



August 25, 2020

Ms. Debbie Lee  
131 Pearl Street Owner, LLC  
201 West 17th Street, Apartment 3D  
New York, NY 10011

**RE: Geotechnical Engineering and Environmental Report  
123-131 Pearl Street Development  
Port Chester, New York  
MMI #7163-01**

Dear Ms. Lee:

Milone & MacBroom, Inc. (MMI) is pleased to submit our geotechnical engineering and environmental report for the proposed Pearl Street Development located at 123-131 Pearl Street in Port Chester, New York. Refer to Figure 1 – Locus Plan in Appendix 1 for the general location of the project.

This report includes subsurface information, geotechnical design and construction recommendations, and a limited environmental evaluation for the project. Our geotechnical recommendations are based in part on guidance from the 2020 New York State Building Code, which is based on the 2018 International Building Code (IBC). The limited environmental evaluation is based on the New York Department of Environment Conservation (NYDECs) Soil Cleanup Objectives.

#### **PURPOSE AND SCOPE**

MMI performed subsurface explorations (e.g. borings) and a geotechnical engineering evaluation for the proposed development, which included characterizing the subsurface conditions at the site, performing geotechnical engineering analyses, and providing geotechnical design and construction recommendations for the project. In addition, limited environmental testing was performed with the intent of providing preliminary information and our initial thoughts regarding the subsurface environmental conditions.

#### **SITE DESCRIPTION AND PROPOSED CONSTRUCTION**

The site is approximately 0.62 acres, comprised of three adjacent parcels that are bordered by Pearl Street to the north, New Broad Street to the south, and commercial properties to the east and west. The site slopes down from approximately El. 76 at Pearl Street to approximately El. 65 at New Broad Street, where there are several retaining walls that maintain a grade change of about seven feet between the site and street below. The site is currently occupied by six, existing buildings that will be demolished as part of the development.

The development will consist of a four to six to seven story residential building with the lowest finished floor level close to that of New Broad Street at about El. 58. The new building will essentially occupy the entire site with a footprint of approximately 27,500 square feet.

## REGIONAL GEOLOGY

According to the "Surficial Geologic Map of New York (1:250,000 scale)" by Donald H. Cadwell and dated 1989 and the "Bedrock Geological Map of the Mamaroneck Quadrangle, New York (1:24,000 scale)" by Pelligrini, T.L and dated 1977, the subsurface materials at the site are mapped as glacial till, over brown or gray, fine to coarse-grained schist (Hartland Formation).

## SUBSURFACE EXPLORATIONS

MMI observed five borings (MM-1 through MM-5) that were performed by General Borings, Inc. of Prospect, Connecticut on July 21 and 22, 2020. The borings were performed to explore the subsurface conditions within the proposed building footprint and their approximate locations are shown on Figure 2, Subsurface Exploration Location Plan, contained in Appendix 1. The borings were located by taping and/or pacing from existing site features and ground surface elevations were estimated from available topographic information.

The borings were advanced using hollow-stem augers to refusal at depths ranging between about 11 and 20 feet below current site grades. Representative soil samples were obtained by split-barrel sampling procedures in general accordance with American Society for Testing and Materials (ASTM) Specification D-1586. The split-barrel sampling procedure utilizes a standard 2-inch-outside-diameter (O.D.) split-barrel sampler that is driven into the bottom of the boring with a 140-pound hammer falling 30 inches. The number of blows required to advance the sampler the middle 12 inches of a normal 24-inch penetration is recorded as the Standard Penetration Resistance Value (N). The blows are indicated on the boring logs at their depth of occurrence and provide an indication of the consistency or relative density of the material.

Borings MM-1, MM-3, and MM-5 were further advanced an additional five to 10 feet into bedrock using an NQ sized, double-tube, core barrel in general accordance with ASTM Specification D-2113. The Rock Quality Designation (RQD) was determined for each rock core as an indication of bedrock quality. RQD is defined as the ratio of the sum of the lengths of the cored pieces greater than four inches versus the total cored length, expressed as a percentage.

Groundwater levels were measured using a weighted tape in the open drill holes or inferred from the soil samples during drilling. Logs of the borings are included in Appendix 2 and photos of the retrieved rock cores are provided in Appendix 3.

## SUBSURFACE SOIL AND BEDROCK CONDITIONS

The generalized subsurface soil and bedrock profile generally consists of asphalt over fill over glacial till over weathered bedrock over more competent bedrock. A more detailed description of the subsurface materials encountered are provided below:

**Asphalt** was encountered at the ground surface of each boring that is generally 2-inches thick.

**Fill** was encountered below the asphalt in each boring that ranges between 2.3 and 8.3 feet thick and generally consists of loose to medium dense, gray, brown/dark brown, or black, fine to coarse sand, trace

to some fine to coarse gravel, little to some silt, trace debris (i.e. asphalt, porcelain) or brown/dark brown, silt, little to and fine to coarse sand, trace fine to coarse gravel.

**Glacial Till** was encountered below the fill in each boring except Boring MM-1. Where encountered, the glacial till ranges between 3.0 and 12.5 feet thick and generally consists of dense to very dense, brown or gray, fine to coarse sand, trace to and silt, trace to some fine to coarse gravel.

**Weathered Bedrock** was encountered below the fill in Boring MM-1 and below the glacial till in Borings MM-2, MM-4, and MM-5. Where encountered, the weathered bedrock ranges between 1.7 and 5.5 feet thick and generally consists of very dense, brown-orange or -gray, fine to coarse sand, some to and silt, trace to little fine to coarse gravel or blue-gray, fine to coarse gravel, trace fine to coarse sand, trace silt.

**Bedrock** was inferred by auger and split spoon refusal in Borings MM-2 and MM-4 at 20 and 11 feet below existing grades respectively, and confirmed by coring in Borings MM-1, MM-3, and MM-5 at 14 feet below existing grades. Based on this information, the bedrock appears to slopes down from west to east and, where cored, generally consists of very poor to fair quality, medium to hard, very severe to very slightly weathered, extremely fractured to sound, gray, fine to coarse-grained schist.

**Groundwater** was encountered in Borings MM-3 and MM-5 at approximately 8.5 feet below current site grades or between approximately El. 58.5 and El. 56.5, respectively. Groundwater levels will vary depending on factors such as season, precipitation, construction activity, and other conditions, which may be different from those at the time of these observations.

## LIMITED ENVIRONMENTAL TESTING AND EVALUATION

Two soil samples were collected from each boring and submitted to a certified laboratory for various environmental laboratory tests to compare to the New York Department of Environment Conservation (NYDECs) Soil Cleanup Objectives as per Chapter 6 of the New York Code. The samples were generally collected from depths less than five feet and between ten and 12 feet below existing grades. The test results are provided in Appendix 4.

Rules and Regulations (NYCRR) Part 375, Table 375-6.8(a) and Table 375-6.8(b) were used as guidelines for determining potential reuse of the soil. Based on the test results and these guidelines, our initial thoughts are as follows:

- Three of the borings, MM-1 S-4 (10-12'), MM-4 S-3 (1-3') and MM-5 S-1 (0.5-2.5'), contained analytes which exceeded the residential and for some analytes the commercial/industrial cleanup objectives for metals and polycyclic aromatic hydrocarbon (PAH);
- The unrestricted use cleanup objective was exceeded in the shallow samples from borings MM-1, MM-2, and MM-3 for various metals (mercury, lead, trivalent chromium and barium);
- Total lead concentrations in samples MM-4 S-3 (1-3') and MM-5 S-1 (0.5-2.5') were analyzed for toxicity leaching procedure lead to determine if lead was characteristically hazardous. The results were below the toxicity characteristic threshold of 5 mg/L, therefore soil is considered non-hazardous.

The test results suggest a release has occurred in the vicinity of MM-1, MM-4 and MM-5, although the source of the release is not known. The soil in these areas although not hazardous is not suitable for unrestricted reuse on-site or for export from the site. MMI recommends the following:

- Engage an environmental consultant familiar with the NYDEC Environmental Remediation Programs 6 NYCRR Part 375 to assist with environmental cleanup, reporting and overall compliance with the regulations;
- Develop a Remedial Action Plan for the project that includes the following at a minimum:
  - Plan for additional sampling of impacted areas;
  - Procedures for evaluating soils during excavation including field screening methods to be used and analytical requirements;
  - Remedial plan for soils above the residential cleanup objectives including proposed extent of remediation and proposed disposal facilities;
  - Strategies for the management of remaining excavated materials including any additional analytical requirements, proposed disposal facilities, and/or potential reuse/export options; and
  - Potential NYDEC notification requirement, if any.

## **GEOTECHNICAL ENGINEERING IMPLICATIONS OF SUBSURFACE CONDITIONS**

The existing fill is only up to eight feet thick and is anticipated to be removed as a matter of course during site preparation and grading. Support for the proposed building can be provided by conventional shallow foundations bearing on the glacial till, weathered bedrock, or more competent bedrock, or on compacted granular fill (CGF) over these materials depending on the actual foundation loads.

Excavations up to approximately 20 feet are anticipated along the northern, southern, and western boundaries of the site to construct the proposed building, which will require a temporary earth retaining system (TERS). The TERS will likely be required to retain a mixed face of subsurface materials (i.e. fill, glacial till, and weathered and/or poor quality bedrock).

With the development of the design, final foundation levels and the requirements of the TERS can be further evaluated.

## **GEOTECHNICAL RECOMMENDATIONS**

### **Building Foundations**

We recommend supporting the proposed building with conventional shallow foundations that bear on undisturbed glacial till, weathered bedrock, or more competent bedrock or CGF over these materials. Where CGF is used beneath the footings, it should be placed 1 foot beyond the edge of the footings and at a one horizontal to one vertical (1H:1V) slope down and away from the bottom of footings to the top of the bearing stratum.

We recommend exterior footings bearing on glacial till or weathered bedrock should be constructed at a minimum depth of 42 inches below final grades and footings bearing on competent bedrock should be constructed a minimum depth of 12 inches below final grades to protect against frost. We recommend a

minimum depth of 12 inches be maintained below the proposed bottom of concrete floor slab and the tops of interior footings. The minimum footing size should be 12-inches and we recommend a maximum coefficient of friction of 0.55 between foundations and the recommended bearing strata. We recommend a maximum net allowable bearing pressure for footings bearing on undisturbed glacial till, weathered bedrock, competent bedrock, or CGF over these materials as shown below:

Bearing Material Type	Net Allowable Bearing Pressure
Compacted Granular Fill (CGF)	3 TSF
Weathered Bedrock or Glacial Till	4 TSF
More Competent Bedrock	10 TSF

TSF = tons per square foot

We anticipate that the footings will experience up to approximately 1 inch of total settlement and up to approximately 1/2 inch of differential settlement. Settlements should occur as the loads are applied and will be complete at the end of construction.

### Floor Slabs

We recommend the proposed building floor slabs consist of slab-on-grade construction. We recommend placing the concrete floor slab over a minimum 6-inch-thick base course layer of compacted sand and gravel over proof compacted natural soils or CGF over the natural soils. Slab damp proofing should be installed between the slab and the base course consisting of not less than 6-mil polyethylene with joints lapped at least 6 inches. The subgrade modulus for the recommended subgrade and base course is 125 pounds per cubic inch.

### Foundation and Sub-Slab Drainage

We recommend the installation of perimeter foundation drains around the building. The perimeter drains should be installed flush with the bottom of the footings and should discharge by gravity to a convenient and appropriate location. The foundation drains should consist of 4-inch-diameter, perforated, polyvinyl chloride (PVC) pipe that is surrounded by at least 6 inches of crushed stone wrapped in nonwoven filter fabric.

We also recommend sub-slab drains below the floor of the building. The sub-slab drains should consist of parallel 12-inch square trenches spaced 25 feet on center below the slab base course material. The trenches should be backfilled with a 4-inch-diameter, perforated, PVC pipe surrounded by crushed stone and wrapped in nonwoven filter fabric. The PVC pipe should be connected to a common header system that discharges by gravity to a convenient and appropriate location.

We also recommend that roof drains and leaders be designed to divert water away from foundations. Other approved methods or materials may be considered or as detailed by the structural engineer.

### **Seismic Site Class and Liquefaction Potential**

We estimate the average Standard Penetration Resistance Value "N" extrapolated over a 100-foot depth below the proposed building foundations to be greater than 50 blows per foot, resulting in a site class of "C" (very dense soil and soft rock) per the New York State Building Code.

Based on the mapped horizontal response spectral acceleration coefficients ( $S_S = 0.28g$ ,  $S_1 = 0.06g$ ) for Port Chester, New York, we estimate  $S_{MS}$  as 0.364,  $S_{M1}$  as 0.09g,  $S_{DS}$  as 0.243g, and  $S_{D1}$  as 0.06g. Additionally, we estimate the mapped peak ground acceleration (PGA) as 0.17, and the  $PGA_M$  adjusted for site class is 0.209.

The site soils were analyzed for their potential to liquefy during a design earthquake. Based on the corrected standard penetration test results, estimated depths to groundwater, soil classifications, and peak ground acceleration adjusted for site class ( $PGA_M$ ) at this locale, it is our opinion that the site soils are not prone to liquefaction during a design earthquake.

### **Earth Retaining Structures**

Temporary and permanent earth retaining structures that are either cantilevered (i.e. are free to rotate at the top) or braced should be designed using the following geotechnical design parameters:

Material Type	Total Unit Weight (pcf)	Friction Angle (degrees)	Earth Pressures Coefficients		
			K <sub>a</sub>	K <sub>p</sub>	K <sub>o</sub>
Fill	120	33	0.29	3.4	0.46
Glacial Till	135	36	0.26	3.9	0.41
Weathered Bedrock	140	45	0.17	5.8	0.29

pcf = pounds per cubic foot

### **MATERIALS AND COMPACTION REQUIREMENTS**

The on-site fill absent of any deleterious materials, and excavated glacial till may be suitable for reuse as compacted granular fill (CGF) or as ordinary fill in nonload-bearing areas provided that the material satisfies all other project requirements.

CGF for use as structural fill should consist of inorganic soil that is free of clay, loam, ice and snow, tree stumps, roots, and other organic matter and graded within the following limits:

Sieve Size	Percent Finer by Weight
3 inches	100
1 1/2 inches	55-100
1/4 inch	25 – 60
No. 10	15 – 45
No. 40	5-25
No. 200	0 – 10

Sand and gravel for use as slab base course should consist of hard, durable sand and gravel that is free of ice, clay, shale, roots, sod, rubbish, and other organic matter and graded within the following limits:

<b>Sieve Size</b>	<b>Percent Finer by Weight</b>
2 inches	100
1/2 inch	50 – 85
No. 4	40 – 75
No. 40	10 – 35
No. 200	0 – 10

Crushed stone for use around drains or below foundations and slabs should consist of sound, tough, durable rock that is graded within the following limits:

<b>Sieve Size</b>	<b>Percent Finer by Weight</b>
3/4 inch	100
1/2 inch	85 – 100
3/8 inch	15 – 45
No. 4	0 – 15
No. 8	0 – 5

Proposed fill materials should satisfy the requirements for the intended use as specified herein. We recommend a minimum in-place dry density of 95 percent as per ASTM D1557 for material placed below foundations and floor slabs. We recommend a minimum in-place dry density of 92 percent as per ASTM D1557 for material placed as backfill against structural walls. Backfill directly behind walls should be compacted with light, hand-operated compactors. Material should be placed in a maximum loose lift thickness of 10 inches and within 2 percent of its optimum moisture content.

## **CONSTRUCTION CONSIDERATIONS**

### **Site Preparation**

We recommend any deleterious materials be stripped or excavated during site preparation. Subgrade materials that are disturbed during such removal should be undercut to undisturbed material below and backfilled with CGF. The exposed subgrades should be proof compacted with a large double-drum vibratory roller prior to the start of construction.

The six existing buildings and paved parking and drive aisles will be demolished as part of the project. All existing structures and substructures must be removed from beneath the proposed building footprint prior to any construction.

### **Subgrade Preparation**

Excavation subgrades should be free of water, ice, frozen soil, and loose soils prior to any construction. For soil or weathered bedrock subgrades, we recommend the use of smooth-edged excavator buckets to make the final excavation to help protect the subgrade, followed by proof compaction of the exposed

subgrade. More competent bedrock subgrades should be sound and free of loose materials. Fill materials and/or concrete should be placed as soon as possible after excavation so that disturbance of bearing materials does not occur. Should the materials at bearing level become disturbed, the affected materials should be removed and replaced with CGF prior to further construction. A 4-inch-thick layer of crushed stone may be used to protect subgrades that are expected to be open for an extended period.

### **Temporary Excavations**

We anticipate that a TERS will be required to construct the proposed building. All excavations should be sloped or shored in accordance with local, state, and federal regulations, including the Occupational Safety and Health Administration (OSHA) (29 CFR Part 1926) excavation trench safety standards. Where excavations can be sloped, they should be sloped in accordance with OSHA requirements for a Class "C" soil, which can be cut at a maximum of one vertical to one and one-half horizontal (1V:1.5H) up to a maximum excavation depth of 20 feet. These recommendations assume no surcharge load (i.e., stockpiles, construction equipment, etc.) at the top of the excavations or seepage (e.g., cuts below the groundwater table).

Where excavations cannot be sloped back in accordance with OSHA requirements, a TERS will be required to at least the top of competent bedrock. The TERS could consist of either cantilevered soldier piles drilled into the bedrock with lagging or a soil nails wall. If encountered, the more competent, finished rock face configuration should be no steeper than 1H:4V.

The TERS should be designed to resist the combined lateral forces resulting from earth pressures as well as those posed by any traffic and/or construction surcharge loading at the top of the excavation. The TERS should be selected by the contractor and designed by a professional engineer registered in the State of New York.

### **Bedrock Excavation**

Based on a lowest finished floor at about El. 58, we do not anticipate much bedrock excavation to be performed. Where limited bedrock excavation is required, we anticipate it can be accomplished by mechanical means as the amount of excavation should be limited, and the parent rock material is not generally a hard rock.

### **Groundwater Control/Dewatering**

Based on the observed groundwater levels at the time of drilling and anticipated finished floor elevations, excavations are anticipated to extend slightly below groundwater levels. However, we expect that groundwater/surface water runoff can be controlled with sumps and/or grading to low points. A crushed stone drainage blanket over the bottom of the excavation will facilitate dewatering.

### **CONSTRUCTION DOCUMENTS AND PLANS**

Project drawings and specifications should be provided to MMI to review for conformance with the geotechnical recommendations contained herein. If changes are made to the location or type of structure, the recommendations in this report will need to be reviewed.

## **CONSTRUCTION QUALITY CONTROL**

A qualified geotechnical engineer should make field observations of excavations and foundation preparation to monitor actual conditions for compliance with these recommendations and the project specifications in accordance with the project's Statement of Special Inspections. Specifically, we recommend field observation of footing subgrades, removal of unsuitable materials, and fill placement and compaction.

## **LIMITATIONS**

This report is subject to the limitations included in Appendix 5. Thank you for the opportunity to be of service. Please feel free to call if you have any questions.

Very truly yours,

MILONE & MACBROOM, INC.



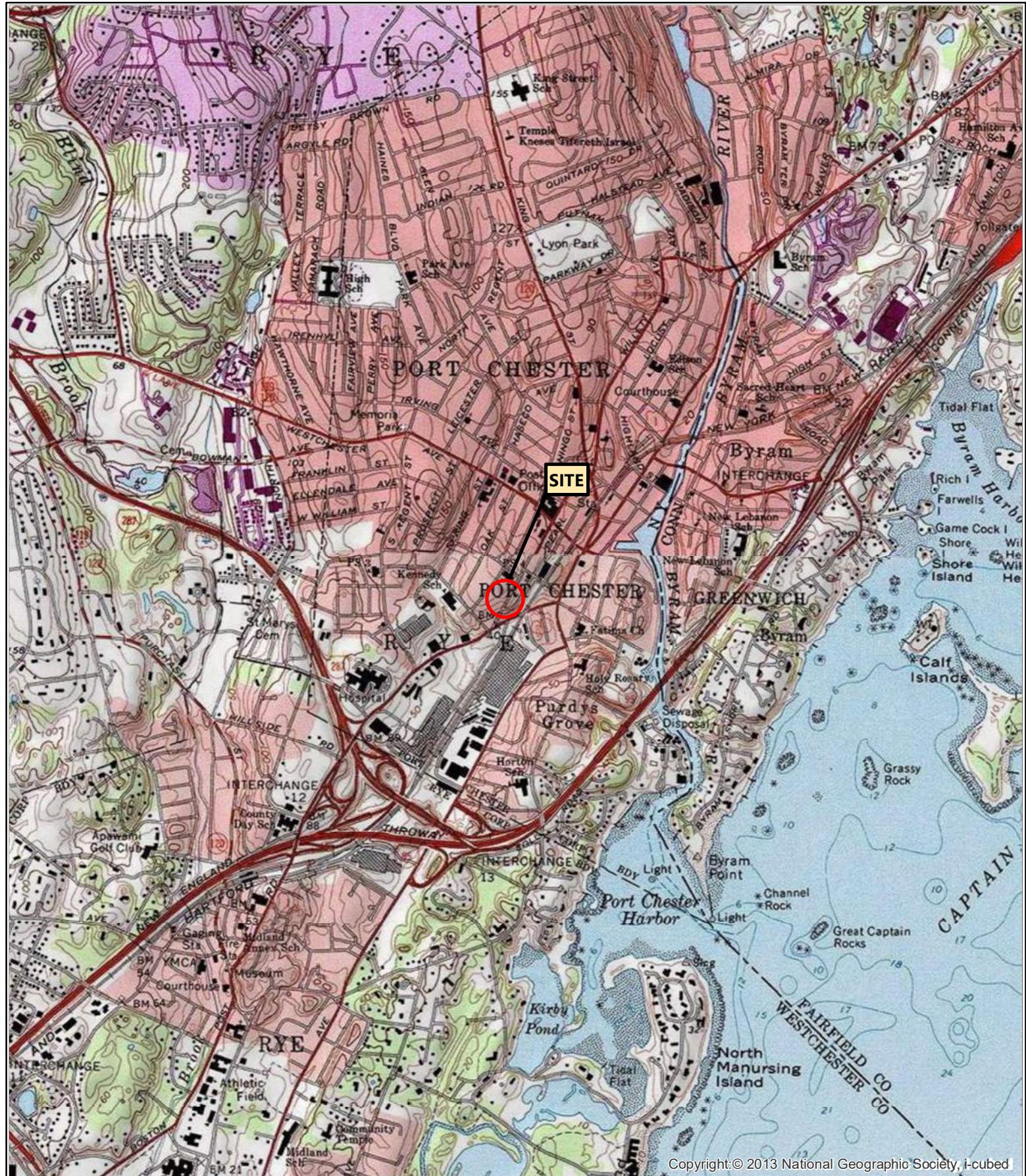
Ryan Henderson, EIT  
Geotechnical Engineer



Joseph W. Kidd, PE  
Senior Geotechnical Manager

Attachments: Appendix 1 – Figures  
Appendix 2 – Boring Logs  
Appendix 3 – Rock Core Photographic Log  
Appendix 4 – Environmental Laboratory Testing  
Appendix 5 – Limitations

APPENDIX 1  
FIGURES



Copyright: © 2013 National Geographic Society, i-cubed

<b>SOURCE(S):</b> 2013, National Geographic Society, USA Topographic Map	<b>FIGURE 1 - LOCUS PLAN</b>	<b>LOCATION:</b> 123-131 PEARL STREET PORT CHESTER, NEW YORK
	<b>123-131 PEARL STREET DEVELOPMENT</b>	<b>MAP BY:</b> R.H. <b>CHECKED:</b> J.K. <b>MMI#:</b> 7163-01 <b>DATE:</b> JULY 24, 2020 <b>SCALE:</b> 1 inch = 2,000 feet

**NOTES:**

- NOTES:

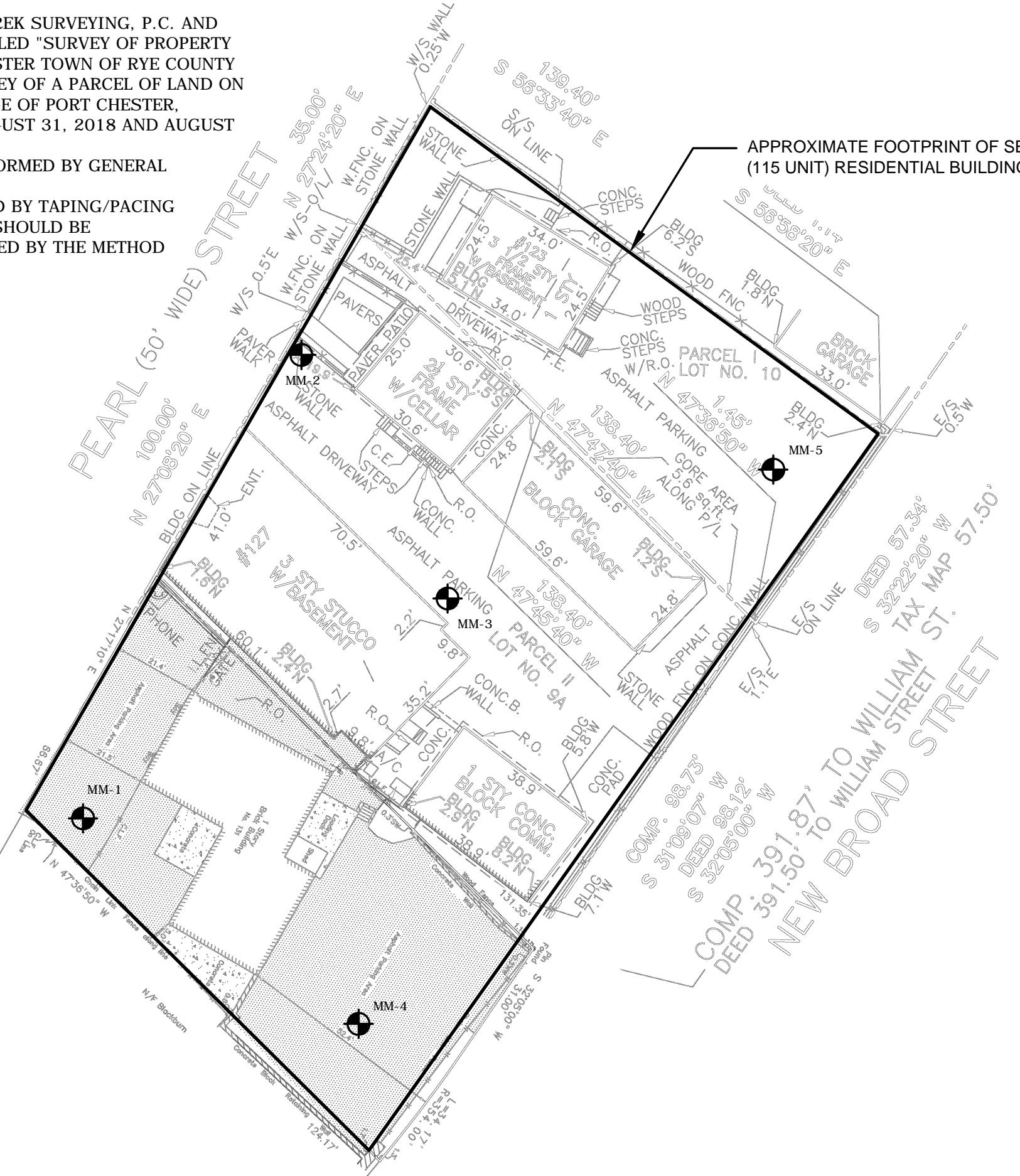
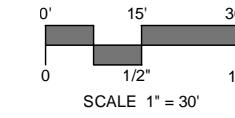
  1. BASEMAP DEVELOPED FROM ELECTRONIC FILES BY AREK SURVEYING, P.C. AND RICHARD A. SPINELLI LICENSED LAND SURVEYOR TITLED "SURVEY OF PROPERTY LOCATED AT 123, 125-127 PEARL STREET, PORT CHESTER TOWN OF RYE COUNTY OF WESTCHESTER, STATE OF NEW YORK" AND "SURVEY OF A PARCEL OF LAND ON THE EASTERLY SIDE OF PEARL STREET IN THE VILLAGE OF PORT CHESTER, WESTCHESTER COUNTY, NEW YORK" AND DATED AUGUST 31, 2018 AND AUGUST 15, 2019, RESPECTIVELY.
  2. BORINGS BY MILONE & MACBROOM, INC. WERE PERFORMED BY GENERAL BORINGS, INC. ON JULY 21 AND JULY 22, 2020.
  3. THE LOCATIONS OF THE BORINGS WERE DETERMINED BY TAPING/PACING FROM EXISTING SITE FEATURES. THESE LOCATIONS SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.

