6-8', and 10-12'.
- **B3 Full** included soil from soil boring B3 at depths of 2-4', 4-6', 10-12', and 15-17'.
- **B4 Full** included soil from soil boring B4 at depths of 2-4', 4-6', 6-8', 10-12', 15-17', and 17-19'.
- **B5 Full** included soil from soil boring B5 at depths of 2-4', 4-6', 6-8', 8-10', 10-12', 15-17', and 20-22'.
- **B2-B5 0-2'** included soil from soil borings B2, B3, B4, and B5 from a depth of 0'-2'.
- **B2-B5 WT** included soil which was moist to wet, and was assumed to be from within the groundwater table from soil borings B2 (10-12'), B3 (10-12', 15-17'), B4 (10-12', 15-17'), and B5 (15-17', 20-22').

PEER estimated and documented a global positioning system (GPS) point for each boring based on an open source electronic application; therefore, the location of each soil boring, as estimated in the below Google Earth image is considered approximate only.



53 Parkerville Rd., Southborough, MA
(North is Up)

The following information provides a summary of the analytical results from soil samples collected by PEER on April 15, 2024. The samples were kept under chain of custody by PEER, and in a cooler with ice, until Phoenix Environmental Laboratories, Inc. (Phoenix), of Manchester, CT couriered the samples back to their office on April 16, 2024. PEER received the Analysis Report from Phoenix with the results on April 25, 2024.

VOCs

For Sample B2-B5 (0-2') and Sample B2-B5 WT, there were no detections of individual VOCs. In addition, there were no exceedances of the MCP RCS-1 Criteria for an individual VOC, and there were no exceedances of the MCP RCS-2 Criteria for an individual VOC. Furthermore, there were no exceedances of Total VOCs for acceptance at a lined landfill, and there were no exceedances of Total VOCs for acceptance at an unlined landfill. VOCs were not detected. **Refer to Table 1A.**

SVOCs

For Sample B2 Full, Sample B3 Full, Sample B4 Full, and Sample B5 Full, there were no detections of individual SVOCs. In addition, there were no exceedances of the MCP RCS-1 Criteria for an individual SVOC, and there were no exceedances of the MCP RCS-2 Criteria for an individual SVOC. Furthermore, there were no exceedances of Total SVOCs for acceptance at a lined landfill, and there were no exceedances of Total SVOCs for acceptance at an unlined landfill. SVOCs were not detected. **Refer to Table 1B.**

Metals

For Sample B2 Full, Sample B3 Full, Sample B4 Full, and Sample B5 Full, there were neither exceedances of the MCP RCS-1 Criteria for individual Metals nor exceedances of the MCP RCS-2 Criteria for individual Metals. There were neither exceedances of Metals for acceptance at a lined landfill nor exceedances of Metals for acceptance at an unlined landfill. **Refer to Table 1C.**

PCBs

For Sample B2 Full, Sample B3 Full, Sample B4 Full, and Sample B5 Full, there were neither exceedances of the MCP RCS-1 Criteria for individual Aroclors nor exceedances of the MCP RCS-2 Criteria for individual Aroclors. There were neither exceedances of Total PCBs for acceptance at a lined landfill nor exceedances of Total PCBs for acceptance at an unlined landfill. PCBs were not detected. **Refer to Table 1D.**

TPHs

For Sample B2 Full, Sample B3 Full, Sample B4 Full, and Sample B5 Full, there were neither exceedances of the MCP RCS-1 Criteria for TPH DRO nor exceedances of the MCP RCS-2 Criteria for TPH DRO. There were neither exceedances of TPH DRO for acceptance at a lined landfill nor exceedances of TPH DRO for acceptance at an unlined landfill. Individual DRO were not detected. There are no comparison parameters for TPH GRO; however, TPH GRO was also not detected. **Refer to Table 1E.**

Pesticides

For Sample B2-B5 0-2', there were neither exceedances of MCP RCS-1 criteria for individual pesticides nor exceedances of MCP RCS-2 criteria for individual pesticides. COMM-97-001 does not provide regulatory criteria for pesticides. **Refer to Table 1F.**

Herbicides

For Sample B2-B5 0-2', there were neither exceedances of MCP RCS-1 criteria for individual herbicides nor exceedances of MCP RCS-2 criteria for individual herbicides. COMM-97-001 does not provide regulatory criteria for herbicides. **Refer to Table 1G.**

Miscellaneous/Biological

For Sample B2-B5 WT, there were no detections of chloride, fecal coliforms, and nitrite as nitrogen for the soil sample (B2-B5 WT) analyzed, where "WT" refers to within the groundwater table. The MCP and COMM-97-001 do not provide regulatory criteria for these parameters. PEER understands that the location of the

potential septic system leach field was misrepresented to the Architect by Others, and that therefore this lack of the presence of a septic system leach field at the assumed location may be indicated in the laboratory results for these parameters.

In addition, Nitrate as Nitrogen was only detected at concentrations slightly above the laboratory reporting limit in soil Sample B2-B5 WT (0.93 mg/Kg). According to the Soil and Plant Nutrient Testing Laboratory at the UMass Extension (the Extension), in Amherst, MA, in general, a soil Nitrate Nitrogen concentration of 30 ppm (mg/Kg) or higher during the active growing season is sufficient for most plants. The Extension believes that interpretation of soil Nitrate Nitrogen levels below 30 ppm (mg/Kg) is somewhat nebulous because soil nitrogen is so dynamic. The Extension continues that when the concentration of soil Nitrate Nitrogen is less than 30 ppm (mg/Kg), additional fertilizer may or may not be needed. The soil borings which comprised B2-B5 WT are located in a grassed field northwest of the Margaret A. Neary Elementary School building. The presence of Nitrate Nitrogen may be due to applications of fertilizer to the grassed field; however, since the concentration at the sampled location is considered to be approximately 31 times lower than what the Extension may consider "sufficient for most plants", no additional discussion related to Nitrate Nitrogen as a contaminant appears warranted.

Furthermore, Total Phosphate was detected at Sample B2-B5 WT. According to an article from the Eleventh Annual on-Site Wastewater Treatment Conference Minimizing Impacts, Maximizing Resource Potential Soil Based Wastewater Treatment, titled "Soil Based Wastewater Treatment", by George W. Loomis, Soil Scientist, Dept. of Natural Resources Science, Director of the Cooperative Extension On-Site Wastewater Training Center at the University of Rhode Island (the "Article"), Phosphate is not a toxic compound, but it is the limiting nutrient in freshwater lakes and ponds responsible for eutrophication.

The Article continues that Phosphate anions are negatively charged ions capable of being strongly adsorbed to hydrous oxides of iron, aluminum, and manganese and carbonate surfaces on soil particles. It is also taken up by plant roots and incorporated into microbial cell material and organic matter. Most soils have the ability to adsorb phosphate loads from septic systems fairly well, so the concern is minimal. However, coarse textured soils with limited surface areas (due to low hydrous oxide or carbonate contents) can eventually reach their phosphate adsorptive capacity and not provide sufficient treatment to protect adjacent water bodies. Phosphate removals are also limited in saturated soils, and in situations where localized channel-type wastewater flow occurs.

PEER notes that concentration of total phosphate in soil within the groundwater table is approximately 26 times higher than the laboratory reporting limit. Whereas the Article indicates that "Phosphate removals are also limited in saturated soils," PEER notes that these soil sample locations were specifically collected at depths associated with saturated soils. Though the presence of total Phosphate occurs in the soil samples, with the understanding that the septic system leach field is not located in this grassed field, no additional discussion related to total Phosphate as a contaminant appears warranted. However, PEER recommends

that a consideration of excavation dewatering activities, if needed, in these soil types near or associated with wetlands be further reviewed. **Refer to Table 1H.**

General Chemistry

For Sample B2 Full, Sample B3 Full, Sample B4 Full, and Sample B5 Full, there were neither exceedances of Conductivity for acceptance at a lined landfill nor exceedances of Conductivity for acceptance at an unlined landfill. There were no exceedances of RCRA Characteristics for flashpoint/ignitability. Flashpoint/ignitability passed. There were no exceedances of RCRA Characteristics for pH. There were no exceedances of RCRA Characteristics for reactivity. Reactivity was Negative. **Refer to Table 1I.**

Initial Recommendations

PEER recommends that additional pre-characterization sampling of the subsurface soil in borings and/or test pits be completed once the exact proposed building or utility excavations or other site infrastructure depths and locations are known.

In addition, as it relates to the potential need for dewatering activities (as detailed in the Lahlaf Geotechnical Consulting, Inc. Preliminary Geotechnical Report), PEER understands that Lahlaf Geotechnical Consulting, Inc. is anticipating "that groundwater control procedures will be needed during construction." Should a construction general permit be required for this activity, PEER recommends considering the implementation of a sampling and analysis program for groundwater through the installation of temporary groundwater monitoring wells during any additional subsurface soil investigation, and prior to site redevelopment.

Please find directly included an excel spreadsheet (as a PDF) summarizing the results of the limited subsurface soil investigation at the Margaret A. Neary Elementary School, and including an Analysis Report by Phoenix Environmental Laboratories (dated April 25, 2024).

Please contact us directly at 781.238.8880, should you have any questions or require any clarification on this Limited Subsurface Soil Investigation Memorandum at the Margaret A. Neary Elementary School.

Sincerely,

PEER Consultants, P.C.

David Gorden, BCES
Senior Environmental Scientist

Table 1A - Volatile Organic Compounds
(Detected Analytes)

Margaret A. Neary Elementary School
53 Parkerville Road
Southborough, Massachusetts

Lab Sample Id						CQ52307		CQ52308		CQ52309		CQ52310		CQ52312		CQ52313	
Collection Date						4/15/2024		4/15/2024		4/15/2024		4/15/2024		4/15/2024		4/15/2024	
Client Id						B2 FULL		B3 FULL		B4 FULL		B5 FULL		B2-B5 0-2`		B2-B5 WT	
Matrix						Soil		Soil		Soil		Soil		Soil		Soil	
	Units	2020 MCP RCS-1	2020 MCP RCS-2	COMM-97-001 Lined Landfill	COMM-97-001 Unlined Landfill	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Volatiles By SW8260D																	
Total VOCs	ug/Kg	NL	NL	10,000	4,000	--		--		--		--		NS		NS	

-- = Analyte not detected in soil sample.
NS = VOCs were not sampled for in this sample.
NL = The MCP does not list a standard for this.
There were no detections of individual VOCs.
There were no exceedances of the MCP RCS-1 Criteria for an individual VOC.
There were no exceedances of the MCP RCS-2 Criteria for an individual VOC.
There were no exceedances of Total VOCs for acceptance at a lined landfill.
There were no exceedances of Total VOCs for acceptance at an unlined landfill.

Table 1B - Semivolatile Organic Compounds
(Detected Analytes)
Margaret A. Neary Elementary School
53 Parkerville Road
Southborough, Massachusetts

Lab Sample Id						CQ52307		CQ52308		CQ52309		CQ52310		CQ52312		CQ52313	
Collection Date						4/15/2024		4/15/2024		4/15/2024		4/15/2024		4/15/2024		4/15/2024	
Client Id						B2 FULL		B3 FULL		B4 FULL		B5 FULL		B2-B5 0-2`		B2-B5 WT	
Matrix						Soil		Soil		Soil		Soil		Soil		Soil	
	2020 MCP	2020 MCP	COMM-97-001 Lined	COMM-97-001 Unlined													
Units	RCS-1	RCS-2	Landfill	Landfill		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Semivolatiles By SW8270E																	
Total SVOCs	ug/Kg	NL	NL	100,000	100,000	--		--		--		--		NS		NS	

-- = Analyte not detected in soil sample.
NS = SVOCs were not sampled for in this sample.
NL = The MCP does not list a standard for this.
There were no detections of individual SVOCs.
There were no exceedances of the MCP RCS-1 Criteria for an individual SVOC.
There were no exceedances of the MCP RCS-2 Criteria for an individual SVOC.
There were no exceedances of Total SVOCs for acceptance at a lined landfill.
There were no exceedances of Total SVOCs for acceptance at an unlined landfill.

Table 1C - Metals
(Detected Analytes)

Margaret A. Neary Elementary School
53 Parkerville Road
Southborough, Massachusetts

Lab Sample Id						CQ52307		CQ52308		CQ52309		CQ52310		CQ52312		CQ52313	
Collection Date						4/15/2024		4/15/2024		4/15/2024		4/15/2024		4/15/2024		4/15/2024	
Client Id						B2 FULL		B3 FULL		B4 FULL		B5 FULL		B2-B5 0-2`		B2-B5 WT	
Matrix						Soil		Soil		Soil		Soil		Soil		Soil	
		2020 MCP	2020 MCP	COMM-97-001 Lined	COMM-97-001 Unlined												
Units		RCS-1	RCS-2	Landfill	Landfill	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Metals, Total																	
Arsenic	mg/Kg	20	20	40	40	3.95	0.66	3.71	0.75	2.82	0.72	3.78	0.70	NS		NS	
Barium	mg/Kg	1,000	3,000	NL	NL	35.4	0.33	46.9	0.38	32.7	0.36	48.3	0.35	NS		NS	
Beryllium	mg/Kg	100	200	80	30	--		0.34	0.30	--		0.35	0.28	NS		NS	
Cadmium	mg/Kg	80	80	1,000	1,000	--		--		0.4	0.36	--		NS		NS	
Chromium	mg/Kg	100	200	NL	NL	12.1	0.33	17.9	0.38	13.1	0.36	13.8	0.35	NS		NS	
Lead	mg/Kg	200	600	2,000	1,000	3.6	0.33	3.77	0.38	3.42	0.36	3.64	0.35	NS		NS	
Nickel	mg/Kg	700	1,000	NL	NL	8.46	0.33	11	0.38	10.3	0.36	9.65	0.35	NS		NS	
Vanadium	mg/Kg	500	800	NL	NL	17.8	0.33	24.1	0.38	20.8	0.36	22.3	0.35	NS		NS	
Zinc	mg/Kg	1,000	3,000	NL	NL	22.1	0.7	26.9	0.8	23.4	0.7	27.3	0.7	NS		NS	

-- = Analyte not detected in soil sample.
NS = Metals were not sampled for in this sample.
NL = COMM-97-001 does not list a standard for this metal.
There were neither exceedances of the MCP RCS-1 Criteria for individual Metals nor exceedances of the MCP RCS-2 Criteria for individual Metals.
There were neither exceedances of Metals for acceptance at a lined landfill nor exceedances of Metals for acceptance at an unlined landfill.

Table 1D - Polychlorinated Biphenyls
(Detected Analytes)

Margaret A. Neary Elementary School
53 Parkerville Road
Southborough, Massachusetts

Lab Sample Id					CQ52307		CQ52308		CQ52309		CQ52310		CQ52312		CQ52313	
Collection Date					4/15/2024		4/15/2024		4/15/2024		4/15/2024		4/15/2024		4/15/2024	
Client Id					B2 FULL		B3 FULL		B4 FULL		B5 FULL		B2-B5 0-2`		B2-B5 WT	
Matrix					Soil		Soil		Soil		Soil		Soil		Soil	
Units	2020 MCP RCS-1	2020 MCP RCS-2	COMM-97-001 Lined Landfill	COMM-97-001 Unlined Landfill	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
PCBs By SW8082A																
Total PCBs	NL	NL	<2,000	<2,000	--		--		--		--		NS		NS	

-- = Analyte not detected in soil sample.
NS = PCBs were not sampled for in this sample.
NL = The MCP does not list a standard for this.
There were neither exceedances of the MCP RCS-1 Criteria for individual Aroclors nor exceedances of the MCP RCS-2 Criteria for individual Aroclors.
There were neither exceedances of Total PCBs for acceptance at a lined landfill nor exceedances of Total PCBs for acceptance at an unlined landfill.

Table 1E - Total Petroleum Hydrocarbons
(Detected Analytes)

Margaret A. Neary Elementary School
53 Parkerville Road
Southborough, Massachusetts

Lab Sample Id						CQ52307		CQ52308		CQ52309		CQ52310		CQ52312		CQ52313	
Collection Date						4/15/2024		4/15/2024		4/15/2024		4/15/2024		4/15/2024		4/15/2024	
Client Id						B2 FULL		B3 FULL		B4 FULL		B5 FULL		B2-B5 0-2`		B2-B5 WT	
Matrix						Soil		Soil		Soil		Soil		Soil		Soil	
	Units	2020 MCP RCS-1	2020 MCP RCS-2	COMM-97-001 Lined Landfill	COMM-97-001 Unlined Landfill	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
TPH By SW8015D DRO																	
Total TPH	mg/kg	1,000	3,000	5,000	2,000	--		--		--		--		NS		NS	
Gasoline Range Hydrocarbons (C6-C10) By SW8015D GRO																	
GRO (C6-C10)	mg/Kg	NL	NL	NL	NL	--		--		--		--		NS		NS	

-- = Analyte not detected in soil sample.
NS = TPHs were not sampled for in this sample.
NL = The MCP and COMM-97-001 do not list a standard for this.
TPH DRO included Fuel Oil #2/Diesel Fuel, Fuel Oil #4, Fuel Oil #6, Kerosene, Motor Oil, Unidentified
GRO included gasoline range organics (C6-C10).
There were neither exceedances of the MCP RCS-1 Criteria for Total TPH DRO nor exceedances of the MCP RCS-2 Criteria for Total TPH DRO.
There were neither exceedances of TPH DRO for acceptance at a lined landfill nor exceedances of TPH DRO for acceptance at an unlined landfill.

