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Last Updated: April 12, 2022

Mr. Steve Zerges  
Donofrio General Contracting Corp  
202 28<sup>th</sup> Street  
Brooklyn, NY 11232

**Re: Waste Classification - Letter Report**  
**Environmental Professional Services - SEK-20070**  
**25th Avenue Between Hunter Avenue and Gravesend Bay**  
**Brooklyn, NY 11214**  
**JMG Project: 2100022**

Dear Mr. Zerges:

This letter is intended to provide you with the analytical data from our recent Waste Characterization (WC) scope of work conducted at Project Site SEK-20070. The project scope of work includes the construction of a new stormwater system and associated outfall channel along 25th Avenue in the vicinity of the existing Rocky Pier. A site location map can be found in [Figure 1](#).

## **1. Site Description**

The Site is located at 25th Avenue between Hunter Avenue and Gravesend Bay, Brooklyn, NY. The former use of the area was identified as undeveloped land. An area of stockpiled soils was identified in the southeastern portion of the property during the site investigation. The on-site soils consisted of tan/brown medium to coarse sand, with historic fill materials being identified in select soil borings. The Property is located in close vicinity to the Gravesend Bay to the west. Groundwater was not encountered up to eight feet below ground surface (bgs).

## **2. Waste Classifications Activities**

Field Sampling Plan: A Field Sampling Plan (FSP) was developed on 10 December 2021, and subsequently revised on 21 February 2022 based on comments received from D'Onofrio and analytical results from January 2022.

Field Sampling Procedures: Sampling frequency and intervals were based on the requirements of the bid specifications and on those outlined in the Field Sampling Plan dated 10 December 2021 and revised on

21 February 2022. These requirements consisted of collecting one characterization sample per 500 cubic yards of soil as per Section 8.01 C2 of the bid specifications. Subsequent delineation soil sampling was conducted at a frequency of one sample per boring location. The delineation soil samples were collected for lead analysis only.

#### Initial Waste Characterization: January 2022

The site contractor mobilized to assist in the collection of soil samples from the proposed work area. A Site reconnaissance was performed by Mr. Matthew Thurston on January 21, 2022. The site reconnaissance included a visual inspection of the Site and proposed work area. After discussion with on-site personnel, the soil borings were advanced into the subsurface to collect soil samples for the waste classification prior to excavation and disposal. The MultiGas meter was used to screen the soil prior to the selection of samples. Volatile organic vapors were not detected, nor was any evidence of a release of hazardous substances. A total of four soil borings, SB-1 through SB-4, were advanced within the subsurface during the investigation as planned. The sample locations are shown on [Figure 2](#).

Discussion with the on-site contractor indicated that the depth of the excavation would be to approximately 13 ft to 15 ft bgs. Accordingly, the driller advanced four soil borings to a total depth of 15 feet bgs. Soil borings SB-1, SB-3 and SB-4 were selected, and one five-point composite sample was collected at specific depth intervals from each for composite samples WC-2, WC-3 and WC-4, respectively, as per the field sampling plan.

Soil borings SB-1 and SB-3, which were composited into WC-2 and WC-3, respectively, consisted of a surficial layer of gravel overlying medium-grained, light brown, silty sand to a depth of 15 fbgs. Evidence of historic fill materials including concrete, brick, coal ash and asphalt were identified in the soil boring, SB-4, advanced closest to Gravesend Bay, which was composited into sample WC-4. The contractor was unable to collect waste classification samples further west into the proposed excavation area due to unsafe working conditions (high tide) that would be present associated with Gravesend Bay.

A waste classification sample, WC-1, was collected from the stockpiled soil in the southeastern portion of the property. A chain of custody form was completed at the time of sampling and maintained until the disposition of the samples at the laboratory.

The contractor collected discrete soil samples at various depths biased towards areas with suspected soil contamination based on elevated PID screening results and/or apparent visual staining. Soil samples for volatile organic analysis were collected using a Terra Core™ or EnCore™ sampling device. Samples collected for other analyses were placed in laboratory-supplied sample containers. After collection, samples were placed in shipping coolers and maintained at approximately 4 +/- 2 degrees Celsius. The coolers were hand-delivered to the analytical laboratory under chain-of-custody protocol.

The five-point composite sample was analyzed for Target Compound List (TCL) Semi-Volatile Organics (SVOCs), herbicides, pesticides, Polychlorinated Biphenyl (PCBs), Target Analyte List (TAL) Metals, Toxicity Characteristic Leaching Procedure (TCLP) Metals and Resource Conservation and Recovery Act (RCRA) characteristics of ignitability and corrosivity. The grab sample was analyzed for TCL Volatile Organic Compounds (VOCs) bias to suspected highest soil contamination.

These soil samples represent the first fifteen feet of soil. If deeper excavation is required, then additional testing will be necessary to meet the disposal facility requirements.

#### January 2022 - Soil Analytical Results

The soil sample analytical results are summarized in [Table 1](#). It also provides a comparison to the NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives, Pennsylvania (PA) Clean Fill Limits, PA Regulated Fill limits, NYCRR Part 375 Restricted Use Soil Cleanup Objectives Residential, NYCRR Part 375 Restricted Use Soil Cleanup Objectives Commercial, NJDEP SRP Residential Direct Contact Soil Remediation Standard-RDCSRS, and NJDEP SRP Non-Residential Direct Contact Soil Remediation Standard-NRDCSRS. The concentrations reported in the summary tables are in milligrams per kilogram (mg/kg), unless otherwise noted for TCLP metals analysis the units are mg/l.

The analytical results indicate that the soil associated with waste classification samples WC-1, WC-2 and WC-3 has been found to contain non-hazardous components, and all compounds were detected at concentrations below the applicable standards. Following the review of the analytical results and the Technical Specifications described in Section 6 of the Field Sampling Plan and Section 8.01-C2 of the bid specifications, the onsite soils associated with Waste Classification samples WC-1 through WC-3 can be classified as Non-Hazardous Non-contaminated.

Laboratory analytical results for soil sample WC-4, which was collected closest to Gravesend Bay, reported a TCLP lead concentration of 9.66 mg/L which is above the Environmental Protection Agency (EPA) TCLP standard of 5 mg/L. Soils associated with this waste classification sample should be treated prior to off-site disposal or should be stockpiled separately and disposed of at an EPA regulated facility. Soils exceeding any of the hazardous characteristic criteria meet the legal definition of hazardous soils (rather than non-hazardous contaminated soils) and must be staged, transported and/or disposed of under Item 8.01 H- Handling, Transporting and Disposal of Hazardous Soils as detailed in the bid specifications.

The concentration of TCLP lead identified in this soil sample is suspected to be associated with historic fill materials identified within the soil boring installed in the WC-4 area. The contractor recommended delineation of the WC-4 composite sample area to identify the extent of lead contaminated historic fill on the Property and reduce the total volume of hazardous soil that will require export from the Site.

The EPA Generator Identification number for Waste Code D008 hazardous soils will be obtained prior to soil excavation and disposal, and is not available at this publish time.

#### Delineation Soil Sampling: February 2022

The site contractor mobilized to assist in the collection of delineation soil samples around the WC-4 sample location. Mr. Matthew Thurston on February 24, 2022 visited site. The area was further visually inspected prior to the drilling. The MultiGas meter was used to screen the soil prior to the selection of samples. Volatile organic vapors were not detected, nor was any evidence of a release of hazardous substances. The contractor advanced six soil borings to a total depth of 15 feet bgs in the vicinity of sample location WC-4 to collect soil samples for delineation purposes. Two samples (SB4-N and SB4-N2) were collected north of the SB-4 boring location, two samples (SB4-S and SB4-S2) were collected south of the SB-4 boring location, one sample (SB4-E) was collected east of SB-4 boring location, and one sample (SB4-W) was collected west of the SB-4 boring location. SB4-N, SB4-S, SB4-E and SB4-W were located approximately ten feet radially outward from SB4. SB4-N2 and SB4-S2 were located approximately twenty feet radially outward from SB4.

All soil borings consisted of a surficial layer of yellow to yellowish-brown coarse sand (SB4-S2 consisted of gravel mixed in as well) overlying dark brown, silty sand with historic fill overlying moist, brown silty sand to a depth of 15 fbs. Historic fill was found in each soil boring and included a mix of concrete, brick, coal ash and asphalt and the historic fill layer extended to a maximum depth of 11 fbs. Soil samples were collected from within the historic fill layer. Each soil sample was analyzed for total lead and TCLP lead.

#### February 2022 - Soil Analytical Results Review

Soil analytical results from the February 2022 delineation soil sampling are presented in [Table 2](#). It provides a comparison to:

- EPA-TCLP: EPA Toxicity Characteristic (TCLP) Regulatory Levels Criteria
- NJ-NRDCSRS: New Jersey 2017 Non-Residential Direct Contact Soil Remediation Standards Criteria
- NJ-RDCSRS: New Jersey 2017 Residential Direct Contact Soil Remediation Standards Criteria
- PA-NRDCS2: Pennsylvania Non-Residential Direct Contact Subsurface Soil (2-15') MSCs Criteria
- PA-RDCS: Pennsylvania Residential Direct Contact Soil MSCs Criteria
- PA-RFCL: Pennsylvania Regulated Fill Concentration Limits Criteria
- NY-DER10-CIU: New York DER-10 Commercial or Industrial Use Allowable Constituent Levels for Imported Fill & Soil Criteria
- NY-DER10-RRU: New York DER-10 Restricted Residential Use Allowable Constituent Levels for Imported Fill & Soil Criteria
- NY-DER10-RU: New York DER-10 Restricted Use Allowable Constituent Levels for Imported Fill & Soil Criteria
- NY-RESI: New York NYCRR Part 375 Industrial Criteria, New York Restricted use Criteria
- NY-RESR: New York NYCRR Part 375 Residential Criteria, New York Restricted use Criteria
- NY-RESC: New York NYCRR Part 375 Commercial Criteria, New York Restricted use Criteria

The concentrations reported in the summary tables are in milligrams per kilogram (mg/kg), unless otherwise noted for TCLP lead analysis the units are mg/L.

The analytical results review indicates that the soil associated with soil borings SB4-N, SB4-N2, SB4-S, SB4-S2, SB4-E and SB4-W has been found to contain TCLP lead concentrations below the EPA TCLP standard of 5 mg/L. Total lead concentrations were additionally identified below regulatory standards. Following the review of the analytical results and the Technical Specifications described in Section 6 of the Field Sampling Plan and Section 8.01-C2 of the bid specifications, the sampled soil meets the TCLP criteria for Non-Hazardous.

### **3. Conclusion & Recommendations**

The soil associated with WC-4 was found to contain TCLP lead concentrations above the EPA hazardous level. The additional delineation soil samples collected around the WC-4 sample location did not identify TCLP lead concentrations above the EPA hazardous standard. Historic fill soils to be excavated, the lead-contaminated in-situ volume of which is estimated to be 116 cubic yards, are identified within the WC-4 area should be treated prior to off-site disposal or should be stockpiled separately and disposed of at a regulated facility as hazardous material. Off-site treatment of hazardous materials may be required at the EPA regulated landfill. JMG will obtain a one-time EPA Hazardous Waste Generator ID for the disposal approval. A community air monitoring plan will be developed prior to the excavation and disposal of hazardous soils. Please contact the undersigned at (732)-763-9571 if you require further information or clarification.

Kind Regards,

**JMG Engineering DPC**



Giorgi Khardzeishvili, P.E.

*Devang Patel*

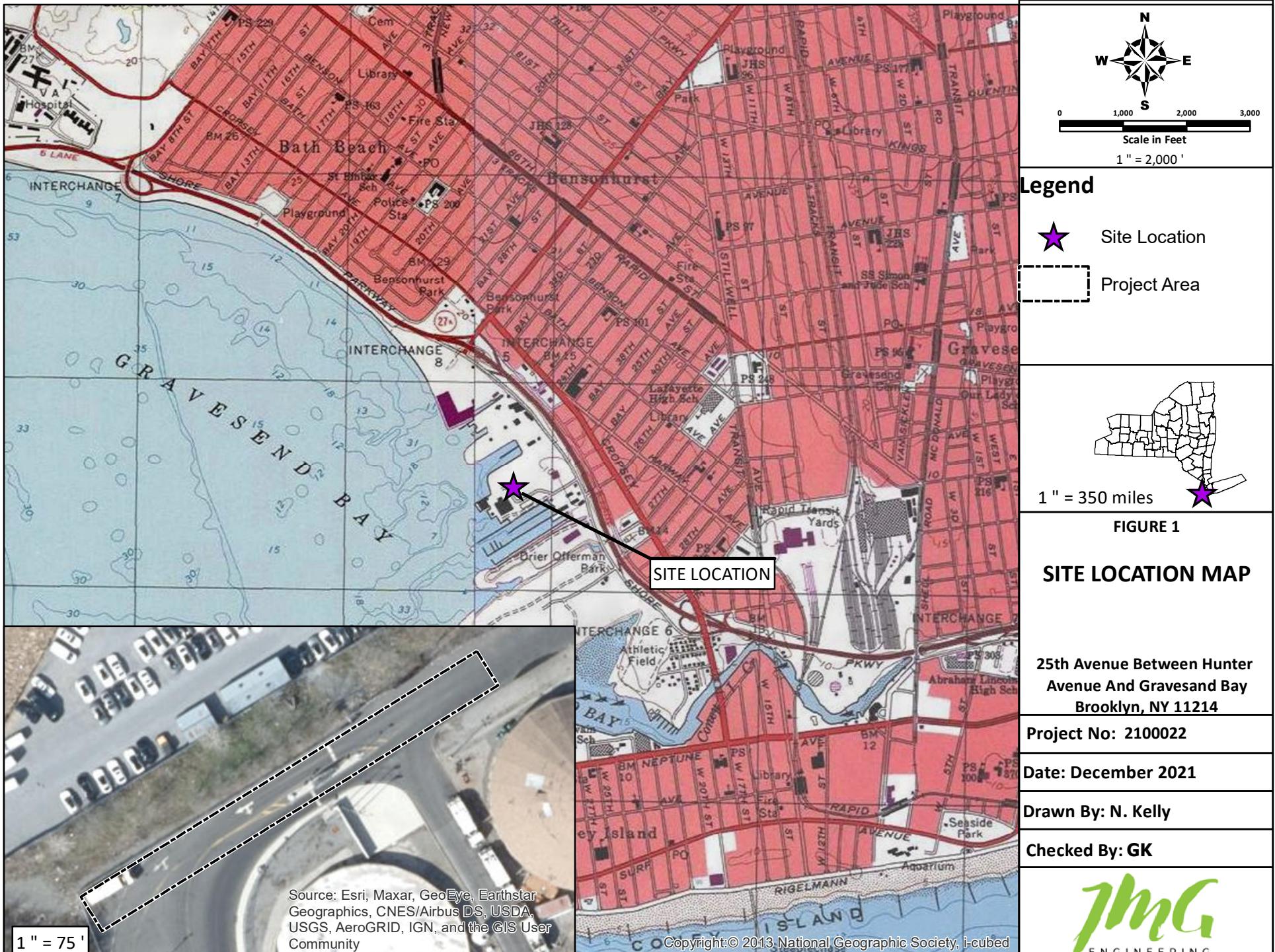
Devang Patel

Enclosed:      Figure 1 - Site Location Map  
                  Figure 2 - Sample Location Map

Table 1 - Summary of Waste Class Soil Analytical Results

Table 2 - Summary of Soil Analytical Results – February 2022

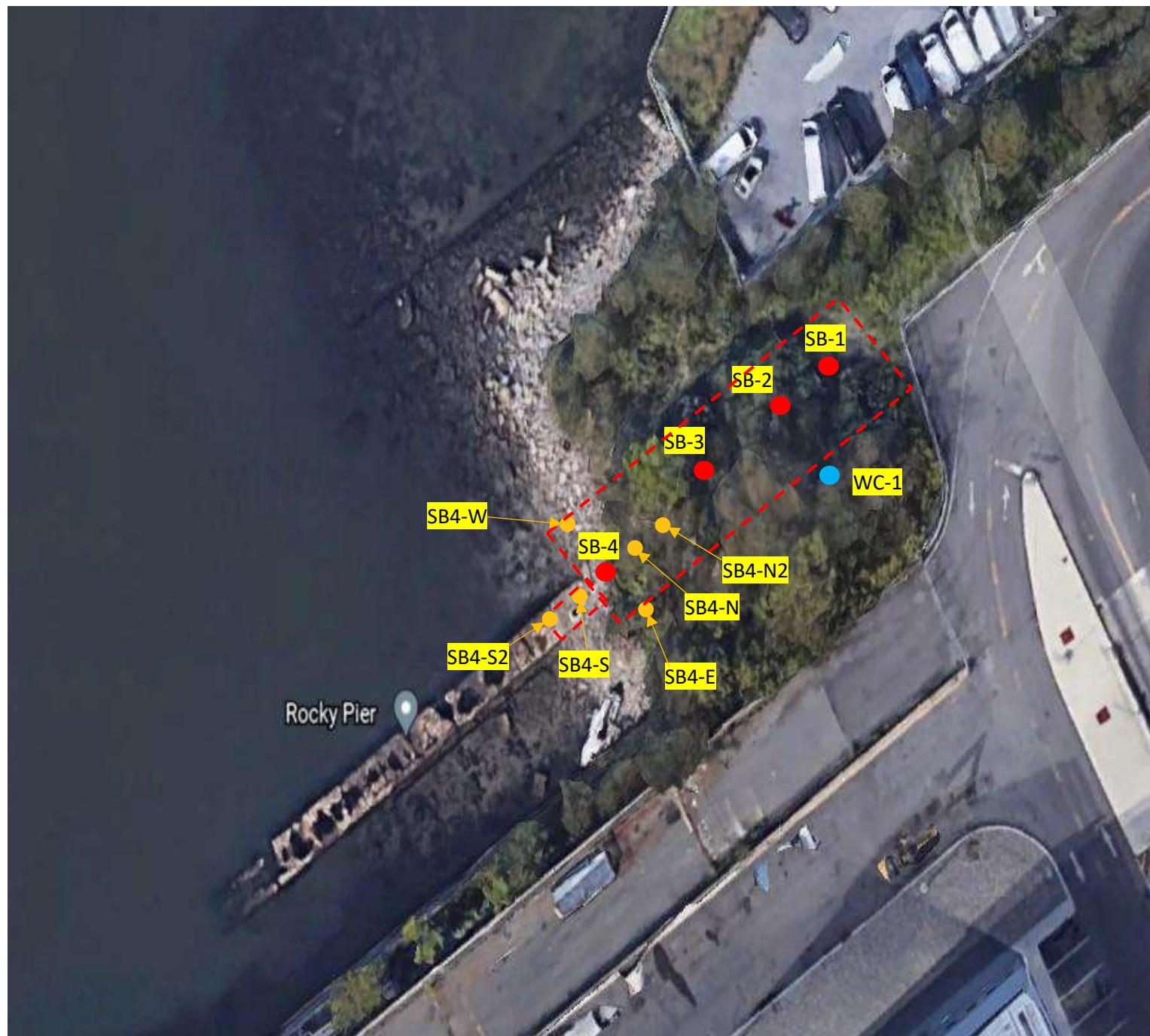
Exhibit 1 - Construction Phase Diagrams  
Exhibit 2 - Laboratory Certifications  
Exhibit 3 - Quality Control Project Plan  
Exhibit 4 - Laboratory Reports



**Figure 2**

**Sample Location Map**

25th Avenue Between  
Hunter Avenue and  
Gravesand Bay  
Brooklyn, NY 11214



**Legend**

- Soil Boring Location - Jan 2022
- Soil Boring Location - Feb 2022
- Stockpile Sample
- Proposed Excavation

Project Number: 2100022

Date: 3/9/2022

By: Nicholas Quagliari

**Table 1 Waste Classification Soil Analytical Results**  
**25th Avenue, Between Hunter Avenue and Gravesend Bay**  
**Brooklyn, New York**

LOCATION SAMPLING DATE LAB SAMPLE ID SAMPLE TYPE	CasNum	EPA-TCLP	NJ-NRDCSRs	NY-CP51	NY-DER10-CIU	NY-DER10-RRU	NY-DER10-RU	NY-RESI	NY-RESR	NY-RESRR	NY-RESC	PA-NRDCS2	PA-RDCS	PA-RFCL	Units	WC-1		WC-2		WC-3		WC-4	
																1/21/2022		1/21/2022		1/21/2022		1/21/2022	
																L2203656-01	SOIL	L2203656-02	SOIL	L2203656-03	SOIL	L2203656-04	SOIL
Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual		
<b>Chlorinated Herbicides by GC</b>																							
2,4,5-T	93-76-5																						
2,4,5-TP (Silvex)	93-72-1																						
2,4-D	94-75-7																						
<b>Diesel Range Organics</b>																							
DRO (C10-C28)	NONE																						
<b>General Chemistry</b>																							
Cyanide, Reactive	57-12-5																						
Paint Filter Liquid	PFLT																						
pH (H)	12408-02-5																						
Solids, Total	NONE																						
Sulfide, Reactive	NONE																						
<b>Ignitability of Solids</b>																							
Ignitability	NONE																						
<b>Organochlorine Pesticides by GC</b>																							
4,4'-DDD	72-54-8	13	3		14	13	2.6	180	2.6	13	92	190000	78	150	mg/kg	0.00161	U	0.00183	U	0.00193	U	0.00162	U
4,4'-DDE	72-55-9	9	2		17	8.9	1.8	120	1.8	8.9	62	190000	55	220	mg/kg	0.00161	U	0.00183	U	0.00193	U	0.00162	U
4,4'-DDT	50-29-3	8	2		47	7.9	1.7	94	1.7	7.9	47	190000	55	270	mg/kg	0.00302	U	0.00343	U	0.00362	U	0.00304	U
Aldrin	309-00-2	0.2	0.04		0.19	0.097	0.019	1.4	0.019	0.097	0.68	190000	1.1	2.4	mg/kg	0.00161	U	0.00183	U	0.00193	U	0.00162	U
Alpha-BHC	319-84-6	0.5	0.1		0.02	0.02	0.02	6.8	0.097	0.48	3.4	190000	3	0.25	mg/kg	0.000671	U	0.000763	U	0.000804	U	0.000677	U
Beta-BHC	319-85-7	2	0.4		0.09	0.09	0.072	14	0.072	0.36	3	190000	10	1.1	mg/kg	0.00161	U	0.00183	U	0.00193	U	0.00162	U
Chlordane	57-74-9	1	0.2		2.9	2.9	0.91	47	0.91	4.2	24	190000	53	49	mg/kg	0.0134	U	0.0153	U	0.0161	U	0.0135	U
cis-Chlordane	5103-71-9	1	0.2		0.25	0.25	0.25	1000	100	100	500	190000	1.2	0.58	mg/kg	0.00201	U	0.00229	U	0.00241	U	0.00203	U
Delta-BHC	319-86-8															0.00161	U	0.00183	U	0.00193	U	0.00162	U
Dieldrin	60-57-1	0.2	0.04		0.1	0.1	0.039	2.8	0.039	0.2	1.4	190000	2	1.1	mg/kg	0.00101	U	0.00114	U	0.0012	U	0.00102	U
Endosulfan I	959-98-8	6800	470		102	24	4.8	920	4.8	24	200	190000	1300	260	mg/kg	0.00161	U	0.00183	U	0.00193	U	0.00162	U
Endosulfan II	33213-65-9	6800	470		102	24	4.8	920	4.8	24	200	190000	1300	260	mg/kg	0.00161	U	0.00183	U	0.00193	U	0.00162	U
Endosulfan sulfate	1031-07-8	6800	470		200	24	4.8	920	4.8	24	200	190000	1300	70	mg/kg	0.000671	U	0.000763	U	0.000804	U	0.000677	U
Endrin	72-20-8	340	23		0.06	0.06	410	2.2	11	89	190000	66	5.5	mg/kg	0.000671	U	0.000763	U	0.000804	U	0.000677	U	
Endrin aldehyde	7421-93-4															0.00201	U	0.00229	U	0.00241	U	0.00203	U
Endrin ketone	53494-70-5															0.00161	U	0.00183	U	0.00193	U	0.00162	U
Heptachlor	76-44-8	0.7	0.1		0.38	0.38	0.38	29	0.42	2.1	15	190000	4.1	0.68	mg/kg	0.000806	U	0.000916	U	0.000965	U	0.000812	U
Heptachlor epoxide	1024-57-3	0.3	0.07		0.1	0.1	0.1	23	0.28	1.3	9.2	190000	2	1.1	mg/kg	0.0302	U	0.00343	U	0.00362	U	0.0304	U
Lindane	58-89-9	2	0.4		0.1	0.1	0.1	25	1	1	1	190000	17	0.072	mg/kg	0.000671	U	0.000763	U	0.000804	U	0.000677	U
Methoxychlor	72-43-5	5700	390													0.00302	U	0.00343	U	0.00362	U	0.00304	U
Toxaphene	8001-35-2	3	0.6													0.0302	U	0.0343	U	0.0362	U	0.0304	U
trans-Chlordane	5103-74-2	1	0.2													0.0201	U	0.00229	U	0.00241	U	0.00203	U
<b>Polychlorinated Biphenyls by GC</b>																							
Aroclor 1016	12674-11-2	1	0.2		1	1	1	25	1	1	1	10000	15	46	mg/kg	0.0336	U	0.0376	U	0.035	U	0.0338	U
Aroclor 1221	11104-28-2	1	0.2		1	1	1	25	1	1	1	10000	27	4.7	mg/kg	0.0336	U	0.0376	U	0.035	U	0.0338	U
Aroclor 1232	11141-16-5	1	0.2		1	1	1	25	1	1	1	10000	9.3	0.7	mg/kg	0.0336	U	0.0376	U	0.035	U	0.0338	U
Aroclor 1242	53469-21-9	1	0.2		1	1	1	25	1	1	1	10000	9.3	20	mg/kg	0.0336	U	0.0376	U	0.035	U	0.0338	U
Aroclor 1248	12672-29-6	1	0.2		1	1	1	25	1	1	1	10000	9.3	46	mg/kg	0.0336	U	0.0376	U	0.035	U	0.0338	U
Aroclor 1254	11097-69-1	1	0.2		1	1	1	25	1	1	1	10000	4.4	46	mg/kg	0.0336	U	0.0376	U	0.035	U	0.0338	U
Aroclor 1260	11096-82-5	1	0.2		1	1	1	25	1	1	1	10000	9.3	46	mg/kg	0.0336	U	0.0376	U	0.035	U	0.0338	U
Aroclor 1262	37324-23-5	1	0.2		1	1	1	25	1	1	1	10000	60	0.26	mg/kg	0.0336	U	0.0376	U	0.035	U	0.0338	U
Aroclor 1268	11100-14-4	1	0.2		1	1	1	25	1	1	1	10000	12	0.068	mg/kg	0.0336	U	0.0376	U	0.035	U	0.0338	U
PCBs, Total	1336-36-3	1	0.2		1	1	1	25	1	1	1	10000	2700	7300	mg/kg	0.17	U	0.19	U	0.18	U	0.17	U
<b>Semivolatile Organics by GC/MS</b>																							
1,2,4,5-Tetrachlorobenzene	95-94-3															0.17	U	0.19	U	0.18	U	0.17	U
1,2,4-Trichlorobenzene	120-82-1	820	73													0.17	U	0.19	U	0.18	U	0.17	U
1,2-Dichlorobenzene	95-50-1	59000	5300		1.1	1.1	1.1	1000	100	500	10000	3800	59	mg/kg	0.17	U	0.19	U	0.18	U	0.17	U	
1,3-Dichlorobenzene	541-73-1	59000	5300		2.4	2.4	2.4	560	17	49	280	10000	10000	61	mg/kg	0.17	U	0.19	U	0.18	U	0.17	U
1,4-Dichlorobenzene	106-46-7	13	5		1.8	1.8	1.8	250	9.8	13	230	40	10	mg/kg	0.17	U	0.19	U	0.18	U	0.17	U	
1,4-Dioxane	123-91-1				0.1	0.1	0.1	250	9.8	13	130	510	89	0.42	mg/kg	0.026	U	0.029	U	0.027	U	0.13	U
2,4,5-Trichlorophenol	95-95-4	68000	6100													0.17	U	0.19	U	0.18	U	0.17	U
2,4,6-Trichlorophenol	88-06-2	74	19													0.17	U	0.19	U	0.18	U	0.17	U
2,4-Dichlorophenol	120-83-2	2100	180													0.16	U	0.17	U	0.16	U	0.17	U
2,4-Dimethylphenol	105-67-9	14000	1200																				

**Table 1 Waste Classification Soil Analytical Results**  
**25th Avenue, Between Hunter Avenue and Gravesend Bay**  
**Brooklyn, New York**

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LOCATION SAMPLING DATE LAB SAMPLE ID SAMPLE TYPE	CasNum	EPA-TCLP	NJ-NRDCSRs	NY-CP51	NY-DER10-CIU	NY-DER10-RRU	NY-DER10-RU	NY-RESI	NY-RESR	NY-RESRR	NY-RESC	PA-NRDCS2	PA-RDCS	PA-RFCL	Units	WC-1		WC-2		WC-3		WC-4					
																1/21/2022		1/21/2022		1/21/2022		1/21/2022					
																L2203656-01		L2203656-02		L2203656-03		L2203656-04					
																SOIL		SOIL		SOIL		SOIL					
Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual				
Lead, Total	7439-92-1	800	400	450	400	400	3900	400	400	1000	190000	500	450	mg/kg	14.3	4.86	11.9	55.5									
Magnesium, Total	7439-95-4															465	498	233					13400				
Manganese, Total	7439-96-5	5900	11000		2000	2000	2000	10000	2000	2000	190000	31000	2000	mg/kg	59.1	20	36.5					111					
Mercury, Total	7439-97-6	65	23	0.73	0.73	0.73	5.7	0.81	0.81	2.8	190000	35	10	mg/kg	0.065	U	0.074	U	0.069	U	0.048	J					
Nickel, Total	7440-02-0	23000	1600	130	130	130	10000	140	310	190000	4400	650	mg/kg	2.65		2.8		1.99	J	9.97							
Potassium, Total	7440-09-7															101	J	238	75.5	J	330						
Selenium, Total	7782-49-2	5700	390	4	4	4	6800	36	180	1500	190000	1100	26	mg/kg	1.58	U	1.84	U	1.64	U	1.63	U					
Silver, Total	7440-22-4	5700	390	8.3	8.3	8.3	6800	36	180	1500	190000	1100	84	mg/kg	0.791	U	0.918	U	0.823	U	0.816	U					
Sodium, Total	7440-23-5															21.9	J	108	J	10.9	J	1090					
Thallium, Total	7440-28-0															1.58	U	1.84	U	1.64	U	1.63	U				
Vanadium, Total	7440-62-2	1100	78													190000	15	220	mg/kg	4	3.4	2.92	9.44				
Zinc, Total	7440-66-6	110000	23000	2480	2480	2200	10000	2200	10000	10000	190000	66000	12000	mg/kg	21.8		18.5		11.2		108						
<b>Volatile Organics by EPA 5035</b>																											
1,1,1,2-Tetrachloroethane	630-20-6																340	60	18	mg/kg	0.00069	U	0.00055	U			
1,1,1-Trichloroethane	71-55-6			160000		0.68	0.68	0.68	1000	100	500	10000	10000	7.2	mg/kg	0.00069	U	0.00055	U	0.00059	U	0.00068	U				
1,1,2,2-Tetrachloroethane	79-34-5	3	1													44	7.6	0.13	mg/kg	0.00069	U	0.00055	U				
1,1,2-Trichloroethane	79-00-5	6	2													18	3.8	0.15	mg/kg	0.0014	U	0.0011	U				
1,1-Dichloroethane	75-34-3	24	8		0.27	0.27	0.27	480	19	26	240	1600	280	3.9	mg/kg	0.0014	U	0.0011	U	0.0012	U	0.0014	U				
1,1-Dichloroethene	75-35-4	150	11		0.33	0.33	0.33	1000	100	500	10000	3800	0.19	mg/kg	0.0014	U	0.0011	U	0.0012	U	0.0014	U					
1,1-Dichloropropene	563-58-6															0.00069	U	0.00055	U	0.00059	U	0.00068	U				
1,2,3-Trichlorobenzene	87-61-6															0.0028	U	0.0022	U	0.0024	U	0.0027	U				
1,2,3-Trichloropropane	96-18-4															0.0028	U	0.0022	U	0.0024	U	0.0027	U				
1,2,4,5-Tetraethylbenzene	95-93-2															27	0.14	3	mg/kg	0.0028	U	0.0022	U				
1,2,4-Trichlorobenzene	120-82-1	820	73	3.6	3.6	3.6	380	47	52	190	5400	1100	35	mg/kg	0.0028	U	0.0022	U	0.0024	U	0.0027	U					
1,2,4,Trimethylbenzene	95-63-6															4.2	0.74	0.0012	mg/kg	0.0028	U	0.0022	U				
1,2-Dibromo-3-chloropropane	96-12-8	0.2	0.08													0.42	0.029	0.0092	mg/kg	0.0042	U	0.0033	U				
1,2-Dibromoethane	106-93-4	0.04	0.008													0.0014	U	0.0011	U	0.0012	U	0.0014	U				
1,2-Dichlorobenzene	95-50-1	59000	5300	1.1	1.1	1.1	1000	100	100	500	10000	3800	59	mg/kg	0.0028	U	0.0022	U	0.0024	U	0.0027	U					
1,2-Dichloroethane	107-06-2	3	0.9		0.02	0.02	0.02	60	2.3	3.1	30	98	17	0.1	mg/kg	0.0014	U	0.0011	U	0.0012	U	0.0014	U				
1,2-Dichloroethene, Total	540-59-0															0.0014	U	0.0011	U	0.0012	U	0.0014	U				
1,2-Dichloropropane	78-87-5	5	2				8.4	8.4	8.4	8.4	380	47	52	190	5400	1100	210	mg/kg	0.0028	U	0.0022	U	0.0024	U	0.0027	U	
1,3,5-Trimethylbenzene	108-67-8															0.69	0.12	0.11	mg/kg	0.0028	U	0.0022	U	0.0024	U	0.0027	U
1,3-Dichlorobenzene	541-73-1	59000	5300				2.4	2.4	560	17	49	280	10000	10000	61	mg/kg	0.0028	U	0.0022	U	0.0024	U	0.0027	U			
1,3-Dichloropropane	142-28-9															640	110	110	mg/kg	0.0069	U	0.0055	U	0.0059	U	0.0068	U
1,3-Dichloropropene, Total	542-75-6															0.0069	U	0.0055	U	0.0059	U	0.0068	U				
1,4-Dichlorobenzene	106-46-7	13	5		1.8	1.8	1.8	250	9.8	13	130	230	40	10	mg/kg	0.0028	U	0.0022	U	0.0024	U	0.0027	U				
1,4-Dioxane	123-91-1				0.1	0.1	0.1	250	9.8	13	130	510	89	0.42	mg/kg	0.11		0.088	U	0.094	U	0.11					
2,2-Dichloropropane	594-20-7															0.0028	U	0.0022	U	0.0024	U	0.0027	U				
2-Butanone	78-93-3	44000	3100		0.12	0.12	0.12	1000	100	100	500	10000	10000	76	mg/kg	0.014	U	0.011	U	0.012	U	0.014	U				
2-Hexanone	591-78-6															2700	570	6.4	mg/kg	0.014	U	0.011	U	0.012	U	0.014	U
4-Methyl-2-pentanone	108-10-1															10000	10000	140	mg/kg	0.014	U	0.011	U	0.012	U	0.014	U
Acetone	67-64-1		70000		0.05	0.05	0.05	1000	100	100	500	10000	10000	1200	mg/kg	0.014	U	0.011	U	0.012	U	0.014	U				
Acrylonitrile	107-13-1	3	0.9													37	6.5	0.051	mg/kg	0.0055	U	0.0044	U	0.0047	U	0.0055	U
Benzene	71-43-2	5	2	0.06	0.06	0.06	0.06	89	2.9	4.8	44	330	57	0.13	mg/kg	0.0069	U	0.0055	U	0.0059	U	0.0068	U				
Bromobenzene	108-86-1															5400	1100	1100	mg/kg	0.0028	U	0.0022	U	0.0024	U	0.0027	U
Bromochloromethane	74-97-5															3600	760	1.6	mg/kg	0.0028	U	0.0022	U	0.0024	U	0.0027	U
Bromodichloromethane	75-27-4	3	1													69	12	2.7	mg/kg	0.0069	U	0.0055	U	0.0059	U	0.0068	U
Bromoform	75-25-2	280	81													2300	400	3.5	mg/kg	0.0055	U	0.0044	U	0.0047	U	0.0055	U
Bromomethane	74-83-9	59	25													460	95	0.54	mg/kg	0.0028	U	0.0022	U	0.0024	U	0.0027	U
Carbon disulfide	75-15-0	110000	7800	1	1	1	1	780	30	41	390	1000	180	46	mg/kg	0.014	U	0.011	U	0.012	U	0.014	U				
Carbon tetrachloride	56-23-5	4	2		0.76	0.76	0.76	44	1.4	2.4	22	430	75	0.26	mg/kg	0.014	U	0.011	U	0.012	U	0.014	U				
Chlorobenzene	108-90-7	7400	510		1.1	1.1	1.1	1000	100	100	500</td																