## LEGEND:



BORING BY MILONI  
& MACBROOM, INC.

MM- 1



**MILONE &  
MACBROOM**

**MILON  
MACB**  
1999 REALTY DRIVE  
CHESHIRE, CT 06410  
203.271.1773

REVISIONS

SUBSURFACE EXPLORATION LOCATION PLAN

SUBSIDENCE EXPIRATION LOCATIONS

**SUBSURFACE EXPLORATION**  
23-131 PEARL STREET  
NEW YORK, N.Y.

DESIGNED	DRAWN	CHECKED
1"=30'		
SCALE		
<b>JULY 27, 2020</b>		
DATE		
<b>7163-01</b>		
PROJECT NO.		

# FIG.2

SHEET NO. \_\_\_\_\_

PURCHASE

APPENDIX 2  
BORING LOGS

# BORING LOG



99 Realty Drive  
Cheshire, CT 06410  
(203) 271-1773

PROJECT:	123-131 PEARL STREET DEVELOPMENT			BORING NO.:	MM-1	SHEET:	1 of 1
LOCATION:	123-131 PEARL STREET, PORT CHESTER, NEW YORK				CONTRACTOR:	GENERAL BORINGS, INC.	
PROJ. NO:	7163-01				FOREMAN:	T. MCGOVERN	
CLIENT:	131 PEARL STREET OWNER, LLC				INSPECTOR:	R. HENDERSON	
DATE:	JULY 21, 2020 & JULY 22, 2020				GROUND SURFACE ELEVATION:	±76.0'	

EQUIPMENT:	AUGER	CASING	SAMPLER	COREBRL.	GROUNDWATER DEPTH (FT.)			TYPE OF RIG:				
TYPE	HSA	NX	SS	NQ	DATE	TIME	WATER DEPTH	TRUCK W/ SAFETY HAMMER				
SIZE ID (IN.)	4 1/4	3.0	1 3/8	1 7/8	2020-07-22		NOT ENCOUNTERED	RIG MODEL: MOBILE B-53				
HMR. WT (LB.)	-	-	140	-								
HMR. FALL (IN.)	-	-	30	-								
Depth (FT)	SAMPLE NUMBER	RECOVERY (IN)	BLOWS PER 6"/ MIN. PER FT.	SOIL AND ROCK CLASSIFICATION-DESCRIPTION BURMISTER SYSTEM (SOIL) U.S. CORPS OF ENGINEERS SYSTEM (ROCK)					DEPTH (FT.)	STRATUM DESCRIPTION	ELEV. (FT.)	Remark
1				Top 2": ASPHALT. Bottom 10": Gray, fine to coarse SAND, some fine to coarse Gravel, little Silt. S-1: Medium dense, gray-brown, fine to coarse SAND, little fine to coarse Gravel, little Silt, trace Debris (i.e. asphalt). PID = 0.8 ppm					0.2'	ASPHALT	75.8'	
2	S-1	8	9	S-2: Medium dense, dark brown, fine to coarse SAND, some Silt, trace fine Gravel. PID = 1.0 ppm								FILL
3			9									
4	S-2	10	12									
5			12									
6	S-3	10	11	S-3: Loose, brown, fine to coarse SAND, little Silt, little fine Gravel. PID = 0.2 ppm								
7			5									
8			3						8.5'		67.5'	
9			4									
10			5									
11	S-4	16	20	S-4: Very dense, brown-orange, fine to coarse SAND, some Silt, trace fine to coarse Gravel. PID = 0.2 ppm								WEATHERED BEDROCK
12			27									
13			39									
14			80									
15												
16												
17	C-1	31	4.5	C-1: Poor quality, medium to hard, severe to slightly weathered, extremely fractured to sound, gray, fine to coarse grained SCHIST. REC=52%, RQD=27%								BEDROCK
18			2.8									
19			2.2									
20			2.0									
21			2.5									
22				Bottom of Exploration ±19.0'					19.0'		57.0'	

**Remarks:** 1. Hollow stem auger (HSA) refusal at ±13.5'. Upon refusal, hollow stem augers were removed from the borehole and 3-inch I.D NX casing was advanced to refusal (±14.0').

NON-PLASTIC (SPT-N)	PLASTIC (SPT-N)	SAMPLE TYPE	PROPORTIONS
0-4 = VERY LOOSE	0-2 = VERY SOFT	C = ROCK CORE	trace = <10%
4-10 = LOOSE	2-4 = SOFT	S = SPLIT SPOON	little = 10% - 20%
10-30 = MEDIUM DENSE	4-8 = MEDIUM	UP = UNDISTURBED PISTON	some = 20% - 35%
30-50 = DENSE	8-15 = STIFF	UT = UNDISTURBED THINWALL	and = 35% - 50%
50+ = VERY DENSE	15-30 = VERY STIFF		
	30+ = HARD		

# BORING LOG



99 Realty Drive  
Cheshire, CT 06410  
(203) 271-1773

PROJECT:	123-131 PEARL STREET DEVELOPMENT	BORING NO.:	MM-2	SHEET:	1 of 1
LOCATION:	123-131 PEARL STREET, PORT CHESTER, NEW YORK	CONTRACTOR:	GENERAL BORINGS, INC.		
PROJ. NO:	7163-01	FOREMAN:	T. MCGOVERN		
CLIENT:	131 PEARL STREET OWNER, LLC	INSPECTOR:	R. HENDERSON		
DATE:	JULY 22, 2020	GROUND SURFACE ELEVATION:	±76.0'		

EQUIPMENT:	AUGER	CASING	SAMPLER	COREBRL.	GROUNDWATER DEPTH (FT.)			TYPE OF RIG:	
TYPE	HSA	-	SS	-	DATE	TIME	WATER DEPTH	TRUCK W/ SAFETY HAMMER	
SIZE ID (IN.)	4 1/4	-	1 3/8	-	2020-07-22		NOT ENCOUNTERED	RIG MODEL: MOBILE B-53	
HMR. WT (LB.)	-	-	140	-					
HMR. FALL (IN.)	-	-	30	-					
Depth (FT)	SAMPLE NUMBER	RECOVERY (IN)	BLOWS PER 6"/ MIN. PER FT.	SOIL AND ROCK CLASSIFICATION-DESCRIPTION BURMISTER SYSTEM (SOIL) U.S. CORPS OF ENGINEERS SYSTEM (ROCK)				DEPTH (FT.)	STRATUM DESCRIPTION
1				Top 2": ASPHALT. Bottom 10": Brown, fine to coarse SAND, some Silt, little fine to coarse Gravel. S-1: Medium dense, brown, fine to coarse SAND, some Silt, little fine to coarse Gravel. PID = 0.5 ppm				0.2'	ASPHALT
2	S-1	17	15 15 12 6	S-2: Medium dense, dark brown, SILT and fine to coarse SAND, trace fine to coarse Gravel. PID = 0.2 ppm					FILL
3			14 18 11 7	S-3: Dense, brown, fine to coarse SAND, little Silt, little fine to coarse Gravel. PID = 0.0 ppm				6.0'	70.0'
4	S-2	10							
5			6						
6	S-3	12	11 27 32						
7									
8									
9									
10									
11	S-4	15	15 28 38 70	S-4: Very dense, brown, fine to coarse SAND, little Silt, little fine to coarse Gravel. PID = 1.5 ppm					
12									
13									
14									
15									
16	S-5	16	25 33 47 49	S-5: Very dense, gray, fine to coarse SAND, little Silt, trace fine Gravel. PID = 0.0 ppm					
17									
18								18.5'	57.5'
19									
20	S-6	2	50/2"	S-6: Very dense, brown-gray, fine to coarse SAND and SILT, trace fine Gravel. Bottom of Exploration ±20.2'				20.2'	55.8'
21									
22									

Remarks: 1. Hollow stem auger (HSA) refusal at ±20.0'.

NON-PLASTIC (SPT-N)	PLASTIC (SPT-N)	SAMPLE TYPE	PROPORTIONS
0-4 = VERY LOOSE	0-2 = VERY SOFT	C = ROCK CORE	trace = <10%
4-10 = LOOSE	2-4 = SOFT	S = SPLIT SPOON	little = 10% - 20%
10-30 = MEDIUM DENSE	4-8 = MEDIUM	UP = UNDISTURBED PISTON	some = 20% - 35%
30-50 = DENSE	8-15 = STIFF	UT = UNDISTURBED THINWALL	and = 35% - 50%
50+ = VERY DENSE	15-30 = VERY STIFF		
	30+ = HARD		

# BORING LOG



99 Realty Drive  
Cheshire, CT 06410  
(203) 271-1773

PROJECT:	123-131 PEARL STREET DEVELOPMENT			BORING NO.:	MM-3	SHEET:	1 of 2
LOCATION:	123-131 PEARL STREET, PORT CHESTER, NEW YORK				CONTRACTOR:	GENERAL BORINGS, INC.	
PROJ. NO:	7163-01				FOREMAN:	T. MCGOVERN	
CLIENT:	131 PEARL STREET OWNER, LLC				INSPECTOR:	R. HENDERSON	
DATE:	JULY 21, 2020				GROUND SURFACE ELEVATION:	±67.0'	

EQUIPMENT:	AUGER	CASING	SAMPLER	COREBRL.	GROUNDWATER DEPTH (FT.)			TYPE OF RIG:	
TYPE	HSA	NX	SS	NQ	DATE	TIME	WATER DEPTH	TRUCK W/ SAFETY HAMMER	
SIZE ID (IN.)	4 1/4	3.0	1 3/8	1 7/8	2020-07-21		±8.5'	RIG MODEL: MOBILE B-53	
HMR. WT (LB.)	-	-	140	-					
HMR. FALL (IN.)	-	-	30	-					
Depth (FT)	SAMPLE NUMBER	RECOVERY (IN)	BLOWS PER 6" / MIN. PER FT.	SOIL AND ROCK CLASSIFICATION-DESCRIPTION BURMISTER SYSTEM (SOIL) U.S. CORPS OF ENGINEERS SYSTEM (ROCK)				DEPTH (FT.)	STRATUM DESCRIPTION
1	S-1	15	12	Top 2": ASPHALT. Bottom 4": Black, fine to coarse SAND, some fine to coarse Gravel, little Silt. S-1: Loose, Top 4": Black, fine to coarse SAND, some fine to coarse Gravel, little Silt. Middle 7": Dark brown, SILT, little fine to coarse Sand, trace fine Gravel. Bottom 4": Brown, SILT, little fine to medium Sand. PID = 1.5 ppm				0.2'	ASPHALT
2			5					2.5'	FILL
3			3						
4			4						
5			22						
6	S-2	14	23	S-2: Dense, brown, fine to coarse SAND, little fine Gravel, trace Silt. PID = 3.6 ppm					
7			30						
8			30						
9									
10									
11	S-3	15	20	S-3: Dense, brown, fine to coarse SAND, little fine Gravel, trace Silt. PID = 1.6 ppm					
12			21						
13			24						
14			29						
15				S-4: Very dense, brown, fine to coarse SAND, some Silt, trace fine Gravel. PID = 2.9 ppm					
16	C-1	19	1.2	C-1: Very poor quality, moderately hard to hard, very severe to moderately weathered, extremely to moderately fractured, gray, fine to coarse grained SCHIST. REC=32%, RQD=7%				14.0'	53.0'
17			0.7						
18			0.8						
19			2.7						
20			2.0						
21	C-2	60	2.0	C-2: Fair quality, medium to hard, slight to very slightly weathered, moderately fractured to sound, gray, fine to coarse grained SCHIST, horizontal to shallow dipping. REC=100%, RQD=63%					
22			2.8						
			2.8						
			5.0						

**Remarks:** 1. Hollow stem auger (HSA) refusal at ±13.5'. Upon refusal, hollow stem augers were removed from the borehole and 3-inch I.D NX casing was advanced to refusal (±14.0').

NON-PLASTIC (SPT-N)	PLASTIC (SPT-N)	SAMPLE TYPE	PROPORTIONS
0-4 = VERY LOOSE	0-2 = VERY SOFT	C = ROCK CORE	trace = <10%
4-10 = LOOSE	2-4 = SOFT	S = SPLIT SPOON	little = 10% - 20%
10-30 = MEDIUM DENSE	4-8 = MEDIUM	UP = UNDISTURBED PISTON	some = 20% - 35%
30-50 = DENSE	8-15 = STIFF	UT = UNDISTURBED THINWALL	and = 35% - 50%
50+ = VERY DENSE	15-30 = VERY STIFF		
	30+ = HARD		

# BORING LOG



99 Realty Drive  
Cheshire, CT 06410  
(203) 271-1773

PROJECT:	123-131 PEARL STREET DEVELOPMENT			BORING NO.:	MM-3	SHEET:	2 of 2
LOCATION:	123-131 PEARL STREET, PORT CHESTER, NEW YORK				CONTRACTOR: GENERAL BORINGS, INC.		
PROJ. NO:	7163-01				FOREMAN: T. MCGOVERN		
CLIENT:	131 PEARL STREET OWNER, LLC				INSPECTOR: R. HENDERSON		
DATE:	JULY 21, 2020				GROUND SURFACE ELEVATION: ±67.0'		

EQUIPMENT:	AUGER	CASING	SAMPLER	COREBRL.	GROUNDWATER DEPTH (FT.)			TYPE OF RIG:				
TYPE	HSA	NX	SS	NQ	DATE	TIME	WATER DEPTH	TRUCK W/ SAFETY HAMMER				
SIZE ID (IN.)	4 1/4	3.0	1 3/8	1 7/8	2020-07-21		±8.5'	RIG MODEL: MOBILE B-53				
HMR. WT (LB.)	-	-	140	-								
HMR. FALL (IN.)	-	-	30	-								
Depth (FT)	SAMPLE NUMBER	RECOVERY (IN)	BLOWS PER 6" / MIN. PER FT.	SOIL AND ROCK CLASSIFICATION-DESCRIPTION BURMISTER SYSTEM (SOIL) U.S. CORPS OF ENGINEERS SYSTEM (ROCK)					DEPTH (FT.)	STRATUM DESCRIPTION	ELEV. (FT.)	Remark
24			2.5						24.0'	BEDROCK	43.0'	
25				Bottom of Exploration ±24.0'								
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												

Remarks:

NON-PLASTIC (SPT-N)	PLASTIC (SPT-N)	SAMPLE TYPE	PROPORTIONS
0-4 = VERY LOOSE	0-2 = VERY SOFT	C = ROCK CORE	trace = <10%
4-10 = LOOSE	2-4 = SOFT	S = SPLIT SPOON	little = 10% - 20%
10-30 = MEDIUM DENSE	4-8 = MEDIUM	UP = UNDISTURBED PISTON	some = 20% - 35%
30-50 = DENSE	8-15 = STIFF	UT = UNDISTURBED THINWALL	and = 35% - 50%
50+ = VERY DENSE	15-30 = VERY STIFF		
	30+ = HARD		

# BORING LOG



99 Realty Drive  
Cheshire, CT 06410  
(203) 271-1773

PROJECT:	123-131 PEARL STREET DEVELOPMENT	BORING NO.:	MM-4	SHEET:	1 of 1
LOCATION:	123-131 PEARL STREET, PORT CHESTER, NEW YORK	CONTRACTOR:	GENERAL BORINGS, INC.		
PROJ. NO:	7163-01	FOREMAN:	T. MCGOVERN		
CLIENT:	131 PEARL STREET OWNER, LLC	INSPECTOR:	R. HENDERSON		
DATE:	JULY 22, 2020	GROUND SURFACE ELEVATION:	±62.0'		

EQUIPMENT:	AUGER	CASING	SAMPLER	COREBRL.	GROUNDWATER DEPTH (FT.)			TYPE OF RIG:				
TYPE	HSA	-	SS	-	DATE	TIME	WATER DEPTH	TRUCK W/ SAFETY HAMMER				
SIZE ID (IN.)	4 1/4	-	1 3/8	-	2020-07-22		NOT ENCOUNTERED	RIG MODEL: MOBILE B-53				
HMR. WT (LB.)	-	-	140	-								
HMR. FALL (IN.)	-	-	30	-								
Depth (FT)	SAMPLE NUMBER	RECOVERY (IN)	BLOWS PER 6"/ MIN. PER FT.	SOIL AND ROCK CLASSIFICATION-DESCRIPTION BURMISTER SYSTEM (SOIL) U.S. CORPS OF ENGINEERS SYSTEM (ROCK)					DEPTH (FT.)	STRATUM DESCRIPTION	ELEV. (FT.)	Remark
1				Top 2": ASPHALT. Bottom 10": Brown, fine to coarse SAND, little Silt, little fine Gravel.					0.2'	ASPHALT	61.8'	
2	S-1	7	4	S-1: Medium dense, brown, fine to coarse SAND, little Silt, little fine Gravel, trace Debris (i.e. porcelain). PID = 1.2 ppm					3.0'	FILL	59.0'	
3			12									
4	S-2	13	17	S-2: Dense, brown, fine to coarse SAND, little Silt, little fine to coarse Gravel. PID = 2.6 ppm								
5			20									
6	S-3	17	32	S-3: Dense, Top 9": Gray, fine to coarse SAND, some Silt, little fine Gravel. Bottom 8": Gray-brown, fine to coarse SAND, some Silt, trace fine Gravel. PID = 6.4 ppm					6.0'		56.0'	
7			22									
8			26									
9			16									
10	S-4	10	80	S-4: Very dense, gray-brown, fine to coarse SAND, some Silt, little fine to coarse Gravel. PID = 11.3 ppm					11.0'		51.0'	1
11				Bottom of Exploration ±11.0'								
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												

Remarks: 1. Hollow stem auger (HSA) refusal at ±11.0'.

NON-PLASTIC (SPT-N)	PLASTIC (SPT-N)	SAMPLE TYPE	PROPORTIONS
0-4 = VERY LOOSE	0-2 = VERY SOFT	C = ROCK CORE	trace = <10%
4-10 = LOOSE	2-4 = SOFT	S = SPLIT SPOON	little = 10% - 20%
10-30 = MEDIUM DENSE	4-8 = MEDIUM	UP = UNDISTURBED PISTON	some = 20% - 35%
30-50 = DENSE	8-15 = STIFF	UT = UNDISTURBED THINWALL	and = 35% - 50%
50+ = VERY DENSE	15-30 = VERY STIFF		
	30+ = HARD		

# BORING LOG



99 Realty Drive  
Cheshire, CT 06410  
(203) 271-1773

PROJECT:	123-131 PEARL STREET DEVELOPMENT			BORING NO.:	MM-5	SHEET:	1 of 1
LOCATION:	123-131 PEARL STREET, PORT CHESTER, NEW YORK				CONTRACTOR:	GENERAL BORINGS, INC.	
PROJ. NO:	7163-01				FOREMAN:	T. MCGOVERN	
CLIENT:	131 PEARL STREET OWNER, LLC				INSPECTOR:	R. HENDERSON	
DATE:	JULY 21, 2020				GROUND SURFACE ELEVATION:	±65.0'	

EQUIPMENT:	AUGER	CASING	SAMPLER	COREBRL.	GROUNDWATER DEPTH (FT.)			TYPE OF RIG:				
TYPE	HSA	NX	SS	NQ	DATE	TIME	WATER DEPTH	TRUCK W/ SAFETY HAMMER				
SIZE ID (IN.)	4 1/4	3.0	1 3/8	1 7/8	2020-07-21		NOT ENCOUNTERED	RIG MODEL: MOBILE B-53				
HMR. WT (LB.)	-	-	140	-								
HMR. FALL (IN.)	-	-	30	-								
Depth (FT)	SAMPLE NUMBER	RECOVERY (IN)	BLOWS PER 6" / MIN. PER FT.	SOIL AND ROCK CLASSIFICATION-DESCRIPTION BURMISTER SYSTEM (SOIL) U.S. CORPS OF ENGINEERS SYSTEM (ROCK)					DEPTH (FT.)	STRATUM DESCRIPTION	ELEV. (FT.)	Remark
1	S-1	16	4	Top 2": ASPHALT. Bottom 4": Black, fine to coarse SAND, some fine to coarse Gravel, little Silt. S-1: Loose, dark brown, SILT and fine to medium SAND. PID = 0.5 ppm					0.2'	ASPHALT	64.2'	
2			3									
3			4									
4			4									
5	S-2	11	4	S-2: Medium dense, brown-orange, SILT, some fine to coarse Sand, trace fine to coarse Gravel.								FILL
6			6									
7			7									
8			4									
9	S-3	8	2	S-3: Dense, brown, fine to coarse SAND, some Silt, some fine to coarse Gravel.					5.5'		59.5'	
10			12	PID = 1.1 ppm								
11			12	S-4: Very dense, Top 9": Brown, fine to coarse SAND & SILT, little fine to coarse Gravel. Bottom 3": Blue-gray, fine to coarse GRAVEL, trace fine to coarse Sand, trace Silt.					8.5'	G.W.T ▼	56.5'	
12			73	PID = 8.0 ppm					11.5'		53.5'	
13	S-4	12	50/3"									
14			9									
15			13									
16			73									
17	C-1	60	3.2	C-1: Fair quality, medium to hard, moderate to slightly weathered, moderately fractured to sound, gray, fine to coarse grained SCHIST, horizontal to shallow dipping. REC=100%, RQD=53%					14.0'		51.0'	
18			3.0									
19			2.6									
20			3.5									
21	C-1	60	4.0						19.0'		46.0'	
22				Bottom of Exploration ±19.0'								

Remarks: 1. Hollow stem auger (HSA) refusal at ±13.5'. Upon refusal, hollow stem augers were removed from the borehole and 3-inch I.D NX casing was advanced to refusal (±14.0').

NON-PLASTIC (SPT-N)	PLASTIC (SPT-N)	SAMPLE TYPE	PROPORTIONS
0-4 = VERY LOOSE	0-2 = VERY SOFT	C = ROCK CORE	trace = <10%
4-10 = LOOSE	2-4 = SOFT	S = SPLIT SPOON	little = 10% - 20%
10-30 = MEDIUM DENSE	4-8 = MEDIUM	UP = UNDISTURBED PISTON	some = 20% - 35%
30-50 = DENSE	8-15 = STIFF	UT = UNDISTURBED THINWALL	and = 35% - 50%
50+ = VERY DENSE	15-30 = VERY STIFF		
	30+ = HARD		

APPENDIX 3  
ROCK CORE PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.:
131 Pearl Street Owner, LLC	123-131 Pearl Street Port Chester, New York	7163-01

<b>Photo No.:</b> 1	<b>Date:</b> 7/22/2020	<p><b>Description:</b> View of bedrock retrieved from 5-foot core runs from Borings MM-1 (C-1), MM-3 (C-1 &amp; C-2), and MM-5 (C-1). Detailed data shown on box and boring logs. Note that the left side of the box is the top of the core.</p> 
<b>Photo No.:</b> 2	<b>Date:</b> 7/22/2020	<p><b>Description:</b> View of upper portion of rock cores from Borings MM-1 (C-1), MM-3 (C-1 &amp; C-2), and MM-5 (C-1). Lower portion of rock cores shown in Photo No. 3.</p> 
<b>Photo No.:</b> 3	<b>Date:</b> 7/22/2020	<p><b>Description:</b> View of lower portion of rock cores from Borings MM-1 (C-1), MM-3 (C-1 &amp; C-2), and MM-5 (C-1). Upper portion of rock cores shown in Photo No. 2.</p> 

**APPENDIX 4**  
**ENVIRONMENTAL LABORATORY TESTING**

**Table 1: Summary of Soil Analytical Results**

123-131 Pearl Street Development  
Port Chester, NY

Phoenix Environmental Laboratories, Inc.		NYDEC Soil Cleanup Objectives (6 CRR-NY 375-6.8)																						
		Lab Sample Id	Collection Date	Unrestricted Use	Residential	Restricted Use Residential	Commercial/Industrial	CG38945 7/21/2020 MM-5 S-1 (0.5-2.5') Soil	CG38946 7/21/2020 MM-5 S-4 (10-12') Soil	CG38947 7/21/2020 MM-3 S-1 (0.5-2.5') Soil	CG38948 7/21/2020 MM-3 S-1 (10-12') Soil	CG38949 7/21/2020 MM-1 S-2 (3-5') Soil	CG38950 7/21/2020 MM-1 S-4 (10-12') Soil	CG38951 7/21/2020 MM-2 S-2 (3-5') Soil	CG38952 7/21/2020 MM-2 S-4 (10-12') Soil	CG38953 7/21/2020 MM-4 S-3 (1-3') Soil	CG38954 7/21/2020 MM-4 S-3 (5-7.5') Soil	CG38955 7/21/2020 TRIP BLANK LL Soil	CG38956 7/21/2020 TRIP BLANK HL Soil					
		Client Id	Matrix					Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL			
Project Id : 123-131 PEARL STREET DEVEOLPMENT				CAS	Units																			
<b>Miscellaneous/Inorganics</b>																								
Percent Solid	PHNX - PCTSOLID	%						82		89		83		86		88		91		86		94		
Chromium, Hex. (SW3060 digestion)	18540-29-9	mg/Kg														< 0.42	0.42					< 0.43	0.43	
<b>Metals, Total</b>																								
Arsenic	7440-38-2	mg/Kg	13	16	16	16		23.9	0.73	1.12	0.72	4.16	0.73	1.25	0.74	2.88	0.68	0.98	0.67	2.14	0.74	1.23	0.67	
Barium	7440-39-3	mg/Kg	350	350	400	400		300	0.37	105	0.36	120	0.36	103	0.37	132	0.34	357	0.34	104	0.37	83.7	0.34	
Cadmium	7440-43-9	mg/Kg	2.5	2.5	4.3	7.5		2.21	0.37	1.34	0.36	2	0.36	1.36	0.37	1.49	0.34	2.38	0.34	1.63	0.37	1.27	0.34	
Chromium*	7440-47-3	mg/Kg	30	36	180	1500		36.7	0.37	25.6	0.36	35.7	0.36	26.9	0.37	26.4	0.34	54	0.34	30.1	0.37	19.4	0.34	
Trivalent Chromium	16065-83-3	mg/kg	30	36	180	1500																		
Lead	7439-92-1	mg/Kg	63	400	400	450		743	0.37	4.21	0.36	11.9	0.36	5.63	0.37	88.6	0.34	4.46	0.34	7.46	0.37	5.95	0.34	
Mercury	7439-97-6	mg/Kg	0.18	0.73	0.73	0.73		1.5	0.08	< 0.03	0.03	< 0.03	0.03	< 0.03	0.03	0.43	0.03	< 0.03	0.03	< 0.03	0.03	0.03	0.03	
Selenium	7782-49-2	mg/Kg	3.9	4	4	4		< 1.5	1.5	< 1.4	1.4	< 1.5	1.5	< 1.5	1.5	< 1.4	1.4	< 1.3	1.3	< 1.5	1.5	< 1.3	1.3	
Silver	7440-22-4	mg/Kg	2	8.3	8.3	8.3		< 0.37	0.37	< 0.36	0.36	< 0.36	0.36	< 0.37	0.37	< 0.34	0.34	< 0.34	0.34	< 0.37	0.37	< 0.34	0.34	
<b>Metals, TCLP</b>																								
TCLP Lead	7439-92-1	mg/L	NE	NE	NE	NE		0.28	0.10												0.18	0.10		
<b>PCBs By SW8082A</b>																								
Total PCBs	12674-11-2	mg/kg	0.1	1	1	1		ND		ND		ND		ND		ND		ND		ND		ND		
<b>Volatiles By SW8260C</b>																								
Acetone	67-64-1	ug/Kg	50	50	50	50		< 29	29	< 41	41	< 29	29	< 30	30	< 45	45	< 37	37	< 32	32	< 24	24	
<b>Semi volatiles By SW8270D</b>																								
Anthracene	120-12-7	ug/Kg	100,000	100,000	100,000	500,000		640	280	< 260	260	< 280	280	< 270	270	< 260	260	< 260	260	< 270	270	< 250	250	
Benz(a)anthracene	56-55-3	ug/Kg	1,000	1,000	1,000	1,000		2,600	280	< 260	260	< 280	280	< 270	270	840	260	< 260	260	< 270	270	< 250	250	
Benzo(a)pyrene	50-32-8	ug/Kg	1,000	1,000	1,000	1,000		2,400	280	< 260	260	< 280	280	< 270	270	950	260	< 260	260	< 270	270	< 250	250	
Benzo(b)fluoranthene	205-99-2	ug/Kg	1,000	1,000	1,000	1,700		2,200	280	< 260	260	< 280	280	< 270	270	790	260	< 260	260	< 270	270	< 250	250	
Benzo(ghi)perylene	191-24-2	ug/Kg	100,000	100,000	100,000	500,000		1,400	280	< 260	260	< 280	280	< 270	270	600	260	< 260	260	< 270	270	< 250	250	
Benzo(k)fluoranthene	207-08-9	ug/Kg	800	1,000	1,700	1,700		1,900	280	< 260	260	< 280	280	< 270	270	710	260	< 260	260	< 270	270	< 250	250	
Chrysene	218-01-9	ug/Kg	1,000	1,000	1,000	1,000		2,500	280	< 260	260	< 280	280	< 270	270	810	260	< 260	260	< 270	270	< 250	250	
Dibenz(a,h)anthracene	53-70-3	ug/Kg	330	330	330	560		370	280	< 260	260	< 280	280	< 270	270	< 260	260	< 260	260	< 270	270	< 250	250	
Fluoranthene	206-44-0	ug/Kg	100,000	100,000	100,000	500,000		5,100	280	< 260	260	< 280	280	< 270	270	1,400	260	< 260	260	< 270	270	< 250	250	
Indeno(1,2,3-cd)pyrene	193-39-5	ug/Kg	500	500	500	5,600		1,600	280	< 260	260	< 280	280	< 270	270	640	260	< 260	260	< 270	270	< 250	250	
Phenanthrene	85-01-8	ug/Kg	100,000	100,000	100,000	500,000		2,900	280	< 260	260	< 280	280	< 270	270	540	260	< 260	260	< 270	270	< 250		



Thursday, August 06, 2020

Attn: Jason Fernet  
SLR International Corporatio  
99 Realty Drive  
Cheshire, CT 06410

Project ID: 123-131 PEARL STREET DEVEOLPMENT

SDG ID: GCG38945

Sample ID#s: CG38945 - CG38956

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

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

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

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

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

Sincerely yours,

A handwritten signature in black ink that reads "Phyllis Shiller".