Table 1F - Pesticides
(Detected Analytes)

Margaret A. Neary Elementary School
53 Parkerville Road
Southborough, Massachusetts

Lab Sample Id					CQ52307		CQ52308		CQ52309		CQ52310		CQ52312		CQ52313	
Collection Date					4/15/2024		4/15/2024		4/15/2024		4/15/2024		4/15/2024		4/15/2024	
Client Id					B2 FULL		B3 FULL		B4 FULL		B5 FULL		B2-B5 0-2`		B2-B5 WT	
Matrix					Soil		Soil		Soil		Soil		Soil		Soil	
Units	2020 MCP RCS-1	2020 MCP RCS-2	COMM-97-001 Lined Landfill	COMM-97-001 Unlined Landfill	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Pesticides By SW8081B																

There were no detections of Pesticides for the soil sample (B2-B5 0-2') analyzed.
There were neither exceedances of MCP RCS-1 criteria for individual pesticides nor exceedances of MCP RCS-2 criteria for individual pesticides.
COMM-97-001 does not provide regulatory criteria for pesticides.

Table 1G - Herbicides
(Detected Analytes)

Margaret A. Neary Elementary School
53 Parkerville Road
Southborough, Massachusetts

Lab Sample Id					CQ52307		CQ52308		CQ52309		CQ52310		CQ52312		CQ52313	
Collection Date					4/15/2024		4/15/2024		4/15/2024		4/15/2024		4/15/2024		4/15/2024	
Client Id					B2 FULL		B3 FULL		B4 FULL		B5 FULL		B2-B5 0-2`		B2-B5 WT	
Matrix					Soil		Soil		Soil		Soil		Soil		Soil	
Units	2020 MCP RCS-1	2020 MCP RCS-2	COMM-97-001 Lined Landfill	COMM-97-001 Unlined Landfill	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Chlorinated Herbicides By SW8151A																

There were no detections of Herbicides for the soil sample (B2-B5 0-2') analyzed.
There were neither exceedances of MCP RCS-1 criteria for individual herbicides nor exceedances of MCP RCS-2 criteria for individual herbicides.
COMM-97-001 does not provide regulatory criteria for herbicides.

Table 1H - Miscellaneous / Biological
(Detected Analytes)

Margaret A. Neary Elementary School
53 Parkerville Road
Southborough, Massachusetts

Lab Sample Id						CQ52307		CQ52308		CQ52309		CQ52310		CQ52312		CQ52313	
Collection Date						4/15/2024		4/15/2024		4/15/2024		4/15/2024		4/15/2024		4/15/2024	
Client Id						B2 FULL		B3 FULL		B4 FULL		B5 FULL		B2-B5 0-2`		B2-B5 WT	
Matrix						Soil		Soil		Soil		Soil		Soil		Soil	
	2020 MCP	2020 MCP	COMM-97-001 Lined	COMM-97-001 Unlined													
Units	RCS-1	RCS-2	Landfill	Landfill		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Miscellaneous/Biological																	
Chloride	mg/kg	NL	NL	NL	NL	NS		NS		NS		NS		NS		--	
Fecal Coliforms	cfu/g	NL	NL	NL	NL	NS		NS		NS		NS		NS		--	
Nitrite as N	mg/kg	NL	NL	NL	NL	NS		NS		NS		NS		NS		--	
Nitrate as N	mg/kg	NL	NL	NL	NL	NS		NS		NS		NS		NS		0.93	0.56
Phosphorus, Total as P	mg/Kg	NL	NL	NL	NL	NS		NS		NS		NS		NS		365	14

There were no detections of chloride, fecal coliforms, and nitrite as nitrogen for the soil sample (B2-B5 WT) analyzed, where "WT" refers to within the groundwater table.
-- = Analyte not detected in soil sample.
NL = The MCP and COMM-97-001 do not list a standard for this constituent.
NS = Constituent was not sampled for in this sample.

Table 1I - General Chemistry
(Detected Analytes)

Margaret A. Neary Elementary School
53 Parkerville Road
Southborough, Massachusetts

							CQ52307		CQ52308		CQ52309		CQ52310		CQ52312		CQ52313	
Lab Sample Id																		
Collection Date							4/15/2024		4/15/2024		4/15/2024		4/15/2024		4/15/2024		4/15/2024	
Client Id							B2 FULL		B3 FULL		B4 FULL		B5 FULL		B2-B5 0-2`		B2-B5 WT	
Matrix							Soil		Soil		Soil		Soil		Soil		Soil	
		2020 MCP	2020 MCP	RCRA Characteristics	COMM-97-001 Lined	COMM-97-001 Unlined												
Units		RCS-1	RCS-2	40 CFR 261	Landfill	Landfill	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Miscellaneous/Inorganics																		
Percent Solid	%	NL	NL	NL	NL	NL	94		90		90		89		80		90	
Conductivity - Soil Matrix	umhos/cm	NL	NL	NL	8,000	4,000	24	5	20	5	23	5	25	5	NS		NS	
Corrosivity	Pos/Neg	NL	NL	NL	NL	NL	**Negative**		**Negative**		**Negative**		**Negative**					
Flash Point	Degree F	NL	NL	≤ 140	NL	NL	>200	200	>200	200	>200	200	>200	200	NS		NS	
Ignitability	degree F	NL	NL	≤ 140	NL	NL	**Passed**	140	**Passed**	140	**Passed**	140	**Passed**	140	NS		NS	
pH at 25C - Soil	pH Units	NL	NL	≤ 2 and ≥ 12.5	NL	NL	7.22	1.00	7.4	1.00	7.12	1.00	7.32	1.00	NS		NS	
Reactivity Cyanide	mg/Kg	NL	NL	40 CFR 261.23	NL	NL	< 5	5	< 5	5	< 5	5	< 5	5	NS		NS	
Reactivity Sulfide	mg/Kg	NL	NL	40 CFR 261.23	NL	NL	< 20	20	< 20	20	< 20	20	< 20	20	NS		NS	
Reactivity	Pos/Neg	NL	NL	40 CFR 261.23	NL	NL	**Negative**		**Negative**		**Negative**		**Negative**					

NL = The MCP and COMM-97-001 do not list a standard for this constituent.
NS = Constituent was not sampled for in this sample.
There were neither exceedances of Conductivity for acceptance at a lined landfill nor exceedances of Conductivity for acceptance at an unlined landfill.
There were no exceedances of RCRA Characteristics for flashpoint/ignitability. Flashpoint/ignitability passed.
There were no exceedances of RCRA Characteristics for pH.
There were no exceedances of RCRA Characteristics for reactivity. Reactivity was Negative.

PHOENIX
Environmental Laboratories, Inc.

Thursday, April 25, 2024

Attn: Mr Dave Gorden
PEER Consultants
10 Mall Road, Suite 301
Burlington, MA 01803

Project ID: **M.A.N. SCHOOL**
SDG ID: **GCQ52307**
Sample ID#s: CQ52307 - CQ52314

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

Sample Id Cross Reference

April 25, 2024

SDG I.D.: GCQ52307

Project ID: M.A.N. SCHOOL

Client Id	Lab Id	Matrix
B2 FULL	CQ52307	SOIL
B3 FULL	CQ52308	SOIL
B4 FULL	CQ52309	SOIL
B5 FULL	CQ52310	SOIL
TB041524 LL	CQ52311	SOIL
B2-B5 0-2`	CQ52312	SOIL
B2-B5 WT	CQ52313	SOIL
TB041524 HL	CQ52314	SOIL

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

Analysis Report

April 25, 2024

FOR: Attn: Mr Dave Gorden
PEER Consultants
10 Mall Road, Suite 301
Burlington, MA 01803

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/15/24	14:37
Location Code:	PEER	Received by:	CP	04/16/24	14:45
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	8404				

Laboratory Data

SDG ID: GCQ52307
Phoenix ID: CQ52307

Project ID: M.A.N. SCHOOL
Client ID: B2 FULL

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.33	0.33	mg/Kg	1	04/17/24	TH	SW6010D
Arsenic	3.95	0.66	mg/Kg	1	04/17/24	TH	SW6010D
Barium	35.4	0.33	mg/Kg	1	04/17/24	TH	SW6010D
Beryllium	< 0.26	0.26	mg/Kg	1	04/17/24	TH	SW6010D
Cadmium	< 0.33	0.33	mg/Kg	1	04/17/24	TH	SW6010D
Chromium	12.1	0.33	mg/Kg	1	04/17/24	TH	SW6010D
Mercury	< 0.03	0.03	mg/Kg	2	04/17/24	ZT	SW7471B
Nickel	8.46	0.33	mg/Kg	1	04/17/24	TH	SW6010D
Lead	3.60	0.33	mg/Kg	1	04/17/24	PS	SW6010D
Antimony	< 3.3	3.3	mg/Kg	1	04/17/24	TH	SW6010D
Selenium	< 1.3	1.3	mg/Kg	1	04/17/24	TH	SW6010D
Thallium	< 3.0	3.0	mg/Kg	1	04/17/24	TH	SW6010D
Vanadium	17.8	0.33	mg/Kg	1	04/17/24	TH	SW6010D
Zinc	22.1	0.7	mg/Kg	1	04/17/24	TH	SW6010D
Percent Solid	94		%		04/16/24	CV	SW846-%Solid
Conductivity - Soil Matrix	24	5	umhos/cm	1	04/17/24	JY	SW9050A
Corrosivity	Negative		Pos/Neg	1	04/16/24	MW	SW846-Corr
Flash Point	>200	200	Degree F	1	04/19/24	G	SW1010B
Ignitability	Passed	140	degree F	1	04/19/24	G	SW846-Ignit
pH at 25C - Soil	7.22	1.00	pH Units	1	04/16/24 23:31	MW	SW846 9045D
Reactivity Cyanide	< 5	5	mg/Kg	1	04/19/24	EG/GD	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	04/22/24	EG/GD	SW846 CH7
Reactivity	Negative		Pos/Neg	1	04/22/24	EG/GD	SW846-React
Field Extraction	Completed				04/15/24		SW5035A
Mercury Digestion	Completed				04/17/24	MQ/HL	SW7471B
Extraction of ETPH	Completed				04/19/24	HL/H/U	SW3546
Soil Extraction for PCB	Completed				04/22/24	H/A	SW3546

Ver 1

Project ID: M.A.N. SCHOOL
Client ID: B2 FULL

Phoenix I.D.: CQ52307

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Soil Extraction for SVOA	Completed				04/19/24	C/A	SW3546
Total Metals Digest	Completed				04/16/24	J/AG	SW3050B
Gasoline Range Hydrocarbons (C6-C10)							
GRO (C6-C10)	ND	5.1	mg/Kg	50	04/17/24	V	SW8015D GRO
QA/QC Surrogates							
% 2,5-Dibromotoluene (FID)	90		%	50	04/17/24	V	70 - 130 %
Polychlorinated Biphenyls							
PCB-1016	ND	70	ug/Kg	2	04/23/24	SC	SW8082A
PCB-1221	ND	70	ug/Kg	2	04/23/24	SC	SW8082A
PCB-1232	ND	70	ug/Kg	2	04/23/24	SC	SW8082A
PCB-1242	ND	70	ug/Kg	2	04/23/24	SC	SW8082A
PCB-1248	ND	70	ug/Kg	2	04/23/24	SC	SW8082A
PCB-1254	ND	70	ug/Kg	2	04/23/24	SC	SW8082A
PCB-1260	ND	70	ug/Kg	2	04/23/24	SC	SW8082A
PCB-1262	ND	70	ug/Kg	2	04/23/24	SC	SW8082A
PCB-1268	ND	70	ug/Kg	2	04/23/24	SC	SW8082A
QA/QC Surrogates							
% DCBP	91		%	2	04/23/24	SC	30 - 150 %
% DCBP (Confirmation)	90		%	2	04/23/24	SC	30 - 150 %
% TCMX	80		%	2	04/23/24	SC	30 - 150 %
% TCMX (Confirmation)	78		%	2	04/23/24	SC	30 - 150 %
TPH by GC (Extractable (C9-C36))							
Fuel Oil #2 / Diesel Fuel	ND	52	mg/kg	1	04/20/24	JRB	SW8015D DRO
Fuel Oil #4	ND	52	mg/kg	1	04/20/24	JRB	SW8015D DRO
Fuel Oil #6	ND	52	mg/kg	1	04/20/24	JRB	SW8015D DRO
Kerosene	ND	52	mg/kg	1	04/20/24	JRB	SW8015D DRO
Motor Oil	ND	52	mg/kg	1	04/20/24	JRB	SW8015D DRO
Total TPH	ND	52	mg/kg	1	04/20/24	JRB	SW8015D DRO
Unidentified	ND	52	mg/kg	1	04/20/24	JRB	SW8015D DRO
QA/QC Surrogates							
% COD (surr)	73		%	1	04/20/24	JRB	50 - 150 %
% Terphenyl (surr)	80		%	1	04/20/24	JRB	50 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
1,1,1-Trichloroethane	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	3.2	ug/Kg	1	04/16/24	JLI	SW8260D
1,1,2-Trichloroethane	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
1,1-Dichloroethane	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
1,1-Dichloroethene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
1,1-Dichloropropene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
1,2,3-Trichlorobenzene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
1,2,3-Trichloropropane	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
1,2-Dibromoethane	ND	0.53	ug/Kg	1	04/16/24	JLI	SW8260D

Project ID: M.A.N. SCHOOL
Client ID: B2 FULL

Phoenix I.D.: CQ52307

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2-Dichlorobenzene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
1,2-Dichloroethane	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
1,2-Dichloropropane	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
1,3-Dichlorobenzene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
1,3-Dichloropropane	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
1,4-Dichlorobenzene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
2,2-Dichloropropane	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
2-Chlorotoluene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
2-Hexanone	ND	27	ug/Kg	1	04/16/24	JLI	SW8260D
2-Isopropyltoluene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
4-Chlorotoluene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
4-Methyl-2-pentanone	ND	27	ug/Kg	1	04/16/24	JLI	SW8260D
Acetone	ND	270	ug/Kg	1	04/16/24	JLI	SW8260D
Acrylonitrile	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
Benzene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
Bromobenzene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
Bromochloromethane	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
Bromodichloromethane	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
Bromoform	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
Bromomethane	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
Carbon Disulfide	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
Carbon tetrachloride	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
Chlorobenzene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
Chloroethane	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
Chloroform	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
Chloromethane	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
cis-1,2-Dichloroethene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
cis-1,3-Dichloropropene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
Dibromochloromethane	ND	3.2	ug/Kg	1	04/16/24	JLI	SW8260D
Dibromomethane	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
Dichlorodifluoromethane	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
Ethylbenzene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
Hexachlorobutadiene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
Isopropylbenzene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
m&p-Xylene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
Methyl Ethyl Ketone	ND	32	ug/Kg	1	04/16/24	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	1	04/16/24	JLI	SW8260D
Methylene chloride	ND	11	ug/Kg	1	04/16/24	JLI	SW8260D
Naphthalene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
n-Butylbenzene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
n-Propylbenzene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
o-Xylene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
p-Isopropyltoluene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
sec-Butylbenzene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
Styrene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
tert-Butylbenzene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
Tetrachloroethene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
Tetrahydrofuran (THF)	ND	11	ug/Kg	1	04/16/24	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Toluene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
Total Xylenes	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
trans-1,2-Dichloroethene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
trans-1,3-Dichloropropene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	1	04/16/24	JLI	SW8260D
Trichloroethene	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
Trichlorofluoromethane	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
Trichlorotrifluoroethane	ND	11	ug/Kg	1	04/16/24	JLI	SW8260D
Vinyl chloride	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	1	04/16/24	JLI	70 - 130 %
% Bromofluorobenzene	95		%	1	04/16/24	JLI	70 - 130 %
% Dibromofluoromethane	94		%	1	04/16/24	JLI	70 - 130 %
% Toluene-d8	99		%	1	04/16/24	JLI	70 - 130 %
Oxygenates & Dioxane							
1,4-Dioxane	ND	110	ug/Kg	1	04/16/24	JLI	SW8260D (OXY)
Diethyl ether	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D (OXY)
Di-isopropyl ether	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D (OXY)
Ethyl tert-butyl ether	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D (OXY)
tert-amyl methyl ether	ND	5.3	ug/Kg	1	04/16/24	JLI	SW8260D (OXY)
Semivolatiles							
1,1-Biphenyl	ND	50	ug/Kg	1	04/20/24	MR	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
1,2,4-Trichlorobenzene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
1,2-Dichlorobenzene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
1,2-Diphenylhydrazine	ND	350	ug/Kg	1	04/20/24	MR	SW8270E
1,3-Dichlorobenzene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
1,4-Dichlorobenzene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
2,4,5-Trichlorophenol	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
2,4,6-Trichlorophenol	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
2,4-Dichlorophenol	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
2,4-Dimethylphenol	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
2,4-Dinitrophenol	ND	350	ug/Kg	1	04/20/24	MR	SW8270E
2,4-Dinitrotoluene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
2,6-Dinitrotoluene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
2-Chloronaphthalene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
2-Chlorophenol	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
2-Methylnaphthalene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
2-Methylphenol (o-cresol)	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
2-Nitroaniline	ND	350	ug/Kg	1	04/20/24	MR	SW8270E
2-Nitrophenol	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	350	ug/Kg	1	04/20/24	MR	SW8270E
3,3'-Dichlorobenzidine	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
3-Nitroaniline	ND	350	ug/Kg	1	04/20/24	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	350	ug/Kg	1	04/20/24	MR	SW8270E
4-Bromophenyl phenyl ether	ND	350	ug/Kg	1	04/20/24	MR	SW8270E
4-Chloro-3-methylphenol	ND	250	ug/Kg	1	04/20/24	MR	SW8270E