**Table 1 Waste Classification Soil Analytical Results**  
**25th Avenue, Between Hunter Avenue and Gravesend Bay**  
**Brooklyn, New York**

LOCATION SAMPLING DATE LAB SAMPLE ID SAMPLE TYPE	CasNum	EPA-TCLP	NJ-NRDCSRs	NY-CP51	NY-DER10-CIU	NY-DER10-RRU	NY-DER10-RU	NY-RESI	NY-RESR	NY-RESRR	NY-RESC	PA-NRDCS2	PA-RDCS	PA-RFCL	Units	WC-1		WC-2		WC-3		WC-4		
																1/21/2022		1/21/2022		1/21/2022		1/21/2022		
																L2203656-01	SOIL	L2203656-02	SOIL	L2203656-03	SOIL	L2203656-04	SOIL	
o-Xylene	95-47-6		170000	12000	0.26								9100	1900	mg/kg	0.0014	U	0.0011	U	0.0012	U	0.0014	U	
p-Chlorotoluene	106-43-4												10000	4400	10	mg/kg	0.0028	U	0.0022	U	0.0024	U	0.0027	U
p-Diethylbenzene	105-05-5												mg/kg	0.0028	U	0.0022	U	0.0024	U	0.0027	U	0.0027	U	
p-Ethyltoluene	622-96-8												mg/kg	0.0028	U	0.0022	U	0.0024	U	0.0024	U	0.0027	U	
p-Isopropyltoluene	99-87-6				10								mg/kg	0.0016		0.00022	J	0.0012	U	0.0014	U	0.0014	U	
p/m-Xylene	179601-23-1	170000	12000	0.26									9100	1900	mg/kg	0.0028	U	0.0022	U	0.0024	U	0.0027	U	
sec-Butylbenzene	135-98-8		12000	11	11	11	1000	100	100	500	10000	10000	2800	mg/kg	0.0014	U	0.0011	U	0.0012	U	0.0014	U		
Styrene	100-42-5	260	90		5.9	5.9	5.9	1000	100	500	10000	10000	24	mg/kg	0.0014	U	0.0011	U	0.0012	U	0.0014	U		
tert-Butylbenzene	98-06-6				5.9	5.9	5.9	1000	100	500	10000	10000	2200	mg/kg	0.0028	U	0.0022	U	0.0024	U	0.0027	U		
Tetrachloroethene	127-18-4	1500	43		1.3	1.3	1.3	300	5.5	19	150	3600	760	0.43	mg/kg	0.00069	U	0.00055	U	0.00059	U	0.00068	U	
Toluene	108-88-3	91000	6300	0.7	0.7	0.7	1000	100	100	500	10000	10000	44	mg/kg	0.0014	U	0.0011	U	0.0012	U	0.0014	U		
trans-1,2-Dichloroethene	156-60-5	720	300		0.19	0.19	1000	100	100	500	10000	4400	2.3	mg/kg	0.0021	U	0.0016	U	0.0018	U	0.002	U		
trans-1,3-Dichloropropene	10061-02-6	7	2										640	110	mg/kg	0.0014	U	0.0011	U	0.0012	U	0.0014	U	
trans-1,4-Dichloro-2-butene	110-57-6												0.6	0.11	0.0039	mg/kg	0.0069	U	0.0055	U	0.0059	U	0.0068	U
Trichloroethene	79-01-6	10	3		0.47	0.47	0.47	400	10	21	200	180	38	0.17	mg/kg	0.00069	U	0.00055	U	0.00059	U	0.00068	U	
Trichlorofluoromethane	75-69-4	340000	23000										10000	10000	87	mg/kg	0.0055	U	0.0044	U	0.0047	U	0.0055	U
Vinyl acetate	108-05-4												10000	3800	21	mg/kg	0.014	U	0.011	U	0.012	U	0.014	U
Vinyl chloride	75-01-4	2	0.7	0.02	0.02	0.02	27	0.21	0.9	13	290	0.93	0.027	mg/kg	0.0014	U	0.0011	U	0.0012	U	0.0014	U		
Xylenes, Total	1330-20-7	170000	12000	0.26	1.6	1.6	1.6	1000	100	500	9100	1900	990	mg/kg	0.0014	U	0.0011	U	0.0012	U	0.0014	U		

**Footnotes:**

EPA-TCLP: EPA Toxicity Characteristic (TCLP) Regulatory Levels

NJ-NRDCSRs: New Jersey 2017 Non-Residential Direct Contact Soil Remediation Standards

NJ-RDCSRs: New Jersey 2017 Residential Direct Contact Soil Remediation Standards

NY-DER10-CIU: New York DER-10 Commercial or Industrial Use Allowable Constituent Levels for Imported Fill & Soil

NY-DER10-RRU: New York DER-10 Restricted Residential Use Allowable Constituent Levels for Imported Fill & Soil Criteria

NY-DER10-RU: New York DER-10 Restricted Use Allowable Constituent Levels for Imported Fill & Soil Criteria

NY-RESI: New York NYCR Part 375 Industrial Criteria, New York Restricted use Criteria

NY-RESR: New York NYCR Part 375 Residential Criteria, New York Restricted use Criteria

NY-RESRR: New York NYCR Part 375 Restricted-Residential Criteria, New York Restricted use Criteria

NY-RESC: New York NYCR Part 375 Commercial Criteria, New York Restricted use Criteria

PA-NRDCS2: Pennsylvania Non-Residential Direct Contact Subsurface Soil (2'-15')

PA-RDCS: Pennsylvania Residential Direct Contact Soil MSCs

PA-RFCL: Pennsylvania Regulated Fill Concentration Limits Criteria

Yellow highlight: indicates detection above a standard

Gray Highlight Indicates Non-detect: Detection Limit above limit

SU: Standard Units

mg/kg: milligram per kilogram

mg/L: milligram per liter

Q - The quality control sample exceeds the associated acceptance criteria.

U - Not detected at the reported detection limit for the sample.

Table 2 Soil Analytical Results  
25th Avenue, Between Hunter Avenue and Gravesend Bay  
Brooklyn, New York

SAMPLE ID:	CAS	EPA-TCLP	NJ-RDCCSRs	NJ-RDCRS	PA-RDCS2	PA-RDCS	NY-DER10-CIU	NY-DER10-RRU	NY-DER10-RU	NY-RESI	NY-RESC	PA-RFCL	SB4-S	L2209984-01	SB4-S2	L2209984-02	SB4-N	L2209984-03	SB4-N2	L2209984-04	SB4-E	L2209984-05	SB4-W	L2209984-06										
LAB ID:													SOIL	2/24/2022	SOIL	2/24/2022	SOIL	2/24/2022	SOIL	2/24/2022	SOIL	2/24/2022	SOIL	2/24/2022										
COLLECTION DATE:													Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL						
SAMPLE MATRIX:		(mg/l)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL						
ANALYTE																																		
<b>TOTAL METALS</b>																																		
Lead, Total	7439-92-1	800	400	190000	500	450	400	400	3900	400	1000	450	98.8	2.09	0.11	224	2.16	0.12	20	2.16	0.12	230	2.1	0.11	49.1	2.28	0.12	10.9	2.27	0.12				
<b>TCLP METALS BY EPA 1311</b>																																		
Lead, TCLP	7439-92-1	5												0.05	J	0.5	0.03	0.94	0.5	0.03	ND	0.5	0.03	0.17	J	0.5	0.03	0.06	J	0.5	0.03	ND	0.5	0.03
<b>GENERAL CHEMISTRY</b>																																		
Solids, Total	NONE													91.4	0.1	NA	90.9	0.1	NA	90.3	0.1	NA	90	0.1	NA	86.6	0.1	NA	87.7	0.1	NA			

\* Comparison is not performed on parameters with non-numeric criteria.

Footnotes:

EPA-TCLP: EPA Toxicity Characteristic (TCLP) Regulatory Levels Criteria per 40CFR Part 261 as of September 10, 2015.

NJ-RDCCSRs: New Jersey 2017 Non-Residential Direct Contact Soil Remediation Standards Criteria per Soil Remediation Standards, last amended September 18, 2017.

NJ-RDCRS: New Jersey 2017 Residential Direct Contact Soil Remediation Standards Criteria per Soil Remediation Standards, last amended September 18, 2017.

PA-RDCS2: Pennsylvania Non-Residential Direct Contact Subsurface Soil (2-15) MSCs Criteria per November 20, 2021 Statewide Health Standards.

PA-RDCS: Pennsylvania Residential Direct Contact Soil MSCs Criteria per November 1, 2020.

PA-RFCL: Pennsylvania Regulated Fill Concentration Limits Criteria per Waste Management Regulations effective January 1, 2020.

NY-DER10-CIU: New York DER-10 Commercial or Industrial Use Allowable Constituent Levels for Imported Fill & Soil Criteria per DER-10 Technical Guidance for Site Investigation & Remediation issued May 3, 2010.

NY-DER10-RRU: New York DER-10 Restricted Residential Use Allowable Constituent Levels for Imported Fill & Soil Criteria per DER-10 Technical Guidance for Site Investigation & Remediation issued May 3, 2010.

NY-DER10-RU: New York DER-10 Restricted Use Allowable Constituent Levels for Imported Fill & Soil Criteria per DER-10 Technical Guidance for Site Investigation & Remediation issued May 3, 2010.

NY-RESI: New York NYCCR Part 375 Industrial Criteria, New York Restricted use Criteria per 6 NYCCR Part 375 Environmental Remediation Programs, effective December 14, 2006.

NY-RESC: New York NYCCR Part 375 Residential Criteria, New York Restricted use Criteria per 6 NYCCR Part 375 Environmental Remediation Programs, effective December 14, 2006.

SU: Standard Units

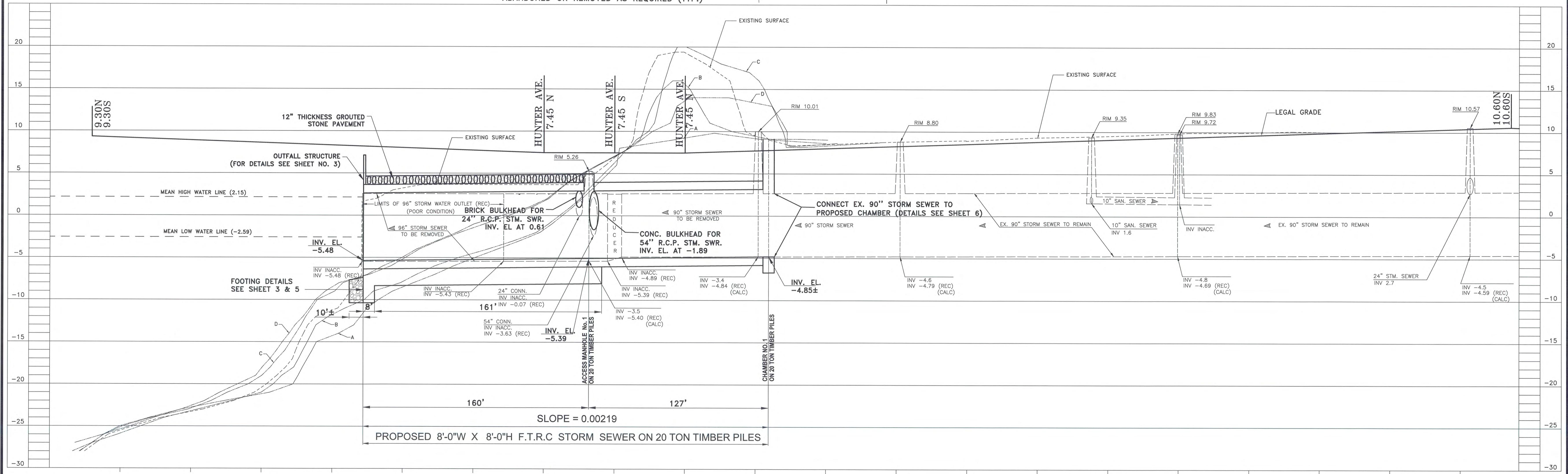
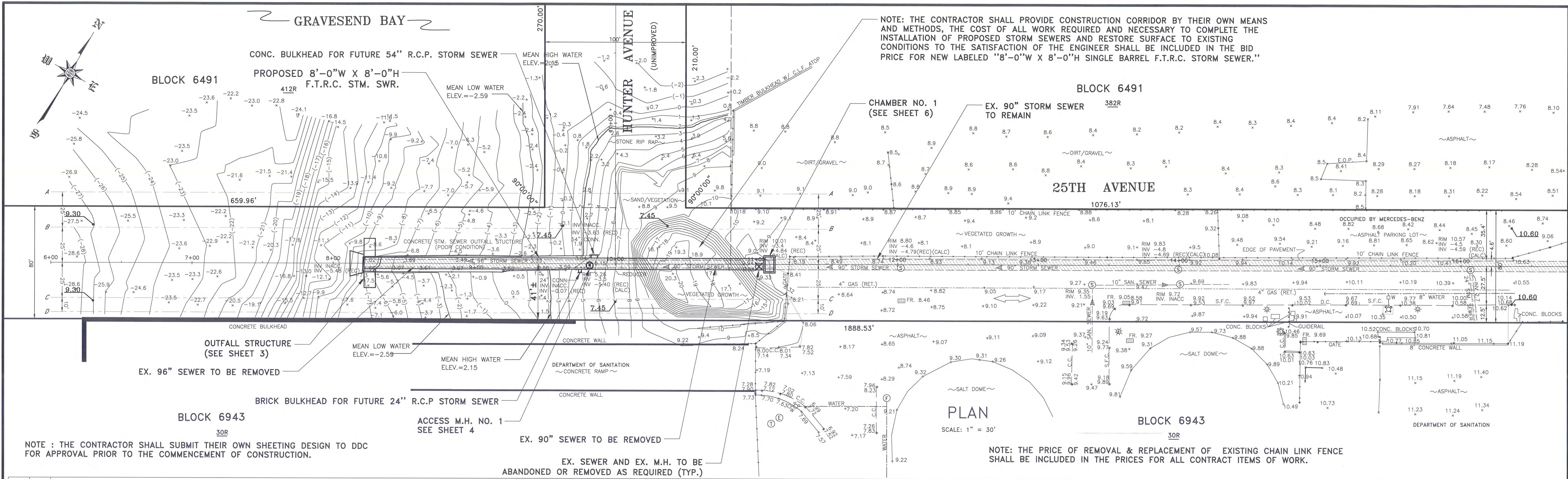
mg/kg: milligram per kilogram

mg/L: milligram per liter

Q - The quality control sample exceeds the associated acceptance criteria.

J: indicates that analyte concentration is an estimated value

**Exhibit 1**  
**Phase Construction Diagrams**



**SEWER PROFILE ALONG 25TH AVENUE**

SCALE: VERT: 1" = 5'  
HORIZ: 1" = 30'

**NOTES:**  
1. ALL ELEVATIONS REFER TO NAVD88 DATUM, ESTABLISHED BY GLOBAL POSITIONING SYSTEM METHODOLOGY, USING (GEOID 12A).  
2. MEAN HIGH WATER ELEVATION= 2.15 FEET (NAVD88). MEAN LOW WATER ELEVATION= -2.59 FEET (NAVD88), BASED ON NOAA PROGRAM VDATUM FOR NAVD88 (GEOID12A).  
3. DATUM CONVERSION NAVD88 ELEVATIONS TO BROOKLYN SEWER DATUM ELEVATIONS = -0.617 FEET.  
4. DATUM CONVERSION NAVD88 ELEVATIONS TO BROOKLYN HIGHWAY DATUM ELEVATIONS = -1.447 FEET

NO.	DATE	DESCRIPTIONS	BY APP'R'D
		REVISIONS	

TOPOGRAPHIC SURVEY PREPARED BY:  
X  
X  
X  
LICENSED LAND SURVEYOR

DESIGNED \_\_\_\_\_ M.K.  
DRAWN \_\_\_\_\_ M.K.  
CHECKED \_\_\_\_\_ R.L.C.L.  
SCALE AS SHOWN  
CADD FILE SEE 20070 SHG (PLAN AND PROFILE VIEW)  
Shirley Robins  
ENGINEER-IN-CHARGE  
Tina J.  
DIRECTOR

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

25th AVE. BETWEEN HUNTER AVE. AND GRAVESEND BAY  
STORM SEWER OUTFALL  
PLAN AND PROFILE

CONSTRUCTION OF 8'-0"W X 8'-0"H STORM SEWER  
ALONG 25TH AVE.  
BOROUGH OF BROOKLYN

PROJECT ID: SEK - 20070 DATE: 01/31/2019 SHEET 2 OF 6

**Exhibit 2**  
**Laboratories Certifications**

**NEW YORK STATE DEPARTMENT OF HEALTH  
WADSWORTH CENTER**



Expires 12:01 AM April 01, 2022  
Issued April 01, 2021

**CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE**

*Issued in accordance with and pursuant to section 502 Public Health Law of New York State*

**MR. JOSEPH L. WATKINS  
ALPHA ANALYTICAL  
8 WALKUP DR  
WESTBOROUGH, MA 01581-1019**

**NY Lab Id No: 11148**

*is hereby APPROVED as an Environmental Laboratory in conformance with the  
National Environmental Laboratory Accreditation Conference Standards (2016) for the category  
**ENVIRONMENTAL ANALYSES POTABLE WATER**  
All approved analytes are listed below:*

**Bacteriology**

Coliform, Total / E. coli (Qualitative)	SM 20, 21-23 9223B (-04) (Colilert)
E. coli (Enumeration)	SM 20, 21-23 9223B (-04) (Colilert)
Heterotrophic Plate Count	SM 20, 21-23 9215B (-04)

**Non-Metals**

Nitrate (as N)	EPA 353.2 Rev. 2.0
	EPA 300.0 Rev. 2.1
	SM 21-23 4500-NO3 F (-00)

**Fuel Additives**

Methyl tert-butyl ether	EPA 524.2
Naphthalene	EPA 524.2

**Nitrite (as N)**

Orthophosphate (as P)	SM 21-23 4500-NO3 F (-00)
Solids, Total Dissolved	SM 21-23 4500-NO2 B (-00)
Specific Conductance	SM 19, 21-23 4500-P E (-99)
Sulfate (as SO4)	SM 21-23 2540C (-97)
	SM 21-23 2510B (-97)
	EPA 300.0 Rev. 2.1

**Microextractables**

1,2,3-Trichloropropane, Low Level	EPA 504.1
1,2-Dibromo-3-chloropropane, Low Level	EPA 504.1
1,2-Dibromoethane, Low Level	EPA 504.1

**Trihalomethanes**

Bromodichloromethane	EPA 524.2
Bromoform	EPA 524.2
Chloroform	EPA 524.2
Dibromochloromethane	EPA 524.2
Total Trihalomethanes	EPA 524.2

**Miscellaneous**

Odor	SM 21-23 2150 B (-97)
Organic Carbon, Dissolved	SM 21-23 5310C (-00)
Organic Carbon, Total	SM 21-23 5310C (-00)
Perchlorate	EPA 332.0 Rev. 1
Turbidity	SM 21-23 2130 B (-01)
	EPA 180.1 Rev. 2.0

**Volatile Aromatics**

1,2,3-Trichlorobenzene	EPA 524.2
1,2,4-Trichlorobenzene	EPA 524.2
1,2,4-Trimethylbenzene	EPA 524.2
1,2-Dichlorobenzene	EPA 524.2
1,3,5-Trimethylbenzene	EPA 524.2
1,3-Dichlorobenzene	EPA 524.2
1,4-Dichlorobenzene	EPA 524.2
2-Chlorotoluene	EPA 524.2

**Non-Metals**

Alkalinity	SM 21-23 2320B (-97)
Chloride	EPA 300.0 Rev. 2.1
Color	SM 21-23 2120B (-01)
Cyanide	SM 20, 21-23 4500-CN E
Fluoride, Total	EPA 300.0 Rev. 2.1
	SM 21-23 4500-F C (-97)

**Serial No.: 62895**

Property of the New York State Department of Health. Certificates are valid only at the address shown, must be conspicuously posted, and are printed on secure paper. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify the laboratory's accreditation status.



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ENVIRONMENTAL ANALYSES POTABLE WATER  
All approved analytes are listed below:*

**Volatile Aromatics**

4-Chlorotoluene	EPA 524.2
Benzene	EPA 524.2
Bromobenzene	EPA 524.2
Chlorobenzene	EPA 524.2
Ethyl benzene	EPA 524.2
Hexachlorobutadiene	EPA 524.2
Isopropylbenzene	EPA 524.2
n-Butylbenzene	EPA 524.2
n-Propylbenzene	EPA 524.2
p-Isopropyltoluene (P-Cymene)	EPA 524.2
sec-Butylbenzene	EPA 524.2
Styrene	EPA 524.2
tert-Butylbenzene	EPA 524.2
Toluene	EPA 524.2
Total Xylenes	EPA 524.2

**Volatile Halocarbons**

1,2-Dichloropropane	EPA 524.2
1,3-Dichloropropane	EPA 524.2
2,2-Dichloropropane	EPA 524.2
Bromoform	EPA 524.2
Bromochloromethane	EPA 524.2
Bromomethane	EPA 524.2
Carbon tetrachloride	EPA 524.2
Chloroethane	EPA 524.2
Chloromethane	EPA 524.2
cis-1,2-Dichloroethene	EPA 524.2
cis-1,3-Dichloropropene	EPA 524.2
Dibromomethane	EPA 524.2
Dichlorodifluoromethane	EPA 524.2
Methylene chloride	EPA 524.2
Tetrachloroethene	EPA 524.2
trans-1,2-Dichloroethene	EPA 524.2
trans-1,3-Dichloropropene	EPA 524.2
Trichloroethene	EPA 524.2
Trichlorofluoromethane	EPA 524.2
Vinyl chloride	EPA 524.2

**Sample Preparation Methods**

SM 20, 21-23 4500-CN C (-99)

Serial No.: 62895

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ENVIRONMENTAL ANALYSES NON POTABLE WATER  
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**Acrylates**

Acrolein (Propenal)	EPA 8260D
	EPA 8260C
	EPA 624.1
Acrylonitrile	EPA 8260D
	EPA 8260C
	EPA 624.1
Ethyl methacrylate	EPA 8260D
	EPA 8260C
Methyl methacrylate	EPA 8260D
	EPA 8260C

**Amines**

Aniline	EPA 8270D
	EPA 8270E
Carbazole	EPA 625.1
	EPA 8270D
Diphenylamine	EPA 8270D
	EPA 8270E
Pyridine	EPA 625.1
	EPA 8270D
	EPA 8270E

**Amines**

1,2-Diphenylhydrazine	EPA 625.1
	EPA 8270D
	EPA 8270E
2-Naphthylamine	EPA 8270D
	EPA 8270E
2-Nitroaniline	EPA 8270D
	EPA 8270E
3-Nitroaniline	EPA 8270D
	EPA 8270E
4-Chloroaniline	EPA 8270D
	EPA 8270E
4-Nitroaniline	EPA 8270D
	EPA 8270E
Aniline	EPA 625.1

**Bacteriology**

Coliform, Fecal	SM 9221C E-2006
Heterotrophic Plate Count	SM 18-21 9215B

**Benzidines**

3,3'-Dichlorobenzidine	EPA 625.1
	EPA 8270D
	EPA 8270E
Benzidine	EPA 625.1
	EPA 8270D
	EPA 8270E

**Chlorinated Hydrocarbon Pesticides**

4,4'-DDD	EPA 8081B
	EPA 608.3
4,4'-DDE	EPA 8081B

Serial No.: 62896

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NEW YORK STATE DEPARTMENT OF HEALTH  
WADSWORTH CENTER



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MR. JOSEPH L. WATKINS  
ALPHA ANALYTICAL  
8 WALKUP DR  
WESTBOROUGH, MA 01581-1019

NY Lab Id No: 11148

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ENVIRONMENTAL ANALYSES NON POTABLE WATER*

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**Chlorinated Hydrocarbon Pesticides**

4,4'-DDE	EPA 608.3
4,4'-DDT	EPA 8081B
	EPA 608.3
Aldrin	EPA 8081B
	EPA 608.3
alpha-BHC	EPA 8081B
	EPA 608.3
alpha-Chlordane	EPA 8081B
beta-BHC	EPA 8081B
	EPA 608.3
Chlordane Total	EPA 8081B
	EPA 608.3
delta-BHC	EPA 8081B
	EPA 608.3
Dieldrin	EPA 8081B
	EPA 608.3
Endosulfan I	EPA 8081B
	EPA 608.3
Endosulfan II	EPA 8081B
	EPA 608.3
Endosulfan sulfate	EPA 8081B
	EPA 608.3
Endrin	EPA 8081B
	EPA 608.3
Endrin aldehyde	EPA 8081B
	EPA 608.3

**Chlorinated Hydrocarbon Pesticides**

Endrin Ketone	EPA 8081B
gamma-Chlordane	EPA 8081B
Heptachlor	EPA 8081B
	EPA 608.3
Heptachlor epoxide	EPA 8081B
Lindane	EPA 8081B
Methoxychlor	EPA 8081B
	EPA 608.3
Mirex	EPA 8081B
PCNB	EPA 8270D
Toxaphene	EPA 8081B
	EPA 608.3
	EPA 8270E
	EPA 8081B
	EPA 608.3
	EPA 8260D
	EPA 8260C
	EPA 8270D
	EPA 8270E
	EPA 625.1
	EPA 8270D
	EPA 8270E
	EPA 625.1
	EPA 8270D

**Chlorinated Hydrocarbons**

1,2,3-Trichlorobenzene	EPA 8260D
1,2,4,5-Tetrachlorobenzene	EPA 8260C
	EPA 8270D
	EPA 8270E
1,2,4-Trichlorobenzene	EPA 8270E
2-Choronaphthalene	EPA 625.1
	EPA 8270D
	EPA 8270E
	EPA 625.1
	EPA 8270D

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**Chlorinated Hydrocarbons**

2-Chloronaphthalene	EPA 8270E
Hexachlorobenzene	EPA 625.1
	EPA 8270D
	EPA 8270E
Hexachlorobutadiene	EPA 625.1
	EPA 8270D
	EPA 8270E
Hexachlorocyclopentadiene	EPA 625.1
	EPA 8270D
	EPA 8270E
Hexachloroethane	EPA 625.1
	EPA 8270D
	EPA 8270E

**Demand**

Chemical Oxygen Demand	EPA 410.4, Rev. 2.0 (1993)
	SM 5220D-2011

**Fuel Oxygenates**

Di-isopropyl ether	EPA 8260D
Ethanol	EPA 8260C
Methyl tert-butyl ether	EPA 8260D
tert-amyl methyl ether (TAME)	EPA 8260C
tert-butyl alcohol	EPA 8264.1
	EPA 8260D
	EPA 8260C
	EPA 8260D
	EPA 8260C
	EPA 8260D
	EPA 8260C
	EPA 8260D
	EPA 8260C
	EPA 8260D
	EPA 8260C
	EPA 8260D
	EPA 8260C
	EPA 8260D
	EPA 8260C

**Chlorophenoxy Acid Pesticides**

2,4,5-T	EPA 8151A
2,4,5-TP (Silvex)	EPA 8151A
2,4-D	EPA 8151A
2,4-DB	EPA 8151A
Dalapon	EPA 8151A
Dicamba	EPA 8151A
Dichloroprop	EPA 8151A
Dinoseb	EPA 8151A

**Haloethers**

2,2'-Oxybis(1-chloropropane)	EPA 625.1
tert-butyl ethyl ether (ETBE)	EPA 8260D
	EPA 8260C
	EPA 8270D
	EPA 8270E
	EPA 625.1
	EPA 8270D
	EPA 8270E
	EPA 625.1
	EPA 8270D
	EPA 8270E
	EPA 625.1

**Demand**

Biochemical Oxygen Demand	SM 5210B-2011
Carbonaceous BOD	SM 5210B-2011

4-Chlorophenylphenyl ether

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**Haloethers**

4-Chlorophenylphenyl ether	EPA 8270D
	EPA 8270E
Bis(2-chloroethoxy)methane	EPA 625.1
	EPA 8270D
Bis(2-chloroethyl)ether	EPA 8270E
	EPA 625.1
	EPA 8270D
	EPA 8270E

**Low Level Halocarbons**

1,2,3-Trichloropropane, Low Level	EPA 8011
1,2-Dibromo-3-chloropropane, Low Level	EPA 8011
1,2-Dibromoethane, Low Level	EPA 8011

**Low Level Polynuclear Aromatics**

Acenaphthene Low Level	EPA 8270D SIM
	EPA 8270E SIM
Acenaphthylene Low Level	EPA 8270D SIM
	EPA 8270E SIM
Anthracene Low Level	EPA 8270D SIM
	EPA 8270E SIM
Benzo(a)anthracene Low Level	EPA 8270D SIM
	EPA 8270E SIM
Benzo(a)pyrene Low Level	EPA 8270D SIM
	EPA 8270E SIM
Benzo(b)fluoranthene Low Level	EPA 8270D SIM
	EPA 8270E SIM

**Low Level Polynuclear Aromatics**

Benzo(g,h,i)perylene Low Level	EPA 8270D SIM
Benzo(k)fluoranthene Low Level	EPA 8270D SIM
Chrysene Low Level	EPA 8270D SIM
Dibenzo(a,h)anthracene Low Level	EPA 8270D SIM
Fluoranthene Low Level	EPA 8270D SIM
Fluorene Low Level	EPA 8270D SIM
Indeno(1,2,3-cd)pyrene Low Level	EPA 8270D SIM
Naphthalene Low Level	EPA 8270D SIM
Phenanthrene Low Level	EPA 8270D SIM
Pyrene Low Level	EPA 8270D SIM

**Metals I**

Iron, Total	SM 3500-Fe B-2011
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**Metals II**