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  
UT Lab Registration #CT00007  
VT Lab Registration #VT11301



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



## SDG Comments

August 06, 2020

SDG I.D.: GCG38945

---

Version 2: Per client request TCLP metals and Hex.Chromium were added on.



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

August 06, 2020

SDG I.D.: GCG38945

Project ID: 123-131 PEARL STREET DEVEOLPMENT

---

Client Id	Lab Id	Matrix
MM-5 S-1 (0.5-2.5`)	CG38945	SOIL
MM-5 S-4 (10-12`)	CG38946	SOIL
MM-3 S-1 (0.5-2.5`)	CG38947	SOIL
MM-3 S-1 (10-12`)	CG38948	SOIL
MM-1 S-2 (3-5`)	CG38949	SOIL
MM-1 S-4 (10-12`)	CG38950	SOIL
MM-2 S-2 (3-5`)	CG38951	SOIL
MM-2 S-4 (10-12`)	CG38952	SOIL
MM-4 S-3 (1-3`)	CG38953	SOIL
MM-4 S-3 (5-7.5`)	CG38954	SOIL
TRIP BLANK LL	CG38955	SOIL
TRIP BLANK HL	CG38956	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

August 06, 2020

FOR: Attn: Jason Fernet  
 SLR International Corporation  
 99 Realty Drive  
 Cheshire, CT 06410

### Sample Information

Matrix: SOIL  
 Location Code: SLR-CHESTER  
 Rush Request: 48 Hour  
 P.O.#: \_\_\_\_\_

### Custody Information

Collected by: RH  
 Received by: B  
 Analyzed by: see "By" below

Date

Time

07/21/20 8:45

07/22/20 16:41

## Laboratory Data

SDG ID: GCG38945

Phoenix ID: CG38945

Project ID: 123-131 PEARL STREET DEVELOPMENT

Client ID: MM-5 S-1 (0.5-2.5`)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.37	0.37	mg/Kg	1	07/23/20	CPP	SW6010D
Arsenic	23.9	0.73	mg/Kg	1	07/23/20	CPP	SW6010D
Barium	300	0.37	mg/Kg	1	07/23/20	TH	SW6010D
Cadmium	2.21	0.37	mg/Kg	1	07/23/20	CPP	SW6010D
Chromium	36.7	0.37	mg/Kg	1	07/23/20	CPP	SW6010D
Mercury	1.50	0.08	mg/Kg	5	07/23/20	RS	SW7471B
Lead	743	0.37	mg/Kg	1	07/23/20	CPP	SW6010D
Selenium	< 1.5	1.5	mg/Kg	1	07/23/20	CPP	SW6010D
TCLP Lead	0.28	0.10	mg/L	1	08/03/20	CPP	SW846 1311/6010
TCLP Metals Digestion	Completed				08/01/20	VT/VT	SW3010A
Percent Solid	82		%		07/22/20	HB	SW846-%Solid
Soil Extraction for PCB	Completed				07/22/20	/E	SW3545A
Mercury Digestion	Completed				07/23/20	VT/VT	SW7471B
Soil Extraction for SVOA	Completed				07/22/20	R/A	SW3546
TCLP Extraction for Metals	Completed				07/31/20	VT	SW1311
Total Metals Digest	Completed				07/22/20	S/AG/BF	SW3050B

### Polychlorinated Biphenyls

PCB-1016	ND	0.39	mg/kg	10	07/23/20	SC	SW8082A
PCB-1221	ND	0.39	mg/kg	10	07/23/20	SC	SW8082A
PCB-1232	ND	0.39	mg/kg	10	07/23/20	SC	SW8082A
PCB-1242	ND	0.39	mg/kg	10	07/23/20	SC	SW8082A
PCB-1248	ND	0.39	mg/kg	10	07/23/20	SC	SW8082A
PCB-1254	ND	0.39	mg/kg	10	07/23/20	SC	SW8082A
PCB-1260	ND	0.39	mg/kg	10	07/23/20	SC	SW8082A
PCB-1262	ND	0.39	mg/kg	10	07/23/20	SC	SW8082A
PCB-1268	ND	0.39	mg/kg	10	07/23/20	SC	SW8082A

### QA/QC Surrogates

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
% DCBP	86		%	10	07/23/20	SC 30 - 150 %
% DCBP (Confirmation)	84		%	10	07/23/20	SC 30 - 150 %
% TCMX	82		%	10	07/23/20	SC 30 - 150 %
% TCMX (Confirmation)	80		%	10	07/23/20	SC 30 - 150 %
<b>Volatiles</b>						
1,1,1,2-Tetrachloroethane	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
1,1,1-Trichloroethane	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
1,1,2,2-Tetrachloroethane	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
1,1,2-Trichloroethane	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloroethane	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloroethene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloropropene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
1,2,3-Trichlorobenzene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
1,2,3-Trichloropropane	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
1,2,4-Trichlorobenzene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
1,2,4-Trimethylbenzene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dibromo-3-chloropropane	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dibromoethane	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichlorobenzene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichloroethane	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichloropropane	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
1,3,5-Trimethylbenzene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
1,3-Dichlorobenzene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
1,3-Dichloropropane	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
1,4-Dichlorobenzene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
2,2-Dichloropropane	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
2-Chlorotoluene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
2-Hexanone	ND	29	ug/Kg	1	07/23/20	JLI SW8260C
2-Isopropyltoluene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
4-Chlorotoluene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
4-Methyl-2-pentanone	ND	29	ug/Kg	1	07/23/20	JLI SW8260C
Acetone	ND	29	ug/Kg	1	07/23/20	JLI SW8260C
Acrylonitrile	ND	12	ug/Kg	1	07/23/20	JLI SW8260C
Benzene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
Bromobenzene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
Bromochloromethane	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
Bromodichloromethane	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
Bromoform	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
Bromomethane	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
Carbon Disulfide	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
Carbon tetrachloride	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
Chlorobenzene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
Chloroethane	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
Chloroform	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
Chloromethane	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
cis-1,2-Dichloroethene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
cis-1,3-Dichloropropene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
Dibromochloromethane	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
Dibromomethane	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
Dichlorodifluoromethane	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
Ethylbenzene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
Hexachlorobutadiene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
Isopropylbenzene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
m&p-Xylene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
Methyl Ethyl Ketone	ND	29	ug/Kg	1	07/23/20	JLI SW8260C
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	1	07/23/20	JLI SW8260C
Methylene chloride	ND	12	ug/Kg	1	07/23/20	JLI SW8260C
Naphthalene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
n-Butylbenzene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
n-Propylbenzene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
o-Xylene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
p-Isopropyltoluene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
sec-Butylbenzene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
Styrene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
tert-Butylbenzene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
Tetrachloroethene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
Tetrahydrofuran (THF)	ND	12	ug/Kg	1	07/23/20	JLI SW8260C
Toluene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
Total Xylenes	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,2-Dichloroethene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,3-Dichloropropene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	1	07/23/20	JLI SW8260C
Trichloroethene	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
Trichlorofluoromethane	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
Trichlorotrifluoroethane	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
Vinyl chloride	ND	5.8	ug/Kg	1	07/23/20	JLI SW8260C
<b><u>QA/QC Surrogates</u></b>						
% 1,2-dichlorobenzene-d4	100		%	1	07/23/20	JLI 70 - 130 %
% Bromofluorobenzene	85		%	1	07/23/20	JLI 70 - 130 %
% Dibromofluoromethane	91		%	1	07/23/20	JLI 70 - 130 %
% Toluene-d8	97		%	1	07/23/20	JLI 70 - 130 %
<b><u>Semivolatiles</u></b>						
1,2,4,5-Tetrachlorobenzene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
1,2,4-Trichlorobenzene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
1,2-Dichlorobenzene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
1,2-Diphenylhydrazine	ND	400	ug/Kg	1	07/23/20	AW SW8270D
1,3-Dichlorobenzene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
1,4-Dichlorobenzene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
2,4,5-Trichlorophenol	ND	280	ug/Kg	1	07/23/20	AW SW8270D
2,4,6-Trichlorophenol	ND	280	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dichlorophenol	ND	280	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dimethylphenol	ND	280	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dinitrophenol	ND	400	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dinitrotoluene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
2,6-Dinitrotoluene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
2-Chloronaphthalene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
2-Chlorophenol	ND	280	ug/Kg	1	07/23/20	AW SW8270D
2-Methylnaphthalene	ND	280	ug/Kg	1	07/23/20	AW SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
2-Methylphenol (o-cresol)	ND	280	ug/Kg	1	07/23/20	AW SW8270D
2-Nitroaniline	ND	400	ug/Kg	1	07/23/20	AW SW8270D
2-Nitrophenol	ND	280	ug/Kg	1	07/23/20	AW SW8270D
3&4-Methylphenol (m&p-cresol)	ND	400	ug/Kg	1	07/23/20	AW SW8270D
3,3'-Dichlorobenzidine	ND	280	ug/Kg	1	07/23/20	AW SW8270D
3-Nitroaniline	ND	400	ug/Kg	1	07/23/20	AW SW8270D
4,6-Dinitro-2-methylphenol	ND	400	ug/Kg	1	07/23/20	AW SW8270D
4-Bromophenyl phenyl ether	ND	400	ug/Kg	1	07/23/20	AW SW8270D
4-Chloro-3-methylphenol	ND	280	ug/Kg	1	07/23/20	AW SW8270D
4-Chloroaniline	ND	280	ug/Kg	1	07/23/20	AW SW8270D
4-Chlorophenyl phenyl ether	ND	280	ug/Kg	1	07/23/20	AW SW8270D
4-Nitroaniline	ND	640	ug/Kg	1	07/23/20	AW SW8270D
4-Nitrophenol	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Acenaphthene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Acenaphthylene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Acetophenone	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Aniline	ND	400	ug/Kg	1	07/23/20	AW SW8270D
Anthracene	640	280	ug/Kg	1	07/23/20	AW SW8270D
Benz(a)anthracene	2600	280	ug/Kg	1	07/23/20	AW SW8270D
Benzidine	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Benzo(a)pyrene	2400	280	ug/Kg	1	07/23/20	AW SW8270D
Benzo(b)fluoranthene	2200	280	ug/Kg	1	07/23/20	AW SW8270D
Benzo(ghi)perylene	1400	280	ug/Kg	1	07/23/20	AW SW8270D
Benzo(k)fluoranthene	1900	280	ug/Kg	1	07/23/20	AW SW8270D
Benzoic acid	ND	800	ug/Kg	1	07/23/20	AW SW8270D
Benzyl butyl phthalate	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroethoxy)methane	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroethyl)ether	ND	400	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroisopropyl)ether	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-ethylhexyl)phthalate	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Carbazole	ND	400	ug/Kg	1	07/23/20	AW SW8270D
Chrysene	2500	280	ug/Kg	1	07/23/20	AW SW8270D
Dibenz(a,h)anthracene	370	280	ug/Kg	1	07/23/20	AW SW8270D
Dibenzofuran	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Diethyl phthalate	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Dimethylphthalate	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Di-n-butylphthalate	ND	400	ug/Kg	1	07/23/20	AW SW8270D
Di-n-octylphthalate	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Fluoranthene	5100	280	ug/Kg	1	07/23/20	AW SW8270D
Fluorene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorobenzene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorobutadiene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorocyclopentadiene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Hexachloroethane	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Indeno(1,2,3-cd)pyrene	1600	280	ug/Kg	1	07/23/20	AW SW8270D
Isophorone	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Naphthalene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Nitrobenzene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodimethylamine	ND	400	ug/Kg	1	07/23/20	AW SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
N-Nitrosodi-n-propylamine	ND	280	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodiphenylamine	ND	400	ug/Kg	1	07/23/20	AW SW8270D
Pentachloronitrobenzene	ND	400	ug/Kg	1	07/23/20	AW SW8270D
Pentachlorophenol	ND	400	ug/Kg	1	07/23/20	AW SW8270D
Phenanthrene	2900	280	ug/Kg	1	07/23/20	AW SW8270D
Phenol	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Pyrene	4100	280	ug/Kg	1	07/23/20	AW SW8270D
Pyridine	ND	400	ug/Kg	1	07/23/20	AW SW8270D
<b><u>QA/QC Surrogates</u></b>						
% 2,4,6-Tribromophenol	88		%	1	07/23/20	AW 30 - 130 %
% 2-Fluorobiphenyl	73		%	1	07/23/20	AW 30 - 130 %
% 2-Fluorophenol	64		%	1	07/23/20	AW 30 - 130 %
% Nitrobenzene-d5	68		%	1	07/23/20	AW 30 - 130 %
% Phenol-d5	74		%	1	07/23/20	AW 30 - 130 %
% Terphenyl-d14	86		%	1	07/23/20	AW 30 - 130 %
Field Extraction	Completed				07/21/20	SW5035A

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

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
BRL=Below Reporting Level L=Biased Low

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

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.

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

August 06, 2020

Reviewed and Released by: Rashmi Makol, Project Manager



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



## Analysis Report

August 06, 2020

FOR: Attn: Jason Fernet  
 SLR International Corporation  
 99 Realty Drive  
 Cheshire, CT 06410

### Sample Information

Matrix: SOIL  
 Location Code: SLR-CHESTER  
 Rush Request: Standard  
 P.O.#:

### Custody Information

Collected by: RH  
 Received by: B  
 Analyzed by: see "By" below

Date

Time

07/21/20 9:30

07/22/20 16:41

## Laboratory Data

SDG ID: GCG38945

Phoenix ID: CG38946

Project ID: 123-131 PEARL STREET DEVELOPMENT

Client ID: MM-5 S-4 (10-12')

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	1	07/23/20	CPP	SW6010D
Arsenic	1.12	0.72	mg/Kg	1	07/23/20	CPP	SW6010D
Barium	105	0.36	mg/Kg	1	07/23/20	TH	SW6010D
Cadmium	1.34	0.36	mg/Kg	1	07/23/20	CPP	SW6010D
Chromium	25.6	0.36	mg/Kg	1	07/23/20	CPP	SW6010D
Mercury	< 0.03	0.03	mg/Kg	2	07/23/20	RS	SW7471B
Lead	4.21	0.36	mg/Kg	1	07/23/20	CPP	SW6010D
Selenium	< 1.4	1.4	mg/Kg	1	07/23/20	CPP	SW6010D
Percent Solid	89		%		07/22/20	HB	SW846-%Solid
Soil Extraction for PCB	Completed				07/22/20	/E	SW3545A
Mercury Digestion	Completed				07/23/20	VT/VT	SW7471B
Soil Extraction for SVOA	Completed				07/22/20	R/A	SW3546
Total Metals Digest	Completed				07/22/20	S/AG/BF	SW3050B

### Polychlorinated Biphenyls

PCB-1016	ND	0.37	mg/kg	10	07/23/20	SC	SW8082A
PCB-1221	ND	0.37	mg/kg	10	07/23/20	SC	SW8082A
PCB-1232	ND	0.37	mg/kg	10	07/23/20	SC	SW8082A
PCB-1242	ND	0.37	mg/kg	10	07/23/20	SC	SW8082A
PCB-1248	ND	0.37	mg/kg	10	07/23/20	SC	SW8082A
PCB-1254	ND	0.37	mg/kg	10	07/23/20	SC	SW8082A
PCB-1260	ND	0.37	mg/kg	10	07/23/20	SC	SW8082A
PCB-1262	ND	0.37	mg/kg	10	07/23/20	SC	SW8082A
PCB-1268	ND	0.37	mg/kg	10	07/23/20	SC	SW8082A

### QA/QC Surrogates

% DCBP	92	%	10	07/23/20	SC	30 - 150 %
% DCBP (Confirmation)	85	%	10	07/23/20	SC	30 - 150 %
% TCMX	79	%	10	07/23/20	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
% TCMX (Confirmation)	78		%	10	07/23/20	SC 30 - 150 %
<b>Volatiles</b>						
1,1,1,2-Tetrachloroethane	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
1,1,1-Trichloroethane	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
1,1,2,2-Tetrachloroethane	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
1,1,2-Trichloroethane	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloroethane	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloroethene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloropropene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
1,2,3-Trichlorobenzene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
1,2,3-Trichloropropane	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
1,2,4-Trichlorobenzene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
1,2,4-Trimethylbenzene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dibromo-3-chloropropane	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dibromoethane	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichlorobenzene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichloroethane	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichloropropane	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
1,3,5-Trimethylbenzene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
1,3-Dichlorobenzene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
1,3-Dichloropropane	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
1,4-Dichlorobenzene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
2,2-Dichloropropane	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
2-Chlorotoluene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
2-Hexanone	ND	41	ug/Kg	1	07/23/20	JLI SW8260C
2-Isopropyltoluene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
4-Chlorotoluene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
4-Methyl-2-pentanone	ND	41	ug/Kg	1	07/23/20	JLI SW8260C
Acetone	ND	41	ug/Kg	1	07/23/20	JLI SW8260C
Acrylonitrile	ND	17	ug/Kg	1	07/23/20	JLI SW8260C
Benzene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
Bromobenzene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
Bromochloromethane	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
Bromodichloromethane	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
Bromoform	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
Bromomethane	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
Carbon Disulfide	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
Carbon tetrachloride	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
Chlorobenzene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
Chloroethane	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
Chloroform	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
Chloromethane	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
cis-1,2-Dichloroethene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
cis-1,3-Dichloropropene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
Dibromochloromethane	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
Dibromomethane	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
Dichlorodifluoromethane	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
Ethylbenzene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
Hexachlorobutadiene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
Isopropylbenzene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
m&p-Xylene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
Methyl Ethyl Ketone	ND	41	ug/Kg	1	07/23/20	JLI SW8260C
Methyl t-butyl ether (MTBE)	ND	17	ug/Kg	1	07/23/20	JLI SW8260C
Methylene chloride	ND	17	ug/Kg	1	07/23/20	JLI SW8260C
Naphthalene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
n-Butylbenzene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
n-Propylbenzene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
o-Xylene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
p-Isopropyltoluene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
sec-Butylbenzene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
Styrene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
tert-Butylbenzene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
Tetrachloroethene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
Tetrahydrofuran (THF)	ND	17	ug/Kg	1	07/23/20	JLI SW8260C
Toluene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
Total Xylenes	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,2-Dichloroethene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,3-Dichloropropene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,4-dichloro-2-butene	ND	17	ug/Kg	1	07/23/20	JLI SW8260C
Trichloroethene	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
Trichlorofluoromethane	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
Trichlorotrifluoroethane	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
Vinyl chloride	ND	8.3	ug/Kg	1	07/23/20	JLI SW8260C
<b><u>QA/QC Surrogates</u></b>						
% 1,2-dichlorobenzene-d4	99		%	1	07/23/20	JLI 70 - 130 %
% Bromofluorobenzene	97		%	1	07/23/20	JLI 70 - 130 %
% Dibromofluoromethane	93		%	1	07/23/20	JLI 70 - 130 %
% Toluene-d8	100		%	1	07/23/20	JLI 70 - 130 %

**Semivolatiles**

1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
1,2,4-Trichlorobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
1,2-Dichlorobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
1,2-Diphenylhydrazine	ND	360	ug/Kg	1	07/23/20	AW SW8270D
1,3-Dichlorobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
1,4-Dichlorobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dichlorophenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dimethylphenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dinitrophenol	ND	360	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dinitrotoluene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2-Chloronaphthalene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2-Chlorophenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2-Methylnaphthalene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2-Nitroaniline	ND	360	ug/Kg	1	07/23/20	AW SW8270D
2-Nitrophenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
3&4-Methylphenol (m&p-cresol)	ND	360	ug/Kg	1	07/23/20	AW SW8270D
3,3'-Dichlorobenzidine	ND	260	ug/Kg	1	07/23/20	AW SW8270D
3-Nitroaniline	ND	360	ug/Kg	1	07/23/20	AW SW8270D
4,6-Dinitro-2-methylphenol	ND	360	ug/Kg	1	07/23/20	AW SW8270D
4-Bromophenyl phenyl ether	ND	360	ug/Kg	1	07/23/20	AW SW8270D
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
4-Chloroaniline	ND	260	ug/Kg	1	07/23/20	AW SW8270D
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	07/23/20	AW SW8270D
4-Nitroaniline	ND	580	ug/Kg	1	07/23/20	AW SW8270D
4-Nitrophenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Acenaphthene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Acenaphthylene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Acetophenone	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Aniline	ND	360	ug/Kg	1	07/23/20	AW SW8270D
Anthracene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Benz(a)anthracene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Benzidine	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Benzo(a)pyrene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Benzo(b)fluoranthene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Benzo(ghi)perylene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Benzo(k)fluoranthene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Benzoic acid	ND	730	ug/Kg	1	07/23/20	AW SW8270D
Benzyl butyl phthalate	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroethyl)ether	ND	360	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Carbazole	ND	360	ug/Kg	1	07/23/20	AW SW8270D
Chrysene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Dibenz(a,h)anthracene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Dibenzofuran	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Diethyl phthalate	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Dimethylphthalate	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Di-n-butylphthalate	ND	360	ug/Kg	1	07/23/20	AW SW8270D
Di-n-octylphthalate	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Fluoranthene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Fluorene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorobutadiene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Hexachloroethane	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Isophorone	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Naphthalene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Nitrobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodimethylamine	ND	360	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodi-n-propylamine	ND	260	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodiphenylamine	ND	360	ug/Kg	1	07/23/20	AW SW8270D
Pentachloronitrobenzene	ND	360	ug/Kg	1	07/23/20	AW SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
Pentachlorophenol	ND	360	ug/Kg	1	07/23/20	AW SW8270D
Phenanthrene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Phenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Pyrene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Pyridine	ND	360	ug/Kg	1	07/23/20	AW SW8270D
<b><u>QA/QC Surrogates</u></b>						
% 2,4,6-Tribromophenol	75		%	1	07/23/20	AW 30 - 130 %
% 2-Fluorobiphenyl	65		%	1	07/23/20	AW 30 - 130 %
% 2-Fluorophenol	58		%	1	07/23/20	AW 30 - 130 %
% Nitrobenzene-d5	57		%	1	07/23/20	AW 30 - 130 %
% Phenol-d5	62		%	1	07/23/20	AW 30 - 130 %
% Terphenyl-d14	90		%	1	07/23/20	AW 30 - 130 %
Field Extraction	Completed				07/21/20	SW5035A

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

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL

BRL=Below Reporting Level L=Biased Low

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

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.