Project ID: M.A.N. SCHOOL
Client ID: B2 FULL

Phoenix I.D.: CQ52307

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
4-Chloroaniline	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
4-Nitroaniline	ND	560	ug/Kg	1	04/20/24	MR	SW8270E
4-Nitrophenol	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Acenaphthene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Acenaphthylene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Acetophenone	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Aniline	ND	350	ug/Kg	1	04/20/24	MR	SW8270E
Anthracene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Benz(a)anthracene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Benzidine	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Benzo(a)pyrene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Benzo(b)fluoranthene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Benzo(ghi)perylene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Benzo(k)fluoranthene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Benzoic acid	ND	700	ug/Kg	1	04/20/24	MR	SW8270E
Benzyl butyl phthalate	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Bis(2-chloroethyl)ether	ND	350	ug/Kg	1	04/20/24	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	350	ug/Kg	1	04/20/24	MR	SW8270E
Carbazole	ND	350	ug/Kg	1	04/20/24	MR	SW8270E
Chrysene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Dibenz(a,h)anthracene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Dibenzofuran	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Diethyl phthalate	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Dimethylphthalate	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Di-n-butylphthalate	ND	350	ug/Kg	1	04/20/24	MR	SW8270E
Di-n-octylphthalate	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Fluoranthene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Fluorene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Hexachlorobenzene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Hexachlorobutadiene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Hexachlorocyclopentadiene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Hexachloroethane	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Indeno(1,2,3-cd)pyrene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Isophorone	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Naphthalene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Nitrobenzene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
N-Nitrosodimethylamine	ND	350	ug/Kg	1	04/20/24	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
N-Nitrosodiphenylamine	ND	350	ug/Kg	1	04/20/24	MR	SW8270E
Pentachloronitrobenzene	ND	350	ug/Kg	1	04/20/24	MR	SW8270E
Pentachlorophenol	ND	350	ug/Kg	1	04/20/24	MR	SW8270E
Phenanthrene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Phenol	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Pyrene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Pyridine	ND	350	ug/Kg	1	04/20/24	MR	SW8270E
QA/QC Surrogates							
% 2,4,6-Tribromophenol	73		%	1	04/20/24	MR	30 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% 2-Fluorobiphenyl	64		%	1	04/20/24	MR	30 - 130 %
% 2-Fluorophenol	64		%	1	04/20/24	MR	30 - 130 %
% Nitrobenzene-d5	63		%	1	04/20/24	MR	30 - 130 %
% Phenol-d5	65		%	1	04/20/24	MR	30 - 130 %
% Terphenyl-d14	72		%	1	04/20/24	MR	30 - 130 %

Massachusetts does not offer certification for Soil/Solid matrices.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
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:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Corrosivity is based solely on the pH analysis performed above.

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

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
April 25, 2024
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

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

Analysis Report

April 25, 2024

FOR: Attn: Mr Dave Gorden
PEER Consultants
10 Mall Road, Suite 301
Burlington, MA 01803

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/15/24	11:39
Location Code:	PEER	Received by:	CP	04/16/24	14:45
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	8404				

Laboratory Data

SDG ID: GCQ52307
Phoenix ID: CQ52308

Project ID: M.A.N. SCHOOL
Client ID: B3 FULL

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.38	0.38	mg/Kg	1	04/17/24	TH	SW6010D
Arsenic	3.71	0.75	mg/Kg	1	04/17/24	TH	SW6010D
Barium	46.9	0.38	mg/Kg	1	04/17/24	TH	SW6010D
Beryllium	0.34	0.30	mg/Kg	1	04/17/24	TH	SW6010D
Cadmium	< 0.38	0.38	mg/Kg	1	04/17/24	TH	SW6010D
Chromium	17.9	0.38	mg/Kg	1	04/17/24	TH	SW6010D
Mercury	< 0.03	0.03	mg/Kg	2	04/17/24	ZT	SW7471B
Nickel	11.0	0.38	mg/Kg	1	04/17/24	TH	SW6010D
Lead	3.77	0.38	mg/Kg	1	04/17/24	PS	SW6010D
Antimony	< 3.8	3.8	mg/Kg	1	04/17/24	TH	SW6010D
Selenium	< 1.5	1.5	mg/Kg	1	04/17/24	TH	SW6010D
Thallium	< 3.4	3.4	mg/Kg	1	04/17/24	TH	SW6010D
Vanadium	24.1	0.38	mg/Kg	1	04/17/24	TH	SW6010D
Zinc	26.9	0.8	mg/Kg	1	04/17/24	TH	SW6010D
Percent Solid	90		%		04/16/24	CV	SW846-%Solid
Conductivity - Soil Matrix	20	5	umhos/cm	1	04/17/24	JY	SW9050A
Corrosivity	Negative		Pos/Neg	1	04/16/24	MW	SW846-Corr
Flash Point	>200	200	Degree F	1	04/19/24	G	SW1010B
Ignitability	Passed	140	degree F	1	04/19/24	G	SW846-Ignit
pH at 25C - Soil	7.40	1.00	pH Units	1	04/16/24 23:31	MW	SW846 9045D
Reactivity Cyanide	< 5	5	mg/Kg	1	04/19/24	EG/GD	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	04/22/24	EG/GD	SW846 CH7
Reactivity	Negative		Pos/Neg	1	04/22/24	EG/GD	SW846-React
Field Extraction	Completed				04/15/24		SW5035A
Mercury Digestion	Completed				04/17/24	MQ/HL	SW7471B
Extraction of ETPH	Completed				04/19/24	HL/H/U	SW3546
Soil Extraction for PCB	Completed				04/22/24	H/A	SW3546

Ver 1

Project ID: M.A.N. SCHOOL
Client ID: B3 FULL

Phoenix I.D.: CQ52308

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Soil Extraction for SVOA	Completed				04/19/24	C/A	SW3546
Total Metals Digest	Completed				04/16/24	J/AG	SW3050B
Gasoline Range Hydrocarbons (C6-C10)							
GRO (C6-C10)	ND	5.0	mg/Kg	50	04/17/24	V	SW8015D GRO
QA/QC Surrogates							
% 2,5-Dibromotoluene (FID)	94		%	50	04/17/24	V	70 - 130 %
Polychlorinated Biphenyls							
PCB-1016	ND	73	ug/Kg	2	04/23/24	SC	SW8082A
PCB-1221	ND	73	ug/Kg	2	04/23/24	SC	SW8082A
PCB-1232	ND	73	ug/Kg	2	04/23/24	SC	SW8082A
PCB-1242	ND	73	ug/Kg	2	04/23/24	SC	SW8082A
PCB-1248	ND	73	ug/Kg	2	04/23/24	SC	SW8082A
PCB-1254	ND	73	ug/Kg	2	04/23/24	SC	SW8082A
PCB-1260	ND	73	ug/Kg	2	04/23/24	SC	SW8082A
PCB-1262	ND	73	ug/Kg	2	04/23/24	SC	SW8082A
PCB-1268	ND	73	ug/Kg	2	04/23/24	SC	SW8082A
QA/QC Surrogates							
% DCBP	86		%	2	04/23/24	SC	30 - 150 %
% DCBP (Confirmation)	85		%	2	04/23/24	SC	30 - 150 %
% TCMX	79		%	2	04/23/24	SC	30 - 150 %
% TCMX (Confirmation)	76		%	2	04/23/24	SC	30 - 150 %
TPH by GC (Extractable (C9-C36))							
Fuel Oil #2 / Diesel Fuel	ND	55	mg/kg	1	04/20/24	JRB	SW8015D DRO
Fuel Oil #4	ND	55	mg/kg	1	04/20/24	JRB	SW8015D DRO
Fuel Oil #6	ND	55	mg/kg	1	04/20/24	JRB	SW8015D DRO
Kerosene	ND	55	mg/kg	1	04/20/24	JRB	SW8015D DRO
Motor Oil	ND	55	mg/kg	1	04/20/24	JRB	SW8015D DRO
Total TPH	ND	55	mg/kg	1	04/20/24	JRB	SW8015D DRO
Unidentified	ND	55	mg/kg	1	04/20/24	JRB	SW8015D DRO
QA/QC Surrogates							
% COD (surr)	66		%	1	04/20/24	JRB	50 - 150 %
% Terphenyl (surr)	73		%	1	04/20/24	JRB	50 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
1,1,1-Trichloroethane	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	2.9	ug/Kg	1	04/16/24	JLI	SW8260D
1,1,2-Trichloroethane	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
1,1-Dichloroethane	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
1,1-Dichloroethene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
1,1-Dichloropropene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
1,2,3-Trichlorobenzene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
1,2,3-Trichloropropane	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
1,2-Dibromoethane	ND	0.49	ug/Kg	1	04/16/24	JLI	SW8260D

Project ID: M.A.N. SCHOOL
Client ID: B3 FULL

Phoenix I.D.: CQ52308

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2-Dichlorobenzene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
1,2-Dichloroethane	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
1,2-Dichloropropane	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
1,3-Dichlorobenzene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
1,3-Dichloropropane	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
1,4-Dichlorobenzene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
2,2-Dichloropropane	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
2-Chlorotoluene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
2-Hexanone	ND	24	ug/Kg	1	04/16/24	JLI	SW8260D
2-Isopropyltoluene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
4-Chlorotoluene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
4-Methyl-2-pentanone	ND	24	ug/Kg	1	04/16/24	JLI	SW8260D
Acetone	ND	240	ug/Kg	1	04/16/24	JLI	SW8260D
Acrylonitrile	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
Benzene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
Bromobenzene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
Bromochloromethane	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
Bromodichloromethane	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
Bromoform	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
Bromomethane	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
Carbon Disulfide	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
Carbon tetrachloride	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
Chlorobenzene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
Chloroethane	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
Chloroform	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
Chloromethane	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
cis-1,2-Dichloroethene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
cis-1,3-Dichloropropene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
Dibromochloromethane	ND	2.9	ug/Kg	1	04/16/24	JLI	SW8260D
Dibromomethane	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
Dichlorodifluoromethane	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
Ethylbenzene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
Hexachlorobutadiene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
Isopropylbenzene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
m&p-Xylene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
Methyl Ethyl Ketone	ND	29	ug/Kg	1	04/16/24	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	9.8	ug/Kg	1	04/16/24	JLI	SW8260D
Methylene chloride	ND	9.8	ug/Kg	1	04/16/24	JLI	SW8260D
Naphthalene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
n-Butylbenzene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
n-Propylbenzene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
o-Xylene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
p-Isopropyltoluene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
sec-Butylbenzene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
Styrene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
tert-Butylbenzene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
Tetrachloroethene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
Tetrahydrofuran (THF)	ND	9.8	ug/Kg	1	04/16/24	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Toluene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
Total Xylenes	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
trans-1,2-Dichloroethene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
trans-1,3-Dichloropropene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
trans-1,4-dichloro-2-butene	ND	9.8	ug/Kg	1	04/16/24	JLI	SW8260D
Trichloroethene	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
Trichlorofluoromethane	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
Trichlorotrifluoroethane	ND	9.8	ug/Kg	1	04/16/24	JLI	SW8260D
Vinyl chloride	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	1	04/16/24	JLI	70 - 130 %
% Bromofluorobenzene	96		%	1	04/16/24	JLI	70 - 130 %
% Dibromofluoromethane	92		%	1	04/16/24	JLI	70 - 130 %
% Toluene-d8	99		%	1	04/16/24	JLI	70 - 130 %
Oxygenates & Dioxane							
1,4-Dioxane	ND	98	ug/Kg	1	04/16/24	JLI	SW8260D (OXY)
Diethyl ether	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D (OXY)
Di-isopropyl ether	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D (OXY)
Ethyl tert-butyl ether	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D (OXY)
tert-amyl methyl ether	ND	4.9	ug/Kg	1	04/16/24	JLI	SW8260D (OXY)
Semivolatiles							
1,1-Biphenyl	ND	50	ug/Kg	1	04/20/24	MR	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
1,2,4-Trichlorobenzene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
1,2-Dichlorobenzene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
1,2-Diphenylhydrazine	ND	360	ug/Kg	1	04/20/24	MR	SW8270E
1,3-Dichlorobenzene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
1,4-Dichlorobenzene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
2,4,5-Trichlorophenol	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
2,4,6-Trichlorophenol	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
2,4-Dichlorophenol	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
2,4-Dimethylphenol	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
2,4-Dinitrophenol	ND	360	ug/Kg	1	04/20/24	MR	SW8270E
2,4-Dinitrotoluene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
2,6-Dinitrotoluene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
2-Chloronaphthalene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
2-Chlorophenol	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
2-Methylnaphthalene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
2-Methylphenol (o-cresol)	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
2-Nitroaniline	ND	360	ug/Kg	1	04/20/24	MR	SW8270E
2-Nitrophenol	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	360	ug/Kg	1	04/20/24	MR	SW8270E
3,3'-Dichlorobenzidine	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
3-Nitroaniline	ND	360	ug/Kg	1	04/20/24	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	360	ug/Kg	1	04/20/24	MR	SW8270E
4-Bromophenyl phenyl ether	ND	360	ug/Kg	1	04/20/24	MR	SW8270E
4-Chloro-3-methylphenol	ND	250	ug/Kg	1	04/20/24	MR	SW8270E

Project ID: M.A.N. SCHOOL
Client ID: B3 FULL

Phoenix I.D.: CQ52308

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
4-Chloroaniline	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
4-Nitroaniline	ND	580	ug/Kg	1	04/20/24	MR	SW8270E
4-Nitrophenol	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Acenaphthene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Acenaphthylene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Acetophenone	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Aniline	ND	360	ug/Kg	1	04/20/24	MR	SW8270E
Anthracene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Benz(a)anthracene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Benzidine	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Benzo(a)pyrene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Benzo(b)fluoranthene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Benzo(ghi)perylene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Benzo(k)fluoranthene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Benzoic acid	ND	720	ug/Kg	1	04/20/24	MR	SW8270E
Benzyl butyl phthalate	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Bis(2-chloroethyl)ether	ND	360	ug/Kg	1	04/20/24	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	360	ug/Kg	1	04/20/24	MR	SW8270E
Carbazole	ND	360	ug/Kg	1	04/20/24	MR	SW8270E
Chrysene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Dibenz(a,h)anthracene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Dibenzofuran	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Diethyl phthalate	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Dimethylphthalate	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Di-n-butylphthalate	ND	360	ug/Kg	1	04/20/24	MR	SW8270E
Di-n-octylphthalate	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Fluoranthene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Fluorene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Hexachlorobenzene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Hexachlorobutadiene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Hexachlorocyclopentadiene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Hexachloroethane	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Indeno(1,2,3-cd)pyrene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Isophorone	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Naphthalene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Nitrobenzene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
N-Nitrosodimethylamine	ND	360	ug/Kg	1	04/20/24	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
N-Nitrosodiphenylamine	ND	360	ug/Kg	1	04/20/24	MR	SW8270E
Pentachloronitrobenzene	ND	360	ug/Kg	1	04/20/24	MR	SW8270E
Pentachlorophenol	ND	360	ug/Kg	1	04/20/24	MR	SW8270E
Phenanthrene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Phenol	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Pyrene	ND	250	ug/Kg	1	04/20/24	MR	SW8270E
Pyridine	ND	360	ug/Kg	1	04/20/24	MR	SW8270E
QA/QC Surrogates							
% 2,4,6-Tribromophenol	73		%	1	04/20/24	MR	30 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% 2-Fluorobiphenyl	65		%	1	04/20/24	MR	30 - 130 %
% 2-Fluorophenol	66		%	1	04/20/24	MR	30 - 130 %
% Nitrobenzene-d5	64		%	1	04/20/24	MR	30 - 130 %
% Phenol-d5	66		%	1	04/20/24	MR	30 - 130 %
% Terphenyl-d14	72		%	1	04/20/24	MR	30 - 130 %

Massachusetts does not offer certification for Soil/Solid matrices.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
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:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Corrosivity is based solely on the pH analysis performed above.