Chromium VI	EPA 7196A
	SM 3500-Cr B-2011

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Mineral	Miscellaneous	
Acidity	Perchlorate	EPA 6860
Alkalinity	Phenols	EPA 420.1 (Rev. 1978)
Chloride	Specific Conductance	EPA 9065
		EPA 120.1 (Rev. 1982)
Fluoride, Total	EPA 9056A	SM 2510B-2011
	EPA 300.0, Rev. 2.1 (1993)	EPA 9050A
	SM 4500-F- C-2011	SM 4500-S2- D-2011
	EPA 9056A	SM 5540C-2011
Sulfate (as SO <sub>4</sub> )	EPA 300.0, Rev. 2.1 (1993)	SM 2130 B-2011
	SM 4500-SO <sub>4</sub> - E-2011	EPA 180.1, Rev. 2.0 (1993)
	EPA 9056A	
Miscellaneous	Nitroaromatics and Isophorone	
Bromide	1,3-Dinitrobenzene	EPA 8270D
Color	2,4-Dinitrotoluene	EPA 8270E
Cyanide, Total	LACHAT QuikChem 10-204-00-1-X	EPA 625.1
	EPA 9014	EPA 8270D
	SM 4500-CN E-2011	EPA 8270E
	EPA 9012B	EPA 625.1
Formaldehyde	2,6-Dinitrotoluene	EPA 8270D
non-Polar Extractable Material (TPH)	EPA 8315A	EPA 8270E
	EPA 1664A	EPA 625.1
	EPA 1664B	EPA 8270D
Oil and Grease Total Recoverable (HEM)	EPA 1664A	EPA 8270E
	EPA 1664B	EPA 625.1
Organic Carbon, Total	Isophorone	EPA 8270D
	Nitrobenzene	EPA 8270D
	SM 5310C-2011	EPA 8270E
	EPA 9060A	

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**Nitrosoamines**

N-Nitrosodimethylamine	EPA 625.1
	EPA 8270D
	EPA 8270E
N-Nitrosodi-n-propylamine	EPA 625.1
	EPA 8270D
	EPA 8270E
N-Nitrosodiphenylamine	EPA 625.1
	EPA 8270D
	EPA 8270E

**Nutrient**

Ammonia (as N)	SM 4500-NH3 H-2011
Kjeldahl Nitrogen, Total	EPA 350.1, Rev. 2.0 (1993)
	EPA 351.1 (Rev. 1978)
	SM 4500-NH3 H-2011
Nitrate (as N)	EPA 353.2, Rev. 2.0 (1993)
	EPA 300.0, Rev. 2.1 (1993)
	SM 4500-NO3 F-2011
	EPA 9056A
Nitrate-Nitrite (as N)	EPA 353.2, Rev. 2.0 (1993)
	SM 4500-NO3 F-2011
Nitrite (as N)	EPA 353.2, Rev. 2.0 (1993)
	SM 4500-NO3 F-2011
	SM 4500-NO2 B-2011
Orthophosphate (as P)	SM 4500-P E-2011
Phosphorus, Total	SM 4500-P E-2011

**Organophosphate Pesticides**

Atrazine	EPA 625.1
	EPA 8270D
	EPA 8270E
Parathion ethyl	EPA 8270D
	EPA 8270E
Thionazin	EPA 8270D
	EPA 8270E

**Petroleum Hydrocarbons**

Diesel Range Organics	EPA 8015D
Gasoline Range Organics	EPA 8015D

**Phthalate Esters**

Benzyl butyl phthalate	EPA 625.1
	EPA 8270D
	EPA 8270E
Bis(2-ethylhexyl) phthalate	EPA 625.1
	EPA 8270D
	EPA 8270E
Diethyl phthalate	EPA 625.1
	EPA 8270D
	EPA 8270E

**Diethyl phthalate**

Dimethyl phthalate	EPA 625.1
	EPA 8270D
	EPA 8270E
Di-n-butyl phthalate	EPA 625.1
	EPA 8270D
	EPA 8270E

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**Phthalate Esters**

Di-n-butyl phthalate	EPA 8270E
Di-n-octyl phthalate	EPA 625.1
	EPA 8270D
	EPA 8270E

**Polychlorinated Biphenyls**

Aroclor 1016 (PCB-1016)	EPA 8082A
	EPA 608.3
Aroclor 1221 (PCB-1221)	EPA 8082A
	EPA 608.3
Aroclor 1232 (PCB-1232)	EPA 8082A
	EPA 608.3
Aroclor 1242 (PCB-1242)	EPA 8082A
	EPA 608.3
Aroclor 1248 (PCB-1248)	EPA 8082A
	EPA 608.3
Aroclor 1254 (PCB-1254)	EPA 8082A
	EPA 608.3
Aroclor 1260 (PCB-1260)	EPA 8082A
	EPA 608.3
Aroclor 1262 (PCB-1262)	EPA 8082A
Aroclor 1268 (PCB-1268)	EPA 8082A

**Polynuclear Aromatics**

3-Methylcholanthrene	EPA 8270E
Acenaphthene	EPA 625.1
	EPA 8270D

**Polynuclear Aromatics**

Acenaphthene	EPA 8270E
Acenaphthylene	EPA 8270D
	EPA 8270E
Anthracene	EPA 625.1
Benzo(a)anthracene	EPA 8270D
	EPA 8270E
Benzo(a)pyrene	EPA 625.1
	EPA 8270D
Benzo(b)fluoranthene	EPA 625.1
	EPA 8270D
Benzo(g,h,i)perylene	EPA 625.1
	EPA 8270D
Benzo(k)fluoranthene	EPA 625.1
	EPA 8270D
Chrysene	EPA 625.1
Dibenzo(a,h)anthracene	EPA 625.1

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**Polynuclear Aromatics**

Dibenzo(a,h)anthracene

EPA 8270D

Fluoranthene

EPA 8270E

Fluorene

EPA 625.1



Indeno(1,2,3-cd)pyrene

EPA 8270D

Naphthalene

EPA 8270E

Phenanthrene

EPA 625.1

Pyrene

EPA 8270D

**Priority Pollutant Phenols**

2,3,4,6 Tetrachlorophenol

EPA 8270D

2,4,5-Trichlorophenol

EPA 8270E

**Priority Pollutant Phenols**

2,4,5-Trichlorophenol

EPA 8270E

2,4,6-Trichlorophenol

EPA 625.1

EPA 8270D

EPA 8270E

2,4-Dichlorophenol

EPA 625.1

EPA 8270D

EPA 8270E

2,4-Dimethylphenol

EPA 625.1

EPA 8270D

EPA 8270E

2,4-Dinitrophenol

EPA 625.1

EPA 8270D

EPA 8270E

2-Chlorophenol

EPA 625.1

EPA 8270D

EPA 8270E

2-Methyl-4,6-dinitrophenol

EPA 625.1

EPA 8270D

EPA 8270E

2-Methylphenol

EPA 625.1

EPA 8270D

EPA 8270E

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**Priority Pollutant Phenols**

3-Methylphenol	EPA 8270D
	EPA 8270E
4-Chloro-3-methylphenol	EPA 625.1
	EPA 8270D
	EPA 8270E
4-Methylphenol	EPA 625.1
	EPA 8270D
	EPA 8270E
4-Nitrophenol	EPA 625.1
	EPA 8270D
	EPA 8270E
Cresols, Total	EPA 8270E
	EPA 8270D
	EPA 8270E
Pentachlorophenol	EPA 625.1
	EPA 8270D
	EPA 8270E
Phenol	EPA 625.1
	EPA 8270D
	EPA 8270E

**Semi-Volatile Organics**

1,1'-Biphenyl	EPA 8270D
1,2-Dichlorobenzene, Semi-volatile	EPA 8270D
	EPA 8270E
1,3-Dichlorobenzene, Semi-volatile	EPA 8270D
	EPA 8270E
1,4-Dichlorobenzene, Semi-volatile	EPA 8270D
	EPA 8270E
2-Methylnaphthalene	EPA 8270D
	EPA 8270E
Acetophenone	EPA 625.1
	EPA 8270D
	EPA 8270E
Benzaldehyde	EPA 8270D
	EPA 8270E
Benzoic Acid	EPA 8270D
	EPA 8270E
Benzyl alcohol	EPA 8270D
	EPA 8270E
Caprolactam	EPA 8270D
	EPA 8270E
Dibenzofuran	EPA 8270D
	EPA 8270E
n-Decane	EPA 625.1
n-Octadecane	EPA 625.1

**Residue**

Settleable Solids	SM 2540 F-2011
Solids, Total	SM 2540 B-2011
Solids, Total Dissolved	SM 2540 C-2011
Solids, Total Suspended	SM 2540 D-2011
Solids, Volatile	SM 2540 E-2011

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**Volatile Aromatics**

1,2,4-Trichlorobenzene, Volatile	EPA 8260D
1,2,4-Trimethylbenzene	EPA 8260D
1,2-Dichlorobenzene	EPA 8260C
1,3,5-Trimethylbenzene	EPA 8260D
1,3-Dichlorobenzene	EPA 8260D
1,4-Dichlorobenzene	EPA 8260D
2-Chlorotoluene	EPA 8260D
4-Chlorotoluene	EPA 8260D
Benzene	EPA 8260D
Bromobenzene	EPA 8260D
Chlorobenzene	EPA 8260D

**Volatile Aromatics**

Chlorobenzene	EPA 624.1
Ethyl benzene	EPA 8260D
Isopropylbenzene	EPA 8260D
m/p-Xylenes	EPA 8260D
Naphthalene, Volatile	EPA 8260D
n-Butylbenzene	EPA 8260D
n-Propylbenzene	EPA 8260D
o-Xylene	EPA 8260D
p-Isopropyltoluene (P-Cymene)	EPA 8260D
sec-Butylbenzene	EPA 8260D
Styrene	EPA 8260D
tert-Butylbenzene	EPA 8260D
Toluene	EPA 8260D

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NEW YORK STATE DEPARTMENT OF HEALTH  
WADSWORTH CENTER



Expires 12:01 AM April 01, 2022  
Issued April 01, 2021

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. JOSEPH L. WATKINS  
ALPHA ANALYTICAL  
8 WALKUP DR  
WESTBOROUGH, MA 01581-1019

NY Lab Id No: 11148

is hereby APPROVED as an Environmental Laboratory in conformance with the  
National Environmental Laboratory Accreditation Conference Standards (2016) for the category  
ENVIRONMENTAL ANALYSES NON POTABLE WATER

All approved analytes are listed below:

Volatile Aromatics

Toluene	EPA 8260C
	EPA 624.1
Total Xylenes	EPA 8260D
	EPA 8260C

Volatile Halocarbons

1,1-Dichloroethene	EPA 624.1
1,1-Dichloropropene	EPA 8260D
1,2,3-Trichloropropane	EPA 8260D
1,2-Dibromo-3-chloropropane	EPA 8260D
1,2-Dibromoethane	EPA 8260D
1,2-Dichloroethane	EPA 8260D
1,2-Dichloropropane	EPA 8260D
1,2-Dibromo-3-chloropropane	EPA 8260D
1,2-Dibromoethane	EPA 8260D
1,2-Dichloroethane	EPA 8260D
1,2-Dichloropropane	EPA 8260D
1,3-Dichloropropane	EPA 8260D
2,2-Dichloropropane	EPA 8260D
2-Chloroethylvinyl ether	EPA 8260D
Bromochloromethane	EPA 8260D
Bromodichloromethane	EPA 8260D

Volatile Halocarbons

1,1,1,2-Tetrachloroethane	EPA 8260D
	EPA 8260C
1,1,1-Trichloroethane	EPA 8260D
	EPA 8260C
1,1,2,2-Tetrachloroethane	EPA 8260D
	EPA 8260C
	EPA 624.1
1,1,2-Trichloro-1,2,2-Trifluoroethane	EPA 8260D
	EPA 8260C
	EPA 624.1
1,1,2-Trichloroethane	EPA 8260D
	EPA 8260C
	EPA 624.1
1,1-Dichloroethane	EPA 8260D
	EPA 8260C
	EPA 624.1
1,1-Dichloroethene	EPA 8260D
	EPA 8260C

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Volatile Halocarbons

Bromodichloromethane	EPA 624.1
Bromoform	EPA 8260D
	EPA 8260C
	EPA 624.1
Bromomethane	EPA 8260D
	EPA 8260C
	EPA 624.1
Carbon tetrachloride	EPA 8260D
	EPA 8260C
	EPA 624.1
Chloroethane	EPA 8260D
	EPA 8260C
	EPA 624.1
Chloroform	EPA 8260D
	EPA 8260C
	EPA 624.1
Chloromethane	EPA 8260D
	EPA 8260C
	EPA 624.1
cis-1,2-Dichloroethene	EPA 8260D
	EPA 8260C
	EPA 624.1
cis-1,3-Dichloropropene	EPA 8260D
	EPA 8260C
	EPA 624.1
Dibromochloromethane	EPA 8260D

Volatile Halocarbons

Dibromochloromethane	EPA 8260C
Dibromomethane	EPA 624.1
	EPA 8260D
	EPA 8260C
Dichlorodifluoromethane	EPA 8260D
	EPA 8260C
	EPA 624.1
Hexachlorobutadiene, Volatile	EPA 8260D
	EPA 8260C
Methyl iodide	EPA 8260D
	EPA 8260C
Methylene chloride	EPA 8260D
	EPA 8260C
Tetrachloroethene	EPA 624.1
	EPA 8260D
	EPA 8260C
trans-1,2-Dichloroethene	EPA 624.1
	EPA 8260D
	EPA 8260C
trans-1,3-Dichloropropene	EPA 8260D
	EPA 8260C
	EPA 624.1
trans-1,4-Dichloro-2-butene	EPA 8260D
	EPA 8260C
Trichloroethene	EPA 8260D

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Volatile Halocarbons

Trichloroethene

EPA 8260C

Trichlorofluoromethane

EPA 8260D

EPA 8260C

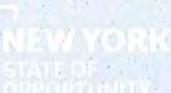
Vinyl chloride

EPA 624.1

EPA 8260D

EPA 8260C

EPA 624.1



Volatiles Organics

Carbon Disulfide

EPA 8260D

EPA 8260C

Cyclohexane

EPA 8260D

EPA 8260C

Di-ethyl ether

EPA 8260D

EPA 8260C

Ethyl Acetate

EPA 8260D

EPA 8260C

Isopropanol

EPA 8260D

EPA 8260C

Methyl acetate

EPA 8260D

EPA 8260C

Methyl cyclohexane

EPA 8260D

EPA 8260C

n-Butanol

EPA 8260D

EPA 8260C

o-Toluidine

EPA 8270D

EPA 8270E

Tetrahydrofuran

EPA 8260D

EPA 8260C

Vinyl acetate

EPA 8260D

EPA 8260C

Volatiles Organics

1,4-Dioxane

EPA 8260D

EPA 8260C

EPA 8260C SIM

EPA 8260D SIM

EPA 8270E SIM

EPA 8260D

EPA 8260C

Sample Preparation Methods

SM 4500-P B(5)-2011

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**Sample Preparation Methods**

EPA 5030C  
SM 4500-CN B-2011 and C-2011  
EPA 9030B  
EPA 3510C  
SM 4500-NH3 B-2011  
SM 4500-F B-2011  
SM 4500-N Org B-2011 or C-2011  
EPA 9010C

Department  
of Health

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**ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE**

All approved analytes are listed below:

**Acrylates**

Acrolein (Propenal)	EPA 8260D
	EPA 8260C
Acrylonitrile	EPA 8260D
	EPA 8260C
Ethyl methacrylate	EPA 8260D
	EPA 8260C
Methyl methacrylate	EPA 8260D
	EPA 8260C

**Amines**

1,2-Diphenylhydrazine	EPA 8270D
	EPA 8270E
2-Nitroaniline	EPA 8270D
	EPA 8270E
3-Nitroaniline	EPA 8270D
	EPA 8270E
4-Chloroaniline	EPA 8270D
	EPA 8270E
4-Nitroaniline	EPA 8270D
	EPA 8270E
Aniline	EPA 8270D
	EPA 8270E
Carbazole	EPA 8270D
	EPA 8270E
Diphenylamine	EPA 8270D
	EPA 8270E

**Benzidines**

3,3'-Dichlorobenzidine	EPA 8270D
	EPA 8270E
Benzidine	EPA 8270D
	EPA 8270E

**Characteristic Testing**

Corrosivity (pH)	EPA 9040C
	EPA 9045D
Free Liquids	EPA 9095B
Ignitability	EPA 1030
	EPA 1010A
Synthetic Precipitation Leaching Proc.	EPA 1312
TCLP	EPA 1311

**Chlorinated Hydrocarbon Pesticides**

4,4'-DDD	EPA 8081B
4,4'-DDE	EPA 8081B
4,4'-DDT	EPA 8081B
Aldrin	EPA 8081B
alpha-BHC	EPA 8081B
alpha-Chlordane	EPA 8081B
Atrazine	EPA 8270D
	EPA 8270E
beta-BHC	EPA 8081B
Chlordane Total	EPA 8081B
delta-BHC	EPA 8081B
Dieldrin	EPA 8081B

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**Chlorinated Hydrocarbon Pesticides**

Endosulfan I	EPA 8081B
Endosulfan II	EPA 8081B
Endosulfan sulfate	EPA 8081B
Endrin	EPA 8081B
Endrin aldehyde	EPA 8081B
Endrin Ketone	EPA 8081B
gamma-Chlordane	EPA 8081B
Heptachlor	EPA 8081B
Heptachlor epoxide	EPA 8081B
Lindane	EPA 8081B
Methoxychlor	EPA 8081B
Pentachloronitrobenzene	EPA 8270D
Toxaphene	EPA 8081B

**Chlorinated Hydrocarbons**

Hexachlorobutadiene	EPA 8270D
Hexachlorocyclopentadiene	EPA 8270D
Hexachloroethane	EPA 8260D
	EPA 8260C
	EPA 8270D
	EPA 8270E

**Chlorinated Hydrocarbons**

1,2,3-Trichlorobenzene	EPA 8260D
	EPA 8260C
1,2,4,5-Tetrachlorobenzene	EPA 8270D
	EPA 8270E
1,2,4-Trichlorobenzene	EPA 8270D
	EPA 8270E
2-Chloronaphthalene	EPA 8270D
	EPA 8270E
Hexachlorobenzene	EPA 8270D
	EPA 8270E

**Chlorophenoxy Acid Pesticides**

2,4,5-T	EPA 8151A
2,4,5-TP (Silvex)	EPA 8151A
2,4-D	EPA 8151A
2,4-DB	EPA 8151A
Dalapon	EPA 8151A
Dicamba	EPA 8151A
Dichloroprop	EPA 8151A
MCPA	EPA 8151A
MCPP	EPA 8151A

**Haloethers**

2,2'-Oxybis(1-chloropropane)	EPA 8270D
4-Bromophenylphenyl ether	EPA 8270D
4-Chlorophenylphenyl ether	EPA 8270D
	EPA 8270E
	EPA 8270E

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**Haloethers**

Bis(2-chloroethoxy)methane	EPA 8270D
	EPA 8270E
Bis(2-chloroethyl)ether	EPA 8270D
	EPA 8270E

**Low Level Polynuclear Aromatic Hydrocarbons**

Acenaphthene Low Level	EPA 8270D SIM
	EPA 8270E SIM
Acenaphthylene Low Level	EPA 8270D SIM
	EPA 8270E SIM
Anthracene Low Level	EPA 8270D SIM
	EPA 8270E SIM
Benzo(a)anthracene Low Level	EPA 8270D SIM
	EPA 8270E SIM
Benzo(a)pyrene Low Level	EPA 8270D SIM
	EPA 8270E SIM
Benzo(b)fluoranthene Low Level	EPA 8270D SIM
	EPA 8270E SIM
Benzo(g,h,i)perylene Low Level	EPA 8270D SIM
	EPA 8270E SIM
Benzo(k)fluoranthene Low Level	EPA 8270D SIM
	EPA 8270E SIM
Chrysene Low Level	EPA 8270D SIM
	EPA 8270E SIM
Dibenzo(a,h)anthracene Low Level	EPA 8270D SIM
	EPA 8270E SIM

**Low Level Polynuclear Aromatic Hydrocarbons**

Fluoranthene Low Level	EPA 8270D SIM
	EPA 8270E SIM
Fluorene Low Level	EPA 8270D SIM
	EPA 8270E SIM
Indeno(1,2,3-cd)pyrene Low Level	EPA 8270D SIM
	EPA 8270E SIM
Naphthalene Low Level	EPA 8270D SIM
	EPA 8270E SIM
Phenanthrene Low Level	EPA 8270D SIM
	EPA 8270E SIM
Pyrene Low Level	EPA 8270D SIM
	EPA 8270E SIM
<b>Metals II</b>	
Chromium VI	EPA 7196A
<b>Minerals</b>	
Chloride	EPA 9251
Sulfate (as SO <sub>4</sub> )	EPA 9038
<b>Miscellaneous</b>	
Cyanide, Total	EPA 9014
	EPA 9012B
Extractable Organic Halides	EPA 9023
Perchlorate	EPA 6860
Phenols	EPA 9065
Specific Conductance	EPA 9050A

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**Nitroaromatics and Isophorone**

2,4-Dinitrotoluene	EPA 8270D
	EPA 8270E
2,6-Dinitrotoluene	EPA 8270D
	EPA 8270E
Isophorone	EPA 8270D
	EPA 8270E
Nitrobenzene	EPA 8260D
	EPA 8260C
	EPA 8270D
	EPA 8270E
Pyridine	EPA 8270D
	EPA 8270E

**Petroleum Hydrocarbons**

Oil and Grease Total Recoverable (HEM)	EPA 9071B (Solvent:Hexane)
<b>Phthalate Esters</b>	
Benzyl butyl phthalate	EPA 8270D
	EPA 8270E
Bis(2-ethylhexyl) phthalate	EPA 8270D
	EPA 8270E
Diethyl phthalate	EPA 8270D
	EPA 8270E
Dimethyl phthalate	EPA 8270D
	EPA 8270E
Di-n-butyl phthalate	EPA 8270D
	EPA 8270E
Di-n-octyl phthalate	EPA 8270D
	EPA 8270E
<b>Polychlorinated Biphenyls</b>	
Aroclor 1016 (PCB-1016)	EPA 8082A
Aroclor 1016 (PCB-1016) in Oil	EPA 8082A
Aroclor 1221 (PCB-1221)	EPA 8082A
Aroclor 1221 (PCB-1221) in Oil	EPA 8082A
Aroclor 1232 (PCB-1232)	EPA 8082A
Aroclor 1232 (PCB-1232) in Oil	EPA 8082A
Aroclor 1242 (PCB-1242)	EPA 8082A
Aroclor 1242 (PCB-1242) in Oil	EPA 8082A
Aroclor 1248 (PCB-1248)	EPA 8082A
Aroclor 1248 (PCB-1248) in Oil	EPA 8082A

**Organophosphate Pesticides**

Parathion ethyl	EPA 8270E
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**Petroleum Hydrocarbons**

Diesel Range Organics	EPA 8015D
Gasoline Range Organics	EPA 8015D

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**Polychlorinated Biphenyls**

Aroclor 1254 (PCB-1254)	EPA 8082A
Aroclor 1254 (PCB-1254) in Oil	EPA 8082A
Aroclor 1260 (PCB-1260)	EPA 8082A
Aroclor 1260 (PCB-1260) in Oil	EPA 8082A
Aroclor 1262 (PCB-1262)	EPA 8082A
Aroclor 1262 (PCB-1262) in Oil	EPA 8082A
Aroclor 1268 (PCB-1268)	EPA 8082A
Aroclor 1268 (PCB-1268) in Oil	EPA 8082A

**Polynuclear Aromatic Hydrocarbons**

Acenaphthene	EPA 8270D
	EPA 8270E
Acenaphthylene	EPA 8270D
	EPA 8270E
Anthracene	EPA 8270D
	EPA 8270E
Benzo(a)anthracene	EPA 8270D
	EPA 8270E
Benzo(a)pyrene	EPA 8270D
	EPA 8270E
Benzo(b)fluoranthene	EPA 8270D
	EPA 8270E
Benzo(g,h,i)perylene	EPA 8270D
	EPA 8270E
Benzo(k)fluoranthene	EPA 8270D
	EPA 8270E

**Polynuclear Aromatic Hydrocarbons**

Chrysene	EPA 8270D
Dibenzo(a,h)anthracene	EPA 8270D
Fluoranthene	EPA 8270D
Fluorene	EPA 8270D
Indeno(1,2,3-cd)pyrene	EPA 8270D
Naphthalene	EPA 8270D
Phenanthrene	EPA 8270D
Pyrene	EPA 8270D
<b>Priority Pollutant Phenols</b>	
2,3,4,6 Tetrachlorophenol	EPA 8270D
	EPA 8270E
2,4,5-Trichlorophenol	EPA 8270D
	EPA 8270E
2,4,6-Trichlorophenol	EPA 8270D
	EPA 8270E
2,4-Dichlorophenol	EPA 8270D
	EPA 8270E

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Priority Pollutant Phenols

2,4-Dimethylphenol	EPA 8270D
	EPA 8270E
2,4-Dinitrophenol	EPA 8270D
	EPA 8270E
2-Chlorophenol	EPA 8270D
	EPA 8270E
2-Methyl-4,6-dinitrophenol	EPA 8270D
	EPA 8270E
2-Methylphenol	EPA 8270D
	EPA 8270E
2-Nitrophenol	EPA 8270D
	EPA 8270E
3-Methylphenol	EPA 8270D
	EPA 8270E
4-Chloro-3-methylphenol	EPA 8270D
	EPA 8270E
4-Methylphenol	EPA 8270D
	EPA 8270E
4-Nitrophenol	EPA 8270D
	EPA 8270E
Pentachlorophenol	EPA 8270D
	EPA 8270E
Phenol	EPA 8270D
	EPA 8270E

Semi-Volatile Organics

1,1'-Biphenyl	EPA 8270D
1,2-Dichlorobenzene, Semi-volatile	EPA 8270D
1,3-Dichlorobenzene, Semi-volatile	EPA 8270D
1,4-Dichlorobenzene, Semi-volatile	EPA 8270D
2-Methylnaphthalene	EPA 8270D
Acetophenone	EPA 8270D
Benzaldehyde	EPA 8270D
Benzoic Acid	EPA 8270D
Benzyl alcohol	EPA 8270D
Caprolactam	EPA 8270D
Dibenzofuran	EPA 8270D
Volatile Aromatics	
1,2,4-Trichlorobenzene, Volatile	EPA 8260D
	EPA 8260C

Serial No.: 62897

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NEW YORK STATE DEPARTMENT OF HEALTH  
WADSWORTH CENTER



Expires 12:01 AM April 01, 2022  
Issued April 01, 2021

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. JOSEPH L. WATKINS  
ALPHA ANALYTICAL  
8 WALKUP DR  
WESTBOROUGH, MA 01581-1019

NY Lab Id No: 11148

is hereby APPROVED as an Environmental Laboratory in conformance with the  
National Environmental Laboratory Accreditation Conference Standards (2016) for the category  
ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE

All approved analytes are listed below:

Volatile Aromatics

1,2,4-Trimethylbenzene	EPA 8260D	Naphthalene, Volatile	EPA 8260D
	EPA 8260C		EPA 8260C
1,2-Dichlorobenzene	EPA 8260D	n-Butylbenzene	EPA 8260D
	EPA 8260C		EPA 8260C
1,3,5-Trimethylbenzene	EPA 8260D	n-Propylbenzene	EPA 8260D
	EPA 8260C		EPA 8260C
1,3-Dichlorobenzene	EPA 8260D	o-Xylene	EPA 8260D
	EPA 8260C		EPA 8260C
1,4-Dichlorobenzene	EPA 8260D	p-Isopropyltoluene (P-Cymene)	EPA 8260D
	EPA 8260C		EPA 8260C
2-Chlorotoluene	EPA 8260D	sec-Butylbenzene	EPA 8260D
	EPA 8260C		EPA 8260C
4-Chlorotoluene	EPA 8260D	Styrene	EPA 8260D
	EPA 8260C		EPA 8260C
Benzene	EPA 8260D	tert-Butylbenzene	EPA 8260D
	EPA 8260C		EPA 8260C
Bromobenzene	EPA 8260D	Toluene	EPA 8260D
	EPA 8260C		EPA 8260C
Chlorobenzene	EPA 8260D	Total Xylenes	EPA 8260D
	EPA 8260C		EPA 8260C
Ethyl benzene	EPA 8260D	Volatile Halocarbons	
	EPA 8260C	1,1,1,2-Tetrachloroethane	EPA 8260D
Isopropylbenzene	EPA 8260D		EPA 8260C
	EPA 8260C	1,1,1-Trichloroethane	EPA 8260D
m/p-Xylenes	EPA 8260D		EPA 8260C
	EPA 8260C		

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**Volatile Halocarbons**

1,1,2,2-Tetrachloroethane	EPA 8260D
	EPA 8260C
1,1,2-Trichloro-1,2,2-Trifluoroethane	EPA 8260D
	EPA 8260C
1,1,2-Trichloroethane	EPA 8260D
	EPA 8260C
1,1-Dichloroethane	EPA 8260D
	EPA 8260C
1,1-Dichloroethene	EPA 8260D
	EPA 8260C
1,1-Dichloropropene	EPA 8260D
	EPA 8260C
1,2,3-Trichloropropane	EPA 8260D
	EPA 8260C
1,2-Dibromo-3-chloropropane	EPA 8260D
	EPA 8260C
1,2-Dibromoethane	EPA 8260D
	EPA 8260C
1,2-Dichloroethane	EPA 8260D
	EPA 8260C
1,2-Dichloropropene	EPA 8260D
	EPA 8260C
1,3-Dichloropropane	EPA 8260D
	EPA 8260C
2,2-Dichloropropane	EPA 8260D
	EPA 8260C

**Volatile Halocarbons**

2-Chloroethylvinyl ether	EPA 8260D
3-Chloropropene (Allyl chloride)	EPA 8260D
Bromochloromethane	EPA 8260D
Bromodichloromethane	EPA 8260D
Bromoform	EPA 8260D
Bromomethane	EPA 8260D
Carbon tetrachloride	EPA 8260D
Chloroethane	EPA 8260D
Chloroform	EPA 8260D
Chloromethane	EPA 8260D
cis-1,2-Dichloroethene	EPA 8260D
cis-1,3-Dichloropropene	EPA 8260D
Dibromochloromethane	EPA 8260D
	EPA 8260C

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**Volatile Halocarbons**

Dibromomethane	EPA 8260D
	EPA 8260C
Dichlorodifluoromethane	EPA 8260D
	EPA 8260C
Hexachlorobutadiene, Volatile	EPA 8260D
	EPA 8260C
Methyl iodide	EPA 8260D
	EPA 8260C
Methylene chloride	EPA 8260D
	EPA 8260C
Tetrachloroethene	EPA 8260D
	EPA 8260C
trans-1,2-Dichloroethene	EPA 8260D
	EPA 8260C
trans-1,3-Dichloropropene	EPA 8260D
	EPA 8260C
trans-1,4-Dichloro-2-butene	EPA 8260D
	EPA 8260C
Trichloroethene	EPA 8260D
	EPA 8260C
Trichlorofluoromethane	EPA 8260D
	EPA 8260C
Vinyl chloride	EPA 8260D
	EPA 8260C

**Volatile Organics**

1,4-Dioxane	EPA 8260D
	EPA 8260C
2-Butanone (Methylethyl ketone)	EPA 8260D
	EPA 8260C
2-Hexanone	EPA 8260D
	EPA 8260C
2-Nitropropane	EPA 8260D
	EPA 8260C
4-Methyl-2-Pentanone	EPA 8260D
	EPA 8260C
Acetone	EPA 8260D
	EPA 8260C
Carbon Disulfide	EPA 8260D
	EPA 8260C
Cyclohexane	EPA 8260D
	EPA 8260C
Di-ethyl ether	EPA 8260D
	EPA 8260C
Ethyl Acetate	EPA 8260D
	EPA 8260C
Methyl acetate	EPA 8260D
	EPA 8260C
Methyl cyclohexane	EPA 8260D
	EPA 8260C

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**ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE**

All approved analytes are listed below:

**Volatile Organics**

Methyl tert-butyl ether	EPA 8260D
	EPA 8260C
n-Butanol	EPA 8260D
	EPA 8260C
tert-butyl alcohol	EPA 8260D
	EPA 8260C
Tetrahydrofuran	EPA 8260D
	EPA 8260C
Vinyl acetate	EPA 8260D
	EPA 8260C

**Sample Preparation Methods**

EPA 5035A-L
EPA 5035A-H
EPA 3580A
EPA 3540C
EPA 3546
EPA 3060A
EPA 9010C

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**Exhibit 3**  
**Quality Control Project Plan**

QUALITY ASSURANCE PROJECT PLAN  
QUALITY ASSURANCE PROCESS



## 1. Introduction

JMG Engineering (JMG) prepared this Quality Assurance Project Plan (QAPP) for the Projects that area either supervised or managed by JMG.

This QAPP identifies the scope of work, roles and responsibilities of personnel, quality management, communication structure, description of potential Quality Assurance (QA) problems, and corrective actions, the quality of data collection and analyses, deficiencies that may affect quality, and the uncertainty limits for the results. The following document was developed by JMG to comply with New York State Department of Environmental Conservation (NYSDEC) QA requirements.

## 2. Purpose & Scope of Work

The purpose of this QAPP is to meet the NYSDEC Technical Guidance for Site Investigation and Remediation DER-10 as well as project specific needs outlined by the Project Owner.