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

August 06, 2020

Reviewed and Released by: Rashmi Makol, Project Manager



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



## Analysis Report

August 06, 2020

FOR: Attn: Jason Fernet  
 SLR International Corporation  
 99 Realty Drive  
 Cheshire, CT 06410

### Sample Information

Matrix: SOIL  
 Location Code: SLR-CHESTER  
 Rush Request: Standard  
 P.O.#:

### Custody Information

Collected by: RH  
 Received by: B  
 Analyzed by: see "By" below

Date

Time

07/21/20 12:00

07/22/20 16:41

## Laboratory Data

SDG ID: GCG38945

Phoenix ID: CG38947

Project ID: 123-131 PEARL STREET DEVELOPMENT

Client ID: MM-3 S-1 (0.5-2.5`)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	1	07/23/20	CPP	SW6010D
Arsenic	4.16	0.73	mg/Kg	1	07/23/20	CPP	SW6010D
Barium	120	0.36	mg/Kg	1	07/23/20	TH	SW6010D
Cadmium	2.00	0.36	mg/Kg	1	07/23/20	CPP	SW6010D
Chromium	35.7	0.36	mg/Kg	1	07/23/20	CPP	SW6010D
Mercury	< 0.03	0.03	mg/Kg	2	07/23/20	RS	SW7471B
Lead	11.9	0.36	mg/Kg	1	07/23/20	CPP	SW6010D
Selenium	< 1.5	1.5	mg/Kg	1	07/23/20	CPP	SW6010D
Percent Solid	83		%		07/22/20	HB	SW846-%Solid
Soil Extraction for PCB	Completed				07/22/20	/E	SW3545A
Mercury Digestion	Completed				07/23/20	VT/VT	SW7471B
Soil Extraction for SVOA	Completed				07/22/20	R/A	SW3546
Total Metals Digest	Completed				07/22/20	S/AG/BF	SW3050B

### Polychlorinated Biphenyls

PCB-1016	ND	0.4	mg/kg	10	07/23/20	SC	SW8082A
PCB-1221	ND	0.4	mg/kg	10	07/23/20	SC	SW8082A
PCB-1232	ND	0.4	mg/kg	10	07/23/20	SC	SW8082A
PCB-1242	ND	0.4	mg/kg	10	07/23/20	SC	SW8082A
PCB-1248	ND	0.4	mg/kg	10	07/23/20	SC	SW8082A
PCB-1254	ND	0.4	mg/kg	10	07/23/20	SC	SW8082A
PCB-1260	ND	0.4	mg/kg	10	07/23/20	SC	SW8082A
PCB-1262	ND	0.4	mg/kg	10	07/23/20	SC	SW8082A
PCB-1268	ND	0.4	mg/kg	10	07/23/20	SC	SW8082A

### QA/QC Surrogates

% DCBP	86	%	10	07/23/20	SC	30 - 150 %
% DCBP (Confirmation)	89	%	10	07/23/20	SC	30 - 150 %
% TCMX	81	%	10	07/23/20	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
% TCMX (Confirmation)	81		%	10	07/23/20	SC 30 - 150 %
<b>Volatiles</b>						
1,1,1,2-Tetrachloroethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,1,1-Trichloroethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,1,2,2-Tetrachloroethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,1,2-Trichloroethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloroethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloroethene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloropropene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,2,3-Trichlorobenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,2,3-Trichloropropane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,2,4-Trichlorobenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,2,4-Trimethylbenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dibromo-3-chloropropane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dibromoethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichlorobenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichloroethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichloropropane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,3,5-Trimethylbenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,3-Dichlorobenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,3-Dichloropropane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,4-Dichlorobenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
2,2-Dichloropropane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
2-Chlorotoluene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
2-Hexanone	ND	29	ug/Kg	1	07/23/20	JLI SW8260C
2-Isopropyltoluene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
4-Chlorotoluene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
4-Methyl-2-pentanone	ND	29	ug/Kg	1	07/23/20	JLI SW8260C
Acetone	ND	29	ug/Kg	1	07/23/20	JLI SW8260C
Acrylonitrile	ND	11	ug/Kg	1	07/23/20	JLI SW8260C
Benzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Bromobenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Bromochloromethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Bromodichloromethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Bromoform	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Bromomethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Carbon Disulfide	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Carbon tetrachloride	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Chlorobenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Chloroethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Chloroform	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Chloromethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
cis-1,2-Dichloroethene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
cis-1,3-Dichloropropene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Dibromochloromethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Dibromomethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Dichlorodifluoromethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Ethylbenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Hexachlorobutadiene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
Isopropylbenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
m&p-Xylene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Methyl Ethyl Ketone	ND	29	ug/Kg	1	07/23/20	JLI SW8260C
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	1	07/23/20	JLI SW8260C
Methylene chloride	ND	11	ug/Kg	1	07/23/20	JLI SW8260C
Naphthalene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
n-Butylbenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
n-Propylbenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
o-Xylene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
p-Isopropyltoluene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
sec-Butylbenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Styrene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
tert-Butylbenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Tetrachloroethene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Tetrahydrofuran (THF)	ND	11	ug/Kg	1	07/23/20	JLI SW8260C
Toluene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Total Xylenes	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,2-Dichloroethene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,3-Dichloropropene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	1	07/23/20	JLI SW8260C
Trichloroethene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Trichlorofluoromethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Trichlorotrifluoroethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Vinyl chloride	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
<b><u>QA/QC Surrogates</u></b>						
% 1,2-dichlorobenzene-d4	99		%	1	07/23/20	JLI 70 - 130 %
% Bromofluorobenzene	94		%	1	07/23/20	JLI 70 - 130 %
% Dibromofluoromethane	91		%	1	07/23/20	JLI 70 - 130 %
% Toluene-d8	99		%	1	07/23/20	JLI 70 - 130 %

**Semivolatiles**

1,2,4,5-Tetrachlorobenzene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
1,2,4-Trichlorobenzene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
1,2-Dichlorobenzene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
1,2-Diphenylhydrazine	ND	400	ug/Kg	1	07/23/20	AW SW8270D
1,3-Dichlorobenzene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
1,4-Dichlorobenzene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
2,4,5-Trichlorophenol	ND	280	ug/Kg	1	07/23/20	AW SW8270D
2,4,6-Trichlorophenol	ND	280	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dichlorophenol	ND	280	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dimethylphenol	ND	280	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dinitrophenol	ND	400	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dinitrotoluene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
2,6-Dinitrotoluene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
2-Chloronaphthalene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
2-Chlorophenol	ND	280	ug/Kg	1	07/23/20	AW SW8270D
2-Methylnaphthalene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
2-Methylphenol (o-cresol)	ND	280	ug/Kg	1	07/23/20	AW SW8270D
2-Nitroaniline	ND	400	ug/Kg	1	07/23/20	AW SW8270D
2-Nitrophenol	ND	280	ug/Kg	1	07/23/20	AW SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
3&4-Methylphenol (m&p-cresol)	ND	400	ug/Kg	1	07/23/20	AW SW8270D
3,3'-Dichlorobenzidine	ND	280	ug/Kg	1	07/23/20	AW SW8270D
3-Nitroaniline	ND	400	ug/Kg	1	07/23/20	AW SW8270D
4,6-Dinitro-2-methylphenol	ND	400	ug/Kg	1	07/23/20	AW SW8270D
4-Bromophenyl phenyl ether	ND	400	ug/Kg	1	07/23/20	AW SW8270D
4-Chloro-3-methylphenol	ND	280	ug/Kg	1	07/23/20	AW SW8270D
4-Chloroaniline	ND	280	ug/Kg	1	07/23/20	AW SW8270D
4-Chlorophenyl phenyl ether	ND	280	ug/Kg	1	07/23/20	AW SW8270D
4-Nitroaniline	ND	640	ug/Kg	1	07/23/20	AW SW8270D
4-Nitrophenol	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Acenaphthene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Acenaphthylene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Acetophenone	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Aniline	ND	400	ug/Kg	1	07/23/20	AW SW8270D
Anthracene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Benz(a)anthracene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Benzidine	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Benzo(a)pyrene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Benzo(b)fluoranthene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Benzo(ghi)perylene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Benzo(k)fluoranthene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Benzoic acid	ND	800	ug/Kg	1	07/23/20	AW SW8270D
Benzyl butyl phthalate	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroethoxy)methane	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroethyl)ether	ND	400	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroisopropyl)ether	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-ethylhexyl)phthalate	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Carbazole	ND	400	ug/Kg	1	07/23/20	AW SW8270D
Chrysene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Dibenz(a,h)anthracene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Dibenzofuran	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Diethyl phthalate	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Dimethylphthalate	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Di-n-butylphthalate	ND	400	ug/Kg	1	07/23/20	AW SW8270D
Di-n-octylphthalate	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Fluoranthene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Fluorene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorobenzene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorobutadiene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorocyclopentadiene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Hexachloroethane	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Indeno(1,2,3-cd)pyrene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Isophorone	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Naphthalene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Nitrobenzene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodimethylamine	ND	400	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodi-n-propylamine	ND	280	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodiphenylamine	ND	400	ug/Kg	1	07/23/20	AW SW8270D
Pentachloronitrobenzene	ND	400	ug/Kg	1	07/23/20	AW SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
Pentachlorophenol	ND	400	ug/Kg	1	07/23/20	AW SW8270D
Phenanthrene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Phenol	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Pyrene	ND	280	ug/Kg	1	07/23/20	AW SW8270D
Pyridine	ND	400	ug/Kg	1	07/23/20	AW SW8270D
<b><u>QA/QC Surrogates</u></b>						
% 2,4,6-Tribromophenol	85		%	1	07/23/20	AW 30 - 130 %
% 2-Fluorobiphenyl	68		%	1	07/23/20	AW 30 - 130 %
% 2-Fluorophenol	56		%	1	07/23/20	AW 30 - 130 %
% Nitrobenzene-d5	55		%	1	07/23/20	AW 30 - 130 %
% Phenol-d5	61		%	1	07/23/20	AW 30 - 130 %
% Terphenyl-d14	90		%	1	07/23/20	AW 30 - 130 %
Field Extraction	Completed				07/21/20	SW5035A

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

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL

BRL=Below Reporting Level L=Biased Low

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

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.

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

August 06, 2020

Reviewed and Released by: Rashmi Makol, Project Manager



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



## Analysis Report

August 06, 2020

FOR: Attn: Jason Fernet  
 SLR International Corporation  
 99 Realty Drive  
 Cheshire, CT 06410

### Sample Information

Matrix: SOIL  
 Location Code: SLR-CHESTER  
 Rush Request: Standard  
 P.O.#:

### Custody Information

Collected by: RH  
 Received by: B  
 Analyzed by: see "By" below

Date

Time

07/21/20 13:00

07/22/20 16:41

## Laboratory Data

SDG ID: GCG38945

Phoenix ID: CG38948

Project ID: 123-131 PEARL STREET DEVELOPMENT

Client ID: MM-3 S-1 (10-12')

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.37	0.37	mg/Kg	1	07/23/20	CPP	SW6010D
Arsenic	1.25	0.74	mg/Kg	1	07/23/20	CPP	SW6010D
Barium	103	0.37	mg/Kg	1	07/23/20	TH	SW6010D
Cadmium	1.36	0.37	mg/Kg	1	07/23/20	CPP	SW6010D
Chromium	26.9	0.37	mg/Kg	1	07/23/20	CPP	SW6010D
Mercury	< 0.03	0.03	mg/Kg	2	07/23/20	RS	SW7471B
Lead	5.63	0.37	mg/Kg	1	07/23/20	CPP	SW6010D
Selenium	< 1.5	1.5	mg/Kg	1	07/23/20	CPP	SW6010D
Percent Solid	86		%		07/22/20	HB	SW846-%Solid
Soil Extraction for PCB	Completed				07/22/20	/E	SW3545A
Mercury Digestion	Completed				07/23/20	VT/VT	SW7471B
Soil Extraction for SVOA	Completed				07/22/20	R/A	SW3546
Total Metals Digest	Completed				07/22/20	S/AG/BF	SW3050B

### Polychlorinated Biphenyls

PCB-1016	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A
PCB-1221	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A
PCB-1232	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A
PCB-1242	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A
PCB-1248	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A
PCB-1254	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A
PCB-1260	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A
PCB-1262	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A
PCB-1268	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A

### QA/QC Surrogates

% DCBP	97	%	10	07/23/20	SC	30 - 150 %
% DCBP (Confirmation)	99	%	10	07/23/20	SC	30 - 150 %
% TCMX	91	%	10	07/23/20	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
% TCMX (Confirmation)	89		%	10	07/23/20	SC 30 - 150 %
<b>Volatiles</b>						
1,1,1,2-Tetrachloroethane	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
1,1,1-Trichloroethane	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
1,1,2,2-Tetrachloroethane	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
1,1,2-Trichloroethane	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloroethane	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloroethene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloropropene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
1,2,3-Trichlorobenzene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
1,2,3-Trichloropropane	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
1,2,4-Trichlorobenzene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
1,2,4-Trimethylbenzene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dibromo-3-chloropropane	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dibromoethane	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichlorobenzene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichloroethane	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichloropropane	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
1,3,5-Trimethylbenzene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
1,3-Dichlorobenzene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
1,3-Dichloropropane	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
1,4-Dichlorobenzene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
2,2-Dichloropropane	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
2-Chlorotoluene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
2-Hexanone	ND	30	ug/Kg	1	07/23/20	JLI SW8260C
2-Isopropyltoluene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
4-Chlorotoluene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
4-Methyl-2-pentanone	ND	30	ug/Kg	1	07/23/20	JLI SW8260C
Acetone	ND	30	ug/Kg	1	07/23/20	JLI SW8260C
Acrylonitrile	ND	12	ug/Kg	1	07/23/20	JLI SW8260C
Benzene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
Bromobenzene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
Bromochloromethane	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
Bromodichloromethane	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
Bromoform	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
Bromomethane	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
Carbon Disulfide	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
Carbon tetrachloride	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
Chlorobenzene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
Chloroethane	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
Chloroform	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
Chloromethane	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
cis-1,2-Dichloroethene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
cis-1,3-Dichloropropene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
Dibromochloromethane	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
Dibromomethane	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
Dichlorodifluoromethane	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
Ethylbenzene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
Hexachlorobutadiene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
Isopropylbenzene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
m&p-Xylene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
Methyl Ethyl Ketone	ND	30	ug/Kg	1	07/23/20	JLI SW8260C
Methyl t-butyl ether (MTBE)	ND	12	ug/Kg	1	07/23/20	JLI SW8260C
Methylene chloride	ND	12	ug/Kg	1	07/23/20	JLI SW8260C
Naphthalene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
n-Butylbenzene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
n-Propylbenzene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
o-Xylene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
p-Isopropyltoluene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
sec-Butylbenzene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
Styrene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
tert-Butylbenzene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
Tetrachloroethene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
Tetrahydrofuran (THF)	ND	12	ug/Kg	1	07/23/20	JLI SW8260C
Toluene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
Total Xylenes	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,2-Dichloroethene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,3-Dichloropropene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,4-dichloro-2-butene	ND	12	ug/Kg	1	07/23/20	JLI SW8260C
Trichloroethene	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
Trichlorofluoromethane	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
Trichlorotrifluoroethane	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
Vinyl chloride	ND	6.0	ug/Kg	1	07/23/20	JLI SW8260C
<b><u>QA/QC Surrogates</u></b>						
% 1,2-dichlorobenzene-d4	99		%	1	07/23/20	JLI 70 - 130 %
% Bromofluorobenzene	98		%	1	07/23/20	JLI 70 - 130 %
% Dibromofluoromethane	91		%	1	07/23/20	JLI 70 - 130 %
% Toluene-d8	99		%	1	07/23/20	JLI 70 - 130 %

**Semivolatiles**

1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
1,2,4-Trichlorobenzene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
1,2-Dichlorobenzene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
1,2-Diphenylhydrazine	ND	380	ug/Kg	1	07/23/20	AW SW8270D
1,3-Dichlorobenzene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
1,4-Dichlorobenzene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
2,4,5-Trichlorophenol	ND	270	ug/Kg	1	07/23/20	AW SW8270D
2,4,6-Trichlorophenol	ND	270	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dichlorophenol	ND	270	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dimethylphenol	ND	270	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dinitrophenol	ND	380	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dinitrotoluene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
2,6-Dinitrotoluene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
2-Chloronaphthalene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
2-Chlorophenol	ND	270	ug/Kg	1	07/23/20	AW SW8270D
2-Methylnaphthalene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
2-Methylphenol (o-cresol)	ND	270	ug/Kg	1	07/23/20	AW SW8270D
2-Nitroaniline	ND	380	ug/Kg	1	07/23/20	AW SW8270D
2-Nitrophenol	ND	270	ug/Kg	1	07/23/20	AW SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
3&4-Methylphenol (m&p-cresol)	ND	380	ug/Kg	1	07/23/20	AW SW8270D
3,3'-Dichlorobenzidine	ND	270	ug/Kg	1	07/23/20	AW SW8270D
3-Nitroaniline	ND	380	ug/Kg	1	07/23/20	AW SW8270D
4,6-Dinitro-2-methylphenol	ND	380	ug/Kg	1	07/23/20	AW SW8270D
4-Bromophenyl phenyl ether	ND	380	ug/Kg	1	07/23/20	AW SW8270D
4-Chloro-3-methylphenol	ND	270	ug/Kg	1	07/23/20	AW SW8270D
4-Chloroaniline	ND	270	ug/Kg	1	07/23/20	AW SW8270D
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	1	07/23/20	AW SW8270D
4-Nitroaniline	ND	610	ug/Kg	1	07/23/20	AW SW8270D
4-Nitrophenol	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Acenaphthene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Acenaphthylene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Acetophenone	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Aniline	ND	380	ug/Kg	1	07/23/20	AW SW8270D
Anthracene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Benz(a)anthracene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Benzidine	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Benzo(a)pyrene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Benzo(b)fluoranthene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Benzo(ghi)perylene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Benzo(k)fluoranthene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Benzoic acid	ND	760	ug/Kg	1	07/23/20	AW SW8270D
Benzyl butyl phthalate	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroethyl)ether	ND	380	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroisopropyl)ether	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-ethylhexyl)phthalate	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Carbazole	ND	380	ug/Kg	1	07/23/20	AW SW8270D
Chrysene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Dibenz(a,h)anthracene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Dibenzofuran	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Diethyl phthalate	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Dimethylphthalate	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Di-n-butylphthalate	ND	380	ug/Kg	1	07/23/20	AW SW8270D
Di-n-octylphthalate	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Fluoranthene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Fluorene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorobenzene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorobutadiene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorocyclopentadiene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Hexachloroethane	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Indeno(1,2,3-cd)pyrene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Isophorone	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Naphthalene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Nitrobenzene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodimethylamine	ND	380	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodi-n-propylamine	ND	270	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodiphenylamine	ND	380	ug/Kg	1	07/23/20	AW SW8270D
Pentachloronitrobenzene	ND	380	ug/Kg	1	07/23/20	AW SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
Pentachlorophenol	ND	380	ug/Kg	1	07/23/20	AW SW8270D
Phenanthrene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Phenol	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Pyrene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Pyridine	ND	380	ug/Kg	1	07/23/20	AW SW8270D
<b><u>QA/QC Surrogates</u></b>						
% 2,4,6-Tribromophenol	71		%	1	07/23/20	AW 30 - 130 %
% 2-Fluorobiphenyl	71		%	1	07/23/20	AW 30 - 130 %
% 2-Fluorophenol	67		%	1	07/23/20	AW 30 - 130 %
% Nitrobenzene-d5	66		%	1	07/23/20	AW 30 - 130 %
% Phenol-d5	71		%	1	07/23/20	AW 30 - 130 %
% Terphenyl-d14	87		%	1	07/23/20	AW 30 - 130 %
Field Extraction	Completed				07/21/20	SW5035A

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

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL

BRL=Below Reporting Level L=Biased Low

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

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.

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

August 06, 2020

Reviewed and Released by: Rashmi Makol, Project Manager



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



## Analysis Report

August 06, 2020

FOR: Attn: Jason Fernet  
 SLR International Corporation  
 99 Realty Drive  
 Cheshire, CT 06410

### Sample Information

Matrix: SOIL  
 Location Code: SLR-CHESTER  
 Rush Request: Standard  
 P.O.#:

### Custody Information

Collected by: RH  
 Received by: B  
 Analyzed by: see "By" below

Date

Time

07/21/20 15:30

07/22/20 16:41

## Laboratory Data

SDG ID: GCG38945

Phoenix ID: CG38949

Project ID: 123-131 PEARL STREET DEVELOPMENT

Client ID: MM-1 S-2 (3-5`)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.34	0.34	mg/Kg	1	07/23/20	CPP	SW6010D
Arsenic	2.88	0.68	mg/Kg	1	07/23/20	CPP	SW6010D
Barium	132	0.34	mg/Kg	1	07/23/20	TH	SW6010D
Cadmium	1.49	0.34	mg/Kg	1	07/23/20	CPP	SW6010D
Chromium	26.4	0.34	mg/Kg	1	07/23/20	CPP	SW6010D
Mercury	0.43	0.03	mg/Kg	2	07/24/20	MGH	SW7471B
Lead	88.6	0.34	mg/Kg	1	07/23/20	CPP	SW6010D
Selenium	< 1.4	1.4	mg/Kg	1	07/23/20	CPP	SW6010D
Percent Solid	88		%		07/22/20	HB	SW846-%Solid
Soil Extraction for PCB	Completed				07/22/20	/E	SW3545A
Mercury Digestion	Completed				07/24/20	VT/VT	SW7471B
Soil Extraction for SVOA	Completed				07/22/20	R/A	SW3546
Total Metals Digest	Completed				07/22/20	S/AG/BF	SW3050B

### Polychlorinated Biphenyls

PCB-1016	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A
PCB-1221	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A
PCB-1232	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A
PCB-1242	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A
PCB-1248	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A
PCB-1254	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A
PCB-1260	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A
PCB-1262	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A
PCB-1268	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A

### QA/QC Surrogates

% DCBP	86	%	10	07/23/20	SC	30 - 150 %
% DCBP (Confirmation)	87	%	10	07/23/20	SC	30 - 150 %
% TCMX	97	%	10	07/23/20	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
% TCMX (Confirmation)	93		%	10	07/23/20	SC 30 - 150 %
<b>Volatiles</b>						
1,1,1,2-Tetrachloroethane	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
1,1,1-Trichloroethane	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
1,1,2,2-Tetrachloroethane	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
1,1,2-Trichloroethane	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloroethane	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloroethene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloropropene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
1,2,3-Trichlorobenzene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
1,2,3-Trichloropropane	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
1,2,4-Trichlorobenzene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
1,2,4-Trimethylbenzene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dibromo-3-chloropropane	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dibromoethane	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichlorobenzene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichloroethane	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichloropropane	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
1,3,5-Trimethylbenzene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
1,3-Dichlorobenzene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
1,3-Dichloropropane	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
1,4-Dichlorobenzene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
2,2-Dichloropropane	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
2-Chlorotoluene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
2-Hexanone	ND	45	ug/Kg	1	07/23/20	JLI SW8260C
2-Isopropyltoluene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
4-Chlorotoluene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
4-Methyl-2-pentanone	ND	45	ug/Kg	1	07/23/20	JLI SW8260C
Acetone	ND	45	ug/Kg	1	07/23/20	JLI SW8260C
Acrylonitrile	ND	18	ug/Kg	1	07/23/20	JLI SW8260C
Benzene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
Bromobenzene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
Bromochloromethane	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
Bromodichloromethane	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
Bromoform	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
Bromomethane	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
Carbon Disulfide	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
Carbon tetrachloride	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
Chlorobenzene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
Chloroethane	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
Chloroform	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
Chloromethane	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
cis-1,2-Dichloroethene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
cis-1,3-Dichloropropene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
Dibromochloromethane	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
Dibromomethane	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
Dichlorodifluoromethane	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
Ethylbenzene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
Hexachlorobutadiene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
Isopropylbenzene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
m&p-Xylene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
Methyl Ethyl Ketone	ND	45	ug/Kg	1	07/23/20	JLI SW8260C
Methyl t-butyl ether (MTBE)	ND	18	ug/Kg	1	07/23/20	JLI SW8260C
Methylene chloride	ND	18	ug/Kg	1	07/23/20	JLI SW8260C
Naphthalene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
n-Butylbenzene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
n-Propylbenzene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
o-Xylene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
p-Isopropyltoluene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
sec-Butylbenzene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
Styrene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
tert-Butylbenzene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
Tetrachloroethene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
Tetrahydrofuran (THF)	ND	18	ug/Kg	1	07/23/20	JLI SW8260C
Toluene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
Total Xylenes	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,2-Dichloroethene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,3-Dichloropropene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,4-dichloro-2-butene	ND	18	ug/Kg	1	07/23/20	JLI SW8260C
Trichloroethene	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
Trichlorofluoromethane	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
Trichlorotrifluoroethane	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
Vinyl chloride	ND	8.9	ug/Kg	1	07/23/20	JLI SW8260C
<b><u>QA/QC Surrogates</u></b>						
% 1,2-dichlorobenzene-d4	98		%	1	07/23/20	JLI 70 - 130 %
% Bromofluorobenzene	90		%	1	07/23/20	JLI 70 - 130 %
% Dibromofluoromethane	92		%	1	07/23/20	JLI 70 - 130 %
% Toluene-d8	98		%	1	07/23/20	JLI 70 - 130 %

**Semivolatiles**

1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
1,2,4-Trichlorobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
1,2-Dichlorobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
1,2-Diphenylhydrazine	ND	370	ug/Kg	1	07/23/20	AW SW8270D
1,3-Dichlorobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
1,4-Dichlorobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dichlorophenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dimethylphenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dinitrophenol	ND	370	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dinitrotoluene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2-Chloronaphthalene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2-Chlorophenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2-Methylnaphthalene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2-Nitroaniline	ND	370	ug/Kg	1	07/23/20	AW SW8270D
2-Nitrophenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	1	07/23/20	AW SW8270D
3,3'-Dichlorobenzidine	ND	260	ug/Kg	1	07/23/20	AW SW8270D
3-Nitroaniline	ND	370	ug/Kg	1	07/23/20	AW SW8270D
4,6-Dinitro-2-methylphenol	ND	370	ug/Kg	1	07/23/20	AW SW8270D
4-Bromophenyl phenyl ether	ND	370	ug/Kg	1	07/23/20	AW SW8270D
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
4-Chloroaniline	ND	260	ug/Kg	1	07/23/20	AW SW8270D
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	07/23/20	AW SW8270D
4-Nitroaniline	ND	590	ug/Kg	1	07/23/20	AW SW8270D
4-Nitrophenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Acenaphthene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Acenaphthylene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Acetophenone	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Aniline	ND	370	ug/Kg	1	07/23/20	AW SW8270D
Anthracene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Benz(a)anthracene	840	260	ug/Kg	1	07/23/20	AW SW8270D
Benzidine	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Benzo(a)pyrene	950	260	ug/Kg	1	07/23/20	AW SW8270D
Benzo(b)fluoranthene	790	260	ug/Kg	1	07/23/20	AW SW8270D
Benzo(ghi)perylene	600	260	ug/Kg	1	07/23/20	AW SW8270D
Benzo(k)fluoranthene	710	260	ug/Kg	1	07/23/20	AW SW8270D
Benzoic acid	ND	740	ug/Kg	1	07/23/20	AW SW8270D
Benzyl butyl phthalate	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroethyl)ether	ND	370	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Carbazole	ND	370	ug/Kg	1	07/23/20	AW SW8270D
Chrysene	810	260	ug/Kg	1	07/23/20	AW SW8270D
Dibenz(a,h)anthracene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Dibenzofuran	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Diethyl phthalate	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Dimethylphthalate	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Di-n-butylphthalate	ND	370	ug/Kg	1	07/23/20	AW SW8270D
Di-n-octylphthalate	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Fluoranthene	1400	260	ug/Kg	1	07/23/20	AW SW8270D
Fluorene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorobutadiene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Hexachloroethane	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Indeno(1,2,3-cd)pyrene	640	260	ug/Kg	1	07/23/20	AW SW8270D
Isophorone	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Naphthalene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Nitrobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodimethylamine	ND	370	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodi-n-propylamine	ND	260	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodiphenylamine	ND	370	ug/Kg	1	07/23/20	AW SW8270D
Pentachloronitrobenzene	ND	370	ug/Kg	1	07/23/20	AW SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
Pentachlorophenol	ND	370	ug/Kg	1	07/23/20	AW SW8270D
Phenanthrene	540	260	ug/Kg	1	07/23/20	AW SW8270D
Phenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Pyrene	1300	260	ug/Kg	1	07/23/20	AW SW8270D
Pyridine	ND	370	ug/Kg	1	07/23/20	AW SW8270D
<b><u>QA/QC Surrogates</u></b>						
% 2,4,6-Tribromophenol	59		%	1	07/23/20	AW 30 - 130 %
% 2-Fluorobiphenyl	51		%	1	07/23/20	AW 30 - 130 %
% 2-Fluorophenol	38		%	1	07/23/20	AW 30 - 130 %
% Nitrobenzene-d5	42		%	1	07/23/20	AW 30 - 130 %
% Phenol-d5	45		%	1	07/23/20	AW 30 - 130 %
% Terphenyl-d14	60		%	1	07/23/20	AW 30 - 130 %
Field Extraction	Completed				07/21/20	SW5035A

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

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL

BRL=Below Reporting Level L=Biased Low

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

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.