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

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
April 25, 2024
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

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

Analysis Report

April 25, 2024

FOR: Attn: Mr Dave Gorden
PEER Consultants
10 Mall Road, Suite 301
Burlington, MA 01803

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/15/24	13:16
Location Code:	PEER	Received by:	CP	04/16/24	14:45
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	8404				

Laboratory Data

SDG ID: GCQ52307
Phoenix ID: CQ52309

Project ID: M.A.N. SCHOOL
Client ID: B4 FULL

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	1	04/17/24	PM	SW6010D
Arsenic	2.82	0.72	mg/Kg	1	04/17/24	PM	SW6010D
Barium	32.7	0.36	mg/Kg	1	04/17/24	PM	SW6010D
Beryllium	< 0.29	0.29	mg/Kg	1	04/17/24	PM	SW6010D
Cadmium	0.40	0.36	mg/Kg	1	04/17/24	PM	SW6010D
Chromium	13.1	0.36	mg/Kg	1	04/17/24	PM	SW6010D
Mercury	< 0.03	0.03	mg/Kg	2	04/17/24	ZT	SW7471B
Nickel	10.3	0.36	mg/Kg	1	04/17/24	PM	SW6010D
Lead	3.42	0.36	mg/Kg	1	04/17/24	PM	SW6010D
Antimony	< 3.6	3.6	mg/Kg	1	04/17/24	PM	SW6010D
Selenium	< 1.4	1.4	mg/Kg	1	04/17/24	PM	SW6010D
Thallium	< 3.2	3.2	mg/Kg	1	04/17/24	PM	SW6010D
Vanadium	20.8	0.36	mg/Kg	1	04/17/24	PM	SW6010D
Zinc	23.4	0.7	mg/Kg	1	04/17/24	PM	SW6010D
Percent Solid	90		%		04/16/24	CV	SW846-%Solid
Conductivity - Soil Matrix	23	5	umhos/cm	1	04/17/24	JY	SW9050A
Corrosivity	Negative		Pos/Neg	1	04/16/24	MW	SW846-Corr
Flash Point	>200	200	Degree F	1	04/19/24	G	SW1010B
Ignitability	Passed	140	degree F	1	04/19/24	G	SW846-Ignit
pH at 25C - Soil	7.12	1.00	pH Units	1	04/16/24 23:31	MW	SW846 9045D
Reactivity Cyanide	< 5	5	mg/Kg	1	04/19/24	EG/GD	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	04/22/24	EG/GD	SW846 CH7
Reactivity	Negative		Pos/Neg	1	04/22/24	EG/GD	SW846-React
Field Extraction	Completed				04/15/24		SW5035A
Mercury Digestion	Completed				04/17/24	MQ/HL	SW7471B
Extraction of ETPH	Completed				04/19/24	HL/H/U	SW3546
Soil Extraction for PCB	Completed				04/22/24	C/U	SW3546

Ver 1

Project ID: M.A.N. SCHOOL
Client ID: B4 FULL

Phoenix I.D.: CQ52309

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference	
Soil Extraction for SVOA	Completed				04/19/24	C/A	SW3546	
Total Metals Digest	Completed				04/16/24	J/AG	SW3050B	
Gasoline Range Hydrocarbons (C6-C10)								
GRO (C6-C10)	ND	4.8	mg/Kg	50	04/17/24	V	SW8015D GRO	
QA/QC Surrogates								
% 2,5-Dibromotoluene (FID)	92		%	50	04/17/24	V	70 - 130 %	
Polychlorinated Biphenyls								
PCB-1016	ND	72	ug/Kg	2	04/23/24	SC	SW8082A	
PCB-1221	ND	72	ug/Kg	2	04/23/24	SC	SW8082A	
PCB-1232	ND	72	ug/Kg	2	04/23/24	SC	SW8082A	
PCB-1242	ND	72	ug/Kg	2	04/23/24	SC	SW8082A	
PCB-1248	ND	72	ug/Kg	2	04/23/24	SC	SW8082A	
PCB-1254	ND	72	ug/Kg	2	04/23/24	SC	SW8082A	
PCB-1260	ND	72	ug/Kg	2	04/23/24	SC	SW8082A	
PCB-1262	ND	72	ug/Kg	2	04/23/24	SC	SW8082A	
PCB-1268	ND	72	ug/Kg	2	04/23/24	SC	SW8082A	
QA/QC Surrogates								
% DCBP	86		%	2	04/23/24	SC	30 - 150 %	
% DCBP (Confirmation)	77		%	2	04/23/24	SC	30 - 150 %	
% TCMX	77		%	2	04/23/24	SC	30 - 150 %	
% TCMX (Confirmation)	70		%	2	04/23/24	SC	30 - 150 %	
TPH by GC (Extractable (C9-C36))								
Fuel Oil #2 / Diesel Fuel	ND	54	mg/kg	1	04/20/24	JRB	SW8015D DRO	
Fuel Oil #4	ND	54	mg/kg	1	04/20/24	JRB	SW8015D DRO	
Fuel Oil #6	ND	54	mg/kg	1	04/20/24	JRB	SW8015D DRO	
Kerosene	ND	54	mg/kg	1	04/20/24	JRB	SW8015D DRO	
Motor Oil	ND	54	mg/kg	1	04/20/24	JRB	SW8015D DRO	
Total TPH	ND	54	mg/kg	1	04/20/24	JRB	SW8015D DRO	
Unidentified	ND	54	mg/kg	1	04/20/24	JRB	SW8015D DRO	
QA/QC Surrogates								
% COD (surr)	49		%	1	04/20/24	JRB	50 - 150 %	3
% Terphenyl (surr)	60		%	1	04/20/24	JRB	50 - 150 %	
Volatiles								
1,1,1,2-Tetrachloroethane	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D	
1,1,1-Trichloroethane	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D	
1,1,2,2-Tetrachloroethane	ND	2.5	ug/Kg	1	04/17/24	JLI	SW8260D	
1,1,2-Trichloroethane	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D	
1,1-Dichloroethane	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D	
1,1-Dichloroethene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D	
1,1-Dichloropropene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D	
1,2,3-Trichlorobenzene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D	
1,2,3-Trichloropropane	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D	
1,2,4-Trichlorobenzene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D	
1,2,4-Trimethylbenzene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D	
1,2-Dibromo-3-chloropropane	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D	
1,2-Dibromoethane	ND	0.42	ug/Kg	1	04/17/24	JLI	SW8260D	

Project ID: M.A.N. SCHOOL
Client ID: B4 FULL

Phoenix I.D.: CQ52309

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2-Dichlorobenzene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
1,2-Dichloroethane	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
1,2-Dichloropropane	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
1,3-Dichlorobenzene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
1,3-Dichloropropane	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
1,4-Dichlorobenzene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
2,2-Dichloropropane	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
2-Chlorotoluene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
2-Hexanone	ND	21	ug/Kg	1	04/17/24	JLI	SW8260D
2-Isopropyltoluene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
4-Chlorotoluene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
4-Methyl-2-pentanone	ND	21	ug/Kg	1	04/17/24	JLI	SW8260D
Acetone	ND	210	ug/Kg	1	04/17/24	JLI	SW8260D
Acrylonitrile	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
Benzene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
Bromobenzene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
Bromochloromethane	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
Bromodichloromethane	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
Bromoform	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
Bromomethane	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
Carbon Disulfide	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
Carbon tetrachloride	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
Chlorobenzene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
Chloroethane	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
Chloroform	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
Chloromethane	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
cis-1,2-Dichloroethene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
cis-1,3-Dichloropropene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
Dibromochloromethane	ND	2.5	ug/Kg	1	04/17/24	JLI	SW8260D
Dibromomethane	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
Dichlorodifluoromethane	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
Ethylbenzene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
Hexachlorobutadiene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
Isopropylbenzene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
m&p-Xylene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
Methyl Ethyl Ketone	ND	25	ug/Kg	1	04/17/24	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	8.4	ug/Kg	1	04/17/24	JLI	SW8260D
Methylene chloride	ND	8.4	ug/Kg	1	04/17/24	JLI	SW8260D
Naphthalene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
n-Butylbenzene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
n-Propylbenzene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
o-Xylene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
p-Isopropyltoluene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
sec-Butylbenzene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
Styrene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
tert-Butylbenzene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
Tetrachloroethene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
Tetrahydrofuran (THF)	ND	8.4	ug/Kg	1	04/17/24	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Toluene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
Total Xylenes	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
trans-1,2-Dichloroethene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
trans-1,3-Dichloropropene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
trans-1,4-dichloro-2-butene	ND	8.4	ug/Kg	1	04/17/24	JLI	SW8260D
Trichloroethene	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
Trichlorofluoromethane	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
Trichlorotrifluoroethane	ND	8.4	ug/Kg	1	04/17/24	JLI	SW8260D
Vinyl chloride	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	1	04/17/24	JLI	70 - 130 %
% Bromofluorobenzene	95		%	1	04/17/24	JLI	70 - 130 %
% Dibromofluoromethane	96		%	1	04/17/24	JLI	70 - 130 %
% Toluene-d8	100		%	1	04/17/24	JLI	70 - 130 %
Oxygenates & Dioxane							
1,4-Dioxane	ND	84	ug/Kg	1	04/17/24	JLI	SW8260D (OXY)
Diethyl ether	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D (OXY)
Di-isopropyl ether	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D (OXY)
Ethyl tert-butyl ether	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D (OXY)
tert-amyl methyl ether	ND	4.2	ug/Kg	1	04/17/24	JLI	SW8260D (OXY)
Semivolatiles							
1,1-Biphenyl	ND	50	ug/Kg	1	04/20/24	MR	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
1,2,4-Trichlorobenzene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
1,2-Dichlorobenzene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
1,2-Diphenylhydrazine	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
1,3-Dichlorobenzene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
1,4-Dichlorobenzene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
2,4-Dichlorophenol	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
2,4-Dimethylphenol	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
2,4-Dinitrophenol	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
2,4-Dinitrotoluene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
2,6-Dinitrotoluene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
2-Chloronaphthalene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
2-Chlorophenol	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
2-Methylnaphthalene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
2-Nitroaniline	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
2-Nitrophenol	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
3,3'-Dichlorobenzidine	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
3-Nitroaniline	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
4-Bromophenyl phenyl ether	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	04/20/24	MR	SW8270E

Project ID: M.A.N. SCHOOL
Client ID: B4 FULL

Phoenix I.D.: CQ52309

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
4-Chloroaniline	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
4-Nitroaniline	ND	590	ug/Kg	1	04/20/24	MR	SW8270E
4-Nitrophenol	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Acenaphthene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Acenaphthylene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Acetophenone	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Aniline	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
Anthracene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Benz(a)anthracene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Benzidine	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Benzo(a)pyrene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Benzo(b)fluoranthene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Benzo(ghi)perylene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Benzo(k)fluoranthene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Benzoic acid	ND	730	ug/Kg	1	04/20/24	MR	SW8270E
Benzyl butyl phthalate	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Bis(2-chloroethyl)ether	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
Carbazole	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
Chrysene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Dibenz(a,h)anthracene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Dibenzofuran	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Diethyl phthalate	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Dimethylphthalate	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Di-n-butylphthalate	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
Di-n-octylphthalate	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Fluoranthene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Fluorene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Hexachlorobenzene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Hexachlorobutadiene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Hexachloroethane	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Indeno(1,2,3-cd)pyrene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Isophorone	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Naphthalene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Nitrobenzene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
N-Nitrosodimethylamine	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
N-Nitrosodiphenylamine	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
Pentachloronitrobenzene	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
Pentachlorophenol	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
Phenanthrene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Phenol	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Pyrene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Pyridine	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
QA/QC Surrogates							
% 2,4,6-Tribromophenol	78		%	1	04/20/24	MR	30 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% 2-Fluorobiphenyl	67		%	1	04/20/24	MR	30 - 130 %
% 2-Fluorophenol	70		%	1	04/20/24	MR	30 - 130 %
% Nitrobenzene-d5	68		%	1	04/20/24	MR	30 - 130 %
% Phenol-d5	70		%	1	04/20/24	MR	30 - 130 %
% Terphenyl-d14	74		%	1	04/20/24	MR	30 - 130 %

3 = This parameter exceeds laboratory specified limits.
Massachusetts does not offer certification for Soil/Solid matrices.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
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.

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Corrosivity is based solely on the pH analysis performed above.

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
April 25, 2024
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

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

Analysis Report

April 25, 2024

FOR: Attn: Mr Dave Gorden
PEER Consultants
10 Mall Road, Suite 301
Burlington, MA 01803

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/15/24	9:42
Location Code:	PEER	Received by:	CP	04/16/24	14:45
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	8404				

Laboratory Data

SDG ID: GCQ52307
Phoenix ID: CQ52310

Project ID: M.A.N. SCHOOL
Client ID: B5 FULL

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.35	0.35	mg/Kg	1	04/18/24	CPP	SW6010D
Arsenic	3.78	0.70	mg/Kg	1	04/18/24	CPP	SW6010D
Barium	48.3	0.35	mg/Kg	1	04/18/24	CPP	SW6010D
Beryllium	0.35	0.28	mg/Kg	1	04/18/24	CPP	SW6010D
Cadmium	< 0.35	0.35	mg/Kg	1	04/18/24	CPP	SW6010D
Chromium	13.8	0.35	mg/Kg	1	04/18/24	CPP	SW6010D
Mercury	< 0.03	0.03	mg/Kg	2	04/17/24	ZT	SW7471B
Nickel	9.65	0.35	mg/Kg	1	04/18/24	CPP	SW6010D
Lead	3.64	0.35	mg/Kg	1	04/18/24	CPP	SW6010D
Antimony	< 3.5	3.5	mg/Kg	1	04/18/24	CPP	SW6010D
Selenium	< 1.4	1.4	mg/Kg	1	04/18/24	CPP	SW6010D
Thallium	< 3.2	3.2	mg/Kg	1	04/18/24	CPP	SW6010D
Vanadium	22.3	0.35	mg/Kg	1	04/18/24	CPP	SW6010D
Zinc	27.3	0.7	mg/Kg	1	04/18/24	CPP	SW6010D
Percent Solid	89		%		04/16/24	CV	SW846-%Solid
Conductivity - Soil Matrix	25	5	umhos/cm	1	04/17/24	JY	SW9050A
Corrosivity	Negative		Pos/Neg	1	04/16/24	MW	SW846-Corr
Flash Point	>200	200	Degree F	1	04/19/24	G	SW1010B
Ignitability	Passed	140	degree F	1	04/19/24	G	SW846-Ignit
pH at 25C - Soil	7.32	1.00	pH Units	1	04/16/24 23:31	MW	SW846 9045D
Reactivity Cyanide	< 5	5	mg/Kg	1	04/19/24	EG/GD	SW846 7.3.3.1/90
Reactivity Sulfide	< 20	20	mg/Kg	1	04/22/24	EG/GD	SW846 CH7
Reactivity	Negative		Pos/Neg	1	04/22/24	EG/GD	SW846-React
Field Extraction	Completed				04/15/24		SW5035A
Mercury Digestion	Completed				04/17/24	MQ/HL	SW7471B
Extraction of ETPH	Completed				04/19/24	HL/H/U	SW3546
Soil Extraction for PCB	Completed				04/22/24	C/U	SW3546

Ver 1

Project ID: M.A.N. SCHOOL
Client ID: B5 FULL

Phoenix I.D.: CQ52310

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Soil Extraction for SVOA	Completed				04/19/24	C/A	SW3546
Total Metals Digest	Completed				04/17/24	J/AG	SW3050B
Gasoline Range Hydrocarbons (C6-C10)							
GRO (C6-C10)	ND	5.6	mg/Kg	50	04/17/24	V	SW8015D GRO
QA/QC Surrogates							
% 2,5-Dibromotoluene (FID)	94		%	50	04/17/24	V	70 - 130 %
Polychlorinated Biphenyls							
PCB-1016	ND	74	ug/Kg	2	04/23/24	SC	SW8082A
PCB-1221	ND	74	ug/Kg	2	04/23/24	SC	SW8082A
PCB-1232	ND	74	ug/Kg	2	04/23/24	SC	SW8082A
PCB-1242	ND	74	ug/Kg	2	04/23/24	SC	SW8082A
PCB-1248	ND	74	ug/Kg	2	04/23/24	SC	SW8082A
PCB-1254	ND	74	ug/Kg	2	04/23/24	SC	SW8082A
PCB-1260	ND	74	ug/Kg	2	04/23/24	SC	SW8082A
PCB-1262	ND	74	ug/Kg	2	04/23/24	SC	SW8082A
PCB-1268	ND	74	ug/Kg	2	04/23/24	SC	SW8082A
QA/QC Surrogates							
% DCBP	95		%	2	04/23/24	SC	30 - 150 %
% DCBP (Confirmation)	91		%	2	04/23/24	SC	30 - 150 %
% TCMX	83		%	2	04/23/24	SC	30 - 150 %
% TCMX (Confirmation)	80		%	2	04/23/24	SC	30 - 150 %
TPH by GC (Extractable (C9-C36))							
Fuel Oil #2 / Diesel Fuel	ND	56	mg/kg	1	04/20/24	JRB	SW8015D DRO
Fuel Oil #4	ND	56	mg/kg	1	04/20/24	JRB	SW8015D DRO
Fuel Oil #6	ND	56	mg/kg	1	04/20/24	JRB	SW8015D DRO
Kerosene	ND	56	mg/kg	1	04/20/24	JRB	SW8015D DRO
Motor Oil	ND	56	mg/kg	1	04/20/24	JRB	SW8015D DRO
Total TPH	ND	56	mg/kg	1	04/20/24	JRB	SW8015D DRO
Unidentified	ND	56	mg/kg	1	04/20/24	JRB	SW8015D DRO
QA/QC Surrogates							
% COD (surr)	67		%	1	04/20/24	JRB	50 - 150 %
% Terphenyl (surr)	81		%	1	04/20/24	JRB	50 - 150 %
Volatiles							
1,1,1,2-Tetrachloroethane	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
1,1,1-Trichloroethane	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	2.7	ug/Kg	1	04/17/24	JLI	SW8260D
1,1,2-Trichloroethane	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
1,1-Dichloroethane	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
1,1-Dichloroethene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
1,1-Dichloropropene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
1,2,3-Trichlorobenzene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
1,2,3-Trichloropropane	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
1,2-Dibromoethane	ND	0.45	ug/Kg	1	04/17/24	JLI	SW8260D