The Plan also covers the quality control protocols required to be following while collecting information and site characterization.

## 3. Project Team & Planning

Project Team	Positions	Phone #	Cell Number	Emails
Giorgi Khardzeishvili	Technical Director		732-763-9571	<a href="mailto:gk@jmgeng.com">gk@jmgeng.com</a>
Devang R. Patel	Sampling Team	732-253-3470	732-208-0928	<a href="mailto:dpatel@envocarenj.com">dpatel@envocarenj.com</a>
Paul Simms	Alpha Laboratories	508-898-9220	508-898-9220	<a href="mailto:psimms@alphalab.com">psimms@alphalab.com</a>

Upon development of the SOW, the project manager will notify the QA team of projects requiring data collection during each phase of the project.

## 4. Laboratory Quality Assurance Project Plan

All sampling and analyses will be performed in accordance with the requirements of the QAPP prepared for the site. Main Components of the QAPP include:

- Sampling Program
  - Sample containers will be ordered through a NYSDEC certified laboratory, decontaminated, and appropriate preservative will be added (if applicable) prior to their use by the analytical laboratory. Containers with preservative will be labelled as such.
  - All soil samples will be collected using disposable sampling tools where possible.
  - Sample holding times will be maintained in accordance with the NYSDEC Field Sampling Guidance.
  - Field QC samples (e.g., trip blanks, coded field duplicates, and matrix spike/matrix spike duplicates) will be collected as necessary.
    - Trip blank sample will not be collected when sampling is conducted for TAL Metals, PCBs, EPH, SVOCs and Cyanides
    - For heating oil tanks – field duplicate samples will not be collected
  - Field duplicates and matrix spike supplicate will not be collected for heating oil or gasoline UST investigation.
  - Groundwater samples will be collected by qualified individuals.
  - Samples collected using low-flow groundwater sampling procedures will be handled by a laboratory services engaged for the Project.
  - Vapor intrusion investigation samples will be collected in accordance with applicable NYSDEC guidance.
- Sample Tracking and Preservations
  - Laboratory provided chain-of-custody will be used to track sample cooler and samples
  - All samples will be preserved as per the NYSDEC Field Sampling Guidance.
- Field Instrument Calibration Procedures
  - All field analytical equipment will be calibrated immediately prior to each day's use and/or checked calibration using supplied calibration kit. Calibration procedures will conform to manufacturer's standard instruction.
  - The instrumental rental company is required to provide calibrated functioning equipment for each project.

- Analytical Procedures

JMG will request analytical methods that can meet most current NYSDEC criteria.

It is JMG's belief that analytical laboratory will be performing all required QC checks a required frequency as dictated by analytical method. The data associated with this QA checks will be included in the report.

### a. Data Validation

In general, data validation is the process of evaluating the completeness, correctness, consistency, and compliance of a data package against a standard or against project-specific criteria. Data validation will identify laboratory and analytical errors that are associated with a data set. In addition, the data validation process may identify potential sampling errors, such as preservation and sample handling methods, which are out of conformance with the sampling plan's data quality objectives. The following items are to be evaluated during a Tier I Data Validation review:

Tier I Review Components:

VOCs (8260B), SVOCs (8270D), and Metals (6010C):

- Chain of Custody;
- Case narrative;
- Field and sample identifications (IDs) cross reference;
- Holding times;
- Preservation and cooler receipt;
- Surrogate recoveries (for organics only);
- Laboratory blank data (method blanks, preparation blanks);
- Spike data (including MS/MSD);
- Laboratory Control Samples (LCS).

TCLP (1311)/ SPLP (1312):

- Chain of Custody;
- Case narrative;
- Field and sample identifications (IDs) cross reference;
- Holding times;
- Preservation and cooler receipt;
- Percent solids;
- TCLP blank;
- Extraction fluid information (pre-test information, extraction fluid type, pH, volume);
- Spike recoveries for metals;
- Tumbler rate, tumbling time, and room temperature.

It must be noted it is possible for laboratory to develop stringer QA criteria in comparison to NYSDEC. Additionally, elevated results for items outside of the Site-Specific Constituents of concern will be investigated further.

Tier II Review Components: This task will be performed by third party.

### b. Accuracy

Accuracy can be defined in numerous ways. One definition by Taylor (1987) defines analytical accuracy as “the degree of agreement of a measured value with the true...value.” This definition implies that analytical measurements are really estimates of the true concentration of a chemical in a sample. Since the goal is to determine the concentration of a compound or element in a sample, how can a determination be made as to whether the estimate is indeed accurate without knowing the true concentration? In addition, what degree of difference is acceptable between the estimated concentration and the true concentration?

The analytical process devised by U.S. EPA and codified in SW-846, Test Methods for Evaluating Solid Waste (1986) attempts to provide measures of accuracy within the analytical process. This is accomplished in two ways. First, every testing procedure requires calibration. Calibration is the act of determining the analytical instrument’s response to standards which contain compounds at known concentrations. The calibration response curve is then used to establish the concentration of compounds in the samples submitted to the laboratory. Most analytical procedures described in SW-846 and other guidance requires that the lab check the validity of the calibration curve at regular intervals or re-calibrate the instrument each working day. These calibration checks are then used to assure whether the instrument is responding in a proper manner when samples are analyzed over a given period of time. The review of initial and continuing calibration data, instrument response through time, internal standard response, and retention time of internal standard compounds are important aspects of data validation. However, the review of calibration data is a subject left for the Tier II Data Validation process. It should be noted that precise data may not be accurate data.

The second approach to determining accuracy is through the use of spikes and system monitoring compounds or surrogate compounds. Surrogate compounds are organic compounds that are not expected to occur in environmental samples, but which behave similarly to target compounds. Surrogate compounds are usually brominated or deuterated (labeled with a “heavy” hydrogen atom in a specific position indicated with a number in the name of the surrogate), making them easy to distinguish from target compounds.

Because surrogate compounds are spiked into each sample extract at known concentrations, a measure of accuracy can be determined based upon a comparison of the measured concentration of the surrogate compound to the actual amount spiked into a sample.

This comparison is usually represented by the Percent Recovery (%R) of a spiked compound. The general formula for the percent recovery is given in the following equation:

### Equation 1

$$\%R = (\text{SSR} - \text{Sample Result})/\text{Cs} * 100$$

Where:

$\%R$  = Percent Recovery

SSR = Spiked Sample Result

$C_s$  = Concentration of the Spike Added

This equation implies that as the measured concentration (SSR – Sample Result) from an analysis approaches the spiked concentration from a standard ( $C_s$ ), the  $\%R$  approaches 100 percent.

Surrogate compound analysis gives the Tier I Data Validator important information on what effect the sample material may have on the measurement of a compound in a sample. Therefore, the Validator may also be able to determine whether the accuracy of the measurement may be adversely biased.

For the purpose of this section, bias is defined as the constant or systematic distortion of a measurement process, different from random error, which manifests itself (usually in one direction) as a persistent positive or negative deviation from the known or true value (resulting ultimately in uncertainty with regard to an analytical result). This may be due to (but not limited to) improper sample/data collection, sample matrix, poorly calibrated analytical or sampling equipment, or limitations or errors in analytical methods and techniques

Measures of accuracy, such as the  $\% R$ , are rarely equal to 100%. Usually there is a range of  $\%R$  values centered around 100 percent. If variability is expected, what  $\%R$  is acceptable such that the measurements may be considered accurate enough for the goals of the sampling project? The answer to this question is generally predicated on the project's data quality objectives (DQOs). Acceptance criteria for laboratory precision are usually specified in the method or laboratory Standard Operating Procedure (SOP). It is, therefore, important for the Tier I Data Validator to assess the laboratory's quality control acceptance criteria for surrogate recovery ranges prior to analysis in order to determine whether they meet the project-specific DQOs. In general, for volatile organic compound analysis, the acceptance criteria  $\%R$  is  $100 +/- 25\%$ . Surrogate recoveries outside of this range are qualified based upon the magnitude of the exceedances.

### c. Precision

Precision can be defined as the amount of agreement between repeated measurements of a sample or a set of samples. Because of fluctuations in the analytical process, repeated measurements of a sample will commonly differ. If enough measurements are made, the distribution of data points should approximately conform to a standard normal distribution, where data points are distributed about a mean value. In general, the range of scatter in the distribution is a measure of the precision of the analytical process.

Unfortunately, the acquisition of sufficient replicates is beyond the scope and budget of most environmental sampling projects. If this is so, how may a determination be made as to whether the analytical process is precise enough to be acceptable?

#### **Equation: 2**

$$RPD = \left| \frac{C_1 - C_2}{\frac{C_1 + C_2}{2}} \right| \times 100$$

Where:

$C_1$  = The higher of the spike or spike duplicate results  
(concentration)

$C_2$  = The lower of the spike or spike duplicate results  
(concentration)

It is important to note that the spike and spike duplicate result concentrations be used in equation 2 and not the recoveries for the spike or spike duplicate results. The concentrations are generally reported in ppm, ppb units, while the recoveries are reported as a percentage.

Equation 2 implies that as the results of the spike and spike duplicate begin to deviate from each other, the value of the RPD increases from 0%. Like accuracy, the quality control criteria for precision data must be either required in the work plan, in a contract with a laboratory, or the Tier I Data Validator must know the acceptance level for precision set by the laboratory performing the analyses. Acceptance criteria for laboratory precision are usually specified in the method or laboratory Standard Operating Procedure (SOP). In general, if these acceptance criteria are not developed, laboratory will elect to use RPD of 20%.

## 5. Quality Assurance Review

JMG team members are also responsible for performing a Quality Assurance review for each assigned project task. The Quality Assurance review is a confirmation review conducted to ensure the field and reports have complied with their Quality Control plan and to provide a degree of confidence in the hydrologic, hydraulic, and environmental adequacy of the design. The Quality Assurance review will be conducted for all project specific submittals and the level of involvement will vary depending upon project specific issues and complexity. JMG team members shall:

- Ensure all submittal packages are complete.
- Ensure design concept complies with project scope, project commitments, budget, etc.
- Ensure the project scope complies with all governing criteria.
- Ensure project critical requirements / issues have been addressed.
- Review documents for conformance with current NYSDEC and/or Client policies and procedures.
- Review plans and details for maintenance and long-term serviceability issues.
- Ensure design calculations have been reviewed, checked and corrected.
- Ensure previous Quality Assurance comments have been resolved.
- Perform/request independent analysis of specific design elements as appropriate.
- Prepare and report any issues identified related to out of compliance.
- Identify permit compliance requirements.

**Exhibit 4**  
**Laboratory Report**

JOB: L2203656 REPORT STYLE: Data Usability Report  
0010: Alpha Analytical Report Cover Page - OK  
0015: Sample Cross Reference Summary - OK  
0055: NJ DKQP Conformance/Non-Conformance Summary Questionnaire - OK  
0060: Case Narrative - OK  
0100: Volatiles Cover Page - OK  
0110: Volatiles Sample Results - OK  
0120: Volatiles Method Blank Report - OK  
0130: Volatiles LCS Report - OK  
0180: Semivolatiles Cover Page - OK  
0190: Semivolatiles Sample Results - OK  
0200: Semivolatiles Method Blank Report - OK  
0210: Semivolatiles LCS Report - OK  
0400: Petroleum Cover Page - OK  
0410: Petroleum Sample Results - OK  
0420: Petroleum Method Blank Report - OK  
0430: Petroleum LCS Report - OK  
0460: Petroleum Duplicate Report - OK  
0700: PCBs Cover Page - OK  
0710: PCBs Sample Results - OK  
0720: PCBs Method Blank Report - OK  
0730: PCBs LCS Report - OK  
0900: Pesticides Cover Page - OK  
0910: Pesticides Sample Results - OK  
0920: Pesticides Method Blank Report - OK  
0930: Pesticides LCS Report - OK  
1005: Metals Sample Results - OK  
1010: Metals Method Blank Report - OK  
1020: Metals LCS Report - OK  
1180: Inorganics Cover Page - OK  
1190: Ignitability Results - OK  
1200: Wet Chemistry Sample Results - OK  
1210: Wet Chemistry Method Blank Report - OK  
1220: Wet Chemistry LCS Report - OK  
5100: Sample Receipt & Container Information Report - OK  
5200: Glossary - OK  
5400: References - OK  
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## ANALYTICAL REPORT

Lab Number:	L2203656
Client:	Envocare 1527 Route 27 Suite 105 Somerset, NJ 08873
ATTN:	Devang Patel
Phone:	(732) 253-5740
Project Name:	JMG BROOKLYN
Project Number:	150550
Report Date:	01/31/22

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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Eight Walkup Drive, Westborough, MA 01581-1019  
508-898-9220 (Fax) 508-898-9193 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2203656-01	WC-1	SOIL	BROOKLYN, NY	01/21/22 09:00	01/21/22
L2203656-02	WC-2	SOIL	BROOKLYN, NY	01/21/22 12:00	01/21/22
L2203656-03	WC-3	SOIL	BROOKLYN, NY	01/21/22 12:15	01/21/22
L2203656-04	WC-4	SOIL	BROOKLYN, NY	01/21/22 12:45	01/21/22

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**NJ DEP Data of Known Quality Protocols**  
**Conformance/Non-Conformance**  
**Summary Questionnaire**

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	YES
1a	Were the method specified handling, preservation, and holding time requirements met?	YES
1b	EPH Method: Was the EPH Method conducted without significant modifications (see Section 11.3 of respective DKQ methods)?	N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	YES
3	Were all samples received at an appropriate temperature ( $4 \pm 2^\circ \text{ C}$ )?	YES
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	NO
5a	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	NO
5b	Were these reporting limits met?	N/A
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	YES
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	NO

**Note:** For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1a or #1b is "No", the data package does not meet the requirements for "Data of Known Quality".



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

**HOLD POLICY** - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

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**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

### Case Narrative (continued)

#### Report Submission

January 31, 2022: This is a preliminary report.

January 28, 2022: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

#### DKQP Related Narratives

##### Report Submission

In reference to question 5a:

Reporting limits were not specified.

#### Semivolatile Organics

L2203656-04D: The sample has elevated detection limits due to the dilution required by the sample matrix.

In reference to question 4:

WG1599051-2-3: One or more compounds failed to meet the DKQP recovery and/or RPD limits. Difficult analytes may recover at less than 10% recovery, where applicable. Please refer to the QC section of the report for specific details.

#### Total Metals

L2203656-01 through -04: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

#### Non-DKQP Related Narratives

##### Herbicides

L2203656-04D: The sample has elevated detection limits due to the dilution required by the sample matrix.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 01/31/22

# ORGANICS



# VOLATILES



Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-01  
 Client ID: WC-1  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 09:00  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 01/25/22 20:39  
 Analyst: JC  
 Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Methylene chloride	ND	ug/kg	6.9	3.2	1	
1,1-Dichloroethane	ND	ug/kg	1.4	0.20	1	
Chloroform	ND	ug/kg	2.1	0.19	1	
Carbon tetrachloride	ND	ug/kg	1.4	0.32	1	
1,2-Dichloropropane	ND	ug/kg	1.4	0.17	1	
Dibromochloromethane	ND	ug/kg	1.4	0.19	1	
1,1,2-Trichloroethane	ND	ug/kg	1.4	0.37	1	
Tetrachloroethene	ND	ug/kg	0.69	0.27	1	
Chlorobenzene	ND	ug/kg	0.69	0.18	1	
Trichlorofluoromethane	ND	ug/kg	5.5	0.96	1	
1,2-Dichloroethane	ND	ug/kg	1.4	0.36	1	
1,1,1-Trichloroethane	ND	ug/kg	0.69	0.23	1	
Bromodichloromethane	ND	ug/kg	0.69	0.15	1	
trans-1,3-Dichloropropene	ND	ug/kg	1.4	0.38	1	
cis-1,3-Dichloropropene	ND	ug/kg	0.69	0.22	1	
1,3-Dichloropropene, Total	ND	ug/kg	0.69	0.22	1	
1,1-Dichloropropene	ND	ug/kg	0.69	0.22	1	
Bromoform	ND	ug/kg	5.5	0.34	1	
1,1,2,2-Tetrachloroethane	ND	ug/kg	0.69	0.23	1	
Benzene	ND	ug/kg	0.69	0.23	1	
Toluene	ND	ug/kg	1.4	0.75	1	
Ethylbenzene	ND	ug/kg	1.4	0.20	1	
Chloromethane	ND	ug/kg	5.5	1.3	1	
Bromomethane	ND	ug/kg	2.8	0.80	1	
Vinyl chloride	ND	ug/kg	1.4	0.46	1	
Chloroethane	ND	ug/kg	2.8	0.62	1	
1,1-Dichloroethene	ND	ug/kg	1.4	0.33	1	
trans-1,2-Dichloroethene	ND	ug/kg	2.1	0.19	1	



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**SAMPLE RESULTS**

Lab ID:	L2203656-01	Date Collected:	01/21/22 09:00
Client ID:	WC-1	Date Received:	01/21/22
Sample Location:	BROOKLYN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Trichloroethene	ND	ug/kg	0.69	0.19	1	
1,2-Dichlorobenzene	ND	ug/kg	2.8	0.20	1	
1,3-Dichlorobenzene	ND	ug/kg	2.8	0.20	1	
1,4-Dichlorobenzene	ND	ug/kg	2.8	0.24	1	
Methyl tert butyl ether	ND	ug/kg	2.8	0.28	1	
p/m-Xylene	ND	ug/kg	2.8	0.78	1	
o-Xylene	ND	ug/kg	1.4	0.40	1	
Xylenes, Total	ND	ug/kg	1.4	0.40	1	
cis-1,2-Dichloroethene	ND	ug/kg	1.4	0.24	1	
1,2-Dichloroethene, Total	ND	ug/kg	1.4	0.19	1	
Dibromomethane	ND	ug/kg	2.8	0.33	1	
Styrene	ND	ug/kg	1.4	0.27	1	
Dichlorodifluoromethane	ND	ug/kg	14	1.3	1	
Acetone	ND	ug/kg	14	6.7	1	
Carbon disulfide	ND	ug/kg	14	6.3	1	
2-Butanone	ND	ug/kg	14	3.1	1	
Vinyl acetate	ND	ug/kg	14	3.0	1	
4-Methyl-2-pentanone	ND	ug/kg	14	1.8	1	
1,2,3-Trichloropropane	ND	ug/kg	2.8	0.18	1	
2-Hexanone	ND	ug/kg	14	1.6	1	
Bromochloromethane	ND	ug/kg	2.8	0.28	1	
2,2-Dichloropropane	ND	ug/kg	2.8	0.28	1	
1,2-Dibromoethane	ND	ug/kg	1.4	0.39	1	
1,3-Dichloropropane	ND	ug/kg	2.8	0.23	1	
1,1,1,2-Tetrachloroethane	ND	ug/kg	0.69	0.18	1	
Bromobenzene	ND	ug/kg	2.8	0.20	1	
n-Butylbenzene	ND	ug/kg	1.4	0.23	1	
sec-Butylbenzene	ND	ug/kg	1.4	0.20	1	
tert-Butylbenzene	ND	ug/kg	2.8	0.16	1	
o-Chlorotoluene	ND	ug/kg	2.8	0.26	1	
p-Chlorotoluene	ND	ug/kg	2.8	0.15	1	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.2	1.4	1	
Hexachlorobutadiene	ND	ug/kg	5.5	0.23	1	
Isopropylbenzene	ND	ug/kg	1.4	0.15	1	
p-Isopropyltoluene	1.6	ug/kg	1.4	0.15	1	
Naphthalene	ND	ug/kg	5.5	0.90	1	
Acrylonitrile	ND	ug/kg	5.5	1.6	1	



Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-01  
 Client ID: WC-1  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 09:00  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
n-Propylbenzene	ND		ug/kg	1.4	0.24	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.8	0.44	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.8	0.38	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.8	0.27	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.8	0.46	1
1,4-Dioxane	ND		ug/kg	110	48.	1
p-Diethylbenzene	ND		ug/kg	2.8	0.24	1
p-Ethyltoluene	ND		ug/kg	2.8	0.53	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.8	0.26	1
Ethyl ether	ND		ug/kg	2.8	0.47	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.9	2.0	1

**Tentatively Identified Compounds**

Total TIC Compounds	76.7	J	ug/kg	1
Unknown	10.6	J	ug/kg	1
Unknown	61.7	J	ug/kg	1
Unknown	4.36	J	ug/kg	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	120		70-130
Dibromofluoromethane	105		70-130

Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-02  
 Client ID: WC-2  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:00  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 01/24/22 16:25  
 Analyst: MKS  
 Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Methylene chloride	ND	ug/kg	5.5	2.5	1	
1,1-Dichloroethane	ND	ug/kg	1.1	0.16	1	
Chloroform	ND	ug/kg	1.6	0.15	1	
Carbon tetrachloride	ND	ug/kg	1.1	0.25	1	
1,2-Dichloropropane	ND	ug/kg	1.1	0.14	1	
Dibromochloromethane	ND	ug/kg	1.1	0.15	1	
1,1,2-Trichloroethane	ND	ug/kg	1.1	0.29	1	
Tetrachloroethene	ND	ug/kg	0.55	0.22	1	
Chlorobenzene	ND	ug/kg	0.55	0.14	1	
Trichlorofluoromethane	ND	ug/kg	4.4	0.76	1	
1,2-Dichloroethane	ND	ug/kg	1.1	0.28	1	
1,1,1-Trichloroethane	ND	ug/kg	0.55	0.18	1	
Bromodichloromethane	ND	ug/kg	0.55	0.12	1	
trans-1,3-Dichloropropene	ND	ug/kg	1.1	0.30	1	
cis-1,3-Dichloropropene	ND	ug/kg	0.55	0.17	1	
1,3-Dichloropropene, Total	ND	ug/kg	0.55	0.17	1	
1,1-Dichloropropene	ND	ug/kg	0.55	0.18	1	
Bromoform	ND	ug/kg	4.4	0.27	1	
1,1,2,2-Tetrachloroethane	ND	ug/kg	0.55	0.18	1	
Benzene	ND	ug/kg	0.55	0.18	1	
Toluene	ND	ug/kg	1.1	0.60	1	
Ethylbenzene	ND	ug/kg	1.1	0.16	1	
Chloromethane	ND	ug/kg	4.4	1.0	1	
Bromomethane	ND	ug/kg	2.2	0.64	1	
Vinyl chloride	ND	ug/kg	1.1	0.37	1	
Chloroethane	ND	ug/kg	2.2	0.50	1	
1,1-Dichloroethene	ND	ug/kg	1.1	0.26	1	
trans-1,2-Dichloroethene	ND	ug/kg	1.6	0.15	1	



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**SAMPLE RESULTS**

Lab ID:	L2203656-02	Date Collected:	01/21/22 12:00
Client ID:	WC-2	Date Received:	01/21/22
Sample Location:	BROOKLYN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Trichloroethene	ND		ug/kg	0.55	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.22	1
p/m-Xylene	ND		ug/kg	2.2	0.62	1
o-Xylene	ND		ug/kg	1.1	0.32	1
Xylenes, Total	ND		ug/kg	1.1	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.2	0.26	1
Styrene	ND		ug/kg	1.1	0.22	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	ND		ug/kg	11	5.3	1
Carbon disulfide	ND		ug/kg	11	5.0	1
2-Butanone	ND		ug/kg	11	2.4	1
Vinyl acetate	ND		ug/kg	11	2.4	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.2	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.22	1
2,2-Dichloropropane	ND		ug/kg	2.2	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.31	1
1,3-Dichloropropane	ND		ug/kg	2.2	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.55	0.14	1
Bromobenzene	ND		ug/kg	2.2	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
o-Chlorotoluene	ND		ug/kg	2.2	0.21	1
p-Chlorotoluene	ND		ug/kg	2.2	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.3	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.4	0.19	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	0.22	J	ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.4	0.72	1
Acrylonitrile	ND		ug/kg	4.4	1.3	1



Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-02  
 Client ID: WC-2  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:00  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
n-Propylbenzene	ND		ug/kg	1.1	0.19	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.35	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.30	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.21	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.37	1
1,4-Dioxane	ND		ug/kg	88	39.	1
p-Diethylbenzene	ND		ug/kg	2.2	0.20	1
p-Ethyltoluene	ND		ug/kg	2.2	0.42	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.2	0.21	1
Ethyl ether	ND		ug/kg	2.2	0.38	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.5	1.6	1

**Tentatively Identified Compounds**

No Tentatively Identified Compounds	ND	ug/kg	1
Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	111		70-130

Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-03  
 Client ID: WC-3  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:15  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 01/25/22 21:04  
 Analyst: JC  
 Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Methylene chloride	ND	ug/kg	5.9	2.7	1	
1,1-Dichloroethane	ND	ug/kg	1.2	0.17	1	
Chloroform	ND	ug/kg	1.8	0.16	1	
Carbon tetrachloride	ND	ug/kg	1.2	0.27	1	
1,2-Dichloropropane	ND	ug/kg	1.2	0.15	1	
Dibromochloromethane	ND	ug/kg	1.2	0.16	1	
1,1,2-Trichloroethane	ND	ug/kg	1.2	0.32	1	
Tetrachloroethene	ND	ug/kg	0.59	0.23	1	
Chlorobenzene	ND	ug/kg	0.59	0.15	1	
Trichlorofluoromethane	ND	ug/kg	4.7	0.82	1	
1,2-Dichloroethane	ND	ug/kg	1.2	0.30	1	
1,1,1-Trichloroethane	ND	ug/kg	0.59	0.20	1	
Bromodichloromethane	ND	ug/kg	0.59	0.13	1	
trans-1,3-Dichloropropene	ND	ug/kg	1.2	0.32	1	
cis-1,3-Dichloropropene	ND	ug/kg	0.59	0.19	1	
1,3-Dichloropropene, Total	ND	ug/kg	0.59	0.19	1	
1,1-Dichloropropene	ND	ug/kg	0.59	0.19	1	
Bromoform	ND	ug/kg	4.7	0.29	1	
1,1,2,2-Tetrachloroethane	ND	ug/kg	0.59	0.20	1	
Benzene	ND	ug/kg	0.59	0.20	1	
Toluene	ND	ug/kg	1.2	0.64	1	
Ethylbenzene	ND	ug/kg	1.2	0.17	1	
Chloromethane	ND	ug/kg	4.7	1.1	1	
Bromomethane	ND	ug/kg	2.4	0.69	1	
Vinyl chloride	ND	ug/kg	1.2	0.40	1	
Chloroethane	ND	ug/kg	2.4	0.53	1	
1,1-Dichloroethene	ND	ug/kg	1.2	0.28	1	
trans-1,2-Dichloroethene	ND	ug/kg	1.8	0.16	1	



Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID:	L2203656-03	Date Collected:	01/21/22 12:15
Client ID:	WC-3	Date Received:	01/21/22
Sample Location:	BROOKLYN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Trichloroethene	ND	ug/kg	0.59	0.16	1	
1,2-Dichlorobenzene	ND	ug/kg	2.4	0.17	1	
1,3-Dichlorobenzene	ND	ug/kg	2.4	0.17	1	
1,4-Dichlorobenzene	ND	ug/kg	2.4	0.20	1	
Methyl tert butyl ether	ND	ug/kg	2.4	0.24	1	
p/m-Xylene	ND	ug/kg	2.4	0.66	1	
o-Xylene	ND	ug/kg	1.2	0.34	1	
Xylenes, Total	ND	ug/kg	1.2	0.34	1	
cis-1,2-Dichloroethene	ND	ug/kg	1.2	0.21	1	
1,2-Dichloroethene, Total	ND	ug/kg	1.2	0.16	1	
Dibromomethane	ND	ug/kg	2.4	0.28	1	
Styrene	ND	ug/kg	1.2	0.23	1	
Dichlorodifluoromethane	ND	ug/kg	12	1.1	1	
Acetone	ND	ug/kg	12	5.7	1	
Carbon disulfide	ND	ug/kg	12	5.4	1	
2-Butanone	ND	ug/kg	12	2.6	1	
Vinyl acetate	ND	ug/kg	12	2.5	1	
4-Methyl-2-pentanone	ND	ug/kg	12	1.5	1	
1,2,3-Trichloropropane	ND	ug/kg	2.4	0.15	1	
2-Hexanone	ND	ug/kg	12	1.4	1	
Bromochloromethane	ND	ug/kg	2.4	0.24	1	
2,2-Dichloropropane	ND	ug/kg	2.4	0.24	1	
1,2-Dibromoethane	ND	ug/kg	1.2	0.33	1	
1,3-Dichloropropane	ND	ug/kg	2.4	0.20	1	
1,1,1,2-Tetrachloroethane	ND	ug/kg	0.59	0.16	1	
Bromobenzene	ND	ug/kg	2.4	0.17	1	
n-Butylbenzene	ND	ug/kg	1.2	0.20	1	
sec-Butylbenzene	ND	ug/kg	1.2	0.17	1	
tert-Butylbenzene	ND	ug/kg	2.4	0.14	1	
o-Chlorotoluene	ND	ug/kg	2.4	0.22	1	
p-Chlorotoluene	ND	ug/kg	2.4	0.13	1	
1,2-Dibromo-3-chloropropane	ND	ug/kg	3.5	1.2	1	
Hexachlorobutadiene	ND	ug/kg	4.7	0.20	1	
Isopropylbenzene	ND	ug/kg	1.2	0.13	1	
p-Isopropyltoluene	ND	ug/kg	1.2	0.13	1	
Naphthalene	ND	ug/kg	4.7	0.77	1	
Acrylonitrile	ND	ug/kg	4.7	1.4	1	



Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-03  
 Client ID: WC-3  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:15  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
n-Propylbenzene	ND		ug/kg	1.2	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.38	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.32	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.4	0.23	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.4	0.39	1
1,4-Dioxane	ND		ug/kg	94	41.	1
p-Diethylbenzene	ND		ug/kg	2.4	0.21	1
p-Ethyltoluene	ND		ug/kg	2.4	0.45	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.4	0.22	1
Ethyl ether	ND		ug/kg	2.4	0.40	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.9	1.7	1

**Tentatively Identified Compounds**

No Tentatively Identified Compounds	ND	ug/kg	1
Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	126		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	117		70-130
Dibromofluoromethane	104		70-130

Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-04  
 Client ID: WC-4  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:45  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 01/24/22 16:48  
 Analyst: MKS  
 Percent Solids: 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Methylene chloride	ND	ug/kg	6.8	3.1	1	
1,1-Dichloroethane	ND	ug/kg	1.4	0.20	1	
Chloroform	ND	ug/kg	2.0	0.19	1	
Carbon tetrachloride	ND	ug/kg	1.4	0.32	1	
1,2-Dichloropropane	ND	ug/kg	1.4	0.17	1	
Dibromochloromethane	ND	ug/kg	1.4	0.19	1	
1,1,2-Trichloroethane	ND	ug/kg	1.4	0.37	1	
Tetrachloroethene	ND	ug/kg	0.68	0.27	1	
Chlorobenzene	ND	ug/kg	0.68	0.17	1	
Trichlorofluoromethane	ND	ug/kg	5.5	0.95	1	
1,2-Dichloroethane	ND	ug/kg	1.4	0.35	1	
1,1,1-Trichloroethane	ND	ug/kg	0.68	0.23	1	
Bromodichloromethane	ND	ug/kg	0.68	0.15	1	
trans-1,3-Dichloropropene	ND	ug/kg	1.4	0.37	1	
cis-1,3-Dichloropropene	ND	ug/kg	0.68	0.22	1	
1,3-Dichloropropene, Total	ND	ug/kg	0.68	0.22	1	
1,1-Dichloropropene	ND	ug/kg	0.68	0.22	1	
Bromoform	ND	ug/kg	5.5	0.34	1	
1,1,2,2-Tetrachloroethane	ND	ug/kg	0.68	0.23	1	
Benzene	ND	ug/kg	0.68	0.23	1	
Toluene	ND	ug/kg	1.4	0.74	1	
Ethylbenzene	ND	ug/kg	1.4	0.19	1	
Chloromethane	ND	ug/kg	5.5	1.3	1	
Bromomethane	ND	ug/kg	2.7	0.80	1	
Vinyl chloride	ND	ug/kg	1.4	0.46	1	
Chloroethane	ND	ug/kg	2.7	0.62	1	
1,1-Dichloroethene	ND	ug/kg	1.4	0.33	1	
trans-1,2-Dichloroethene	ND	ug/kg	2.0	0.19	1	