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

August 06, 2020

Reviewed and Released by: Rashmi Makol, Project Manager



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



## Analysis Report

August 06, 2020

FOR: Attn: Jason Fernet  
 SLR International Corporation  
 99 Realty Drive  
 Cheshire, CT 06410

### Sample Information

Matrix: SOIL  
 Location Code: SLR-CHESTER  
 Rush Request: 48 Hour  
 P.O.#: \_\_\_\_\_

### Custody Information

Collected by: RH  
 Received by: B  
 Analyzed by: see "By" below

Date

Time

07/21/20 9:30

07/22/20 16:41

## Laboratory Data

SDG ID: GCG38945

Phoenix ID: CG38950

Project ID: 123-131 PEARL STREET DEVELOPMENT

Client ID: MM-1 S-4 (10-12')

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.34	0.34	mg/Kg	1	07/23/20	CPP	SW6010D
Arsenic	0.98	0.67	mg/Kg	1	07/23/20	CPP	SW6010D
Barium	357	0.34	mg/Kg	1	07/23/20	TH	SW6010D
Cadmium	2.38	0.34	mg/Kg	1	07/23/20	CPP	SW6010D
Chromium	54.0	0.34	mg/Kg	1	07/23/20	CPP	SW6010D
Mercury	< 0.03	0.03	mg/Kg	2	07/24/20	MGH	SW7471B
Lead	4.46	0.34	mg/Kg	1	07/23/20	CPP	SW6010D
Selenium	< 1.3	1.3	mg/Kg	1	07/23/20	CPP	SW6010D
Trivalent Chromium	54.0	0.34	mg/kg	1	08/03/20		CALC 6010-7196
Percent Solid	91		%		07/22/20	HB	SW846-%Solid
chromium, Hex. (SW3060 digestion)	< 0.42	0.42	mg/Kg	1	08/03/20	ARG/BJA	SW7196A
pH at 25C - Soil	6.72	1.00	pH Units	1	07/31/20 21:11	AP	SW846 9045
Redox Potential	112		mV	1	07/31/20	AP	SM2580B-09
Soil Extraction for PCB	Completed				07/22/20	/E	SW3545A
Mercury Digestion	Completed				07/24/20	VT/VT	SW7471B
Soil Extraction for SVOA	Completed				07/22/20	R/A	SW3546
Total Metals Digest	Completed				07/22/20	S/AG/BF	SW3050B

### Polychlorinated Biphenyls

PCB-1016	ND	0.36	mg/kg	10	07/24/20	SC	SW8082A
PCB-1221	ND	0.36	mg/kg	10	07/24/20	SC	SW8082A
PCB-1232	ND	0.36	mg/kg	10	07/24/20	SC	SW8082A
PCB-1242	ND	0.36	mg/kg	10	07/24/20	SC	SW8082A
PCB-1248	ND	0.36	mg/kg	10	07/24/20	SC	SW8082A
PCB-1254	ND	0.36	mg/kg	10	07/24/20	SC	SW8082A
PCB-1260	ND	0.36	mg/kg	10	07/24/20	SC	SW8082A
PCB-1262	ND	0.36	mg/kg	10	07/24/20	SC	SW8082A
PCB-1268	ND	0.36	mg/kg	10	07/24/20	SC	SW8082A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
<b><u>QA/QC Surrogates</u></b>						
% DCBP	88		%	10	07/24/20	SC 30 - 150 %
% DCBP (Confirmation)	82		%	10	07/24/20	SC 30 - 150 %
% TCMX	93		%	10	07/24/20	SC 30 - 150 %
% TCMX (Confirmation)	92		%	10	07/24/20	SC 30 - 150 %
<b><u>Volatiles</u></b>						
1,1,1,2-Tetrachloroethane	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
1,1,1-Trichloroethane	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
1,1,2,2-Tetrachloroethane	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
1,1,2-Trichloroethane	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloroethane	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloroethene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloropropene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
1,2,3-Trichlorobenzene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
1,2,3-Trichloropropane	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
1,2,4-Trichlorobenzene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
1,2,4-Trimethylbenzene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dibromo-3-chloropropane	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dibromoethane	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichlorobenzene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichloroethane	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichloropropane	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
1,3,5-Trimethylbenzene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
1,3-Dichlorobenzene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
1,3-Dichloropropane	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
1,4-Dichlorobenzene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
2,2-Dichloropropane	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
2-Chlorotoluene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
2-Hexanone	ND	37	ug/Kg	1	07/23/20	JLI SW8260C
2-Isopropyltoluene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
4-Chlorotoluene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
4-Methyl-2-pentanone	ND	37	ug/Kg	1	07/23/20	JLI SW8260C
Acetone	ND	37	ug/Kg	1	07/23/20	JLI SW8260C
Acrylonitrile	ND	15	ug/Kg	1	07/23/20	JLI SW8260C
Benzene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
Bromobenzene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
Bromochloromethane	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
Bromodichloromethane	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
Bromoform	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
Bromomethane	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
Carbon Disulfide	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
Carbon tetrachloride	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
Chlorobenzene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
Chloroethane	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
Chloroform	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
Chloromethane	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
cis-1,2-Dichloroethene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
cis-1,3-Dichloropropene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
Dibromochloromethane	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
Dibromomethane	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
Dichlorodifluoromethane	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
Ethylbenzene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
Hexachlorobutadiene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
Isopropylbenzene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
m&p-Xylene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
Methyl Ethyl Ketone	ND	37	ug/Kg	1	07/23/20	JLI SW8260C
Methyl t-butyl ether (MTBE)	ND	15	ug/Kg	1	07/23/20	JLI SW8260C
Methylene chloride	ND	15	ug/Kg	1	07/23/20	JLI SW8260C
Naphthalene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
n-Butylbenzene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
n-Propylbenzene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
o-Xylene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
p-Isopropyltoluene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
sec-Butylbenzene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
Styrene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
tert-Butylbenzene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
Tetrachloroethene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
Tetrahydrofuran (THF)	ND	15	ug/Kg	1	07/23/20	JLI SW8260C
Toluene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
Total Xylenes	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,2-Dichloroethene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,3-Dichloropropene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,4-dichloro-2-butene	ND	15	ug/Kg	1	07/23/20	JLI SW8260C
Trichloroethene	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
Trichlorofluoromethane	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
Trichlorotrifluoroethane	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
Vinyl chloride	ND	7.5	ug/Kg	1	07/23/20	JLI SW8260C
<b><u>QA/QC Surrogates</u></b>						
% 1,2-dichlorobenzene-d4	98		%	1	07/23/20	JLI 70 - 130 %
% Bromofluorobenzene	97		%	1	07/23/20	JLI 70 - 130 %
% Dibromofluoromethane	93		%	1	07/23/20	JLI 70 - 130 %
% Toluene-d8	99		%	1	07/23/20	JLI 70 - 130 %
<b><u>Semivolatiles</u></b>						
1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
1,2,4-Trichlorobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
1,2-Dichlorobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
1,2-Diphenylhydrazine	ND	370	ug/Kg	1	07/23/20	AW SW8270D
1,3-Dichlorobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
1,4-Dichlorobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dichlorophenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dimethylphenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dinitrophenol	ND	370	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dinitrotoluene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2,6-Dinitrotoluene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2-Chloronaphthalene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2-Chlorophenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
2-Methylnaphthalene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2-Nitroaniline	ND	370	ug/Kg	1	07/23/20	AW SW8270D
2-Nitrophenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	1	07/23/20	AW SW8270D
3,3'-Dichlorobenzidine	ND	260	ug/Kg	1	07/23/20	AW SW8270D
3-Nitroaniline	ND	370	ug/Kg	1	07/23/20	AW SW8270D
4,6-Dinitro-2-methylphenol	ND	370	ug/Kg	1	07/23/20	AW SW8270D
4-Bromophenyl phenyl ether	ND	370	ug/Kg	1	07/23/20	AW SW8270D
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
4-Chloroaniline	ND	260	ug/Kg	1	07/23/20	AW SW8270D
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	07/23/20	AW SW8270D
4-Nitroaniline	ND	590	ug/Kg	1	07/23/20	AW SW8270D
4-Nitrophenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Acenaphthene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Acenaphthylene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Acetophenone	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Aniline	ND	370	ug/Kg	1	07/23/20	AW SW8270D
Anthracene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Benz(a)anthracene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Benzidine	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Benzo(a)pyrene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Benzo(b)fluoranthene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Benzo(ghi)perylene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Benzo(k)fluoranthene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Benzoic acid	ND	730	ug/Kg	1	07/23/20	AW SW8270D
Benzyl butyl phthalate	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroethyl)ether	ND	370	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Carbazole	ND	370	ug/Kg	1	07/23/20	AW SW8270D
Chrysene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Dibenz(a,h)anthracene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Dibenzofuran	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Diethyl phthalate	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Dimethylphthalate	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Di-n-butylphthalate	ND	370	ug/Kg	1	07/23/20	AW SW8270D
Di-n-octylphthalate	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Fluoranthene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Fluorene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorobutadiene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Hexachloroethane	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Isophorone	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Naphthalene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Nitrobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
N-Nitrosodimethylamine	ND	370	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodi-n-propylamine	ND	260	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodiphenylamine	ND	370	ug/Kg	1	07/23/20	AW SW8270D
Pentachloronitrobenzene	ND	370	ug/Kg	1	07/23/20	AW SW8270D
Pentachlorophenol	ND	370	ug/Kg	1	07/23/20	AW SW8270D
Phenanthrene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Phenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Pyrene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Pyridine	ND	370	ug/Kg	1	07/23/20	AW SW8270D
<b><u>QA/QC Surrogates</u></b>						
% 2,4,6-Tribromophenol	74		%	1	07/23/20	AW 30 - 130 %
% 2-Fluorobiphenyl	65		%	1	07/23/20	AW 30 - 130 %
% 2-Fluorophenol	58		%	1	07/23/20	AW 30 - 130 %
% Nitrobenzene-d5	58		%	1	07/23/20	AW 30 - 130 %
% Phenol-d5	62		%	1	07/23/20	AW 30 - 130 %
% Terphenyl-d14	86		%	1	07/23/20	AW 30 - 130 %
Field Extraction	Completed				07/21/20	SW5035A

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

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL

BRL=Below Reporting Level L=Biased Low

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

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.

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

Hexavalent Chromium:

This sample is in a reducing state.

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

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

Phyllis Shiller, Laboratory Director

August 06, 2020

Reviewed and Released by: Rashmi Makol, Project Manager



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



## Analysis Report

August 06, 2020

FOR: Attn: Jason Fernet  
 SLR International Corporation  
 99 Realty Drive  
 Cheshire, CT 06410

### Sample Information

Matrix: SOIL  
 Location Code: SLR-CHESTER  
 Rush Request: Standard  
 P.O.#:

### Custody Information

Collected by: RH  
 Received by: B  
 Analyzed by: see "By" below

Date

Time

07/21/20 11:30

07/22/20 16:41

## Laboratory Data

SDG ID: GCG38945

Phoenix ID: CG38951

Project ID: 123-131 PEARL STREET DEVELOPMENT

Client ID: MM-2 S-2 (3-5`)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.37	0.37	mg/Kg	1	07/23/20	CPP	SW6010D
Arsenic	2.14	0.74	mg/Kg	1	07/23/20	CPP	SW6010D
Barium	104	0.37	mg/Kg	1	07/23/20	TH	SW6010D
Cadmium	1.63	0.37	mg/Kg	1	07/23/20	CPP	SW6010D
Chromium	30.1	0.37	mg/Kg	1	07/23/20	CPP	SW6010D
Mercury	< 0.03	0.03	mg/Kg	2	07/24/20	MGH	SW7471B
Lead	7.46	0.37	mg/Kg	1	07/23/20	CPP	SW6010D
Selenium	< 1.5	1.5	mg/Kg	1	07/23/20	CPP	SW6010D
Percent Solid	86		%		07/22/20	HB	SW846-%Solid
Soil Extraction for PCB	Completed				07/22/20	/E	SW3545A
Mercury Digestion	Completed				07/24/20	VT/VT	SW7471B
Soil Extraction for SVOA	Completed				07/22/20	R/A	SW3546
Total Metals Digest	Completed				07/22/20	S/AG/BF	SW3050B

### Polychlorinated Biphenyls

PCB-1016	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A
PCB-1221	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A
PCB-1232	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A
PCB-1242	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A
PCB-1248	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A
PCB-1254	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A
PCB-1260	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A
PCB-1262	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A
PCB-1268	ND	0.38	mg/kg	10	07/23/20	SC	SW8082A

### QA/QC Surrogates

% DCBP	92	%	10	07/23/20	SC	30 - 150 %
% DCBP (Confirmation)	91	%	10	07/23/20	SC	30 - 150 %
% TCMX	82	%	10	07/23/20	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
% TCMX (Confirmation)	81		%	10	07/23/20	SC 30 - 150 %
<b>Volatiles</b>						
1,1,1,2-Tetrachloroethane	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
1,1,1-Trichloroethane	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
1,1,2,2-Tetrachloroethane	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
1,1,2-Trichloroethane	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloroethane	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloroethene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloropropene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
1,2,3-Trichlorobenzene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
1,2,3-Trichloropropane	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
1,2,4-Trichlorobenzene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
1,2,4-Trimethylbenzene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dibromo-3-chloropropane	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dibromoethane	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichlorobenzene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichloroethane	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichloropropane	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
1,3,5-Trimethylbenzene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
1,3-Dichlorobenzene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
1,3-Dichloropropane	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
1,4-Dichlorobenzene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
2,2-Dichloropropane	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
2-Chlorotoluene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
2-Hexanone	ND	32	ug/Kg	1	07/23/20	JLI SW8260C
2-Isopropyltoluene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
4-Chlorotoluene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
4-Methyl-2-pentanone	ND	32	ug/Kg	1	07/23/20	JLI SW8260C
Acetone	ND	32	ug/Kg	1	07/23/20	JLI SW8260C
Acrylonitrile	ND	13	ug/Kg	1	07/23/20	JLI SW8260C
Benzene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
Bromobenzene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
Bromochloromethane	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
Bromodichloromethane	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
Bromoform	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
Bromomethane	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
Carbon Disulfide	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
Carbon tetrachloride	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
Chlorobenzene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
Chloroethane	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
Chloroform	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
Chloromethane	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
cis-1,2-Dichloroethene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
cis-1,3-Dichloropropene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
Dibromochloromethane	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
Dibromomethane	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
Dichlorodifluoromethane	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
Ethylbenzene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
Hexachlorobutadiene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
Isopropylbenzene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
m&p-Xylene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
Methyl Ethyl Ketone	ND	32	ug/Kg	1	07/23/20	JLI SW8260C
Methyl t-butyl ether (MTBE)	ND	13	ug/Kg	1	07/23/20	JLI SW8260C
Methylene chloride	ND	13	ug/Kg	1	07/23/20	JLI SW8260C
Naphthalene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
n-Butylbenzene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
n-Propylbenzene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
o-Xylene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
p-Isopropyltoluene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
sec-Butylbenzene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
Styrene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
tert-Butylbenzene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
Tetrachloroethene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
Tetrahydrofuran (THF)	ND	13	ug/Kg	1	07/23/20	JLI SW8260C
Toluene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
Total Xylenes	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,2-Dichloroethene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,3-Dichloropropene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,4-dichloro-2-butene	ND	13	ug/Kg	1	07/23/20	JLI SW8260C
Trichloroethene	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
Trichlorofluoromethane	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
Trichlorotrifluoroethane	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
Vinyl chloride	ND	6.4	ug/Kg	1	07/23/20	JLI SW8260C
<b><u>QA/QC Surrogates</u></b>						
% 1,2-dichlorobenzene-d4	100		%	1	07/23/20	JLI 70 - 130 %
% Bromofluorobenzene	95		%	1	07/23/20	JLI 70 - 130 %
% Dibromofluoromethane	92		%	1	07/23/20	JLI 70 - 130 %
% Toluene-d8	98		%	1	07/23/20	JLI 70 - 130 %

**Semivolatiles**

1,2,4,5-Tetrachlorobenzene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
1,2,4-Trichlorobenzene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
1,2-Dichlorobenzene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
1,2-Diphenylhydrazine	ND	380	ug/Kg	1	07/23/20	AW SW8270D
1,3-Dichlorobenzene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
1,4-Dichlorobenzene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
2,4,5-Trichlorophenol	ND	270	ug/Kg	1	07/23/20	AW SW8270D
2,4,6-Trichlorophenol	ND	270	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dichlorophenol	ND	270	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dimethylphenol	ND	270	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dinitrophenol	ND	380	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dinitrotoluene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
2-Chloronaphthalene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
2-Chlorophenol	ND	270	ug/Kg	1	07/23/20	AW SW8270D
2-Methylnaphthalene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
2-Methylphenol (o-cresol)	ND	270	ug/Kg	1	07/23/20	AW SW8270D
2-Nitroaniline	ND	380	ug/Kg	1	07/23/20	AW SW8270D
2-Nitrophenol	ND	270	ug/Kg	1	07/23/20	AW SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
3&4-Methylphenol (m&p-cresol)	ND	380	ug/Kg	1	07/23/20	AW SW8270D
3,3'-Dichlorobenzidine	ND	270	ug/Kg	1	07/23/20	AW SW8270D
3-Nitroaniline	ND	380	ug/Kg	1	07/23/20	AW SW8270D
4,6-Dinitro-2-methylphenol	ND	380	ug/Kg	1	07/23/20	AW SW8270D
4-Bromophenyl phenyl ether	ND	380	ug/Kg	1	07/23/20	AW SW8270D
4-Chloro-3-methylphenol	ND	270	ug/Kg	1	07/23/20	AW SW8270D
4-Chloroaniline	ND	270	ug/Kg	1	07/23/20	AW SW8270D
4-Chlorophenyl phenyl ether	ND	270	ug/Kg	1	07/23/20	AW SW8270D
4-Nitroaniline	ND	610	ug/Kg	1	07/23/20	AW SW8270D
4-Nitrophenol	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Acenaphthene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Acenaphthylene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Acetophenone	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Aniline	ND	380	ug/Kg	1	07/23/20	AW SW8270D
Anthracene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Benz(a)anthracene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Benzidine	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Benzo(a)pyrene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Benzo(b)fluoranthene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Benzo(ghi)perylene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Benzo(k)fluoranthene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Benzoic acid	ND	770	ug/Kg	1	07/23/20	AW SW8270D
Benzyl butyl phthalate	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroethoxy)methane	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroethyl)ether	ND	380	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroisopropyl)ether	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-ethylhexyl)phthalate	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Carbazole	ND	380	ug/Kg	1	07/23/20	AW SW8270D
Chrysene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Dibenz(a,h)anthracene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Dibenzofuran	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Diethyl phthalate	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Dimethylphthalate	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Di-n-butylphthalate	ND	380	ug/Kg	1	07/23/20	AW SW8270D
Di-n-octylphthalate	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Fluoranthene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Fluorene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorobenzene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorobutadiene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorocyclopentadiene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Hexachloroethane	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Indeno(1,2,3-cd)pyrene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Isophorone	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Naphthalene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Nitrobenzene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodimethylamine	ND	380	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodi-n-propylamine	ND	270	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodiphenylamine	ND	380	ug/Kg	1	07/23/20	AW SW8270D
Pentachloronitrobenzene	ND	380	ug/Kg	1	07/23/20	AW SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
Pentachlorophenol	ND	380	ug/Kg	1	07/23/20	AW SW8270D
Phenanthrene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Phenol	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Pyrene	ND	270	ug/Kg	1	07/23/20	AW SW8270D
Pyridine	ND	380	ug/Kg	1	07/23/20	AW SW8270D
<b><u>QA/QC Surrogates</u></b>						
% 2,4,6-Tribromophenol	82		%	1	07/23/20	AW 30 - 130 %
% 2-Fluorobiphenyl	73		%	1	07/23/20	AW 30 - 130 %
% 2-Fluorophenol	61		%	1	07/23/20	AW 30 - 130 %
% Nitrobenzene-d5	64		%	1	07/23/20	AW 30 - 130 %
% Phenol-d5	70		%	1	07/23/20	AW 30 - 130 %
% Terphenyl-d14	82		%	1	07/23/20	AW 30 - 130 %
Field Extraction	Completed				07/21/20	SW5035A

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

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL

BRL=Below Reporting Level L=Biased Low

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

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.

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

August 06, 2020

Reviewed and Released by: Rashmi Makol, Project Manager



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



## Analysis Report

August 06, 2020

FOR: Attn: Jason Fernet  
 SLR International Corporation  
 99 Realty Drive  
 Cheshire, CT 06410

### Sample Information

Matrix: SOIL  
 Location Code: SLR-CHESTER  
 Rush Request: Standard  
 P.O.#:

### Custody Information

Collected by: RH  
 Received by: B  
 Analyzed by: see "By" below

Date

Time

07/21/20 12:00

07/22/20 16:41

## Laboratory Data

SDG ID: GCG38945

Phoenix ID: CG38952

Project ID: 123-131 PEARL STREET DEVELOPMENT

Client ID: MM-2 S-4 (10-12')

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.34	0.34	mg/Kg	1	07/23/20	CPP	SW6010D
Arsenic	1.23	0.67	mg/Kg	1	07/23/20	CPP	SW6010D
Barium	83.7	0.34	mg/Kg	1	07/23/20	TH	SW6010D
Cadmium	1.27	0.34	mg/Kg	1	07/23/20	CPP	SW6010D
Chromium	19.4	0.34	mg/Kg	1	07/23/20	CPP	SW6010D
Mercury	< 0.03	0.03	mg/Kg	1	07/24/20	MGH	SW7471B
Lead	5.95	0.34	mg/Kg	1	07/23/20	CPP	SW6010D
Selenium	< 1.3	1.3	mg/Kg	1	07/23/20	CPP	SW6010D
Percent Solid	94		%		07/22/20	HB	SW846-%Solid
Soil Extraction for PCB	Completed				07/22/20	/E	SW3545A
Mercury Digestion	Completed				07/24/20	VT/VT	SW7471B
Soil Extraction for SVOA	Completed				07/22/20	R/A	SW3546
Total Metals Digest	Completed				07/22/20	S/AG/BF	SW3050B

### Polychlorinated Biphenyls

PCB-1016	ND	0.35	mg/kg	10	07/23/20	SC	SW8082A
PCB-1221	ND	0.35	mg/kg	10	07/23/20	SC	SW8082A
PCB-1232	ND	0.35	mg/kg	10	07/23/20	SC	SW8082A
PCB-1242	ND	0.35	mg/kg	10	07/23/20	SC	SW8082A
PCB-1248	ND	0.35	mg/kg	10	07/23/20	SC	SW8082A
PCB-1254	ND	0.35	mg/kg	10	07/23/20	SC	SW8082A
PCB-1260	ND	0.35	mg/kg	10	07/23/20	SC	SW8082A
PCB-1262	ND	0.35	mg/kg	10	07/23/20	SC	SW8082A
PCB-1268	ND	0.35	mg/kg	10	07/23/20	SC	SW8082A

### QA/QC Surrogates

% DCBP	95	%	10	07/23/20	SC	30 - 150 %
% DCBP (Confirmation)	94	%	10	07/23/20	SC	30 - 150 %
% TCMX	94	%	10	07/23/20	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
% TCMX (Confirmation)	88		%	10	07/23/20	SC 30 - 150 %
<b>Volatiles</b>						
1,1,1,2-Tetrachloroethane	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
1,1,1-Trichloroethane	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
1,1,2,2-Tetrachloroethane	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
1,1,2-Trichloroethane	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloroethane	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloroethene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloropropene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
1,2,3-Trichlorobenzene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
1,2,3-Trichloropropane	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
1,2,4-Trichlorobenzene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
1,2,4-Trimethylbenzene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dibromo-3-chloropropane	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dibromoethane	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichlorobenzene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichloroethane	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichloropropane	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
1,3,5-Trimethylbenzene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
1,3-Dichlorobenzene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
1,3-Dichloropropane	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
1,4-Dichlorobenzene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
2,2-Dichloropropane	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
2-Chlorotoluene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
2-Hexanone	ND	24	ug/Kg	1	07/23/20	JLI SW8260C
2-Isopropyltoluene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
4-Chlorotoluene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
4-Methyl-2-pentanone	ND	24	ug/Kg	1	07/23/20	JLI SW8260C
Acetone	ND	24	ug/Kg	1	07/23/20	JLI SW8260C
Acrylonitrile	ND	9.8	ug/Kg	1	07/23/20	JLI SW8260C
Benzene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
Bromobenzene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
Bromochloromethane	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
Bromodichloromethane	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
Bromoform	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
Bromomethane	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
Carbon Disulfide	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
Carbon tetrachloride	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
Chlorobenzene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
Chloroethane	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
Chloroform	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
Chloromethane	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
cis-1,2-Dichloroethene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
cis-1,3-Dichloropropene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
Dibromochloromethane	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
Dibromomethane	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
Dichlorodifluoromethane	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
Ethylbenzene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
Hexachlorobutadiene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
Isopropylbenzene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
m&p-Xylene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
Methyl Ethyl Ketone	ND	24	ug/Kg	1	07/23/20	JLI SW8260C
Methyl t-butyl ether (MTBE)	ND	9.8	ug/Kg	1	07/23/20	JLI SW8260C
Methylene chloride	ND	9.8	ug/Kg	1	07/23/20	JLI SW8260C
Naphthalene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
n-Butylbenzene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
n-Propylbenzene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
o-Xylene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
p-Isopropyltoluene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
sec-Butylbenzene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
Styrene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
tert-Butylbenzene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
Tetrachloroethene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
Tetrahydrofuran (THF)	ND	9.8	ug/Kg	1	07/23/20	JLI SW8260C
Toluene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
Total Xylenes	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,2-Dichloroethene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,3-Dichloropropene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,4-dichloro-2-butene	ND	9.8	ug/Kg	1	07/23/20	JLI SW8260C
Trichloroethene	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
Trichlorofluoromethane	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
Trichlorotrifluoroethane	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
Vinyl chloride	ND	4.9	ug/Kg	1	07/23/20	JLI SW8260C
<b><u>QA/QC Surrogates</u></b>						
% 1,2-dichlorobenzene-d4	99		%	1	07/23/20	JLI 70 - 130 %
% Bromofluorobenzene	97		%	1	07/23/20	JLI 70 - 130 %
% Dibromofluoromethane	90		%	1	07/23/20	JLI 70 - 130 %
% Toluene-d8	99		%	1	07/23/20	JLI 70 - 130 %

**Semivolatiles**

1,2,4,5-Tetrachlorobenzene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
1,2,4-Trichlorobenzene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
1,2-Dichlorobenzene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
1,2-Diphenylhydrazine	ND	350	ug/Kg	1	07/23/20	AW SW8270D
1,3-Dichlorobenzene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
1,4-Dichlorobenzene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
2,4,5-Trichlorophenol	ND	250	ug/Kg	1	07/23/20	AW SW8270D
2,4,6-Trichlorophenol	ND	250	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dichlorophenol	ND	250	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dimethylphenol	ND	250	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dinitrophenol	ND	350	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dinitrotoluene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
2-Chloronaphthalene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
2-Chlorophenol	ND	250	ug/Kg	1	07/23/20	AW SW8270D
2-Methylnaphthalene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
2-Methylphenol (o-cresol)	ND	250	ug/Kg	1	07/23/20	AW SW8270D
2-Nitroaniline	ND	350	ug/Kg	1	07/23/20	AW SW8270D
2-Nitrophenol	ND	250	ug/Kg	1	07/23/20	AW SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
3&4-Methylphenol (m&p-cresol)	ND	350	ug/Kg	1	07/23/20	AW SW8270D
3,3'-Dichlorobenzidine	ND	250	ug/Kg	1	07/23/20	AW SW8270D
3-Nitroaniline	ND	350	ug/Kg	1	07/23/20	AW SW8270D
4,6-Dinitro-2-methylphenol	ND	350	ug/Kg	1	07/23/20	AW SW8270D
4-Bromophenyl phenyl ether	ND	350	ug/Kg	1	07/23/20	AW SW8270D
4-Chloro-3-methylphenol	ND	250	ug/Kg	1	07/23/20	AW SW8270D
4-Chloroaniline	ND	250	ug/Kg	1	07/23/20	AW SW8270D
4-Chlorophenyl phenyl ether	ND	250	ug/Kg	1	07/23/20	AW SW8270D
4-Nitroaniline	ND	560	ug/Kg	1	07/23/20	AW SW8270D
4-Nitrophenol	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Acenaphthene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Acenaphthylene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Acetophenone	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Aniline	ND	350	ug/Kg	1	07/23/20	AW SW8270D
Anthracene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Benz(a)anthracene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Benzidine	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Benzo(a)pyrene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Benzo(b)fluoranthene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Benzo(ghi)perylene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Benzo(k)fluoranthene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Benzoic acid	ND	710	ug/Kg	1	07/23/20	AW SW8270D
Benzyl butyl phthalate	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroethoxy)methane	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroethyl)ether	ND	350	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroisopropyl)ether	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-ethylhexyl)phthalate	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Carbazole	ND	350	ug/Kg	1	07/23/20	AW SW8270D
Chrysene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Dibenz(a,h)anthracene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Dibenzofuran	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Diethyl phthalate	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Dimethylphthalate	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Di-n-butylphthalate	ND	350	ug/Kg	1	07/23/20	AW SW8270D
Di-n-octylphthalate	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Fluoranthene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Fluorene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorobenzene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorobutadiene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorocyclopentadiene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Hexachloroethane	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Isophorone	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Naphthalene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Nitrobenzene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodimethylamine	ND	350	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodi-n-propylamine	ND	250	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodiphenylamine	ND	350	ug/Kg	1	07/23/20	AW SW8270D
Pentachloronitrobenzene	ND	350	ug/Kg	1	07/23/20	AW SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
Pentachlorophenol	ND	350	ug/Kg	1	07/23/20	AW SW8270D
Phenanthrene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Phenol	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Pyrene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Pyridine	ND	350	ug/Kg	1	07/23/20	AW SW8270D
<b><u>QA/QC Surrogates</u></b>						
% 2,4,6-Tribromophenol	70		%	1	07/23/20	AW 30 - 130 %
% 2-Fluorobiphenyl	71		%	1	07/23/20	AW 30 - 130 %
% 2-Fluorophenol	64		%	1	07/23/20	AW 30 - 130 %
% Nitrobenzene-d5	65		%	1	07/23/20	AW 30 - 130 %
% Phenol-d5	70		%	1	07/23/20	AW 30 - 130 %
% Terphenyl-d14	88		%	1	07/23/20	AW 30 - 130 %
Field Extraction	Completed				07/21/20	SW5035A

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

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL

BRL=Below Reporting Level L=Biased Low

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

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.