Project ID: M.A.N. SCHOOL
Client ID: B5 FULL

Phoenix I.D.: CQ52310

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
1,2-Dichlorobenzene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
1,2-Dichloroethane	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
1,2-Dichloropropane	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
1,3-Dichlorobenzene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
1,3-Dichloropropane	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
1,4-Dichlorobenzene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
2,2-Dichloropropane	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
2-Chlorotoluene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
2-Hexanone	ND	22	ug/Kg	1	04/17/24	JLI	SW8260D
2-Isopropyltoluene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
4-Chlorotoluene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
4-Methyl-2-pentanone	ND	22	ug/Kg	1	04/17/24	JLI	SW8260D
Acetone	ND	220	ug/Kg	1	04/17/24	JLI	SW8260D
Acrylonitrile	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
Benzene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
Bromobenzene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
Bromochloromethane	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
Bromodichloromethane	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
Bromoform	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
Bromomethane	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
Carbon Disulfide	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
Carbon tetrachloride	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
Chlorobenzene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
Chloroethane	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
Chloroform	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
Chloromethane	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
cis-1,2-Dichloroethene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
cis-1,3-Dichloropropene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
Dibromochloromethane	ND	2.7	ug/Kg	1	04/17/24	JLI	SW8260D
Dibromomethane	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
Dichlorodifluoromethane	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
Ethylbenzene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
Hexachlorobutadiene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
Isopropylbenzene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
m&p-Xylene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
Methyl Ethyl Ketone	ND	27	ug/Kg	1	04/17/24	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	9.0	ug/Kg	1	04/17/24	JLI	SW8260D
Methylene chloride	ND	9.0	ug/Kg	1	04/17/24	JLI	SW8260D
Naphthalene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
n-Butylbenzene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
n-Propylbenzene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
o-Xylene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
p-Isopropyltoluene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
sec-Butylbenzene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
Styrene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
tert-Butylbenzene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
Tetrachloroethene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
Tetrahydrofuran (THF)	ND	9.0	ug/Kg	1	04/17/24	JLI	SW8260D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Toluene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
Total Xylenes	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
trans-1,2-Dichloroethene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
trans-1,3-Dichloropropene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
trans-1,4-dichloro-2-butene	ND	9.0	ug/Kg	1	04/17/24	JLI	SW8260D
Trichloroethene	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
Trichlorofluoromethane	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
Trichlorotrifluoroethane	ND	9.0	ug/Kg	1	04/17/24	JLI	SW8260D
Vinyl chloride	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	99		%	1	04/17/24	JLI	70 - 130 %
% Bromofluorobenzene	96		%	1	04/17/24	JLI	70 - 130 %
% Dibromofluoromethane	95		%	1	04/17/24	JLI	70 - 130 %
% Toluene-d8	100		%	1	04/17/24	JLI	70 - 130 %
Oxygenates & Dioxane							
1,4-Dioxane	ND	90	ug/Kg	1	04/17/24	JLI	SW8260D (OXY)
Diethyl ether	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D (OXY)
Di-isopropyl ether	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D (OXY)
Ethyl tert-butyl ether	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D (OXY)
tert-amyl methyl ether	ND	4.5	ug/Kg	1	04/17/24	JLI	SW8260D (OXY)
Semivolatiles							
1,1-Biphenyl	ND	50	ug/Kg	1	04/20/24	MR	SW8270E
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
1,2,4-Trichlorobenzene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
1,2-Dichlorobenzene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
1,2-Diphenylhydrazine	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
1,3-Dichlorobenzene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
1,4-Dichlorobenzene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
2,2'-Oxybis(1-Chloropropane)	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
2,4-Dichlorophenol	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
2,4-Dimethylphenol	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
2,4-Dinitrophenol	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
2,4-Dinitrotoluene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
2,6-Dinitrotoluene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
2-Chloronaphthalene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
2-Chlorophenol	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
2-Methylnaphthalene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
2-Nitroaniline	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
2-Nitrophenol	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
3,3'-Dichlorobenzidine	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
3-Nitroaniline	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
4,6-Dinitro-2-methylphenol	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
4-Bromophenyl phenyl ether	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	04/20/24	MR	SW8270E

Project ID: M.A.N. SCHOOL
Client ID: B5 FULL

Phoenix I.D.: CQ52310

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
4-Chloroaniline	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
4-Nitroaniline	ND	590	ug/Kg	1	04/20/24	MR	SW8270E
4-Nitrophenol	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Acenaphthene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Acenaphthylene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Acetophenone	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Aniline	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
Anthracene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Benz(a)anthracene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Benzidine	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Benzo(a)pyrene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Benzo(b)fluoranthene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Benzo(ghi)perylene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Benzo(k)fluoranthene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Benzoic acid	ND	740	ug/Kg	1	04/20/24	MR	SW8270E
Benzyl butyl phthalate	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Bis(2-chloroethyl)ether	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
Bis(2-ethylhexyl)phthalate	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
Carbazole	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
Chrysene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Dibenz(a,h)anthracene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Dibenzofuran	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Diethyl phthalate	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Dimethylphthalate	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Di-n-butylphthalate	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
Di-n-octylphthalate	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Fluoranthene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Fluorene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Hexachlorobenzene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Hexachlorobutadiene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Hexachloroethane	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Indeno(1,2,3-cd)pyrene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Isophorone	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Naphthalene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Nitrobenzene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
N-Nitrosodimethylamine	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
N-Nitrosodi-n-propylamine	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
N-Nitrosodiphenylamine	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
Pentachloronitrobenzene	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
Pentachlorophenol	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
Phenanthrene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Phenol	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Pyrene	ND	260	ug/Kg	1	04/20/24	MR	SW8270E
Pyridine	ND	370	ug/Kg	1	04/20/24	MR	SW8270E
QA/QC Surrogates							
% 2,4,6-Tribromophenol	74		%	1	04/20/24	MR	30 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% 2-Fluorobiphenyl	67		%	1	04/20/24	MR	30 - 130 %
% 2-Fluorophenol	69		%	1	04/20/24	MR	30 - 130 %
% Nitrobenzene-d5	68		%	1	04/20/24	MR	30 - 130 %
% Phenol-d5	69		%	1	04/20/24	MR	30 - 130 %
% Terphenyl-d14	72		%	1	04/20/24	MR	30 - 130 %

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RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
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.

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Corrosivity is based solely on the pH analysis performed above.

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
April 25, 2024
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

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

Analysis Report

April 25, 2024

FOR: Attn: Mr Dave Gorden
PEER Consultants
10 Mall Road, Suite 301
Burlington, MA 01803

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/10/24	
Location Code:	PEER	Received by:	CP	04/16/24	14:45
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	8404				

Laboratory Data

SDG ID: GCQ52307
Phoenix ID: CQ52311

Project ID: M.A.N. SCHOOL
Client ID: TB041524 LL

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed				04/15/24		SW5035A
Volatiles							
1,1,1,2-Tetrachloroethane	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
1,1,1-Trichloroethane	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	3.0	ug/Kg	1	04/16/24	JLI	SW8260D
1,1,2-Trichloroethane	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
1,1-Dichloroethane	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
1,1-Dichloroethene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
1,1-Dichloropropene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
1,2,3-Trichlorobenzene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
1,2,3-Trichloropropane	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
1,2-Dibromoethane	ND	0.50	ug/Kg	1	04/16/24	JLI	SW8260D
1,2-Dichlorobenzene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
1,2-Dichloroethane	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
1,2-Dichloropropane	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
1,3-Dichlorobenzene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
1,3-Dichloropropane	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
1,4-Dichlorobenzene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
2,2-Dichloropropane	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
2-Chlorotoluene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
2-Hexanone	ND	25	ug/Kg	1	04/16/24	JLI	SW8260D
2-Isopropyltoluene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D

Project ID: M.A.N. SCHOOL
Client ID: TB041524 LL

Phoenix I.D.: CQ52311

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
4-Methyl-2-pentanone	ND	25	ug/Kg	1	04/16/24	JLI	SW8260D
Acetone	ND	250	ug/Kg	1	04/16/24	JLI	SW8260D
Acrylonitrile	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
Benzene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
Bromobenzene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
Bromochloromethane	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
Bromodichloromethane	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
Bromoform	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
Bromomethane	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
Carbon Disulfide	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
Carbon tetrachloride	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
Chlorobenzene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
Chloroethane	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
Chloroform	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
Chloromethane	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
Dibromochloromethane	ND	3.0	ug/Kg	1	04/16/24	JLI	SW8260D
Dibromomethane	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
Dichlorodifluoromethane	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
Ethylbenzene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
Hexachlorobutadiene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
Isopropylbenzene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
m&p-Xylene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
Methyl Ethyl Ketone	ND	30	ug/Kg	1	04/16/24	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	1	04/16/24	JLI	SW8260D
Methylene chloride	ND	10	ug/Kg	1	04/16/24	JLI	SW8260D
Naphthalene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
n-Butylbenzene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
n-Propylbenzene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
o-Xylene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
p-Isopropyltoluene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
sec-Butylbenzene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
Styrene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
tert-Butylbenzene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
Tetrachloroethene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
Tetrahydrofuran (THF)	ND	10	ug/Kg	1	04/16/24	JLI	SW8260D
Toluene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
Total Xylenes	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	1	04/16/24	JLI	SW8260D
Trichloroethene	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
Trichlorofluoromethane	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
Trichlorotrifluoroethane	ND	10	ug/Kg	1	04/16/24	JLI	SW8260D
Vinyl chloride	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	1	04/16/24	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	96		%	1	04/16/24	JLI	70 - 130 %
% Dibromofluoromethane	93		%	1	04/16/24	JLI	70 - 130 %
% Toluene-d8	100		%	1	04/16/24	JLI	70 - 130 %

Oxygenates & Dioxane

1,4-Dioxane	ND	100	ug/Kg	1	04/16/24	JLI	SW8260D (OXY)
Diethyl ether	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D (OXY)
Di-isopropyl ether	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D (OXY)
Ethyl tert-butyl ether	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D (OXY)
tert-amyl methyl ether	ND	5.0	ug/Kg	1	04/16/24	JLI	SW8260D (OXY)

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RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
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:

TRIP BLANK INCLUDED.

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

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
April 25, 2024
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

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

Analysis Report

April 25, 2024

FOR: Attn: Mr Dave Gorden
PEER Consultants
10 Mall Road, Suite 301
Burlington, MA 01803

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/15/24	15:01
Location Code:	PEER	Received by:	CP	04/16/24	14:45
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	8404				

Laboratory Data

SDG ID: GCQ52307
Phoenix ID: CQ52312

Project ID: M.A.N. SCHOOL
Client ID: B2-B5 0-2`

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	80		%		04/16/24	CV	SW846-%Solid
Soil Extraction for Herbicide	Completed				04/19/24	P/D	SW3546
Soil Extraction for Pesticide	Completed				04/23/24	J/H/A	SW3546
Chlorinated Herbicides							
2,4,5-T	ND	31	ug/Kg	2	04/23/24	JRB	SW8151A
2,4,5-TP (Silvex)	ND	31	ug/Kg	2	04/23/24	JRB	SW8151A
2,4-D	ND	62	ug/Kg	2	04/23/24	JRB	SW8151A
2,4-DB	ND	310	ug/Kg	2	04/23/24	JRB	SW8151A
Dalapon	ND	31	ug/Kg	2	04/23/24	JRB	SW8151A
Dicamba	ND	31	ug/Kg	2	04/23/24	JRB	SW8151A
Dichloroprop	ND	47	ug/Kg	2	04/23/24	JRB	SW8151A
Dinoseb	ND	31	ug/Kg	2	04/23/24	JRB	SW8151A
MCPA	ND	9300	ug/Kg	2	04/23/24	JRB	SW8151A
MCPP	ND	9300	ug/Kg	2	04/23/24	JRB	SW8151A
QA/QC Surrogates							
% DCAA	73		%	2	04/23/24	JRB	30 - 150 %
% DCAA (Confirmation)	63		%	2	04/23/24	JRB	30 - 150 %
Pesticides							
4,4' -DDD	ND	8.2	ug/Kg	2	04/24/24	AW	SW8081B
4,4' -DDE	ND	8.2	ug/Kg	2	04/24/24	AW	SW8081B
4,4' -DDT	ND	8.2	ug/Kg	2	04/24/24	AW	SW8081B
a-BHC	ND	8.2	ug/Kg	2	04/24/24	AW	SW8081B
Alachlor	ND	8.2	ug/Kg	2	04/24/24	AW	SW8081B
Aldrin	ND	4.1	ug/Kg	2	04/24/24	AW	SW8081B
b-BHC	ND	8.2	ug/Kg	2	04/24/24	AW	SW8081B

Project ID: M.A.N. SCHOOL
Client ID: B2-B5 0-2`

Phoenix I.D.: CQ52312

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Chlordane	ND	41	ug/Kg	2	04/24/24	AW	SW8081B
d-BHC	ND	8.2	ug/Kg	2	04/24/24	AW	SW8081B
Dieldrin	ND	4.1	ug/Kg	2	04/24/24	AW	SW8081B
Endosulfan I	ND	8.2	ug/Kg	2	04/24/24	AW	SW8081B
Endosulfan II	ND	8.2	ug/Kg	2	04/24/24	AW	SW8081B
Endosulfan sulfate	ND	8.2	ug/Kg	2	04/24/24	AW	SW8081B
Endrin	ND	8.2	ug/Kg	2	04/24/24	AW	SW8081B
Endrin aldehyde	ND	8.2	ug/Kg	2	04/24/24	AW	SW8081B
Endrin ketone	ND	8.2	ug/Kg	2	04/24/24	AW	SW8081B
g-BHC	ND	1.6	ug/Kg	2	04/24/24	AW	SW8081B
Heptachlor	ND	8.2	ug/Kg	2	04/24/24	AW	SW8081B
Heptachlor epoxide	ND	8.2	ug/Kg	2	04/24/24	AW	SW8081B
Hexachlorobenzene	ND	4.1	ug/Kg	2	04/24/24	AW	SW8081B
Methoxychlor	ND	41	ug/Kg	2	04/24/24	AW	SW8081B
Toxaphene	ND	160	ug/Kg	2	04/24/24	AW	SW8081B
QA/QC Surrogates							
% DCBP	67		%	2	04/24/24	AW	30 - 150 %
% DCBP (Confirmation)	68		%	2	04/24/24	AW	30 - 150 %
% TCMX	64		%	2	04/24/24	AW	30 - 150 %
% TCMX (Confirmation)	71		%	2	04/24/24	AW	30 - 150 %

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RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
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:

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

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Phyllis Shiller, Laboratory Director
April 25, 2024
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

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

Analysis Report

April 25, 2024

FOR: Attn: Mr Dave Gorden
PEER Consultants
10 Mall Road, Suite 301
Burlington, MA 01803

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/15/24	15:33
Location Code:	PEER	Received by:	CP	04/16/24	14:45
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	8404				

Laboratory Data

SDG ID: GCQ52307
Phoenix ID: CQ52313

Project ID: M.A.N. SCHOOL
Client ID: B2-B5 WT

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Fecal Coliforms	<10	10	cfu/g	10	04/16/24 16:45	MM/DN	SM9222D-15
Percent Solid	90		%		04/16/24	CV	SW846-%Solid
Chloride	< 56	56	mg/kg	10	04/16/24	BS/GD	SW9056A
Nitrite as N	< 0.11	0.11	mg/kg	10	04/16/24	BS/GD	SW9056A
Nitrate as N	0.93	0.56	mg/kg	10	04/16/24	BS/GD	SW9056A
Phosphorus, Total as P	365	14	mg/Kg	25	04/17/24	LG	SM4500PE-11

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RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

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.
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Phyllis Shiller, Laboratory Director
April 25, 2024
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

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

Analysis Report

April 25, 2024

FOR: Attn: Mr Dave Gorden
PEER Consultants
10 Mall Road, Suite 301
Burlington, MA 01803

Sample Information		Custody Information		Date	Time
Matrix:	SOIL	Collected by:		04/15/24	
Location Code:	PEER	Received by:	CP	04/16/24	14:45
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	8404				

Laboratory Data

SDG ID: GCQ52307
Phoenix ID: CQ52314

Project ID: M.A.N. SCHOOL
Client ID: TB041524 HL

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed				04/15/24		SW5035A
Volatiles							
1,1,1,2-Tetrachloroethane	ND	100	ug/Kg	50	04/16/24	JLI	SW8260D
1,1,1-Trichloroethane	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
1,1,2,2-Tetrachloroethane	ND	50	ug/Kg	50	04/16/24	JLI	SW8260D
1,1,2-Trichloroethane	ND	100	ug/Kg	50	04/16/24	JLI	SW8260D
1,1-Dichloroethane	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
1,1-Dichloroethene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
1,1-Dichloropropene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
1,2,3-Trichlorobenzene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
1,2,3-Trichloropropane	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
1,2,4-Trichlorobenzene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
1,2,4-Trimethylbenzene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
1,2-Dibromo-3-chloropropane	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
1,2-Dibromoethane	ND	100	ug/Kg	50	04/16/24	JLI	SW8260D
1,2-Dichlorobenzene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
1,2-Dichloroethane	ND	100	ug/Kg	50	04/16/24	JLI	SW8260D
1,2-Dichloropropane	ND	100	ug/Kg	50	04/16/24	JLI	SW8260D
1,3,5-Trimethylbenzene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
1,3-Dichlorobenzene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
1,3-Dichloropropane	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
1,4-Dichlorobenzene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
2,2-Dichloropropane	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
2-Chlorotoluene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
2-Hexanone	ND	1300	ug/Kg	50	04/16/24	JLI	SW8260D
2-Isopropyltoluene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D

