



SUPPLEMENTAL REMEDIAL INVESTIGATION REPORT

For:

**Sonero Metro City Auto Site
1001 Whitlock Avenue
Bronx, New York 10459
BCP Site No. C203148**

Prepared for:

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MAY 2022

CERTIFICATIONS

"I Fuad Dahan certify that I am currently a [NYS registered professional engineer or Qualified Environmental Professional as defined in 6 NYCRR Part 375] and that this Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications."

Fuad Dahan	05/31/2022	
NYS Professional Engineer (# 090531)	Date	Signature

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LIST OF ACRONYMS

Acronym	Definition
AWQS	Ambient Water Quality Standards
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
CAMP	Community Air Monitoring Plan
CVOC	Chlorinated Volatile Organic Compound
cy	Cubic yard
DER	Division of Environmental Remediation
DER-10	NYSDEC Technical Guidance for Site Investigation & Remediation Division of Environmental Remediation
DUSR	Data Usability Summary Report
ESA	Environmental Site Assessment
ft-bgs	Feet below ground surface
MW	Monitoring Well
ng/l	Nanograms per liter
NYSDEC	New York State Department of Environmental Conservation
PAHs	Polycyclic Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyls
PCE	Tetrachloroethene
PFAS	Per and Polyfluoroalkyl Substances
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctanesulfonic Acid
PHC	Petroleum Hydrocarbon
PID	Photoionization Detector
PPE	Personal Protective Equipment
QA/QC	Quality Assurance/Quality Control
RAWP	Remedial Action Work Plan
RI	Remedial Investigation
RIR	Remedial Investigation Report
RIWP	Remedial Investigation Work Plan
RSCOs	Restricted Use Soil Cleanup Objectives
RRSCOs	Restricted Residential Soil Cleanup Objectives
SCG	Standards, Criteria, and Guidance
SCO	Soil Cleanup Objectives
SESI	SESI Consulting Engineers, DPC
SRI	Supplemental Remedial Investigation
SRIWP	Supplemental Remedial Investigation Work Plan
SVI	Soil Vapor Intrusion
SVOC	Semi Volatile Organic Compounds

Acronym	Definition
TAL	Target Analyte List
TCE	Trichloroethene
TCL	Target Compound List
TOGS	Technical and Operations Guidance Series
USCO	Unrestricted Use Soil Cleanup Objectives
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOCs	Volatile Organic Compounds

EXECUTIVE SUMMARY

The New York State Department of Environmental Conservation (NYSDEC) entered into a Brownfield Cleanup Program (BCP) Agreement (BCA) with Whitlock Point LLC and Whitlock Point Services LLC (the “Volunteer”), for the 0.788-acre property known as Sonero Metro City Auto Site (BCP# C203148) (“Site”), 1001 Whitlock Avenue, Bronx, New York on September 22, 2021. A Site Location Map is presented as **Figure 1.1**.

A Remedial Investigation Report (RIR) was previously prepared for the Site by SESI and submitted to the NYSDEC in April 2021. The RIR was prepared using previously collected data in anticipation of a Track 4 remedy for the Site, and a Remedial Action Work Plan (RAWP) was also prepared detailing the Track 4 remedy and submitted to the NYSDEC with the BCP application. The Volunteer is now planning to conduct a Track 1 remedy, which requires a more extensive remedial investigation (RI) be conducted at the Site. To achieve this, a Supplemental Remedial Investigation Work Plan (SRIWP) was prepared for the Site, which was last revised on February 8, 2022, and subsequently approved by the NYSDEC on February 9, 2022. This Supplemental Remedial Investigation Report summarizes the results of prior investigations, and of the Supplemental Remedial Investigation (SRI) performed on the Site in February 2022, which was conducted in general accordance with the SRIWP. The SRI was conducted in order to obtain deeper soil samples and additional spatial data to support the planned Track 1 remedy.

The SRI consisted of collecting 30 soil samples from 10 boring locations and three (3) groundwater samples from three (3) monitoring wells. A description of the sampling activities for each media is included below.

Soil samples were collected in order to systematically investigate Site contamination on a Site-wide basis. The samples were analyzed for a combination of full target compound list (TCL) and target analyte list (TAL) analytes – which include volatile organic compounds (VOCs) (USEPA Method 8260), metals (USEPA Methods 6010/7471), semi-volatile organic compounds (SVOCs) (USEPA Method 8270), polychlorinated biphenyls (PCBs) and pesticides (USEPA Methods 8081/8082), per and polyfluoroalkyl substances (PFAS) (USEPA Method 573), and 1,4 dioxane (USEPA Method 8270). Duplicates and field blanks were collected for quality assurance/quality control (QA/QC) purposes.

Based on the results of the soil sampling analytical data, one (1) polycyclic aromatic hydrocarbon (PAH) compound and seven (7) metals were detected in excess of their respective Unrestricted Use Soil Cleanup Objectives (USCOs), with one (1) PAH compound and one (1) metal also exceeded restricted residential soil cleanup objectives (RRSCOs).

Perfluorooctanesulfonic acid (PFOS) was identified in three (3) soil samples exceeding

the guidance value. No exceedances of VOCs, PCBs, pesticides, or cyanide were identified in any of the soil samples collected above their respective USCOs. However, elevated photoionization detector (PID) readings, visible staining, and petroleum odors were detected in soils in a limited area near the south end of the Site from 10-22 ft bgs, for which a spill was reported to NYSDEC.

In groundwater, no VOCs, pesticides, PCBs, cyanide, or 1,4-dioxane were detected at concentrations in excess of the Ambient Water Quality Standards (AWQS). Metals exceedances of the AWQS included three (3) common naturally occurring metals (iron, manganese and sodium), as well as lead and chromium in one (1) well. Perfluorooctanoic acid (PFOA) and PFOS were identified in excess of the NYSDEC Guidance Value of 10 nanograms per liter (ng/l) in all three (3) wells.

1.0 INTRODUCTION

The NYSDEC entered into a BCA for BCP# C203148 on October 21, 2021 for the property located at 1001 Whitlock Avenue in the Bronx, New York (the “Site”). A Site Location Map is presented as **Figure 1.1** and a Site Plan as **Figure 1.2**. This document presents a summary of all of the investigative work that was performed on the Site to date including the recent investigative work that was performed in accordance with the SRIWP, which was last revised on February 8, 2022, and subsequently approved by the NYSDEC on February 9, 2022.

The SRI was completed in accordance with the NYSDEC DER-10, to provide a systematic assessment of environmental conditions on the Site. This SRI defines the nature and extent of contamination on-Site, identifies contaminant source areas, and produces data of sufficient quantity and quality to develop a remedial action work plan and complete an on-Site exposure assessment and a qualitative off-Site exposure assessment for purposes of designing the anticipated Track 1 remedial action for the Site.

2.0 BACKGROUND

2.1 SITE DESCRIPTION AND PROPOSED DEVELOPMENT

The Site is a 0.788-acre property located at 1001 Whitlock Avenue in the Bronx, New York. The Site consists of a vacant lot with no permanent structures. The Site surface cover consists of broken-up asphalt and overgrowth. A Site Plan is included as **Figure 1.2**.

The Site is bounded to the east by Whitlock Avenue, to the west by residential buildings, to the north by a vacant former industrial building (North America/Pulse Plastics BCP Site C203144) and 165th Street to the north, and to the south by the intersection of Aldus Street and Whitlock Avenue. The Site is identified on tax map records as a portion of Block 2756, Lot 85.

The Site was historically improved with “auto sales” or “garages” and a gas filling station located at the southernmost extent of the Site from the 1950s to 1977. The Site was identified as Sonero Auto Repair from 1999 to 2012 and also operated as Metro City Auto Repair. Four (4) 1,000-gallon gasoline underground storage tanks (USTs) were closed in place at the Site on December 1, 1999.

The proposed project is a multi-story affordable housing residential apartment building with ground floor retail space and a structured parking garage beneath the building.

2.2 DESCRIPTION OF SURROUNDING PROPERTIES

Adjacent properties to the Site are tabulated in Table 2.1 below:

Table 2.1 – Surrounding Properties

Direction	Adjacent Property
North	Vacant former industrial building (BCP Site No. C203144)
East	Whitlock Avenue, elevated subway tracks beyond
South	Aldus Street, residential and commercial properties beyond
West	Residential properties, Longfellow Avenue beyond

2.3 PREVIOUS ENVIRONMENTAL INVESTIGATIONS

The following environmental reports were included as appendices to the Remedial Investigation work plan and are summarized below:

- Phase I Environmental Site Assessment (ESA), 1156 East 165th Street, 1125 Whitlock Avenue, Bronx, Bronx County, New York, Block 2756 Lots 85 and 90, Prepared by PVE Sheffler, LLC, January 26, 2016
- Subsurface Investigation (Phase II ESA); 1156 East 165th Street (Block 2756 Lot 90), 1125 Whitlock Avenue (Block 2756 Lot 85), Bronx, New York. PVE Sheffler File No. #560999, March 8, 2016

- Phase I Environmental Site Assessment, 1156 East 165th Street, 1125 Whitlock Avenue, Bronx County, New York, Block 2756 Lots 85 and 90, PVE Sheffler File No. #560999, May 11, 2017
- Remedial Investigation Report, 1125 Whitlock Avenue & 1156 East 165th Street, NYC OER Project Number: 18TMP0057X, 18EHAN025X, Prepared by PVE Sheffler, LLC, November 2017
- Report on Subsurface Soil and Foundation Investigation, Proposed 14 Story Building, 1125 Whitlock Ave, Bronx, NY (CSA Job # 17-147), Prepared by Carlin, Simpson & Associates, December 20, 2017
- Remedial Action Work Plan (RAWP), Prepared for Park Management by PVE, LLC, December 2017
- Phase I ESA, Prepared for the Stagg Group by PVE, LLC, October 2019

2.3.1 PHASE II ENVIRONMENTAL SITE ASSESSMENT (ESA) AND REMEDIAL INVESTIGATION (RI) SUMMARY

Prior Phase II Field investigation activities were completed by PVE between February 2016 and September 2017, and by SESI in October 2019, and are summarized below:

- PVE advanced seven (7) soil borings, installed (2) monitoring wells, and placed 12 temporary soil vapor sampling points. PVE collected seven (7) soil samples (i.e., SB-01, SB-02, SB-03, SB-04, SB-06, SB-07, SB-08), two (2) groundwater samples (i.e., MW-3 and MW-4), and nine (9) soil vapor samples (SV-1, SV-4, SV-5, and SV-8 through SV-13).
- SESI advanced 12 soil borings and installed three (3) soil vapor points. SESI collected 12 soil samples (SESI-1 through SESI-12) and three (3) soil vapor samples (SV-14, SV-15, SV-16).

The soil and groundwater samples that were collected were analyzed for TCL/TAL +30 including metals, SVOCs, volatile organic compounds, cyanide, PCBs, and pesticides. The soil vapor samples were analyzed for VOCs in accordance with EPA Method TO-15.

The analytical results of the soil samples were compared to the NYSDEC soil cleanup objectives (SCOs) and the constituent concentrations in groundwater were compared to the applicable NYSDEC TOGS AWQS.

Soil Investigation Results

Table 2.2 below provides a summary of the soil exceedances. Based on the soil sampling results, the following conclusions were made:

- The overall depth of impacted soils exceeding the USCOs ranged from 2 to 14 ft-bgs.
- Metals exceeding the USCOs were identified on the Site at depths up to 14 ft-bgs.
- SVOC and metals exceeding both USCO, Residential Use Soil Cleanup Objectives (RSCOs), and RRSCOs were identified in soils at depths ranging from 2 to 8 ft-bgs.

Table 2.2: RIR Summary of Exceedances in Soil

LOCATION					SB-02	SB-03	SB-06	SB-07	SB-08	SESI-1 (2)				
SAMPLING DATE					2/2/2016	2/2/2016	2/2/2016	2/2/2016	2/2/2016	10/16/2019				
SAMPLE TYPE					SOIL	SOIL	SOIL	SOIL	SOIL	SOIL				
SAMPLE DEPTH (ft.)					6-8	6-8	13-14	3-3.5	9-10	2-2.5				
	USCO	PGSCO	RRSCO	Units	Results	Q	Results	Q	Results	Q	Results	Q		
Semivolatile Organics by GC/MS														
Benzo(a)anthracene	1	1	1	mg/kg	0.343	U	1.05		0.356	U	0.327	U	0.36	
Benzo(b)fluoranthene	1	1.7	1	mg/kg	0.343	U	0.602		0.356	U	0.327	U	0.4	
Chrysene	1	1	3.9	mg/kg	0.343	U	1.08		0.356	U	0.327	U	0.31	
Indeno(1,2,3-cd)pyrene	0.5	8.2	0.5	mg/kg	0.343	U	0.594		0.356	U	0.327	U	0.2	
Total Metals														
Barium, Total	350	820	400	mg/kg	111		105		103		168		1040	
Copper, Total	50	1720	270	mg/kg	33.2		28.1		22		43.8		90.4	
Lead, Total	63	450	400	mg/kg	64.5		103		134		341		246	
Manganese, Total	1600	2000	2000	mg/kg	818		1570		143		278		165	
Mercury, Total	0.18	0.73	0.81	mg/kg	0.174		0.122		0.0688		0.12		0.355	
Nickel, Total	30	130	310	mg/kg	21.1		27.9		19.8		18.4		11.8	
Silver, Total	2	8.3	180	mg/kg	0.599	U	0.566	U	0.633	U	0.54	U	0.888	U
Zinc, Total	109	2480	10000	mg/kg	85.2		80.1		60.2		699		467	
Volatile Organics by EPA 5035														
Acetone	0.05	0.05	100	mg/kg	0.396	JL	0.0352	U	0.0442	U	0.0387	U	0.016	U

LOCATION					SESI-3 (4)	SESI-6 (3)	SESI-7 (5)	SESI-8 (4)	SESI-9 (4)	SESI-10 (4)	SESI-12 (4)					
SAMPLING DATE					10/16/2019	10/16/2019	10/16/2019	10/16/2019	10/16/2019	10/17/2019	10/17/2019					
SAMPLE TYPE					SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL					
SAMPLE DEPTH (ft.)					4-4.5	3-3.5	5-5.5	4-4.5	4-4.5	4-4.5	4-4.5					
	USCO	PGSCO	RRSCO	Units	Results	Q	Results	Q	Results	Q	Results	Q				
Semivolatile Organics by GC/MS																
Benzo(a)anthracene	1	1	1	mg/kg	1.2		0.11	U	0.073	J	0.11	U	0.42	0.068	J	
Benzo(b)fluoranthene	1	1.7	1	mg/kg	1.2		0.11	U	0.095	J	0.11	U	0.58	0.09	J	
Chrysene	1	1	3.9	mg/kg	1		0.11	U	0.067	J	0.11	U	0.43	0.065	J	
Indeno(1,2,3-cd)pyrene	0.5	8.2	0.5	mg/kg	0.62		0.14	U	0.046	J	0.15	U	0.26	0.045	J	
Total Metals																
Barium, Total	350	820	400	mg/kg	161		143		231		118		104	110	277	
Copper, Total	50	1720	270	mg/kg	30		40		77		33.2		30.8	45.4	55.3	
Lead, Total	63	450	400	mg/kg	471		8.76		499		88		96	31.6	109	
Manganese, Total	1600	2000	2000	mg/kg	319		2830		344		347		357	242	318	
Mercury, Total	0.18	0.73	0.81	mg/kg	0.104		0.068	U	6.54		0.347		0.384	0.097	0.208	
Nickel, Total	30	130	310	mg/kg	15.2		31.1		14.8		18.6		14.6	25.9	20.2	
Silver, Total	2	8.3	180	mg/kg	0.968	U	0.816	J	2.9		0.267	J	0.884	1.04	0.942	U
Zinc, Total	109	2480	10000	mg/kg	116		86.1		220		187		114	147	586	
Volatile Organics by EPA 5035																
Acetone	0.05	0.05	100	mg/kg	0.012	U	0.012	U	0.012	U	0.012	U	0.025	0.015	0.012	

Notes:

1. Mg/Kg – milligrams per kilogram
2. Bold cell = compound detected
3. Q – Data Qualifier
4. J = Estimated Concentration
5. U = Undetected
6. Yellow shading = Compound Exceeds the USCO
7. Orange shading = PGSCO = Protection of groundwater SCO
- Red shading = Compound Exceeds the RRSCO

Groundwater Investigation Results

Table 2.3 below provides a summary of the groundwater exceedances. Based on the groundwater sampling results, the following conclusions were made:

- The depth to groundwater ranged from 9 to 18 ft-bgs and groundwater flows in a northerly direction across the Site.
- The Site's groundwater has been impacted with the chlorinated VOC (CVOC) tetrachloroethylene (PCE) and metals above TOGS AQWS near the northern portion of the Site.
- The CVOC chloroform was detected above the TOGS AQWS near the southern portion of the Site.

Table 2.3: RIR Summary of Exceedances in Groundwater

Well ID			MW-3		FD-MW-3		MW-4	
Sampling Date			9/26/2017		9/26/2017		9/26/2017	
Analyte	AWQS	Unit	Result	Q	Result		Result	Q
Chloroform	7	ug/l	ND< 0.2	U	ND< 0.2		9.8	
Tetrachloroethylene (PCE)	5	ug/l	11		12		1.2	
Total Metals (Unfiltered)								
Manganese	300	ug/l	1020		1140		230	
Sodium	20,000	ug/l	85200	B	85400		12300	
Dissolved Metals								
Iron	300	ug/l	561		757		133	
Manganese	300	ug/l	1020		1150		3110	
Sodium	20,000	ug/l	75200	B	75100		11600	

Notes:

1. Ug/L – micrograms per liter
2. Bold cell = compound detected
3. Q = Data Qualifier
4. B = Compound detected in lab blank data qualifier
5. Yellow shading = Compound Exceeds the TOGS AWQS

Soil Vapor Investigation Results

Table 2.4 below and **Figure 2.1** provide a summary of the VOC detections in soil vapor. Based on the soil vapor sampling results, the following conclusions were made:

- The CVOCs PCE, trichloroethylene (TCE), and methylene chloride were detected in soil vapor points on the western portion of the Site.
- The petroleum hydrocarbon (PHC) VOCs 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 1,3 butadiene, benzene, ethylbenzene, xylenes, heptane, hexane, and toluene were detected in soil vapor.