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

August 06, 2020

Reviewed and Released by: Rashmi Makol, Project Manager



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



## Analysis Report

August 06, 2020

FOR: Attn: Jason Fernet  
 SLR International Corporation  
 99 Realty Drive  
 Cheshire, CT 06410

### Sample Information

Matrix: SOIL  
 Location Code: SLR-CHESTER  
 Rush Request: 48 Hour  
 P.O.#:

### Custody Information

Collected by: RH  
 Received by: B  
 Analyzed by: see "By" below

Date

Time

SDG ID: GCG38945  
 Phoenix ID: CG38953

Project ID: 123-131 PEARL STREET DEVELOPMENT  
 Client ID: MM-4 S-3 (1-3')

### Laboratory Data

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.36	0.36	mg/Kg	1	07/23/20	CPP	SW6010D
Arsenic	4.92	0.72	mg/Kg	1	07/23/20	CPP	SW6010D
Barium	209	0.36	mg/Kg	1	07/23/20	TH	SW6010D
Cadmium	2.24	0.36	mg/Kg	1	07/23/20	CPP	SW6010D
Chromium	45.3	0.36	mg/Kg	1	07/23/20	CPP	SW6010D
Mercury	0.65	0.03	mg/Kg	1	07/24/20	MGH	SW7471B
Lead	2370	36	mg/Kg	100	07/23/20	TH	SW6010D
Selenium	< 1.4	1.4	mg/Kg	1	07/23/20	CPP	SW6010D
TCLP Lead	0.18	0.10	mg/L	1	08/03/20	CPP	SW846 1311/6010
TCLP Metals Digestion	Completed				08/01/20	VT/VT	SW3010A
Trivalent Chromium	45.3	0.36	mg/kg	1	08/03/20		CALC 6010-7196
Percent Solid	91		%		07/22/20	HB	SW846-%Solid
Chromium, Hex. (SW3060 digestion)	< 0.43	0.43	mg/Kg	1	08/03/20	ARG/BJA	SW7196A
pH at 25C - Soil	7.75	1.00	pH Units	1	07/31/20 21:11	AP	SW846 9045
Redox Potential	219		mV	1	07/31/20	AP	SM2580B-09
Soil Extraction for PCB	Completed				07/22/20	/E	SW3545A
Mercury Digestion	Completed				07/24/20	VT/VT	SW7471B
Soil Extraction for SVOA	Completed				07/22/20	R/A	SW3546
TCLP Extraction for Metals	Completed				07/31/20	VT	SW1311
Total Metals Digest	Completed				07/22/20	S/AG/BF	SW3050B

### Polychlorinated Biphenyls

PCB-1016	ND	0.37	mg/kg	10	07/23/20	SC	SW8082A
PCB-1221	ND	0.37	mg/kg	10	07/23/20	SC	SW8082A
PCB-1232	ND	0.37	mg/kg	10	07/23/20	SC	SW8082A
PCB-1242	ND	0.37	mg/kg	10	07/23/20	SC	SW8082A
PCB-1248	ND	0.37	mg/kg	10	07/23/20	SC	SW8082A
PCB-1254	ND	0.37	mg/kg	10	07/23/20	SC	SW8082A

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
PCB-1260	ND	0.37	mg/kg	10	07/23/20	SC SW8082A
PCB-1262	ND	0.37	mg/kg	10	07/23/20	SC SW8082A
PCB-1268	ND	0.37	mg/kg	10	07/23/20	SC SW8082A
<b><u>QA/QC Surrogates</u></b>						
% DCBP	105		%	10	07/23/20	SC 30 - 150 %
% DCBP (Confirmation)	102		%	10	07/23/20	SC 30 - 150 %
% TCMX	112		%	10	07/23/20	SC 30 - 150 %
% TCMX (Confirmation)	106		%	10	07/23/20	SC 30 - 150 %
<b><u>Volatiles</u></b>						
1,1,1,2-Tetrachloroethane	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
1,1,1-Trichloroethane	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
1,1,2,2-Tetrachloroethane	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
1,1,2-Trichloroethane	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloroethane	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloroethene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloropropene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
1,2,3-Trichlorobenzene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
1,2,3-Trichloropropane	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
1,2,4-Trichlorobenzene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
1,2,4-Trimethylbenzene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dibromo-3-chloropropane	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dibromoethane	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichlorobenzene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichloroethane	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichloropropane	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
1,3,5-Trimethylbenzene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
1,3-Dichlorobenzene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
1,3-Dichloropropane	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
1,4-Dichlorobenzene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
2,2-Dichloropropane	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
2-Chlorotoluene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
2-Hexanone	ND	27	ug/Kg	1	07/23/20	JLI SW8260C
2-Isopropyltoluene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
4-Chlorotoluene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
4-Methyl-2-pentanone	ND	27	ug/Kg	1	07/23/20	JLI SW8260C
Acetone	ND	27	ug/Kg	1	07/23/20	JLI SW8260C
Acrylonitrile	ND	11	ug/Kg	1	07/23/20	JLI SW8260C
Benzene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
Bromobenzene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
Bromochloromethane	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
Bromodichloromethane	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
Bromoform	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
Bromomethane	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
Carbon Disulfide	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
Carbon tetrachloride	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
Chlorobenzene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
Chloroethane	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
Chloroform	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
Chloromethane	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
cis-1,2-Dichloroethene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
cis-1,3-Dichloropropene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
Dibromochloromethane	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
Dibromomethane	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
Dichlorodifluoromethane	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
Ethylbenzene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
Hexachlorobutadiene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
Isopropylbenzene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
m&p-Xylene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
Methyl Ethyl Ketone	ND	27	ug/Kg	1	07/23/20	JLI SW8260C
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	1	07/23/20	JLI SW8260C
Methylene chloride	ND	11	ug/Kg	1	07/23/20	JLI SW8260C
Naphthalene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
n-Butylbenzene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
n-Propylbenzene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
o-Xylene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
p-Isopropyltoluene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
sec-Butylbenzene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
Styrene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
tert-Butylbenzene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
Tetrachloroethene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
Tetrahydrofuran (THF)	ND	11	ug/Kg	1	07/23/20	JLI SW8260C
Toluene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
Total Xylenes	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,2-Dichloroethene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,3-Dichloropropene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	1	07/23/20	JLI SW8260C
Trichloroethene	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
Trichlorofluoromethane	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
Trichlorotrifluoroethane	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
Vinyl chloride	ND	5.5	ug/Kg	1	07/23/20	JLI SW8260C
<b><u>QA/QC Surrogates</u></b>						
% 1,2-dichlorobenzene-d4	100		%	1	07/23/20	JLI 70 - 130 %
% Bromofluorobenzene	84		%	1	07/23/20	JLI 70 - 130 %
% Dibromofluoromethane	91		%	1	07/23/20	JLI 70 - 130 %
% Toluene-d8	96		%	1	07/23/20	JLI 70 - 130 %
<b><u>Semivolatiles</u></b>						
1,2,4,5-Tetrachlorobenzene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
1,2,4-Trichlorobenzene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
1,2-Dichlorobenzene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
1,2-Diphenylhydrazine	ND	360	ug/Kg	1	07/23/20	AW SW8270D
1,3-Dichlorobenzene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
1,4-Dichlorobenzene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
2,4,5-Trichlorophenol	ND	250	ug/Kg	1	07/23/20	AW SW8270D
2,4,6-Trichlorophenol	ND	250	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dichlorophenol	ND	250	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dimethylphenol	ND	250	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dinitrophenol	ND	360	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dinitrotoluene	ND	250	ug/Kg	1	07/23/20	AW SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
2,6-Dinitrotoluene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
2-Chloronaphthalene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
2-Chlorophenol	ND	250	ug/Kg	1	07/23/20	AW SW8270D
2-Methylnaphthalene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
2-Methylphenol (o-cresol)	ND	250	ug/Kg	1	07/23/20	AW SW8270D
2-Nitroaniline	ND	360	ug/Kg	1	07/23/20	AW SW8270D
2-Nitrophenol	ND	250	ug/Kg	1	07/23/20	AW SW8270D
3&4-Methylphenol (m&p-cresol)	ND	360	ug/Kg	1	07/23/20	AW SW8270D
3,3'-Dichlorobenzidine	ND	250	ug/Kg	1	07/23/20	AW SW8270D
3-Nitroaniline	ND	360	ug/Kg	1	07/23/20	AW SW8270D
4,6-Dinitro-2-methylphenol	ND	360	ug/Kg	1	07/23/20	AW SW8270D
4-Bromophenyl phenyl ether	ND	360	ug/Kg	1	07/23/20	AW SW8270D
4-Chloro-3-methylphenol	ND	250	ug/Kg	1	07/23/20	AW SW8270D
4-Chloroaniline	ND	250	ug/Kg	1	07/23/20	AW SW8270D
4-Chlorophenyl phenyl ether	ND	250	ug/Kg	1	07/23/20	AW SW8270D
4-Nitroaniline	ND	580	ug/Kg	1	07/23/20	AW SW8270D
4-Nitrophenol	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Acenaphthene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Acenaphthylene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Acetophenone	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Aniline	ND	360	ug/Kg	1	07/23/20	AW SW8270D
Anthracene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Benz(a)anthracene	1200	250	ug/Kg	1	07/23/20	AW SW8270D
Benzidine	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Benzo(a)pyrene	1200	250	ug/Kg	1	07/23/20	AW SW8270D
Benzo(b)fluoranthene	1100	250	ug/Kg	1	07/23/20	AW SW8270D
Benzo(ghi)perylene	680	250	ug/Kg	1	07/23/20	AW SW8270D
Benzo(k)fluoranthene	980	250	ug/Kg	1	07/23/20	AW SW8270D
Benzoic acid	ND	730	ug/Kg	1	07/23/20	AW SW8270D
Benzyl butyl phthalate	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroethoxy)methane	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroethyl)ether	ND	360	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroisopropyl)ether	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-ethylhexyl)phthalate	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Carbazole	ND	360	ug/Kg	1	07/23/20	AW SW8270D
Chrysene	1200	250	ug/Kg	1	07/23/20	AW SW8270D
Dibenz(a,h)anthracene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Dibenzofuran	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Diethyl phthalate	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Dimethylphthalate	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Di-n-butylphthalate	ND	360	ug/Kg	1	07/23/20	AW SW8270D
Di-n-octylphthalate	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Fluoranthene	2000	250	ug/Kg	1	07/23/20	AW SW8270D
Fluorene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorobenzene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorobutadiene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorocyclopentadiene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Hexachloroethane	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Indeno(1,2,3-cd)pyrene	750	250	ug/Kg	1	07/23/20	AW SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
Isophorone	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Naphthalene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Nitrobenzene	ND	250	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodimethylamine	ND	360	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodi-n-propylamine	ND	250	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodiphenylamine	ND	360	ug/Kg	1	07/23/20	AW SW8270D
Pentachloronitrobenzene	ND	360	ug/Kg	1	07/23/20	AW SW8270D
Pentachlorophenol	ND	360	ug/Kg	1	07/23/20	AW SW8270D
Phenanthrene	580	250	ug/Kg	1	07/23/20	AW SW8270D
Phenol	ND	250	ug/Kg	1	07/23/20	AW SW8270D
Pyrene	1700	250	ug/Kg	1	07/23/20	AW SW8270D
Pyridine	ND	360	ug/Kg	1	07/23/20	AW SW8270D
<b><u>QA/QC Surrogates</u></b>						
% 2,4,6-Tribromophenol	84		%	1	07/23/20	AW 30 - 130 %
% 2-Fluorobiphenyl	73		%	1	07/23/20	AW 30 - 130 %
% 2-Fluorophenol	70		%	1	07/23/20	AW 30 - 130 %
% Nitrobenzene-d5	69		%	1	07/23/20	AW 30 - 130 %
% Phenol-d5	74		%	1	07/23/20	AW 30 - 130 %
% Terphenyl-d14	85		%	1	07/23/20	AW 30 - 130 %
Field Extraction	Completed				07/21/20	SW5035A

1

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

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
BRL=Below Reporting Level L=Biased Low

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

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.

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

#### TCLP Non-Volatile Extraction:

Sample weight was < 100 grams (the minimum requirement of the method to insure homogeneity).

#### Hexavalent Chromium:

This sample is in a reducing state.

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

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

Phyllis Shiller, Laboratory Director

August 06, 2020

Reviewed and Released by: Rashmi Makol, Project Manager



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



## Analysis Report

August 06, 2020

FOR: Attn: Jason Fernet  
 SLR International Corporation  
 99 Realty Drive  
 Cheshire, CT 06410

### Sample Information

Matrix: SOIL  
 Location Code: SLR-CHESTER  
 Rush Request: Standard  
 P.O.#:

### Custody Information

Collected by: RH  
 Received by: B  
 Analyzed by: see "By" below

Date

Time

07/21/20 13:45

07/22/20 16:41

## Laboratory Data

SDG ID: GCG38945

Phoenix ID: CG38954

Project ID: 123-131 PEARL STREET DEVELOPMENT

Client ID: MM-4 S-3 (5-7.5`)

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.40	0.40	mg/Kg	1	07/23/20	CPP	SW6010D
Arsenic	1.59	0.79	mg/Kg	1	07/23/20	CPP	SW6010D
Barium	85.5	0.40	mg/Kg	1	07/23/20	TH	SW6010D
Cadmium	1.22	0.40	mg/Kg	1	07/23/20	CPP	SW6010D
Chromium	19.1	0.40	mg/Kg	1	07/23/20	CPP	SW6010D
Mercury	< 0.03	0.03	mg/Kg	1	07/24/20	MGH	SW7471B
Lead	7.02	0.40	mg/Kg	1	07/23/20	CPP	SW6010D
Selenium	< 1.6	1.6	mg/Kg	1	07/23/20	CPP	SW6010D
Percent Solid	89		%		07/22/20	HB	SW846-%Solid
Soil Extraction for PCB	Completed				07/22/20	/E	SW3545A
Mercury Digestion	Completed				07/24/20	VT/VT	SW7471B
Soil Extraction for SVOA	Completed				07/22/20	R/A	SW3546
Total Metals Digest	Completed				07/22/20	S/AG/BF	SW3050B

### Polychlorinated Biphenyls

PCB-1016	ND	0.36	mg/kg	10	07/23/20	SC	SW8082A
PCB-1221	ND	0.36	mg/kg	10	07/23/20	SC	SW8082A
PCB-1232	ND	0.36	mg/kg	10	07/23/20	SC	SW8082A
PCB-1242	ND	0.36	mg/kg	10	07/23/20	SC	SW8082A
PCB-1248	ND	0.36	mg/kg	10	07/23/20	SC	SW8082A
PCB-1254	ND	0.36	mg/kg	10	07/23/20	SC	SW8082A
PCB-1260	ND	0.36	mg/kg	10	07/23/20	SC	SW8082A
PCB-1262	ND	0.36	mg/kg	10	07/23/20	SC	SW8082A
PCB-1268	ND	0.36	mg/kg	10	07/23/20	SC	SW8082A

### QA/QC Surrogates

% DCBP	99	%	10	07/23/20	SC	30 - 150 %
% DCBP (Confirmation)	99	%	10	07/23/20	SC	30 - 150 %
% TCMX	103	%	10	07/23/20	SC	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
% TCMX (Confirmation)	98		%	10	07/23/20	SC 30 - 150 %
<b>Volatiles</b>						
1,1,1,2-Tetrachloroethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,1,1-Trichloroethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,1,2,2-Tetrachloroethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,1,2-Trichloroethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloroethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloroethene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,1-Dichloropropene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,2,3-Trichlorobenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,2,3-Trichloropropane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,2,4-Trichlorobenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,2,4-Trimethylbenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dibromo-3-chloropropane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dibromoethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichlorobenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichloroethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,2-Dichloropropane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,3,5-Trimethylbenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,3-Dichlorobenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,3-Dichloropropane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
1,4-Dichlorobenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
2,2-Dichloropropane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
2-Chlorotoluene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
2-Hexanone	ND	29	ug/Kg	1	07/23/20	JLI SW8260C
2-Isopropyltoluene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
4-Chlorotoluene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
4-Methyl-2-pentanone	ND	29	ug/Kg	1	07/23/20	JLI SW8260C
Acetone	34	S 29	ug/Kg	1	07/23/20	JLI SW8260C
Acrylonitrile	ND	11	ug/Kg	1	07/23/20	JLI SW8260C
Benzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Bromobenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Bromochloromethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Bromodichloromethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Bromoform	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Bromomethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Carbon Disulfide	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Carbon tetrachloride	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Chlorobenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Chloroethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Chloroform	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Chloromethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
cis-1,2-Dichloroethene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
cis-1,3-Dichloropropene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Dibromochloromethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Dibromomethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Dichlorodifluoromethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Ethylbenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Hexachlorobutadiene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
Isopropylbenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
m&p-Xylene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Methyl Ethyl Ketone	ND	29	ug/Kg	1	07/23/20	JLI SW8260C
Methyl t-butyl ether (MTBE)	ND	11	ug/Kg	1	07/23/20	JLI SW8260C
Methylene chloride	ND	11	ug/Kg	1	07/23/20	JLI SW8260C
Naphthalene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
n-Butylbenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
n-Propylbenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
o-Xylene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
p-Isopropyltoluene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
sec-Butylbenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Styrene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
tert-Butylbenzene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Tetrachloroethene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Tetrahydrofuran (THF)	ND	11	ug/Kg	1	07/23/20	JLI SW8260C
Toluene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Total Xylenes	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,2-Dichloroethene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,3-Dichloropropene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,4-dichloro-2-butene	ND	11	ug/Kg	1	07/23/20	JLI SW8260C
Trichloroethene	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Trichlorofluoromethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Trichlorotrifluoroethane	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
Vinyl chloride	ND	5.7	ug/Kg	1	07/23/20	JLI SW8260C
<b><u>QA/QC Surrogates</u></b>						
% 1,2-dichlorobenzene-d4	97		%	1	07/23/20	JLI 70 - 130 %
% Bromofluorobenzene	99		%	1	07/23/20	JLI 70 - 130 %
% Dibromofluoromethane	96		%	1	07/23/20	JLI 70 - 130 %
% Toluene-d8	104		%	1	07/23/20	JLI 70 - 130 %

**Semivolatiles**

1,2,4,5-Tetrachlorobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
1,2,4-Trichlorobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
1,2-Dichlorobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
1,2-Diphenylhydrazine	ND	370	ug/Kg	1	07/23/20	AW SW8270D
1,3-Dichlorobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
1,4-Dichlorobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2,4,5-Trichlorophenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2,4,6-Trichlorophenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dichlorophenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dimethylphenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dinitrophenol	ND	370	ug/Kg	1	07/23/20	AW SW8270D
2,4-Dinitrotoluene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2-Chloronaphthalene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2-Chlorophenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2-Methylnaphthalene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2-Methylphenol (o-cresol)	ND	260	ug/Kg	1	07/23/20	AW SW8270D
2-Nitroaniline	ND	370	ug/Kg	1	07/23/20	AW SW8270D
2-Nitrophenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
3&4-Methylphenol (m&p-cresol)	ND	370	ug/Kg	1	07/23/20	AW SW8270D
3,3'-Dichlorobenzidine	ND	260	ug/Kg	1	07/23/20	AW SW8270D
3-Nitroaniline	ND	370	ug/Kg	1	07/23/20	AW SW8270D
4,6-Dinitro-2-methylphenol	ND	370	ug/Kg	1	07/23/20	AW SW8270D
4-Bromophenyl phenyl ether	ND	370	ug/Kg	1	07/23/20	AW SW8270D
4-Chloro-3-methylphenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
4-Chloroaniline	ND	260	ug/Kg	1	07/23/20	AW SW8270D
4-Chlorophenyl phenyl ether	ND	260	ug/Kg	1	07/23/20	AW SW8270D
4-Nitroaniline	ND	590	ug/Kg	1	07/23/20	AW SW8270D
4-Nitrophenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Acenaphthene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Acenaphthylene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Acetophenone	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Aniline	ND	370	ug/Kg	1	07/23/20	AW SW8270D
Anthracene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Benz(a)anthracene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Benzidine	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Benzo(a)pyrene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Benzo(b)fluoranthene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Benzo(ghi)perylene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Benzo(k)fluoranthene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Benzoic acid	ND	740	ug/Kg	1	07/23/20	AW SW8270D
Benzyl butyl phthalate	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroethoxy)methane	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroethyl)ether	ND	370	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-chloroisopropyl)ether	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Carbazole	ND	370	ug/Kg	1	07/23/20	AW SW8270D
Chrysene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Dibenz(a,h)anthracene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Dibenzofuran	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Diethyl phthalate	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Dimethylphthalate	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Di-n-butylphthalate	ND	370	ug/Kg	1	07/23/20	AW SW8270D
Di-n-octylphthalate	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Fluoranthene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Fluorene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorobutadiene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Hexachlorocyclopentadiene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Hexachloroethane	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Isophorone	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Naphthalene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Nitrobenzene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodimethylamine	ND	370	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodi-n-propylamine	ND	260	ug/Kg	1	07/23/20	AW SW8270D
N-Nitrosodiphenylamine	ND	370	ug/Kg	1	07/23/20	AW SW8270D
Pentachloronitrobenzene	ND	370	ug/Kg	1	07/23/20	AW SW8270D

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
Pentachlorophenol	ND	370	ug/Kg	1	07/23/20	AW SW8270D
Phenanthrene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Phenol	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Pyrene	ND	260	ug/Kg	1	07/23/20	AW SW8270D
Pyridine	ND	370	ug/Kg	1	07/23/20	AW SW8270D
<b><u>QA/QC Surrogates</u></b>						
% 2,4,6-Tribromophenol	79		%	1	07/23/20	AW 30 - 130 %
% 2-Fluorobiphenyl	58		%	1	07/23/20	AW 30 - 130 %
% 2-Fluorophenol	45		%	1	07/23/20	AW 30 - 130 %
% Nitrobenzene-d5	43		%	1	07/23/20	AW 30 - 130 %
% Phenol-d5	52		%	1	07/23/20	AW 30 - 130 %
% Terphenyl-d14	81		%	1	07/23/20	AW 30 - 130 %
Field Extraction	Completed				07/21/20	SW5035A

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

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL

BRL=Below Reporting Level L=Biased Low

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

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.

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

S - Laboratory solvent, contamination is possible.