Project ID: M.A.N. SCHOOL
Client ID: TB041524 HL

Phoenix I.D.: CQ52314

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
4-Methyl-2-pentanone	ND	400	ug/Kg	50	04/16/24	JLI	SW8260D
Acetone	ND	5000	ug/Kg	50	04/16/24	JLI	SW8260D
Acrylonitrile	ND	500	ug/Kg	50	04/16/24	JLI	SW8260D
Benzene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
Bromobenzene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
Bromochloromethane	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
Bromodichloromethane	ND	100	ug/Kg	50	04/16/24	JLI	SW8260D
Bromoform	ND	100	ug/Kg	50	04/16/24	JLI	SW8260D
Bromomethane	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
Carbon Disulfide	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
Carbon tetrachloride	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
Chlorobenzene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
Chloroethane	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
Chloroform	ND	200	ug/Kg	50	04/16/24	JLI	SW8260D
Chloromethane	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
cis-1,2-Dichloroethene	ND	100	ug/Kg	50	04/16/24	JLI	SW8260D
cis-1,3-Dichloropropene	ND	25	ug/Kg	50	04/16/24	JLI	SW8260D
Dibromochloromethane	ND	50	ug/Kg	50	04/16/24	JLI	SW8260D
Dibromomethane	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
Dichlorodifluoromethane	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
Ethylbenzene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
Hexachlorobutadiene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
Isopropylbenzene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
m&p-Xylene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
Methyl Ethyl Ketone	ND	3000	ug/Kg	50	04/16/24	JLI	SW8260D
Methyl t-butyl ether (MTBE)	ND	100	ug/Kg	50	04/16/24	JLI	SW8260D
Methylene chloride	ND	100	ug/Kg	50	04/16/24	JLI	SW8260D
Naphthalene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
n-Butylbenzene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
n-Propylbenzene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
o-Xylene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
p-Isopropyltoluene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
sec-Butylbenzene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
Styrene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
tert-Butylbenzene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
Tetrachloroethene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
Tetrahydrofuran (THF)	ND	500	ug/Kg	50	04/16/24	JLI	SW8260D
Toluene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
Total Xylenes	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
trans-1,2-Dichloroethene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
trans-1,3-Dichloropropene	ND	25	ug/Kg	50	04/16/24	JLI	SW8260D
trans-1,4-dichloro-2-butene	ND	500	ug/Kg	50	04/16/24	JLI	SW8260D
Trichloroethene	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
Trichlorofluoromethane	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
Trichlorotrifluoroethane	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
Vinyl chloride	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4 (50x)	101		%	50	04/16/24	JLI	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene (50x)	99		%	50	04/16/24	JLI	70 - 130 %
% Dibromofluoromethane (50x)	96		%	50	04/16/24	JLI	70 - 130 %
% Toluene-d8 (50x)	99		%	50	04/16/24	JLI	70 - 130 %

Oxygenates & Dioxane

1,4-Dioxane	ND	800	ug/Kg	50	04/16/24	JLI	SW8260D (OXY)
Diethyl ether	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D (OXY)
Di-isopropyl ether	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D (OXY)
Ethyl tert-butyl ether	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D (OXY)
tert-amyl methyl ether	ND	250	ug/Kg	50	04/16/24	JLI	SW8260D (OXY)

Massachusetts does not offer certification for Soil/Solid matrices.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
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:

TRIP BLANK INCLUDED.

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

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
April 25, 2024
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

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

QA/QC Report

April 25, 2024

QA/QC Data

SDG I.D.: GCQ52307

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 727169 (mg/kg), QC Sample No: CQ51669 2X (CQ52307, CQ52308, CQ52309, CQ52310)														
Mercury - Soil	BRL	0.02	<0.03	<0.03	NC	94.7	92.5	2.4	106	89.5	16.9	75 - 125	20	
Comment:														
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 75-125%														
QA/QC Batch 727091 (mg/kg), QC Sample No: CQ52191 (CQ52307, CQ52308)														
ICP Metals - Soil														
Antimony	BRL	3.3	<40	<39	NC	86.4	96.7	11.3	92.6			75 - 125	35	
Arsenic	BRL	0.67	<8.0	<7.8	NC	78.6	88.3	11.6	91.8			75 - 125	35	
Barium	BRL	0.33	16.7	15.0	10.7	80.9	90.3	11.0	99.7			75 - 125	35	
Beryllium	BRL	0.27	<3.2	<3.1	NC	87.9	92.7	5.3	98.5			75 - 125	35	
Cadmium	BRL	0.33	<4.0	<3.9	NC	82.6	88.5	6.9	93.4			75 - 125	35	
Chromium	BRL	0.33	5.9	4.5	26.9	83.1	93.0	11.2	98.0			75 - 125	35	
Lead	BRL	0.33	2.08	<3.9	NC	77.1	87.0	12.1	94.4			75 - 125	35	
Nickel	BRL	0.33	4.4	<3.9	NC	82.3	90.5	9.5	95.2			75 - 125	35	
Selenium	BRL	1.3	<16	<16	NC	76.1	81.7	7.1	83.4			75 - 125	35	
Silver	BRL	0.33	<4.0	<3.9	NC	81.4	92.1	12.3	94.0			75 - 125	35	
Thallium	BRL	3.0	<36	<35	NC	91.0	96.2	5.6	95.7			75 - 125	35	
Vanadium	BRL	0.33	17.1	14.0	19.9	80.1	90.2	11.9	101			75 - 125	35	
Zinc	BRL	0.67	13.7	11.7	15.7	77.5	87.2	11.8	93.2			75 - 125	35	
Comment:														
Additional: LCS acceptance range is 80-120% MS acceptance range 75-125%.														
QA/QC Batch 727086 (mg/kg), QC Sample No: CQ52285 (CQ52309)														
ICP Metals - Soil														
Antimony	BRL	3.3	<3.0	<3.5	NC	86.1	94.3	9.1	91.4			75 - 125	35	
Arsenic	BRL	0.67	<0.61	<0.70	NC	81.2	87.9	7.9	90.6			75 - 125	35	
Barium	BRL	0.33	13.8	34.2	85.0	84.8	84.9	0.1	114			75 - 125	35	r
Beryllium	BRL	0.27	<0.24	<0.28	NC	90.2	95.2	5.4	104			75 - 125	35	
Cadmium	BRL	0.33	<0.30	<0.35	NC	85.4	91.7	7.1	98.9			75 - 125	35	
Chromium	BRL	0.33	0.40	1.07	NC	85.6	93.0	8.3	100			75 - 125	35	
Lead	BRL	0.33	1.86	1.28	NC	82.2	90.5	9.6	97.7			75 - 125	35	
Nickel	BRL	0.33	0.57	1.09	NC	87.4	94.8	8.1	99.5			75 - 125	35	
Selenium	BRL	1.3	<1.2	<1.4	NC	89.7	77.9	14.1	75.3			75 - 125	35	
Silver	BRL	0.33	<0.30	<0.35	NC	89.7	99.0	9.9	99.6			75 - 125	35	
Thallium	BRL	3.0	<2.7	<3.1	NC	90.0	94.2	4.6	97.3			75 - 125	35	
Vanadium	BRL	0.33	3.0	6.2	69.6	81.9	90.0	9.4	99.5			75 - 125	35	r
Zinc	BRL	0.67	14.0	20.2	36.3	76.8	85.0	10.1	101			75 - 125	35	r
Comment:														
Additional: LCS acceptance range is 80-120% MS acceptance range 75-125%.														
QA/QC Batch 727249 (mg/kg), QC Sample No: CQ52310 (CQ52310)														
ICP Metals - Soil														
Antimony	BRL	3.3	<3.5	<3.6	NC	90.1	93.4	3.6	92.4			75 - 125	35	

QA/QC Data

SDG I.D.: GCQ52307

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Arsenic	BRL	0.67	3.78	2.56	NC	86.3	83.8	2.9	95.6			75 - 125	35	
Barium	BRL	0.33	48.3	34.3	33.9	84.2	84.2	0.0	103			75 - 125	35	
Beryllium	BRL	0.27	0.35	<0.28	NC	90.5	90.3	0.2	100			75 - 125	35	
Cadmium	BRL	0.33	<0.35	<0.36	NC	85.6	84.7	1.1	99.7			75 - 125	35	
Chromium	BRL	0.33	13.8	27.7	67.0	87.9	89.0	1.2	101			75 - 125	35	r
Lead	BRL	0.33	3.64	2.90	22.6	83.4	81.1	2.8	99.9			75 - 125	35	
Nickel	BRL	0.33	9.65	6.63	37.1	87.5	87.6	0.1	99.8			75 - 125	35	r
Selenium	BRL	1.3	<1.4	<1.4	NC	83.5	80.6	3.5	86.7			75 - 125	35	
Silver	BRL	0.33	<0.35	<0.36	NC	90.0	88.5	1.7	101			75 - 125	35	
Thallium	BRL	3.0	<3.2	<3.2	NC	90.2	88.2	2.2	100			75 - 125	35	
Vanadium	BRL	0.33	22.3	14.4	43.1	84.9	84.9	0.0	102			75 - 125	35	r
Zinc	BRL	0.67	27.3	29.2	6.70	82.8	83.1	0.4	95.4			75 - 125	35	

Comment:

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

r = This parameter is outside laboratory RPD specified recovery limits.

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QA/QC Report

April 25, 2024

QA/QC Data

SDG I.D.: GCQ52307

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 727649 (mg/Kg), QC Sample No: CQ51663 5X (CQ52307, CQ52308, CQ52309, CQ52310)													
Reactivity Cyanide	BRL	5	<5	<5.2	NC	97.0						80 - 120	20
Reactivity Sulfide	BRL	20	<20	<20	NC	90.8						80 - 120	20
Comment:													
Additional soil criteria LCS acceptance range is 80-120% MS acceptance range 75-125%.													
QA/QC Batch 727720 (Degree F), QC Sample No: CQ50166 (CQ52307, CQ52308, CQ52309, CQ52310)													
Flash Point			>200	>200	NC	101						75 - 125	30
Comment:													
Additional: LCS acceptance range is 85-115% MS acceptance range 75-125%.													
QA/QC Batch 727360 (umhos/cm), QC Sample No: CQ50787 (CQ52307, CQ52308, CQ52309, CQ52310)													
Conductivity - Soil Matrix	BRL	5	424	361	16.1							75 - 125	30
Comment:													
Additional: LCS acceptance range is 85-115% MS acceptance range 75-125%.													
QA/QC Batch 727237 (mg/Kg), QC Sample No: CQ51168 (CQ52313)													
Phosphorus, Total as P	BRL	0.50	8610	9200	6.60	93.5			NC			75 - 125	30
Comment:													
Additional: LCS acceptance range is 85-115% MS acceptance range 75-125%.													
QA/QC Batch 727151 (PH), QC Sample No: CQ51380 (CQ52307, CQ52308, CQ52309, CQ52310)													
pH			8.65	8.63	0.20	101						85 - 115	20
Comment:													
Additional: LCS acceptance range is 85-115% MS acceptance range 75-125%.													
QA/QC Batch 727218 (mg/L), QC Sample No: CQ52578 (CQ52313)													
Chloride	BRL	5.0	7.5	7.6	NC	96.2			100			90 - 110	20
Nitrate as Nitrogen	BRL	0.05	0.97	0.95	2.10	99.3			101			90 - 110	20
Nitrite as Nitrogen	BRL	0.004	<0.004	<0.004	NC	102			107			90 - 110	20

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QA/QC Report

April 25, 2024

QA/QC Data

SDG I.D.: GCQ52307

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 727693 (mg/Kg), QC Sample No: CQ52422 (CQ52307, CQ52308, CQ52309, CQ52310)											
TPH by GC (Extractable Products) - Soil											
Ext. Petroleum H.C. (C9-C36)	ND	50	89	86	3.4	106	95	10.9	50 - 150	30	
% COD (surr)	85	%	130	51	87.3	127	60	71.7	50 - 150	30	r
% Terphenyl (surr)	88	%	105	101	3.9	107	127	17.1	50 - 150	30	
Comment:											
The ETPH/DRO LCS has been normalized based on the alkane calibration.											
QA/QC Batch 727496 (mg/Kg), QC Sample No: CQ52307 50X (CQ52307 (50X) , CQ52308 (50X) , CQ52309 (50X) , CQ52310 (50X))											
Gasoline Range Hydrocarbons (C6C10) - Soil											
GRO (C6-C10)	ND	5.0	95	95	0.0	94	94	0.0	70 - 130	30	
% 2,5-Dibromotoluene (FID)	90	%	81	89	9.4	86	84	2.4	70 - 130	30	
QA/QC Batch 727763 (ug/Kg), QC Sample No: CQ55312 10X (CQ52312)											
Chlorinated Herbicides - Soil											
2,4,5-T	ND	130	51	60	16.2	54	57	5.4	40 - 140	30	
2,4,5-TP (Silvex)	ND	130	56	66	16.4	64	65	1.6	40 - 140	30	
2,4-D	ND	250	47	55	15.7	58	63	8.3	40 - 140	30	
2,4-DB	ND	2500	32	38	17.1	40	39	2.5	40 - 140	30	l
Dalapon	ND	130	48	63	27.0	53	73	31.7	40 - 140	30	r
Dicamba	ND	130	85	95	11.1	76	86	12.3	40 - 140	30	
Dichloroprop	ND	130	70	80	13.3	92	103	11.3	40 - 140	30	
Dinoseb	ND	130	68	81	17.4	68	68	0.0	10 - 110	20	
MCPA	ND	38000	54	59	8.8	59	65	9.7	40 - 140	30	
MCPP	ND	38000	66	74	11.4	67	71	5.8	40 - 140	30	
% DCAA (Surrogate Rec)	71	%	64	72	11.8	66	75	12.8	30 - 150	30	
% DCAA (Surrogate Rec) (Confirm	72	%	57	70	20.5	55	61	10.3	30 - 150	30	
Comment:											
MCP 8151 additional criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%.											
QA/QC Batch 728004 (ug/Kg), QC Sample No: CQ51831 2X (CQ52307, CQ52308)											
Polychlorinated Biphenyls - Soil											
PCB-1016	ND	33	95	86	9.9	78	91	15.4	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	104	87	17.8	75	89	17.1	40 - 140	30	
PCB-1262	ND	33							40 - 140	30	
PCB-1268	ND	33							40 - 140	30	
% DCBP (Surrogate Rec)	121	%	108	93	14.9	81	97	18.0	30 - 150	30	
% DCBP (Surrogate Rec) (Confirm	116	%	105	96	9.0	83	97	15.6	30 - 150	30	
% TCMX (Surrogate Rec)	104	%	95	86	9.9	77	88	13.3	30 - 150	30	

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
% TCMX (Surrogate Rec) (Confirm	103	%	94	82	13.6	74	86	15.0	30 - 150	30
QA/QC Batch 728024 (ug/Kg), QC Sample No: CQ52390 2X (CQ52309, CQ52310)										
Polychlorinated Biphenyls - Soil										
PCB-1016	ND	33	93	87	6.7	74	82	10.3	40 - 140	30
PCB-1221	ND	33							40 - 140	30
PCB-1232	ND	33							40 - 140	30
PCB-1242	ND	33							40 - 140	30
PCB-1248	ND	33							40 - 140	30
PCB-1254	ND	33							40 - 140	30
PCB-1260	ND	33	105	86	19.9	75	80	6.5	40 - 140	30
PCB-1262	ND	33							40 - 140	30
PCB-1268	ND	33							40 - 140	30
% DCBP (Surrogate Rec)	99	%	110	90	20.0	79	93	16.3	30 - 150	30
% DCBP (Surrogate Rec) (Confirm	91	%	100	97	3.0	85	96	12.2	30 - 150	30
% TCMX (Surrogate Rec)	82	%	90	86	4.5	72	83	14.2	30 - 150	30
% TCMX (Surrogate Rec) (Confirm	76	%	89	80	10.7	68	80	16.2	30 - 150	30
QA/QC Batch 728175 (ug/Kg), QC Sample No: CQ49646 (CQ52312)										
Pesticides - Soil										
4,4' -DDD	ND	0.83	75	69	8.3	87	85	2.3	40 - 140	30
4,4' -DDE	ND	0.83	74	67	9.9	137	142	3.6	40 - 140	30
4,4' -DDT	ND	0.83	70	66	5.9	105	106	0.9	40 - 140	30
a-BHC	ND	0.50	71	64	10.4	73	70	4.2	40 - 140	30
Alachlor	ND	1.7	NA	NA	NC	NA	NA	NC	40 - 140	30
Aldrin	ND	0.50	72	66	8.7	76	73	4.0	40 - 140	30
b-BHC	ND	0.50	84	77	8.7	88	85	3.5	40 - 140	30
Chlordane	ND	17	73	69	5.6	86	93	7.8	40 - 140	30
d-BHC	ND	1.7	70	65	7.4	78	74	5.3	40 - 140	30
Dieldrin	ND	0.50	74	68	8.5	99	100	1.0	40 - 140	30
Endosulfan I	ND	1.7	74	70	5.6	77	76	1.3	40 - 140	30
Endosulfan II	ND	1.7	74	70	5.6	79	77	2.6	40 - 140	30
Endosulfan sulfate	ND	1.7	78	74	5.3	82	82	0.0	40 - 140	30
Endrin	ND	1.7	70	65	7.4	76	74	2.7	40 - 140	30
Endrin aldehyde	ND	1.7	72	68	5.7	72	72	0.0	40 - 140	30
Endrin ketone	ND	1.7	81	77	5.1	86	83	3.6	40 - 140	30
g-BHC	ND	0.50	87	79	9.6	89	84	5.8	40 - 140	30
Heptachlor	ND	1.7	70	63	10.5	72	68	5.7	40 - 140	30
Heptachlor epoxide	ND	1.7	63	60	4.9	66	64	3.1	40 - 140	30
Hexachlorobenzene	ND	1.7	82	71	14.4	77	78	1.3	40 - 140	30
Methoxychlor	ND	1.7	73	68	7.1	76	74	2.7	40 - 140	30
Toxaphene	ND	67	NA	NA	NC	NA	NA	NC	40 - 140	30
% DCBP	42	%	77	73	5.3	81	78	3.8	30 - 150	30
% DCBP (Confirmation)	38	%	74	71	4.1	73	69	5.6	30 - 150	30
% TCMX	37	%	70	62	12.1	72	71	1.4	30 - 150	30
% TCMX (Confirmation)	34	%	67	60	11.0	68	64	6.1	30 - 150	30
QA/QC Batch 727757 (ug/kg), QC Sample No: CQ52044 (CQ52307, CQ52308, CQ52309, CQ52310)										
Semivolatiles - Soil										
1,1-Biphenyl	ND	230	67	63	6.2	65	63	3.1	40 - 140	30
1,2,4,5-Tetrachlorobenzene	ND	230	73	68	7.1	69	67	2.9	40 - 140	30
1,2,4-Trichlorobenzene	ND	230	71	66	7.3	67	66	1.5	40 - 140	30
1,2-Dichlorobenzene	ND	180	64	61	4.8	60	60	0.0	40 - 140	30
1,2-Diphenylhydrazine	ND	230	64	63	1.6	64	62	3.2	40 - 140	30

