## **Spill Closure Report**

June 28, 2019 NYSDEC Spill #1900873

Submitted for:

Former Empire Electric Company
5200 1<sup>st</sup> Avenue
Brooklyn, New York
New York City Tax Map Designation: Block 803 Lot 9

Submitted to:

Attn. Charles Post
New York State Department of Environmental Consevation
Division of Environmental Remediation
625 Broadway
Albany, New York 12233

IEC Project Number 13902



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#### 1 LOCATION AND FACILITY DESCRIPTION

## 1.1 Site Description

Impact environmental Closures (IEC) was contracted to perform environmental services at the Property located at 5200 1st Avenue in Brooklyn, New York (the Site) which is situated at the southwest corner of the intersection of 52nd Street and 1st Avenue. The Site is currently a vacant gravel covered lot enclosed by fencing on the north and east perimeters, and by warehouse-type buildings to the south and west. The Site parcel consists of approximately 24,000 square feet (SF) where 100 feet front 52nd Street to the north and 240 feet front 1st Avenue to the east. The Site is identified as New Yok City tax map Section 1, Block 803, Lot 9. The primary zoning is M-3, heavy industry. The current Site owner is identified as 5200 Enterprises LTD.

The surrounding area is primarily industrial in nature with a potato chip manufacturing plant (Utz), a New York City Department of Sanitation vehicle maintenance and storage building, an overnight courier (DHL), the former BUG - Kings County Works manufactured gas plant Site, and the waterfront (Bush Terminal docks) in the general vicinity of the Site. The Site is situated approximately 1,200 feet from Upper New York Bay at the western end of the borough of Brooklyn. The elevation of the Site is approximately 16 feet above mean sea level (amsl), sloping gradually up from the Hudson River.

### 1.2 Historical Site Information

Based on a review of historical Sanborn Maps and City Directories, the following historical information was ascertained. In 1888, the Site appeared to be vacant. A building was constructed in 1892 by the Brooklyn City Railroad Company for use as a power plant for the municipally owned trolley system. The 1906 Sanborn Map identified 6 duplex engines and 14 dynamos on the Site, and the 1922 map labeled the property and adjoining buildings as Projectile Works. The 1926 Sanborn map and 1934 city directory identify the Site as Metropolitan Engine Company, machine manufacturer of electrical equipment (machine shop and storage). The facility was conveyed to the City of New York in 1940. The 1942 and 1951 Sanborn maps indicate storage on the Site.

On September 5, 1951, the City transferred the property to Hastone Realty Corp, who then subdivided the parcel into two lots (Lot 6 and Lot 9). Empire Electric Company operated on Lot 9 (the Site) starting in 1951. The city directories from 1961 through 1985 identify the Site as Empire Electric Co., Inc. (electric motors) and the Sanborn maps have the Site labelled as storage of used motors and transformers from 1970 through 2007.

Empire Electric reportedly operated on the Site until December 1986. Empire Electrics operations consisted of reconditioning and warehousing of electrical equipment, including transformers containing PCBs. The Site was sold again in 1986, but the building remained unused and abandoned until the building was razed in 2017.

### 1.3 Environmental Site Information

The Site is identified as the former Empire Electric Company which was identified as a former Large Quantity Generator (LQG) of hazardous waste, waste manifest Site and an Inactive Hazardous Waste Disposal Site in New York State (SHWS). The New York State Department of Environmental Conservation (NYSDEC) Environmental Site Remediation (ESR) database identifies the Site as a State Superfund Program Site. The hazardous waste disposal period for the Site is from 1950 to 1985. Waste generated included 11,000 pounds of B007 (PCB waste including but not limited to contaminated soil, solids, and sludges) and D008 (lead).

The Site previously contained a deteriorated, vacant, red brick building that once covered the Site footprint. This building was razed by the NYSDEC during an Interim Remedial Measure (IRM) in 2017 to make the Site safe to perform a Remedial Investigation. Removal of contaminated soil and subsequent backfilling of the Site with material approved by the NYSDEC has been performed as part of the IRM, along with the covering of the Site in crushed virgin stone to assist with stormwater drainage and dust suppression.

Based on investigations conducted at the Site under the auspices of the NYSDEC, the primary contaminant of concern at this time are polychlorinated biphenyls (PCBs). The NYSEC information indicates "Building material contained PCB concentrations in excess of 50 ppm, the TSCA definition of PCB hazardous waste, in 35 percent of the analyzed samples. Based on sample analysis, 60 percent of the concrete slab on the main floor and 80 percent of the concrete slab in the basement area exceeded this criteria and was therefore classified as a TSCA hazardous waste. Grease/oil samples collected from building material in the basement also exceeded the TSCA criteria of 50 ppm total PCBs and is present on nearly 70 percent of brick pillar surfaces. Fifty-two of the 165 building material samples collected and analyzed contained levels of PCB contamination ranging from 51 ppm to 33,000 ppm. Soil samples from beneath the basement floor exceeded the 1ppm surface/10ppm subsurface criteria historically used to assess PCB contamination in soil. Two of these soil samples also exceeded the TSCA definition of hazardous waste. The deteriorated, vacant, red brick building that once covered the entire site was demolished and disposed of offsite in 2017. The site presents a significant environmental threat due to the potential for remaining PCB releases from source areas beneath the former building." The soil beneath the basement floor of the former Site building is contaminated with significant levels of PCBs.

The NYSDEC information also indicates "Testing results for upgradient and downgradient groundwater samples collected during the PSA indicate the presence of volatile organic compounds above standards for public drinking water supplies. However, exposure to the contaminated groundwater is unlikely since public water serves the area. Indoor air contamination from volatile organic compounds in the groundwater is a potential exposure pathway that will be evaluated during the upcoming investigation."

The soil directly beneath the former Site building reportedly consisted of fill and debris materials, underlain by sand and gravel layers until bedrock. The depth to bedrock is unknown but is likely greater than 100 feet below grade (fbg). The depth to the surficial water table beneath the Site is approximately 17 to 21 fbg. Regional groundwater flow direction is indicated to the west, toward the Upper New York Bay.

## 1.4 Physical Site Inspection

A tenant known as M & Y Tour Inc. occupied the Site from approximately October 2018 to February 2019 (5 months) for bus storage/parking. On Thursday April 4, 2019, IEC performed a visual inspection of the Site to determine the current on-Site conditions as they relate to recent usage of the Site as a bus storage yard (refer to **Appendix A** for Site photographs). The Site was a gravel covered lot enclosed by adjoining buildings and fencing during the inspection. A section of the south potion of the Site is currently being used to store automobiles and light trucks (parts of this area could not be inspected due to the parked vehicles). There are no structures, buses or other automotive equipment on the remainder of the Site, and the Site is free of garbage. There are scattered bricks on the west end of the lot which may be related to demolition debris. There were no chemical or lubricant storage containers located on the Site. Several areas of the gravel cover were noted to have been compacted due to the former storage of buses, and some ruts have formed in these areas. Approximately 15 areas of incidental minor staining were noted primarily along the southwest and northwest Sides of the Site, at locations where buses had reportedly been parked overnight. These stained areas were indicative of minor oil leaks from stored buses. The stained areas ranged in size from between 6" in diameter to 12" in diameter.

## 1.5 Scope of Work

On April 25, 2019, NYSDEC Spill #1900873 was assigned to the Site due to the presence of oil stained gravel observed on portions of the Site. Based on the presence of these oil stained gravel areas of concern noted, the NYSDEC required the preparation of a Spill Remediation Work Plan to address/remediate the incidental release locations.