Table 2.4: RIR Summary of VOC Detections in Soil Vapor

Sample ID	SV-1		SV-4		SV-5		SV-8		SV-9		SV-10	
Date Sampled	2/1/2016		2/1/2016		2/1/2016		8/18/2017		8/18/2017		8/18/2017	
Analyte	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,2,4-Trimethylbenzene	ND	U	1.3	D	ND	U	56	D	63	D	ND	U
1,3,5-Trimethylbenzene	ND	U	ND	U	ND	U	22	D	26	D	ND	U
1,3-Butadiene	ND	U	ND	U	ND	U	ND	U	ND	U	ND	U
Acetone	20	D	24	D	160	D	760	D	510	D	1100	D
Benzene	ND	U	ND	U	ND	U	9.7	D	11	D	46	D
Ethylbenzene	ND	U	ND	U	ND	U	52	D	51	D	75	D
Xylenes	ND	U	3.8	D	ND	U	274	D	286	D	311	D
Methyl Ethyl Ketone (2-Butanone)	ND	U	2.6	D	8.5	D	23	D	11	D	47	D
Methylene Chloride	ND	U	ND	U	ND	U	13	D	ND	U	ND	U
N-Heptane	ND	U	4.9	D	ND	U	27	D	22	D	88	D
N-Hexane	ND	U	5.3	D	ND	U	47	D	27	D	280	D
Tetrachloroethylene (PCE)	1200	D	ND	U	ND	U	590	D	100	D	230	D
Toluene	ND	U	2.5	D	ND	U	120	D	120	D	280	D
Trichloroethylene (TCE)	390	D	ND	U	ND	U	ND	U	ND	U	39	D

Sample ID	SV-11		SV-12		SV-13		SV-14		SV-15		SV-16	
Date Sampled	8/18/2017		8/18/2017		8/18/2017		10/17/2019		10/17/2019		10/17/2019	
Analyte	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,2,4-Trimethylbenzene	45	D	56	D	62	D	0.983	U	2.68		3.81	
1,3,5-Trimethylbenzene	ND	U	21	D	24	D	0.983	U	0.983	U	2.46	U
1,3-Butadiene	ND	U	ND	U	ND	U	5.66		0.883		32.5	
Acetone	670	D	310	D	400	D	575		553		1280	
Benzene	ND	U	16	D	8.3	D	3.96		1.85		7.6	
Ethylbenzene	63	D	51	D	51	D	0.869	U	1.21		2.17	U
Xylene	305	D	248	D	261	D	2.75		6.65		10.52	
Methyl Ethyl Ketone (2-Butanone)	ND	U	16	D	9.0	D	31.3		215		43.9	
Methylene Chloride	200	D	50	D	ND	U	1.74	U	1.74	U	4.34	U
N-Heptane	37	D	29	D	22	D	8.07		2.24		53.3	
N-Hexane	200	D	440	D	20	D	86		16.4		128	
Tetrachloroethylene (PCE)	74	D	430	D	74	D	1.36	U	1.36	U	15.4	
Toluene	170	D	150	D	130	D	5.8		3.84		9.87	
Trichloroethylene (TCE)	ND	U	2.2	D	ND	U	1.4		1.07	U	2.69	U

Notes:

1. Result units in ug/m³ (micrograms per kilogram)
2. Q – Data Qualifier
3. D = Detected
4. U = Undetected

Conceptual Site Model

The overall depth of SVOC and metals-impacted soils exceeding the USCOs in previous investigations ranged from 2 to 14 ft-bgs. SVOCs and metals exceeding the USCOs, RSCOs,

and RRSCOs were identified in soils at depths ranging from 2 to 8 ft-bgs. The applicable standards criteria and guidance (SCGs) for the Site groundwater are the NYSDEC TOGS 1.1.1 AWQS. The Site's groundwater has been impacted with PCE above the NYSDEC TOGS AQWS groundwater standards as a result of the historical land uses.

The Site groundwater flow direction is to the north. The groundwater table is at 9-18 ft bgs. The range in groundwater depth is a result of the time of the year and the method (e.g. boring or permanent well) with which the groundwater depth was reported.

The pathway of the contaminated groundwater to human receptors is limited to the ingestion of the groundwater or direct exposure through excavation work. However, groundwater in this area of the Bronx is not used for drinking. In addition, the impacted Site groundwater is not likely to have an ecological pathway.

Finally, the PHC VOCs and CVOCs detected in soil vapor have the potential to cause soil vapor intrusion into the future on-Site buildings. Precautionary vapor mitigation measures and a vapor intrusion evaluation are recommended for the Site's proposed enclosed areas in the future.

3.0 SITE SETTING

3.1 TOPOGRAPHY

The Site is relatively flat with regional surface topography sloping downward to the east. Based on the U.S. Geological Survey – Central Park, New York, 2013 topographic map, the Site is approximately 38 feet above mean sea level.

3.2 SURFACE WATER AND DRAINAGE

The closest open surface water to the Site is the Bronx River located approximately 550 feet east of the Site. Stormwater drainage patterns generally consist of sheet flow over paved surfaces into the storm drains on the surrounding streets.

3.3 GEOLOGY

Based on soil borings conducted by PVE, CSA and SESI, subsurface geology generally consisted of brown to black fine to coarse sand, mixed with traces of gravel, silt, bricks and crushed concrete (fill) to depths of 2 to 13 feet ft-bgs. Results of CSA's geotechnical study identified that the fill is underlain by dense brown coarse to fine sands, silt, and gravel to depths of 20 to 29 ft bgs. The coarse sands are underlain by weathered schist at depths ranging from 20 to 33 ft-bgs. Weathered bedrock was encountered at depths ranging from 22 to 33 ft-bgs. Probable bedrock was encountered during this SRI at depths as shallow as 2.5 ft-bgs and as deep as 20 ft-bgs.

3.4 HYDROGEOLOGY

Groundwater was encountered at depths ranging from 9 to 18.6 ft bgs in September 2017 and December 2017 in soil borings performed by PVE and CSA. During this SRI, groundwater was encountered at depths between 18 and 21 ft bgs. The groundwater was determined to flow in a northerly direction across the Site. Regionally groundwater is expected to flow to the east towards the Bronx River.

4.0 SUPPLEMENTAL REMEDIAL INVESTIGATION ACTIVITIES

The SRI was conducted in general accordance with the NYSDEC DER-10 and with the SRIWP for the Site, which was last revised on February 8, 2022, and subsequently approved by the NYSDEC on February 9, 2022. The objective of the SRI was to complete the investigation of soil and groundwater on the Site and to further delineate the nature and extent of the contamination on Site, including deeper soils. The applicable SCGs for the Site soils are the USCOs and RRSCOs, and NYSDEC guidance values for PFOS and PFOA. The applicable SCGs for the Site groundwater are the TOGS AWQS Class GA standards (cf. Section 703.6), and the NYS drinking water standards for PFOA, PFOS, and 1-4-dioxane.

4.1 SRI SAMPLING SUMMARY

SRI field activities were completed from February 14-22, 2022. Ten (10) soil borings and three (3) permanent groundwater monitoring wells were installed and sampled to systematically investigate contamination in media on a Site-wide basis. **Table 1** (attached) includes a summary of the samples collected, depths, rationale, and their corresponding analyses. **Figures 4.1 and 4.2** present the sample locations for soil and groundwater, respectively.

The soil and groundwater samples that were collected were analyzed for TCL/TAL +30 including metals (USEPA Methods 6010/7471), SVOCs (USEPA Method 8270), VOCs (USEPA Method 8270), PCBs, and pesticides (USEPA Methods 8081/8082), as well as PFAS (USEPA Method 537), and 1,4 dioxane (USEPA Method 8760). Field blanks were collected for each sampling event, and a trip blank accompanied all aqueous samples analyzed for VOCs. A duplicate soil sample was collected from RI-SB4 (4.5-5') as DUP-1 and RI-SB8 (4.5-5') as DUP-2. A duplicate groundwater sample was collected from RI-MW-4.

4.2 INVESTIGATION METHODOLOGY

All the field work was completed under the on-Site observation of a SESI field engineer and the direction of the environmental project manager and remedial engineer. The field work involved advancing borings and installing permanent monitoring wells. Disposable field equipment was utilized to collect soil and groundwater samples.

A Community Air Monitoring Plan (CAMP) was implemented during all intrusive field work in accordance with the SRIWP. This included monitoring for VOCs and dust. There were no exceedances for VOCs or dust during the CAMP monitoring. All CAMP monitoring data is included in **Appendix A**.

SESI observed the work completed by the following subcontractors:

- Coastal Environmental Solutions, Inc. - Advanced soil borings and installed monitoring wells utilizing direct-push drilling techniques
- SGS Laboratories, Dayton, New Jersey – Analyzed soil and groundwater samples as per requested analytical methods
- Hanibal Tayeh, PhD, Thomaston, CT – Validated all analytical data

4.3 SOIL BORINGS AND SAMPLING

A total of 30 soil samples were collected from ten (10) soil borings (RI-SB1 through RI-SB10) as shown on **Table 1**. The borings were advanced utilizing direct-push drilling techniques. Borings were advanced to maximum depths ranging from 13-20 ft bgs. Soil samples were collected utilizing a macro-core sampler. Samples for laboratory chemical analyses were collected based on field screening, which includes visual and olfactory observations and screening with photo-ionization detector. QA/QC samples consisting of field rinsate blanks and duplicate samples were collected each day or one (1) for every 20 samples. All borings were logged continuously from grade to completion by the SESI field inspector and sampling activities were also conducted by the inspector. The boring logs are provided in **Appendix B**.

In addition to the remedial investigation grab samples, composite samples were collected from 13 borings for waste characterization purposes. The waste characterization samples were collected at an approximate frequency of one (1) composite per 750 cubic yards (cy) of soils based on Site grid cells with an approximate area of 2,500 ft² and 8 foot deep. The waste classification sampling data and Site grids are included in **Appendix C**.

4.4 MONITORING WELL INSTALLATIONS

Three (3) permanent groundwater monitoring wells were installed to investigate groundwater beneath the Site, as detailed on **Table 1**. PVE wells MW-2 and MW-3 could not be located, so replacement wells MW-2R and MW-3R were installed, along with the additional proposed well RI-MW-4. Several attempts were made to install proposed monitoring well RI-MW-5 between borings RI-SB6 and RI-SB8, but refusal was met between 11 and 16 ft-bgs during each attempt with no groundwater encountered, and therefore this well could not be installed. Groundwater samples were analyzed for TCL/TAL +30, PFAS, and 1-4 dioxane. The depth of the wells ranged from 19 to 25 ft bgs. The depth of the water table was determined to vary from 18 to 21 ft-bgs across the Site. Individual well depth details are provided in **Table 1** and in the

monitoring well construction logs are included in **Appendix B**. All the wells were constructed utilizing two (2)-inch PVC pipe with 10 feet 0.020-inch slot screen. The PVC screen was surrounded by #2 filter sand. The filter sand was extended at least approximately one (1) foot above the screen. Bentonite approximately one (1) to two (2) feet thick was then placed on top of the filter sand and the remaining annular space around the PVC riser was grouted with cement/bentonite mix. The wells were left as stickups on the uneven ground surface and well caps were placed on each.

4.5 GROUNDWATER SAMPLING

Monitoring wells MW-3R, RI-MW-4 and MW-2R were found to have limited water volumes with slow recharge. The monitoring wells were therefore sampled across two days (February 18 and 22, 2022) in order to obtain sufficient sample volume. The monitoring wells were sampled using a peristaltic pump via volume-average purging rather than low-flow sampling due to limited volume of water. Water quality parameters were therefore not collected due to slow recharge. Groundwater samples were collected after purging well water in each well. QA/QC samples were collected and included a field blank and trip blank in each cooler shipment when VOCs were to be analyzed.

A groundwater contour map was developed using well gauging and surveying data (**Figure 4.3**). The map depicts groundwater flow to the north across the Site. This follows the local topography. The monitoring well gauging and survey data is presented on **Table 2**.

4.6 INVESTIGATION DERIVED WASTE

Materials that were generated as investigation derived waste included the following:

- Personal protective equipment (PPE) – disposable gloves.
- Disposable equipment and items - plastic ground and equipment covers, conduit pipe, tubing, broken or unused sample containers, sample container boxes, tape, etc.
- Groundwater obtained through well development or well purging.

The following procedures were used for disposal of the above listed items:

- Disposable PPE (gloves) was bagged and disposed as ordinary rubbish.
- Disposable equipment and items were bagged and disposed with the non-hazardous materials.
- Purge water generated during the monitoring well installation and sampling was run

through a carbon bucket and discharged to the ground surface.

5.0 REMEDIAL INVESTIGATION RESULTS

For purposes of evaluating the remedial alternatives associated with the proposed Site redevelopment, the analytical results of the soil samples were compared to the NYSDEC USCOs and RRSCOs, and June 2021 guidance values for PFAS compounds including PFOS and PFOA. The constituent concentrations in groundwater were compared to the applicable NYSDEC TOGS Class GA AWQS and NYS drinking water standards.

The laboratory analytical reports for soil and groundwater results are included as **Appendix D**. The Data Usability Summary Report (DUSR) is included in **Appendix E** of this report.

5.1 SOIL INVESTIGATION RESULTS

One (1) PAH and (7) metals were detected in excess of their respective USCOs and/or RRSCOs. Exceedances were identified at one (1) location for PAHs and nine (9) locations for metals. Exceedances are detailed in **Table 5.1** below and on Figure 4.1.

One PAH, indeno(1,2,3-cd)pyrene, was identified in one (1) sample from one (1) soil boring at a concentration exceeding both the USCO and RRSCO. Seven (7) metals including barium, cadmium, copper, lead, mercury, nickel, and zinc exceeded USCOs, with at least one (1) metal exceeding in 14 samples across nine (9) boring locations. Only barium exceeded the RRSCO in one (1) sample. The maximum exceedance depth for metals was 15 ft-bgs as indicated in the table below.

Table 5.1 – Soil Sample SCO Exceedances

Client Sample ID:	Units	USCO	RRSCO	RI-SB1 (14.5-15')	RI-SB2 (3.5-4')	RI-SB2 (9.5-10')	RI-SB4 (4.5-5')	RI-SB4 (14.5-15')	RI-SB5 (4.5-5')	RI-SB6 (4.5-5')
Date Sampled:				2/14/2022	2/14/2022	2/14/2022	2/15/2022	2/15/2022	2/15/2022	2/15/2022
Sample Depth (ft-bgs):				14.5-15.0	3.5-4.0	9.5-10.0	4.5-5.0	14.5-15.0	4.5-5.0	4.5-5.0
SVOC Analysis										
Indeno(1,2,3-cd)pyrene	ug/kg	500	500	21.5 J	76.9	ND (38)	33.2 J	ND (32)	50.7	164
Metals Analysis										
Barium	mg/kg	350	400	87.6	167	87.9	404	220	96.5	221
Copper	mg/kg	50	270	65.1	43.7 ^j	24.9 ^j	52.2 ^j	26.7 ^j	47.3 ^j	55.6 ^j
Lead	mg/kg	63	400	69.2	87.7	8.3	63.8	5.4	36	101
Mercury	mg/kg	0.18	0.81	0.18	0.18	ND (0.037)	ND (0.037)	0.052	0.075	0.15
Nickel	mg/kg	30	310	17.3	23.8	30.4	34.1	49.4	31.3	301
Zinc	mg/kg	109	10000	69.8	224	74.8	265	112	75.3	177

Client Sample ID:	Units	USCO	RRSCO	RI-SB6 (9.5-10')	RI-SB6 (12.5-13')	RI-SB7 (9.5-10')	RI-SB8 (4.5-5')	RI-SB8 (12.5-13')	RI-SB9 (4.5-5')	RI-SB9 (9.5-10')	R1-SB10 (2-2.5')
Date Sampled:				2/15/2022	2/15/2022	2/16/2022	2/16/2022	2/16/2022	2/16/2022	2/16/2022	2/17/2022
Sample Depth (ft-bgs):				9.5-10.0	12.5-13.0	9.5-10.0	4.5-5.0	12.5-13.0	4.5-5.0	9.5-10.0	2.0-2.5
SVOC Analysis											
Indeno(1,2,3-cd)pyrene	ug/kg	500	500	34.7 J	573	ND (39)	65.5	ND (36)	44	ND (35)	77.6
Metals Analysis											
Cadmium	mg/kg	2.5	4.3	ND (0.60)	ND (0.59)	ND (0.58)	0.6	ND (0.56)	ND (0.55)	ND (0.56)	3.2
Copper	mg/kg	50	270	39.0 ^j	27.2	133 ^j	78.0 ^j	21.9 ^j	46.6 ^j	35.4 ^j	39.6
Lead	mg/kg	63	400	335	10.4	12.7	25.5	6.5	101	16.5	209
Mercury	mg/kg	0.18	0.81	0.31	0.15	0.061	0.1	ND (0.033)	0.24	ND (0.036)	0.33
Nickel	mg/kg	30	310	23.3	25.8	31.3	41.1	46.1	24.7	38.3	28.9
Zinc	mg/kg	109	10000	96.7	58.5	71.8	424	117	125	103	2270

Footnotes:

mg/kg = Milligrams per kilogram

ug/kg = Micrograms per kilogram

ND = Not Detected

J = The reported result is an estimate. The value is less than the minimum calibration level but greater than the estimated detection limit (EDL)

^j = Elevated detection limit due to dilution required for high interfering element.

USCO = NY Unrestricted Use Soil Cleanup Objectives (6 NYCRR 375-6 12/06)

RRSCO = NY Restricted Residential Use Soil Cleanup Objectives w/CP-51 (10/10) (6 NYCRR 375-6 12/06)

	= Concentration exceeds USCOs
	= Concentration exceeds RRSCOs

PFOS was detected in three (3) soil samples above its respective NYSDEC Guidance Value (June 2021). PFOA was not detected in any soil samples exceeding the guidance value. The PFOS exceedances are presented in Table 5.1A below.