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

Phyllis Shiller, Laboratory Director

August 06, 2020

Reviewed and Released by: Rashmi Makol, Project Manager



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



## Analysis Report

August 06, 2020

FOR: Attn: Jason Fernet  
SLR International Corporatio  
99 Realty Drive  
Cheshire, CT 06410

### Sample Information

Matrix: SOIL  
Location Code: SLR-CHESTER  
Rush Request: Standard  
P.O.#:

### Custody Information

Collected by: RH  
Received by: B  
Analyzed by: see "By" below

Date

07/21/20  
07/22/20  
16:41

Time

Project ID: 123-131 PEARL STREET DEVEOLPMENT  
Client ID: TRIP BLANK LL

## Laboratory Data

SDG ID: GCG38945

Phoenix ID: CG38955

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

### Volatiles

1,1,1,2-Tetrachloroethane	ND	5.0	ug/Kg	1	07/23/20	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.0	ug/Kg	1	07/23/20	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.0	ug/Kg	1	07/23/20	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.0	ug/Kg	1	07/23/20	JLI	SW8260C
1,1-Dichloroethane	ND	5.0	ug/Kg	1	07/23/20	JLI	SW8260C
1,1-Dichloroethene	ND	5.0	ug/Kg	1	07/23/20	JLI	SW8260C
1,1-Dichloropropene	ND	5.0	ug/Kg	1	07/23/20	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.0	ug/Kg	1	07/23/20	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.0	ug/Kg	1	07/23/20	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.0	ug/Kg	1	07/23/20	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.0	ug/Kg	1	07/23/20	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.0	ug/Kg	1	07/23/20	JLI	SW8260C
1,2-Dibromoethane	ND	5.0	ug/Kg	1	07/23/20	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.0	ug/Kg	1	07/23/20	JLI	SW8260C
1,2-Dichloroethane	ND	5.0	ug/Kg	1	07/23/20	JLI	SW8260C
1,2-Dichloropropane	ND	5.0	ug/Kg	1	07/23/20	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.0	ug/Kg	1	07/23/20	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.0	ug/Kg	1	07/23/20	JLI	SW8260C
1,3-Dichloropropane	ND	5.0	ug/Kg	1	07/23/20	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.0	ug/Kg	1	07/23/20	JLI	SW8260C
2,2-Dichloropropane	ND	5.0	ug/Kg	1	07/23/20	JLI	SW8260C
2-Chlorotoluene	ND	5.0	ug/Kg	1	07/23/20	JLI	SW8260C
2-Hexanone	ND	25	ug/Kg	1	07/23/20	JLI	SW8260C
2-Isopropyltoluene	ND	5.0	ug/Kg	1	07/23/20	JLI	SW8260C
4-Chlorotoluene	ND	5.0	ug/Kg	1	07/23/20	JLI	SW8260C
4-Methyl-2-pentanone	ND	25	ug/Kg	1	07/23/20	JLI	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
Acetone	ND	25	ug/Kg	1	07/23/20	JLI SW8260C
Acrylonitrile	ND	10	ug/Kg	1	07/23/20	JLI SW8260C
Benzene	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
Bromobenzene	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
Bromoform	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
Bromomethane	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
Carbon Disulfide	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
Carbon tetrachloride	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
Chlorobenzene	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
Chloroethane	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
Chloroform	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
Chloromethane	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
Dibromochloromethane	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
Dibromomethane	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
Dichlorodifluoromethane	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
Ethylbenzene	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
Hexachlorobutadiene	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
Isopropylbenzene	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
m&p-Xylene	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
Methyl Ethyl Ketone	ND	25	ug/Kg	1	07/23/20	JLI SW8260C
Methyl t-butyl ether (MTBE)	ND	10	ug/Kg	1	07/23/20	JLI SW8260C
Methylene chloride	ND	10	ug/Kg	1	07/23/20	JLI SW8260C
Naphthalene	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
n-Butylbenzene	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
n-Propylbenzene	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
o-Xylene	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
p-Isopropyltoluene	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
sec-Butylbenzene	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
Styrene	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
tert-Butylbenzene	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
Tetrachloroethene	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
Tetrahydrofuran (THF)	ND	10	ug/Kg	1	07/23/20	JLI SW8260C
Toluene	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
Total Xylenes	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
trans-1,4-dichloro-2-butene	ND	10	ug/Kg	1	07/23/20	JLI SW8260C
Trichloroethene	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
Trichlorofluoromethane	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
Trichlorotrifluoroethane	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
Vinyl chloride	ND	5.0	ug/Kg	1	07/23/20	JLI SW8260C
<b><u>QA/QC Surrogates</u></b>						
% 1,2-dichlorobenzene-d4	98		%	1	07/23/20	JLI 70 - 130 %
% Bromofluorobenzene	98		%	1	07/23/20	JLI 70 - 130 %
% Dibromofluoromethane	90		%	1	07/23/20	JLI 70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	
% Toluene-d8	99		%	1	07/23/20	JLI	70 - 130 %
Field Extraction	Completed				07/21/20	SW5035A	1

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

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
BRL=Below Reporting Level L=Biased Low

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

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

August 06, 2020

Reviewed and Released by: Rashmi Makol, Project Manager



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



## Analysis Report

August 06, 2020

FOR: Attn: Jason Fernet  
SLR International Corporatio  
99 Realty Drive  
Cheshire, CT 06410

### Sample Information

Matrix: SOIL  
Location Code: SLR-CHESTER  
Rush Request: Standard  
P.O.#:

### Custody Information

Collected by: RH  
Received by: B  
Analyzed by: see "By" below

Date

Time

07/21/20

16:41

Project ID: 123-131 PEARL STREET DEVEOLPMENT

Client ID: TRIP BLANK HL

### Laboratory Data

SDG ID: GCG38945

Phoenix ID: CG38956

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

### Volatiles

1,1,1,2-Tetrachloroethane	ND	250	ug/Kg	50	07/23/20	JLI	SW8260C
1,1,1-Trichloroethane	ND	250	ug/Kg	50	07/23/20	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	250	ug/Kg	50	07/23/20	JLI	SW8260C
1,1,2-Trichloroethane	ND	250	ug/Kg	50	07/23/20	JLI	SW8260C
1,1-Dichloroethane	ND	250	ug/Kg	50	07/23/20	JLI	SW8260C
1,1-Dichloroethene	ND	250	ug/Kg	50	07/23/20	JLI	SW8260C
1,1-Dichloropropene	ND	250	ug/Kg	50	07/23/20	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	250	ug/Kg	50	07/23/20	JLI	SW8260C
1,2,3-Trichloropropane	ND	250	ug/Kg	50	07/23/20	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	250	ug/Kg	50	07/23/20	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	250	ug/Kg	50	07/23/20	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	250	ug/Kg	50	07/23/20	JLI	SW8260C
1,2-Dibromoethane	ND	250	ug/Kg	50	07/23/20	JLI	SW8260C
1,2-Dichlorobenzene	ND	250	ug/Kg	50	07/23/20	JLI	SW8260C
1,2-Dichloroethane	ND	250	ug/Kg	50	07/23/20	JLI	SW8260C
1,2-Dichloropropane	ND	250	ug/Kg	50	07/23/20	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	250	ug/Kg	50	07/23/20	JLI	SW8260C
1,3-Dichlorobenzene	ND	250	ug/Kg	50	07/23/20	JLI	SW8260C
1,3-Dichloropropane	ND	250	ug/Kg	50	07/23/20	JLI	SW8260C
1,4-Dichlorobenzene	ND	250	ug/Kg	50	07/23/20	JLI	SW8260C
2,2-Dichloropropane	ND	250	ug/Kg	50	07/23/20	JLI	SW8260C
2-Chlorotoluene	ND	250	ug/Kg	50	07/23/20	JLI	SW8260C
2-Hexanone	ND	1300	ug/Kg	50	07/23/20	JLI	SW8260C
2-Isopropyltoluene	ND	250	ug/Kg	50	07/23/20	JLI	SW8260C
4-Chlorotoluene	ND	250	ug/Kg	50	07/23/20	JLI	SW8260C
4-Methyl-2-pentanone	ND	1300	ug/Kg	50	07/23/20	JLI	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By
Acetone	ND	5000	ug/Kg	50	07/23/20	JLI SW8260C
Acrylonitrile	ND	500	ug/Kg	50	07/23/20	JLI SW8260C
Benzene	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Bromobenzene	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Bromochloromethane	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Bromodichloromethane	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Bromoform	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Bromomethane	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Carbon Disulfide	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Carbon tetrachloride	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Chlorobenzene	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Chloroethane	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Chloroform	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Chloromethane	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
cis-1,2-Dichloroethene	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
cis-1,3-Dichloropropene	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Dibromochloromethane	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Dibromomethane	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Dichlorodifluoromethane	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Ethylbenzene	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Hexachlorobutadiene	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Isopropylbenzene	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
m&p-Xylene	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Methyl Ethyl Ketone	ND	3000	ug/Kg	50	07/23/20	JLI SW8260C
Methyl t-butyl ether (MTBE)	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Methylene chloride	ND	500	ug/Kg	50	07/23/20	JLI SW8260C
Naphthalene	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
n-Butylbenzene	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
n-Propylbenzene	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
o-Xylene	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
p-Isopropyltoluene	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
sec-Butylbenzene	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Styrene	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
tert-Butylbenzene	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Tetrachloroethene	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Tetrahydrofuran (THF)	ND	500	ug/Kg	50	07/23/20	JLI SW8260C
Toluene	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Total Xylenes	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
trans-1,2-Dichloroethene	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
trans-1,3-Dichloropropene	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
trans-1,4-dichloro-2-butene	ND	500	ug/Kg	50	07/23/20	JLI SW8260C
Trichloroethene	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Trichlorofluoromethane	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Trichlorotrifluoroethane	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
Vinyl chloride	ND	250	ug/Kg	50	07/23/20	JLI SW8260C
<b><u>QA/QC Surrogates</u></b>						
% 1,2-dichlorobenzene-d4 (50x)	99		%	50	07/23/20	JLI 70 - 130 %
% Bromofluorobenzene (50x)	97		%	50	07/23/20	JLI 70 - 130 %
% Dibromofluoromethane (50x)	88		%	50	07/23/20	JLI 70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	
% Toluene-d8 (50x)	99		%	50	07/23/20	JLI	70 - 130 %
Field Extraction	Completed				07/21/20	SW5035A	1

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

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
BRL=Below Reporting Level L=Biased Low

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

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

August 06, 2020

Reviewed and Released by: Rashmi Makol, Project Manager



## Environmental Laboratories, Inc.

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

# QA/QC Report

August 06, 2020

## QA/QC Data

SDG I.D.: GCG38945

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 539795 (mg/kg), QC Sample No: CG44973 40X (CG38950, CG38953)

### Chromium, Hexavalent - Soil

Chromium, Hexavalent	BRL	0.40	<0.44	<0.43	NC	103						85 - 115	30
Chromium, Hexavalent (Ins)						91.8			99.8			85 - 115	30
Chromium, Hexavalent (Sol)						91.6			67.9			85 - 115	30 m

Comment:

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

QA/QC Batch 538483 (mg/kg), QC Sample No: CG37740 2X (CG38945, CG38946, CG38947, CG38948)

Mercury - Soil	BRL	0.03	1.70	6.65	119	115	112	2.6	NC	NC	NC	70 - 130	30 r
----------------	-----	------	------	------	-----	-----	-----	-----	----	----	----	----------	------

Comment:

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

QA/QC Batch 538679 (mg/kg), QC Sample No: CG38950 2X (CG38949, CG38950, CG38951)

Mercury - Soil	BRL	0.03	<0.03	<0.03	NC	108	111	2.7	84.3	82.0	2.8	70 - 130	30
----------------	-----	------	-------	-------	----	-----	-----	-----	------	------	-----	----------	----

Comment:

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

QA/QC Batch 538678 (mg/kg), QC Sample No: CG40007 (CG38952, CG38953, CG38954)

Mercury - Soil	BRL	0.02	<0.03	<0.03	NC	102	96.3	5.7	91.7	113	20.8	70 - 130	30
----------------	-----	------	-------	-------	----	-----	------	-----	------	-----	------	----------	----

Comment:

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

QA/QC Batch 538426 (mg/kg), QC Sample No: CG38945 (CG38945, CG38946, CG38947, CG38948, CG38949, CG38950, CG38951, CG38952, CG38953, CG38954)

### ICP Metals - Soil

Arsenic	BRL	0.67	23.9	14.8	47.0	95.0	103	8.1	93.0			75 - 125	35 r
Barium	BRL	0.33	300	332	10.1	96.5	108	11.2	114			75 - 125	35
Cadmium	BRL	0.33	2.21	2.13	3.70	103	98.8	4.2	102			75 - 125	35
Chromium	BRL	0.33	36.7	35.9	2.20	95.6	103	7.5	102			75 - 125	35
Lead	BRL	0.33	743	692	7.10	94.6	102	7.5	121			75 - 125	35
Selenium	BRL	1.3	<1.5	<1.5	NC	93.6	98.9	5.5	95.3			75 - 125	35
Silver	BRL	0.33	<0.37	<0.36	NC	85.7	93.8	9.0	96.1			75 - 125	35

Comment:

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

QA/QC Batch 539741 (mg/L), QC Sample No: CG44462 (CG38945, CG38953)

### ICP Metals - TCLP Extraction

Lead	BRL	0.010	0.347	0.344	0.90	83.6	79.0	5.7	63.7			80 - 120	20 l,m
------	-----	-------	-------	-------	------	------	------	-----	------	--	--	----------	--------

Comment:

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

I = 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.



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



## QA/QC Report

August 06, 2020

### QA/QC Data

SDG I.D.: GCG38945

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 539722 (PH), QC Sample No: CG38950 (CG38950, CG38953)													
pH at 25C - Soil			6.72	6.82	1.50	100					85 - 115		20



## Environmental Laboratories, Inc.

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

# QA/QC Report

August 06, 2020

## QA/QC Data

SDG I.D.: GCG38945

Parameter	Blank	Blk	RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 538416 (ug/Kg), QC Sample No: CG39017 2X (CG38945, CG38946, CG38947, CG38948, CG38949, CG38950, CG38951, CG38952, CG38953, CG38954)											
<b>Polychlorinated Biphenyls - Soil</b>											
PCB-1016	ND	33		69	85	20.8	57	57	0.0	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		72	89	21.1	59	56	5.2	40 - 140	30
PCB-1262	ND	33								40 - 140	30
PCB-1268	ND	33								40 - 140	30
% DCBP (Surrogate Rec)	74	%		79	98	21.5	62	60	3.3	30 - 150	30
% DCBP (Surrogate Rec) (Confirm)	77	%		77	98	24.0	59	57	3.4	30 - 150	30
% TCMX (Surrogate Rec)	66	%		67	87	26.0	56	57	1.8	30 - 150	30
% TCMX (Surrogate Rec) (Confirm)	66	%		67	87	26.0	56	56	0.0	30 - 150	30
QA/QC Batch 538422 (ug/kg), QC Sample No: CG38952 (CG38945, CG38946, CG38947, CG38948, CG38949, CG38950, CG38951, CG38952, CG38953, CG38954)											
<b>Semivolatiles - Soil</b>											
1,2,4,5-Tetrachlorobenzene	ND	230		73	74	1.4	70	62	12.1	40 - 140	30
1,2,4-Trichlorobenzene	ND	230		71	69	2.9	67	60	11.0	40 - 140	30
1,2-Dichlorobenzene	ND	180		64	60	6.5	58	53	9.0	40 - 140	30
1,2-Diphenylhydrazine	ND	230		79	82	3.7	74	67	9.9	40 - 140	30
1,3-Dichlorobenzene	ND	230		62	58	6.7	57	52	9.2	40 - 140	30
1,4-Dichlorobenzene	ND	230		63	60	4.9	57	52	9.2	40 - 140	30
2,4,5-Trichlorophenol	ND	230		91	95	4.3	83	77	7.5	40 - 140	30
2,4,6-Trichlorophenol	ND	130		89	93	4.4	79	72	9.3	30 - 130	30
2,4-Dichlorophenol	ND	130		85	88	3.5	78	70	10.8	30 - 130	30
2,4-Dimethylphenol	ND	230		86	88	2.3	47	44	6.6	30 - 130	30
2,4-Dinitrophenol	ND	230		22	34	42.9	70	56	22.2	30 - 130	30
2,4-Dinitrotoluene	ND	130		96	99	3.1	89	81	9.4	30 - 130	30
2,6-Dinitrotoluene	ND	130		91	95	4.3	85	77	9.9	40 - 140	30
2-Chloronaphthalene	ND	230		79	81	2.5	73	67	8.6	40 - 140	30
2-Chlorophenol	ND	230		81	79	2.5	73	66	10.1	30 - 130	30
2-Methylnaphthalene	ND	230		73	74	1.4	71	63	11.9	40 - 140	30
2-Methylphenol (o-cresol)	ND	230		90	90	0.0	72	67	7.2	40 - 140	30
2-Nitroaniline	ND	330		170	174	2.3	142	132	7.3	40 - 140	30
2-Nitrophenol	ND	230		80	80	0.0	75	66	12.8	40 - 140	30
3&4-Methylphenol (m&p-cresol)	ND	230		89	90	1.1	70	65	7.4	30 - 130	30
3,3'-Dichlorobenzidine	ND	130		92	97	5.3	58	52	10.9	40 - 140	30
3-Nitroaniline	ND	330		107	110	2.8	90	82	9.3	40 - 140	30
4,6-Dinitro-2-methylphenol	ND	230		43	53	20.8	83	69	18.4	30 - 130	30
4-Bromophenyl phenyl ether	ND	230		85	91	6.8	81	74	9.0	40 - 140	30

QA/QC Data

SDG I.D.: GCG38945

Parameter	Blank	Blk RL	LCS	LCSD	LCS	MS	MSD	MS	%	%
			%	%	RPD	%	%	RPD	Rec	RPD
4-Chloro-3-methylphenol	ND	230	91	95	4.3	82	75	8.9	30 - 130	30
4-Chloroaniline	ND	230	79	81	2.5	72	66	8.7	40 - 140	30
4-Chlorophenyl phenyl ether	ND	230	82	85	3.6	77	71	8.1	40 - 140	30
4-Nitroaniline	ND	230	88	93	5.5	83	75	10.1	40 - 140	30
4-Nitrophenol	ND	230	84	88	4.7	79	74	6.5	30 - 130	30
Acenaphthene	ND	230	79	82	3.7	73	68	7.1	30 - 130	30
Acenaphthylene	ND	130	77	79	2.6	70	65	7.4	40 - 140	30
Acetophenone	ND	230	71	69	2.9	64	58	9.8	40 - 140	30
Aniline	ND	330	71	68	4.3	52	47	10.1	40 - 140	30
Anthracene	ND	230	81	84	3.6	77	70	9.5	40 - 140	30
Benz(a)anthracene	ND	230	87	91	4.5	82	75	8.9	40 - 140	30
Benzidine	ND	330	71	71	0.0	<10	<10	NC	40 - 140	30
Benzo(a)pyrene	ND	130	90	95	5.4	85	77	9.9	40 - 140	30
Benzo(b)fluoranthene	ND	160	107	112	4.6	98	90	8.5	40 - 140	30
Benzo(ghi)perylene	ND	230	88	92	4.4	85	76	11.2	40 - 140	30
Benzo(k)fluoranthene	ND	230	66	70	5.9	65	58	11.4	40 - 140	30
Benzoic Acid	ND	670	18	26	36.4	47	34	32.1	30 - 130	30
Benzyl butyl phthalate	ND	230	92	98	6.3	88	79	10.8	40 - 140	30
Bis(2-chloroethoxy)methane	ND	230	73	74	1.4	70	63	10.5	40 - 140	30
Bis(2-chloroethyl)ether	ND	130	62	59	5.0	57	52	9.2	40 - 140	30
Bis(2-chloroisopropyl)ether	ND	230	53	52	1.9	50	45	10.5	40 - 140	30
Bis(2-ethylhexyl)phthalate	ND	230	92	99	7.3	90	81	10.5	40 - 140	30
Carbazole	ND	230	85	89	4.6	80	74	7.8	40 - 140	30
Chrysene	ND	230	87	91	4.5	82	74	10.3	40 - 140	30
Dibenz(a,h)anthracene	ND	130	89	95	6.5	85	78	8.6	40 - 140	30
Dibenzofuran	ND	230	80	84	4.9	75	69	8.3	40 - 140	30
Diethyl phthalate	ND	230	86	92	6.7	82	74	10.3	40 - 140	30
Dimethylphthalate	ND	230	85	89	4.6	80	73	9.2	40 - 140	30
Di-n-butylphthalate	ND	670	89	94	5.5	86	78	9.8	40 - 140	30
Di-n-octylphthalate	ND	230	94	101	7.2	92	83	10.3	40 - 140	30
Fluoranthene	ND	230	83	87	4.7	79	72	9.3	40 - 140	30
Fluorene	ND	230	80	84	4.9	75	69	8.3	40 - 140	30
Hexachlorobenzene	ND	130	83	88	5.8	81	72	11.8	40 - 140	30
Hexachlorobutadiene	ND	230	69	69	0.0	67	60	11.0	40 - 140	30
Hexachlorocyclopentadiene	ND	230	64	64	0.0	59	54	8.8	40 - 140	30
Hexachloroethane	ND	130	62	61	1.6	58	53	9.0	40 - 140	30
Indeno(1,2,3-cd)pyrene	ND	230	87	92	5.6	83	75	10.1	40 - 140	30
Isophorone	ND	130	68	69	1.5	63	58	8.3	40 - 140	30
Naphthalene	ND	230	67	67	0.0	64	58	9.8	40 - 140	30
Nitrobenzene	ND	130	74	73	1.4	68	63	7.6	40 - 140	30
N-Nitrosodimethylamine	ND	230	45	44	2.2	41	37	10.3	40 - 140	30
N-Nitrosodi-n-propylamine	ND	130	76	77	1.3	69	62	10.7	40 - 140	30
N-Nitrosodiphenylamine	ND	130	87	90	3.4	75	69	8.3	40 - 140	30
Pentachloronitrobenzene	ND	230	84	90	6.9	82	76	7.6	40 - 140	30
Pentachlorophenol	ND	230	61	62	1.6	44	39	12.0	30 - 130	30
Phenanthrene	ND	130	82	87	5.9	77	71	8.1	40 - 140	30
Phenol	ND	230	79	79	0.0	70	65	7.4	30 - 130	30
Pyrene	ND	230	86	89	3.4	80	73	9.2	30 - 130	30
Pyridine	ND	230	43	42	2.4	40	37	7.8	40 - 140	30
% 2,4,6-Tribromophenol	87	%	84	90	6.9	70	65	7.4	30 - 130	30
% 2-Fluorobiphenyl	72	%	72	75	4.1	67	61	9.4	30 - 130	30
% 2-Fluorophenol	62	%	68	68	0.0	61	54	12.2	30 - 130	30
% Nitrobenzene-d5	61	%	69	68	1.5	64	57	11.6	30 - 130	30

QA/QC Data

SDG I.D.: GCG38945

Parameter	Blank	Blk RL	LCS				MSD		MS		% Rec Limits	% RPD Limits
			%	LCSD %	LCS RPD	%	MSD %	RPD				
% Phenol-d5	68	%		75	75	0.0	66	61	7.9	30 - 130	30	
% Terphenyl-d14	94	%		89	93	4.4	84	76	10.0	30 - 130	30	
Comment:												
Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)												
QA/QC Batch 538546 (ug/kg), QC Sample No: CG38785 (CG38945, CG38946, CG38947, CG38948, CG38949, CG38950, CG38951, CG38952, CG38955)												
<b>Volatiles - Soil (Low Level)</b>												
1,1,1,2-Tetrachloroethane	ND	5.0		104	104	0.0	84	101	18.4	70 - 130	30	
1,1,1-Trichloroethane	ND	5.0		94	90	4.3	80	95	17.1	70 - 130	30	
1,1,2,2-Tetrachloroethane	ND	3.0		111	108	2.7	80	106	28.0	70 - 130	30	
1,1,2-Trichloroethane	ND	5.0		102	101	1.0	82	101	20.8	70 - 130	30	
1,1-Dichloroethane	ND	5.0		93	90	3.3	80	95	17.1	70 - 130	30	
1,1-Dichloroethene	ND	5.0		99	91	8.4	87	100	13.9	70 - 130	30	
1,1-Dichloropropene	ND	5.0		100	94	6.2	88	101	13.8	70 - 130	30	
1,2,3-Trichlorobenzene	ND	5.0		101	97	4.0	56	71	23.6	70 - 130	30	m
1,2,3-Trichloropropane	ND	5.0		104	102	1.9	80	111	32.5	70 - 130	30	r
1,2,4-Trichlorobenzene	ND	5.0		97	92	5.3	57	75	27.3	70 - 130	30	m
1,2,4-Trimethylbenzene	ND	1.0		100	96	4.1	76	95	22.2	70 - 130	30	
1,2-Dibromo-3-chloropropane	ND	5.0		107	107	0.0	73	102	33.1	70 - 130	30	r
1,2-Dibromoethane	ND	5.0		104	104	0.0	81	102	23.0	70 - 130	30	
1,2-Dichlorobenzene	ND	5.0		99	97	2.0	71	92	25.8	70 - 130	30	
1,2-Dichloroethane	ND	5.0		100	99	1.0	83	100	18.6	70 - 130	30	
1,2-Dichloropropane	ND	5.0		101	99	2.0	87	102	15.9	70 - 130	30	
1,3,5-Trimethylbenzene	ND	1.0		102	98	4.0	80	102	24.2	70 - 130	30	
1,3-Dichlorobenzene	ND	5.0		100	97	3.0	74	96	25.9	70 - 130	30	
1,3-Dichloropropane	ND	5.0		102	102	0.0	83	102	20.5	70 - 130	30	
1,4-Dichlorobenzene	ND	5.0		97	94	3.1	72	94	26.5	70 - 130	30	
2,2-Dichloropropane	ND	5.0		96	92	4.3	77	89	14.5	70 - 130	30	
2-Chlorotoluene	ND	5.0		101	96	5.1	79	102	25.4	70 - 130	30	
2-Hexanone	ND	25		117	114	2.6	89	108	19.3	70 - 130	30	
2-Isopropyltoluene	ND	5.0		106	104	1.9	82	105	24.6	70 - 130	30	
4-Chlorotoluene	ND	5.0		100	96	4.1	78	100	24.7	70 - 130	30	
4-Methyl-2-pentanone	ND	25		109	106	2.8	85	103	19.1	70 - 130	30	
Acetone	ND	10		139	132	5.2	111	146	27.2	70 - 130	30	I,m
Acrylonitrile	ND	5.0		102	95	7.1	77	98	24.0	70 - 130	30	
Benzene	ND	1.0		103	100	3.0	89	104	15.5	70 - 130	30	
Bromobenzene	ND	5.0		102	99	3.0	79	102	25.4	70 - 130	30	
Bromochloromethane	ND	5.0		97	95	2.1	79	97	20.5	70 - 130	30	
Bromodichloromethane	ND	5.0		101	100	1.0	84	99	16.4	70 - 130	30	
Bromoform	ND	5.0		99	101	2.0	70	91	26.1	70 - 130	30	
Bromomethane	ND	5.0		97	92	5.3	83	98	16.6	70 - 130	30	
Carbon Disulfide	ND	5.0		94	90	4.3	79	92	15.2	70 - 130	30	
Carbon tetrachloride	ND	5.0		94	91	3.2	79	95	18.4	70 - 130	30	
Chlorobenzene	ND	5.0		102	100	2.0	84	101	18.4	70 - 130	30	
Chloroethane	ND	5.0		97	89	8.6	80	106	28.0	70 - 130	30	
Chloroform	ND	5.0		95	93	2.1	81	98	19.0	70 - 130	30	
Chloromethane	ND	5.0		99	98	1.0	82	99	18.8	70 - 130	30	
cis-1,2-Dichloroethene	ND	5.0		90	80	11.8	76	83	8.8	70 - 130	30	
cis-1,3-Dichloropropene	ND	5.0		100	99	1.0	80	95	17.1	70 - 130	30	
Dibromochloromethane	ND	3.0		105	105	0.0	81	101	22.0	70 - 130	30	
Dibromomethane	ND	5.0		101	99	2.0	82	100	19.8	70 - 130	30	

QA/QC Data

SDG I.D.: GCG38945

Parameter	Blank	Blk RL	LCS				MSD		MS		% Rec	% RPD
			%	LCSD %	LCS RPD	%	MSD %	MS RPD	RPD	Limits	Limits	
Dichlorodifluoromethane	ND	5.0		100	95	5.1	80	94	16.1	70 - 130	30	
Ethylbenzene	ND	1.0		103	100	3.0	86	103	18.0	70 - 130	30	
Hexachlorobutadiene	ND	5.0		104	100	3.9	61	78	24.5	70 - 130	30	m
Isopropylbenzene	ND	1.0		103	99	4.0	85	109	24.7	70 - 130	30	
m&p-Xylene	ND	2.0		102	100	2.0	85	99	15.2	70 - 130	30	
Methyl ethyl ketone	ND	5.0		117	116	0.9	94	119	23.5	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	1.0		94	92	2.2	78	94	18.6	70 - 130	30	
Methylene chloride	ND	5.0		86	84	2.4	74	89	18.4	70 - 130	30	
Naphthalene	ND	5.0		109	106	2.8	53	56	5.5	70 - 130	30	m
n-Butylbenzene	ND	1.0		102	96	6.1	75	98	26.6	70 - 130	30	
n-Propylbenzene	ND	1.0		103	98	5.0	83	108	26.2	70 - 130	30	
o-Xylene	ND	2.0		103	101	2.0	85	100	16.2	70 - 130	30	
p-Isopropyltoluene	ND	1.0		104	99	4.9	80	102	24.2	70 - 130	30	
sec-Butylbenzene	ND	1.0		111	105	5.6	86	112	26.3	70 - 130	30	
Styrene	ND	5.0		104	103	1.0	82	97	16.8	70 - 130	30	
tert-Butylbenzene	ND	1.0		103	101	2.0	83	106	24.3	70 - 130	30	
Tetrachloroethene	ND	5.0		100	93	7.3	85	99	15.2	70 - 130	30	
Tetrahydrofuran (THF)	ND	5.0		104	99	4.9	79	101	24.4	70 - 130	30	
Toluene	ND	1.0		103	99	4.0	88	103	15.7	70 - 130	30	
trans-1,2-Dichloroethene	ND	5.0		102	96	6.1	87	102	15.9	70 - 130	30	
trans-1,3-Dichloropropene	ND	5.0		100	98	2.0	76	94	21.2	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	5.0		120	116	3.4	79	108	31.0	70 - 130	30	r
Trichloroethene	ND	5.0		104	99	4.9	92	108	16.0	70 - 130	30	
Trichlorofluoromethane	ND	5.0		103	95	8.1	90	100	10.5	70 - 130	30	
Trichlorotrifluoroethane	ND	5.0		96	90	6.5	85	96	12.2	70 - 130	30	
Vinyl chloride	ND	5.0		108	104	3.8	92	108	16.0	70 - 130	30	
% 1,2-dichlorobenzene-d4	98	%		100	100	0.0	99	98	1.0	70 - 130	30	
% Bromofluorobenzene	98	%		100	100	0.0	101	98	3.0	70 - 130	30	
% Dibromofluoromethane	93	%		94	91	3.2	91	93	2.2	70 - 130	30	
% Toluene-d8	99	%		99	98	1.0	100	99	1.0	70 - 130	30	