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**SAMPLE RESULTS**

Lab ID:	L2203656-04	Date Collected:	01/21/22 12:45
Client ID:	WC-4	Date Received:	01/21/22
Sample Location:	BROOKLYN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Trichloroethene	ND	ug/kg	0.68	0.19	1	
1,2-Dichlorobenzene	ND	ug/kg	2.7	0.20	1	
1,3-Dichlorobenzene	ND	ug/kg	2.7	0.20	1	
1,4-Dichlorobenzene	ND	ug/kg	2.7	0.23	1	
Methyl tert butyl ether	ND	ug/kg	2.7	0.28	1	
p/m-Xylene	ND	ug/kg	2.7	0.77	1	
o-Xylene	ND	ug/kg	1.4	0.40	1	
Xylenes, Total	ND	ug/kg	1.4	0.40	1	
cis-1,2-Dichloroethene	ND	ug/kg	1.4	0.24	1	
1,2-Dichloroethene, Total	ND	ug/kg	1.4	0.19	1	
Dibromomethane	ND	ug/kg	2.7	0.33	1	
Styrene	ND	ug/kg	1.4	0.27	1	
Dichlorodifluoromethane	ND	ug/kg	14	1.2	1	
Acetone	ND	ug/kg	14	6.6	1	
Carbon disulfide	ND	ug/kg	14	6.2	1	
2-Butanone	ND	ug/kg	14	3.0	1	
Vinyl acetate	ND	ug/kg	14	2.9	1	
4-Methyl-2-pentanone	ND	ug/kg	14	1.8	1	
1,2,3-Trichloropropane	ND	ug/kg	2.7	0.17	1	
2-Hexanone	ND	ug/kg	14	1.6	1	
Bromochloromethane	ND	ug/kg	2.7	0.28	1	
2,2-Dichloropropane	ND	ug/kg	2.7	0.28	1	
1,2-Dibromoethane	ND	ug/kg	1.4	0.38	1	
1,3-Dichloropropane	ND	ug/kg	2.7	0.23	1	
1,1,1,2-Tetrachloroethane	ND	ug/kg	0.68	0.18	1	
Bromobenzene	ND	ug/kg	2.7	0.20	1	
n-Butylbenzene	ND	ug/kg	1.4	0.23	1	
sec-Butylbenzene	ND	ug/kg	1.4	0.20	1	
tert-Butylbenzene	ND	ug/kg	2.7	0.16	1	
o-Chlorotoluene	ND	ug/kg	2.7	0.26	1	
p-Chlorotoluene	ND	ug/kg	2.7	0.15	1	
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.1	1.4	1	
Hexachlorobutadiene	ND	ug/kg	5.5	0.23	1	
Isopropylbenzene	ND	ug/kg	1.4	0.15	1	
p-Isopropyltoluene	ND	ug/kg	1.4	0.15	1	
Naphthalene	ND	ug/kg	5.5	0.89	1	
Acrylonitrile	ND	ug/kg	5.5	1.6	1	



Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-04  
 Client ID: WC-4  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:45  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
n-Propylbenzene	ND		ug/kg	1.4	0.23	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.7	0.44	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.7	0.37	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.7	0.26	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.7	0.46	1
1,4-Dioxane	ND		ug/kg	110	48.	1
p-Diethylbenzene	ND		ug/kg	2.7	0.24	1
p-Ethyltoluene	ND		ug/kg	2.7	0.53	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.7	0.26	1
Ethyl ether	ND		ug/kg	2.7	0.47	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.8	1.9	1

**Tentatively Identified Compounds**

No Tentatively Identified Compounds	ND	ug/kg	1
Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	112		70-130

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 01/24/22 09:58  
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s):	02,04			Batch:	WG1597992-5
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 01/24/22 09:58  
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s):	02,04		Batch:	WG1597992-5	
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	2.5	J	ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

### **Method Blank Analysis Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 01/24/22 09:58  
Analyst: NLK

<b>Parameter</b>	<b>Result</b>	<b>Qualifier</b>	<b>Units</b>	<b>RL</b>	<b>MDL</b>
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s):			02,04	Batch:	WG1597992-5
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

#### Tentatively Identified Compounds

Total TIC Compounds	2.16	J	ug/kg
Cyclotrisiloxane, Hexamethyl-	2.16	NJ	ug/kg

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 01/24/22 09:58  
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s):	02,04			Batch: WG1597992-5	

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	108		70-130

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 01/25/22 20:14  
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s):	01,03		Batch:	WG1598277-5	
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	0.79	J	ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 01/25/22 20:14  
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s):	01,03		Batch:	WG1598277-5	
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

### **Method Blank Analysis Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 01/25/22 20:14  
Analyst: LAC

<b>Parameter</b>	<b>Result</b>	<b>Qualifier</b>	<b>Units</b>	<b>RL</b>	<b>MDL</b>
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s):		01,03	Batch:	WG1598277-5	
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

#### Tentatively Identified Compounds

Total TIC Compounds	5.10	J	ug/kg
Ethane, 1,1-Difluoro-	2.01	NJ	ug/kg
Unknown	3.09	J	ug/kg

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 01/25/22 20:14  
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s):	01,03		Batch:	WG1598277-5	

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	115		70-130
Dibromofluoromethane	102		70-130

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 02,04 Batch: WG1597992-3 WG1597992-4								
Methylene chloride	112		122		70-130	9		30
1,1-Dichloroethane	106		114		70-130	7		30
Chloroform	104		110		70-130	6		30
Carbon tetrachloride	89		106		70-130	17		30
1,2-Dichloropropane	101		109		70-130	8		30
Dibromochloromethane	86		92		70-130	7		30
1,1,2-Trichloroethane	100		106		70-130	6		30
Tetrachloroethene	77		84		70-130	9		30
Chlorobenzene	94		102		70-130	8		30
Trichlorofluoromethane	146	Q	157	Q	70-139	7		30
1,2-Dichloroethane	102		109		70-130	7		30
1,1,1-Trichloroethane	94		101		70-130	7		30
Bromodichloromethane	100		107		70-130	7		30
trans-1,3-Dichloropropene	85		91		70-130	7		30
cis-1,3-Dichloropropene	101		108		70-130	7		30
1,1-Dichloropropene	85		92		70-130	8		30
Bromoform	79		87		70-130	10		30
1,1,2,2-Tetrachloroethane	99		109		70-130	10		30
Benzene	96		104		70-130	8		30
Toluene	94		101		70-130	7		30
Ethylbenzene	98		106		70-130	8		30
Chloromethane	108		120		52-130	11		30
Bromomethane	135		156	Q	57-147	14		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 02,04 Batch: WG1597992-3 WG1597992-4								
Vinyl chloride	122		136	Q	67-130	11		30
Chloroethane	129		154	Q	50-151	18		30
1,1-Dichloroethene	154	Q	112		65-135	32	Q	30
trans-1,2-Dichloroethene	101		110		70-130	9		30
Trichloroethene	91		97		70-130	6		30
1,2-Dichlorobenzene	92		102		70-130	10		30
1,3-Dichlorobenzene	91		100		70-130	9		30
1,4-Dichlorobenzene	92		101		70-130	9		30
Methyl tert butyl ether	100		104		66-130	4		30
p/m-Xylene	101		110		70-130	9		30
o-Xylene	104		113		70-130	8		30
cis-1,2-Dichloroethene	104		111		70-130	7		30
Dibromomethane	105		112		70-130	6		30
Styrene	106		116		70-130	9		30
Dichlorodifluoromethane	86		96		30-146	11		30
Acetone	70		72		54-140	3		30
Carbon disulfide	129		110		59-130	16		30
2-Butanone	79		82		70-130	4		30
Vinyl acetate	100		106		70-130	6		30
4-Methyl-2-pentanone	101		106		70-130	5		30
1,2,3-Trichloropropane	92		102		68-130	10		30
2-Hexanone	87		91		70-130	4		30
Bromochloromethane	102		111		70-130	8		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 02,04 Batch: WG1597992-3 WG1597992-4								
2,2-Dichloropropane	97		104		70-130	7		30
1,2-Dibromoethane	100		107		70-130	7		30
1,3-Dichloropropane	98		105		69-130	7		30
1,1,1,2-Tetrachloroethane	80		86		70-130	7		30
Bromobenzene	86		95		70-130	10		30
n-Butylbenzene	96		104		70-130	8		30
sec-Butylbenzene	95		105		70-130	10		30
tert-Butylbenzene	93		103		70-130	10		30
o-Chlorotoluene	94		105		70-130	11		30
p-Chlorotoluene	95		105		70-130	10		30
1,2-Dibromo-3-chloropropane	74		82		68-130	10		30
Hexachlorobutadiene	68		76		67-130	11		30
Isopropylbenzene	93		103		70-130	10		30
p-Isopropyltoluene	92		102		70-130	10		30
Naphthalene	88		95		70-130	8		30
Acrylonitrile	106		110		70-130	4		30
n-Propylbenzene	98		108		70-130	10		30
1,2,3-Trichlorobenzene	79		87		70-130	10		30
1,2,4-Trichlorobenzene	81		88		70-130	8		30
1,3,5-Trimethylbenzene	94		104		70-130	10		30
1,2,4-Trimethylbenzene	93		103		70-130	10		30
1,4-Dioxane	81		85		65-136	5		30
p-Diethylbenzene	91		99		70-130	8		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 02,04 Batch: WG1597992-3 WG1597992-4								
p-Ethyltoluene	96		106		70-130	10		30
1,2,4,5-Tetramethylbenzene	85		95		70-130	11		30
Ethyl ether	178	Q	190	Q	67-130	7		30
trans-1,4-Dichloro-2-butene	91		99		70-130	8		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105		106		70-130
Toluene-d8	100		101		70-130
4-Bromofluorobenzene	98		99		70-130
Dibromofluoromethane	107		109		70-130

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03 Batch: WG1598277-3 WG1598277-4								
Methylene chloride	87		86		70-130	1		30
1,1-Dichloroethane	114		113		70-130	1		30
Chloroform	85		85		70-130	0		30
Carbon tetrachloride	92		89		70-130	3		30
1,2-Dichloropropane	114		112		70-130	2		30
Dibromochloromethane	92		92		70-130	0		30
1,1,2-Trichloroethane	95		95		70-130	0		30
Tetrachloroethene	89		88		70-130	1		30
Chlorobenzene	93		93		70-130	0		30
Trichlorofluoromethane	100		98		70-139	2		30
1,2-Dichloroethane	109		108		70-130	1		30
1,1,1-Trichloroethane	92		93		70-130	1		30
Bromodichloromethane	86		84		70-130	2		30
trans-1,3-Dichloropropene	101		101		70-130	0		30
cis-1,3-Dichloropropene	93		92		70-130	1		30
1,1-Dichloropropene	96		95		70-130	1		30
Bromoform	87		86		70-130	1		30
1,1,2,2-Tetrachloroethane	105		104		70-130	1		30
Benzene	89		88		70-130	1		30
Toluene	98		99		70-130	1		30
Ethylbenzene	102		102		70-130	0		30
Chloromethane	130		127		52-130	2		30
Bromomethane	92		90		57-147	2		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03 Batch: WG1598277-3 WG1598277-4								
Vinyl chloride	108		106		67-130	2		30
Chloroethane	92		91		50-151	1		30
1,1-Dichloroethene	95		93		65-135	2		30
trans-1,2-Dichloroethene	92		90		70-130	2		30
Trichloroethene	91		91		70-130	0		30
1,2-Dichlorobenzene	96		95		70-130	1		30
1,3-Dichlorobenzene	98		98		70-130	0		30
1,4-Dichlorobenzene	96		97		70-130	1		30
Methyl tert butyl ether	90		89		66-130	1		30
p/m-Xylene	97		97		70-130	0		30
o-Xylene	95		95		70-130	0		30
cis-1,2-Dichloroethene	89		87		70-130	2		30
Dibromomethane	86		86		70-130	0		30
Styrene	94		95		70-130	1		30
Dichlorodifluoromethane	86		85		30-146	1		30
Acetone	170	Q	165	Q	54-140	3		30
Carbon disulfide	87		86		59-130	1		30
2-Butanone	123		122		70-130	1		30
Vinyl acetate	129		127		70-130	2		30
4-Methyl-2-pentanone	140	Q	138	Q	70-130	1		30
1,2,3-Trichloropropane	105		105		68-130	0		30
2-Hexanone	140	Q	140	Q	70-130	0		30
Bromochloromethane	80		79		70-130	1		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03 Batch: WG1598277-3 WG1598277-4								
2,2-Dichloropropane	91		90		70-130	1		30
1,2-Dibromoethane	97		97		70-130	0		30
1,3-Dichloropropane	99		98		69-130	1		30
1,1,1,2-Tetrachloroethane	90		91		70-130	1		30
Bromobenzene	94		94		70-130	0		30
n-Butylbenzene	123		122		70-130	1		30
sec-Butylbenzene	111		111		70-130	0		30
tert-Butylbenzene	106		106		70-130	0		30
o-Chlorotoluene	114		114		70-130	0		30
p-Chlorotoluene	112		112		70-130	0		30
1,2-Dibromo-3-chloropropane	88		88		68-130	0		30
Hexachlorobutadiene	90		89		67-130	1		30
Isopropylbenzene	108		108		70-130	0		30
p-Isopropyltoluene	108		108		70-130	0		30
Naphthalene	96		96		70-130	0		30
Acrylonitrile	131	Q	127		70-130	3		30
n-Propylbenzene	117		118		70-130	1		30
1,2,3-Trichlorobenzene	86		85		70-130	1		30
1,2,4-Trichlorobenzene	90		89		70-130	1		30
1,3,5-Trimethylbenzene	104		104		70-130	0		30
1,2,4-Trimethylbenzene	103		103		70-130	0		30
1,4-Dioxane	110		111		65-136	1		30
p-Diethylbenzene	109		107		70-130	2		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,03 Batch: WG1598277-3 WG1598277-4								
p-Ethyltoluene	110		110		70-130	0		30
1,2,4,5-Tetramethylbenzene	107		107		70-130	0		30
Ethyl ether	90		88		67-130	2		30
trans-1,4-Dichloro-2-butene	156	Q	154	Q	70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	114		111		70-130
Toluene-d8	108		109		70-130
4-Bromofluorobenzene	120		119		70-130
Dibromofluoromethane	95		92		70-130

# **SEMIVOLATILES**



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-01  
Client ID: WC-1  
Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 09:00  
Date Received: 01/21/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Analytical Method: 1,8270D  
Analytical Date: 01/28/22 09:33  
Analyst: IM  
Percent Solids: 96%

Extraction Method: EPA 3546  
Extraction Date: 01/28/22 00:53

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND	ug/kg	140	18.	1	
1,2,4-Trichlorobenzene	ND	ug/kg	170	20.	1	
Hexachlorobenzene	ND	ug/kg	100	19.	1	
Bis(2-chloroethyl)ether	ND	ug/kg	160	24.	1	
2-Chloronaphthalene	ND	ug/kg	170	17.	1	
1,2-Dichlorobenzene	ND	ug/kg	170	31.	1	
1,3-Dichlorobenzene	ND	ug/kg	170	30.	1	
1,4-Dichlorobenzene	ND	ug/kg	170	30.	1	
3,3'-Dichlorobenzidine	ND	ug/kg	170	46.	1	
2,4-Dinitrotoluene	ND	ug/kg	170	35.	1	
2,6-Dinitrotoluene	ND	ug/kg	170	30.	1	
Fluoranthene	ND	ug/kg	100	20.	1	
4-Chlorophenyl phenyl ether	ND	ug/kg	170	18.	1	
4-Bromophenyl phenyl ether	ND	ug/kg	170	26.	1	
Bis(2-chloroisopropyl)ether	ND	ug/kg	210	30.	1	
Bis(2-chloroethoxy)methane	ND	ug/kg	190	17.	1	
Hexachlorobutadiene	ND	ug/kg	170	25.	1	
Hexachlorocyclopentadiene	ND	ug/kg	500	160	1	
Hexachloroethane	ND	ug/kg	140	28.	1	
Isophorone	ND	ug/kg	160	22.	1	
Naphthalene	ND	ug/kg	170	21.	1	
Nitrobenzene	ND	ug/kg	160	26.	1	
NDPA/DPA	ND	ug/kg	140	20.	1	
n-Nitrosodi-n-propylamine	ND	ug/kg	170	27.	1	
Bis(2-ethylhexyl)phthalate	ND	ug/kg	170	60.	1	
Butyl benzyl phthalate	ND	ug/kg	170	44.	1	
Di-n-butylphthalate	ND	ug/kg	170	33.	1	
Di-n-octylphthalate	ND	ug/kg	170	59.	1	



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**SAMPLE RESULTS**

Lab ID:	L2203656-01	Date Collected:	01/21/22 09:00
Client ID:	WC-1	Date Received:	01/21/22
Sample Location:	BROOKLYN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Diethyl phthalate	ND	ug/kg	170	16.	1	
Dimethyl phthalate	ND	ug/kg	170	36.	1	
Benzo(a)anthracene	ND	ug/kg	100	20.	1	
Benzo(a)pyrene	ND	ug/kg	140	42.	1	
Benzo(b)fluoranthene	ND	ug/kg	100	29.	1	
Benzo(k)fluoranthene	ND	ug/kg	100	28.	1	
Chrysene	ND	ug/kg	100	18.	1	
Acenaphthylene	ND	ug/kg	140	27.	1	
Anthracene	ND	ug/kg	100	34.	1	
Benzo(ghi)perylene	ND	ug/kg	140	20.	1	
Fluorene	ND	ug/kg	170	17.	1	
Phenanthrene	ND	ug/kg	100	21.	1	
Dibenzo(a,h)anthracene	ND	ug/kg	100	20.	1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	140	24.	1	
Pyrene	ND	ug/kg	100	17.	1	
Biphenyl	ND	ug/kg	400	22.	1	
4-Chloroaniline	ND	ug/kg	170	32.	1	
2-Nitroaniline	ND	ug/kg	170	33.	1	
3-Nitroaniline	ND	ug/kg	170	33.	1	
4-Nitroaniline	ND	ug/kg	170	72.	1	
Dibenzofuran	ND	ug/kg	170	16.	1	
2-Methylnaphthalene	ND	ug/kg	210	21.	1	
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	170	18.	1	
Acetophenone	ND	ug/kg	170	21.	1	
2,4,6-Trichlorophenol	ND	ug/kg	100	33.	1	
p-Chloro-m-cresol	ND	ug/kg	170	26.	1	
2-Chlorophenol	ND	ug/kg	170	20.	1	
2,4-Dichlorophenol	ND	ug/kg	160	28.	1	
2,4-Dimethylphenol	ND	ug/kg	170	57.	1	
2-Nitrophenol	ND	ug/kg	380	65.	1	
4-Nitrophenol	ND	ug/kg	240	71.	1	
2,4-Dinitrophenol	ND	ug/kg	830	81.	1	
4,6-Dinitro-o-cresol	ND	ug/kg	450	83.	1	
Pentachlorophenol	ND	ug/kg	140	38.	1	
Phenol	ND	ug/kg	170	26.	1	
2-Methylphenol	ND	ug/kg	170	27.	1	
3-Methylphenol/4-Methylphenol	ND	ug/kg	250	27.	1	



Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-01  
 Client ID: WC-1  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 09:00  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
2,4,5-Trichlorophenol	ND		ug/kg	170	33.	1
Benzoic Acid	ND		ug/kg	560	180	1
Benzyl Alcohol	ND		ug/kg	170	53.	1
Carbazole	ND		ug/kg	170	17.	1
1,4-Dioxane	ND		ug/kg	26	8.0	1

**Tentatively Identified Compounds**

Total TIC Compounds	1770	J	ug/kg	1
Unknown	146	J	ug/kg	1
Unknown	429	J	ug/kg	1
Unknown	174	J	ug/kg	1
Unknown	598	J	ug/kg	1
Unknown	420	J	ug/kg	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		25-120
Phenol-d6	75		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	89		10-136
4-Terphenyl-d14	77		18-120

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-02  
Client ID: WC-2  
Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:00  
Date Received: 01/21/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Analytical Method: 1,8270D  
Analytical Date: 01/28/22 09:56  
Analyst: IM  
Percent Solids: 85%

Extraction Method: EPA 3546  
Extraction Date: 01/28/22 00:53

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	160	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	35.	1
1,3-Dichlorobenzene	ND		ug/kg	190	33.	1
1,4-Dichlorobenzene	ND		ug/kg	190	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	52.	1
2,4-Dinitrotoluene	ND		ug/kg	190	39.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	91	J	ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1
Hexachloroethane	ND		ug/kg	160	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	ND		ug/kg	190	24.	1
Nitrobenzene	ND		ug/kg	170	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	67.	1
Butyl benzyl phthalate	ND		ug/kg	190	49.	1
Di-n-butylphthalate	ND		ug/kg	190	37.	1
Di-n-octylphthalate	ND		ug/kg	190	66.	1



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**SAMPLE RESULTS**

Lab ID:	L2203656-02	Date Collected:	01/21/22 12:00
Client ID:	WC-2	Date Received:	01/21/22
Sample Location:	BROOKLYN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	41.	1
Benzo(a)anthracene	49	J	ug/kg	120	22.	1
Benzo(a)pyrene	61	J	ug/kg	160	47.	1
Benzo(b)fluoranthene	77	J	ug/kg	120	33.	1
Benzo(k)fluoranthene	ND		ug/kg	120	31.	1
Chrysene	64	J	ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	160	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	45	J	ug/kg	160	23.	1
Fluorene	ND		ug/kg	190	19.	1
Phenanthrene	58	J	ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	46	J	ug/kg	160	27.	1
Pyrene	82	J	ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	25.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	37.	1
4-Nitroaniline	ND		ug/kg	190	80.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	26	J	ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	64.	1
2-Nitrophenol	ND		ug/kg	420	73.	1
4-Nitrophenol	ND		ug/kg	270	79.	1
2,4-Dinitrophenol	ND		ug/kg	930	90.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	93.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1



Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-02  
 Client ID: WC-2  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:00  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Benzoic Acid	ND		ug/kg	630	200	1
Benzyl Alcohol	ND		ug/kg	190	59.	1
Carbazole	ND		ug/kg	190	19.	1
1,4-Dioxane	ND		ug/kg	29	8.9	1

**Tentatively Identified Compounds**

Total TIC Compounds	4080	J	ug/kg	1
Unknown	297	J	ug/kg	1
Unknown	866	J	ug/kg	1
Unknown Benzene	2670	J	ug/kg	1
Unknown Ketone	251	J	ug/kg	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	83		25-120
Phenol-d6	87		10-120
Nitrobenzene-d5	98		23-120
2-Fluorobiphenyl	85		30-120
2,4,6-Tribromophenol	98		10-136
4-Terphenyl-d14	82		18-120

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-03  
Client ID: WC-3  
Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:15  
Date Received: 01/21/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Analytical Method: 1,8270D  
Analytical Date: 01/28/22 10:20  
Analyst: IM  
Percent Solids: 92%

Extraction Method: EPA 3546  
Extraction Date: 01/28/22 00:53

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND	ug/kg	140	19.	1	
1,2,4-Trichlorobenzene	ND	ug/kg	180	20.	1	
Hexachlorobenzene	ND	ug/kg	110	20.	1	
Bis(2-chloroethyl)ether	ND	ug/kg	160	24.	1	
2-Chloronaphthalene	ND	ug/kg	180	18.	1	
1,2-Dichlorobenzene	ND	ug/kg	180	32.	1	
1,3-Dichlorobenzene	ND	ug/kg	180	31.	1	
1,4-Dichlorobenzene	ND	ug/kg	180	31.	1	
3,3'-Dichlorobenzidine	ND	ug/kg	180	48.	1	
2,4-Dinitrotoluene	ND	ug/kg	180	36.	1	
2,6-Dinitrotoluene	ND	ug/kg	180	31.	1	
Fluoranthene	ND	ug/kg	110	21.	1	
4-Chlorophenyl phenyl ether	ND	ug/kg	180	19.	1	
4-Bromophenyl phenyl ether	ND	ug/kg	180	27.	1	
Bis(2-chloroisopropyl)ether	ND	ug/kg	220	31.	1	
Bis(2-chloroethoxy)methane	ND	ug/kg	190	18.	1	
Hexachlorobutadiene	ND	ug/kg	180	26.	1	
Hexachlorocyclopentadiene	ND	ug/kg	510	160	1	
Hexachloroethane	ND	ug/kg	140	29.	1	
Isophorone	ND	ug/kg	160	23.	1	
Naphthalene	ND	ug/kg	180	22.	1	
Nitrobenzene	ND	ug/kg	160	27.	1	
NDPA/DPA	ND	ug/kg	140	20.	1	
n-Nitrosodi-n-propylamine	ND	ug/kg	180	28.	1	
Bis(2-ethylhexyl)phthalate	ND	ug/kg	180	62.	1	
Butyl benzyl phthalate	ND	ug/kg	180	45.	1	
Di-n-butylphthalate	ND	ug/kg	180	34.	1	
Di-n-octylphthalate	ND	ug/kg	180	61.	1	



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**SAMPLE RESULTS**

Lab ID:	L2203656-03	Date Collected:	01/21/22 12:15
Client ID:	WC-3	Date Received:	01/21/22
Sample Location:	BROOKLYN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Diethyl phthalate	ND	ug/kg	180	17.	1	
Dimethyl phthalate	ND	ug/kg	180	38.	1	
Benzo(a)anthracene	ND	ug/kg	110	20.	1	
Benzo(a)pyrene	ND	ug/kg	140	44.	1	
Benzo(b)fluoranthene	ND	ug/kg	110	30.	1	
Benzo(k)fluoranthene	ND	ug/kg	110	29.	1	
Chrysene	ND	ug/kg	110	19.	1	
Acenaphthylene	ND	ug/kg	140	28.	1	
Anthracene	ND	ug/kg	110	35.	1	
Benzo(ghi)perylene	ND	ug/kg	140	21.	1	
Fluorene	ND	ug/kg	180	17.	1	
Phenanthrene	ND	ug/kg	110	22.	1	
Dibenzo(a,h)anthracene	ND	ug/kg	110	21.	1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	140	25.	1	
Pyrene	ND	ug/kg	110	18.	1	
Biphenyl	ND	ug/kg	410	23.	1	
4-Chloroaniline	ND	ug/kg	180	33.	1	
2-Nitroaniline	ND	ug/kg	180	35.	1	
3-Nitroaniline	ND	ug/kg	180	34.	1	
4-Nitroaniline	ND	ug/kg	180	74.	1	
Dibenzofuran	ND	ug/kg	180	17.	1	
2-Methylnaphthalene	ND	ug/kg	220	22.	1	
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	180	19.	1	
Acetophenone	ND	ug/kg	180	22.	1	
2,4,6-Trichlorophenol	ND	ug/kg	110	34.	1	
p-Chloro-m-cresol	ND	ug/kg	180	27.	1	
2-Chlorophenol	ND	ug/kg	180	21.	1	
2,4-Dichlorophenol	ND	ug/kg	160	29.	1	
2,4-Dimethylphenol	ND	ug/kg	180	59.	1	
2-Nitrophenol	ND	ug/kg	390	68.	1	
4-Nitrophenol	ND	ug/kg	250	73.	1	
2,4-Dinitrophenol	ND	ug/kg	860	84.	1	
4,6-Dinitro-o-cresol	ND	ug/kg	470	86.	1	
Pentachlorophenol	ND	ug/kg	140	40.	1	
Phenol	ND	ug/kg	180	27.	1	
2-Methylphenol	ND	ug/kg	180	28.	1	
3-Methylphenol/4-Methylphenol	ND	ug/kg	260	28.	1	



Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-03  
 Client ID: WC-3  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:15  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Benzoic Acid	ND		ug/kg	580	180	1
Benzyl Alcohol	ND		ug/kg	180	55.	1
Carbazole	ND		ug/kg	180	17.	1
1,4-Dioxane	ND		ug/kg	27	8.3	1

**Tentatively Identified Compounds**

No Tentatively Identified Compounds	ND	ug/kg	1
Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	78		25-120
Phenol-d6	79		10-120
Nitrobenzene-d5	85		23-120
2-Fluorobiphenyl	77		30-120
2,4,6-Tribromophenol	90		10-136
4-Terphenyl-d14	76		18-120

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-04 D  
Client ID: WC-4  
Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:45  
Date Received: 01/21/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Analytical Method: 1,8270D  
Analytical Date: 01/28/22 10:43  
Analyst: IM  
Percent Solids: 95%

Extraction Method: EPA 3546  
Extraction Date: 01/28/22 00:53

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	690	89.	5
1,2,4-Trichlorobenzene	ND		ug/kg	860	98.	5
Hexachlorobenzene	ND		ug/kg	520	96.	5
Bis(2-chloroethyl)ether	ND		ug/kg	770	120	5
2-Chloronaphthalene	ND		ug/kg	860	85.	5
1,2-Dichlorobenzene	ND		ug/kg	860	150	5
1,3-Dichlorobenzene	ND		ug/kg	860	150	5
1,4-Dichlorobenzene	ND		ug/kg	860	150	5
3,3'-Dichlorobenzidine	ND		ug/kg	860	230	5
2,4-Dinitrotoluene	ND		ug/kg	860	170	5
2,6-Dinitrotoluene	ND		ug/kg	860	150	5
Fluoranthene	180	J	ug/kg	520	99.	5
4-Chlorophenyl phenyl ether	ND		ug/kg	860	92.	5
4-Bromophenyl phenyl ether	ND		ug/kg	860	130	5
Bis(2-chloroisopropyl)ether	ND		ug/kg	1000	150	5
Bis(2-chloroethoxy)methane	ND		ug/kg	930	86.	5
Hexachlorobutadiene	ND		ug/kg	860	120	5
Hexachlorocyclopentadiene	ND		ug/kg	2400	780	5
Hexachloroethane	ND		ug/kg	690	140	5
Isophorone	ND		ug/kg	770	110	5
Naphthalene	100	J	ug/kg	860	100	5
Nitrobenzene	ND		ug/kg	770	130	5
NDPA/DPA	ND		ug/kg	690	98.	5
n-Nitrosodi-n-propylamine	ND		ug/kg	860	130	5
Bis(2-ethylhexyl)phthalate	ND		ug/kg	860	300	5
Butyl benzyl phthalate	ND		ug/kg	860	220	5
Di-n-butylphthalate	ND		ug/kg	860	160	5
Di-n-octylphthalate	ND		ug/kg	860	290	5



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**SAMPLE RESULTS**

Lab ID:	L2203656-04	D	Date Collected:	01/21/22 12:45
Client ID:	WC-4		Date Received:	01/21/22
Sample Location:	BROOKLYN, NY		Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Diethyl phthalate	ND		ug/kg	860	80.	5
Dimethyl phthalate	ND		ug/kg	860	180	5
Benzo(a)anthracene	110	J	ug/kg	520	97.	5
Benzo(a)pyrene	ND		ug/kg	690	210	5
Benzo(b)fluoranthene	180	J	ug/kg	520	140	5
Benzo(k)fluoranthene	ND		ug/kg	520	140	5
Chrysene	200	J	ug/kg	520	89.	5
Acenaphthylene	ND		ug/kg	690	130	5
Anthracene	ND		ug/kg	520	170	5
Benzo(ghi)perylene	140	J	ug/kg	690	100	5
Fluorene	ND		ug/kg	860	84.	5
Phenanthrene	210	J	ug/kg	520	100	5
Dibenzo(a,h)anthracene	ND		ug/kg	520	99.	5
Indeno(1,2,3-cd)pyrene	ND		ug/kg	690	120	5
Pyrene	210	J	ug/kg	520	85.	5
Biphenyl	ND		ug/kg	2000	110	5
4-Chloroaniline	ND		ug/kg	860	160	5
2-Nitroaniline	ND		ug/kg	860	160	5
3-Nitroaniline	ND		ug/kg	860	160	5
4-Nitroaniline	ND		ug/kg	860	360	5
Dibenzofuran	ND		ug/kg	860	81.	5
2-Methylnaphthalene	180	J	ug/kg	1000	100	5
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	860	90.	5
Acetophenone	ND		ug/kg	860	110	5
2,4,6-Trichlorophenol	ND		ug/kg	520	160	5
p-Chloro-m-cresol	ND		ug/kg	860	130	5
2-Chlorophenol	ND		ug/kg	860	100	5
2,4-Dichlorophenol	ND		ug/kg	770	140	5
2,4-Dimethylphenol	ND		ug/kg	860	280	5
2-Nitrophenol	ND		ug/kg	1800	320	5
4-Nitrophenol	ND		ug/kg	1200	350	5
2,4-Dinitrophenol	ND		ug/kg	4100	400	5
4,6-Dinitro-o-cresol	ND		ug/kg	2200	410	5
Pentachlorophenol	ND		ug/kg	690	190	5
Phenol	ND		ug/kg	860	130	5
2-Methylphenol	ND		ug/kg	860	130	5
3-Methylphenol/4-Methylphenol	ND		ug/kg	1200	130	5



Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID:	L2203656-04	D	Date Collected:	01/21/22 12:45
Client ID:	WC-4		Date Received:	01/21/22
Sample Location:	BROOKLYN, NY		Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
2,4,5-Trichlorophenol	ND		ug/kg	860	160	5
Benzoic Acid	ND		ug/kg	2800	870	5
Benzyl Alcohol	ND		ug/kg	860	260	5
Carbazole	ND		ug/kg	860	84.	5
1,4-Dioxane	ND		ug/kg	130	40.	5

**Tentatively Identified Compounds**

No Tentatively Identified Compounds	ND	ug/kg	5
Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		25-120
Phenol-d6	69		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	72		30-120
2,4,6-Tribromophenol	70		10-136
4-Terphenyl-d14	71		18-120

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D  
Analytical Date: 01/28/22 08:22  
Analyst: IM

Extraction Method: EPA 3546  
Extraction Date: 01/27/22 23:36

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s):	01-04		Batch:	WG1599051-1	
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	170	19.
Hexachlorobenzene	ND		ug/kg	100	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	170	16.
1,2-Dichlorobenzene	ND		ug/kg	170	30.
1,3-Dichlorobenzene	ND		ug/kg	170	28.
1,4-Dichlorobenzene	ND		ug/kg	170	29.
3,3'-Dichlorobenzidine	ND		ug/kg	170	44.
2,4-Dinitrotoluene	ND		ug/kg	170	33.
2,6-Dinitrotoluene	ND		ug/kg	170	28.
Fluoranthene	ND		ug/kg	100	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.
4-Bromophenyl phenyl ether	ND		ug/kg	170	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.
Hexachlorobutadiene	ND		ug/kg	170	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	22.
Naphthalene	ND		ug/kg	170	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	57.
Butyl benzyl phthalate	ND		ug/kg	170	42.
Di-n-butylphthalate	ND		ug/kg	170	31.
Di-n-octylphthalate	ND		ug/kg	170	56.
Diethyl phthalate	ND		ug/kg	170	15.