QA/QC Data

SDG I.D.: GCQ52307

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,3-Dichlorobenzene	ND	230	62	60	3.3	58	59	1.7	40 - 140	30	
1,4-Dichlorobenzene	ND	230	60	58	3.4	57	57	0.0	40 - 140	30	
2,2'-Oxybis(1-Chloropropane)	ND	230	60	59	1.7	59	59	0.0	40 - 140	30	
2,4,5-Trichlorophenol	ND	230	87	80	8.4	81	78	3.8	30 - 130	30	
2,4,6-Trichlorophenol	ND	130	86	82	4.8	83	79	4.9	30 - 130	30	
2,4-Dichlorophenol	ND	130	85	80	6.1	80	78	2.5	30 - 130	30	
2,4-Dimethylphenol	ND	230	78	73	6.6	73	70	4.2	30 - 130	30	
2,4-Dinitrophenol	ND	230	48	41	15.7	22	19	14.6	30 - 130	30	m
2,4-Dinitrotoluene	ND	130	85	83	2.4	84	79	6.1	40 - 140	30	
2,6-Dinitrotoluene	ND	130	85	82	3.6	84	81	3.6	40 - 140	30	
2-Chloronaphthalene	ND	230	72	69	4.3	70	67	4.4	40 - 140	30	
2-Chlorophenol	ND	230	76	73	4.0	71	71	0.0	30 - 130	30	
2-Methylnaphthalene	ND	230	76	72	5.4	73	71	2.8	40 - 140	30	
2-Methylphenol (o-cresol)	ND	230	74	72	2.7	70	70	0.0	30 - 130	30	
2-Nitroaniline	ND	330	102	101	1.0	99	95	4.1	40 - 140	30	
2-Nitrophenol	ND	230	72	69	4.3	73	71	2.8	30 - 130	30	
3&4-Methylphenol (m&p-cresol)	ND	230	77	73	5.3	72	73	1.4	30 - 130	30	
3,3'-Dichlorobenzidine	ND	130	112	106	5.5	107	98	8.8	40 - 140	30	
3-Nitroaniline	ND	330	94	91	3.2	93	88	5.5	40 - 140	30	
4,6-Dinitro-2-methylphenol	ND	230	84	78	7.4	60	53	12.4	30 - 130	30	
4-Bromophenyl phenyl ether	ND	230	84	79	6.1	82	76	7.6	40 - 140	30	
4-Chloro-3-methylphenol	ND	230	85	80	6.1	82	78	5.0	30 - 130	30	
4-Chloroaniline	ND	230	73	70	4.2	70	69	1.4	40 - 140	30	
4-Chlorophenyl phenyl ether	ND	230	74	71	4.1	72	69	4.3	40 - 140	30	
4-Nitroaniline	ND	230	71	70	1.4	73	69	5.6	40 - 140	30	
4-Nitrophenol	ND	230	72	69	4.3	67	62	7.8	30 - 130	30	
Acenaphthene	ND	230	68	64	6.1	66	64	3.1	40 - 140	30	
Acenaphthylene	ND	130	64	60	6.5	62	60	3.3	40 - 140	30	
Acetophenone	ND	230	63	61	3.2	60	60	0.0	40 - 140	30	
Aniline	ND	330	65	64	1.6	61	61	0.0	40 - 140	30	
Anthracene	ND	230	75	71	5.5	74	69	7.0	40 - 140	30	
Benz(a)anthracene	ND	230	78	74	5.3	77	71	8.1	40 - 140	30	
Benzidine	ND	330	68	71	4.3	53	45	16.3	40 - 140	30	
Benzo(a)pyrene	ND	130	87	82	5.9	84	78	7.4	40 - 140	30	
Benzo(b)fluoranthene	ND	160	78	74	5.3	76	71	6.8	40 - 140	30	
Benzo(ghi)perylene	ND	230	84	81	3.6	82	76	7.6	40 - 140	30	
Benzo(k)fluoranthene	ND	230	77	72	6.7	75	70	6.9	40 - 140	30	
Benzoic Acid	ND	670	97	80	19.2	65	50	26.1	30 - 130	30	
Benzyl butyl phthalate	ND	230	78	74	5.3	77	72	6.7	40 - 140	30	
Bis(2-chloroethoxy)methane	ND	230	72	69	4.3	70	68	2.9	40 - 140	30	
Bis(2-chloroethyl)ether	ND	130	67	65	3.0	64	64	0.0	40 - 140	30	
Bis(2-ethylhexyl)phthalate	ND	230	77	73	5.3	77	71	8.1	40 - 140	30	
Carbazole	ND	230	78	74	5.3	76	71	6.8	40 - 140	30	
Chrysene	ND	230	78	74	5.3	76	70	8.2	40 - 140	30	
Dibenz(a,h)anthracene	ND	130	84	79	6.1	80	75	6.5	40 - 140	30	
Dibenzofuran	ND	230	71	68	4.3	68	66	3.0	40 - 140	30	
Diethyl phthalate	ND	230	75	72	4.1	72	69	4.3	40 - 140	30	
Dimethylphthalate	ND	230	77	73	5.3	76	71	6.8	40 - 140	30	
Di-n-butylphthalate	ND	670	81	77	5.1	79	74	6.5	40 - 140	30	
Di-n-octylphthalate	ND	230	80	77	3.8	79	74	6.5	40 - 140	30	
Fluoranthene	ND	230	77	75	2.6	76	70	8.2	40 - 140	30	
Fluorene	ND	230	74	71	4.1	71	69	2.9	40 - 140	30	
Hexachlorobenzene	ND	130	69	65	6.0	68	65	4.5	40 - 140	30	

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Hexachlorobutadiene	ND	230	68	65	4.5	64	63	1.6	40 - 140	30
Hexachlorocyclopentadiene	ND	230	50	46	8.3	51	49	4.0	40 - 140	30
Hexachloroethane	ND	130	61	59	3.3	58	57	1.7	40 - 140	30
Indeno(1,2,3-cd)pyrene	ND	230	82	79	3.7	80	75	6.5	40 - 140	30
Isophorone	ND	130	64	61	4.8	63	61	3.2	40 - 140	30
Naphthalene	ND	230	68	64	6.1	65	63	3.1	40 - 140	30
Nitrobenzene	ND	130	66	66	0.0	65	65	0.0	40 - 140	30
N-Nitrosodimethylamine	ND	230	67	64	4.6	63	63	0.0	40 - 140	30
N-Nitrosodi-n-propylamine	ND	130	66	66	0.0	65	64	1.6	40 - 140	30
N-Nitrosodiphenylamine	ND	130	75	72	4.1	73	69	5.6	40 - 140	30
Pentachloronitrobenzene	ND	230	70	65	7.4	70	64	9.0	40 - 140	30
Pentachlorophenol	ND	230	68	63	7.6	54	49	9.7	30 - 130	30
Phenanthrene	ND	130	73	69	5.6	71	67	5.8	40 - 140	30
Phenol	ND	230	84	82	2.4	81	80	1.2	30 - 130	30
Pyrene	ND	230	76	73	4.0	74	70	5.6	40 - 140	30
Pyridine	ND	230	56	53	5.5	49	53	7.8	40 - 140	30
% 2,4,6-Tribromophenol	77	%	72	68	5.7	73	67	8.6	30 - 130	30
% 2-Fluorobiphenyl	70	%	64	61	4.8	64	62	3.2	30 - 130	30
% 2-Fluorophenol	72	%	68	66	3.0	65	64	1.6	30 - 130	30
% Nitrobenzene-d5	70	%	62	61	1.6	61	61	0.0	30 - 130	30
% Phenol-d5	71	%	67	66	1.5	65	65	0.0	30 - 130	30
% Terphenyl-d14	77	%	69	67	2.9	68	64	6.1	30 - 130	30

Comment:

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

QA/QC Batch 727223 (ug/kg), QC Sample No: CQ52307 (CQ52307, CQ52308, CQ52309, CQ52310, CQ52311)

Volatiles - Soil (Low Level)

1,1,1,2-Tetrachloroethane	ND	5.0	110	110	0.0	110	106	3.7	70 - 130	20
1,1,1-Trichloroethane	ND	5.0	113	111	1.8	118	113	4.3	70 - 130	20
1,1,2,2-Tetrachloroethane	ND	3.0	108	110	1.8	115	109	5.4	70 - 130	20
1,1,2-Trichloroethane	ND	5.0	108	109	0.9	108	103	4.7	70 - 130	20
1,1-Dichloroethane	ND	5.0	108	105	2.8	114	109	4.5	70 - 130	20
1,1-Dichloroethene	ND	5.0	113	109	3.6	120	116	3.4	70 - 130	20
1,1-Dichloropropene	ND	5.0	121	119	1.7	123	118	4.1	70 - 130	20
1,2,3-Trichlorobenzene	ND	5.0	110	112	1.8	106	102	3.8	70 - 130	20
1,2,3-Trichloropropane	ND	5.0	105	106	0.9	113	106	6.4	70 - 130	20
1,2,4-Trichlorobenzene	ND	5.0	114	117	2.6	110	105	4.7	70 - 130	20
1,2,4-Trimethylbenzene	ND	1.0	117	115	1.7	119	112	6.1	70 - 130	20
1,2-Dibromo-3-chloropropane	ND	5.0	98	101	3.0	105	104	1.0	70 - 130	20
1,2-Dibromoethane	ND	5.0	109	111	1.8	113	108	4.5	70 - 130	20
1,2-Dichlorobenzene	ND	5.0	113	113	0.0	114	107	6.3	70 - 130	20
1,2-Dichloroethane	ND	5.0	104	105	1.0	105	100	4.9	70 - 130	20
1,2-Dichloropropane	ND	5.0	110	109	0.9	110	106	3.7	70 - 130	20
1,3,5-Trimethylbenzene	ND	1.0	119	116	2.6	122	114	6.8	70 - 130	20
1,3-Dichlorobenzene	ND	5.0	116	115	0.9	118	112	5.2	70 - 130	20
1,3-Dichloropropane	ND	5.0	111	112	0.9	113	108	4.5	70 - 130	20
1,4-Dichlorobenzene	ND	5.0	116	115	0.9	116	111	4.4	70 - 130	20
1,4-dioxane	ND	100	112	114	1.8	108	99	8.7	40 - 160	20
2,2-Dichloropropane	ND	5.0	111	108	2.7	115	110	4.4	70 - 130	20
2-Chlorotoluene	ND	5.0	116	114	1.7	120	113	6.0	70 - 130	20
2-Hexanone	ND	25	82	87	5.9	89	87	2.3	40 - 160	20
2-Isopropyltoluene	ND	5.0	121	117	3.4	123	115	6.7	70 - 130	20

QA/QC Data

SDG I.D.: GCQ52307

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
4-Chlorotoluene	ND	5.0	118	116	1.7	121	114	6.0	70 - 130	20	
4-Methyl-2-pentanone	ND	25	92	97	5.3	100	96	4.1	40 - 160	20	
Acetone	ND	10	73	77	5.3	86	82	4.8	40 - 160	20	
Acrylonitrile	ND	5.0	98	98	0.0	108	105	2.8	70 - 130	20	
Benzene	ND	1.0	113	112	0.9	115	109	5.4	70 - 130	20	
Bromobenzene	ND	5.0	113	112	0.9	118	110	7.0	70 - 130	20	
Bromochloromethane	ND	5.0	106	108	1.9	107	104	2.8	70 - 130	20	
Bromodichloromethane	ND	5.0	104	106	1.9	103	99	4.0	70 - 130	20	
Bromoform	ND	5.0	99	102	3.0	96	93	3.2	70 - 130	20	
Bromomethane	ND	5.0	115	114	0.9	121	114	6.0	40 - 160	20	
Carbon Disulfide	ND	5.0	116	112	3.5	123	118	4.1	70 - 130	20	
Carbon tetrachloride	ND	5.0	134	131	2.3	117	114	2.6	70 - 130	20	I
Chlorobenzene	ND	5.0	115	114	0.9	117	112	4.4	70 - 130	20	
Chloroethane	ND	5.0	120	113	6.0	122	118	3.3	70 - 130	20	
Chloroform	ND	5.0	107	107	0.0	111	106	4.6	70 - 130	20	
Chloromethane	ND	5.0	125	122	2.4	133	128	3.8	40 - 160	20	
cis-1,2-Dichloroethene	ND	5.0	107	105	1.9	111	107	3.7	70 - 130	20	
cis-1,3-Dichloropropene	ND	5.0	108	109	0.9	106	101	4.8	70 - 130	20	
Dibromochloromethane	ND	3.0	107	108	0.9	103	99	4.0	70 - 130	20	
Dibromomethane	ND	5.0	106	108	1.9	108	102	5.7	70 - 130	20	
Dichlorodifluoromethane	ND	5.0	115	111	3.5	120	115	4.3	40 - 160	20	
Diethyl ether	ND	5.0	100	102	2.0	104	98	5.9	70 - 130	20	
Di-isopropyl ether	ND	5.0	103	102	1.0	105	101	3.9	70 - 130	20	
Ethyl tert-butyl ether	ND	5.0	102	103	1.0	103	100	3.0	70 - 130	20	
Ethylbenzene	ND	1.0	118	116	1.7	120	116	3.4	70 - 130	20	
Hexachlorobutadiene	ND	5.0	118	115	2.6	109	101	7.6	70 - 130	20	
Isopropylbenzene	ND	1.0	120	116	3.4	124	117	5.8	70 - 130	20	
m&p-Xylene	ND	2.0	119	115	3.4	120	115	4.3	70 - 130	20	
Methyl ethyl ketone	ND	5.0	83	88	5.8	88	84	4.7	40 - 160	20	
Methyl t-butyl ether (MTBE)	ND	1.0	101	103	2.0	102	98	4.0	70 - 130	20	
Methylene chloride	ND	5.0	95	95	0.0	99	94	5.2	70 - 130	20	
Naphthalene	ND	5.0	104	109	4.7	111	106	4.6	70 - 130	20	
n-Butylbenzene	ND	1.0	125	121	3.3	124	117	5.8	70 - 130	20	
n-Propylbenzene	ND	1.0	121	118	2.5	126	119	5.7	70 - 130	20	
o-Xylene	ND	2.0	114	112	1.8	115	110	4.4	70 - 130	20	
p-Isopropyltoluene	ND	1.0	121	118	2.5	123	115	6.7	70 - 130	20	
sec-Butylbenzene	ND	1.0	123	119	3.3	127	119	6.5	70 - 130	20	
Styrene	ND	5.0	115	112	2.6	115	110	4.4	70 - 130	20	
tert-amyl methyl ether	ND	5.0	102	105	2.9	101	96	5.1	70 - 130	20	
tert-Butylbenzene	ND	1.0	119	116	2.6	124	117	5.8	70 - 130	20	
Tetrachloroethene	ND	5.0	120	118	1.7	123	118	4.1	70 - 130	20	
Tetrahydrofuran (THF)	ND	5.0	96	103	7.0	104	102	1.9	70 - 130	20	
Toluene	ND	1.0	111	110	0.9	113	109	3.6	70 - 130	20	
trans-1,2-Dichloroethene	ND	5.0	112	109	2.7	119	114	4.3	70 - 130	20	
trans-1,3-Dichloropropene	ND	5.0	106	108	1.9	103	100	3.0	70 - 130	20	
trans-1,4-dichloro-2-butene	ND	5.0	105	109	3.7	110	105	4.7	70 - 130	20	
Trichloroethene	ND	5.0	116	115	0.9	120	114	5.1	70 - 130	20	
Trichlorofluoromethane	ND	5.0	123	119	3.3	131	125	4.7	70 - 130	20	m
Trichlorotrifluoroethane	ND	5.0	124	118	5.0	131	126	3.9	70 - 130	20	m
Vinyl chloride	ND	5.0	126	121	4.0	136	131	3.7	70 - 130	20	m
% 1,2-dichlorobenzene-d4	100	%	99	100	1.0	99	100	1.0	70 - 130	20	
% Bromofluorobenzene	96	%	100	101	1.0	100	100	0.0	70 - 130	20	
% Dibromofluoromethane	95	%	97	99	2.0	97	96	1.0	70 - 130	20	

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
% Toluene-d8	100	%	99	100	1.0	99	98	1.0	70 - 130	20	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 10%.
The RPD criteria for the LCS/LCSD is 20%,
The MS/MSD RPD criteria is listed above.