Table 5.1A—Soil Sample PFAS Exceedances

Client Sample ID:	Units	NYSDEC Guidance Value	RI-SB2 (3.5-4')	RI-SB5 (4.5-5')	R1-SB10 (2-2.5')
Date Sampled:			2/14/2022	2/15/2022	2/17/2022
Sample Depth (ft-bgs):			3.5-4	4.5-5	2-2.5
PFAS Analysis					
Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.880	1.1	10.9	8.5

Footnotes:

= Concentration exceeds NYSDEC Guidance Value

No exceedances of VOCs, PCBs, pesticides, or cyanide were identified in any of the soil samples collected above their respective USCOs.

Sampling locations and exceedances are identified in **Figures 4.1**. Soil analytical data is presented in **Tables 3-8** (attached).

5.2 GROUNDWATER

Three (3) monitoring wells (MW-2R, MW-3R, and RI-MW-4) were sampled for TCL/TAL+30 (including VOCs, SVOCs, PCBs, pesticides, and metals), PFAS, and 1,4-dioxane.

As shown in **Table 5.2** below, no VOCs, pesticides, PCBs, cyanide, or 1,4-dioxane were detected at concentrations in excess of the AWQS. Metals exceedances of the AWQS included three (3) common naturally occurring metals (iron, manganese and sodium), as well as lead and chromium in one (1) well. PFOA and PFOS were identified in excess of the NYSDEC Guidance value of 10 ng/l in all three (3) wells.

Table 5.2--Summary of Exceedances in Groundwater

Client Sample ID:	Units	NYSDEC AWQS or Guidance Value	MW-3R	RI-MW-4	MW-2R
Lab Sample ID:			JD40098-1	JD40006-2	JD40006-3
Date Sampled:			2/18/2022 & 2/22/2022	2/18/2022 & 2/22/2022	2/18/2022 & 2/22/2022
Matrix:			Ground Water	Ground Water	Ground Water
MS Semi-volatiles (SW846 8270E)					
Benzo(a)pyrene	ug/l	0	0.67 J	ND	1.2 J
PFAS (EPA 537M BY ID)					
Perfluorooctanoic acid	ng/l	10	23.3	46.7	30.1
Perfluorooctanesulfonic acid	ng/l	10	15	12.1	52.8
Metals Analysis					
Chromium	ug/l	50	ND	ND ^d	211 ^d
Iron	ug/l	300	3440	4490 ^d	98200 ^d
Lead	ug/l	25	4.4	ND ^d	216
Manganese	ug/l	300	2030	2720 ^d	3890 ^d
Sodium	ug/l	20000	31800	45300 ^d	ND ^d
Footnotes:					
NYSDEC = New York State Department of Environmental Conservation.					
AWQS = Ambient Water Quality Standards.					
ug/l = Micrograms per liter.					
ng/l = Nanograms per liter.					
^d = Elevated sample detection limit due to limited volume.					
J = Concentration of compound exceeds the NY TOGS Class GA GW Standard or applicable PFAS Guidance Value					

Sampling locations and exceedances are identified on **Figure 4.2**. All groundwater results are summarized in **Tables 9-14** (attached).

5.3 LIMITED PETROLEUM DELINEATION

During the advancement of a supplemental boring (D1) for waste characterization to 15 ft-bgs near the southern end of the Site to the southeast of RI-SB9 and MW-2R, SESI observed petroleum contamination from 11 to 15 ft-bgs with photoionization detector readings up to 417 parts per million VOCs. This contaminated material was used as part of waste characterization and the VOC grab was collected from 14.5-15 ft-bgs. This boring was advanced further to vertically delineate the contamination and impacts were observed from 10 ft-bgs to bedrock

refusal at 22 ft-bgs. Petroleum contamination was not visually or olfactorily observed in the RI-SB9 boring location approximately 11 feet to the north of the boring where contamination was found (D1). One (1) boring was advanced seven (7) feet to the east (E1), which did not detect any petroleum contamination until refusal at 12 ft-bgs. Another boring was advanced seven (7) feet to the west (W1) and did not detect any petroleum contamination until refusal at 10 ft-bgs. Borings were not advanced further in any compass directions due to excessive refuse/waste from illegal dumping, dense brush or the presence of a previous boring (RI-SB9). Petroleum delineation locations are shown on **Figure 5.1**.

The petroleum impacts were near where the former auto operations occurred and near the inferred location where underground tanks were abandoned in 1999. The NYSDEC case manager was informed of these observations, and SESI notified the NYSDEC Spill Hotline on February 17, 2022, generating spill #21-09757.

5.4 SUMMARY OF RESULTS

Based on soil borings conducted by PVE, CSA and SESI, subsurface geology generally consisted of brown to black fine to coarse sand, mixed with traces of gravel, silt, bricks and crushed concrete (fill) to depths of 2 to 13 feet ft bgs. Results of CSA's geotechnical study identified that the fill is underlain by dense brown coarse to fine sands, silt, and gravel to depths of 20 to 29 ft-bgs. The coarse sands are underlain by weathered schist at depths ranging from 20 to 33 ft-bgs. Weathered bedrock was encountered at depths ranging from 22 to 33 ft-bgs. Probable bedrock was encountered during this SRI at depths as shallow as 2.5 ft-bgs and as deep as 20 ft-bgs. Groundwater depths ranged from 18 to 20 ft-bgs across the Site, and groundwater flows in a northerly direction across the Site.

One (1) PAH, indeno(1,2,3-cd)pyrene, was identified in one (1) sample from one (1) soil boring at a concentration exceeding both the USCO and RRSCO. Seven (7) metals including barium, cadmium, copper, lead, mercury, nickel, and zinc exceeded USCOS, with at least one (1) metal exceeding in 14 samples across nine (9) boring locations. Only barium exceeded the RRSCO in one sample. The maximum exceedance depth for metals was 15 ft-bgs. PFOS was detected in three (3) soil samples above its respective NYSDEC guidance value. No exceedances of VOCs, PCBs, pesticides, or cyanide were identified in any of the soil samples collected above their respective USCOS.

In groundwater, no VOCs, pesticides, PCBs, cyanide, or 1,4-dioxane were detected at concentrations in excess of the AWQS. Metals exceedances of the AWQS included three (3) common naturally occurring metals (iron, manganese and sodium), as well as lead and chromium

in one (1) well. PFOA and PFOS were identified in excess of the NYSDEC guidance value of 10 ng/l in all three (3) wells.

6.0 REMEDIAL INVESTIGATION FINDINGS AND SUMMARY

6.1 CONCEPTUAL SITE MODEL

Soils were found to have been impacted by PAHs and metals, and the overall depth of impacted soils ranged from 0 to 15 ft-bgs. One (1) PAH compound exceeding both the USCOs and the RRSCOs was identified at a depth of 12.5-13 ft-bgs. One (1) metal exceeding the RRSCOs was identified at a depth of 4.5-5 ft-bgs, and metals exceeding the USCO extend down to 15 ft-bgs in two (2) locations (RI-SB-1 and RI-SB-4). No exceedances of VOCs, PCBs, pesticides, or cyanide were identified in any of the soil samples collected above their respective USCOs. However, elevated PID readings, visible staining, and petroleum odors were detected in soils in a limited area near the south end of the Site from 10-22 ft bgs, for which a spill was reported to NYSDEC.

In groundwater, exceedances of metals and PFOA/PFOS were noted. No VOCs, pesticides, PCBs, cyanide, or 1,4-dioxane were detected at concentrations in excess of the AWQS. Metals exceedances of the AWQS included three (3) common naturally occurring metals (iron, manganese and sodium), as well as lead and chromium in one (1) well. PFOA and PFOS were identified in excess of the NYSDEC guidance value of 10 ng/l in all three (3) wells. These PFOA/PFOS may be indicative of regional background contamination of PFOS/PFOA that is common to urban environments.

In soil vapor, the PHC VOCs (1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 1,3 butadiene, benzene, ethylbenzene, xylenes, heptane, hexane, and toluene) and CVOCs (PCE, TCE, methylene chloride) detected have the potential to cause soil vapor intrusion into the future on-Site buildings. Precautionary vapor mitigation measures and a vapor intrusion evaluation are recommended for the Site's proposed enclosed areas in the future.

Groundwater was encountered in overburden soils in all three (3) wells installed during this SRI, and groundwater depths in overburden ranged from 18 to 21 feet bgs in these wells, flowing in a northerly direction. However, local groundwater flow direction can be affected by subsurface openings or obstructions such as basements and utilities, groundwater pumping and other factors.

6.2 QUALITATIVE HUMAN HEALTH EXPOSURE ASSESSMENT

The exposure assessment in this SRIR discusses potential migration routes by which chemicals in the environment may be able to reach human receptors in accordance with NYSDEC DER-10 sections 3.14(c)17, 3.3(c)4 and Appendix 3B. This exposure assessment discussion also considers hypothetical future Site conditions at the Site.

An exposure assessment must evaluate five (5) elements that comprise an exposure pathway. A complete exposure pathway includes the following:

1. A description of the contaminant source. If the original source is unknown, then a description of the contaminated environmental medium at the point of exposure;
2. An explanation of the transport mechanism;
3. An identification of all potential exposure points;
4. A description of the exposure route at the contact point; and,
5. A receptor population.

During the RI/SRI, contaminated soil and soil vapor was identified. was not determined to be significantly impacted, and the sources of any such impacts have not been positively attributed to the Site.

SVOCs and metals were identified at concentrations in soil exceeding the NYSDEC USCOs. However, all soils exceeding USCOs will be removed from the Site as part of the planned remedial action, thereby removing the soil source of contamination and eliminating any potential exposure route and/or point of exposure for soils.

The exposure pathway of groundwater to human receptors is limited to the direct ingestion of the groundwater or direct exposure through excavation work. As a result, only on-Site construction workers could be exposed. Groundwater was found to contain several naturally occurring metals, chromium, and lead in excess of applicable AWQS, and PFOA/PFOS impacts were also detected in groundwater. No VOCs, SVOCs, pesticides, or PCBs were detected at concentrations in excess of the AWQS.

The Site soil vapor has been impacted by PCE, TCE, and various petroleum-related VOCs such as benzene, ethylbenzene, and xylenes. However, no VOCs were detected in soil or groundwater samples.

The surrounding properties consist of commercial and residential properties. Sensitive receptors such as childcare facilities, elder care facilities and hospitals were not identified in the properties immediately adjacent to the Site.

The proposed development consists of a multi-story mixed-use residential structure with a subgrade parking level. The planned building construction will occupy the entire Site leaving no unpaved surfaces.

Groundwater

Potential groundwater exposure points include ingestion, dermal contact and inhalation of vapors. New York City utilizes municipal water (not groundwater) for drinking purposes. Thus, ingestion as a potential exposure point is eliminated from further evaluation.

Potential exposures through dermal contact would arise during future construction excavation where workers, visitors, or trespassers may be exposed to groundwater. Groundwater does not contain VOCs at concentrations that would be a source of harmful vapors to residents or visitors. Furthermore, once the Site is redeveloped, excavation to the depths at which groundwater is present is unlikely.

Surface Water

Surface water is not present on the Site. Thus, this exposure pathway may be eliminated from further evaluation.

Soils

Potential routes of exposure to subsurface and surface soils include dermal contact, ingestion and inhalation of soil particulates. Potential exposures through dermal contact and inhalation would arise during future construction excavation where workers, visitors, or trespassers may be exposed to soil particulates. This exposure will be managed by conducting air monitoring and wearing appropriate PPE. Once the proposed development is complete, the construction of a building slab covering the entire Site will prevent future exposure.

Soil Vapor

When volatile organics are detected in soil gas, it creates a potential exposure to building occupants through vapors accumulating beneath structures or impacting indoor air quality within a structure. A ventilated parking garage and a vapor barrier will be included in the construction of the proposed on-site building foundation.

The lowest level will be a ventilated parking garage with an open-air entrance that will provide frequent air exchange and an exhaust ventilation system in this lowest level of the building.

With respect to potential off-Site exposure, contaminated soil dust may be transported offsite by wind, but preventive measures were implemented during the planned excavation to prevent off-Site dust. With respect to off-Site groundwater, the Site did not contain any significant source of groundwater contamination. The minor contamination found appears to be naturally occurring or to have emanated onto the Site from off-Site sources. Finally, groundwater is not used in New York City for drinking water; therefore, an ingestion potential exposure pathway does not exist. An on-Site source of the soil vapor in soil and groundwater was not determined during the RI, and there are no sensitive receptors that immediately adjoin the Site in any direction, therefore off-site exposure to soil vapor is not a concern. The future potential exposure of soil gas if still present under the building will be eliminated by the vapor barrier, as well as the ventilated parking level.

The following summary table (**Table 2.1**) provides an overview of the current and potential exposures for the Site:

Table 2.1 – Potential Exposures

<i>Environmental Media & Exposure Route</i>	<i>Human Exposure Route</i>
Direct Contact with Surface Soils, Inhalation of Soil Dust, & Direct Contact with Soil Dust	Inhalation, direct contact routes will be minimized by using PPE and conducting dust suppression.
Direct Contact with Subsurface Soils	Inhalation and direct contact routes will be minimized by using PPE and conducting dust suppression. After development, site will be covered by the proposed new building footprint.
Ingestion of Groundwater	Groundwater is not used for drinking. NYC is served by public water supply.
Direct Contact with Groundwater	Will be eliminated by the future placement of a waterproofing membrane and by the future building slab.
Inhalation of Contaminated Soil Vapor	Will be mitigated by the presence of a vapor barrier under the building slab and by a continuously ventilated parking garage.

6.3 FISH AND WILDLIFE IMPACT ANALYSIS

The Site does not contain any ecologically sensitive resources and hence the contaminated soils are not expected to have any impacts on any ecological resources.

6.4 DATA USABILITY SUMMARY REPORT

To validate laboratory analytical data, Data Usability Summary Reports for each laboratory analytical data package were prepared. The DUSRs conclude that all results are usable for project objectives as reported or usable with minor qualification due to laboratory quality control outliers. None of the analytical data changed based on the DUSRs. The DUSRs are included as **Appendix E** of this report.

6.5 RECOMMENDATIONS

6.5.1 CLEANUP ALTERNATIVES

The data obtained as part of the RI and SRI activities has provided information to complete the Site characterization initiated during the prior investigations and completed the nature and extent delineation in all on-Site media of contamination at the Site to the extent required to support the planned Track 1 remedial action for the Site. Track 1 through 4 cleanup remedies will be evaluated in the RAWP. The RAWP will address the remedial alternatives to eliminate exposure from impacted groundwater from on-Site sources, if any. It will also address alternatives to mitigate exposures to any VOC vapor intrusion into the proposed development.

6.5.2 DATA LIMITATIONS AND RECOMMENDATION FOR FUTURE WORK

The SRI results provide sufficient data to develop a feasible, conceptual remedy for the impacted soil, groundwater, and soil vapor.

6.5.3 RECOMMENDED REMEDIAL ACTION OBJECTIVES

The RI and SRI have determined that remedial action needs to be implemented to remediate the contaminated soil and groundwater and mitigate potential vapor intrusion risks. The specific alternatives proposed will be fully evaluated in the RAWP.

7.0 DEVIATIONS FROM THE SRIWP

The SRIWP included four (4) monitoring wells to be installed; however, refusal at bedrock was met between 11 and 16 ft-bgs at multiple locations when attempting to install proposed RI-MW-5. Therefore, only three (3) wells were installed at the Site at the proposed locations.

8.0 REFERENCES

- Phase I Environmental Site Assessment (ESA), 1156 East 165th Street, 1125 Whitlock Avenue, Bronx, Bronx County, New York, Block 2756 Lots 85 and 90, Prepared by PVE Sheffler, LLC, January 26, 2016
- Subsurface Investigation (Phase II ESA); 1156 East 165th Street (Block 2756 Lot 90), 1125 Whitlock Avenue (Block 2756 Lot 85), Bronx, New York. PVE Sheffler File No. #560999, March 8, 2016
- Phase I Environmental Site Assessment, 1156 East 165th Street, 1125 Whitlock Avenue, Bronx County, New York, Block 2756 Lots 85 and 90, PVE Sheffler File No. #560999, May 11, 2017
- Remedial Investigation Report, 1125 Whitlock Avenue & 1156 East 165th Street, NYC OER Project Number: 18TMP0057X, 18EHAN025X, Prepared by PVE Sheffler, LLC, November 2017
- Report on Subsurface Soil and Foundation Investigation, Proposed 14 Story Building, 1125 Whitlock Ave, Bronx, NY (CSA Job # 17-147), Prepared by Carlin, Simpson & Associates, December 20, 2017
- Remedial Action Work Plan (RAWP), Prepared for Park Management by PVE, LLC, December 2017
- Phase I ESA, Prepared for the Stagg Group by PVE, LLC, October 2019