The general scope of work for implementing this Spill Remediation Work Plan for the Site included the following:

- Identification of areas of staining on the Site;
- Removal of stained gravel and soils from the Site;
- Proper disposal of stained gravel to an off-Site approved disposal facility documented by generation of disposal manifests;
- Verification of surficial soil contamination removal from the oil stained areas of concern by implementing a confirmation sampling and analysis plan;
- Confirmation sample collection from the former stained areas to verify that no residual contamination related to incidental motor oil leakage exceeding regulatory levels remains;

- Importation of supplemental virgin crushed stone similar to what is present at the Site, and leveling out rutted areas to restore the Site area previously occupied by M & Y Tour Inc, the former tenant; and
- Submission of a Spill Closure Report to NYSDEC which documents the remedy performed for closure of NYSDEC
   Spill #1900873.

Appropriate precautions were taken to ensure that closure activities were performed safely and in accordance with standard industry practices. Personnel performing field work associated with this work plan were required to have the appropriate OSHA 1910.120 training and use appropriate level of personal protective equipment (PPE).

#### 2 SPILL CLOSURE ACTIVITIES

### 2.1 Identification and Removal of Impacted Materials

On June 6, 2019, IEC personnel performed a thorough physical inspection of the Site. During this inspection, a total of six (6) areas of surficial staining were noted, primarily along the southern and western portions of the property.

## 2.2 Removal of Impacted Materials

On the same day, using a mini-excavator, IEC excavated the stained materials from the six (6) identified areas of the Site. Stained materials were placed into two (2) DOT approved steel 55-gallon drums. In five (5) of the six (6) areas, gravel and underlying soil was removed down to a terminal depth of approximately 1-foot below grade (fbg), at which point visually clean soils were encountered. In one area to the far southwest of the property, stained gravels were noted to extend to approximately 1½ fbg. This area was excavated to approximately 2-fbg until visually clean gravel was encountered. In this area soils were not encountered. According to the NYSDEC Case Manager, Mr. Charles Post, gravel backfill in this area extends deeper than in other portions of the Site.

Following the excavation of the stained gravel, headspace analysis was performed on soil samples collected from the base of each excavated area. Soil sample volumes from each area were placed in a clean Ziploc bag, and the sample was agitated in order to volatilize compounds. A Photo ionization detector (PID) was then inserted into a corner of the Ziploc back to measure if any volatile organic compounds were present in the sample volume. None of the six (6) sample volumes exhibited elevated PID readings above 0.0 parts per million (ppm).

## 2.3 Confirmatory Sampling

Once the impacted material had been excavated to the satisfaction of the NYSDEC, whom visually inspected the remediated locations, confirmatory soil samples were collected from three (3) areas that exhibited the most significant contamination as determined by the NYSDEC representative. Sample volumes were containerized in pre-cleaned,

laboratory supplied glassware, appropriately labeled and preserved at 4°C in an iced cooler. The samples were transported under proper chain-of-custody procedures to Alpha Analytical Laboratories, (Alpha) of Westborough, MA, a New York State ELAP-certified environmental laboratory (ELAP Certification No. 11148).

Each of the three (3) samples were analyzed for Commissioner Policy (CP-51) list volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) using United Stated Environmental Protection Agency (USEPA) Methods SW846 8260C and 8270D, respectively. The analytical sample results were compared to CP-51 Soil Cleanup Levels (SCLs) tables 2 and 3 for gasoline and fuel oil contaminated soils, respectively. See Section 3 for a summary of laboratory analysis.

#### 2.4 Site Restoration and Waste Removal

On June 21, 2019, a total of 49.36 tons of 1.5" clean bluestone material was imported to the Site from Impact Reuse and Recovery, LLC, (IRRS) for Site restoration purposes. IEC subcontracted American Environmental Assessment Corp. to perform the Site regrading and restoration activities. Using a backhoe, the Site was regraded, and the imported stone was spread evenly across the affected portions of the Site to provide a uniform surface which will assist with dust suppression and drainage at the Site (see **Appendix A** for Site Photographs).

On the same day, the two (2) steel 55-gllon drums of excavated gravel were removed by American Environmental Assessments Corp. A total of 550-pounds of impacted material was disposed of at Advanced Waste Water Treatment (AWWT) facility of Farmingdale, NY. See **Appendix B** for waste manifests.

#### 3 LABORATORY ANALYSIS

### 3.1 Endpoint Soil Samples

Laboratory analysis of the three (3) endpoint confirmation soil samples determined that no CP-51 list volatile organic compounds (VOCs) were present in the soil samples collected. Several CP-51 list semi-volatile organic compounds (SVOCs) were detected in the three (3) endpoint soil samples collected. The following SVOCs were detected in the soil samples slightly in exceedance of their respective CP-51 list Soil Cleanup Objectives (SCOs):

- Benzo(a)anthracene 1,700 ug/kg in EP-1 and 2,000 ug/kg in EP-3 (CP-51 SCO = 1,000 ug/kg)
- Benzo(a)pyrene 1,200 ug/kg in EP-1 and 1,300 ug/kg in EP-3 (CP-51 SCO = 1,000 mg/kg)
- Benzo(b)fluoranthene 1,600 ug/kg in EP-1 and 1,700 ug/kg in EP-3 (CP-51 SCO = 1,000 mg/kg)
- Chrysene 1,500 ug/kg in EP-1 and 1,700 ug/kg in EP-3 (CP-51 SCO = 1,000 mg/kg)
- Indeno(1,2,3-cd)pyrene 860 ug/kg in EP-1 and 760 ug/kg in EP-3 (CP-51 SCO = 500 mg/kg)

Additional low level SVOCs were detected in the three (3) endpoint confirmation samples, EP-1, EP-2, and EP-3, but at concentrations below their respective CP-51 List SCOs. See **Appendix C** for raw analytical data

### 4 **CONCLUSIONS**

The laboratory analysis of two (2) of the three (3) the endpoint confirmation samples collected from the Site exhibited residual levels of Poly Aromatic Hydrocarbon (PAH) type SVOCs slightly above the CP-51 soil cleanup objectives. After a review of the laboratory analytical data performed by Mr. Charles Post, the NYSDEC Case Manager, it was determined and agreed upon that these residual levels of PAHs were not considered to pose a concern to the environmental integrity of the Site. Based on the NYSDECs interpretation of the laboratory data, excavation of stained material, and the satisfactory restoration of the Site by way of importing virgin stone and regrading the Site, IEC hereby requests that Spill #1900873 be closed.