QA/QC Batch 727223H (ug/kg), QC Sample No: CQ52307 50X (CQ52314 (50X))

Volatiles - Soil (High Level)

1,1,1,2-Tetrachloroethane	ND	250	108	108	0.0	99	106	6.8	70 - 130	20	
1,1,1-Trichloroethane	ND	250	109	110	0.9	99	105	5.9	70 - 130	20	
1,1,2,2-Tetrachloroethane	ND	250	108	110	1.8	104	111	6.5	70 - 130	20	
1,1,2-Trichloroethane	ND	250	106	107	0.9	102	107	4.8	70 - 130	20	
1,1-Dichloroethane	ND	250	102	104	1.9	97	103	6.0	70 - 130	20	
1,1-Dichloroethene	ND	250	74	79	6.5	76	81	6.4	70 - 130	20	
1,1-Dichloropropene	ND	250	119	121	1.7	109	115	5.4	70 - 130	20	
1,2,3-Trichlorobenzene	ND	250	117	117	0.0	109	116	6.2	70 - 130	20	
1,2,3-Trichloropropane	ND	250	104	104	0.0	100	105	4.9	70 - 130	20	
1,2,4-Trichlorobenzene	ND	250	124	123	0.8	114	121	6.0	70 - 130	20	
1,2,4-Trimethylbenzene	ND	250	115	115	0.0	108	114	5.4	70 - 130	20	
1,2-Dibromo-3-chloropropane	ND	250	94	94	0.0	85	92	7.9	70 - 130	20	
1,2-Dibromoethane	ND	250	108	109	0.9	103	110	6.6	70 - 130	20	
1,2-Dichlorobenzene	ND	250	114	115	0.9	107	114	6.3	70 - 130	20	
1,2-Dichloroethane	ND	250	102	103	1.0	97	103	6.0	70 - 130	20	
1,2-Dichloropropane	ND	250	108	109	0.9	103	109	5.7	70 - 130	20	
1,3,5-Trimethylbenzene	ND	250	115	116	0.9	108	114	5.4	70 - 130	20	
1,3-Dichlorobenzene	ND	250	118	119	0.8	110	117	6.2	70 - 130	20	
1,3-Dichloropropane	ND	250	111	112	0.9	105	111	5.6	70 - 130	20	
1,4-Dichlorobenzene	ND	250	119	118	0.8	111	117	5.3	70 - 130	20	
1,4-dioxane	ND	5000	104	112	7.4	100	107	6.8	40 - 160	20	
2,2-Dichloropropane	ND	250	104	106	1.9	96	102	6.1	70 - 130	20	
2-Chlorotoluene	ND	250	114	115	0.9	108	114	5.4	70 - 130	20	
2-Hexanone	ND	1300	84	85	1.2	81	85	4.8	40 - 160	20	
2-Isopropyltoluene	ND	250	118	118	0.0	111	118	6.1	70 - 130	20	
4-Chlorotoluene	ND	250	118	118	0.0	110	117	6.2	70 - 130	20	
4-Methyl-2-pentanone	ND	1300	90	92	2.2	89	93	4.4	40 - 160	20	
Acetone	ND	500	58	61	5.0	62	65	4.7	40 - 160	20	
Acrylonitrile	ND	250	93	95	2.1	91	96	5.3	70 - 130	20	
Benzene	ND	250	112	113	0.9	106	111	4.6	70 - 130	20	
Bromobenzene	ND	250	112	113	0.9	106	114	7.3	70 - 130	20	
Bromochloromethane	ND	250	102	104	1.9	97	102	5.0	70 - 130	20	
Bromodichloromethane	ND	250	101	102	1.0	92	98	6.3	70 - 130	20	
Bromoform	ND	250	96	95	1.0	84	90	6.9	70 - 130	20	
Bromomethane	ND	250	70	73	4.2	68	74	8.5	40 - 160	20	
Carbon Disulfide	ND	250	75	79	5.2	76	82	7.6	70 - 130	20	
Carbon tetrachloride	ND	250	108	107	0.9	95	102	7.1	70 - 130	20	
Chlorobenzene	ND	250	115	115	0.0	108	114	5.4	70 - 130	20	
Chloroethane	ND	250	26	27	3.8	24	27	11.8	70 - 130	20	l,m
Chloroform	ND	250	103	104	1.0	96	102	6.1	70 - 130	20	
Chloromethane	ND	250	122	125	2.4	113	122	7.7	40 - 160	20	
cis-1,2-Dichloroethene	ND	250	102	104	1.9	96	103	7.0	70 - 130	20	
cis-1,3-Dichloropropene	ND	250	106	107	0.9	98	104	5.9	70 - 130	20	
Dibromochloromethane	ND	150	103	103	0.0	92	99	7.3	70 - 130	20	
Dibromomethane	ND	250	104	105	1.0	98	104	5.9	70 - 130	20	

QA/QC Data

SDG I.D.: GCQ52307

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Dichlorodifluoromethane	ND	250	113	114	0.9	102	108	5.7	40 - 160	20	
Diethyl ether	ND	250	36	36	0.0	38	38	0.0	70 - 130	20	l,m
Di-isopropyl ether	ND	250	99	100	1.0	95	100	5.1	70 - 130	20	
Ethyl tert-butyl ether	ND	250	100	101	1.0	95	101	6.1	70 - 130	20	
Ethylbenzene	ND	250	117	118	0.9	110	115	4.4	70 - 130	20	
Hexachlorobutadiene	ND	250	122	120	1.7	113	119	5.2	70 - 130	20	
Isopropylbenzene	ND	250	115	116	0.9	108	115	6.3	70 - 130	20	
m&p-Xylene	ND	250	117	118	0.9	111	117	5.3	70 - 130	20	
Methyl ethyl ketone	ND	250	82	82	0.0	75	79	5.2	40 - 160	20	
Methyl t-butyl ether (MTBE)	ND	250	98	98	0.0	93	99	6.3	70 - 130	20	
Methylene chloride	ND	250	91	91	0.0	86	91	5.6	70 - 130	20	
Naphthalene	ND	250	107	108	0.9	102	109	6.6	70 - 130	20	
n-Butylbenzene	ND	250	126	125	0.8	117	122	4.2	70 - 130	20	
n-Propylbenzene	ND	250	119	119	0.0	112	118	5.2	70 - 130	20	
o-Xylene	ND	250	113	114	0.9	107	112	4.6	70 - 130	20	
p-Isopropyltoluene	ND	250	120	119	0.8	112	118	5.2	70 - 130	20	
sec-Butylbenzene	ND	250	121	121	0.0	113	120	6.0	70 - 130	20	
Styrene	ND	250	114	115	0.9	108	114	5.4	70 - 130	20	
tert-amyl methyl ether	ND	250	101	102	1.0	97	102	5.0	70 - 130	20	
tert-Butylbenzene	ND	250	116	117	0.9	109	116	6.2	70 - 130	20	
Tetrachloroethene	ND	250	119	120	0.8	112	117	4.4	70 - 130	20	
Tetrahydrofuran (THF)	ND	250	96	98	2.1	87	93	6.7	70 - 130	20	
Toluene	ND	250	110	110	0.0	104	108	3.8	70 - 130	20	
trans-1,2-Dichloroethene	ND	250	106	108	1.9	100	106	5.8	70 - 130	20	
trans-1,3-Dichloropropene	ND	250	104	104	0.0	95	102	7.1	70 - 130	20	
trans-1,4-dichloro-2-butene	ND	250	104	105	1.0	95	102	7.1	70 - 130	20	
Trichloroethene	ND	250	115	116	0.9	108	114	5.4	70 - 130	20	
Trichlorofluoromethane	ND	250	27	28	3.6	26	28	7.4	70 - 130	20	l,m
Trichlorotrifluoroethane	ND	250	88	91	3.4	88	92	4.4	70 - 130	20	
Vinyl chloride	ND	250	122	125	2.4	115	122	5.9	70 - 130	20	
% 1,2-dichlorobenzene-d4	100	%	100	100	0.0	100	100	0.0	70 - 130	20	
% Bromofluorobenzene	99	%	102	102	0.0	101	101	0.0	70 - 130	20	
% Dibromofluoromethane	90	%	97	97	0.0	92	95	3.2	70 - 130	20	
% Toluene-d8	100	%	99	98	1.0	98	98	0.0	70 - 130	20	

Comment:

Additional 8260 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is 10%.
The RPD criteria for the LCS/LCSD is 20%,
The MS/MSD RPD criteria is listed above.

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
April 25, 2024

Thursday, April 25, 2024

Criteria: MA: S1, S1G2, S1G3, S2, S2G2, S2G3

State: MA

Sample Criteria Exceedances Report

GCQ52307 - PEER

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CQ52314	$8260MER	Dibromochloromethane	MA / CMR 310.40.1600 / S1 (mg/kg)	ND	50	5	5	ug/Kg
CQ52314	$8260MER	cis-1,3-Dichloropropene	MA / CMR 310.40.1600 / S1 (mg/kg)	ND	25	10	10	ug/Kg
CQ52314	$8260MER	trans-1,3-Dichloropropene	MA / CMR 310.40.1600 / S1 (mg/kg)	ND	25	10	10	ug/Kg
CQ52314	$8260MER	1,1,2,2-Tetrachloroethane	MA / CMR 310.40.1600 / S1 (mg/kg)	ND	50	5	5	ug/Kg
CQ52314	$8260MER	1,1,2,2-Tetrachloroethane	MA / CMR 310.40.1600 / S2 (mg/kg)	ND	50	20	20	ug/Kg
CQ52314	$8260MER	Dibromochloromethane	MA / CMR 310.40.1600 / S2 (mg/kg)	ND	50	30	30	ug/Kg
CQ52314	$8260MER	1,1,2,2-Tetrachloroethane	MA / SOIL S-1 STANDARDS / S-1 Soil & GW-1	ND	50	5	5	ug/Kg
CQ52314	$8260MER	Dibromochloromethane	MA / SOIL S-1 STANDARDS / S-1 Soil & GW-1	ND	50	5	5	ug/Kg
CQ52314	$8260MER	Dibromochloromethane	MA / SOIL S-1 STANDARDS / S-1 Soil & GW-2	ND	50	30	30	ug/Kg
CQ52314	$8260MER	1,1,2,2-Tetrachloroethane	MA / SOIL S-1 STANDARDS / S-1 Soil & GW-2	ND	50	20	20	ug/Kg
CQ52314	$8260MER	Dibromochloromethane	MA / SOIL S-2 STANDARDS / S-2 Soil & GW-1	ND	50	5	5	ug/Kg
CQ52314	$8260MER	1,1,2,2-Tetrachloroethane	MA / SOIL S-2 STANDARDS / S-2 Soil & GW-1	ND	50	5	5	ug/Kg
CQ52314	$8260MER	Dibromochloromethane	MA / SOIL S-2 STANDARDS / S-2 Soil & GW-2	ND	50	30	30	ug/Kg
CQ52314	$8260MER	1,1,2,2-Tetrachloroethane	MA / SOIL S-2 STANDARDS / S-2 Soil & GW-2	ND	50	20	20	ug/Kg
CQ52314	$MCPADD-SM	1,4-Dioxane	MA / CMR 310.40.1600 / S1 (mg/kg)	ND	800	200	200	ug/Kg
CQ52314	$MCPADD-SM	1,4-Dioxane	MA / SOIL S-1 STANDARDS / S-1 Soil & GW-1	ND	800	200	200	ug/Kg
CQ52314	$MCPADD-SM	1,4-Dioxane	MA / SOIL S-2 STANDARDS / S-2 Soil & GW-1	ND	800	200	200	ug/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

April 25, 2024 SDG I.D.: GCQ52307

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

ETPH Narration

AU-XL2 04/20/24-1: CQ52307, CQ52308, CQ52309, CQ52310

As per section 7.2.3, a discrimination check standard was run and contained the following outliers: C36 29.3%L (20%)

The ETPH method allows for one discrimination check standard outlier.

PCB Narration

AU-ECD3 04/23/24-1: CQ52307, CQ52308, CQ52309, CQ52310

The following Continuing Calibration compounds did not meet % deviation criteria:
Samples: CQ52307, CQ52308
Preceding CC 423B015 - PCB 1260 20%H (%)
Succeeding CC 423B028 - PCB 1260 17%H (%)
Samples: CQ52309, CQ52310
Preceding CC 423B028 - PCB 1260 17%H (%)
Succeeding CC 423B041 - DCBP SURR 17%H (15%), PCB 1260 19%H (%)

PEST Narration

AU-ECD33 04/24/24-1: CQ52312

The following Continuing Calibration compounds did not meet % deviation criteria:
Samples: CQ52312
Preceding CC 424B004 - Endosulfan II 26%L (20%)
Succeeding CC 424B018 - % DCBP 21%L (20%), 4,4'-DDT 24%L (20%), Heptachlor 21%L (20%), Methoxychlor 25%L (20%)
A low "1A" standard was run after the samples to demonstrate capability to detect any compounds outside of the CC acceptance criteria. All reported samples were ND for the affected compounds.

SVOA Narration

CHEM28 04/19/24-1: CQ52307, CQ52308, CQ52309, CQ52310

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 0.087 (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 32%L (30%)
The following Continuing Calibration compounds did not meet Maximum % deviation criteria: None.
The following Continuing Calibration compounds did not meet recommended response factors: 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%.

VOA Narration

CHEM03 04/16/24-2: CQ52307, CQ52308, CQ52309, CQ52310, CQ52311, CQ52314

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

April 25, 2024 SDG I.D.: GCQ52307

The following Initial Calibration compounds did not meet RSD% criteria: Acetone 22% (20%), Dichlorodifluoromethane 23% (20%), Methyl Ethyl Ketone 23% (20%), Trichlorotrifluoroethane 23% (20%)
The following Initial Calibration compounds did not meet maximum RSD% criteria: None.
The following Initial Calibration compounds did not meet recommended response factors: 1,1,2-Trichloroethane 0.194 (0.2)
The following Initial Calibration compounds did not meet minimum response factors: None.

The following Continuing Calibration compounds did not meet % deviation criteria: Carbon tetrachloride 32%H (30%)
The following Continuing Calibration compounds did not meet Maximum % deviation criteria: None.

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

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

PHOENIX
Environmental Laboratories, Inc.

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 2.4 °C Pg 1 of 1

Data Delivery/Contact Options:
☐ Fax:
☐ Phone:
☑ Email: gordendo@peercpc.com

Customer: PEER Consultants
Address: 10 Mall Rd Suite 301
Burlington MA 01803
7812388880

Project: M.A.N. School
Report to: d.gorden
Invoice to: d.gorden
QUOTE # Southboro

Project P.O: 8404

This section MUST be completed with Bottle Quantities.

Sampler's Signature: _____ Date: 4/15/24

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 **X** = _____(Other)

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	2024 Date Sampled	Time Sampled	Hi level VOC	Lo level VOC	TPH GRO	Flash/Ignit	SVOC, TPH DRO, PCB*	TCLP Metals **	Pesticides/Herbicides	Chloride, NO2, NO3, Phosphate	Fecal Coliform	MS/MSD*	~~GL Amber 8 oz w/H2SO4~~	Soil VOA Vials 120ml std	GL Soil container (8 oz) w/methanol ☑ H2O	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	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle w/thio	Bacteria Bottle as is
52307	B2 Full	S	4/15	1437	✓	✓	✓	✓	✓	WA*	WA*					5	2	1								
52308	B3 Full	S	"	1139	✓	✓	✓	✓	✓							5	2	1								
52309	B4 Full	S	"	1316	✓	✓	✓	✓	✓							5	2	1								
52310	B5 Full	S	↓	0942	✓	✓	✓	✓	✓							5	2	1								
52311	TB041524 4	L	4/10	—	✓	✓										3										
52312	B2-B5 0-2'	S	4/15	1501						✓							1									
52313	B2-B5 WT	S	4/15	1533							✓	✓		1			1									
52314	TB HL																									

Relinquished by:	Accepted by:	Date:	Time:
		4-16-24	1205
		4-16-24	14:45

Comments, Special Requirements or Regulations:
* and MCP 14 metals, pH, corrosivity, conductivity, reactivity
** Follow 20x rule, Call Client first for approval

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

Turnaround Time:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☑ Standard
☐ Other
* SURCHARGE APPLIES

RI
☐ (Residential) Direct Exposure
☐ (Comm/Industrial) Direct Exposure
☐ GA Leachability
☐ GB Leachability
☐ GA-GW Objectives
☐ GB-GW Objectives

CT
☐ RCP Cert
☐ GW Protection
☐ SW Protection
☐ GA Mobility
☐ GB Mobility
☐ Residential DEC
☐ I/C DEC
☐ Other

MA comm97-001
☐ MCP Certification
☐ GW-1 ☐ MWRA eSMART
☐ GW-2 ☐ S-1 10% CALC
☐ GW-3
☑ S-1 GW-1 ☑ S-1 GW-2 ☑ S-1 GW-3
☑ S-2 GW-1 ☑ S-2 GW-2 ☑ S-2 GW-3
☐ S-3 GW-1 ☐ S-3 GW-2 ☐ S-3 GW-3
☐ SW Protection

State where samples were collected: MA

Data Format
☑ Excel
☑ PDF
☐ GIS/Key
☐ EQuIS
☐ Other

Data Package
☐ Tier II Checklist
☐ Full Data Package*
☑ Phoenix Std Report
☐ Other
* SURCHARGE APPLIES

PEL-126 REV. 06/20