Tables

Table 1
Sampling Collection Summary Table
1001 Whitlock Avenue, Bronx, New York

	Sample No	Matrix	Date Sampled	Sample Depth/Depth to GW (ft-bgs)	Analysis	Boring Depth (ft-bgs)
RI-SB1	RI-SB1 (4.5-5')	Soil	2/14/2022	4.5-5.0	TCL+30/TAL, PFAS	18
	RI-SB1 (9.5-10')	Soil	2/14/2022	9.5-10.0	TCL+30/TAL, PFAS	
	RI-SB1 (14.5-15')	Soil	2/14/2022	14.5-15.0	TCL+30/TAL, PFAS	
	RI-SB1 (17.5-18')	Soil	2/14/2022	17.5-18.0	TCL+30/TAL, PFAS	
RI-SB2	RI-SB2 (3.5-4')	Soil	2/14/2022	3.5-4.0	TCL+30/TAL, PFAS	20
	RI-SB2 (9.5-10')	Soil	2/14/2022	9.5-10.0	TCL+30/TAL, PFAS	
	RI-SB2 (14.5-15')	Soil	2/14/2022	14.5-15.0	TCL+30/TAL, PFAS	
RI-SB3	RI-SB3 (4.5-5')	Soil	2/14/2022	4.5-5.0	TCL+30/TAL, PFAS	20
	RI-SB3 (9.5-10')	Soil	2/14/2022	9.5-10.0	TCL+30/TAL, PFAS	
	RI-SB3 (14.5-15')	Soil	2/14/2022	14.5-15.0	TCL+30/TAL, PFAS	
RI-SB4	RI-SB4 (4.5-5')	Soil	2/15/2022	4.5-5.0	TCL+30/TAL, PFAS	20
	RI-SB4 (9.5-10')	Soil	2/15/2022	9.5-10.0	TCL+30/TAL, PFAS	
	RI-SB4 (14.5-15')	Soil	2/15/2022	14.5-15.0	TCL+30/TAL, PFAS	
RI-SB5	RI-SB5 (4.5-5')	Soil	2/15/2022	4.5-5.0	TCL+30/TAL, PFAS	20
	RI-SB5 (9.5-10')	Soil	2/15/2022	9.5-10.0	TCL+30/TAL, PFAS	
	RI-SB5 (14.5-15')	Soil	2/15/2022	14.5-15.0	TCL+30/TAL, PFAS	
	RI-SB5 (19.5-20')	Soil	2/15/2022	19.5-20.0	TCL+30/TAL, PFAS	
RI-SB6	RI-SB6 (4.5-5')	Soil	2/15/2022	4.5-5.0	TCL+30/TAL, PFAS	13
	RI-SB6 (9.5-10')	Soil	2/15/2022	9.5-10.0	TCL+30/TAL, PFAS	
	RI-SB6 (12.5-13')	Soil	2/15/2022	12.5-13.0	TCL+30/TAL, PFAS	
RI-SB7	RI-SB7 (4.5-5')	Soil	2/16/2022	4.5-5.0	TCL+30/TAL, PFAS	17
	RI-SB7 (9.5-10')	Soil	2/16/2022	9.5-10.0	TCL+30/TAL, PFAS	
	RI-SB7 (14.5-15')	Soil	2/16/2022	14.5-15.0	TCL+30/TAL, PFAS	
RI-SB8	RI-SB8 (4.5-5')	Soil	2/16/2022	4.5-5.0	TCL+30/TAL, PFAS	13
	RI-SB8 (9.5-10')	Soil	2/16/2022	9.5-10.0	TCL+30/TAL, PFAS	
	RI-SB8 (12.5-13')	Soil	2/16/2022	12.5-13.0	TCL+30/TAL, PFAS	
RI-SB9	RI-SB9 (4.5-5')	Soil	2/16/2022	4.5-5.0	TCL+30/TAL, PFAS	20
	RI-SB9 (9.5-10')	Soil	2/16/2022	9.5-10.0	TCL+30/TAL, PFAS	
	RI-SB9 (14.5-15')	Soil	2/16/2022	14.5-15.0	TCL+30/TAL, PFAS	
RI-SB10	RI-SB10 (2-2.5')	Soil	2/17/2022	2.0-2.5	TCL+30/TAL, PFAS	2.5
MW-3R	MW-3R	Ground Water	2/18/2022	20.10	VOCs, PFAS, 1,4-Dioxane	
RI-MW-4	RI-MW-4	Ground Water	2/18/2022	20.87	VOCs, TAL Metals, PFAS, 1,4-Dioxane	
MW-2R	MW-2R	Ground Water	2/18/2022	18.25	VOCs, TAL Metals, PFAS, 1,4-Dioxane	
MW-3R	MW-3R	Ground Water	2/22/2022	20.55	TAL Metals, TCL SVOCs, Pesticides, PCBs	
RI-MW-4	RI-MW-4	Ground Water	2/22/2022	20.93	TCL SVOCs, Pesticides, PCBs	
MW-2R	MW-2R	Ground Water	2/22/2022	18.05	TCL SVOCs, Pesticides, PCBs	

Table 2
Water Table Elevations
1001 Whitlock Avenue, Bronx, NY

Well Name	Screen Length	Well Depth (ft bg)	Top of Casing Elevation (ft amsl)	Ground Surface Elevation (ft amsl)	Water Table Elevation (ft amsl)
MW-2R	10'	19	43.28	41.94	23.98
MW-3R	10'	25	38.72	36.08	16.83
RI-MW-4	10'	22.5	40.09	37.65	15.42

Table 3
VOCs in Soil
1001 Whitlock Avenue, Bronx, NY

Client Sample ID:		NY SCO - Unrestricted Use (6 NYCRR 375-6 12/06)	NY SCO - Restricted Residential w/CP-51 (10/10) (6 NYCRR 375-6 12/06)	RI-SB3 (4.5-5') 2/14/2022	RI-SB3 (9.5- 10') 2/14/2022	RI-SB3 (14.5- 15') 2/14/2022	RI-SB4 (4.5-5') 2/15/2022	DUP-1 2/15/2022	RI-SB4 (9.5- 10') 2/15/2022	RI-SB4 (14.5- 15') 2/15/2022	RI-SB5 (4.5-5') 2/15/2022
Lab Sample ID:				JD39775-1	JD39775-2	JD39775-3	JD39775-5	JD39775-6	JD39775-7	JD39775-8	JD39775-10
Date Sampled:				2/14/2022	2/14/2022	2/14/2022	2/15/2022	2/15/2022	2/15/2022	2/15/2022	2/15/2022
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
MS Volatiles (SW846 8260D)											
Acetone	ug/kg	50	100000	ND (4.2)	12.3	ND (4.4)	ND (4.4)	ND (4.1)	ND (4.1)	57	20
Benzene	ug/kg	60	4800	ND (0.46)	ND (0.45)	ND (0.49)	ND (0.48)	ND (0.45)	ND (0.45)	ND (0.42)	ND (0.48)
Bromochloromethane	ug/kg	-	-	ND (0.56)	ND (0.56)	ND (0.60)	ND (0.59)	ND (0.55)	ND (0.56)	ND (0.52)	ND (0.59)
Bromodichloromethane	ug/kg	-	-	ND (0.43)	ND (0.43)	ND (0.46)	ND (0.45)	ND (0.42)	ND (0.43)	ND (0.40)	ND (0.45)
Bromoform	ug/kg	-	-	ND (1.4)	ND (1.4)	ND (1.5)	ND (1.4)	ND (1.3)	ND (1.4)	ND (1.3)	ND (1.4)
Bromomethane	ug/kg	-	-	ND (0.77)	ND (0.76)	ND (0.82)	ND (0.81)	ND (0.75)	ND (0.76)	ND (0.70)	ND (0.81)
2-Butanone (MEK)	ug/kg	120	100000	ND (2.4)	ND (2.4)	ND (2.6)	ND (2.6)	ND (2.4)	ND (2.4)	9.0 J	ND (2.6)
Carbon disulfide	ug/kg	-	-	ND (0.54)	ND (0.53)	ND (0.57)	ND (0.57)	ND (0.53)	ND (0.53)	0.76 J	ND (0.56)
Carbon tetrachloride	ug/kg	760	2400	ND (0.62)	ND (0.61)	ND (0.66)	ND (0.66)	ND (0.61)	ND (0.62)	ND (0.57)	ND (0.65)
Chlorobenzene	ug/kg	1100	100000	ND (0.46)	ND (0.46)	ND (0.49)	ND (0.49)	ND (0.45)	ND (0.46)	ND (0.42)	ND (0.48)
Chloroethane	ug/kg	-	-	ND (0.60)	ND (0.59)	ND (0.63)	ND (0.63)	ND (0.58)	ND (0.59)	ND (0.54)	ND (0.62)
Chloroform	ug/kg	370	49000	ND (0.52)	ND (0.52)	ND (0.56)	ND (0.55)	ND (0.51)	ND (0.52)	ND (0.48)	ND (0.55)
Chloromethane	ug/kg	-	-	ND (2.0)	ND (1.9)	ND (2.1)	ND (2.1)	ND (1.9)	ND (2.0)	ND (1.8)	ND (2.1)
Cyclohexane	ug/kg	-	-	ND (0.66)	ND (0.65)	ND (0.71)	ND (0.70)	ND (0.65)	ND (0.65)	ND (0.61)	ND (0.69)
1,2-Dibromo-3-chloropropane	ug/kg	-	-	ND (0.70)	ND (0.69)	ND (0.75)	ND (0.74)	ND (0.68)	ND (0.69)	ND (0.64)	ND (0.73)
Dibromochloromethane	ug/kg	-	-	ND (0.56)	ND (0.56)	ND (0.60)	ND (0.59)	ND (0.55)	ND (0.56)	ND (0.52)	ND (0.59)
1,2-Dibromoethane	ug/kg	-	-	ND (0.42)	ND (0.42)	ND (0.45)	ND (0.45)	ND (0.41)	ND (0.42)	ND (0.39)	ND (0.44)
1,2-Dichlorobenzene	ug/kg	1100	100000	ND (0.55)	ND (0.54)	ND (0.59)	ND (0.58)	ND (0.54)	ND (0.54)	ND (0.50)	ND (0.58)
1,3-Dichlorobenzene	ug/kg	2400	49000	ND (0.50)	ND (0.49)	ND (0.53)	ND (0.53)	ND (0.49)	ND (0.49)	ND (0.46)	ND (0.52)
1,4-Dichlorobenzene	ug/kg	1800	13000	ND (0.50)	ND (0.49)	ND (0.53)	ND (0.52)	ND (0.49)	ND (0.49)	ND (0.46)	ND (0.52)
Dichlorodifluoromethane	ug/kg	-	-	ND (0.73)	ND (0.72)	ND (0.78)	ND (0.77)	ND (0.71)	ND (0.72)	ND (0.67)	ND (0.77)
1,1-Dichloroethane	ug/kg	270	26000	ND (0.50)	ND (0.49)	ND (0.53)	ND (0.52)	ND (0.49)	ND (0.49)	ND (0.46)	ND (0.52)
1,2-Dichloroethane	ug/kg	20	3100	ND (0.47)	ND (0.47)	ND (0.50)	ND (0.50)	ND (0.46)	ND (0.47)	ND (0.43)	ND (0.50)
1,1,1-Trichloroethane	ug/kg	330	100000	ND (0.66)	ND (0.65)	ND (0.70)	ND (0.69)	ND (0.64)	ND (0.65)	ND (0.60)	ND (0.69)
cis-1,2-Dichloroethane	ug/kg	250	100000	ND (0.85)	ND (0.84)	ND (0.90)	ND (0.89)	ND (0.82)	ND (0.84)	ND (0.77)	ND (0.89)
trans-1,2-Dichloroethane	ug/kg	190	100000	ND (0.82)	ND (0.81)	ND (0.86)	ND (0.85)	ND (0.80)	ND (0.81)	ND (0.76)	ND (0.84)
1,2-Dichloropropane	ug/kg	-	-	ND (0.48)	ND (0.47)	ND (0.51)	ND (0.50)	ND (0.46)	ND (0.47)	ND (0.44)	ND (0.50)
cis-1,3-Dichloropropene	ug/kg	-	-	ND (0.48)	ND (0.47)	ND (0.51)	ND (0.50)	ND (0.47)	ND (0.47)	ND (0.44)	ND (0.50)
trans-1,3-Dichloropropene	ug/kg	-	-	ND (0.48)	ND (0.45)	ND (0.49)	ND (0.48)	ND (0.45)	ND (0.45)	ND (0.42)	ND (0.48)
Ethylbenzene	ug/kg	1000	41000	ND (0.46)	ND (0.45)	ND (0.49)	ND (0.48)	ND (0.44)	ND (0.45)	ND (0.42)	ND (0.48)
Freon 113	ug/kg	-	-	ND (2.7)	ND (2.7)	ND (2.9)	ND (2.8)	ND (2.6)	ND (2.7)	ND (2.5)	ND (2.8)
2-Hexanone	ug/kg	-	-	ND (2.1)	ND (2.1)	ND (2.3)	ND (2.2)	ND (2.1)	ND (2.1)	ND (2.0)	ND (2.2)
Isopropylbenzene	ug/kg	-	-	ND (1.4)	ND (1.4)	ND (1.5)	ND (1.5)	ND (1.4)	ND (1.4)	ND (1.3)	ND (1.5)
Methyl Acetate	ug/kg	-	-	ND (1.4)	ND (1.4)	ND (1.5)	ND (1.5)	ND (1.4)	ND (1.4)	ND (1.3)	ND (1.5)
Methylcyclohexane	ug/kg	-	-	ND (0.88)	ND (0.87)	ND (0.94)	ND (0.93)	ND (0.86)	ND (0.87)	ND (0.81)	ND (0.92)
Methyl Tert Butyl Ether	ug/kg	930	100000	ND (0.47)	ND (0.47)	ND (0.50)	ND (0.50)	ND (0.46)	ND (0.47)	ND (0.43)	ND (0.49)
4-Methyl-2-pentanone(MIBK)	ug/kg	-	-	ND (2.3)	ND (2.3)	ND (2.4)	ND (2.4)	ND (2.2)	ND (2.3)	ND (2.1)	ND (2.4)
Methylene chloride	ug/kg	50	100000	ND (2.6)	ND (2.6)	ND (2.8)	ND (2.8)	ND (2.6)	ND (2.6)	ND (2.4)	ND (2.8)
Styrene	ug/kg	-	-	ND (0.41)	ND (0.40)	ND (0.43)	ND (0.43)	ND (0.39)	ND (0.40)	ND (0.37)	ND (0.42)
1,1,2,2-Tetrachloroethane	ug/kg	-	-	ND (0.60)	ND (0.60)	ND (0.64)	ND (0.64)	ND (0.59)	ND (0.60)	ND (0.55)	ND (0.63)
Tetrachloroethene	ug/kg	1300	19000	ND (0.58)	ND (0.58)	ND (0.62)	ND (0.62)	ND (0.57)	ND (0.58)	ND (0.53)	ND (0.61)
1,2,3-Trichlorobenzene	ug/kg	700	100000	ND (0.53)	ND (0.52)	ND (0.56)	ND (0.56)	ND (0.52)	ND (0.52)	ND (0.48)	ND (0.55)
1,2,4-Trichlorobenzene	ug/kg	-	-	ND (2.5)	ND (2.5)	ND (2.7)	ND (2.7)	ND (2.5)	ND (2.5)	ND (2.3)	ND (2.8)
1,1,1-Trichloroethane	ug/kg	880	100000	ND (0.49)	ND (0.48)	ND (0.52)	ND (0.51)	ND (0.47)	ND (0.48)	ND (0.45)	ND (0.51)
1,1,2-Trichloroethane	ug/kg	-	-	ND (0.56)	ND (0.55)	ND (0.60)	ND (0.59)	ND (0.54)	ND (0.55)	ND (0.51)	ND (0.58)
Trichloroethene	ug/kg	470	21000	ND (0.77)	ND (0.76)	ND (0.82)	ND (0.81)	ND (0.75)	ND (0.76)	ND (0.70)	ND (0.80)
Trichlorofluoromethane	ug/kg	-	-	ND (0.69)	ND (0.68)	ND (0.73)	ND (0.73)	ND (0.67)	ND (0.68)	ND (0.63)	ND (0.72)
Vinyl chloride	ug/kg	20	900	ND (0.48)	ND (0.48)	ND (0.52)	ND (0.51)	ND (0.47)	ND (0.48)	ND (0.44)	ND (0.51)
m,p-Xylene	ug/kg	260	100000	ND (0.90)	ND (0.89)	ND (0.96)	ND (0.95)	ND (0.88)	ND (0.89)	ND (0.83)	ND (0.95)
o-Xylene	ug/kg	260	100000	ND (0.46)	ND (0.46)	ND (0.49)	ND (0.49)	ND (0.45)	ND (0.46)	ND (0.42)	ND (0.48)
Xylene (total)	ug/kg	260	100000	ND (0.46)	ND (0.46)	ND (0.49)	ND (0.49)	ND (0.45)	ND (0.46)	ND (0.42)	ND (0.48)

Notes:

ND = Compound not detected

J = An estimated value

Exceeds SCO's

Table 3
VOCs in Soil
1001 Whitlock Avenue, Bronx, NY

Client Sample ID:		NY SCO - Unrestricted Use (6 NYCRR 375-6.12(6))	NY SCO - Restricted Residential w/CP-51 (10/10) (6 NYCRR 375-6 12(6))	RI-SB5 (9.5- 10')	RI-SB5 (14.5- 15')	RI-SB5 (19.5- 20')	RI-SB6 (4.5-5')	RI-SB6 (9.5- 10')	RI-SB6 (12.5- 13')	RI-SB7 (4.5-5')	RI-SB7 (9.5- 10')	RI-SB7 (14.5- 15')	RI-SB8 (4.5-5')
Lab Sample ID:				JD39775-11	JD39775-12	JD39775-13	JD39775-14	JD39775-15	JD39775-16	JD39846-1	JD39846-2	JD39846-3	JD39846-5
Date Sampled:				2/15/2022	2/15/2022	2/15/2022	2/15/2022	2/15/2022	2/15/2022	2/16/2022	2/16/2022	2/16/2022	2/16/2022
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
MS Volatiles (SW846 8260D)													
Acetone	ug/kg	50	100000	22.9	ND (3.7)	47.1	ND (4.3)	ND (4.3)	81.1	ND (4.4)	ND (4.6)	ND (4.4)	ND (4.3)
Benzene	ug/kg	60	4800	ND (0.47)	ND (0.40)	ND (0.50)	ND (0.47)	ND (0.47)	ND (0.46)	ND (0.49)	ND (0.51)	ND (0.48)	ND (0.48)
Bromochloromethane	ug/kg	-	-	ND (0.58)	ND (0.50)	ND (0.61)	ND (0.58)	ND (0.58)	ND (0.56)	ND (0.60)	ND (0.63)	ND (0.59)	ND (0.59)
Bromodichloromethane	ug/kg	-	-	ND (0.45)	ND (0.38)	ND (0.47)	ND (0.44)	ND (0.44)	ND (0.43)	ND (0.46)	ND (0.48)	ND (0.46)	ND (0.45)
Bromoform	ug/kg	-	-	ND (1.4)	ND (1.2)	ND (1.5)	ND (1.4)	ND (1.4)	ND (1.4)	ND (1.5)	ND (1.5)	ND (1.4)	ND (1.4)
Bromomethane	ug/kg	-	-	ND (0.79)	ND (0.68)	ND (0.84)	ND (0.79)	ND (0.79)	ND (0.77)	ND (0.82)	ND (0.86)	ND (0.81)	ND (0.80)
2-Butanone (MEK)	ug/kg	120	100000	3.0 J	ND (2.1)	13.2	ND (2.5)	ND (2.5)	16.7	ND (2.6)	ND (2.7)	ND (2.6)	ND (2.6)
Carbon disulfide	ug/kg	-	-	ND (0.56)	ND (0.47)	ND (0.59)	ND (0.55)	ND (0.55)	0.62 J	ND (0.57)	ND (0.60)	ND (0.57)	ND (0.56)
Carbon tetrachloride	ug/kg	760	2400	ND (0.64)	ND (0.55)	ND (0.68)	ND (0.64)	ND (0.64)	ND (0.62)	ND (0.66)	ND (0.69)	ND (0.66)	ND (0.65)
Chlorobenzene	ug/kg	1100	100000	ND (0.48)	ND (0.41)	ND (0.50)	ND (0.47)	ND (0.48)	ND (0.46)	ND (0.49)	ND (0.51)	ND (0.49)	ND (0.48)
Chloroethane	ug/kg	-	-	ND (0.61)	ND (0.52)	ND (0.65)	ND (0.61)	ND (0.61)	ND (0.60)	ND (0.63)	ND (0.66)	ND (0.63)	ND (0.62)
Chloroform	ug/kg	370	49000	ND (0.54)	ND (0.46)	ND (0.57)	ND (0.54)	ND (0.54)	ND (0.52)	ND (0.56)	ND (0.58)	ND (0.55)	ND (0.55)
Chloromethane	ug/kg	-	-	ND (2.0)	ND (1.7)	ND (2.1)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.1)	ND (2.2)	ND (2.1)	ND (2.1)
Cyclohexane	ug/kg	-	-	ND (0.68)	ND (0.58)	ND (0.72)	ND (0.68)	ND (0.68)	ND (0.66)	ND (0.71)	ND (0.74)	ND (0.70)	ND (0.69)
1,2-Dibromo-3-chloropropane	ug/kg	-	-	ND (0.72)	ND (0.61)	ND (0.76)	ND (0.72)	ND (0.72)	ND (0.70)	ND (0.74)	ND (0.78)	ND (0.74)	ND (0.73)
Dibromochloromethane	ug/kg	-	-	ND (0.58)	ND (0.50)	ND (0.61)	ND (0.58)	ND (0.58)	ND (0.56)	ND (0.60)	ND (0.63)	ND (0.59)	ND (0.59)
1,2-Dibromoethane	ug/kg	-	-	ND (0.44)	ND (0.37)	ND (0.46)	ND (0.43)	ND (0.44)	ND (0.42)	ND (0.45)	ND (0.47)	ND (0.45)	ND (0.44)
1,2-Dichlorobenzene	ug/kg	1100	100000	ND (0.57)	ND (0.48)	ND (0.60)	ND (0.56)	ND (0.57)	ND (0.55)	ND (0.59)	ND (0.61)	ND (0.58)	ND (0.57)
1,3-Dichlorobenzene	ug/kg	2400	49000	ND (0.51)	ND (0.44)	ND (0.54)	ND (0.51)	ND (0.51)	ND (0.50)	ND (0.53)	ND (0.56)	ND (0.53)	ND (0.52)
1,4-Dichlorobenzene	ug/kg	1800	13000	ND (0.51)	ND (0.44)	ND (0.54)	ND (0.51)	ND (0.51)	ND (0.50)	ND (0.53)	ND (0.55)	ND (0.52)	ND (0.52)
Dichlorodifluoromethane	ug/kg	-	-	ND (0.75)	ND (0.64)	ND (0.80)	ND (0.75)	ND (0.75)	ND (0.73)	ND (0.78)	ND (0.81)	ND (0.77)	ND (0.76)
1,1-Dichloroethane	ug/kg	270	26000	ND (0.51)	ND (0.44)	ND (0.54)	ND (0.51)	ND (0.51)	ND (0.50)	ND (0.53)	ND (0.55)	ND (0.53)	ND (0.52)
1,2-Dichloroethane	ug/kg	20	3100	ND (0.49)	ND (0.42)	ND (0.52)	ND (0.49)	ND (0.49)	ND (0.47)	ND (0.50)	ND (0.53)	ND (0.50)	ND (0.49)
1,1-Dichloroethene	ug/kg	330	100000	ND (0.68)	ND (0.58)	ND (0.72)	ND (0.68)	ND (0.68)	ND (0.66)	ND (0.70)	ND (0.73)	ND (0.70)	ND (0.69)
cis-1,2-Dichloroethene	ug/kg	250	100000	ND (0.87)	ND (0.74)	ND (0.92)	ND (0.87)	ND (0.87)	ND (0.85)	ND (0.90)	ND (0.94)	ND (0.89)	ND (0.88)
trans-1,2-Dichloroethene	ug/kg	190	100000	ND (0.63)	ND (0.54)	ND (0.67)	ND (0.63)	ND (0.63)	ND (0.62)	ND (0.66)	ND (0.68)	ND (0.65)	ND (0.64)
1,2-Dichloropropane	ug/kg	-	-	ND (0.49)	ND (0.42)	ND (0.52)	ND (0.49)	ND (0.49)	ND (0.48)	ND (0.51)	ND (0.53)	ND (0.50)	ND (0.50)
cis-1,3-Dichloropropene	ug/kg	-	-	ND (0.49)	ND (0.42)	ND (0.52)	ND (0.49)	ND (0.49)	ND (0.48)	ND (0.51)	ND (0.53)	ND (0.50)	ND (0.50)
trans-1,3-Dichloropropene	ug/kg	-	-	ND (0.47)	ND (0.40)	ND (0.50)	ND (0.47)	ND (0.47)	ND (0.46)	ND (0.49)	ND (0.51)	ND (0.49)	ND (0.48)
Ethylbenzene	ug/kg	1000	41000	ND (0.47)	ND (0.40)	ND (0.50)	ND (0.47)	ND (0.47)	ND (0.46)	ND (0.49)	ND (0.51)	ND (0.48)	ND (0.48)
Freon 113	ug/kg	-	-	ND (2.8)	ND (2.4)	ND (2.9)	ND (2.8)	ND (2.8)	ND (2.7)	ND (2.9)	ND (3.0)	ND (2.8)	ND (2.8)
2-Hexanone	ug/kg	-	-	ND (2.2)	ND (1.9)	ND (2.3)	ND (2.2)	ND (2.2)	ND (2.1)	ND (2.3)	ND (2.4)	ND (2.3)	ND (2.2)
Isopropylbenzene	ug/kg	-	-	ND (1.5)	ND (1.3)	ND (1.6)	ND (1.5)	ND (1.5)	ND (1.4)	ND (1.5)	ND (1.6)	ND (1.5)	ND (1.5)
Methyl Acetate	ug/kg	-	-	ND (1.4)	ND (1.2)	ND (1.5)	ND (1.4)	ND (1.4)	ND (1.4)	ND (1.5)	ND (1.6)	ND (1.5)	ND (1.5)
Methylcyclohexane	ug/kg	-	-	ND (0.91)	ND (0.77)	ND (0.96)	ND (0.90)	ND (0.91)	ND (0.88)	ND (0.94)	ND (0.98)	ND (0.93)	ND (0.92)
Methyl Tert Butyl Ether	ug/kg	930	100000	ND (0.49)	ND (0.41)	ND (0.51)	ND (0.48)	ND (0.49)	ND (0.47)	ND (0.50)	ND (0.53)	ND (0.50)	ND (0.49)
4-Methyl-2-pentanone(MIBK)	ug/kg	-	-	ND (2.4)	ND (2.0)	ND (2.5)	ND (2.3)	ND (2.4)	ND (2.3)	ND (2.4)	ND (2.5)	ND (2.4)	ND (2.4)
Methylene chloride	ug/kg	50	100000	ND (2.7)	ND (2.3)	ND (2.9)	ND (2.7)	ND (2.7)	ND (2.6)	ND (2.8)	ND (2.9)	ND (2.8)	ND (2.7)
Styrene	ug/kg	-	-	ND (0.42)	ND (0.36)	ND (0.44)	ND (0.42)	ND (0.42)	ND (0.41)	ND (0.43)	ND (0.45)	ND (0.43)	ND (0.42)
1,1,2,2-Tetrachloroethane	ug/kg	-	-	ND (0.62)	ND (0.53)	ND (0.66)	ND (0.62)	ND (0.62)	ND (0.60)	ND (0.64)	ND (0.67)	ND (0.64)	ND (0.63)
Tetrachloroethene	ug/kg	1300	19000	ND (0.60)	ND (0.51)	ND (0.64)	ND (0.60)	ND (0.60)	ND (0.59)	ND (0.62)	ND (0.65)	ND (0.62)	ND (0.61)
Toluene	ug/kg	700	100000	ND (0.54)	ND (0.46)	ND (0.58)	ND (0.54)	ND (0.54)	ND (0.53)	ND (0.56)	ND (0.59)	ND (0.56)	ND (0.55)
1,2,3-Trichlorobenzene	ug/kg	-	-	ND (2.6)	ND (2.2)	ND (2.7)	ND (2.6)	ND (2.6)	ND (2.5)	ND (2.7)	ND (2.8)	ND (2.7)	ND (2.6)
1,2,4-Trichlorobenzene	ug/kg	-	-	ND (2.6)	ND (2.2)	ND (2.7)	ND (2.6)	ND (2.6)	ND (2.5)	ND (2.7)	ND (2.8)	ND (2.7)	ND (2.6)
1,1,1-Trichloroethane	ug/kg	680	100000	ND (0.50)	ND (0.43)	ND (0.53)	ND (0.50)	ND (0.50)	ND (0.49)	ND (0.52)	ND (0.54)	ND (0.51)	ND (0.51)
1,1,2-Trichloroethane	ug/kg	-	-	ND (0.57)	ND (0.49)	ND (0.61)	ND (0.57)	ND (0.57)	ND (0.56)	ND (0.59)	ND (0.62)	ND (0.59)	ND (0.58)
Trichloroethene	ug/kg	470	21000	ND (0.79)	ND (0.67)	ND (0.84)	ND (0.79)	ND (0.79)	ND (0.77)	ND (0.82)	ND (0.85)	ND (0.81)	ND (0.80)
Trichlorofluoromethane	ug/kg	-	-	ND (0.71)	ND (0.61)	ND (0.75)	ND (0.71)	ND (0.71)	ND (0.69)	ND (0.73)	ND (0.77)	ND (0.73)	ND (0.72)
Vinyl chloride	ug/kg	20	900	ND (0.50)	ND (0.43)	ND (0.53)	ND (0.50)	ND (0.50)	ND (0.49)	ND (0.52)	ND (0.54)	ND (0.51)	ND (0.51)
m,p-Xylene	ug/kg	260	100000	ND (0.93)	ND (0.79)	ND (0.98)	ND (0.93)	ND (0.93)	ND (0.90)	ND (0.96)	ND (1.0)	ND (0.95)	ND (0.94)
o-Xylene	ug/kg	260	100000	ND (0.48)	ND (0.41)	ND (0.50)	ND (0.47)	ND (0.48)	ND (0.46)	ND (0.49)	ND (0.51)	ND (0.49)	ND (0.48)
Xylene (total)	ug/kg	260	100000	ND (0.48)	ND (0.41)	ND (0.50)	ND (0.47)	ND (0.48)	ND (0.46)	ND (0.49)	ND (0.51)	ND (0.49)	ND (0.48)

Notes:

ND = Compound not detected

J = An estimated value

Exceeds SCOs

Table 3
VOCs in Soil
1001 Whitlock Avenue, Bronx, NY

Client Sample ID:		NY SCO - Unrestricted Use (6 NYCRR 375-6 12/06)	NY SCO - Restricted Residential w/CP-51 (10/10) (6 NYCRR 375-6 12/06)	RI-SB8 (9.5- 10')	RI-SB8 (12.5- 13')	DUP-2	RI-SB9 (4.5-5')	RI-SB9 (9.5- 10')	RI-SB9 (14.5- 15')	R1-SB10(2-2.5')
Lab Sample ID:				JD39846-6	JD39846-7	JD39846-8	JD39846-9	JD39846-10	JD39846-11	JD39915-1
Date Sampled:				2/16/2022	2/16/2022	2/16/2022	2/16/2022	2/16/2022	2/16/2022	2/17/2022
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil
MS Volatiles (SW846 8260D)										
Acetone	ug/kg	50	100000	44.3	ND (4.6)	ND (4.2)	ND (3.7)	ND (4.2)	19.1	ND (4.0)
Benzene	ug/kg	60	4800	ND (0.46)	ND (0.50)	ND (0.46)	ND (0.41)	ND (0.46)	ND (0.50)	ND (0.44)
Bromochloromethane	ug/kg	-	-	ND (0.56)	ND (0.62)	ND (0.56)	ND (0.50)	ND (0.57)	ND (0.62)	ND (0.55)
Bromodichloromethane	ug/kg	-	-	ND (0.43)	ND (0.47)	ND (0.43)	ND (0.38)	ND (0.44)	ND (0.47)	ND (0.42)
Bromofom	ug/kg	-	-	ND (1.4)	ND (1.5)	ND (1.4)	ND (1.2)	ND (1.4)	ND (1.5)	ND (1.3)
Bromomethane	ug/kg	-	-	ND (0.77) °	ND (0.84) °	ND (0.77) °	ND (0.68) °	ND (0.78) °	ND (0.85) °	ND (0.75)
2-Butanone (MEK)	ug/kg	120	100000	9.7 J	ND (2.7)	ND (2.4)	ND (2.2)	ND (2.5)	ND (2.7)	ND (2.4)
Carbon disulfide	ug/kg	-	-	ND (0.54)	ND (0.59)	ND (0.54)	ND (0.48)	ND (0.55)	ND (0.59)	ND (0.52)
Carbon tetrachloride	ug/kg	760	2400	ND (0.62)	ND (0.68)	ND (0.62)	ND (0.55)	ND (0.63)	ND (0.68)	ND (0.60)
Chlorobenzene	ug/kg	1100	100000	ND (0.46)	ND (0.51)	ND (0.46)	ND (0.41)	ND (0.47)	ND (0.51)	ND (0.45)
Chloroethane	ug/kg	-	-	ND (0.59)	ND (0.65)	ND (0.59)	ND (0.53)	ND (0.60)	ND (0.65)	ND (0.58)
Chloroform	ug/kg	370	49000	ND (0.52)	ND (0.57)	ND (0.52)	ND (0.46)	ND (0.53)	ND (0.57)	ND (0.51)
Chloromethane	ug/kg	-	-	ND (2.0)	ND (2.2)	ND (2.0)	ND (1.8)	ND (2.0)	ND (2.2)	ND (1.9)
Cyclohexane	ug/kg	-	-	ND (0.66)	ND (0.72)	ND (0.66)	ND (0.59)	ND (0.67)	ND (0.73)	ND (0.64)
1,2-Dibromo-3-chloropropane	ug/kg	-	-	ND (0.70)	ND (0.76)	ND (0.70)	ND (0.62)	ND (0.71)	ND (0.77)	ND (0.68)
Dibromochloromethane	ug/kg	-	-	ND (0.56)	ND (0.62)	ND (0.56)	ND (0.50)	ND (0.57)	ND (0.62)	ND (0.55)
1,2-Dibromoethane	ug/kg	-	-	ND (0.42)	ND (0.46)	ND (0.42)	ND (0.38)	ND (0.43)	ND (0.47)	ND (0.41)
1,2-Dichlorobenzene	ug/kg	1100	100000	ND (0.55)	ND (0.60)	ND (0.55)	ND (0.49)	ND (0.56)	ND (0.60)	ND (0.53)
1,3-Dichlorobenzene	ug/kg	2400	49000	ND (0.50)	ND (0.55)	ND (0.50)	ND (0.44)	ND (0.51)	ND (0.55)	ND (0.48)
1,4-Dichlorobenzene	ug/kg	1800	13000	ND (0.50)	ND (0.54)	ND (0.50)	ND (0.44)	ND (0.50)	ND (0.55)	ND (0.48)
Dichlorodifluoromethane	ug/kg	-	-	ND (0.73)	ND (0.80)	ND (0.73)	ND (0.65)	ND (0.74)	ND (0.80)	ND (0.71)
1,1-Dichloroethane	ug/kg	270	26000	ND (0.50)	ND (0.55)	ND (0.50)	ND (0.44)	ND (0.51)	ND (0.55)	ND (0.48)
1,2-Dichloroethane	ug/kg	20	3100	ND (0.47)	ND (0.52)	ND (0.47)	ND (0.42)	ND (0.48)	ND (0.52)	ND (0.46)
1,1,1-Trichloroethane	ug/kg	330	100000	ND (0.66)	ND (0.72)	ND (0.66)	ND (0.59)	ND (0.67)	ND (0.72)	ND (0.64)
cis-1,2-Dichloroethene	ug/kg	250	100000	ND (0.84)	ND (0.93)	ND (0.84)	ND (0.75)	ND (0.86)	ND (0.93)	ND (0.82)
trans-1,2-Dichloroethene	ug/kg	190	100000	ND (0.61)	ND (0.67)	ND (0.61)	ND (0.55)	ND (0.62)	ND (0.68)	ND (0.60)
1,2-Dichloropropane	ug/kg	-	-	ND (0.48)	ND (0.52)	ND (0.48)	ND (0.42)	ND (0.48)	ND (0.52)	ND (0.46)
cis-1,3-Dichloropropene	ug/kg	-	-	ND (0.48)	ND (0.52)	ND (0.48)	ND (0.43)	ND (0.48)	ND (0.53)	ND (0.46)
trans-1,3-Dichloropropene	ug/kg	-	-	ND (0.46)	ND (0.50)	ND (0.46)	ND (0.41)	ND (0.47)	ND (0.51)	ND (0.45)
Ethylbenzene	ug/kg	1000	41000	ND (0.46)	ND (0.50)	ND (0.46)	ND (0.41)	ND (0.46)	ND (0.50)	ND (0.44)
Freon 113	ug/kg	-	-	ND (2.7)	ND (2.9)	ND (2.7)	ND (2.4)	ND (2.7)	ND (3.0)	ND (2.6)
2-Hexanone	ug/kg	-	-	ND (2.1)	ND (2.3)	ND (2.1)	ND (1.9)	ND (2.2)	ND (2.3)	ND (2.1)
Isopropylbenzene	ug/kg	-	-	ND (1.4)	ND (1.6)	ND (1.4)	ND (1.3)	ND (1.4)	ND (1.6)	ND (1.4)
Methyl Acetate	ug/kg	-	-	ND (1.4)	ND (1.5)	ND (1.4)	ND (1.2)	ND (1.4)	ND (1.5)	ND (1.4)
Methylcyclohexane	ug/kg	-	-	ND (0.88)	ND (0.96)	ND (0.88)	ND (0.78)	ND (0.89)	ND (0.97)	ND (0.85)
Methyl Tert Butyl Ether	ug/kg	930	100000	ND (0.47)	ND (0.52)	ND (0.47)	ND (0.42)	ND (0.48)	ND (0.52)	ND (0.46)
4-Methyl-2-pentanone(MIBK)	ug/kg	-	-	ND (2.3)	ND (2.5)	ND (2.3)	ND (2.0)	ND (2.3)	ND (2.5)	ND (2.2)
Methylene chloride	ug/kg	50	100000	ND (2.6)	ND (2.9)	ND (2.6)	ND (2.3)	ND (2.7)	ND (2.9)	ND (2.5)
Styrene	ug/kg	-	-	ND (0.40)	ND (0.44)	ND (0.40)	ND (0.36)	ND (0.41)	ND (0.44)	ND (0.39)
1,1,1,2,2-Pentachloroethane	ug/kg	-	-	ND (0.60)	ND (0.66)	ND (0.60)	ND (0.54)	ND (0.61)	ND (0.66)	ND (0.58)
Tetrachloroethene	ug/kg	1300	19000	ND (0.58)	ND (0.64)	ND (0.58)	ND (0.52)	ND (0.59)	ND (0.64)	ND (0.57)
Toluene	ug/kg	700	100000	ND (0.53)	ND (0.58)	ND (0.53)	ND (0.47)	ND (0.54)	ND (0.58)	ND (0.51)
1,2,3-Trichlorobenzene	ug/kg	-	-	ND (2.5)	ND (2.8)	ND (2.5)	ND (2.2)	ND (2.6)	ND (2.8)	ND (2.4)
1,2,4-Trichlorobenzene	ug/kg	-	-	ND (2.5)	ND (2.8)	ND (2.5)	ND (2.2)	ND (2.6)	ND (2.8)	ND (2.4)
1,1,1-Trichloroethane	ug/kg	680	100000	ND (0.49)	ND (0.53)	ND (0.49)	ND (0.43)	ND (0.49)	ND (0.53)	ND (0.47)
1,1,2-Trichloroethane	ug/kg	-	-	ND (0.56)	ND (0.61)	ND (0.56)	ND (0.50)	ND (0.57)	ND (0.61)	ND (0.54)
Trichloroethene	ug/kg	470	21000	ND (0.77)	ND (0.84)	ND (0.77)	ND (0.68)	ND (0.78)	ND (0.84)	ND (0.74)
Trichlorofluoromethane	ug/kg	-	-	ND (0.69)	ND (0.75)	ND (0.69)	ND (0.61)	ND (0.70)	ND (0.76)	ND (0.67)
Vinyl chloride	ug/kg	20	900	ND (0.48)	ND (0.53)	ND (0.48)	ND (0.43)	ND (0.49)	ND (0.53)	ND (0.47)
m,p-Xylene	ug/kg	260	100000	ND (0.90)	ND (0.99)	ND (0.90)	ND (0.80)	ND (0.91)	ND (0.99)	ND (0.87)
o-Xylene	ug/kg	260	100000	ND (0.46)	ND (0.50)	ND (0.46)	ND (0.41)	ND (0.47)	ND (0.51)	ND (0.45)
Xylene (total)	ug/kg	260	100000	ND (0.46)	ND (0.50)	ND (0.46)	ND (0.41)	ND (0.47)	ND (0.51)	ND (0.45)