# **PLATES**

5200 1st Avenue, Bronx, New York







PROJECT NUMBER 13610

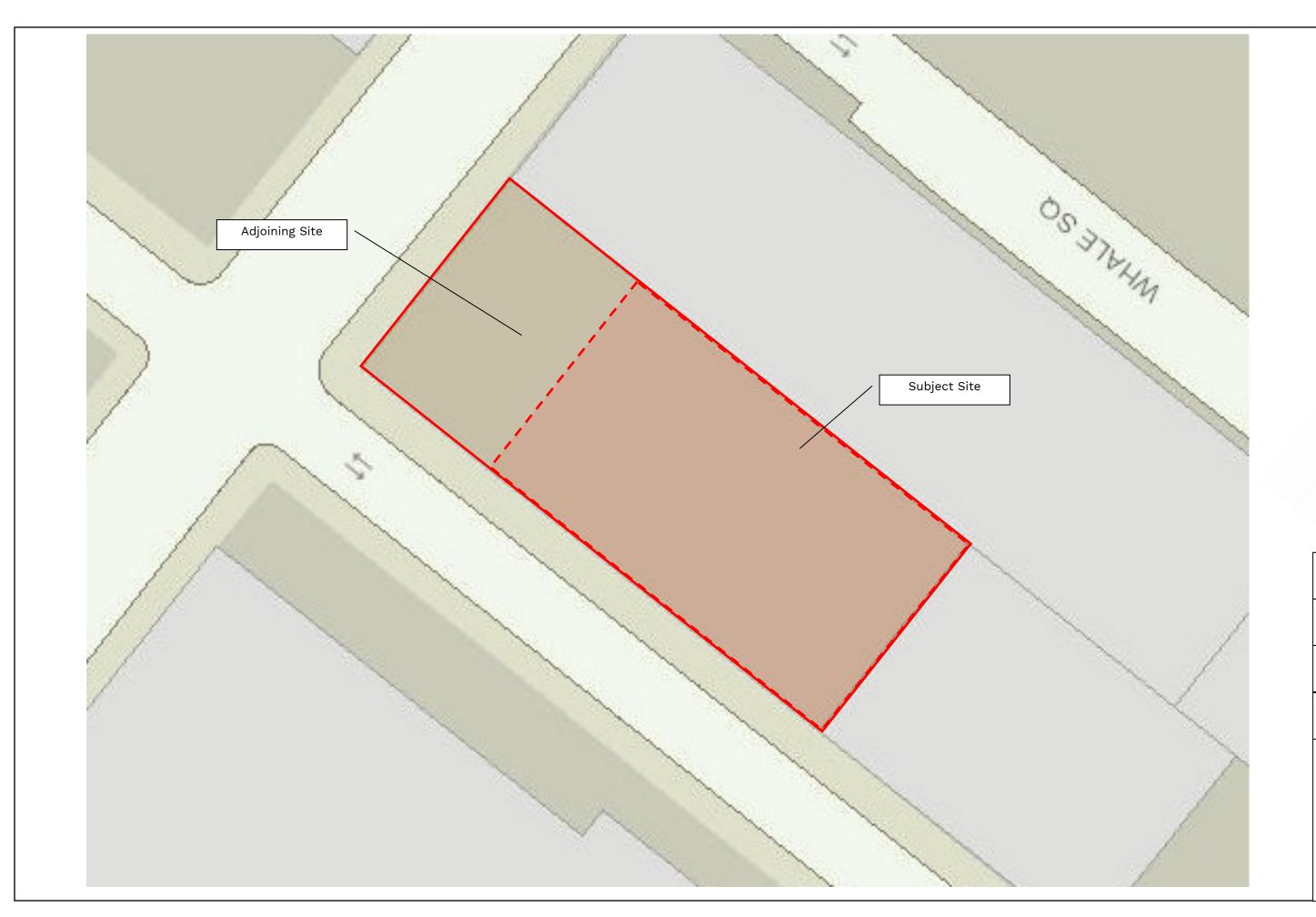
SITE ADDRESS 5200 1st Avenue, Brook-lyn, NY

PLATE NUMBER 1

PLATE NAME Site Location Map

IMPACT ENVIRONMENTAL 170 Keyland Court Bohemia, New York 11716 TEL: (631) 268-8800 FAX: (631) 269-1599







PROJECT NUMBER 13610

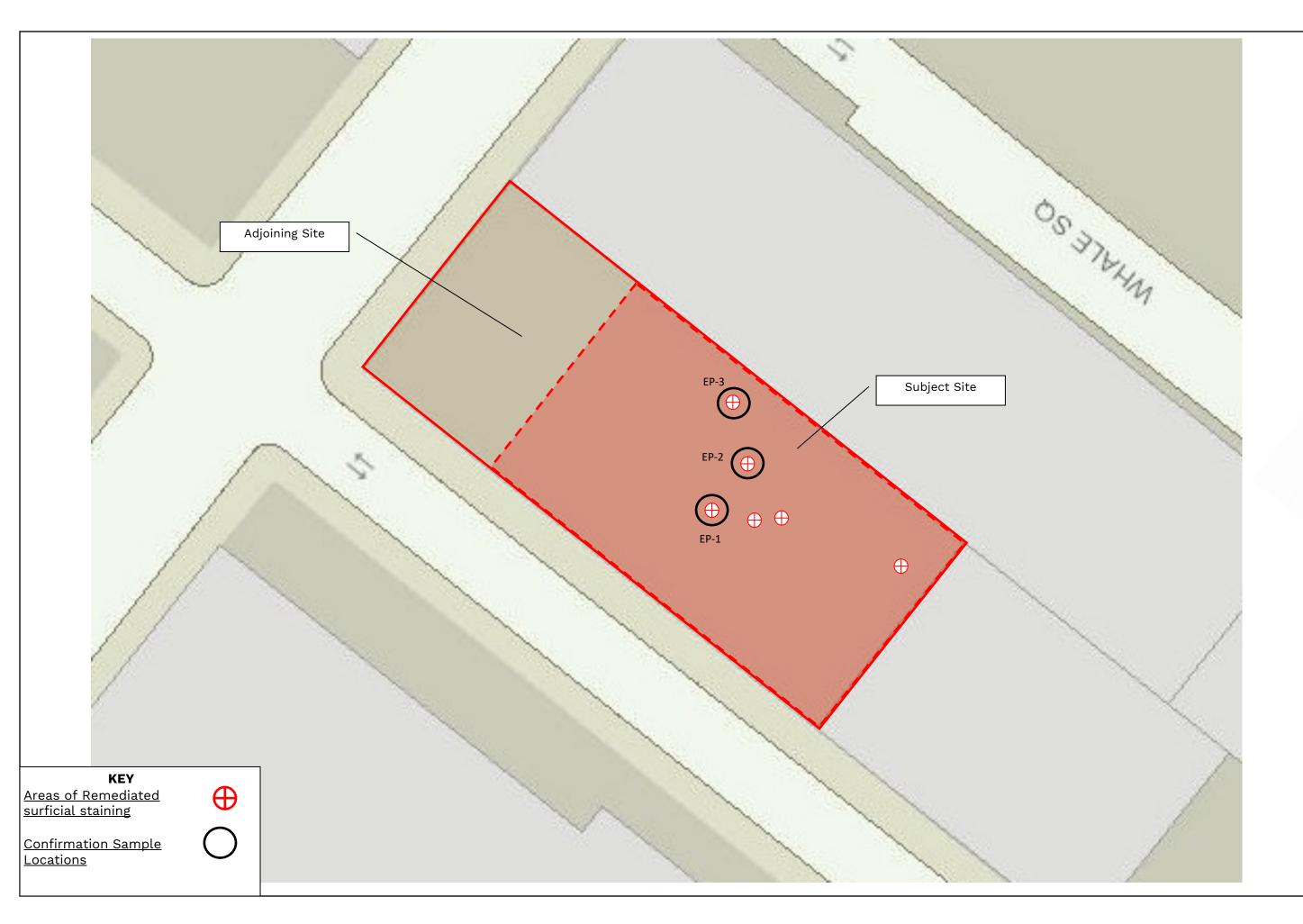
SITE ADDRESS 5200 1st Avenue, Brook-lyn, NY

PLATE NUMBER 2

PLATE NAME Facility Site Plan— Overview

IMPACT ENVIRONMENTAL 170 Keyland Court Bohemia, New York 11716 TEL: (631) 268-8800 FAX: (631) 269-1599







PROJECT NUMBER 13610

SITE ADDRESS 5200 1st Avenue, Brook-lyn, NY

PLATE NUMBER 3

PLATE NAME
Location of Remediated
Locations and Confirmation Sample Locations

IMPACT ENVIRONMENTAL 170 Keyland Court Bohemia, New York 11716 TEL: (631) 268-8800 FAX: (631) 269-1599