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D  
Analytical Date: 01/28/22 08:22  
Analyst: IM

Extraction Method: EPA 3546  
Extraction Date: 01/27/22 23:36

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s):	01-04		Batch:	WG1599051-1	
Dimethyl phthalate	ND		ug/kg	170	35.
Benzo(a)anthracene	ND		ug/kg	100	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	100	28.
Benzo(k)fluoranthene	ND		ug/kg	100	26.
Chrysene	ND		ug/kg	100	17.
Acenaphthylene	ND		ug/kg	130	26.
Anthracene	ND		ug/kg	100	32.
Benzo(ghi)perylene	ND		ug/kg	130	20.
Fluorene	ND		ug/kg	170	16.
Phenanthrene	ND		ug/kg	100	20.
Dibenzo(a,h)anthracene	ND		ug/kg	100	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	100	16.
Biphenyl	ND		ug/kg	380	22.
4-Chloroaniline	ND		ug/kg	170	30.
2-Nitroaniline	ND		ug/kg	170	32.
3-Nitroaniline	ND		ug/kg	170	31.
4-Nitroaniline	ND		ug/kg	170	69.
Dibenzofuran	ND		ug/kg	170	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	17.
Acetophenone	ND		ug/kg	170	20.
2,4,6-Trichlorophenol	ND		ug/kg	100	31.
p-Chloro-m-cresol	ND		ug/kg	170	25.
2-Chlorophenol	ND		ug/kg	170	20.
2,4-Dichlorophenol	ND		ug/kg	150	27.
2,4-Dimethylphenol	ND		ug/kg	170	55.
2-Nitrophenol	ND		ug/kg	360	62.



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

### **Method Blank Analysis Batch Quality Control**

Analytical Method: 1,8270D  
Analytical Date: 01/28/22 08:22  
Analyst: IM

Extraction Method: EPA 3546  
Extraction Date: 01/27/22 23:36

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s):	01-04		Batch:	WG1599051-1	
4-Nitrophenol	ND		ug/kg	230	68.
2,4-Dinitrophenol	ND		ug/kg	800	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	80.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	170	25.
2-Methylphenol	ND		ug/kg	170	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	170	32.
Benzoic Acid	ND		ug/kg	540	170
Benzyl Alcohol	ND		ug/kg	170	51.
Carbazole	ND		ug/kg	170	16.
1,4-Dioxane	ND		ug/kg	25	7.6

#### Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/kg

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	61		25-120
Phenol-d6	65		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	65		30-120
2,4,6-Tribromophenol	74		10-136
4-Terphenyl-d14	71		18-120



# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1599051-2 WG1599051-3								
Acenaphthene	77		66		31-137	15		50
1,2,4-Trichlorobenzene	73		62		38-107	16		50
Hexachlorobenzene	82		71		40-140	14		50
Bis(2-chloroethyl)ether	72		59		40-140	20		50
2-Chloronaphthalene	80		68		40-140	16		50
1,2-Dichlorobenzene	71		58		40-140	20		50
1,3-Dichlorobenzene	69		57		40-140	19		50
1,4-Dichlorobenzene	71		58		28-104	20		50
3,3'-Dichlorobenzidine	42		42		40-140	0		50
2,4-Dinitrotoluene	86		78		40-132	10		50
2,6-Dinitrotoluene	84		76		40-140	10		50
Fluoranthene	82		71		40-140	14		50
4-Chlorophenyl phenyl ether	81		71		40-140	13		50
4-Bromophenyl phenyl ether	81		71		40-140	13		50
Bis(2-chloroisopropyl)ether	72		60		40-140	18		50
Bis(2-chloroethoxy)methane	78		67		40-117	15		50
Hexachlorobutadiene	73		61		40-140	18		50
Hexachlorocyclopentadiene	83		70		40-140	17		50
Hexachloroethane	73		60		40-140	20		50
Isophorone	77		67		40-140	14		50
Naphthalene	72		60		40-140	18		50
Nitrobenzene	80		69		40-140	15		50
NDPA/DPA	82		72		36-157	13		50

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1599051-2 WG1599051-3								
n-Nitrosodi-n-propylamine	77		66		32-121	15		50
Bis(2-ethylhexyl)phthalate	88		76		40-140	15		50
Butyl benzyl phthalate	84		75		40-140	11		50
Di-n-butylphthalate	85		73		40-140	15		50
Di-n-octylphthalate	84		72		40-140	15		50
Diethyl phthalate	83		72		40-140	14		50
Dimethyl phthalate	81		72		40-140	12		50
Benzo(a)anthracene	77		66		40-140	15		50
Benzo(a)pyrene	82		71		40-140	14		50
Benzo(b)fluoranthene	81		70		40-140	15		50
Benzo(k)fluoranthene	82		68		40-140	19		50
Chrysene	77		66		40-140	15		50
Acenaphthylene	81		70		40-140	15		50
Anthracene	81		69		40-140	16		50
Benzo(ghi)perylene	82		70		40-140	16		50
Fluorene	83		72		40-140	14		50
Phenanthrene	78		66		40-140	17		50
Dibenzo(a,h)anthracene	79		68		40-140	15		50
Indeno(1,2,3-cd)pyrene	85		74		40-140	14		50
Pyrene	80		70		35-142	13		50
Biphenyl	81		69		37-127	16		50
4-Chloroaniline	49		58		40-140	17		50
2-Nitroaniline	87		79		47-134	10		50

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1599051-2 WG1599051-3								
3-Nitroaniline	69		68		26-129	1		50
4-Nitroaniline	85		77		41-125	10		50
Dibenzofuran	80		69		40-140	15		50
2-Methylnaphthalene	77		65		40-140	17		50
1,2,4,5-Tetrachlorobenzene	81		68		40-117	17		50
Acetophenone	77		65		14-144	17		50
2,4,6-Trichlorophenol	89		77		30-130	14		50
p-Chloro-m-cresol	86		74		26-103	15		50
2-Chlorophenol	75		65		25-102	14		50
2,4-Dichlorophenol	84		74		30-130	13		50
2,4-Dimethylphenol	79		68		30-130	15		50
2-Nitrophenol	89		79		30-130	12		50
4-Nitrophenol	96		84		11-114	13		50
2,4-Dinitrophenol	56		52		4-130	7		50
4,6-Dinitro-o-cresol	83		74		10-130	11		50
Pentachlorophenol	91		81		17-109	12		50
Phenol	76		64		26-90	17		50
2-Methylphenol	78		66		30-130.	17		50
3-Methylphenol/4-Methylphenol	80		69		30-130	15		50
2,4,5-Trichlorophenol	92		78		30-130	16		50
Benzoic Acid	0	Q	0	Q	10-110	NC		50
Benzyl Alcohol	78		66		40-140	17		50
Carbazole	82		71		54-128	14		50

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

<b>Parameter</b>	<i>LCS</i> <i>%Recovery</i>	<i>Qual</i>	<i>LCSD</i> <i>%Recovery</i>	<i>Qual</i>	<i>%Recovery</i> <i>Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1599051-2 WG1599051-3								
1,4-Dioxane	49		40		40-140	20		50

<b>Surrogate</b>	<i>LCS</i> <i>%Recovery</i>	<i>Qual</i>	<i>LCSD</i> <i>%Recovery</i>	<i>Qual</i>	<b>Acceptance Criteria</b>
2-Fluorophenol	73		61		25-120
Phenol-d6	75		64		10-120
Nitrobenzene-d5	78		71		23-120
2-Fluorobiphenyl	74		66		30-120
2,4,6-Tribromophenol	93		82		10-136
4-Terphenyl-d14	75		67		18-120

# PETROLEUM HYDROCARBONS



Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-01  
 Client ID: WC-1  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 09:00  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 01/28/22 09:45  
 Analyst: MEO  
 Percent Solids: 96%

Extraction Method: EPA 3546  
 Extraction Date: 01/28/22 03:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Diesel Range Organics - Westborough Lab</b>						
DRO (C10-C28)	2500	J	ug/kg	34000	1900	1
Surrogate		% Recovery	Qualifier	Acceptance Criteria		
o-Terphenyl		81		40-140		

Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-02  
 Client ID: WC-2  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:00  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 01/28/22 08:36  
 Analyst: MEO  
 Percent Solids: 85%

Extraction Method: EPA 3546  
 Extraction Date: 01/28/22 03:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Diesel Range Organics - Westborough Lab</b>						
DRO (C10-C28)	3700	J	ug/kg	38000	2100	1
Surrogate		% Recovery	Qualifier	Acceptance Criteria		
o-Terphenyl		83		40-140		

Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-03  
 Client ID: WC-3  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:15  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 01/28/22 10:20  
 Analyst: MEO  
 Percent Solids: 92%

Extraction Method: EPA 3546  
 Extraction Date: 01/28/22 03:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Diesel Range Organics - Westborough Lab</b>						
DRO (C10-C28)	3700	J	ug/kg	36000	2000	1
Surrogate		% Recovery	Qualifier	Acceptance Criteria		
o-Terphenyl		103		40-140		

Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-04  
 Client ID: WC-4  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:45  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8015D(M)  
 Analytical Date: 01/28/22 09:45  
 Analyst: MEO  
 Percent Solids: 95%

Extraction Method: EPA 3546  
 Extraction Date: 01/28/22 03:26

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Diesel Range Organics - Westborough Lab</b>						
DRO (C10-C28)	290000		ug/kg	34000	1900	1
Surrogate		% Recovery	Qualifier	Acceptance Criteria		
o-Terphenyl		61		40-140		

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8015D(M)  
Analytical Date: 01/28/22 09:10  
Analyst: MEO

Extraction Method: EPA 3546  
Extraction Date: 01/28/22 03:26

Parameter	Result	Qualifier	Units	RL	MDL
Diesel Range Organics - Westborough Lab for sample(s):	01-04		Batch:	WG1599077-1	
DRO (C10-C28)	2100	J	ug/kg	33000	1800

Surrogate	%Recovery	Qualifier	Acceptance
			Criteria
o-Terphenyl	75		40-140

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

<b>Parameter</b>	<i>LCS</i> <i>%Recovery</i>	<i>Qual</i>	<i>LCSD</i> <i>%Recovery</i>	<i>Qual</i>	<i>%Recovery</i> <i>Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>
Diesel Range Organics - Westborough Lab Associated sample(s): 01-04 Batch: WG1599077-2								
DRO (C10-C28)	87	-	-	-	60-140	-	-	-

<b>Surrogate</b>	<i>LCS</i> <i>%Recovery</i>	<i>Qual</i>	<i>LCSD</i> <i>%Recovery</i>	<i>Qual</i>	<b>Acceptance Criteria</b>
o-Terphenyl	77	-	-	-	40-140

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Duplicate Analysis**  
**Batch Quality Control**

**Lab Number:** L2203656  
**Report Date:** 01/31/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Diesel Range Organics - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1599077-3 QC Sample: L2203656-02 Client ID: WC-2						
DRO (C10-C28)	3700J	3200J	ug/kg	NC		20

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
o-Terphenyl	83		83		40-140

**PCBS**



Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-01  
 Client ID: WC-1  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 09:00  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8082A  
 Analytical Date: 01/28/22 10:54  
 Analyst: JM  
 Percent Solids: 96%

Extraction Method: EPA 3546  
 Extraction Date: 01/28/22 00:47  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 01/28/22  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 01/28/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Polychlorinated Biphenyls by GC - Westborough Lab</b>							
Aroclor 1016	ND		ug/kg	33.6	2.99	1	A
Aroclor 1221	ND		ug/kg	33.6	3.37	1	A
Aroclor 1232	ND		ug/kg	33.6	7.13	1	A
Aroclor 1242	ND		ug/kg	33.6	4.53	1	A
Aroclor 1248	ND		ug/kg	33.6	5.04	1	A
Aroclor 1254	ND		ug/kg	33.6	3.68	1	A
Aroclor 1260	ND		ug/kg	33.6	6.21	1	A
Aroclor 1262	ND		ug/kg	33.6	4.27	1	A
Aroclor 1268	ND		ug/kg	33.6	3.48	1	A
PCBs, Total	ND		ug/kg	33.6	2.99	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	86		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	82		30-150	B

Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-02  
 Client ID: WC-2  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:00  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8082A  
 Analytical Date: 01/28/22 11:03  
 Analyst: JM  
 Percent Solids: 85%

Extraction Method: EPA 3546  
 Extraction Date: 01/28/22 00:48  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 01/28/22  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 01/28/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Polychlorinated Biphenyls by GC - Westborough Lab</b>							
Aroclor 1016	ND		ug/kg	37.6	3.34	1	A
Aroclor 1221	ND		ug/kg	37.6	3.77	1	A
Aroclor 1232	ND		ug/kg	37.6	7.97	1	A
Aroclor 1242	ND		ug/kg	37.6	5.07	1	A
Aroclor 1248	ND		ug/kg	37.6	5.64	1	A
Aroclor 1254	ND		ug/kg	37.6	4.11	1	A
Aroclor 1260	ND		ug/kg	37.6	6.95	1	A
Aroclor 1262	ND		ug/kg	37.6	4.78	1	A
Aroclor 1268	ND		ug/kg	37.6	3.90	1	A
PCBs, Total	ND		ug/kg	37.6	3.34	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	88		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		30-150	B
Decachlorobiphenyl	88		30-150	B

Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-03  
 Client ID: WC-3  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:15  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8082A  
 Analytical Date: 01/28/22 11:11  
 Analyst: JM  
 Percent Solids: 92%

Extraction Method: EPA 3546  
 Extraction Date: 01/28/22 00:48  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 01/28/22  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 01/28/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Polychlorinated Biphenyls by GC - Westborough Lab</b>							
Aroclor 1016	ND		ug/kg	35.0	3.10	1	A
Aroclor 1221	ND		ug/kg	35.0	3.50	1	A
Aroclor 1232	ND		ug/kg	35.0	7.41	1	A
Aroclor 1242	ND		ug/kg	35.0	4.71	1	A
Aroclor 1248	ND		ug/kg	35.0	5.24	1	A
Aroclor 1254	ND		ug/kg	35.0	3.82	1	A
Aroclor 1260	ND		ug/kg	35.0	6.46	1	A
Aroclor 1262	ND		ug/kg	35.0	4.44	1	A
Aroclor 1268	ND		ug/kg	35.0	3.62	1	A
PCBs, Total	ND		ug/kg	35.0	3.10	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	A
Decachlorobiphenyl	90		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	85		30-150	B

Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-04  
 Client ID: WC-4  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:45  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8082A  
 Analytical Date: 01/28/22 22:44  
 Analyst: CW  
 Percent Solids: 95%

Extraction Method: EPA 3546  
 Extraction Date: 01/28/22 12:28  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 01/28/22  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 01/28/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Polychlorinated Biphenyls by GC - Westborough Lab</b>							
Aroclor 1016	ND		ug/kg	33.8	3.00	1	A
Aroclor 1221	ND		ug/kg	33.8	3.39	1	A
Aroclor 1232	ND		ug/kg	33.8	7.17	1	A
Aroclor 1242	ND		ug/kg	33.8	4.56	1	A
Aroclor 1248	ND		ug/kg	33.8	5.07	1	A
Aroclor 1254	ND		ug/kg	33.8	3.70	1	A
Aroclor 1260	ND		ug/kg	33.8	6.25	1	A
Aroclor 1262	ND		ug/kg	33.8	4.30	1	A
Aroclor 1268	ND		ug/kg	33.8	3.50	1	A
PCBs, Total	ND		ug/kg	33.8	3.00	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	54		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	62		30-150	B

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

### **Method Blank Analysis Batch Quality Control**

Analytical Method: 1,8082A  
Analytical Date: 01/27/22 07:56  
Analyst: JWL

Extraction Method: EPA 3546  
Extraction Date: 01/27/22 00:57  
Cleanup Method: EPA 3665A  
Cleanup Date: 01/27/22  
Cleanup Method: EPA 3660B  
Cleanup Date: 01/27/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s):	01-03			Batch:	WG1598578-1	
Aroclor 1016	ND		ug/kg	32.1	2.85	A
Aroclor 1221	ND		ug/kg	32.1	3.22	A
Aroclor 1232	ND		ug/kg	32.1	6.81	A
Aroclor 1242	ND		ug/kg	32.1	4.33	A
Aroclor 1248	ND		ug/kg	32.1	4.82	A
Aroclor 1254	ND		ug/kg	32.1	3.52	A
Aroclor 1260	ND		ug/kg	32.1	5.94	A
Aroclor 1262	ND		ug/kg	32.1	4.08	A
Aroclor 1268	ND		ug/kg	32.1	3.33	A
PCBs, Total	ND		ug/kg	32.1	2.85	A

Surrogate	%Recovery	Acceptance		
		Qualifier	Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	A
Decachlorobiphenyl	88		30-150	A
2,4,5,6-Tetrachloro-m-xylene	90		30-150	B
Decachlorobiphenyl	96		30-150	B

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8082A  
Analytical Date: 01/28/22 22:22  
Analyst: CW

Extraction Method: EPA 3546  
Extraction Date: 01/28/22 12:28  
Cleanup Method: EPA 3665A  
Cleanup Date: 01/28/22  
Cleanup Method: EPA 3660B  
Cleanup Date: 01/28/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 04 Batch: WG1599299-1						
Aroclor 1016	ND		ug/kg	31.8	2.82	A
Aroclor 1221	ND		ug/kg	31.8	3.18	A
Aroclor 1232	ND		ug/kg	31.8	6.73	A
Aroclor 1242	ND		ug/kg	31.8	4.28	A
Aroclor 1248	ND		ug/kg	31.8	4.76	A
Aroclor 1254	ND		ug/kg	31.8	3.48	A
Aroclor 1260	ND		ug/kg	31.8	5.87	A
Aroclor 1262	ND		ug/kg	31.8	4.03	A
Aroclor 1268	ND		ug/kg	31.8	3.29	A
PCBs, Total	ND		ug/kg	31.8	2.82	A

Surrogate	%Recovery	Acceptance		
		Qualifier	Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	61		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	70		30-150	B

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1598578-2 WG1598578-3									
Aroclor 1016	89		86		40-140	3		50	A
Aroclor 1260	86		85		40-140	1		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	92		93		30-150	A
Decachlorobiphenyl	97		99		30-150	A
2,4,5,6-Tetrachloro-m-xylene	104		104		30-150	B
Decachlorobiphenyl	106		107		30-150	B

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

<b>Parameter</b>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> <i>Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>	<i>Column</i>
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 04 Batch: WG1599299-2 WG1599299-3									
Aroclor 1016	71		77		40-140	8		50	A
Aroclor 1260	69		77		40-140	11		50	A

<b>Surrogate</b>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> <i>Criteria</i>	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	68		77		30-150	A
Decachlorobiphenyl	61		70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		77		30-150	B
Decachlorobiphenyl	68		77		30-150	B

# PESTICIDES

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-01  
Client ID: WC-1  
Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 09:00  
Date Received: 01/21/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Analytical Method: 1,8081B  
Analytical Date: 01/31/22 15:55  
Analyst: EJL  
Percent Solids: 96%

Extraction Method: EPA 3546  
Extraction Date: 01/28/22 03:21  
Cleanup Method: EPA 3620B  
Cleanup Date: 01/30/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Organochlorine Pesticides by GC - Westborough Lab</b>							
Delta-BHC	ND	ug/kg	1.61	0.316	1	A	
Lindane	ND	ug/kg	0.671	0.300	1	A	
Alpha-BHC	ND	ug/kg	0.671	0.191	1	A	
Beta-BHC	ND	ug/kg	1.61	0.611	1	A	
Heptachlor	ND	ug/kg	0.806	0.361	1	A	
Aldrin	ND	ug/kg	1.61	0.567	1	A	
Heptachlor epoxide	ND	ug/kg	3.02	0.906	1	A	
Endrin	ND	ug/kg	0.671	0.275	1	A	
Endrin aldehyde	ND	ug/kg	2.01	0.705	1	A	
Endrin ketone	ND	ug/kg	1.61	0.415	1	A	
Dieldrin	ND	ug/kg	1.01	0.503	1	A	
4,4'-DDE	ND	ug/kg	1.61	0.372	1	B	
4,4'-DDD	ND	ug/kg	1.61	0.575	1	A	
4,4'-DDT	ND	ug/kg	3.02	1.30	1	B	
Endosulfan I	ND	ug/kg	1.61	0.381	1	A	
Endosulfan II	ND	ug/kg	1.61	0.538	1	A	
Endosulfan sulfate	ND	ug/kg	0.671	0.320	1	A	
Methoxychlor	ND	ug/kg	3.02	0.940	1	A	
Toxaphene	ND	ug/kg	30.2	8.46	1	A	
cis-Chlordane	ND	ug/kg	2.01	0.561	1	A	
trans-Chlordane	ND	ug/kg	2.01	0.532	1	A	
Chlordane	ND	ug/kg	13.4	5.34	1	A	

Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-01  
 Client ID: WC-1  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 09:00  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	92		30-150	A
Decachlorobiphenyl	80		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	75		30-150	B

Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-01  
 Client ID: WC-1  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 09:00  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8151A  
 Analytical Date: 01/24/22 13:49  
 Analyst: AKM  
 Percent Solids: 96%  
 Methylation Date: 01/24/22 03:29

Extraction Method: EPA 8151A  
 Extraction Date: 01/22/22 08:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Chlorinated Herbicides by GC - Westborough Lab</b>							
2,4-D	ND		ug/kg	173	10.9	1	A
2,4,5-T	ND		ug/kg	173	5.37	1	A
2,4,5-TP (Silvex)	ND		ug/kg	173	4.61	1	A
Surrogate		% Recovery	Qualifier	<b>Acceptance Criteria</b>		<b>Column</b>	
DCAA		96		30-150		A	
DCAA		79		30-150		B	

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-02  
Client ID: WC-2  
Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:00  
Date Received: 01/21/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Analytical Method: 1,8081B  
Analytical Date: 01/31/22 13:24  
Analyst: EJL  
Percent Solids: 85%

Extraction Method: EPA 3546  
Extraction Date: 01/28/22 03:21  
Cleanup Method: EPA 3620B  
Cleanup Date: 01/30/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Organochlorine Pesticides by GC - Westborough Lab</b>							
Delta-BHC	ND		ug/kg	1.83	0.359	1	A
Lindane	ND		ug/kg	0.763	0.341	1	A
Alpha-BHC	ND		ug/kg	0.763	0.217	1	A
Beta-BHC	ND		ug/kg	1.83	0.694	1	A
Heptachlor	ND		ug/kg	0.916	0.411	1	A
Aldrin	ND		ug/kg	1.83	0.645	1	A
Heptachlor epoxide	ND		ug/kg	3.43	1.03	1	A
Endrin	ND		ug/kg	0.763	0.313	1	A
Endrin aldehyde	ND		ug/kg	2.29	0.801	1	A
Endrin ketone	ND		ug/kg	1.83	0.472	1	A
Dieldrin	ND		ug/kg	1.14	0.572	1	A
4,4'-DDE	ND		ug/kg	1.83	0.424	1	A
4,4'-DDD	ND		ug/kg	1.83	0.653	1	A
4,4'-DDT	ND		ug/kg	3.43	1.47	1	A
Endosulfan I	ND		ug/kg	1.83	0.433	1	A
Endosulfan II	ND		ug/kg	1.83	0.612	1	A
Endosulfan sulfate	ND		ug/kg	0.763	0.363	1	A
Methoxychlor	ND		ug/kg	3.43	1.07	1	A
Toxaphene	ND		ug/kg	34.3	9.62	1	A
cis-Chlordane	ND		ug/kg	2.29	0.638	1	A
trans-Chlordane	ND		ug/kg	2.29	0.604	1	A
Chlordane	ND		ug/kg	15.3	6.07	1	A

Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-02  
 Client ID: WC-2  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:00  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	100		30-150	A
Decachlorobiphenyl	94		30-150	A
2,4,5,6-Tetrachloro-m-xylene	95		30-150	B
Decachlorobiphenyl	80		30-150	B

Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-02  
 Client ID: WC-2  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:00  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8151A  
 Analytical Date: 01/24/22 17:41  
 Analyst: EJL  
 Percent Solids: 85%  
 Methylation Date: 01/24/22 03:29

Extraction Method: EPA 8151A  
 Extraction Date: 01/22/22 08:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Chlorinated Herbicides by GC - Westborough Lab</b>							
2,4-D	ND		ug/kg	195	12.3	1	A
2,4,5-T	ND		ug/kg	195	6.05	1	A
2,4,5-TP (Silvex)	ND		ug/kg	195	5.19	1	A
Surrogate		% Recovery	Qualifier	Acceptance Criteria		Column	
DCAA		97		30-150		A	
DCAA		83		30-150		B	

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-03  
Client ID: WC-3  
Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:15  
Date Received: 01/21/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Analytical Method: 1,8081B  
Analytical Date: 01/31/22 13:35  
Analyst: EJL  
Percent Solids: 92%

Extraction Method: EPA 3546  
Extraction Date: 01/28/22 03:21  
Cleanup Method: EPA 3620B  
Cleanup Date: 01/30/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Organochlorine Pesticides by GC - Westborough Lab</b>							
Delta-BHC	ND	ug/kg	1.93	0.378	1	A	
Lindane	ND	ug/kg	0.804	0.359	1	A	
Alpha-BHC	ND	ug/kg	0.804	0.228	1	A	
Beta-BHC	ND	ug/kg	1.93	0.732	1	A	
Heptachlor	ND	ug/kg	0.965	0.432	1	A	
Aldrin	ND	ug/kg	1.93	0.679	1	A	
Heptachlor epoxide	ND	ug/kg	3.62	1.08	1	A	
Endrin	ND	ug/kg	0.804	0.330	1	A	
Endrin aldehyde	ND	ug/kg	2.41	0.844	1	A	
Endrin ketone	ND	ug/kg	1.93	0.497	1	A	
Dieldrin	ND	ug/kg	1.20	0.603	1	A	
4,4'-DDE	ND	ug/kg	1.93	0.446	1	A	
4,4'-DDD	ND	ug/kg	1.93	0.688	1	A	
4,4'-DDT	ND	ug/kg	3.62	1.55	1	A	
Endosulfan I	ND	ug/kg	1.93	0.456	1	A	
Endosulfan II	ND	ug/kg	1.93	0.645	1	A	
Endosulfan sulfate	ND	ug/kg	0.804	0.383	1	A	
Methoxychlor	ND	ug/kg	3.62	1.12	1	A	
Toxaphene	ND	ug/kg	36.2	10.1	1	A	
cis-Chlordane	ND	ug/kg	2.41	0.672	1	A	
trans-Chlordane	ND	ug/kg	2.41	0.637	1	A	
Chlordane	ND	ug/kg	16.1	6.39	1	A	

Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-03  
 Client ID: WC-3  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:15  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	A
Decachlorobiphenyl	82		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	70		30-150	B

Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-03  
 Client ID: WC-3  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:15  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8151A  
 Analytical Date: 01/24/22 17:59  
 Analyst: EJL  
 Percent Solids: 92%  
 Methylation Date: 01/24/22 03:29

Extraction Method: EPA 8151A  
 Extraction Date: 01/22/22 08:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Chlorinated Herbicides by GC - Westborough Lab</b>							
2,4-D	ND		ug/kg	179	11.3	1	A
2,4,5-T	ND		ug/kg	179	5.55	1	A
2,4,5-TP (Silvex)	ND		ug/kg	179	4.76	1	A
Surrogate		% Recovery	Qualifier	Acceptance Criteria		Column	
DCAA		95		30-150		A	
DCAA		82		30-150		B	

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-04  
Client ID: WC-4  
Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:45  
Date Received: 01/21/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Analytical Method: 1,8081B  
Analytical Date: 01/31/22 13:46  
Analyst: EJL  
Percent Solids: 95%

Extraction Method: EPA 3546  
Extraction Date: 01/28/22 03:21  
Cleanup Method: EPA 3620B  
Cleanup Date: 01/30/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Organochlorine Pesticides by GC - Westborough Lab</b>							
Delta-BHC	ND	ug/kg	1.62	0.318	1	A	
Lindane	ND	ug/kg	0.677	0.302	1	A	
Alpha-BHC	ND	ug/kg	0.677	0.192	1	A	
Beta-BHC	ND	ug/kg	1.62	0.616	1	A	
Heptachlor	ND	ug/kg	0.812	0.364	1	A	
Aldrin	ND	ug/kg	1.62	0.572	1	A	
Heptachlor epoxide	ND	ug/kg	3.04	0.914	1	A	
Endrin	ND	ug/kg	0.677	0.277	1	A	
Endrin aldehyde	ND	ug/kg	2.03	0.711	1	A	
Endrin ketone	ND	ug/kg	1.62	0.418	1	A	
Dieldrin	ND	ug/kg	1.02	0.508	1	A	
4,4'-DDE	ND	ug/kg	1.62	0.376	1	A	
4,4'-DDD	ND	ug/kg	1.62	0.579	1	A	
4,4'-DDT	ND	ug/kg	3.04	1.31	1	A	
Endosulfan I	ND	ug/kg	1.62	0.384	1	A	
Endosulfan II	ND	ug/kg	1.62	0.543	1	A	
Endosulfan sulfate	ND	ug/kg	0.677	0.322	1	A	
Methoxychlor	ND	ug/kg	3.04	0.948	1	A	
Toxaphene	ND	ug/kg	30.4	8.53	1	A	
cis-Chlordane	ND	ug/kg	2.03	0.566	1	A	
trans-Chlordane	ND	ug/kg	2.03	0.536	1	A	
Chlordane	ND	ug/kg	13.5	5.38	1	A	

Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-04  
 Client ID: WC-4  
 Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:45  
 Date Received: 01/21/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	103		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	91		30-150	B
Decachlorobiphenyl	61		30-150	B

Project Name: JMG BROOKLYN

Lab Number: L2203656

Project Number: 150550

Report Date: 01/31/22

**SAMPLE RESULTS**

Lab ID:	L2203656-04	D	Date Collected:	01/21/22 12:45
Client ID:	WC-4		Date Received:	01/21/22
Sample Location:	BROOKLYN, NY		Field Prep:	Not Specified

Sample Depth:

Matrix:	Soil	Extraction Method:	EPA 8151A
Analytical Method:	1,8151A	Extraction Date:	01/22/22 10:49
Analytical Date:	01/25/22 16:41		
Analyst:	EJL		
Percent Solids:	95%		
Methylation Date:	01/24/22 03:29		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Chlorinated Herbicides by GC - Westborough Lab</b>							
2,4-D	ND		ug/kg	852	53.7	5	A
2,4,5-T	ND		ug/kg	852	26.4	5	A
2,4,5-TP (Silvex)	ND		ug/kg	852	22.7	5	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	95		30-150	A
DCAA	78		30-150	B

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8151A  
Analytical Date: 01/24/22 09:15  
Analyst: AKM  
  
Methylation Date: 01/24/22 03:29

Extraction Method: EPA 8151A  
Extraction Date: 01/22/22 08:21

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s):	01-04	Batch:	WG1596972-1			
2,4-D	ND		ug/kg	162	10.2	A
2,4,5-T	ND		ug/kg	162	5.04	A
2,4,5-TP (Silvex)	ND		ug/kg	162	4.32	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria		Column
			Criteria	Column	
DCAA	87		30-150		A
DCAA	80		30-150		B

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8081B  
Analytical Date: 01/31/22 11:42  
Analyst: EJL

Extraction Method: EPA 3546  
Extraction Date: 01/28/22 00:01  
Cleanup Method: EPA 3620B  
Cleanup Date: 01/30/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s):	01-04			Batch:	WG1599052-1	
Delta-BHC	ND		ug/kg	1.59	0.311	A
Lindane	ND		ug/kg	0.661	0.296	A
Alpha-BHC	ND		ug/kg	0.661	0.188	A
Beta-BHC	ND		ug/kg	1.59	0.602	A
Heptachlor	ND		ug/kg	0.794	0.356	A
Aldrin	ND		ug/kg	1.59	0.559	A
Heptachlor epoxide	ND		ug/kg	2.98	0.893	A
Endrin	ND		ug/kg	0.661	0.271	A
Endrin aldehyde	ND		ug/kg	1.98	0.694	A
Endrin ketone	ND		ug/kg	1.59	0.409	A
Dieldrin	ND		ug/kg	0.992	0.496	A
4,4'-DDE	ND		ug/kg	1.59	0.367	A
4,4'-DDD	ND		ug/kg	1.59	0.566	A
Endosulfan I	ND		ug/kg	1.59	0.375	A
Endosulfan II	ND		ug/kg	1.59	0.530	A
Endosulfan sulfate	ND		ug/kg	0.661	0.315	A
Methoxychlor	ND		ug/kg	2.98	0.926	A
Toxaphene	ND		ug/kg	29.8	8.33	A
cis-Chlordane	ND		ug/kg	1.98	0.553	A
trans-Chlordane	ND		ug/kg	1.98	0.524	A
Chlordane	ND		ug/kg	13.2	5.26	A
4,4'-DDT	ND		ug/kg	2.98	1.28	B

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8081B  
Analytical Date: 01/31/22 11:42  
Analyst: EJL

Extraction Method: EPA 3546  
Extraction Date: 01/28/22 00:01  
Cleanup Method: EPA 3620B  
Cleanup Date: 01/30/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s):	01-04			Batch:	WG1599052-1	

Surrogate	%Recovery	Acceptance Criteria			Column
		Qualifier	Criteria		
2,4,5,6-Tetrachloro-m-xylene	87		30-150		A
Decachlorobiphenyl	99		30-150		A
2,4,5,6-Tetrachloro-m-xylene	72		30-150		B
Decachlorobiphenyl	98		30-150		B