Comment:

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

QA/QC Batch 538546H (ug/kg), QC Sample No: CG38785 50X (CG38956 (50X) )

Volatiles - Soil (High Level)

1,1,1,2-Tetrachloroethane	ND	250		100	100	0.0	92	97	5.3	70 - 130	30
1,1,1-Trichloroethane	ND	250		86	88	2.3	84	87	3.5	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	250		105	106	0.9	103	105	1.9	70 - 130	30
1,1,2-Trichloroethane	ND	250		97	98	1.0	96	98	2.1	70 - 130	30
1,1-Dichloroethane	ND	250		87	88	1.1	87	89	2.3	70 - 130	30
1,1-Dichloroethene	ND	250		83	82	1.2	83	75	10.1	70 - 130	30
1,1-Dichloropropene	ND	250		97	98	1.0	96	97	1.0	70 - 130	30
1,2,3-Trichlorobenzene	ND	250		97	103	6.0	102	100	2.0	70 - 130	30
1,2,3-Trichloropropane	ND	250		95	97	2.1	95	97	2.1	70 - 130	30
1,2,4-Trichlorobenzene	ND	250		99	104	4.9	102	102	0.0	70 - 130	30
1,2,4-Trimethylbenzene	ND	250		95	98	3.1	96	97	1.0	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	250		100	104	3.9	92	93	1.1	70 - 130	30
1,2-Dibromoethane	ND	250		98	100	2.0	98	99	1.0	70 - 130	30
1,2-Dichlorobenzene	ND	250		97	100	3.0	98	99	1.0	70 - 130	30
1,2-Dichloroethane	ND	250		95	96	1.0	94	96	2.1	70 - 130	30
1,2-Dichloropropane	ND	250		97	97	0.0	97	99	2.0	70 - 130	30
1,3,5-Trimethylbenzene	ND	250		97	100	3.0	97	99	2.0	70 - 130	30

QA/QC Data

SDG I.D.: GCG38945

Parameter	Blank	Blk RL							% Rec	% RPD
			LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	Limits	Limits
1,3-Dichlorobenzene	ND	250	98	100	2.0	99	99	0.0	70 - 130	30
1,3-Dichloropropane	ND	250	99	99	0.0	100	99	1.0	70 - 130	30
1,4-Dichlorobenzene	ND	250	95	99	4.1	96	97	1.0	70 - 130	30
2,2-Dichloropropane	ND	250	90	91	1.1	85	83	2.4	70 - 130	30
2-Chlorotoluene	ND	250	97	99	2.0	98	98	0.0	70 - 130	30
2-Hexanone	ND	1300	94	93	1.1	97	97	0.0	70 - 130	30
2-Isopropyltoluene	ND	250	100	104	3.9	102	103	1.0	70 - 130	30
4-Chlorotoluene	ND	250	96	100	4.1	98	99	1.0	70 - 130	30
4-Methyl-2-pentanone	ND	1300	95	96	1.0	96	96	0.0	70 - 130	30
Acetone	ND	500	86	89	3.4	97	96	1.0	70 - 130	30
Acrylonitrile	ND	250	91	91	0.0	91	93	2.2	70 - 130	30
Benzene	ND	250	100	102	2.0	100	101	1.0	70 - 130	30
Bromobenzene	ND	250	97	98	1.0	98	98	0.0	70 - 130	30
Bromochloromethane	ND	250	89	91	2.2	89	93	4.4	70 - 130	30
Bromodichloromethane	ND	250	94	96	2.1	88	92	4.4	70 - 130	30
Bromoform	ND	250	90	88	2.2	73	80	9.2	70 - 130	30
Bromomethane	ND	250	65	64	1.6	60	62	3.3	70 - 130	30
Carbon Disulfide	ND	250	81	80	1.2	78	70	10.8	70 - 130	30
Carbon tetrachloride	ND	250	86	88	2.3	76	83	8.8	70 - 130	30
Chlorobenzene	ND	250	101	102	1.0	101	102	1.0	70 - 130	30
Chloroethane	ND	250	25	25	0.0	24	25	4.1	70 - 130	30
Chloroform	ND	250	89	90	1.1	89	89	0.0	70 - 130	30
Chloromethane	ND	250	100	100	0.0	92	93	1.1	70 - 130	30
cis-1,2-Dichloroethene	ND	250	76	84	10.0	77	77	0.0	70 - 130	30
cis-1,3-Dichloropropene	ND	250	94	96	2.1	89	92	3.3	70 - 130	30
Dibromochloromethane	ND	150	97	99	2.0	85	92	7.9	70 - 130	30
Dibromomethane	ND	250	93	96	3.2	93	94	1.1	70 - 130	30
Dichlorodifluoromethane	ND	250	97	99	2.0	83	83	0.0	70 - 130	30
Ethylbenzene	ND	250	100	104	3.9	101	103	2.0	70 - 130	30
Hexachlorobutadiene	ND	250	99	109	9.6	104	107	2.8	70 - 130	30
Isopropylbenzene	ND	250	98	100	2.0	98	100	2.0	70 - 130	30
m&p-Xylene	ND	250	100	101	1.0	100	101	1.0	70 - 130	30
Methyl ethyl ketone	ND	250	93	92	1.1	97	99	2.0	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	250	87	88	1.1	88	89	1.1	70 - 130	30
Methylene chloride	ND	250	80	81	1.2	80	80	0.0	70 - 130	30
Naphthalene	ND	250	102	107	4.8	106	104	1.9	70 - 130	30
n-Butylbenzene	ND	250	98	103	5.0	101	101	0.0	70 - 130	30
n-Propylbenzene	ND	250	98	101	3.0	100	100	0.0	70 - 130	30
o-Xylene	ND	250	101	103	2.0	101	102	1.0	70 - 130	30
p-Isopropyltoluene	ND	250	98	102	4.0	99	101	2.0	70 - 130	30
sec-Butylbenzene	ND	250	104	108	3.8	105	107	1.9	70 - 130	30
Styrene	ND	250	102	104	1.9	102	103	1.0	70 - 130	30
tert-Butylbenzene	ND	250	97	101	4.0	99	101	2.0	70 - 130	30
Tetrachloroethene	ND	250	98	101	3.0	97	98	1.0	70 - 130	30
Tetrahydrofuran (THF)	ND	250	90	92	2.2	91	92	1.1	70 - 130	30
Toluene	ND	250	100	101	1.0	100	100	0.0	70 - 130	30
trans-1,2-Dichloroethene	ND	250	95	96	1.0	94	96	2.1	70 - 130	30
trans-1,3-Dichloropropene	ND	250	93	94	1.1	87	89	2.3	70 - 130	30
trans-1,4-dichloro-2-butene	ND	250	107	108	0.9	94	98	4.2	70 - 130	30
Trichloroethene	ND	250	100	102	2.0	100	100	0.0	70 - 130	30
Trichlorofluoromethane	ND	250	23	23	0.0	22	22	0.0	70 - 130	30
Trichlorotrifluoroethane	ND	250	84	84	0.0	82	73	11.6	70 - 130	30
Vinyl chloride	ND	250	105	106	0.9	98	100	2.0	70 - 130	30

QA/QC Data

SDG I.D.: GCG38945

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec	% RPD
	Blank	RL							Limits	Limits
% 1,2-dichlorobenzene-d4	100	%	99	100	1.0	99	100	1.0	70 - 130	30
% Bromofluorobenzene	97	%	100	99	1.0	98	100	2.0	70 - 130	30
% Dibromofluoromethane	89	%	90	89	1.1	89	90	1.1	70 - 130	30
% Toluene-d8	99	%	99	98	1.0	98	98	0.0	70 - 130	30
Comment:										
Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%, 25-160% for Chloroethane-HL and Trichlorofluoromethane-HL.										
QA/QC Batch 538548 (ug/kg), QC Sample No: CG39178 (CG38953)										
Volatiles - Soil (Low Level)										
1,1,1,2-Tetrachloroethane	ND	5.0	98	98	0.0	86	88	2.3	70 - 130	30
1,1,1-Trichloroethane	ND	5.0	84	84	0.0	79	77	2.6	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	86	85	1.2	79	78	1.3	70 - 130	30
1,1,2-Trichloroethane	ND	5.0	86	84	2.4	79	78	1.3	70 - 130	30
1,1-Dichloroethane	ND	5.0	80	78	2.5	74	73	1.4	70 - 130	30
1,1-Dichloroethene	ND	5.0	86	85	1.2	81	78	3.8	70 - 130	30
1,1-Dichloropropene	ND	5.0	86	85	1.2	84	81	3.6	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	82	77	6.3	63	64	1.6	70 - 130	30
1,2,3-Trichloropropane	ND	5.0	83	80	3.7	74	73	1.4	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	78	75	3.9	61	62	1.6	70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0	82	81	1.2	75	74	1.3	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0	98	95	3.1	81	83	2.4	70 - 130	30
1,2-Dibromoethane	ND	5.0	87	86	1.2	78	78	0.0	70 - 130	30
1,2-Dichlorobenzene	ND	5.0	83	81	2.4	72	72	0.0	70 - 130	30
1,2-Dichloroethane	ND	5.0	85	84	1.2	77	77	0.0	70 - 130	30
1,2-Dichloropropane	ND	5.0	87	86	1.2	81	80	1.2	70 - 130	30
1,3,5-Trimethylbenzene	ND	1.0	83	82	1.2	77	76	1.3	70 - 130	30
1,3-Dichlorobenzene	ND	5.0	81	80	1.2	73	72	1.4	70 - 130	30
1,3-Dichloropropane	ND	5.0	85	84	1.2	77	77	0.0	70 - 130	30
1,4-Dichlorobenzene	ND	5.0	79	78	1.3	71	70	1.4	70 - 130	30
2,2-Dichloropropane	ND	5.0	81	81	0.0	74	72	2.7	70 - 130	30
2-Chlorotoluene	ND	5.0	84	83	1.2	78	77	1.3	70 - 130	30
2-Hexanone	ND	25	90	81	10.5	64	66	3.1	70 - 130	30
2-Isopropyltoluene	ND	5.0	89	88	1.1	83	82	1.2	70 - 130	30
4-Chlorotoluene	ND	5.0	81	80	1.2	74	73	1.4	70 - 130	30
4-Methyl-2-pentanone	ND	25	85	83	2.4	75	75	0.0	70 - 130	30
Acetone	ND	10	112	92	19.6	38	39	2.6	70 - 130	30
Acrylonitrile	ND	5.0	82	80	2.5	70	71	1.4	70 - 130	30
Benzene	ND	1.0	87	86	1.2	82	80	2.5	70 - 130	30
Bromobenzene	ND	5.0	84	83	1.2	76	76	0.0	70 - 130	30
Bromochloromethane	ND	5.0	83	82	1.2	75	75	0.0	70 - 130	30
Bromodichloromethane	ND	5.0	95	94	1.1	83	84	1.2	70 - 130	30
Bromoform	ND	5.0	119	117	1.7	95	102	7.1	70 - 130	30
Bromomethane	ND	5.0	85	84	1.2	76	75	1.3	70 - 130	30
Carbon Disulfide	ND	5.0	83	81	2.4	76	74	2.7	70 - 130	30
Carbon tetrachloride	ND	5.0	97	96	1.0	84	85	1.2	70 - 130	30
Chlorobenzene	ND	5.0	86	85	1.2	80	79	1.3	70 - 130	30
Chloroethane	ND	5.0	86	86	0.0	78	77	1.3	70 - 130	30
Chloroform	ND	5.0	80	78	2.5	74	72	2.7	70 - 130	30
Chloromethane	ND	5.0	79	78	1.3	71	69	2.9	70 - 130	30
cis-1,2-Dichloroethene	ND	5.0	78	77	1.3	72	70	2.8	70 - 130	30
cis-1,3-Dichloropropene	ND	5.0	85	84	1.2	74	75	1.3	70 - 130	30
Dibromochloromethane	ND	3.0	108	106	1.9	90	94	4.3	70 - 130	30

QA/QC Data

SDG I.D.: GCG38945

Parameter	Blank	Blk RL							% Rec	% RPD	
			LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	Limits	Limits	
Dibromomethane	ND	5.0		84	83	1.2	76	76	0.0	70 - 130	30
Dichlorodifluoromethane	ND	5.0		85	84	1.2	79	76	3.9	70 - 130	30
Ethylbenzene	ND	1.0		87	87	0.0	84	81	3.6	70 - 130	30
Hexachlorobutadiene	ND	5.0		87	86	1.2	76	76	0.0	70 - 130	30
Isopropylbenzene	ND	1.0		87	86	1.2	82	80	2.5	70 - 130	30
m&p-Xylene	ND	2.0		85	86	1.2	81	80	1.2	70 - 130	30
Methyl ethyl ketone	ND	5.0		96	84	13.3	62	60	3.3	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0		79	77	2.6	72	72	0.0	70 - 130	30
Methylene chloride	ND	5.0		75	73	2.7	69	68	1.5	70 - 130	30
Naphthalene	ND	5.0		85	82	3.6	70	70	0.0	70 - 130	30
n-Butylbenzene	ND	1.0		83	81	2.4	76	75	1.3	70 - 130	30
n-Propylbenzene	ND	1.0		85	84	1.2	80	78	2.5	70 - 130	30
o-Xylene	ND	2.0		87	87	0.0	83	81	2.4	70 - 130	30
p-Isopropyltoluene	ND	1.0		85	84	1.2	79	78	1.3	70 - 130	30
sec-Butylbenzene	ND	1.0		91	90	1.1	86	84	2.4	70 - 130	30
Styrene	ND	5.0		85	84	1.2	78	77	1.3	70 - 130	30
tert-Butylbenzene	ND	1.0		86	85	1.2	81	80	1.2	70 - 130	30
Tetrachloroethene	ND	5.0		89	89	0.0	87	85	2.3	70 - 130	30
Tetrahydrofuran (THF)	ND	5.0		76	74	2.7	67	67	0.0	70 - 130	30
Toluene	ND	1.0		88	87	1.1	83	82	1.2	70 - 130	30
trans-1,2-Dichloroethene	ND	5.0		89	87	2.3	83	81	2.4	70 - 130	30
trans-1,3-Dichloropropene	ND	5.0		84	83	1.2	71	73	2.8	70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0		92	90	2.2	70	72	2.8	70 - 130	30
Trichloroethene	ND	5.0		89	89	0.0	85	83	2.4	70 - 130	30
Trichlorofluoromethane	ND	5.0		92	92	0.0	86	84	2.4	70 - 130	30
Trichlorotrifluoroethane	ND	5.0		87	86	1.2	85	83	2.4	70 - 130	30
Vinyl chloride	ND	5.0		91	89	2.2	84	80	4.9	70 - 130	30
% 1,2-dichlorobenzene-d4	100	%		101	100	1.0	100	100	0.0	70 - 130	30
% Bromofluorobenzene	96	%		99	99	0.0	101	100	1.0	70 - 130	30
% Dibromofluoromethane	92	%		94	93	1.1	94	93	1.1	70 - 130	30
% Toluene-d8	99	%		99	99	0.0	99	98	1.0	70 - 130	30

Comment:

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

QA/QC Batch 538712 (ug/kg), QC Sample No: CG39216 (CG38954)

Volatiles - Soil (Low Level)

1,1,1,2-Tetrachloroethane	ND	5.0		98	101	3.0	94	92	2.2	70 - 130	30
1,1,1-Trichloroethane	ND	5.0		94	95	1.1	88	83	5.8	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0		104	108	3.8	99	94	5.2	70 - 130	30
1,1,2-Trichloroethane	ND	5.0		90	94	4.3	89	83	7.0	70 - 130	30
1,1-Dichloroethane	ND	5.0		94	95	1.1	87	83	4.7	70 - 130	30
1,1-Dichloroethene	ND	5.0		96	96	0.0	84	77	8.7	70 - 130	30
1,1-Dichloropropene	ND	5.0		93	94	1.1	89	82	8.2	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0		98	93	5.2	84	83	1.2	70 - 130	30
1,2,3-Trichloropropane	ND	5.0		98	102	4.0	90	84	6.9	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0		104	95	9.0	83	81	2.4	70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0		98	95	3.1	87	83	4.7	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0		107	110	2.8	104	96	8.0	70 - 130	30
1,2-Dibromoethane	ND	5.0		95	100	5.1	92	88	4.4	70 - 130	30
1,2-Dichlorobenzene	ND	5.0		92	90	2.2	84	81	3.6	70 - 130	30
1,2-Dichloroethane	ND	5.0		90	94	4.3	87	83	4.7	70 - 130	30
1,2-Dichloropropane	ND	5.0		90	93	3.3	88	83	5.8	70 - 130	30

QA/QC Data

SDG I.D.: GCG38945

Parameter	Blank	Blk RL							% Rec	% RPD	
			LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	Limits	Limits	
1,3,5-Trimethylbenzene	ND	1.0		100	97	3.0	90	85	5.7	70 - 130	30
1,3-Dichlorobenzene	ND	5.0		96	93	3.2	84	81	3.6	70 - 130	30
1,3-Dichloropropane	ND	5.0		94	97	3.1	91	87	4.5	70 - 130	30
1,4-Dichlorobenzene	ND	5.0		94	91	3.2	82	80	2.5	70 - 130	30
2,2-Dichloropropane	ND	5.0		101	103	2.0	92	86	6.7	70 - 130	30
2-Chlorotoluene	ND	5.0		97	95	2.1	89	86	3.4	70 - 130	30
2-Hexanone	ND	25		98	102	4.0	90	83	8.1	70 - 130	30
2-Isopropyltoluene	ND	5.0		99	96	3.1	92	86	6.7	70 - 130	30
4-Chlorotoluene	ND	5.0		96	92	4.3	87	83	4.7	70 - 130	30
4-Methyl-2-pentanone	ND	25		95	102	7.1	93	85	9.0	70 - 130	30
Acetone	ND	10		80	86	7.2	72	68	5.7	70 - 130	30
Acrylonitrile	ND	5.0		96	103	7.0	90	83	8.1	70 - 130	30
Benzene	ND	1.0		93	95	2.1	90	85	5.7	70 - 130	30
Bromobenzene	ND	5.0		93	94	1.1	88	85	3.5	70 - 130	30
Bromoform	ND	5.0		93	96	3.2	87	86	1.2	70 - 130	30
Bromochloromethane	ND	5.0		98	100	2.0	93	90	3.3	70 - 130	30
Bromodichloromethane	ND	5.0		101	108	6.7	94	91	3.2	70 - 130	30
Bromoform	ND	5.0		95	91	4.3	80	77	3.8	70 - 130	30
Bromomethane	ND	5.0		99	99	0.0	84	79	6.1	70 - 130	30
Carbon Disulfide	ND	5.0		100	122	19.8	95	89	6.5	70 - 130	30
Carbon tetrachloride	ND	5.0		93	94	1.1	87	84	3.5	70 - 130	30
Chlorobenzene	ND	5.0		99	101	2.0	87	83	4.7	70 - 130	30
Chloroethane	ND	5.0		95	96	1.0	88	85	3.5	70 - 130	30
Chloroform	ND	5.0		90	92	2.2	79	74	6.5	70 - 130	30
Chloromethane	ND	5.0		87	91	4.5	83	82	1.2	70 - 130	30
cis-1,2-Dichloroethene	ND	5.0		95	98	3.1	91	88	3.4	70 - 130	30
cis-1,3-Dichloropropene	ND	5.0		105	108	2.8	100	97	3.0	70 - 130	30
Dibromochloromethane	ND	3.0		89	93	4.4	86	83	3.6	70 - 130	30
Dibromomethane	ND	5.0		99	100	1.0	87	80	8.4	70 - 130	30
Ethylbenzene	ND	1.0		95	95	0.0	89	84	5.8	70 - 130	30
Hexachlorobutadiene	ND	5.0		100	90	10.5	90	83	8.1	70 - 130	30
Isopropylbenzene	ND	1.0		97	97	0.0	92	85	7.9	70 - 130	30
m&p-Xylene	ND	2.0		97	95	2.1	89	83	7.0	70 - 130	30
Methyl ethyl ketone	ND	5.0		94	100	6.2	82	76	7.6	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0		93	97	4.2	83	80	3.7	70 - 130	30
Methylene chloride	ND	5.0		86	86	0.0	73	70	4.2	70 - 130	30
Naphthalene	ND	5.0		103	102	1.0	95	91	4.3	70 - 130	30
n-Butylbenzene	ND	1.0		104	96	8.0	88	83	5.8	70 - 130	30
n-Propylbenzene	ND	1.0		98	95	3.1	88	83	5.8	70 - 130	30
o-Xylene	ND	2.0		94	94	0.0	89	84	5.8	70 - 130	30
p-Isopropyltoluene	ND	1.0		101	96	5.1	89	84	5.8	70 - 130	30
sec-Butylbenzene	ND	1.0		105	102	2.9	96	90	6.5	70 - 130	30
Styrene	ND	5.0		96	95	1.0	89	85	4.6	70 - 130	30
tert-Butylbenzene	ND	1.0		97	96	1.0	92	86	6.7	70 - 130	30
Tetrachloroethene	ND	5.0		91	92	1.1	87	80	8.4	70 - 130	30
Tetrahydrofuran (THF)	ND	5.0		93	102	9.2	84	77	8.7	70 - 130	30
Toluene	ND	1.0		93	95	2.1	88	84	4.7	70 - 130	30
trans-1,2-Dichloroethene	ND	5.0		99	98	1.0	85	80	6.1	70 - 130	30
trans-1,3-Dichloropropene	ND	5.0		97	100	3.0	92	89	3.3	70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0		131	134	2.3	117	110	6.2	70 - 130	30
Trichloroethene	ND	5.0		90	93	3.3	87	82	5.9	70 - 130	30
Trichlorofluoromethane	ND	5.0		95	95	0.0	81	76	6.4	70 - 130	30
Trichlorotrifluoroethane	ND	5.0		96	96	0.0	82	77	6.3	70 - 130	30

QA/QC Data

SDG I.D.: GCG38945

Parameter	Blank	Blk							% Rec	% RPD
			LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	Limits	Limits
Vinyl chloride	ND	5.0	99	100	1.0	87	80	8.4	70 - 130	30
% 1,2-dichlorobenzene-d4	98	%	98	99	1.0	99	98	1.0	70 - 130	30
% Bromofluorobenzene	99	%	100	100	0.0	100	99	1.0	70 - 130	30
% Dibromofluoromethane	93	%	100	105	4.9	104	101	2.9	70 - 130	30
% Toluene-d8	103	%	100	100	0.0	100	100	0.0	70 - 130	30

Comment:

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

I = 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

August 06, 2020

Thursday, August 06, 2020

Criteria: None

State: NY

## Sample Criteria Exceedances Report

GCG38945 - SLR-CHESTER

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
*** No Data to Display ***								

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



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



## Analysis Comments

August 06, 2020

SDG I.D.: GCG38945

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

### SVOA Narration

**CHEM28 07/22/20-1:** CG38945, CG38946, CG38947, CG38948, CG38949, CG38950, CG38951, CG38952, CG38953, CG38954

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

For 8270 BN list, benzidine peak tailing was evaluated in the DFTPP tune and was found to be in control.

The following Initial Calibration compounds did not meet recommended response factors: 2-Nitrophenol 0.060 (0.1), Hexachlorobenzene 0.080 (0.1)

The following Initial Calibration compounds did not meet minimum response factors: None.

The following Continuing Calibration compounds did not meet recommended response factors: 2-Nitrophenol 0.059 (0.1), Hexachlorobenzene 0.078 (0.1)

The following Continuing Calibration compounds did not meet minimum response factors: None.

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

### VOA Narration

**CHEM03 07/23/20-1:** CG38954

The following Initial Calibration compounds did not meet RSD% criteria: 1,2-Dibromo-3-chloropropane 25% (20%), Bromoform 33% (20%), Dibromochloromethane 22% (20%), trans-1,4-dichloro-2-butene 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: Bromoform 0.091 (0.1), Tetrachloroethene 0.157 (0.2)

The following Initial Calibration compounds did not meet minimum response factors: None.

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

**CHEM26 07/22/20-2:** CG38953

The following Initial Calibration compounds did not meet RSD% criteria: Bromoform 29% (20%), Chloroethane 25% (20%), Dibromochloromethane 21% (20%)

The following Initial Calibration compounds did not meet maximum RSD% criteria: None.

The following Initial Calibration compounds did not meet recommended response factors: Bromoform 0.085 (0.1)

The following Initial Calibration compounds did not meet minimum response factors: None.

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

**CHEM31 07/22/20-2:** CG38945, CG38946, CG38947, CG38948, CG38949, CG38950, CG38951, CG38952, CG38955, CG38956



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



## Analysis Comments

August 06, 2020

SDG I.D.: GCG38945

---

The following Initial Calibration compounds did not meet RSD% criteria: Bromoform 22% (20%), Chloroethane 27% (20%)

The following Initial Calibration compounds did not meet maximum RSD% criteria: None.

The following Initial Calibration compounds did not meet recommended response factors: Acetone 0.094 (0.1), Bromoform 0.089 (0.1), Tetrachloroethene 0.165 (0.2)

The following Initial Calibration compounds did not meet minimum response factors: None.

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



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



## NY Temperature Narration

August 06, 2020

SDG I.D.: GCG38945

---

The samples in this delivery group were received at 2.3°C.  
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

APPENDIX 5  
LIMITATIONS

## **GEOTECHNICAL LIMITATIONS**

### Explorations

1. The analyses and recommendations submitted in this report are based in part on data contained on the subsurface exploration logs. The nature and extent of variations between these explorations may not become evident until construction. If variations then appear evident, it will be necessary to reevaluate the recommendations of this report.
2. The generalized soil profile described in the text is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized and have been developed from interpretations of widely spaced explorations and samples; actual soil transitions are probably more erratic. For specific information, refer to the subsurface exploration logs referenced above.
3. Water level readings were reported on the exploration logs referenced above. These data have been reviewed and interpretations have been made in the text of this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to seasonal changes, variations in rainfall, construction activity, and other factors which may be different from those at the time these observations were made.

### Review

4. If any changes in the nature, design or location of the proposed project are planned, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed, and the conclusions modified or verified in writing by Milone & MacBroom, Inc. It is recommended that this firm be provided the opportunity for a general review of final design drawings and specifications to confirm that earthwork and foundation recommendations are properly interpreted and implemented in the design and specifications.

### Use of Report

5. This report has been prepared for the exclusive use of 131 Pearl Street Owner, LLC and their design team for specific application to the 123-131 Pearl Street Development project located at 123-131 Pearl Street in Port Chester, New York in accordance with generally accepted soil and foundation engineering practices. No other warranty, express or implied, is made.