# **TABLES**

5200 1st Avenue, Bronx, New York



## Table 1 **Laboratory Analysis Summary**

5200 1st Avenue, Brooklyn, New York

LOCATION				EP-1		EP-2		EP-3	
SAMPLING DATE			6/6/2019		6/6/2019		6/6/2019		
LAB SAMPLE ID				L1924279-01		L1924279-02		L1924279-03	
SAMPLE TYPE				SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)				1'		1'		1'	
	NY-CP51	NY-UNRES	Units	Results	Qual	Results	Qual	Results	Qual
General Chemistry									
Solids, Total			%	92.3		95.8		91.3	
Semivolatile Organics by GC/MS									
Acenaphthene	20	20	mg/kg	0.49		0.021	J	0.22	
Acenaphthylene	100	100	mg/kg	0.04	J	0.14	U	0.11	J
Anthracene	100	100	mg/kg	0.46		0.066	J	0.94	
Benzo(a)anthracene	1	1	mg/kg	1.7		0.33		2	
Benzo(a)pyrene	1	1	mg/kg	1.2		0.33		1.3	
Benzo(b)fluoranthene	1	1	mg/kg	1.6		0.39		1.7	
Benzo(ghi)perylene	100	100	mg/kg	0.81		0.21		0.75	
Benzo(k)fluoranthene	0.8	0.8	mg/kg	0.55		0.14		0.45	
Chrysene	1	1	mg/kg	1.5		0.31		1.7	
Dibenzo(a,h)anthracene	0.33	0.33	mg/kg	0.18		0.052	J	0.18	
Fluoranthene	100	100	mg/kg	3.6		0.46		3.4	
Fluorene	30	30	mg/kg	0.26		0.019	J	0.34	
Indeno(1,2,3-cd)pyrene	0.5	0.5	mg/kg	0.86		0.21		0.76	
Phenanthrene	100	100	mg/kg	3.3		0.26		3.2	
Pyrene	100	100	mg/kg	3		0.47		3.4	
Volatile Organics by GC/MS									
1,2,4-Trimethylbenzene	3.6	3.6	mg/kg	0.0018	U	0.0018	U	0.002	U
1,3,5-Trimethylbenzene	8.4	8.4	mg/kg	0.0018	U	0.0018	U	0.002	U
Benzene	0.06	0.06	mg/kg	0.00046	U	0.00044	U	0.00049	U
Ethylbenzene	1	1	mg/kg	0.00092	U	0.00089	U	0.00098	U
Isopropylbenzene	2.3	-	mg/kg	0.00092	U	0.00089	С	0.00098	С
Methyl tert butyl ether	0.93	0.93	mg/kg	0.0018	U	0.0018	С	0.002	С
n-Butylbenzene	12	12	mg/kg	0.00092	U	0.00089	С	0.00098	С
n-Propylbenzene	3.9	3.9	mg/kg	0.00092	U	0.00089	С	0.00098	С
Naphthalene	12	12	mg/kg	0.0037	U	0.0036	С	0.0039	С
o-Xylene	0.26	-	mg/kg	0.00092	U	0.00089	U	0.00098	U
p-Isopropyltoluene	10	-	mg/kg	0.00092	U	0.00089	U	0.00098	U
p/m-Xylene	0.26	-	mg/kg	0.0018	U	0.0018	U	0.002	U
sec-Butylbenzene	11	11	mg/kg	0.00092	U	0.00089	U	0.00098	U
tert-Butylbenzene	5.9	5.9	mg/kg	0.0018	U	0.0018	U	0.002	U
Toluene	0.7	0.7	mg/kg	0.00092	U	0.00089	U	0.00098	U
Xylenes, Total	0.26	0.26	mg/kg	0.00092	U	0.00089	U	0.00098	U

<sup>\*</sup> Comparison is not performed on parameters with non-numeric criteria.

NY-CP51: New York DEC CP-51 Soil Cleanup Levels Criteria per NY CP-51 Soil Cleanup Levels dated October 21, 2010.

NY-UNRES: New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

# **APPENDIX**

5200 1st Avenue, Bronx, New York



# Appendix A

Site Photographs



**Photograph No. 1:** View of excavated impacted gravel area



**Photograph No. 2:** View of additional excavated impacted gravel areas



**Photograph No. 3:** View of excavation locations and storage drums



**Photograph No. 4:** View of machine used to perform remediation





**Photograph No. 5:** View of delivery of first load of bluestone



**Photograph No. 6:** View of second delivery of bluestone





Photograph No. 7: View of site during restoration



Photograph No. 8: View of Site post restoration



# Appendix B

Waste @ Manifests



IMPACT ENVIRONMENTAL 170 Keyland Court

Bohemia, New York 11716 TEL: (631) 268-8800 FAX: (631) 269-1599

<b>A</b>	NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 o	3: Emergency Response (631) 586-2		4. Waste T	racking Nu	0604683
	5. Generator's Name and Maili	ng Address		Generator's Site Address				
	may 70	Vr 41101	TEL 2 100	5200	15	t /	reno	
	3443 Hy	ng Address Inc. M BIV2. Strten	Tollac , wh	Bres	klyn	, Ny		***************************************
	Generator's Phone: 6. Transporter 1 Company Nan	ne	1036%			U.S. EPA ID	Number	
	AMERICAN E	NVIRONMENTAL ASSES	SMENT CORP.			NYI	R00004	14412
	7. Transporter 2 Company Nan	ne				U.S. EPA ID	Number	
	Designated Facility Name ar	and Site Address	1 .1	A.		U.S. EPA ID	Number	
	6. Designated Lacility Name at	23 US OF	wife or	2 109		0.0. LI A ID	rvumber	
		52-97 KIZ	June 1	Viste .		76		
	Facility's Phone:	OVIER				IN		
	9. Waste Shipping Nam	e and Description		No.	Type	11. Total Quantity	12. Unit Wt./Vol.	
1	1. NON PCP	A, NON DOT REGULATE	D		1,00	550		
ENERATOR	NON HON	Deb ms		602	DM	<b>BENYSS</b>	Lhs	- company material
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	13. Special Handling Instruction	ne and Additional Information						
	13. Special Harding Instruction		E)	,				
	10003							
	* *							
		R'S CERTIFICATION: I hereby declare that t ded, and are in all respects in proper conditio						e, and are classified, packaged,
	Generator's/Offeror's Printed/Ty		S	ignature	B			Month Day Year
Y		awoly		Herry	work.	4		6 7 19
INT'L	15. International Shipments	Import to U.S.	Export from					
	Transporter Signature (for expo 16. Transporter Acknowledgme			Date leav	ing 0.5.:	1		
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I A	17. Discrepancy							
	17a. Discrepancy Indication Sp	ace Quantity	Туре	Residue	[	Partial Rej	ection	Full Rejection
7						,		4
7	17b. Alternate Facility (or Gene	erator) Aurill		Manifest Reference N	lumber:	U.S. EPA ID	Number	
듬								
) FA(	Facility's Phone:	FARMIN	coplo Ny			NY	200	0218677
ATE	17c. Signature of Alternate Fac	ility (or Generator)						Month Day Year
DESIGNATED FACILITY								
DE								
	do Budanta I III o	0 10 0 10 10 10 10 10 10 10 10 10 10 10						
30000	18. Designated Facility Owner of Printed/Typed Name	or Operator: Certification of receipt of materia		pt as noted in Item 17a gnature	1			Month Day Year
1	1) Journal of the state of the	Bass						16 77 19
169	9-BLC-O 6 10498 (Rev.	. 9/09)	(	1	DE	ESIGNATI	ED FAC	ILITY TO GENERATOR



Manifest #:

Ticket #: 93399

welcome to solid ground....