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

<b>Parameter</b>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> <i>Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>	<i>Column</i>
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-04 Batch: WG1596972-2 WG1596972-3									
2,4-D	79		80		30-150	1		30	A
2,4,5-T	78		71		30-150	9		30	A
2,4,5-TP (Silvex)	78		77		30-150	1		30	A

<b>Surrogate</b>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> <i>Criteria</i>	<i>Column</i>
DCAA	84		83		30-150	A
DCAA	80		80		30-150	B

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-04 Batch: WG1599052-2 WG1599052-3									
Delta-BHC	97		91		30-150	6		30	A
Lindane	92		86		30-150	7		30	A
Alpha-BHC	98		91		30-150	7		30	A
Beta-BHC	107		100		30-150	7		30	A
Heptachlor	98		94		30-150	4		30	A
Aldrin	98		93		30-150	5		30	A
Heptachlor epoxide	79		72		30-150	9		30	A
Endrin	109		103		30-150	6		30	A
Endrin aldehyde	73		66		30-150	10		30	A
Endrin ketone	109		100		30-150	9		30	A
Dieldrin	94		88		30-150	7		30	A
4,4'-DDE	88		84		30-150	5		30	A
4,4'-DDD	101		95		30-150	6		30	A
4,4'-DDT	102		97		30-150	5		30	A
Endosulfan I	86		81		30-150	6		30	A
Endosulfan II	91		85		30-150	7		30	A
Endosulfan sulfate	89		81		30-150	9		30	A
Methoxychlor	132		125		30-150	5		30	A
cis-Chlordane	94		89		30-150	5		30	A
trans-Chlordane	118		112		30-150	5		30	A

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

<b>Parameter</b>	<i>LCS</i> <i>%Recovery</i>	<i>Qual</i>	<i>LCSD</i> <i>%Recovery</i>	<i>Qual</i>	<i>%Recovery</i> <i>Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-04 Batch: WG1599052-2 WG1599052-3								
<b>Surrogate</b>	<i>LCS</i> <i>%Recovery</i>	<i>Qual</i>	<i>LCSD</i> <i>%Recovery</i>	<i>Qual</i>	<i>Acceptance</i> <i>Criteria</i>			<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	95		90		30-150			A
Decachlorobiphenyl	97		98		30-150			A
2,4,5,6-Tetrachloro-m-xylene	74		72		30-150			B
Decachlorobiphenyl	92		94		30-150			B

## METALS



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-01  
Client ID: WC-1  
Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 09:00  
Date Received: 01/21/22  
Field Prep: Not Specified

Sample Depth: TCLP/SPLP Ext. Date: 01/22/22 21:03

Matrix: Soil  
Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
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**TCLP Metals by EPA 1311 - Mansfield Lab**

Arsenic, TCLP	ND		mg/l	1.00	0.019	1	01/25/22 19:59	01/26/22 00:31	EPA 3015	1,6010D	MC
Barium, TCLP	0.170	J	mg/l	0.500	0.021	1	01/25/22 19:59	01/26/22 00:31	EPA 3015	1,6010D	MC
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	01/25/22 19:59	01/26/22 00:31	EPA 3015	1,6010D	MC
Chromium, TCLP	ND		mg/l	0.200	0.021	1	01/25/22 19:59	01/26/22 00:31	EPA 3015	1,6010D	MC
Lead, TCLP	ND		mg/l	0.500	0.027	1	01/25/22 19:59	01/26/22 00:31	EPA 3015	1,6010D	MC
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	01/25/22 18:37	01/26/22 08:07	EPA 7470A	1,7470A	AC
Selenium, TCLP	ND		mg/l	0.500	0.035	1	01/25/22 19:59	01/26/22 00:31	EPA 3015	1,6010D	MC
Silver, TCLP	ND		mg/l	0.100	0.028	1	01/25/22 19:59	01/26/22 00:31	EPA 3015	1,6010D	MC



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-01  
Client ID: WC-1  
Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 09:00  
Date Received: 01/21/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	852		mg/kg	7.91	2.14	2	01/25/22 05:30	01/26/22 14:53	EPA 3050B	1,6010D	EW
Antimony, Total	ND		mg/kg	3.96	0.301	2	01/25/22 05:30	01/26/22 14:53	EPA 3050B	1,6010D	EW
Arsenic, Total	1.27		mg/kg	0.791	0.165	2	01/25/22 05:30	01/26/22 14:53	EPA 3050B	1,6010D	EW
Barium, Total	8.57		mg/kg	0.791	0.138	2	01/25/22 05:30	01/26/22 14:53	EPA 3050B	1,6010D	EW
Beryllium, Total	0.055	J	mg/kg	0.396	0.026	2	01/25/22 05:30	01/26/22 14:53	EPA 3050B	1,6010D	EW
Cadmium, Total	0.190	J	mg/kg	0.791	0.078	2	01/25/22 05:30	01/26/22 14:53	EPA 3050B	1,6010D	EW
Calcium, Total	1010		mg/kg	7.91	2.77	2	01/25/22 05:30	01/26/22 14:53	EPA 3050B	1,6010D	EW
Chromium, Total	2.36		mg/kg	0.791	0.076	2	01/25/22 05:30	01/26/22 14:53	EPA 3050B	1,6010D	EW
Cobalt, Total	1.09	J	mg/kg	1.58	0.131	2	01/25/22 05:30	01/26/22 14:53	EPA 3050B	1,6010D	EW
Copper, Total	4.95		mg/kg	0.791	0.204	2	01/25/22 05:30	01/26/22 14:53	EPA 3050B	1,6010D	EW
Iron, Total	3600		mg/kg	3.96	0.715	2	01/25/22 05:30	01/26/22 14:53	EPA 3050B	1,6010D	EW
Lead, Total	14.3		mg/kg	3.96	0.212	2	01/25/22 05:30	01/26/22 14:53	EPA 3050B	1,6010D	EW
Magnesium, Total	465		mg/kg	7.91	1.22	2	01/25/22 05:30	01/26/22 14:53	EPA 3050B	1,6010D	EW
Manganese, Total	59.1		mg/kg	0.791	0.126	2	01/25/22 05:30	01/26/22 14:53	EPA 3050B	1,6010D	EW
Mercury, Total	ND		mg/kg	0.065	0.043	1	01/25/22 07:40	01/26/22 07:57	EPA 7471B	1,7471B	AC
Nickel, Total	2.65		mg/kg	1.98	0.192	2	01/25/22 05:30	01/26/22 14:53	EPA 3050B	1,6010D	EW
Potassium, Total	101	J	mg/kg	198	11.4	2	01/25/22 05:30	01/26/22 14:53	EPA 3050B	1,6010D	EW
Selenium, Total	ND		mg/kg	1.58	0.204	2	01/25/22 05:30	01/26/22 14:53	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.791	0.224	2	01/25/22 05:30	01/26/22 14:53	EPA 3050B	1,6010D	EW
Sodium, Total	21.9	J	mg/kg	158	2.49	2	01/25/22 05:30	01/26/22 14:53	EPA 3050B	1,6010D	EW
Thallium, Total	ND		mg/kg	1.58	0.249	2	01/25/22 05:30	01/26/22 14:53	EPA 3050B	1,6010D	EW
Vanadium, Total	4.00		mg/kg	0.791	0.161	2	01/25/22 05:30	01/26/22 14:53	EPA 3050B	1,6010D	EW
Zinc, Total	21.8		mg/kg	3.96	0.232	2	01/25/22 05:30	01/26/22 14:53	EPA 3050B	1,6010D	EW



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-02  
Client ID: WC-2  
Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:00  
Date Received: 01/21/22  
Field Prep: Not Specified

Sample Depth: TCLP/SPLP Ext. Date: 01/22/22 21:03

Matrix: Soil  
Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
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**TCLP Metals by EPA 1311 - Mansfield Lab**

Arsenic, TCLP	ND		mg/l	1.00	0.019	1	01/25/22 19:59	01/26/22 01:07	EPA 3015	1,6010D	MC
Barium, TCLP	0.136	J	mg/l	0.500	0.021	1	01/25/22 19:59	01/26/22 01:07	EPA 3015	1,6010D	MC
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	01/25/22 19:59	01/26/22 01:07	EPA 3015	1,6010D	MC
Chromium, TCLP	ND		mg/l	0.200	0.021	1	01/25/22 19:59	01/26/22 01:07	EPA 3015	1,6010D	MC
Lead, TCLP	ND		mg/l	0.500	0.027	1	01/25/22 19:59	01/26/22 01:07	EPA 3015	1,6010D	MC
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	01/25/22 18:37	01/26/22 08:10	EPA 7470A	1,7470A	AC
Selenium, TCLP	ND		mg/l	0.500	0.035	1	01/25/22 19:59	01/26/22 01:07	EPA 3015	1,6010D	MC
Silver, TCLP	ND		mg/l	0.100	0.028	1	01/25/22 19:59	01/26/22 01:07	EPA 3015	1,6010D	MC



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-02  
Client ID: WC-2  
Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:00  
Date Received: 01/21/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
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**Total Metals - Mansfield Lab**

Aluminum, Total	1000		mg/kg	9.18	2.48	2	01/25/22 05:30	01/26/22 14:58	EPA 3050B	1,6010D	EW
Antimony, Total	ND		mg/kg	4.59	0.349	2	01/25/22 05:30	01/26/22 14:58	EPA 3050B	1,6010D	EW
Arsenic, Total	1.18		mg/kg	0.918	0.191	2	01/25/22 05:30	01/26/22 14:58	EPA 3050B	1,6010D	EW
Barium, Total	8.38		mg/kg	0.918	0.160	2	01/25/22 05:30	01/26/22 14:58	EPA 3050B	1,6010D	EW
Beryllium, Total	0.064	J	mg/kg	0.459	0.030	2	01/25/22 05:30	01/26/22 14:58	EPA 3050B	1,6010D	EW
Cadmium, Total	0.092	J	mg/kg	0.918	0.090	2	01/25/22 05:30	01/26/22 14:58	EPA 3050B	1,6010D	EW
Calcium, Total	286		mg/kg	9.18	3.21	2	01/25/22 05:30	01/26/22 14:58	EPA 3050B	1,6010D	EW
Chromium, Total	2.79		mg/kg	0.918	0.088	2	01/25/22 05:30	01/26/22 14:58	EPA 3050B	1,6010D	EW
Cobalt, Total	0.863	J	mg/kg	1.84	0.152	2	01/25/22 05:30	01/26/22 14:58	EPA 3050B	1,6010D	EW
Copper, Total	3.06		mg/kg	0.918	0.237	2	01/25/22 05:30	01/26/22 14:58	EPA 3050B	1,6010D	EW
Iron, Total	1990		mg/kg	4.59	0.829	2	01/25/22 05:30	01/26/22 14:58	EPA 3050B	1,6010D	EW
Lead, Total	4.86		mg/kg	4.59	0.246	2	01/25/22 05:30	01/26/22 14:58	EPA 3050B	1,6010D	EW
Magnesium, Total	498		mg/kg	9.18	1.41	2	01/25/22 05:30	01/26/22 14:58	EPA 3050B	1,6010D	EW
Manganese, Total	20.0		mg/kg	0.918	0.146	2	01/25/22 05:30	01/26/22 14:58	EPA 3050B	1,6010D	EW
Mercury, Total	ND		mg/kg	0.074	0.048	1	01/25/22 07:40	01/26/22 08:01	EPA 7471B	1,7471B	AC
Nickel, Total	2.80		mg/kg	2.29	0.222	2	01/25/22 05:30	01/26/22 14:58	EPA 3050B	1,6010D	EW
Potassium, Total	238		mg/kg	229	13.2	2	01/25/22 05:30	01/26/22 14:58	EPA 3050B	1,6010D	EW
Selenium, Total	ND		mg/kg	1.84	0.237	2	01/25/22 05:30	01/26/22 14:58	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.918	0.260	2	01/25/22 05:30	01/26/22 14:58	EPA 3050B	1,6010D	EW
Sodium, Total	108	J	mg/kg	184	2.89	2	01/25/22 05:30	01/26/22 14:58	EPA 3050B	1,6010D	EW
Thallium, Total	ND		mg/kg	1.84	0.289	2	01/25/22 05:30	01/26/22 14:58	EPA 3050B	1,6010D	EW
Vanadium, Total	3.40		mg/kg	0.918	0.186	2	01/25/22 05:30	01/26/22 14:58	EPA 3050B	1,6010D	EW
Zinc, Total	18.5		mg/kg	4.59	0.269	2	01/25/22 05:30	01/26/22 14:58	EPA 3050B	1,6010D	EW



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-03  
Client ID: WC-3  
Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:15  
Date Received: 01/21/22  
Field Prep: Not Specified

Sample Depth: TCLP/SPLP Ext. Date: 01/22/22 21:03

Matrix: Soil  
Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
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**TCLP Metals by EPA 1311 - Mansfield Lab**

Arsenic, TCLP	ND		mg/l	1.00	0.019	1	01/25/22 19:59	01/26/22 01:11	EPA 3015	1,6010D	MC
Barium, TCLP	0.720		mg/l	0.500	0.021	1	01/25/22 19:59	01/26/22 01:11	EPA 3015	1,6010D	MC
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	01/25/22 19:59	01/26/22 01:11	EPA 3015	1,6010D	MC
Chromium, TCLP	ND		mg/l	0.200	0.021	1	01/25/22 19:59	01/26/22 01:11	EPA 3015	1,6010D	MC
Lead, TCLP	0.275	J	mg/l	0.500	0.027	1	01/25/22 19:59	01/26/22 01:11	EPA 3015	1,6010D	MC
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	01/25/22 18:37	01/26/22 08:13	EPA 7470A	1,7470A	AC
Selenium, TCLP	ND		mg/l	0.500	0.035	1	01/25/22 19:59	01/26/22 01:11	EPA 3015	1,6010D	MC
Silver, TCLP	ND		mg/l	0.100	0.028	1	01/25/22 19:59	01/26/22 01:11	EPA 3015	1,6010D	MC



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-03  
Client ID: WC-3  
Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:15  
Date Received: 01/21/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	686		mg/kg	8.23	2.22	2	01/25/22 05:30	01/26/22 15:02	EPA 3050B	1,6010D	EW
Antimony, Total	ND		mg/kg	4.11	0.313	2	01/25/22 05:30	01/26/22 15:02	EPA 3050B	1,6010D	EW
Arsenic, Total	0.913		mg/kg	0.823	0.171	2	01/25/22 05:30	01/26/22 15:02	EPA 3050B	1,6010D	EW
Barium, Total	5.50		mg/kg	0.823	0.143	2	01/25/22 05:30	01/26/22 15:02	EPA 3050B	1,6010D	EW
Beryllium, Total	0.033	J	mg/kg	0.411	0.027	2	01/25/22 05:30	01/26/22 15:02	EPA 3050B	1,6010D	EW
Cadmium, Total	0.091	J	mg/kg	0.823	0.081	2	01/25/22 05:30	01/26/22 15:02	EPA 3050B	1,6010D	EW
Calcium, Total	125		mg/kg	8.23	2.88	2	01/25/22 05:30	01/26/22 15:02	EPA 3050B	1,6010D	EW
Chromium, Total	3.36		mg/kg	0.823	0.079	2	01/25/22 05:30	01/26/22 15:02	EPA 3050B	1,6010D	EW
Cobalt, Total	0.790	J	mg/kg	1.64	0.136	2	01/25/22 05:30	01/26/22 15:02	EPA 3050B	1,6010D	EW
Copper, Total	3.01		mg/kg	0.823	0.212	2	01/25/22 05:30	01/26/22 15:02	EPA 3050B	1,6010D	EW
Iron, Total	2150		mg/kg	4.11	0.743	2	01/25/22 05:30	01/26/22 15:02	EPA 3050B	1,6010D	EW
Lead, Total	11.9		mg/kg	4.11	0.220	2	01/25/22 05:30	01/26/22 15:02	EPA 3050B	1,6010D	EW
Magnesium, Total	233		mg/kg	8.23	1.27	2	01/25/22 05:30	01/26/22 15:02	EPA 3050B	1,6010D	EW
Manganese, Total	36.5		mg/kg	0.823	0.131	2	01/25/22 05:30	01/26/22 15:02	EPA 3050B	1,6010D	EW
Mercury, Total	ND		mg/kg	0.069	0.045	1	01/25/22 07:40	01/26/22 08:04	EPA 7471B	1,7471B	AC
Nickel, Total	1.99	J	mg/kg	2.06	0.199	2	01/25/22 05:30	01/26/22 15:02	EPA 3050B	1,6010D	EW
Potassium, Total	75.5	J	mg/kg	206	11.8	2	01/25/22 05:30	01/26/22 15:02	EPA 3050B	1,6010D	EW
Selenium, Total	ND		mg/kg	1.64	0.212	2	01/25/22 05:30	01/26/22 15:02	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.823	0.233	2	01/25/22 05:30	01/26/22 15:02	EPA 3050B	1,6010D	EW
Sodium, Total	10.9	J	mg/kg	164	2.59	2	01/25/22 05:30	01/26/22 15:02	EPA 3050B	1,6010D	EW
Thallium, Total	ND		mg/kg	1.64	0.259	2	01/25/22 05:30	01/26/22 15:02	EPA 3050B	1,6010D	EW
Vanadium, Total	2.92		mg/kg	0.823	0.167	2	01/25/22 05:30	01/26/22 15:02	EPA 3050B	1,6010D	EW
Zinc, Total	11.2		mg/kg	4.11	0.241	2	01/25/22 05:30	01/26/22 15:02	EPA 3050B	1,6010D	EW



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-04  
Client ID: WC-4  
Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:45  
Date Received: 01/21/22  
Field Prep: Not Specified

Sample Depth: TCLP/SPLP Ext. Date: 01/22/22 21:03

Matrix: Soil  
Percent Solids: 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
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**TCLP Metals by EPA 1311 - Mansfield Lab**

Arsenic, TCLP	ND		mg/l	1.00	0.019	1	01/25/22 19:59	01/26/22 01:16	EPA 3015	1,6010D	MC
Barium, TCLP	1.70		mg/l	0.500	0.021	1	01/25/22 19:59	01/26/22 01:16	EPA 3015	1,6010D	MC
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	01/25/22 19:59	01/26/22 01:16	EPA 3015	1,6010D	MC
Chromium, TCLP	ND		mg/l	0.200	0.021	1	01/25/22 19:59	01/26/22 01:16	EPA 3015	1,6010D	MC
Lead, TCLP	9.66		mg/l	0.500	0.027	1	01/25/22 19:59	01/26/22 01:16	EPA 3015	1,6010D	MC
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	01/25/22 18:37	01/26/22 08:17	EPA 7470A	1,7470A	AC
Selenium, TCLP	ND		mg/l	0.500	0.035	1	01/25/22 19:59	01/26/22 01:16	EPA 3015	1,6010D	MC
Silver, TCLP	ND		mg/l	0.100	0.028	1	01/25/22 19:59	01/26/22 01:16	EPA 3015	1,6010D	MC

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**SAMPLE RESULTS**

Lab ID: L2203656-04  
Client ID: WC-4  
Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:45  
Date Received: 01/21/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Percent Solids: 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	2580		mg/kg	8.16	2.20	2	01/25/22 05:30	01/26/22 15:07	EPA 3050B	1,6010D	EW
Antimony, Total	ND		mg/kg	4.08	0.310	2	01/25/22 05:30	01/26/22 15:07	EPA 3050B	1,6010D	EW
Arsenic, Total	3.75		mg/kg	0.816	0.170	2	01/25/22 05:30	01/26/22 15:07	EPA 3050B	1,6010D	EW
Barium, Total	18.1		mg/kg	0.816	0.142	2	01/25/22 05:30	01/26/22 15:07	EPA 3050B	1,6010D	EW
Beryllium, Total	0.098	J	mg/kg	0.408	0.027	2	01/25/22 05:30	01/26/22 15:07	EPA 3050B	1,6010D	EW
Cadmium, Total	0.261	J	mg/kg	0.816	0.080	2	01/25/22 05:30	01/26/22 15:07	EPA 3050B	1,6010D	EW
Calcium, Total	19000		mg/kg	8.16	2.86	2	01/25/22 05:30	01/26/22 15:07	EPA 3050B	1,6010D	EW
Chromium, Total	5.48		mg/kg	0.816	0.078	2	01/25/22 05:30	01/26/22 15:07	EPA 3050B	1,6010D	EW
Cobalt, Total	2.40		mg/kg	1.63	0.135	2	01/25/22 05:30	01/26/22 15:07	EPA 3050B	1,6010D	EW
Copper, Total	14.4		mg/kg	0.816	0.210	2	01/25/22 05:30	01/26/22 15:07	EPA 3050B	1,6010D	EW
Iron, Total	5700		mg/kg	4.08	0.737	2	01/25/22 05:30	01/26/22 15:07	EPA 3050B	1,6010D	EW
Lead, Total	55.5		mg/kg	4.08	0.219	2	01/25/22 05:30	01/26/22 15:07	EPA 3050B	1,6010D	EW
Magnesium, Total	13400		mg/kg	8.16	1.26	2	01/25/22 05:30	01/26/22 15:07	EPA 3050B	1,6010D	EW
Manganese, Total	111		mg/kg	0.816	0.130	2	01/25/22 05:30	01/26/22 15:07	EPA 3050B	1,6010D	EW
Mercury, Total	0.048	J	mg/kg	0.066	0.043	1	01/25/22 07:40	01/26/22 08:07	EPA 7471B	1,7471B	AC
Nickel, Total	9.97		mg/kg	2.04	0.198	2	01/25/22 05:30	01/26/22 15:07	EPA 3050B	1,6010D	EW
Potassium, Total	330		mg/kg	204	11.8	2	01/25/22 05:30	01/26/22 15:07	EPA 3050B	1,6010D	EW
Selenium, Total	ND		mg/kg	1.63	0.210	2	01/25/22 05:30	01/26/22 15:07	EPA 3050B	1,6010D	EW
Silver, Total	ND		mg/kg	0.816	0.231	2	01/25/22 05:30	01/26/22 15:07	EPA 3050B	1,6010D	EW
Sodium, Total	1090		mg/kg	163	2.57	2	01/25/22 05:30	01/26/22 15:07	EPA 3050B	1,6010D	EW
Thallium, Total	ND		mg/kg	1.63	0.257	2	01/25/22 05:30	01/26/22 15:07	EPA 3050B	1,6010D	EW
Vanadium, Total	9.44		mg/kg	0.816	0.166	2	01/25/22 05:30	01/26/22 15:07	EPA 3050B	1,6010D	EW
Zinc, Total	108		mg/kg	4.08	0.239	2	01/25/22 05:30	01/26/22 15:07	EPA 3050B	1,6010D	EW



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

## Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst	
<b>Total Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1597499-1</b>										
Aluminum, Total	ND	mg/kg	4.00	1.08	1	01/25/22 05:30	01/26/22 12:26	1,6010D	EW	
Antimony, Total	ND	mg/kg	2.00	0.152	1	01/25/22 05:30	01/26/22 12:26	1,6010D	EW	
Arsenic, Total	ND	mg/kg	0.400	0.083	1	01/25/22 05:30	01/26/22 12:26	1,6010D	EW	
Barium, Total	ND	mg/kg	0.400	0.070	1	01/25/22 05:30	01/26/22 12:26	1,6010D	EW	
Beryllium, Total	ND	mg/kg	0.200	0.013	1	01/25/22 05:30	01/26/22 12:26	1,6010D	EW	
Cadmium, Total	ND	mg/kg	0.400	0.039	1	01/25/22 05:30	01/26/22 12:26	1,6010D	EW	
Calcium, Total	ND	mg/kg	4.00	1.40	1	01/25/22 05:30	01/26/22 12:26	1,6010D	EW	
Chromium, Total	ND	mg/kg	0.400	0.038	1	01/25/22 05:30	01/26/22 12:26	1,6010D	EW	
Cobalt, Total	ND	mg/kg	0.800	0.066	1	01/25/22 05:30	01/26/22 12:26	1,6010D	EW	
Copper, Total	ND	mg/kg	0.400	0.103	1	01/25/22 05:30	01/26/22 12:26	1,6010D	EW	
Iron, Total	0.376	J	mg/kg	2.00	0.361	1	01/25/22 05:30	01/26/22 12:26	1,6010D	EW
Lead, Total	ND	mg/kg	2.00	0.107	1	01/25/22 05:30	01/26/22 12:26	1,6010D	EW	
Magnesium, Total	ND	mg/kg	4.00	0.616	1	01/25/22 05:30	01/26/22 12:26	1,6010D	EW	
Manganese, Total	0.076	J	mg/kg	0.400	0.064	1	01/25/22 05:30	01/26/22 12:26	1,6010D	EW
Nickel, Total	ND	mg/kg	1.00	0.097	1	01/25/22 05:30	01/26/22 12:26	1,6010D	EW	
Potassium, Total	ND	mg/kg	100	5.76	1	01/25/22 05:30	01/26/22 12:26	1,6010D	EW	
Selenium, Total	ND	mg/kg	0.800	0.103	1	01/25/22 05:30	01/26/22 12:26	1,6010D	EW	
Silver, Total	ND	mg/kg	0.400	0.113	1	01/25/22 05:30	01/26/22 12:26	1,6010D	EW	
Sodium, Total	2.08	J	mg/kg	80.0	1.26	1	01/25/22 05:30	01/26/22 12:26	1,6010D	EW
Thallium, Total	ND	mg/kg	0.800	0.126	1	01/25/22 05:30	01/26/22 12:26	1,6010D	EW	
Vanadium, Total	ND	mg/kg	0.400	0.081	1	01/25/22 05:30	01/26/22 12:26	1,6010D	EW	
Zinc, Total	ND	mg/kg	2.00	0.117	1	01/25/22 05:30	01/26/22 12:26	1,6010D	EW	

### Prep Information

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1597501-1</b>									
Mercury, Total	ND	mg/kg	0.083	0.054	1	01/25/22 07:40	01/26/22 06:38	1,7471B	AC



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

## Method Blank Analysis Batch Quality Control

### Prep Information

Digestion Method: EPA 7471B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01-04 Batch: WG1597748-1</b>									
Arsenic, TCLP	ND	mg/l	1.00	0.019	1	01/25/22 19:59	01/25/22 23:20	1,6010D	MC
Barium, TCLP	ND	mg/l	0.500	0.021	1	01/25/22 19:59	01/25/22 23:20	1,6010D	MC
Cadmium, TCLP	ND	mg/l	0.100	0.010	1	01/25/22 19:59	01/25/22 23:20	1,6010D	MC
Chromium, TCLP	ND	mg/l	0.200	0.021	1	01/25/22 19:59	01/25/22 23:20	1,6010D	MC
Lead, TCLP	ND	mg/l	0.500	0.027	1	01/25/22 19:59	01/25/22 23:20	1,6010D	MC
Selenium, TCLP	ND	mg/l	0.500	0.035	1	01/25/22 19:59	01/25/22 23:20	1,6010D	MC
Silver, TCLP	ND	mg/l	0.100	0.028	1	01/25/22 19:59	01/25/22 23:20	1,6010D	MC

### Prep Information

Digestion Method: EPA 3015

TCLP/SPLP Extraction Date: 01/21/22 04:40

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01-04 Batch: WG1597750-1</b>									
Mercury, TCLP	ND	mg/l	0.0010	0.0005	1	01/25/22 18:37	01/26/22 07:33	1,7470A	AC

### Prep Information

Digestion Method: EPA 7470A

TCLP/SPLP Extraction Date: 01/21/22 04:40



# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1597499-2 SRM Lot Number: D113-540								
Aluminum, Total	67	-	-	-	51-149	-	-	-
Antimony, Total	143	-	-	-	20-250	-	-	-
Arsenic, Total	88	-	-	-	70-130	-	-	-
Barium, Total	84	-	-	-	75-125	-	-	-
Beryllium, Total	84	-	-	-	75-125	-	-	-
Cadmium, Total	84	-	-	-	75-125	-	-	-
Calcium, Total	86	-	-	-	73-128	-	-	-
Chromium, Total	82	-	-	-	70-130	-	-	-
Cobalt, Total	86	-	-	-	75-125	-	-	-
Copper, Total	88	-	-	-	75-125	-	-	-
Iron, Total	81	-	-	-	36-164	-	-	-
Lead, Total	85	-	-	-	72-128	-	-	-
Magnesium, Total	78	-	-	-	63-138	-	-	-
Manganese, Total	85	-	-	-	77-123	-	-	-
Nickel, Total	86	-	-	-	70-130	-	-	-
Potassium, Total	81	-	-	-	59-141	-	-	-
Selenium, Total	84	-	-	-	66-134	-	-	-
Silver, Total	88	-	-	-	70-131	-	-	-
Sodium, Total	87	-	-	-	35-164	-	-	-
Thallium, Total	85	-	-	-	70-130	-	-	-
Vanadium, Total	82	-	-	-	74-126	-	-	-

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1597499-2 SRM Lot Number: D113-540					
Zinc, Total	84	-	70-130	-	
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1597501-2 SRM Lot Number: D113-540					
Mercury, Total	95	-	60-140	-	
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-04 Batch: WG1597748-2					
Arsenic, TCLP	110	-	75-125	-	20
Barium, TCLP	110	-	75-125	-	20
Cadmium, TCLP	102	-	75-125	-	20
Chromium, TCLP	101	-	75-125	-	20
Lead, TCLP	99	-	75-125	-	20
Selenium, TCLP	108	-	75-125	-	20
Silver, TCLP	100	-	75-125	-	20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-04 Batch: WG1597750-2					
Mercury, TCLP	97	-	80-120	-	

# **INORGANICS & MISCELLANEOUS**



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

## SAMPLE RESULTS

Lab ID: L2203656-01  
Client ID: WC-1  
Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 09:00  
Date Received: 01/21/22  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

### Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Sand
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
<b>Ignitability of Solids - Westborough Lab</b>				
Ignitability	NI	01/25/22 16:50	1,1030	MD



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

## SAMPLE RESULTS

Lab ID: L2203656-02  
Client ID: WC-2  
Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:00  
Date Received: 01/21/22  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

### Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Sand
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
<b>Ignitability of Solids - Westborough Lab</b>				
Ignitability	NI	01/25/22 16:50	1,1030	MD



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

## SAMPLE RESULTS

Lab ID: L2203656-03  
Client ID: WC-3  
Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:15  
Date Received: 01/21/22  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

### Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Sand
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
<b>Ignitability of Solids - Westborough Lab</b>				
Ignitability	NI	01/25/22 16:50	1,1030	MD



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

## SAMPLE RESULTS

Lab ID: L2203656-04  
Client ID: WC-4  
Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:45  
Date Received: 01/21/22  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

### Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Sand
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
<b>Ignitability of Solids - Westborough Lab</b>				
Ignitability	NI	01/25/22 16:50	1,1030	MD



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

## SAMPLE RESULTS

Lab ID: L2203656-01  
Client ID: WC-1  
Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 09:00  
Date Received: 01/21/22  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	95.8	%	0.100	NA	1	-	01/22/22 12:57	121,2540G	RI	
pH (H)	6.6	SU	-	NA	1	-	01/24/22 08:30	1,9045D	KP	
Cyanide, Reactive	ND	mg/kg	10	10.	1	01/27/22 11:00	01/27/22 14:23	125,7.3	MJ	
Sulfide, Reactive	ND	mg/kg	10	10.	1	01/27/22 11:00	01/27/22 13:49	125,7.3	MJ	



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

## SAMPLE RESULTS

Lab ID: L2203656-02  
Client ID: WC-2  
Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:00  
Date Received: 01/21/22  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	84.8	%	0.100	NA	1	-	01/22/22 08:44	121,2540G	RI	
pH (H)	8.4	SU	-	NA	1	-	01/24/22 08:30	1,9045D	KP	
Cyanide, Reactive	ND	mg/kg	10	10.	1	01/27/22 11:00	01/27/22 14:24	125,7.3	MJ	
Sulfide, Reactive	ND	mg/kg	10	10.	1	01/27/22 11:00	01/27/22 13:49	125,7.3	MJ	



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

### SAMPLE RESULTS

Lab ID: L2203656-03  
Client ID: WC-3  
Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:15  
Date Received: 01/21/22  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	91.6	%	0.100	NA	1	-	01/22/22 08:44	121,2540G	RI	
pH (H)	8.1	SU	-	NA	1	-	01/24/22 08:30	1,9045D	KP	
Cyanide, Reactive	ND	mg/kg	10	10.	1	01/27/22 11:00	01/27/22 14:24	125,7.3	MJ	
Sulfide, Reactive	ND	mg/kg	10	10.	1	01/27/22 11:00	01/27/22 13:50	125,7.3	MJ	
Paint Filter Liquid	NEGATIVE	-	0	NA	1	-	01/24/22 17:13	1,9095B	AS	



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

### SAMPLE RESULTS

Lab ID: L2203656-04  
Client ID: WC-4  
Sample Location: BROOKLYN, NY

Date Collected: 01/21/22 12:45  
Date Received: 01/21/22  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	95.2	%	0.100	NA	1	-	01/22/22 08:44	121,2540G	RI	
pH (H)	8.0	SU	-	NA	1	-	01/24/22 08:30	1,9045D	KP	
Cyanide, Reactive	ND	mg/kg	10	10.	1	01/27/22 11:00	01/27/22 14:25	125,7.3	MJ	
Sulfide, Reactive	ND	mg/kg	10	10.	1	01/27/22 11:00	01/27/22 13:50	125,7.3	MJ	