Facility Registration #: 121888

1000 Page Avenue Lyndhurst, New Jersey 07071 631-269-8800

## **SCALE TICKET**

Permit: CBG070002

Part 1

## **GENERATOR**

Generator Name, Address and Telephone #:

IRRC 1000 Page Ave. Lyndhurst, NJ 07071 Project Site (Description and Address):

5200 1st Ave

Brooklyn

NY

Part 2

## MATERIAL CLASSIFICATION AND WEIGHT

Classification of Materialione

#13902

WEIGHTS

GROSS/TARE/NET (lbs)

75800 lb 28420 lb 47380 lb NET (tons):

23.690 tn

Part 3

NOTES:

## WEIGHT CERTIFICATION

<u>Certification:</u> By issuing this ticket, I hereby certify that the above named material has been accepted by this facility, and that the weights stated above are accurate. The weights were calculated in accordance with New Jersey's Weights and Measures Program.

Where applicable, I hereby certify that the Transportation Security Seal referenced in the **Scale Operator Notes** section of this ticket was intact upon entrance to this facility, and that I removed the seal upon the removal of the bed cover on the truck.

Name of Scale Operator: Christan F.

Date and Time In and Out: 6/20/19 Tare Time

Gross Time

3:20 pm

3:20 pm

Scale Operator Notes:

Part 4

## TRANSPORTER DATA AND CERTIFICATION

Transporter Name, Address and Permit #: MANOLOS

Driver Name and Signature (conditional):

Manolos 15

Mandius 10

Truck Plate:

By signing this ticket the transport vehicle driver accepts sole responsibility and therefore assumes all liabilities for the gross weight of this divisible load of material scaled and accepted at Impact Environmental Class B Recycling Facility. The driver acknowledges that he or she is solely responsible for compliance with all traffic safety rules and regulations for the operation and maintenance of the vehicle when transporting to, driving in and leaving from Impact Environmental Class B Recycling Facility. Further, the driver represents that he or she will immediately report any incidents of overloading or vehicle equipment failure/hazards associated with the vehicle to the owner of the vehicle, and in doing so will relieve Impact Environmental, its owners, employees and/or all of its affiliated companies to serve any form of notice to the truck owner. Furthermore, driver accepts that he or she will abide by all posted safety procedures at Impact Environmental Class B Recycling Facility and as directed by company staff.



Manifest #:

Ticket #: 93397

6093397

welcome to solid ground....

Facility Registration #: 121888 Permit: CBG070002

1000 Page Avenue Lyndhurst, New Jersey 07071 631-269-8800

## **SCALE TICKET**

Part 1

**GENERATOR** 

Generator Name, Address and Telephone #:

IRRC 1000 Page Ave. Lyndhurst, NJ 07071 Project Site (Description and Address):

5200 1st Ave

Brooklyn

NY

Part 2

MATERIAL CLASSIFICATION AND WEIGHT

Classification of Material:

WEIGHTS

GROSS/TARE/NET (lbs)

79940 lb 28600 lb

51340 lb

NET (tons):

25.670 tn

NOTES:

罪13902

Part 3

WEIGHT CERTIFICATION

<u>Certification:</u> By issuing this ticket, I hereby certify that the above named material has been accepted by this facility, and that the weights stated above are accurate. The weights were calculated in accordance with New Jersey's Weights and Measures Program.

Where applicable, I hereby certify that the Transportation Security Seal referenced in the **Scale Operator Notes** section of this ticket was intact upon entrance to this facility, and that I removed the seal upon the removal of the bed cover on the truck.

Name of Scale Operator:

Christan F.

Date and Time In and Out: 6/20/19

and as directed by company staff.

Tare Time

Gross Time

3:04 pm

3:06 pm

Scale Operator Notes:

Part 4

TRANSPORTER DATA AND CERTIFICATION

Transporter Name, Address and Permit #:

**MANOLOS** 

Driver Name and Signature (conditional):

Manolos 16

Truck Plate:

By signing this ticket the transport vehicle driver accepts sole responsibility and therefore assumes all liabilities for the gross weight of this divisible load of material scaled and accepted at Impact Environmental Class B Recycling Facility. The driver acknowledges that he or she is solely responsible for compliance with all traffic safety rules and regulations for the operation and maintenance of the vehicle when transporting to, driving in and leaving from Impact Environmental Class B Recycling Facility. Further, the driver represents that he or she will immediately report any incidents of overloading or vehicle equipment failure/hazards associated with the vehicle to the owner of the vehicle, and in doing so will relieve Impact Environmental, its owners, employees and/or all of its affiliated companies to serve any form of notice to the truck owner. Furthermore, driver accepts that he or she will abide by all posted safety procedures at Impact Environmental Class B Recycling Facility

# Appendix C

Raw Analytical Data



## ANALYTICAL REPORT

Lab Number: L1924279

Client: Impact Environmental

170 Keyland Ct Bohemia, NY 11716

ATTN: Christopher Connolly

Phone: (631) 269-8800
Project Name: 5200 1ST AVE

Project Number: 13902 Report Date: 06/12/19

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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).

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



**Project Name:** 5200 1ST AVE

Project Number: 13902

**Lab Number:** L1924279 **Report Date:** 06/12/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1924279-01	EP-1	SOIL	5200 IST AVENUE, BROOKLYN, NY	06/06/19 12:30	06/07/19
L1924279-02	EP-2	SOIL	5200 IST AVENUE, BROOKLYN, NY	06/06/19 12:40	06/07/19
L1924279-03	EP-3	SOIL	5200 IST AVENUE, BROOKLYN, NY	06/06/19 12:50	06/07/19



L1924279

Lab Number:

**Project Name:** 5200 1ST AVE

Project Number: 13902 Report Date: 06/12/19

## **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.	



Project Name: 5200 1ST AVE Lab Number: L1924279

Project Number: 13902 Report Date: 06/12/19

## **Case Narrative (continued)**

Report Submission

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

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:

Title: Technical Director/Representative Date: 06/12/19

Custen Walker Cristin Walker

## **ORGANICS**



## **VOLATILES**



Project Name: 5200 1ST AVE Lab Number: L1924279

Project Number: 13902 Report Date: 06/12/19

**SAMPLE RESULTS** 

Lab ID: L1924279-01 Date Collected: 06/06/19 12:30

Client ID: EP-1 Date Received: 06/07/19

Sample Location: 5200 IST AVENUE, BROOKLYN, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 06/10/19 17:21

Analyst: JC Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - \	Westborough Lab					
Benzene	ND		ug/kg	0.46	0.15	1
Toluene	ND		ug/kg	0.92	0.50	1
Ethylbenzene	ND		ug/kg	0.92	0.13	1
Methyl tert butyl ether	ND		ug/kg	1.8	0.18	1
p/m-Xylene	ND		ug/kg	1.8	0.51	1
o-Xylene	ND		ug/kg	0.92	0.27	1
Xylenes, Total	ND		ug/kg	0.92	0.27	1
n-Butylbenzene	ND		ug/kg	0.92	0.15	1
sec-Butylbenzene	ND		ug/kg	0.92	0.13	1
tert-Butylbenzene	ND		ug/kg	1.8	0.11	1
Isopropylbenzene	ND		ug/kg	0.92	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.92	0.10	1
Naphthalene	ND		ug/kg	3.7	0.60	1
n-Propylbenzene	ND		ug/kg	0.92	0.16	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.8	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.8	0.31	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	105	70-130	
Toluene-d8	99	70-130	
4-Bromofluorobenzene	105	70-130	
Dibromofluoromethane	103	70-130	



L1924279

Project Name: 5200 1ST AVE Lab Number:

Project Number: 13902 Report Date: 06/12/19

SAMPLE RESULTS

Lab ID: L1924279-02 Date Collected: 06/06/19 12:40

Client ID: EP-2 Date Received: 06/07/19

Sample Location: 5200 IST AVENUE, BROOKLYN, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 06/11/19 13:36

Analyst: PK Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westbo	orough Lab					
Benzene	ND		ug/kg	0.44	0.15	1
Toluene	ND		ug/kg	0.89	0.48	1
Ethylbenzene	ND		ug/kg	0.89	0.12	1
Methyl tert butyl ether	ND		ug/kg	1.8	0.18	1
p/m-Xylene	ND		ug/kg	1.8	0.50	1
o-Xylene	ND		ug/kg	0.89	0.26	1
Xylenes, Total	ND		ug/kg	0.89	0.26	1
n-Butylbenzene	ND		ug/kg	0.89	0.15	1
sec-Butylbenzene	ND		ug/kg	0.89	0.13	1
tert-Butylbenzene	ND		ug/kg	1.8	0.10	1
Isopropylbenzene	ND		ug/kg	0.89	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.89	0.10	1
Naphthalene	ND		ug/kg	3.6	0.58	1
n-Propylbenzene	ND		ug/kg	0.89	0.15	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.8	0.17	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.8	0.30	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	116	70-130	
Toluene-d8	97	70-130	
4-Bromofluorobenzene	102	70-130	
Dibromofluoromethane	101	70-130	



L1924279

Not Specified

Project Name: 5200 1ST AVE

5200 IST AVENUE, BROOKLYN, NY

L1924279-03

EP-3

Project Number: 13902

**SAMPLE RESULTS** 

Date Collected: 06/06/19 12:50

**Report Date:** 06/12/19

Lab Number:

Field Prep:

Date Received: 06/07/19

Sample Depth:

Sample Location:

Lab ID:

Client ID:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 06/11/19 13:10

Analyst: PK
Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westbor	ough Lab					
	ND		,	0.40	0.40	,
Benzene	ND		ug/kg	0.49	0.16	1
Toluene	ND		ug/kg	0.98	0.53	1
Ethylbenzene	ND		ug/kg	0.98	0.14	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.55	1
o-Xylene	ND		ug/kg	0.98	0.28	1
Xylenes, Total	ND		ug/kg	0.98	0.28	1
n-Butylbenzene	ND		ug/kg	0.98	0.16	1
sec-Butylbenzene	ND		ug/kg	0.98	0.14	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
Isopropylbenzene	ND		ug/kg	0.98	0.11	1
p-Isopropyltoluene	ND		ug/kg	0.98	0.11	1
Naphthalene	ND		ug/kg	3.9	0.64	1
n-Propylbenzene	ND		ug/kg	0.98	0.17	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	114	70-130	
Toluene-d8	98	70-130	
4-Bromofluorobenzene	104	70-130	
Dibromofluoromethane	99	70-130	



L1924279

Lab Number:

Project Name: 5200 1ST AVE

Project Number: 13902 Report Date: 06/12/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 06/10/19 08:34

Analyst: MV

Parameter	Result	Qualifier	Units	RL		MDL
olatile Organics by EPA 503	5 Low - Westbord	ugh Lab fo	r sample(s):	01	Batch:	WG1246541-5
Benzene	ND		ug/kg	0.50		0.17
Toluene	ND		ug/kg	1.0		0.54
Ethylbenzene	ND		ug/kg	1.0		0.14
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
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
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
n-Propylbenzene	ND		ug/kg	1.0		0.17
1,3,5-Trimethylbenzene	ND		ug/kg	2.0		0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0		0.33

		Acceptance
Surrogate	%Recovery Q	ualifier Criteria
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	105	70-130
Dibromofluoromethane	102	70-130



L1924279

**Project Name:** 5200 1ST AVE

**Project Number:** Report Date: 13902 06/12/19

Lab Number:

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 06/11/19 07:58

Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL	
Volatile Organics by EPA 5035 Lo	w - Westbord	ough Lab fo	r sample(s):	02-03	Batch: WG12468	384-5
Benzene	ND		ug/kg	0.50	0.17	
Toluene	ND		ug/kg	1.0	0.54	
Ethylbenzene	ND		ug/kg	1.0	0.14	
Methyl tert butyl ether	0.23	J	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	
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	
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	
n-Propylbenzene	ND		ug/kg	1.0	0.17	
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	

Acceptance				
%Recovery	Qualifier	Criteria		
111		70-130		
98		70-130		
100		70-130		
98		70-130		
	111 98 100	%Recovery Qualifier  111  98  100	%Recovery         Qualifier         Criteria           111         70-130           98         70-130           100         70-130	



## Lab Control Sample Analysis Batch Quality Control

**Project Name:** 5200 1ST AVE

Project Number: 13902

Lab Number: L1924279

**Report Date:** 06/12/19

arameter	LCS %Recovery	Qual %F	LCSD Recovery	%Recovery Qual Limits	RPD	Qual	RPD Limits
olatile Organics by EPA 5035 Low - Westbo	rough Lab Asso	ociated sample(s):	01 Batch:	WG1246541-3 WG124654	1-4		
Benzene	97		96	70-130	1		30
Toluene	99		98	70-130	1		30
Ethylbenzene	101		99	70-130	2		30
Methyl tert butyl ether	102		103	66-130	1		30
p/m-Xylene	98		97	70-130	1		30
o-Xylene	99		98	70-130	1		30
n-Butylbenzene	98		95	70-130	3		30
sec-Butylbenzene	100		99	70-130	1		30
tert-Butylbenzene	104		103	70-130	1		30
Isopropylbenzene	102		100	70-130	2		30
p-Isopropyltoluene	104		102	70-130	2		30
Naphthalene	96		96	70-130	0		30
n-Propylbenzene	97		95	70-130	2		30
1,3,5-Trimethylbenzene	105		104	70-130	1		30
1,2,4-Trimethylbenzene	104		102	70-130	2		30

Surrogate	LCS	LCSD	Acceptance
	%Recovery Qual	%Recovery Qual	Criteria
1,2-Dichloroethane-d4	107	108	70-130
Toluene-d8	100	100	70-130
4-Bromofluorobenzene Dibromofluoromethane	107	106	70-130
	108	106	70-130



## Lab Control Sample Analysis Batch Quality Control

**Project Name:** 5200 1ST AVE

Project Number: 13902

Lab Number: L1924279

**Report Date:** 06/12/19

arameter	LCS %Recovery Qua	LCSD al %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
arameter	/artecovery Qua	ai /orceovery	Quai Liiiits	KPD	Quai LiiiitS
olatile Organics by EPA 5035 Low -	Westborough Lab Associated	d sample(s): 02-03 Ba	atch: WG1246884-3 WG124	6884-4	
Dannana	00	00	70.400	40	20
Benzene	99	88	70-130	12	30
Toluene	95	84	70-130	12	30
Ethylbenzene	93	84	70-130	10	30
Methyl tert butyl ether	109	104	66-130	5	30
p/m-Xylene	91	82	70-130	10	30
o-Xylene	91	83	70-130	9	30
n-Butylbenzene	93	82	70-130	13	30
sec-Butylbenzene	93	82	70-130	13	30
tert-Butylbenzene	96	85	70-130	12	30
Isopropylbenzene	95	84	70-130	12	30
p-Isopropyltoluene	95	84	70-130	12	30
Naphthalene	94	91	70-130	3	30
n-Propylbenzene	95	82	70-130	15	30
1,3,5-Trimethylbenzene	96	85	70-130	12	30
1,2,4-Trimethylbenzene	95	85	70-130	11	30

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
1,2-Dichloroethane-d4	113	114	70-130
Toluene-d8	98	98	70-130
4-Bromofluorobenzene	104	103	70-130
Dibromofluoromethane	102	104	70-130



## **SEMIVOLATILES**



Project Name: 5200 1ST AVE Lab Number: L1924279

Project Number: 13902 Report Date: 06/12/19

**SAMPLE RESULTS** 

Lab ID: L1924279-01 Date Collected: 06/06/19 12:30

Client ID: EP-1 Date Received: 06/07/19
Sample Location: 5200 IST AVENUE, BROOKLYN, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1.8270D Extraction Date: 06/08/19 00:56

Analytical Method: 1,8270D Extraction Date: 06/08/19 00:56

Analytical Date: 06/09/19 06:06

Analyst: EK
Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS	S - Westborough Lab						
Acenaphthene	490		ug/kg	140	18.	1	
Fluoranthene	3600		ug/kg	110	20.	1	
Benzo(a)anthracene	1700		ug/kg	110	20.	1	
Benzo(a)pyrene	1200		ug/kg	140	43.	1	
Benzo(b)fluoranthene	1600		ug/kg	110	30.	1	
Benzo(k)fluoranthene	550		ug/kg	110	28.	1	
Chrysene	1500		ug/kg	110	18.	1	
Acenaphthylene	40	J	ug/kg	140	27.	1	
Anthracene	460		ug/kg	110	34.	1	
Benzo(ghi)perylene	810		ug/kg	140	21.	1	
Fluorene	260		ug/kg	180	17.	1	
Phenanthrene	3300		ug/kg	110	22.	1	
Dibenzo(a,h)anthracene	180		ug/kg	110	20.	1	
Indeno(1,2,3-cd)pyrene	860		ug/kg	140	25.	1	
Pyrene	3000		ug/kg	110	18.	1	

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	134	Q	23-120
2-Fluorobiphenyl	114		30-120
4-Terphenyl-d14	102		18-120



Project Name: 5200 1ST AVE Lab Number: L1924279

Project Number: 13902 Report Date: 06/12/19

**SAMPLE RESULTS** 

Lab ID: L1924279-02 Date Collected: 06/06/19 12:40

Client ID: EP-2 Date Received: 06/07/19

Sample Location: 5200 IST AVENUE, BROOKLYN, NY Field Prep: Not Specified

Sample Depth:

Analytical Date:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8270D Extraction Date: 06/08/19 00:56

Analyst: EK Percent Solids: 96%

06/09/19 04:54

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - West	borough Lab					
Acenaphthene	21	J	ug/kg	140	17.	1
Fluoranthene	460		ug/kg	100	19.	1
Benzo(a)anthracene	330		ug/kg	100	19.	1
Benzo(a)pyrene	330		ug/kg	140	41.	1
Benzo(b)fluoranthene	390		ug/kg	100	28.	1
Benzo(k)fluoranthene	140		ug/kg	100	27.	1
Chrysene	310		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	26.	1
Anthracene	66	J	ug/kg	100	33.	1
Benzo(ghi)perylene	210		ug/kg	140	20.	1
Fluorene	19	J	ug/kg	170	16.	1
Phenanthrene	260		ug/kg	100	20.	1
Dibenzo(a,h)anthracene	52	J	ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	210		ug/kg	140	24.	1
Pyrene	470		ug/kg	100	17.	1

Surrogate	% Recovery		otance teria
Nitrobenzene-d5	101	23	3-120
2-Fluorobiphenyl	84	30	)-120
4-Terphenyl-d14	85	18	3-120



Project Name: 5200 1ST AVE Lab Number: L1924279

Project Number: 13902 Report Date: 06/12/19

**SAMPLE RESULTS** 

Lab ID: L1924279-03 Date Collected: 06/06/19 12:50

Client ID: EP-3 Date Received: 06/07/19

Sample Location: 5200 IST AVENUE, BROOKLYN, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8270D Extraction Date: 06/08/19 00:56

Analytical Date: 06/09/19 06:30

Analyst: EK
Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - W	estborough Lab					
Acenaphthene	220		ug/kg	140	19.	1
Fluoranthene	3400		ug/kg	110	21.	1
Benzo(a)anthracene	2000		ug/kg	110	20.	1
Benzo(a)pyrene	1300		ug/kg	140	44.	1
Benzo(b)fluoranthene	1700		ug/kg	110	31.	1
Benzo(k)fluoranthene	450		ug/kg	110	29.	1
Chrysene	1700		ug/kg	110	19.	1
Acenaphthylene	110	J	ug/kg	140	28.	1
Anthracene	940		ug/kg	110	36.	1
Benzo(ghi)perylene	750		ug/kg	140	21.	1
Fluorene	340		ug/kg	180	18.	1
Phenanthrene	3200		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	180		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	760		ug/kg	140	25.	1
Pyrene	3400		ug/kg	110	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
Nitrobenzene-d5	120		23-120	
2-Fluorobiphenyl	97		30-120	
4-Terphenyl-d14	90		18-120	



L1924279

Lab Number:

**Project Name:** 5200 1ST AVE

Project Number: 13902 Report Date: 06/12/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 06/09/19 12:35

Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 06/08/19 00:56

Parameter	Result	Qualifier	Units	RL		MDL	
Semivolatile Organics by GC/M	S - Westboroug	h Lab for s	ample(s):	01-03	Batch:	WG1246039-1	
Acenaphthene	ND		ug/kg	130		17.	
Fluoranthene	ND		ug/kg	99		19.	
Benzo(a)anthracene	ND		ug/kg	99		19.	
Benzo(a)pyrene	ND		ug/kg	130		40.	
Benzo(b)fluoranthene	ND		ug/kg	99		28.	
Benzo(k)fluoranthene	ND		ug/kg	99		26.	
Chrysene	ND		ug/kg	99		17.	
Acenaphthylene	ND		ug/kg	130		26.	
Anthracene	ND		ug/kg	99		32.	
Benzo(ghi)perylene	ND		ug/kg	130		19.	
Fluorene	ND		ug/kg	160		16.	
Phenanthrene	ND		ug/kg	99		20.	
Dibenzo(a,h)anthracene	ND		ug/kg	99		19.	
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130		23.	
Pyrene	ND		ug/kg	99		16.	

		Acceptance
Surrogate	%Recovery Qua	lifier Criteria
2-Fluorophenol	100	25-120
Phenol-d6	101	10-120
Nitrobenzene-d5	118	23-120
2-Fluorobiphenyl	100	30-120
2,4,6-Tribromophenol	100	10-136
4-Terphenyl-d14	104	18-120



## Lab Control Sample Analysis Batch Quality Control

**Project Name:** 5200 1ST AVE

Project Number: 13902

Lab Number: L1924279

**Report Date:** 06/12/19

arameter	LCS %Recovery	Qual	LCSI %Recov			ecovery imits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborou	ıgh Lab Associ	ated sample(s):	01-03	Batch:	WG1246039-2	WG1246039	9-3		
Acenaphthene	83		89		3	1-137	7		50
Fluoranthene	88		92		4	0-140	4		50
Benzo(a)anthracene	88		92		4	0-140	4		50
Benzo(a)pyrene	93		95		4	0-140	2		50
Benzo(b)fluoranthene	88		93		4	0-140	6		50
Benzo(k)fluoranthene	89		91		4	0-140	2		50
Chrysene	84		87		4	0-140	4		50
Acenaphthylene	91		96		4	0-140	5		50
Anthracene	84		89		4	0-140	6		50
Benzo(ghi)perylene	88		91		4	0-140	3		50
Fluorene	88		94		4	0-140	7		50
Phenanthrene	82		85		4	0-140	4		50
Dibenzo(a,h)anthracene	84		87		4	0-140	4		50
Indeno(1,2,3-cd)pyrene	91		93		4	0-140	2		50
Pyrene	86		90		3	5-142	5		50