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

**Method Blank Analysis**  
**Batch Quality Control**

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1598727-1									
Sulfide, Reactive	ND	mg/kg	10	10.	1	01/27/22 11:00	01/27/22 13:47	125,7.3	MJ
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1598728-1									
Cyanide, Reactive	ND	mg/kg	10	10.	1	01/27/22 11:00	01/27/22 14:22	125,7.3	MJ



# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1597270-1								
pH	100	-	-	-	99-101	-	-	-
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1598727-2								
Sulfide, Reactive	68	-	-	-	60-125	-	-	40
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1598728-2								
Cyanide, Reactive	74	-	-	-	30-125	-	-	40

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

Serial\_No:01312218:08  
**Lab Number:** L2203656  
**Report Date:** 01/31/22

### Sample Receipt and Container Information

Were project specific reporting limits specified? NO

#### Cooler Information

<b>Cooler</b>	<b>Custody Seal</b>
A	Absent

#### Container Information

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2203656-01A	Vial MeOH preserved	A	NA		2.0	Y	Absent		NYTCL-8260HLW(14)
L2203656-01B	Vial water preserved	A	NA		2.0	Y	Absent	22-JAN-22 04:59	NYTCL-8260HLW(14)
L2203656-01C	Vial water preserved	A	NA		2.0	Y	Absent	22-JAN-22 04:59	NYTCL-8260HLW(14)
L2203656-01D	Plastic 2oz unpreserved for TS	A	NA		2.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),AL-TI(180),TL-TI(180),CR-TI(180),SE-TI(180),ZN-TI(180),PB-TI(180),CU-TI(180),SB-TI(180),CO-TI(180),V-TI(180),FE-TI(180),MN-TI(180),MG-TI(180),HG-T(28),K-TI(180),NA-TI(180),CA-TI(180),CD-TI(180)
L2203656-01E	Glass 250ml/8oz unpreserved	A	NA		2.0	Y	Absent		HOLD-CONTINGENCY(14),IGNIT-1030(14),REACTS(14),NYTCL-8270(14),HERB-APA(14),TPH-DRO(14),TS(7),PH-9045(1),NYTCL-8081(14),NYTCL-8082(365),REACTCN(14)
L2203656-01F	Glass 250ml/8oz unpreserved	A	NA		2.0	Y	Absent		HOLD-CONTINGENCY(14),IGNIT-1030(14),REACTS(14),NYTCL-8270(14),HERB-APA(14),TPH-DRO(14),TS(7),PH-9045(1),NYTCL-8081(14),NYTCL-8082(365),REACTCN(14)
L2203656-01W	Plastic 120ml HNO3 preserved Extracts	A	NA		2.0	Y	Absent		CD-CI(180),AS-CI(180),BA-CI(180),HG-C(28),PB-CI(180),CR-CI(180),SE-CI(180),AG-CI(180)
L2203656-01X9	Tumble Vessel	A	NA		2.0	Y	Absent		-
L2203656-02A	Vial MeOH preserved	A	NA		2.0	Y	Absent		NYTCL-8260HLW(14)
L2203656-02B	Vial water preserved	A	NA		2.0	Y	Absent	22-JAN-22 04:59	NYTCL-8260HLW(14)
L2203656-02C	Vial water preserved	A	NA		2.0	Y	Absent	22-JAN-22 04:59	NYTCL-8260HLW(14)
L2203656-02D	Plastic 2oz unpreserved for TS	A	NA		2.0	Y	Absent		TS(7)
L2203656-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.0	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),NI-TI(180),CR-TI(180),TL-TI(180),AL-TI(180),PB-TI(180),CU-TI(180),SB-TI(180),ZN-TI(180),SE-TI(180),V-TI(180),CO-TI(180),MG-TI(180),HG-T(28),MN-TI(180),FE-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

\*Values in parentheses indicate holding time in days

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2203656-02F	Vial Large Septa unpreserved (4oz)	A	NA		2.0	Y	Absent		IGNIT-1030(14),REACTS(14),NYTCL-8270(14),HOLD-CONTINGENCY(14),HERB-APA(14),TPH-DRO(14),PH-9045(1),NYTCL-8081(14),NYTCL-8082(365),REACTCN(14)
L2203656-02G	Glass 500ml/16oz unpreserved	A	NA		2.0	Y	Absent		IGNIT-1030(14),REACTS(14),NYTCL-8270(14),HOLD-CONTINGENCY(14),HERB-APA(14),TPH-DRO(14),PH-9045(1),NYTCL-8081(14),NYTCL-8082(365),REACTCN(14)
L2203656-02W	Plastic 120ml HNO3 preserved Extracts	A	NA		2.0	Y	Absent		CD-CI(180),AS-CI(180),BA-CI(180),HG-C(28),PB-CI(180),SE-CI(180),CR-CI(180),AG-CI(180)
L2203656-02X9	Tumble Vessel	A	NA		2.0	Y	Absent		-
L2203656-03A	Vial MeOH preserved	A	NA		2.0	Y	Absent		NYTCL-8260HLW(14)
L2203656-03B	Vial water preserved	A	NA		2.0	Y	Absent	22-JAN-22 04:59	NYTCL-8260HLW(14)
L2203656-03C	Vial water preserved	A	NA		2.0	Y	Absent	22-JAN-22 04:59	NYTCL-8260HLW(14)
L2203656-03D	Plastic 2oz unpreserved for TS	A	NA		2.0	Y	Absent		TS(7)
L2203656-03E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),TL-TI(180),NI-TI(180),AL-TI(180),CR-TI(180),PB-TI(180),CU-TI(180),ZN-TI(180),SE-TI(180),SB-TI(180),CO-TI(180),V-TI(180),MG-TI(180),HG-T(28),FE-TI(180),MN-TI(180),CD-TI(180),CA-TI(180),K-TI(180),NA-TI(180)
L2203656-03F	Vial Large Septa unpreserved (4oz)	A	NA		2.0	Y	Absent		REACTS(14),IGNIT-1030(14),HOLD-CONTINGENCY(14),NYTCL-8270(14),HERB-APA(14),TPH-DRO(14),PH-9045(1),PAINTF(),NYTCL-8081(14),NYTCL-8082(365),REACTCN(14)
L2203656-03G	Glass 500ml/16oz unpreserved	A	NA		2.0	Y	Absent		REACTS(14),IGNIT-1030(14),HOLD-CONTINGENCY(14),NYTCL-8270(14),HERB-APA(14),TPH-DRO(14),PH-9045(1),PAINTF(),NYTCL-8081(14),NYTCL-8082(365),REACTCN(14)
L2203656-03W	Plastic 120ml HNO3 preserved Extracts	A	NA		2.0	Y	Absent		CD-CI(180),BA-CI(180),AS-CI(180),HG-C(28),PB-CI(180),CR-CI(180),SE-CI(180),AG-CI(180)
L2203656-03X9	Tumble Vessel	A	NA		2.0	Y	Absent		-
L2203656-04A	Vial MeOH preserved	A	NA		2.0	Y	Absent		NYTCL-8260HLW(14)
L2203656-04B	Vial water preserved	A	NA		2.0	Y	Absent	22-JAN-22 04:59	NYTCL-8260HLW(14)
L2203656-04C	Vial water preserved	A	NA		2.0	Y	Absent	22-JAN-22 04:59	NYTCL-8260HLW(14)
L2203656-04D	Plastic 2oz unpreserved for TS	A	NA		2.0	Y	Absent		TS(7)

\*Values in parentheses indicate holding time in days

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

Serial\_No:01312218:08  
**Lab Number:** L2203656  
**Report Date:** 01/31/22

### Container Information

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2203656-04E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),NI-TI(180),TL-TI(180),AL-TI(180),CR-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),MN-TI(180),HG-T(28),FE-TI(180),MG-TI(180),CA-TI(180),K-TI(180),CD-TI(180),NA-TI(180)
L2203656-04F	Vial Large Septa unpreserved (4oz)	A	NA		2.0	Y	Absent		HOLD-CONTINGENCY(14),REACTS(14),IGNIT-1030(14),NYTCL-8270(14),HERB-APA(14),TPH-DRO(14),PH-9045(1),NYTCL-8081(14),NYTCL-8082(365),REACTCN(14)
L2203656-04G	Glass 500ml/16oz unpreserved	A	NA		2.0	Y	Absent		HOLD-CONTINGENCY(14),REACTS(14),IGNIT-1030(14),NYTCL-8270(14),HERB-APA(14),TPH-DRO(14),PH-9045(1),NYTCL-8081(14),NYTCL-8082(365),REACTCN(14)
L2203656-04W	Plastic 120ml HNO3 preserved Extracts	A	NA		2.0	Y	Absent		CD-CI(180),BA-CI(180),AS-CI(180),HG-C(28),PB-CI(180),CR-CI(180),SE-CI(180),AG-CI(180)
L2203656-04X9	Tumble Vessel	A	NA		2.0	Y	Absent		-

\*Values in parentheses indicate holding time in days

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

## GLOSSARY

### **Acronyms**

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

*Report Format: DU Report with 'J' Qualifiers*



**Project Name:** JMG BROOKLYN  
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#### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

#### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

**Difference:** With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

**Final pH:** As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

**Frozen Date/Time:** With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

**Initial pH:** As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthrenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**Total:** With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

#### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e., co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

**Report Format:** DU Report with 'J' Qualifiers



**Project Name:** JMG BROOKLYN  
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**Lab Number:** L2203656  
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**Data Qualifiers**

- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

*Report Format: DU Report with 'J' Qualifiers*



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2203656  
**Report Date:** 01/31/22

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 125 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates IIIA, April 1998.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at its own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## Certification Information

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**The following analytes are not included in our Primary NELAP Scope of Accreditation:**

**Westborough Facility**

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625/625.1: alpha-Terpineol

EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine. SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

**Mansfield Facility**

**SM 2540D**: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Biological Tissue Matrix**: EPA 3050B

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**The following analytes are included in our Massachusetts DEP Scope of Accreditation**

**Westborough Facility:**

**Drinking Water**

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C**, **SM4500CN-CE**, **EPA 180.1**, **SM2130B**, **SM4500CI-D**, **SM2320B**, **SM2540C**, **SM4500H-B**, **SM4500NO2-B**

EPA 332: Perchlorate; **EPA 524.2**: THMs and VOCs; **EPA 504.1**: EDB, DBCP.

**Microbiology**: **SM9215B**; **SM9223-P/A**, **SM9223B-Colilert-QT**, **SM9222D**.

**Non-Potable Water**

**SM4500H,B**, **EPA 120.1**, **SM2510B**, **SM2540C**, **SM2320B**, **SM4500CL-E**, **SM4500F-BC**, **SM4500NH3-BH**: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1**, **SM4500NO3-F**, **EPA 353.2**: Nitrate-N, **SM4500P-E**, **SM4500P-B**, **E**, **SM4500SO4-E**, **SM5220D**, **EPA 410.4**, **SM5210B**, **SM5310C**, **SM4500CL-D**, **EPA 1664**, **EPA 420.1**, **SM4500-CN-CE**, **SM2540D**, **EPA 300**: Chloride, Sulfate, Nitrate.

**EPA 624.1**: Volatile Halocarbons & Aromatics,

**EPA 608.3**: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1**: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.

**Microbiology**: **SM9223B-Colilert-QT**; **Enterolert-QT**, **SM9221E**, **EPA 1600**, **EPA 1603**, **SM9222D**.

**Mansfield Facility:**

**Drinking Water**

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8**: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg. **EPA 522**, **EPA 537.1**.

**Non-Potable Water**

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

**SM2340B**

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For a complete listing of analytes and methods, please contact your Alpha Project Manager.

<b>NEW JERSEY CHAIN OF CUSTODY</b>		<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	<b>Page</b> <u>1</u> of <u>1</u>	<b>Date Rec'd in Lab</b> <u>1/22/22</u>	<b>ALPHA Job #</b> <u>L2203656</u>
					<b>Billing Information</b>
Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193		Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	<b>Project Information</b>		<b>Deliverables</b>
			Project Name: <u>JMG Brooklyn</u> Project Location: <u>Brooklyn, NY</u> Project #: <u>150550</u>		<input checked="" type="checkbox"/> NJ Full / Reduced <input type="checkbox"/> EQuIS (1 File) <input type="checkbox"/> EQuIS (4 File) <input type="checkbox"/> Other
<b>Client Information</b>					<b>Regulatory Requirement</b>
Client: <u>Envocare</u>		(Use Project name as Project #) <input type="checkbox"/>			SRS Residential/Non Residential SRS Impact to Groundwater NJ Ground Water Quality Standards NJ IGW SPLP Leachate Criteria Other <u>NY DEC</u>
Address: <u>1527 Route 27</u> <u>Somerset NJ</u>		Project Manager: <u>D. Park</u>			Is this site impacted by Petroleum? Yes <input type="checkbox"/>
Phone:		Turn-Around Time		Site Information	
Fax:		Standard <input checked="" type="checkbox"/>	Due Date:	Petroleum Product:	
Email: <u>mthurston@envocarenj.com</u>		Rush (only if pre approved) <input type="checkbox"/>	# of Days:		
These samples have been previously analyzed by Alpha <input type="checkbox"/>					
<b>For EPH, selection is REQUIRED:</b>	<b>For VOC, selection is REQUIRED:</b>	<b>Other project specific requirements/comments:</b>			
<input type="checkbox"/> Category 1 <input type="checkbox"/> Category 2	<input type="checkbox"/> 1,4-Dioxane <input type="checkbox"/> 8011	Please specify Metals or TAL.  <b>ANALYSIS</b>			
<b>ALPHA Lab ID (Lab Use Only)</b>	<b>Sample ID</b>	<b>Collection</b>	<b>Sample Matrix</b>	<b>Sampler's Initials</b>	<b>Sample Filtration</b>
03656-01	WC-1	1/21/22 0900	5	MT	<input type="checkbox"/> Done <input type="checkbox"/> Lab to do <b>Preservation</b> <input type="checkbox"/> Lab to do  <i>(Please Specify below)</i>
02	WC-2	1200		X	
03	WC-3	12:5		X	
04	WC-4	1245		X X	
					<b>Sample Specific Comments</b>
					<u>Mold Hex</u>
					<u>Chrome</u>
					<u>analyses</u>
Preservative Code:		Container Code		<b>Container Type</b>	
A = None	P = Plastic	Westboro: Certification No: MA935			
B = HCl	A = Amber Glass	Mansfield: Certification No: MA015	<b>Preservative</b>		
C = HNO <sub>3</sub>	V = Vial				
D = H <sub>2</sub> SO <sub>4</sub>	G = Glass				
E = NaOH	B = Bacteria Cup				
F = MeOH	C = Cube				
G = NaHSO <sub>4</sub>	O = Other				
H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	E = Encore				
K/E = Zn Ac/NaOH	D = BOD Bottle				
O = Other					
Relinquished By: <u>AT&amp;T</u> Date/Time: <u>1/21/22 1534</u> Received By: <u>TOM CALAAR 1/22 1534</u> Date/Time: <u>1/21/22 1800</u> <u>TOM CALAAR 1/22 1800</u> Date/Time: <u>1/21/22 1800</u> Received By: <u>Tom Calaar 1/22 1800</u> Date/Time: <u>1/21/22 2300</u> <u>Yolanda Green 1/21/22</u> Date/Time: <u>1/21/22 2300</u> Received By: <u>Yolanda Green 1/21/22 2300</u> Date/Time: <u>1/22/22 0230</u> <u>CD 1/22/22 0230</u> Date/Time: <u>1/22/22 0230</u>					
Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS.					
(See reverse side.)					

JOB: L2209984 REPORT STYLE: Data Usability Report  
0010: Alpha Analytical Report Cover Page - OK  
0015: Sample Cross Reference Summary - OK  
0060: Case Narrative - OK  
1005: Metals Sample Results - OK  
1010: Metals Method Blank Report - OK  
1020: Metals LCS Report - OK  
1040: Metals Matrix Spike Report - OK  
1050: Metals Duplicate Report - OK  
1180: Inorganics Cover Page - OK  
1200: Wet Chemistry Sample Results - OK  
1250: Wet Chemistry Duplicate Report - OK  
5100: Sample Receipt & Container Information Report - OK  
5200: Glossary - OK  
5400: References - OK

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## ANALYTICAL REPORT

Lab Number:	L2209984
Client:	Envocare 1527 Route 27 Suite 105 Somerset, NJ 08873
ATTN:	Devang Patel
Phone:	(732) 253-5740
Project Name:	JMG BROOKLYN
Project Number:	150550
Report Date:	03/08/22

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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Eight Walkup Drive, Westborough, MA 01581-1019  
508-898-9220 (Fax) 508-898-9193 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
**Report Date:** 03/08/22

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2209984-01	SB4-S	SOIL	BROOKLYN, NY	02/24/22 09:15	02/24/22
L2209984-02	SB4-S2	SOIL	BROOKLYN, NY	02/24/22 09:00	02/24/22
L2209984-03	SB4-N	SOIL	BROOKLYN, NY	02/24/22 10:15	02/24/22
L2209984-04	SB4-N2	SOIL	BROOKLYN, NY	02/24/22 10:30	02/24/22
L2209984-05	SB4-E	SOIL	BROOKLYN, NY	02/24/22 09:30	02/24/22
L2209984-06	SB4-W	SOIL	BROOKLYN, NY	02/24/22 09:45	02/24/22

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
**Report Date:** 03/08/22

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

**HOLD POLICY** - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

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**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
**Report Date:** 03/08/22

### Case Narrative (continued)

#### Report Submission

March 08, 2022: This is a preliminary report.

March 07, 2022: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

#### Sample Receipt

L2209984-01 through -06: The collection time was obtained from the container labels.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Caitlin Walukevich

Title: Technical Director/Representative

Date: 03/08/22

## METALS



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
**Report Date:** 03/08/22

**SAMPLE RESULTS**

Lab ID: L2209984-01  
Client ID: SB4-S  
Sample Location: BROOKLYN, NY

Date Collected: 02/24/22 09:15  
Date Received: 02/24/22  
Field Prep: Not Specified

Sample Depth: TCLP/SPLP Ext. Date: 03/01/22 04:49  
Matrix: Soil  
Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>TCLP Metals by EPA 1311 - Mansfield Lab</b>											
Lead, TCLP	0.051	J	mg/l	0.500	0.027	1	03/03/22 08:44	03/03/22 14:18	EPA 3015	1,6010D	EW



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
**Report Date:** 03/08/22

**SAMPLE RESULTS**

Lab ID: L2209984-01  
Client ID: SB4-S  
Sample Location: BROOKLYN, NY

Date Collected: 02/24/22 09:15  
Date Received: 02/24/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Lead, Total	98.8		mg/kg	2.09	0.112	1	03/01/22 20:01	03/08/22 13:43	EPA 3050B	1,6010D	SV

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
**Report Date:** 03/08/22

**SAMPLE RESULTS**

Lab ID: L2209984-02  
Client ID: SB4-S2  
Sample Location: BROOKLYN, NY

Date Collected: 02/24/22 09:00  
Date Received: 02/24/22  
Field Prep: Not Specified

Sample Depth: TCLP/SPLP Ext. Date: 03/01/22 04:49

Matrix: Soil  
Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>TCLP Metals by EPA 1311 - Mansfield Lab</b>											
Lead, TCLP	0.935		mg/l	0.500	0.027	1	03/03/22 08:44	03/03/22 14:23	EPA 3015	1,6010D	EW

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
**Report Date:** 03/08/22

**SAMPLE RESULTS**

Lab ID: L2209984-02  
Client ID: SB4-S2  
Sample Location: BROOKLYN, NY

Date Collected: 02/24/22 09:00  
Date Received: 02/24/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Lead, Total	224		mg/kg	2.16	0.116	1	03/01/22 20:01	03/08/22 13:47	EPA 3050B	1,6010D	SV

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
**Report Date:** 03/08/22

**SAMPLE RESULTS**

Lab ID: L2209984-03  
Client ID: SB4-N  
Sample Location: BROOKLYN, NY

Date Collected: 02/24/22 10:15  
Date Received: 02/24/22  
Field Prep: Not Specified

Sample Depth: TCLP/SPLP Ext. Date: 03/01/22 04:49

Matrix: Soil  
Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>TCLP Metals by EPA 1311 - Mansfield Lab</b>											
Lead, TCLP	ND		mg/l	0.500	0.027	1	03/03/22 08:44	03/03/22 14:28	EPA 3015	1,6010D	EW

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
**Report Date:** 03/08/22

**SAMPLE RESULTS**

Lab ID: L2209984-03  
Client ID: SB4-N  
Sample Location: BROOKLYN, NY

Date Collected: 02/24/22 10:15  
Date Received: 02/24/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Lead, Total	20.0		mg/kg	2.16	0.116	1	03/01/22 20:01	03/08/22 14:49	EPA 3050B	1,6010D	SV

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
**Report Date:** 03/08/22

**SAMPLE RESULTS**

Lab ID: L2209984-04  
Client ID: SB4-N2  
Sample Location: BROOKLYN, NY

Date Collected: 02/24/22 10:30  
Date Received: 02/24/22  
Field Prep: Not Specified

Sample Depth: TCLP/SPLP Ext. Date: 03/01/22 04:49

Matrix: Soil  
Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>TCLP Metals by EPA 1311 - Mansfield Lab</b>											
Lead, TCLP	0.167	J	mg/l	0.500	0.027	1	03/03/22 08:44	03/03/22 15:03	EPA 3015	1,6010D	EW

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
**Report Date:** 03/08/22

**SAMPLE RESULTS**

Lab ID: L2209984-04  
Client ID: SB4-N2  
Sample Location: BROOKLYN, NY

Date Collected: 02/24/22 10:30  
Date Received: 02/24/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Lead, Total	230		mg/kg	2.10	0.112	1	03/01/22 20:01	03/08/22 14:54	EPA 3050B	1,6010D	SV

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
**Report Date:** 03/08/22

**SAMPLE RESULTS**

Lab ID: L2209984-05  
Client ID: SB4-E  
Sample Location: BROOKLYN, NY

Date Collected: 02/24/22 09:30  
Date Received: 02/24/22  
Field Prep: Not Specified

Sample Depth: TCLP/SPLP Ext. Date: 03/01/22 04:49

Matrix: Soil  
Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>TCLP Metals by EPA 1311 - Mansfield Lab</b>											
Lead, TCLP	0.058	J	mg/l	0.500	0.027	1	03/03/22 08:44	03/03/22 15:08	EPA 3015	1,6010D	EW

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
**Report Date:** 03/08/22

**SAMPLE RESULTS**

Lab ID: L2209984-05  
Client ID: SB4-E  
Sample Location: BROOKLYN, NY

Date Collected: 02/24/22 09:30  
Date Received: 02/24/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Lead, Total	49.1		mg/kg	2.28	0.122	1	03/01/22 20:01	03/08/22 15:30	EPA 3050B	1,6010D	SV

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
**Report Date:** 03/08/22

**SAMPLE RESULTS**

Lab ID: L2209984-06  
Client ID: SB4-W  
Sample Location: BROOKLYN, NY

Date Collected: 02/24/22 09:45  
Date Received: 02/24/22  
Field Prep: Not Specified

Sample Depth: TCLP/SPLP Ext. Date: 03/01/22 04:49

Matrix: Soil  
Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>TCLP Metals by EPA 1311 - Mansfield Lab</b>											
Lead, TCLP	ND		mg/l	0.500	0.027	1	03/03/22 08:44	03/03/22 15:12	EPA 3015	1,6010D	EW

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
**Report Date:** 03/08/22

**SAMPLE RESULTS**

Lab ID: L2209984-06  
Client ID: SB4-W  
Sample Location: BROOKLYN, NY

Date Collected: 02/24/22 09:45  
Date Received: 02/24/22  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Lead, Total	10.9		mg/kg	2.27	0.122	1	03/01/22 20:01	03/08/22 15:34	EPA 3050B	1,6010D	SV

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
**Report Date:** 03/08/22

## Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-06 Batch: WG1610252-1									
Lead, Total	ND	mg/kg	2.00	0.107	1	03/01/22 20:01	03/08/22 14:36	1,6010D	SV

### Prep Information

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01-06 Batch: WG1610746-1									
Lead, TCLP	ND	mg/l	0.500	0.027	1	03/03/22 08:44	03/03/22 13:21	1,6010D	EW

### Prep Information

Digestion Method: EPA 3015

TCLP/SPLP Extraction Date: 02/28/22 15:51



# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
**Report Date:** 03/08/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-06 Batch: WG1610252-2 SRM Lot Number: D113-540								
Lead, Total	89	-	-	-	72-128	-	-	-
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-06 Batch: WG1610746-2								
Lead, TCLP	90	-	-	-	75-125	-	-	20

**Matrix Spike Analysis**  
**Batch Quality Control**

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
**Report Date:** 03/08/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1610252-3 QC Sample: L2210168-02 Client ID: MS Sample												
Lead, Total	624	50.4	536	0	Q	-	-	-	75-125	-	-	20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1610746-3 QC Sample: L2209864-01 Client ID: MS Sample												
Lead, TCLP	0.701	5.3	5.48	90		-	-	-	75-125	-	-	20

**Lab Duplicate Analysis**  
*Batch Quality Control*

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
**Report Date:** 03/08/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1610252-4 QC Sample: L2210168-02 Client ID: DUP Sample						
Lead, Total	624	3070	mg/kg	132	Q	20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1610746-4 QC Sample: L2209864-01 Client ID: DUP Sample						
Lead, TCLP	0.701	0.717	mg/l	2		20

# **INORGANICS & MISCELLANEOUS**



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
**Report Date:** 03/08/22

### SAMPLE RESULTS

Lab ID: L2209984-01  
Client ID: SB4-S  
Sample Location: BROOKLYN, NY

Date Collected: 02/24/22 09:15  
Date Received: 02/24/22  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	91.4		%	0.100	NA	1	-	03/01/22 11:58	121,2540G	RI

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
**Report Date:** 03/08/22

### SAMPLE RESULTS

Lab ID: L2209984-02  
Client ID: SB4-S2  
Sample Location: BROOKLYN, NY

Date Collected: 02/24/22 09:00  
Date Received: 02/24/22  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	90.9		%	0.100	NA	1	-	03/01/22 11:58	121,2540G	RI

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
**Report Date:** 03/08/22

### SAMPLE RESULTS

Lab ID: L2209984-03  
Client ID: SB4-N  
Sample Location: BROOKLYN, NY

Date Collected: 02/24/22 10:15  
Date Received: 02/24/22  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	90.3		%	0.100	NA	1	-	03/01/22 11:58	121,2540G	RI

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
**Report Date:** 03/08/22

### SAMPLE RESULTS

Lab ID: L2209984-04  
Client ID: SB4-N2  
Sample Location: BROOKLYN, NY

Date Collected: 02/24/22 10:30  
Date Received: 02/24/22  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	90.0		%	0.100	NA	1	-	03/01/22 11:58	121,2540G	RI

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
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### SAMPLE RESULTS

Lab ID: L2209984-05  
Client ID: SB4-E  
Sample Location: BROOKLYN, NY

Date Collected: 02/24/22 09:30  
Date Received: 02/24/22  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	86.6		%	0.100	NA	1	-	03/01/22 11:58	121,2540G	RI



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
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### SAMPLE RESULTS

Lab ID: L2209984-06  
Client ID: SB4-W  
Sample Location: BROOKLYN, NY

Date Collected: 02/24/22 09:45  
Date Received: 02/24/22  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	87.7		%	0.100	NA	1	-	03/01/22 11:58	121,2540G	RI

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Duplicate Analysis**  
*Batch Quality Control*

**Lab Number:** L2209984  
**Report Date:** 03/08/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG1610090-1 QC Sample: L2209967-01 Client ID: DUP Sample						
Solids, Total	86.7	87.3	%	1		20

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

Serial\_No:03082218:30  
**Lab Number:** L2209984  
**Report Date:** 03/08/22

### Sample Receipt and Container Information

Were project specific reporting limits specified? YES

#### Cooler Information

<b>Cooler</b>	<b>Custody Seal</b>
A	Absent

#### Container Information

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2209984-01A	Plastic 2oz unpreserved for TS	A	NA		3.0	Y	Absent		HOLD-WETCHEM(),TS(7)
L2209984-01W	Glass 60ml unpreserved split	A	NA		3.0	Y	Absent		PB-TI(180)
L2209984-01X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.0	Y	Absent		PB-CI(180)
L2209984-01X9	Tumble Vessel	A	NA		3.0	Y	Absent		-
L2209984-02A	Plastic 2oz unpreserved for TS	A	NA		3.0	Y	Absent		HOLD-WETCHEM(),TS(7)
L2209984-02W	Glass 60ml unpreserved split	A	NA		3.0	Y	Absent		PB-TI(180)
L2209984-02X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.0	Y	Absent		PB-CI(180)
L2209984-02X9	Tumble Vessel	A	NA		3.0	Y	Absent		-
L2209984-03A	Plastic 2oz unpreserved for TS	A	NA		3.0	Y	Absent		HOLD-WETCHEM(),TS(7)
L2209984-03W	Glass 60ml unpreserved split	A	NA		3.0	Y	Absent		PB-TI(180)
L2209984-03X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.0	Y	Absent		PB-CI(180)
L2209984-03X9	Tumble Vessel	A	NA		3.0	Y	Absent		-
L2209984-04A	Plastic 2oz unpreserved for TS	A	NA		3.0	Y	Absent		HOLD-WETCHEM(),TS(7)
L2209984-04W	Glass 60ml unpreserved split	A	NA		3.0	Y	Absent		PB-TI(180)
L2209984-04X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.0	Y	Absent		PB-CI(180)
L2209984-04X9	Tumble Vessel	A	NA		3.0	Y	Absent		-
L2209984-05A	Plastic 2oz unpreserved for TS	A	NA		3.0	Y	Absent		HOLD-WETCHEM(),TS(7)
L2209984-05W	Glass 60ml unpreserved split	A	NA		3.0	Y	Absent		PB-TI(180)
L2209984-05X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.0	Y	Absent		PB-CI(180)
L2209984-05X9	Tumble Vessel	A	NA		3.0	Y	Absent		-
L2209984-06A	Plastic 2oz unpreserved for TS	A	NA		3.0	Y	Absent		HOLD-WETCHEM(),TS(7)
L2209984-06W	Glass 60ml unpreserved split	A	NA		3.0	Y	Absent		PB-TI(180)
L2209984-06X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.0	Y	Absent		PB-CI(180)

\*Values in parentheses indicate holding time in days

**Project Name:** JMG BROOKLYN  
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Serial\_No:03082218:30  
**Lab Number:** L2209984  
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**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<i>Cooler</i>	<i>Initial pH</i>	<i>Final pH</i>	<i>Temp deg C</i>	<i>Pres</i>	<i>Seal</i>	<i>Frozen Date/Time</i>	<i>Analysis(*)</i>
L2209984-06X9	Tumble Vessel	A	NA		3.0	Y	Absent	-	

\*Values in parentheses indicate holding time in days

**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
**Report Date:** 03/08/22

## GLOSSARY

### **Acronyms**

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

*Report Format: DU Report with 'J' Qualifiers*



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#### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

#### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

**Difference:** With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

**Final pH:** As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

**Frozen Date/Time:** With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

**Initial pH:** As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthrenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**Total:** With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

#### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e., co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

**Report Format:** DU Report with 'J' Qualifiers



**Project Name:** JMG BROOKLYN  
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**Data Qualifiers**

- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

*Report Format: DU Report with 'J' Qualifiers*



**Project Name:** JMG BROOKLYN  
**Project Number:** 150550

**Lab Number:** L2209984  
**Report Date:** 03/08/22

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at its own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## Certification Information

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**The following analytes are not included in our Primary NELAP Scope of Accreditation:**

**Westborough Facility**

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625/625.1: alpha-Terpineol

EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine. SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

**Mansfield Facility**

**SM 2540D**: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Biological Tissue Matrix**: EPA 3050B

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**The following analytes are included in our Massachusetts DEP Scope of Accreditation**

**Westborough Facility:**

**Drinking Water**

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C**, **SM4500CN-CE**, **EPA 180.1**, **SM2130B**, **SM4500CI-D**, **SM2320B**, **SM2540C**, **SM4500H-B**, **SM4500NO2-B**

EPA 332: Perchlorate; **EPA 524.2**: THMs and VOCs; **EPA 504.1**: EDB, DBCP.

**Microbiology**: **SM9215B**; **SM9223-P/A**, **SM9223B-Colilert-QT**, **SM9222D**.

**Non-Potable Water**

**SM4500H,B**, **EPA 120.1**, **SM2510B**, **SM2540C**, **SM2320B**, **SM4500CL-E**, **SM4500F-BC**, **SM4500NH3-BH**: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1**, **SM4500NO3-F**, **EPA 353.2**: Nitrate-N, **SM4500P-E**, **SM4500P-B**, **E**, **SM4500SO4-E**, **SM5220D**, **EPA 410.4**, **SM5210B**, **SM5310C**, **SM4500CL-D**, **EPA 1664**, **EPA 420.1**, **SM4500-CN-CE**, **SM2540D**, **EPA 300**: Chloride, Sulfate, Nitrate.

**EPA 624.1**: Volatile Halocarbons & Aromatics,

**EPA 608.3**: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1**: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.

**Microbiology**: **SM9223B-Colilert-QT**; **Enterolert-QT**, **SM9221E**, **EPA 1600**, **EPA 1603**, **SM9222D**.

**Mansfield Facility:**

**Drinking Water**

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8**: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg. **EPA 522**, **EPA 537.1**.

**Non-Potable Water**

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

**SM2340B**

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For a complete listing of analytes and methods, please contact your Alpha Project Manager.