Survey and to	LCS	LCSD	Acceptance Criteria
Surrogate	%Recovery Qua	l %Recovery Qual	
2-Fluorophenol	87	84	25-120
Phenol-d6	88	85	10-120
Nitrobenzene-d5	102	101	23-120
2-Fluorobiphenyl	85	82	30-120
2,4,6-Tribromophenol	88	83	10-136
4-Terphenyl-d14	83	77	18-120
			ALPHA

# INORGANICS & MISCELLANEOUS



Project Name: 5200 1ST AVE Lab Number: L1924279

Project Number: 13902 Report Date: 06/12/19

**SAMPLE RESULTS** 

Lab ID: L1924279-01 Date Collected: 06/06/19 12:30

Client ID: EP-1 Date Received: 06/07/19
Sample Location: 5200 IST AVENUE, BROOKLYN, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - V	Westborough Lab									
Solids, Total	92.3		%	0.100	NA	1	-	06/08/19 11:01	121,2540G	RI



Project Name: 5200 1ST AVE Lab Number: L1924279

Project Number: 13902 Report Date: 06/12/19

**SAMPLE RESULTS** 

Lab ID: L1924279-02 Date Collected: 06/06/19 12:40

Client ID: EP-2 Date Received: 06/07/19
Sample Location: 5200 IST AVENUE, BROOKLYN, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab	)								
Solids, Total	95.8		%	0.100	NA	1	-	06/08/19 11:01	121,2540G	RI



Project Name: 5200 1ST AVE Lab Number: L1924279

Project Number: 13902 Report Date: 06/12/19

**SAMPLE RESULTS** 

Lab ID: L1924279-03 Date Collected: 06/06/19 12:50

Client ID: EP-3 Date Received: 06/07/19
Sample Location: 5200 IST AVENUE, BROOKLYN, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - V	Vestborough Lab	)								
Solids, Total	91.3		%	0.100	NA	1	-	06/08/19 11:01	121,2540G	RI



Lab Duplicate Analysis

Batch Quality Control

Lab Number:

L1924279 06/12/19

Report Date:

Parameter	Native Sam	ple D	<b>Duplicate Sample</b>	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sam	ple(s): 01-03	QC Batch ID:	WG1246101-1	QC Sample:	L1924279-01	Client ID:	EP-1
Solids, Total	92.3		93.7	%	2		20



**Project Name:** 

Project Number: 13902

5200 1ST AVE

Project Name: 5200 1ST AVE **Lab Number:** L1924279 Project Number: 13902

YES

**Report Date:** 06/12/19

## Sample Receipt and Container Information

Were project specific reporting limits specified?

**Cooler Information** 

Custody Seal Cooler

Α Absent

Container Info	ormation		Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	рН	deg C	Pres	Seal	Date/Time	Analysis(*)
L1924279-01A	Vial Large Septa unpreserved (4oz)	Α	NA		3.1	Υ	Absent		NYCP51-8260-G(14)
L1924279-01B	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		NYCP51-PAH(14),TS(7)
L1924279-01X	Vial MeOH preserved split	Α	NA		3.1	Υ	Absent		NYCP51-8260-G(14)
L1924279-01Y	Vial Water preserved split	Α	NA		3.1	Υ	Absent	08-JUN-19 02:09	NYCP51-8260-G(14)
L1924279-01Z	Vial Water preserved split	Α	NA		3.1	Υ	Absent	08-JUN-19 02:09	NYCP51-8260-G(14)
L1924279-02A	Vial Large Septa unpreserved (4oz)	Α	NA		3.1	Υ	Absent		NYCP51-8260-G(14)
L1924279-02B	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		NYCP51-PAH(14),TS(7)
L1924279-02X	Vial MeOH preserved split	Α	NA		3.1	Υ	Absent		NYCP51-8260-G(14)
L1924279-02Y	Vial Water preserved split	Α	NA		3.1	Υ	Absent	08-JUN-19 02:09	NYCP51-8260-G(14)
L1924279-02Z	Vial Water preserved split	Α	NA		3.1	Υ	Absent	08-JUN-19 02:09	NYCP51-8260-G(14)
L1924279-03A	Vial Large Septa unpreserved (4oz)	Α	NA		3.1	Υ	Absent		NYCP51-8260-G(14)
L1924279-03B	Glass 250ml/8oz unpreserved	Α	NA		3.1	Υ	Absent		NYCP51-PAH(14),TS(7)
L1924279-03X	Vial MeOH preserved split	Α	NA		3.1	Υ	Absent		NYCP51-8260-G(14)
L1924279-03Y	Vial Water preserved split	Α	NA		3.1	Υ	Absent	08-JUN-19 02:09	NYCP51-8260-G(14)
L1924279-03Z	Vial Water preserved split	Α	NA		3.1	Υ	Absent	08-JUN-19 02:09	NYCP51-8260-G(14)



Project Name: 5200 1ST AVE Lab Number: L1924279

Project Number: 13902 Report Date: 06/12/19

### **GLOSSARY**

#### **Acronyms**

**EDL** 

**EPA** 

LOQ

MS

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)

from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

- 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 Microsystaction (SPME)

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.

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.

Environmental Protection Agency.

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.)

- 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.

- 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.

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.

## Footnotes

Report Format: DU Report with 'J' Qualifiers



Project Name: 5200 1ST AVE Lab Number: L1924279
Project Number: 13902 Report Date: 06/12/19

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.

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. If a 'Total' result is requested, the results of its individual components will also be reported.

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 Condensation Product".
- 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).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- 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.
- 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.
- The lower value for the two columns has been reported due to obvious interference.
- 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.
- **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.

Report Format: DU Report with 'J' Qualifiers



Project Name: 5200 1ST AVE Lab Number: L1924279
Project Number: 13902 Report Date: 06/12/19

## REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

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 it's 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.



Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

Serial\_No:06121910:35

ID No.:17873 Revision 12

Published Date: 10/9/2018 4:58:19 PM

Page 1 of 1

## Certification Information

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

## Westborough Facility

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

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: lodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-

Tetramethylbenzene: 4-Ethyltoluene

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

#### **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

## 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

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 II, 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.

## **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.

## 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, TL, 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

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

Pre-Qualtrax Document ID: 08-113 Document Type: Form

<b>ALPHA</b>	CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Rd, Suite 5 ay per Ave, Suite 1	So	Page		Dat	Date Rec'd in Lab	6/1/19	ALPHA Job#
Westborough, MA 01581	Mansfield, MA 02048	Project Information				THE PERSON NAMED IN	Deliverables	salo	· · · · · · · · · · · · · · · · · · ·	
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FAX: 508-898-9193	FAX: 508-822-3288	Project Location: 52eo (sk		mund, br	Brocklyn, 134	72		EQuIS (1 File)	EQuIS (4 File)	PO# 13902
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-0a	₽₽-2		9/9	17:40	S	CC	7	1		2
-03	EP-3		9/9	12:50	S	CC	7			7
								5411		
Preservative Code: A = None B = HCI	Container Code P = Plastic A = Amber Glass	Westboro: Certification No: MA935 Mansfield: Certification No: MA015	o: MA935 o: MA015		S	Container Type	A			Please print clearly, legibly and completely. Samples can
C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = N <sub>2</sub> OH	V = Vial G = Glass B = Bacteria Cup					Preservative	Ł	¥		not be logged in and turnaround time clock will not clad until any ambiguities are
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