Notes:
ND = Compound not detected
J = An estimated value
Exceeds SCOs

Table 4
SVOCs in Soil
1001 Whitlock Avenue, Bronx, NY

Client Sample ID:		NY SCO - Unrestricted Use (6 NYCRR 375-6 12/06)	NY SCO - Restricted Residential w/CP-51 (10/10) (6 NYCRR 375-6 12/06)	RI-SB3 (4.5-5')	RI-SB3 (9.5- 10')	RI-SB3 (14.5- 15')	RI-SB4 (4.5-5')	DUP-1	RI-SB4 (9.5- 10')
Lab Sample ID:				JD39775-1	JD39775-2	JD39775-3	JD39775-5	JD39775-6	JD39775-7
Date Sampled:				2/14/2022	2/14/2022	2/14/2022	2/15/2022	2/15/2022	2/15/2022
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil
MS Semi-volatiles (SW846 8270E)									
2-Chlorophenol	ug/kg	-	-	ND (19)	ND (18)	ND (18)	ND (19)	ND (19)	ND (17)
4-Chloro-3-methyl phenol	ug/kg	-	-	ND (23)	ND (22)	ND (23)	ND (24)	ND (23)	ND (21)
2,4-Dichlorophenol	ug/kg	-	-	ND (32)	ND (31)	ND (31)	ND (33)	ND (33)	ND (29)
2,4-Dimethylphenol	ug/kg	-	-	ND (67)	ND (64)	ND (66)	ND (69)	ND (68)	ND (61)
2,4-Dinitrophenol	ug/kg	-	-	ND (140)	ND (140)	ND (140)	ND (140)	ND (140)	ND (130)
4,6-Dinitro-o-cresol	ug/kg	-	-	ND (40)	ND (39)	ND (39)	ND (41)	ND (41)	ND (36)
2-Methylphenol	ug/kg	330	100000	ND (24)	ND (23)	ND (24)	ND (25)	ND (24)	ND (22)
3,4-Methylphenol	ug/kg	-	-	ND (31)	ND (30)	ND (30)	ND (32)	ND (31)	ND (28)
2-Nitrophenol	ug/kg	-	-	ND (25)	ND (24)	ND (24)	ND (25)	ND (25)	ND (23)
4-Nitrophenol	ug/kg	-	-	ND (100)	ND (96)	ND (98)	ND (100)	ND (100)	ND (91)
Pentachlorophenol	ug/kg	800	6700	ND (35)	ND (34)	ND (35)	ND (36)	ND (36)	ND (32)
Phenol	ug/kg	330	100000	ND (20)	ND (19)	ND (19)	ND (20)	ND (20)	ND (18)
2,3,4,6-Tetrachlorophenol	ug/kg	-	-	ND (25)	ND (24)	ND (24)	ND (26)	ND (25)	ND (23)
2,4,5-Trichlorophenol	ug/kg	-	-	ND (28)	ND (27)	ND (28)	ND (29)	ND (29)	ND (26)
2,4,6-Trichlorophenol	ug/kg	-	-	ND (22)	ND (22)	ND (22)	ND (23)	ND (23)	ND (21)
Acenaphthene	ug/kg	20000	100000	ND (13)	ND (12)	ND (13)	ND (13)	ND (13)	ND (12)
Acenaphthylene	ug/kg	100000	100000	ND (19)	ND (18)	ND (19)	ND (20)	ND (19)	ND (17)
Acetophenone	ug/kg	-	-	ND (8.1)	ND (7.8)	ND (7.9)	ND (8.3)	ND (8.2)	ND (7.3)
Anthracene	ug/kg	100000	100000	ND (23)	ND (22)	ND (23)	ND (24)	ND (23)	ND (21)
Atrazine	ug/kg	-	-	ND (16)	ND (15)	ND (16)	ND (17)	ND (16)	ND (15)
Benzo(a)anthracene	ug/kg	1000	1000	137	17.6 J	ND (10)	14.7 J	17.9 J	57.9
Benzo(a)pyrene	ug/kg	1000	1000	133	33.6 J	ND (17)	32.4 J	37.5 J	79.5
Benzo(b)fluoranthene	ug/kg	1000	1000	133	22.5 J	ND (16)	ND (17)	23.1 J	78.5
Benzo(g,h,i)perylene	ug/kg	100000	100000	69.5	ND (18)	ND (18)	ND (19)	ND (19)	44.6
Benzo(k)fluoranthene	ug/kg	800	3900	46.3	ND (17)	ND (17)	ND (18)	ND (18)	29.5 J
4-Bromophenyl phenyl ether	ug/kg	-	-	ND (15)	ND (14)	ND (14)	ND (15)	ND (15)	ND (13)
Butyl benzyl phthalate	ug/kg	-	-	ND (8.2)	ND (8.0)	ND (8.0)	ND (8.3)	ND (8.3)	ND (8.0)
1,1'-Biphenyl	ug/kg	-	-	ND (5.2)	ND (4.9)	ND (5.0)	ND (5.3)	ND (5.2)	ND (4.7)
Benzaldehyde	ug/kg	-	-	ND (9.3)	ND (9.0)	ND (9.1)	ND (9.6)	ND (9.5)	ND (8.5)
2-Chloronaphthalene	ug/kg	-	-	ND (9.0)	ND (8.6)	ND (8.8)	ND (9.2)	ND (9.1)	ND (8.1)
4-Chloroaniline	ug/kg	-	-	ND (14)	ND (13)	ND (13)	ND (14)	ND (14)	ND (12)
Carbazole	ug/kg	-	-	ND (5.5)	ND (5.2)	ND (5.3)	ND (5.8)	ND (5.5)	5.1 J
Caprolactam	ug/kg	-	-	ND (15) *	ND (14) *	ND (15) *	ND (15) *	ND (15) *	ND (13) *
Chrysene	ug/kg	1000	3900	115	19.6 J	ND (12)	ND (12)	18.7 J	57.6
bis(2-Chloroethoxy)methane	ug/kg	-	-	ND (8.1)	ND (7.7)	ND (7.9)	ND (8.3)	ND (8.2)	ND (7.3)
bis(2-Chloroethyl)ether	ug/kg	-	-	ND (16)	ND (16)	ND (16)	ND (17)	ND (16)	ND (15)
2,2'-Oxybis(1-chloropropane)	ug/kg	-	-	ND (14)	ND (13)	ND (13)	ND (14)	ND (14)	ND (12)
4-Chlorophenyl phenyl ether	ug/kg	-	-	ND (12)	ND (12)	ND (12)	ND (12)	ND (12)	ND (11)
2,4-Dinitrotoluene	ug/kg	-	-	ND (19)	ND (18)	ND (18)	ND (19)	ND (19)	ND (17)
2,6-Dinitrotoluene	ug/kg	-	-	ND (31)	ND (30)	ND (31)	ND (32)	ND (32)	ND (28)
3,3'-Dichlorobenzidine	ug/kg	-	-	ND (25)	ND (24)	ND (24)	ND (25)	ND (25)	ND (23)
1,4-Dioxane	ug/kg	100	13000	36.6 J	ND (16)	ND (16)	ND (17)	ND (17)	28.6 J
Dibenzo(a,h)anthracene	ug/kg	330	330	ND (15)	ND (15)	ND (15)	ND (16)	ND (16)	ND (14)
Dibenzofuran	ug/kg	7000	59000	ND (6.1)	61.8 JB	ND (6.0)	102 B	74.1 JB	ND (5.6)
Di-n-butyl phthalate	ug/kg	-	-	ND (9.4)	ND (9.0)	ND (9.2)	ND (9.6)	ND (9.5)	ND (8.5)
Di-n-octyl phthalate	ug/kg	-	-	ND (8.0)	ND (7.7)	ND (7.8)	ND (8.2)	ND (8.1)	ND (7.3)
Diethyl phthalate	ug/kg	-	-	ND (6.7)	ND (6.4)	ND (6.5)	ND (6.9)	ND (6.8)	ND (6.1)
Dimethyl phthalate	ug/kg	-	-	ND (8.8)	46.0 J	ND (8.6)	ND (9.0)	ND (8.9)	ND (8.0)
bis(2-Ethylhexyl)phthalate	ug/kg	-	-	235	36.8	ND (16)	ND (17)	28.8 J	16
Fluoranthene	ug/kg	100000	100000	ND (17)	ND (17)	ND (17)	ND (18)	ND (17)	ND (16)
Fluorene	ug/kg	30000	100000	ND (8.5)	ND (8.1)	ND (8.3)	ND (8.8)	ND (8.6)	ND (8.6)
Hexachlorobenzene	ug/kg	330	1200	ND (15)	ND (15)	ND (15)	ND (16)	ND (15)	ND (14)
Hexachlorobutadiene	ug/kg	-	-	ND (15)	ND (14)	ND (15)	ND (15)	ND (15)	ND (14)
Hexachlorocyclopentadiene	ug/kg	-	-	ND (19)	ND (18)	ND (18)	ND (19)	ND (19)	ND (17)
Hexachloroethane	ug/kg	-	-	100	35.1 J	ND (17)	33.2 J	38.9	70.5
Indeno(1,2,3-cd)pyrene	ug/kg	500	500	ND (8.1)	ND (7.7)	ND (7.9)	ND (8.3)	ND (8.2)	ND (7.3)
Isophorone	ug/kg	-	-	ND (8.5)	ND (8.2)	ND (8.3)	ND (8.7)	ND (8.6)	ND (7.7)
2-Methylnaphthalene	ug/kg	-	-	ND (8.9)	ND (8.5)	ND (8.7)	ND (9.1)	ND (9.0)	ND (8.0)
2-Nitroaniline	ug/kg	-	-	ND (9.4)	ND (9.0)	ND (9.2)	ND (9.6)	ND (9.5)	ND (8.5)
3-Nitroaniline	ug/kg	-	-	ND (9.8)	ND (9.4)	ND (9.5)	ND (10)	ND (9.9)	ND (8.8)
4-Nitroaniline	ug/kg	-	-	ND (11)	ND (10)	ND (10)	ND (11)	ND (11)	ND (9.6)
Naphthalene	ug/kg	12000	100000	ND (15)	ND (14)	ND (14)	ND (15)	ND (15)	ND (13)
Nitrobenzene	ug/kg	-	15000	ND (11)	ND (10)	ND (11)	ND (11)	ND (11)	ND (9.9)
N-Nitroso-di-n-propylamine	ug/kg	-	-	ND (14)	ND (13)	ND (13)	ND (14)	ND (14)	ND (12)
N-Nitrosodiphenylamine	ug/kg	-	-	56.4	25.0 J	ND (12)	ND (13)	18.6 J	45.3
Phenanthrene	ug/kg	100000	100000	256	33.0 J	ND (12)	ND (12)	29.0 J	112
Pyrene	ug/kg	100000	100000	ND (9.6)	ND (9.2)	ND (9.4)	ND (9.8)	ND (9.7)	ND (8.7)
1,2,4,5-Tetrachlorobenzene	ug/kg	-	-						

Notes:

ND = Compound not detected

J = An estimated value

Exceeds SCOs

Table 4
SVOCs in Soil
1001 Whitlock Avenue, Bronx, NY

Client Sample ID:		NY SCO - Unrestricted Use (6 NYCRR 375-6.12/06)	NY SCO - Restricted Residential w/CP-51 (10/10) (6 NYCRR 375-6 12/06)	RI-SB4 (14.5- 15')	RI-SB5 (4.5-5')	RI-SB5 (9.5- 10')	RI-SB5 (14.5- 15')	RI-SB5 (19.5- 20')	RI-SB6 (4.5-5')	RI-SB6 (9.5- 10')	RI-SB6 (12.5- 13')	RI-SB7 (4.5-5')	RI-SB7 (9.5- 10')
Lab Sample ID:				JD39775-8	JD39775-10	JD39775-11	JD39775-12	JD39775-13	JD39775-14	JD39775-15	JD39775-16	JD39846-1	JD39846-2
Date Sampled:				2/15/2022	2/15/2022	2/15/2022	2/15/2022	2/15/2022	2/15/2022	2/15/2022	2/15/2022	2/16/2022	2/16/2022
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
MS Semi-volatiles (SW846 8270E)													
2-Chlorophenol	ug/kg	-	-	ND (16)	ND (19)	ND (18)	ND (17)	ND (20)	ND (20)	ND (20)	ND (18)	ND (19)	ND (19)
2-Chloro-2-methyl phenol	ug/kg	-	-	ND (20)	ND (23)	ND (22)	ND (21)	ND (25)	ND (24)	ND (24)	ND (22)	ND (24)	ND (24)
2,4-Dichlorophenol	ug/kg	-	-	ND (27)	ND (32)	ND (30)	ND (29)	ND (35)	ND (34)	ND (34)	ND (31)	ND (32)	ND (33)
2,4-Dimethylphenol	ug/kg	-	-	ND (57)	ND (68)	ND (64)	ND (60)	ND (73)	ND (71)	ND (71)	ND (65)	ND (68)	ND (69)
2,4-Dinitrophenol	ug/kg	-	-	ND (120) *	ND (140)	ND (130)	ND (130)	ND (150)	ND (150)	ND (150)	ND (140)	ND (140)	ND (140)
4,6-Dinitro-o-cresol	ug/kg	-	-	ND (34)	ND (41)	ND (38)	ND (36)	ND (44)	ND (43)	ND (42)	ND (39)	ND (41)	ND (41)
2-Methylphenol	ug/kg	330	100000	ND (20)	ND (24)	ND (23)	ND (22)	ND (26)	ND (25)	ND (25)	ND (23)	ND (24)	ND (25)
3&4-Methylphenol	ug/kg	-	-	ND (26)	ND (31)	ND (29)	ND (28)	ND (34)	ND (33)	ND (33)	ND (30)	ND (31)	ND (32)
2-Nitrophenol	ug/kg	-	-	ND (21)	ND (25)	ND (24)	ND (22)	ND (27)	ND (26)	ND (26)	ND (24)	ND (25)	ND (25)
4-Nitrophenol	ug/kg	-	-	ND (85)	ND (100)	ND (95)	ND (90)	ND (110)	ND (110)	ND (110)	ND (98)	ND (100)	ND (100)
Pentachlorophenol	ug/kg	800	6700	ND (30)	ND (36)	ND (34)	ND (32)	ND (38)	ND (37)	ND (37)	ND (34)	ND (36)	ND (36)
Phenol	ug/kg	330	100000	ND (17)	ND (20)	ND (19)	ND (18)	ND (21)	ND (21)	ND (21)	ND (19)	ND (20)	ND (20)
2,3,4,6-Tetrachlorophenol	ug/kg	-	-	ND (21)	ND (25)	ND (24)	ND (22)	ND (27)	ND (26)	ND (26)	ND (24)	ND (25)	ND (25)
2,4,5-Trichlorophenol	ug/kg	-	-	ND (24)	ND (28)	ND (27)	ND (25)	ND (31)	ND (30)	ND (30)	ND (27)	ND (28)	ND (29)
2,4,6-Trichlorophenol	ug/kg	-	-	ND (19)	ND (23)	ND (21)	ND (20)	ND (24)	ND (24)	ND (24)	ND (22)	ND (23)	ND (23)
Acenaphthene	ug/kg	20000	100000	ND (11)	ND (13)	ND (12)	ND (12)	ND (14)	ND (14)	ND (14)	211	18.9 J	ND (13)
Acenaphthylene	ug/kg	100000	100000	ND (16)	ND (19)	ND (18)	ND (17)	ND (21)	56.5	ND (20)	ND (19)	ND (19)	ND (20)
Acetophenone	ug/kg	-	-	ND (6.8)	ND (8.2)	ND (7.7)	ND (7.3)	ND (8.8)	ND (8.6)	ND (8.5)	ND (7.9)	ND (8.2)	ND (8.3)
Anthracene	ug/kg	100000	100000	ND (20)	ND (23)	ND (22)	ND (21)	ND (25)	60.3	ND (24)	143	49	ND (24)
Atrazine	ug/kg	-	-	ND (14)	ND (16)	ND (15)	ND (14)	ND (18)	ND (17)	ND (17)	ND (16)	ND (16)	ND (16)
Benzo(a)anthracene	ug/kg	1000	1000	ND (9.0)	35.1 J	ND (10)	ND (9.6)	ND (12)	206	13.2 J	710	143	ND (11)
Benzo(a)pyrene	ug/kg	1000	1000	ND (14)	48.9	ND (16)	ND (15)	ND (19)	200	31.9 J	705	117	ND (18)
Benzo(b)fluoranthene	ug/kg	1000	1000	ND (14)	46.7	ND (16)	ND (15)	ND (18)	228	ND (18)	891	138	ND (17)
Benzo(g,h,i)perylene	ug/kg	100000	100000	ND (16)	25.2 J	ND (18)	ND (17)	ND (20)	123	ND (20)	511	67.7	ND (19)
Benzo(k)fluoranthene	ug/kg	800	3900	ND (15)	ND (18)	ND (17)	ND (16)	ND (19)	89.9	ND (18)	314	56.9	ND (18)
4-Bromophenyl phenyl ether	ug/kg	-	-	ND (12)	ND (15)	ND (14)	ND (13)	ND (16)	ND (15)	ND (15)	ND (14)	ND (15)	ND (15)
Butyl benzyl phthalate	ug/kg	-	-	ND (7.3)	ND (9.3)	ND (8.7)	ND (8.2)	ND (10)	ND (9.7)	ND (9.7)	ND (9.0)	ND (9.3)	ND (9.4)
1,1'-Biphenyl	ug/kg	-	-	ND (4.4)	ND (5.2)	ND (4.9)	ND (4.6)	ND (5.6)	ND (5.5)	ND (5.4)	42.8 J	ND (5.2)	ND (5.3)
Benzaldehyde	ug/kg	-	-	ND (7.9)	ND (9.4)	ND (8.9)	ND (8.4)	ND (10)	ND (9.9)	ND (9.8)	ND (9.1)	ND (9.4)	ND (9.6)
2-Chloronaphthalene	ug/kg	-	-	ND (7.6)	ND (9.0)	ND (8.5)	ND (8.0)	ND (9.7)	ND (9.5)	ND (9.4)	ND (8.7)	ND (9.0)	ND (9.2)
4-Chloroaniline	ug/kg	-	-	ND (11)	ND (14)	ND (13)	ND (12)	ND (15)	ND (14)	ND (14)	ND (13)	ND (14)	ND (14)
Carbazole	ug/kg	-	-	ND (4.6)	ND (5.5)	ND (5.2)	ND (4.9)	ND (5.9)	18.3 J	ND (5.7)	93.1	20.5 J	ND (5.8)
Caprolactam	ug/kg	-	-	ND (13)	ND (15) *	ND (14) *	ND (13) *	ND (16) *	ND (16) *	ND (16) *	ND (14) *	ND (15) *	ND (15) *
Chrysene	ug/kg	1000	3900	ND (10)	42.1	ND (11)	ND (11)	ND (13)	188	ND (12)	664	146	ND (12)
bis(2-Chloroethoxy)methane	ug/kg	-	-	ND (6.8)	ND (8.1)	ND (7.6)	ND (7.2)	ND (8.8)	ND (8.5)	ND (8.5)	ND (7.9)	ND (8.1)	ND (8.2)
bis(2-Chloroethyl)ether	ug/kg	-	-	ND (14)	ND (16)	ND (15)	ND (15)	ND (18)	ND (17)	ND (17)	ND (16)	ND (16)	ND (17)
2,2'-Oxybis(1-chloropropane)	ug/kg	-	-	ND (11)	ND (14)	ND (13)	ND (12)	ND (15)	ND (14)	ND (14)	ND (13)	ND (14)	ND (14)
4-Chlorophenyl phenyl ether	ug/kg	-	-	ND (10)	ND (12)	ND (12)	ND (11)	ND (13)	ND (13)	ND (13)	ND (12)	ND (12)	ND (12)
2,4-Dinitrotoluene	ug/kg	-	-	ND (9.9)	ND (12)	ND (11)	ND (10)	ND (13)	ND (12)	ND (12)	ND (11)	ND (12) *	ND (12) *
2,6-Dinitrotoluene	ug/kg	-	-	ND (16)	ND (19)	ND (18)	ND (17)	ND (21)	ND (20)	ND (20)	ND (18)	ND (19)	ND (19)
3,3'-Dichlorobenzidine	ug/kg	-	-	ND (27)	ND (32)	ND (30)	ND (28)	ND (34)	ND (33)	ND (33)	ND (31)	ND (32)	ND (32)
1,4-Dioxane	ug/kg	100	13000	ND (21)	ND (25)	ND (24)	ND (22)	ND (27)	ND (26)	ND (26)	ND (24)	ND (25)	ND (25)
Dibenzo(a,h)anthracene	ug/kg	330	330	ND (14)	27.7 J	ND (16)	ND (15)	ND (18)	56.2	24.4 J	131	23.5 J	ND (17)
Dibenzofuran	ug/kg	7000	59000	ND (13)	ND (15)	ND (15)	ND (14)	ND (17)	ND (16)	ND (16)	157	ND (15)	ND (16)
Di-n-butyl phthalate	ug/kg	-	-	ND (5.2)	ND (6.2)	98.8 B	39.4 JB	81.7 JB	21.0 JB	ND (6.5)	62.8 JB	ND (6.2)	ND (6.3)
Di-n-octyl phthalate	ug/kg	-	-	ND (7.9)	ND (9.5)	ND (8.9)	ND (8.4)	ND (10)	ND (9.9)	ND (9.9)	ND (9.1)	ND (9.4)	ND (9.6)
Diethyl phthalate	ug/kg	-	-	ND (6.8)	ND (8.1)	ND (7.6)	ND (7.2)	ND (8.7)	ND (8.5)	ND (8.4)	ND (7.8)	ND (8.1)	ND (8.2)
Dimethyl phthalate	ug/kg	-	-	ND (5.7)	ND (6.8)	ND (6.4)	ND (6.0)	ND (7.3)	ND (7.1)	ND (7.1)	ND (6.5)	ND (6.8)	ND (6.9)
bis(2-Ethylhexyl)phthalate	ug/kg	-	-	ND (7.5)	ND (8.9)	ND (8.4)	ND (7.9)	ND (9.6)	ND (9.3)	ND (9.3)	ND (8.6)	ND (8.9)	ND (9.0)
Fluoranthene	ug/kg	100000	100000	ND (14)	71.1	ND (16)	ND (15)	ND (18)	407	ND (18)	1280	239	ND (17)
Fluorene	ug/kg	30000	100000	ND (15)	ND (17)	ND (16)	ND (16)	ND (19)	18.7 J	ND (18)	146	20.4 J	ND (18)
Hexachlorobenzene	ug/kg	330	1200	ND (8.1)	ND (9.6)	ND (9.0)	ND (8.6)	ND (10)	ND (10)	ND (10)	ND (9.3)	ND (9.6)	ND (9.7)
Hexachlorobutadiene	ug/kg	-	-	ND (13)	ND (15)	ND (14)	ND (14)	ND (16)	ND (16)	ND (16)	ND (15)	ND (15)	ND (15)
Hexachlorocyclopentadiene	ug/kg	-	-	ND (13)	ND (15)	ND (14)	ND (13)	ND (16)	ND (16)	ND (16)	ND (15)	ND (15)	ND (15)
Hexachloroethane	ug/kg	-	-	ND (16)	ND (19)	ND (18)	ND (17)	ND (20)	ND (20)	ND (20)	ND (18)	ND (19)	ND (19)
Indeno(1,2,3-cd)pyrene	ug/kg	500	500	ND (15)	50.7	ND (17)	ND (16)	ND (19)	164	34.7 J	57.3	85.2	ND (18)
Isophorone	ug/kg	-	-	ND (6.8)	ND (8.1)	ND (7.6)	ND (7.2)	ND (8.8)	ND (8.5)	ND (8.5)	ND (7.9)	ND (8.1)	ND (8.2)
2-Methylnaphthalene	ug/kg	-	-	ND (7.2)	ND (8.6)	ND (8.1)	ND (7.6)	ND (9.3)	ND (9.0)	ND (9.0)	119	31.0 J	ND (8.7)
2-Nitroaniline	ug/kg	-	-	ND (7.5)	ND (9.0)	ND (8.4)	ND (8.0)	ND (9.7)	ND (9.4)	ND (9.3)	ND (8.7)	ND (8.9)	ND (9.1)
3-Nitroaniline	ug/kg	-	-	ND (8.0)	ND (9.5)	ND (8.9)	ND (8.5)	ND (10)	ND (9.9)	ND (9.9)	ND (9.2)	ND (9.5)	ND (9.6)
4-Nitroaniline	ug/kg	-	-	ND (7.2)	ND (8.8)	ND (8.3)	ND (7.8)	ND (9.5)	ND (9.2)	ND (9.2)	ND (8.5)	ND (8.8) *	ND (9.0) *
Naphthalene	ug/kg	12000	100000	ND (9.0)	11.7 J	ND (10)	ND (9.5)	ND (12)	11.6 J	ND (11)	582	33.1 J	ND (11)
Nitrobenzene	ug/kg	-	15000	ND (12)	ND (15)	ND (14)	ND (13)	ND (16)	ND (15)	ND (15)	ND (14)	ND (15)	ND (15)
N-Nitroso-di-n-propylamine	ug/kg	-	-	ND (9.2)	ND (11)	ND (10)	ND (9.8)	ND (12)	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)
N-Nitrosodiphenylamine	ug/kg	-	-	ND (12)	ND (14)	ND (13)	ND (12)	ND (15)	ND (15)	ND (14)	ND (13)	ND (14)	ND (14)
Phenanthrene	ug/kg	100000	100000	ND (11)	37.3 J	ND (12)	ND (11)	ND (14)	219	ND (13)	819	216	ND (13)
Pyrene	ug/kg	100000	100000	ND (10)	67.2	ND (11)	ND (11)	ND (13)	340	19.1 J	1150	215	ND (12)
1,2,4,5-Tetrachlorobenzene	ug/kg	-	-	ND (8.1)	ND (9.7)	ND (9.1)	ND (8.6)	ND (10)	ND (10)	ND (10)	ND (9.3)	ND (9.6)	ND (9.8)

Notes:

ND = Compound not detected

J = An estimated value

Exceeds SCOs

Table 4
SVOCs in Soil
1001 Whitlock Avenue, Bronx, NY

Client Sample ID:		NY SCO - Unrestricted Use (6 NYCRR 375-6.12/06)	NY SCO - Restricted Residential w/CP-51 (10/10) (6 NYCRR 375-6 12/06)	RI-SB7 (14.5- 15')	RI-SB8 (4.5-5')	RI-SB8 (9.5- 10')	RI-SB8 (12.5- 13')	DUP-2	RI-SB9 (4.5-5')	RI-SB9 (9.5- 10')	RI-SB9 (14.5- 15')	R1-SB10(2-2.5')
Lab Sample ID:				JD39846-3	JD39846-5	JD39846-6	JD39846-7	JD39846-8	JD39846-9	JD39846-10	JD39846-11	JD39915-1
Date Sampled:				2/16/2022	2/16/2022	2/16/2022	2/16/2022	2/16/2022	2/16/2022	2/16/2022	2/16/2022	2/17/2022
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
MS Semi-volatiles (SW846 8270E)												
2-Chlorophenol	ug/kg	-	-	ND (18)	ND (19)	ND (19)	ND (18)	ND (19)	ND (18)	ND (18)	ND (21)	ND (18)
4-Chloro-3-methyl phenol	ug/kg	-	-	ND (22)	ND (23)	ND (24)	ND (22)	ND (24)	ND (22)	ND (22)	ND (26)	ND (22)
2,4-Dichlorophenol	ug/kg	-	-	ND (31)	ND (33)	ND (33)	ND (30)	ND (34)	ND (31)	ND (30)	ND (36)	ND (31)
2,4-Dimethylphenol	ug/kg	-	-	ND (64)	ND (68)	ND (69)	ND (63)	ND (70)	ND (65)	ND (63)	ND (74)	ND (64)
2,4-Dinitrophenol	ug/kg	-	-	ND (140)	ND (140)	ND (150)	ND (130)	ND (150)	ND (140)	ND (130)	ND (160)	ND (140)
4-B-Dinitro-o-cresol	ug/kg	-	-	ND (38)	ND (41)	ND (42)	ND (38)	ND (42)	ND (39)	ND (38)	ND (45)	ND (39)
2-Methylphenol	ug/kg	330	100000	ND (23)	ND (24)	ND (25)	ND (23)	ND (25)	ND (23)	ND (23)	ND (27)	ND (23)
3,4-Methylphenol	ug/kg	-	-	ND (30)	ND (32)	ND (32)	ND (29)	ND (32)	ND (30)	ND (29)	ND (34)	ND (30)
2-Nitrophenol	ug/kg	-	-	ND (34)	ND (25)	ND (26)	ND (24)	ND (26)	ND (24)	ND (23)	ND (28)	ND (24)
4-Nitrophenol	ug/kg	-	-	ND (96)	ND (100)	ND (100)	ND (95)	ND (100)	ND (97)	ND (95)	ND (110)	ND (96) *
Pentachlorophenol	ug/kg	800	6700	ND (34)	ND (36)	ND (37)	ND (33)	ND (37)	ND (34)	ND (33)	ND (39)	ND (34)
Phenol	ug/kg	330	100000	ND (19)	ND (20)	ND (20)	ND (19)	ND (21)	ND (19)	ND (19)	ND (22)	ND (19)
2,3,4,6-Tetrachlorophenol	ug/kg	-	-	ND (24)	ND (25)	ND (26)	ND (24)	ND (26)	ND (24)	ND (23)	ND (28)	ND (24)
2,4,5-Trichlorophenol	ug/kg	-	-	ND (27)	ND (29)	ND (29)	ND (27)	ND (29)	ND (27)	ND (27)	ND (31)	ND (27)
2,4,6-Trichlorophenol	ug/kg	-	-	ND (21)	ND (23)	ND (23)	ND (21)	ND (23)	ND (22)	ND (21)	ND (25)	ND (21)
Acenaphthene	ug/kg	20000	100000	ND (12)	ND (13)	ND (13)	ND (12)	ND (14)	ND (13)	ND (12)	ND (14)	ND (12)
Acenaphthylene	ug/kg	100000	100000	ND (18)	ND (19)	ND (20)	ND (18)	ND (20)	ND (18)	ND (18)	ND (21)	18.0 J
Acetophenone	ug/kg	-	-	ND (7.7)	ND (8.2)	ND (8.4)	ND (7.7)	ND (8.4)	ND (7.8)	ND (7.6)	ND (9.0)	ND (7.8)
Anthracene	ug/kg	100000	100000	ND (22)	ND (23)	ND (24)	ND (22)	ND (24)	ND (22)	ND (22)	ND (26)	ND (22)
Atrazine	ug/kg	-	-	ND (15)	ND (16)	ND (17)	ND (15)	ND (17)	ND (16)	ND (15)	ND (18)	ND (15)
Benzo(a)anthracene	ug/kg	1000	1000	ND (10)	75.6	26.8 J	ND (10)	49.7	15.5 J	15.2 J	60.2	62.3
Benzo(a)pyrene	ug/kg	1000	1000	ND (16)	78.2	19.0 J	ND (16)	63.6	24.6 J	ND (16)	51.3	81.2
Benzo(b)fluoranthene	ug/kg	1000	1000	ND (16)	9/2	23.4 J	ND (16)	81.1	43.1	ND (16)	57.4	98.7
Benzo(g,h,i)perylene	ug/kg	100000	100000	ND (18)	55.7	ND (20)	ND (18)	55.9	36.8	ND (18)	28.8 J	66.3
Benzo(k)fluoranthene	ug/kg	800	3900	ND (17)	36.5 J	ND (18)	ND (17)	30.4 J	ND (17)	ND (17)	24.8 J	51
4-Bromophenyl phenyl ether	ug/kg	-	-	ND (14)	ND (15)	ND (15)	ND (14)	ND (15)	ND (14)	ND (14)	ND (16)	ND (14)
Butyl benzyl phthalate	ug/kg	-	-	ND (8.8)	ND (9.4)	ND (9.5)	ND (8.7)	ND (9.6)	ND (8.9)	ND (8.7)	ND (10)	ND (8.8)
1,1'-Biphenyl	ug/kg	-	-	ND (4.9)	ND (5.3)	ND (5.3)	ND (4.9)	ND (5.4)	ND (5.0)	ND (4.9)	ND (5.5)	ND (4.9)
Benzaldehyde	ug/kg	-	-	ND (8.9)	ND (9.5)	ND (9.7)	ND (8.8)	ND (9.7)	ND (9.0)	ND (8.8)	ND (10)	ND (8.9)
2-Chloronaphthalene	ug/kg	-	-	ND (8.6)	ND (9.1)	ND (9.3)	ND (8.5)	ND (9.3)	ND (8.6)	ND (8.4)	ND (9.9)	ND (8.6)
4-Chloroaniline	ug/kg	-	-	ND (13)	ND (14)	ND (14)	ND (13)	ND (14)	ND (13)	ND (13)	ND (15)	ND (13)
Carbazole	ug/kg	-	-	ND (5.2)	ND (5.6)	ND (5.7)	ND (5.2)	ND (5.7)	ND (5.3)	ND (5.1)	ND (6.0)	5.8 J
Caprolactam	ug/kg	-	-	ND (14) *	ND (15) *	ND (15) *	ND (14) *	ND (16) *	ND (14) *	ND (14) *	ND (16) *	ND (14)
Chrysene	ug/kg	1000	3900	ND (11)	87.2	23.1 J	ND (11)	59.6	19.7 J	14.2 J	50.6	76.2
bis(2-Chloroethoxy)methane	ug/kg	-	-	ND (7.7)	ND (8.2)	ND (8.4)	ND (7.6)	ND (8.4)	ND (7.8)	ND (7.6)	ND (8.9)	ND (7.7)
bis(2-Chloroethyl)ether	ug/kg	-	-	ND (16)	ND (17)	ND (17)	ND (15)	ND (16)	ND (15)	ND (15)	ND (18)	ND (16) *
2,2'-Oxybis(1-chloropropane)	ug/kg	-	-	ND (13)	ND (14)	ND (14)	ND (13)	ND (14)	ND (13)	ND (13)	ND (15)	ND (13)
4-Chlorophenyl phenyl ether	ug/kg	-	-	ND (12)	ND (12)	ND (13)	ND (12)	ND (13)	ND (12)	ND (11)	ND (14)	ND (12)
2,4-Dinitrotoluene	ug/kg	-	-	ND (11) *	ND (12) *	ND (12) *	ND (11) *	ND (12) *	ND (11) *	ND (11) *	ND (13) *	ND (11)
2,6-Dinitrotoluene	ug/kg	-	-	ND (18)	ND (19)	ND (20)	ND (18)	ND (20)	ND (18)	ND (18)	ND (21)	ND (18)
3,3'-Dichlorobenzidine	ug/kg	-	-	ND (30)	ND (32)	ND (33)	ND (30)	ND (33)	ND (30)	ND (30)	ND (35)	ND (30)
1,4-Dioxane	ug/kg	100	13000	ND (24)	ND (25)	ND (26)	ND (24)	ND (26)	ND (24)	ND (23)	ND (28)	ND (24)
Dibenzo(a,h)anthracene	ug/kg	330	330	ND (16)	ND (17)	ND (17)	ND (16)	ND (17)	ND (16)	ND (16)	ND (18)	20.9 J
Dibenzofuran	ug/kg	7000	59000	ND (15)	ND (16)	ND (16)	ND (15)	ND (16)	ND (15)	ND (14)	ND (17)	ND (15)
Di-n-butyl phthalate	ug/kg	-	-	ND (5.9)	ND (6.2)	ND (6.4)	ND (5.8)	ND (6.4)	ND (5.9)	ND (5.8)	ND (6.8)	35.8 JB
Di-n-octyl phthalate	ug/kg	-	-	ND (9.0)	ND (9.5)	ND (9.7)	ND (8.9)	ND (9.8)	ND (9.0)	ND (8.8)	ND (10)	ND (9.0) *
Diethyl phthalate	ug/kg	-	-	ND (7.7)	ND (8.2)	ND (8.3)	ND (7.6)	ND (8.4)	ND (7.7)	ND (7.6)	ND (8.9)	ND (7.7)
Dimethyl phthalate	ug/kg	-	-	ND (6.4)	ND (6.8)	ND (6.9)	ND (6.3)	ND (7.0)	ND (6.5)	ND (6.3)	ND (7.4)	ND (6.4)
bis(2-Ethylhexyl)phthalate	ug/kg	-	-	ND (8.4)	ND (9.0)	ND (9.1)	ND (8.3)	ND (9.2)	ND (8.5)	ND (8.3)	ND (9.8)	ND (8.4)
Fluoranthene	ug/kg	100000	100000	ND (16)	135	49.8	ND (16)	74.2	ND (16)	16.2 J	87.9	103
Fluorene	ug/kg	30000	100000	ND (17)	ND (18)	ND (18)	ND (16)	ND (18)	ND (17)	ND (16)	ND (19)	ND (17)
Hexachlorobenzene	ug/kg	330	1200	ND (9.1)	ND (9.7)	ND (9.9)	ND (9.0)	ND (9.9)	ND (9.2)	ND (9.0)	ND (11)	ND (9.1)
Hexachlorobutadiene	ug/kg	-	-	ND (14)	ND (15)	ND (16)	ND (14)	ND (16)	ND (15)	ND (14)	ND (17)	ND (15)
Hexachlorocyclopentadiene	ug/kg	-	-	ND (14)	ND (15)	ND (16)	ND (14)	ND (16)	ND (14)	ND (14)	ND (17)	ND (14) *
Hexachloroethane	ug/kg	-	-	ND (18)	ND (19)	ND (19)	ND (18)	ND (19)	ND (18)	ND (18)	ND (21)	ND (18)
Indeno(1,2,3-cd)pyrene	ug/kg	500	500	ND (17)	65.5	ND (18)	ND (17)	66.1	44	ND (17)	35.4 J	77.8
Isophorone	ug/kg	-	-	ND (7.7)	ND (8.2)	ND (8.4)	ND (7.6)	ND (8.4)	ND (7.8)	ND (7.6)	ND (8.9)	ND (7.7) *
2-Methylnaphthalene	ug/kg	-	-	ND (8.1)	ND (8.7)	ND (8.8)	ND (8.1)	ND (8.9)	ND (8.2)	ND (8.0)	ND (9.4)	ND (8.2)
2-Nitroaniline	ug/kg	-	-	ND (8.5)	ND (9.0)	ND (9.2)	ND (8.4)	ND (9.3)	ND (8.6)	ND (8.4)	ND (9.8)	ND (8.5) *
3-Nitroaniline	ug/kg	-	-	ND (9.0)	ND (9.6)	ND (9.8)	ND (8.9)	ND (9.8)	ND (9.1)	ND (8.9)	ND (10)	ND (9.0)
4-Nitroaniline	ug/kg	-	-	ND (9.3) *	ND (9.9) *	ND (10) *	ND (9.2) *	ND (10) *	ND (9.4) *	ND (9.2) *	ND (11) *	ND (9.3)
Naphthalene	ug/kg	12000	100000	ND (10)	ND (11)	ND (11)	ND (10)	ND (11)	ND (10)	ND (10)	ND (12)	10.8 J
Nitrobenzene	ug/kg	-	15000	ND (14)	ND (15)	ND (15)	ND (14)	ND (15)	ND (14)	ND (14)	ND (16)	ND (14) *
N-Nitroso-di-n-propylamine	ug/kg	-	-	ND (10)	ND (11)	ND (11)	ND (10)	ND (11)	ND (10)	ND (10)	ND (12)	ND (10)
N-Nitrosodiphenylamine	ug/kg	-	-	ND (13)	ND (14)	ND (14)	ND (13)	ND (14)	ND (13)	ND (13)	ND (15)	ND (13)
Phenanthrene	ug/kg	100000	100000	ND (12)	71.8	38.5 J	ND (12)	37.8 J	ND (12)	12.1 J	26.3 J	38.8
Pyrene	ug/kg	100000	100000	ND (12)	130	41.2	ND (11)	69.9	17.0 J	18.3 J	78.9	108
1,2,4,5-Tetrachlorobenzene	ug/kg	-	-	ND (9.1)	ND (9.7)	ND (9.9)	ND (9.1)	ND (10)	ND (9.2)	ND (9.0)	ND (11)	ND (9.2)

Notes:

ND = Compound not detected

J = An estimated value

Exceeds SCO:

Table 5
Pesticides and PCBs in Soil
1001 Whitlock Avenue, Bronx, NY

Client Sample ID:		NY SCO - Unrestricted Use (6 NYCRR 375-6 12/06)	NY SCO - Restricted Residential w/CP-51 (10/10) (6 NYCRR 375-6 12/06)	RI-SB3 (4.5-5')	RI-SB3 (9.5- 10')	RI-SB3 (14.5- 15')	RI-SB4 (4.5-5')	DUP-1	RI-SB4 (9.5- 10')	RI-SB4 (14.5- 15')
Lab Sample ID:				JD39775-1	JD39775-2	JD39775-3	JD39775-5	JD39775-6	JD39775-7	JD39775-8
Date Sampled:				2/14/2022	2/14/2022	2/14/2022	2/15/2022	2/15/2022	2/15/2022	2/15/2022
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil
GC/LC Semi-volatiles (SW846 8081B)										
Aldrin	ug/kg	5	97	ND (0.64)	ND (0.60)	ND (0.63)	ND (0.60)	ND (0.61)	ND (0.58)	ND (0.53)
alpha-BHC	ug/kg	20	480	ND (0.63)	ND (0.59)	ND (0.62)	ND (0.60)	ND (0.60)	ND (0.57)	ND (0.52)
beta-BHC	ug/kg	36	360	ND (0.70)	ND (0.66)	ND (0.69)	ND (0.66)	ND (0.67)	ND (0.64)	ND (0.58)
delta-BHC	ug/kg	40	100000	ND (0.74)	ND (0.70)	ND (0.74)	ND (0.70)	ND (0.71)	ND (0.68)	ND (0.62)
gamma-BHC (Lindane)	ug/kg	100	1300	ND (0.57)	ND (0.54)	ND (0.57)	ND (0.54)	ND (0.55)	ND (0.52)	ND (0.48)
alpha-Chlordane	ug/kg	94	4200	ND (0.63)	ND (0.59)	ND (0.62)	ND (0.59)	ND (0.60)	ND (0.57)	ND (0.52)
gamma-Chlordane	ug/kg	-	-	ND (0.35)	ND (0.33)	ND (0.35)	ND (0.33)	ND (0.34)	ND (0.32)	ND (0.29)
Dieldrin	ug/kg	5	200	ND (0.53)	ND (0.50)	ND (0.53)	ND (0.50)	ND (0.51)	ND (0.48)	ND (0.44)
4,4'-DDD	ug/kg	3.3	13000	ND (0.71)	ND (0.67)	ND (0.71)	ND (0.67)	ND (0.68)	ND (0.65)	ND (0.59)
4,4'-DDE	ug/kg	3.3	8900	ND (0.68)	ND (0.64)	ND (0.67)	ND (0.64)	ND (0.65)	ND (0.62)	ND (0.57)
4,4'-DDT	ug/kg	3.3	7900	ND (0.69)	ND (0.64)	ND (0.68)	ND (0.65)	ND (0.66)	ND (0.63)	ND (0.57)
Endrin	ug/kg	14	11000	ND (0.60)	ND (0.56)	ND (0.60)	ND (0.57)	ND (0.58)	ND (0.55)	ND (0.50)
Endosulfan sulfate	ug/kg	2400	24000	ND (0.61)	ND (0.57)	ND (0.60)	ND (0.57)	ND (0.58)	ND (0.55)	ND (0.50)
Endrin aldehyde	ug/kg	-	-	ND (0.44)	ND (0.41)	ND (0.44)	ND (0.42)	ND (0.42)	ND (0.40)	ND (0.37)
Endosulfan-I	ug/kg	2400	24000	ND (0.45)	ND (0.42)	ND (0.44)	ND (0.42)	ND (0.43)	ND (0.41)	ND (0.37)
Endosulfan-II	ug/kg	2400	24000	ND (0.48)	ND (0.45)	ND (0.48)	ND (0.46)	ND (0.46)	ND (0.44)	ND (0.40)
Heptachlor	ug/kg	42	2100	ND (0.67)	ND (0.63)	ND (0.66)	ND (0.63)	ND (0.64)	ND (0.61)	ND (0.56)
Heptachlor epoxide	ug/kg	-	-	ND (0.54)	ND (0.51)	ND (0.54)	ND (0.51)	ND (0.52)	ND (0.49)	ND (0.45)
Methoxychlor	ug/kg	-	-	ND (0.62)	ND (0.58)	ND (0.61)	ND (0.58)	ND (0.59)	ND (0.56)	ND (0.51)
Endrin ketone	ug/kg	-	-	ND (0.56) ^b	ND (0.53)	ND (0.58) ^b	ND (0.53) ^b	ND (0.54) ^b	ND (0.51) ^b	ND (0.47) ^b
Toxaphene	ug/kg	-	-	ND (18)	ND (17)	ND (18)	ND (17)	ND (17)	ND (16)	ND (15)
GC/LC Semi-volatiles (SW846 8082A)										
Aroclor 1016	ug/kg	100	1000	ND (18)	ND (17)	ND (18)	ND (17)	ND (17)	ND (16)	ND (17)
Aroclor 1221	ug/kg	100	1000	ND (24)	ND (23)	ND (24)	ND (23)	ND (23)	ND (22)	ND (23)
Aroclor 1232	ug/kg	100	1000	ND (25)	ND (23)	ND (25)	ND (23)	ND (24)	ND (23)	ND (24)
Aroclor 1242	ug/kg	100	1000	ND (16)	ND (15)	ND (16)	ND (15)	ND (15)	ND (14)	ND (15)
Aroclor 1248	ug/kg	100	1000	ND (35)	ND (32)	ND (34)	ND (33)	ND (33)	ND (31)	ND (33)
Aroclor 1254	ug/kg	100	1000	ND (21)	ND (20)	ND (21)	ND (20)	ND (20)	ND (19)	ND (20)
Aroclor 1260	ug/kg	100	1000	ND (17)	ND (15)	ND (16)	ND (16)	ND (16)	ND (15)	ND (16)
Aroclor 1268	ug/kg	100	1000	ND (16)	ND (15)	ND (16)	ND (15)	ND (16)	ND (15)	ND (16)
Aroclor 1262	ug/kg	100	1000	ND (25)	ND (24)	ND (25)	ND (24)	ND (24)	ND (23)	ND (24)

Notes:
ND = Compound not detected
J = An estimated value

Table 5
Pesticides and PCBs in Soil
1001 Whitlock Avenue, Bronx, NY

Client Sample ID:		NY SCO - Unrestricted Use (6 NYCRR 375-6.12/06)	NY SCO - Restricted Residential w/CP-51 (10/10) (6 NYCRR 375-6 12/06)	RI-SB5 (4.5-5')	RI-SB5 (9.5- 10')	RI-SB5 (14.5- 15')	RI-SB5 (19.5- 20')	RI-SB6 (4.5-5')	RI-SB6 (9.5- 10')	RI-SB6 (12.5- 13')	RI-SB7 (4.5-5')	RI-SB7 (9.5- 10')	RI-SB7 (14.5- 15')
Lab Sample ID:				JD39775-10	JD39775-11	JD39775-12	JD39775-13	JD39775-14	JD39775-15	JD39775-16	JD39846-1	JD39846-2	JD39846-3
Date Sampled:				2/15/2022	2/15/2022	2/15/2022	2/15/2022	2/15/2022	2/15/2022	2/15/2022	2/16/2022	2/16/2022	2/16/2022
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
GC/LC Semi-volatiles (SW846 8081B)													
Aldrin	ug/kg	5	97	ND (0.66)	ND (0.57)	ND (0.58)	ND (0.62)	ND (0.63)	ND (0.63)	ND (0.61)	ND (0.61)	ND (0.61)	ND (0.58)
alpha-BHC	ug/kg	20	480	ND (0.65)	ND (0.56)	ND (0.57)	ND (0.62)	ND (0.62)	ND (0.62)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.57)
beta-BHC	ug/kg	36	360	ND (0.72)	ND (0.63)	ND (0.64)	ND (0.69)	ND (0.69)	ND (0.69)	ND (0.67)	ND (0.67)	ND (0.67)	ND (0.64)
delta-BHC	ug/kg	40	100000	ND (0.77)	ND (0.66)	ND (0.67)	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.71)	ND (0.71)	ND (0.71)	ND (0.68)
gamma-BHC (Lindane)	ug/kg	100	1300	ND (0.59)	ND (0.51)	ND (0.52)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.54)	ND (0.54)	ND (0.55)	ND (0.52)
alpha-Chlordane	ug/kg	94	4200	ND (0.65)	ND (0.56)	ND (0.57)	ND (0.61)	ND (0.62)	ND (0.62)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.57)
gamma-Chlordane	ug/kg	-	-	ND (0.36)	ND (0.31)	ND (0.32)	ND (0.34)	ND (0.35)	ND (0.35)	ND (0.33)	ND (0.33)	ND (0.34)	ND (0.32)
Dieldrin	ug/kg	5	200	ND (0.55)	ND (0.48)	ND (0.48)	ND (0.52)	ND (0.52)	ND (0.53)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.48)
4,4'-DDD	ug/kg	3.3	13000	ND (0.73)	ND (0.64)	ND (0.65)	ND (0.70)	1.2	ND (0.70)	ND (0.68)	ND (0.68)	ND (0.68)	ND (0.65)
4,4'-DDE	ug/kg	3.3	8900	ND (0.70)	ND (0.61)	ND (0.62)	ND (0.67)	ND (0.67)	ND (0.67)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.62)
4,4'-DDT	ug/kg	3.3	7900	ND (0.71)	ND (0.61)	ND (0.62)	ND (0.67)	0.75 J ^b	ND (0.68)	ND (0.65)	ND (0.65)	ND (0.66)	ND (0.62)
Endrin	ug/kg	14	11000	ND (0.62)	ND (0.54)	ND (0.55)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.57)	ND (0.57)	ND (0.58)	ND (0.55)
Endosulfan sulfate	ug/kg	2400	24000	ND (0.62)	ND (0.54)	ND (0.55)	ND (0.59)	ND (0.60)	ND (0.60)	ND (0.58)	ND (0.58)	ND (0.58)	ND (0.55)
Endrin aldehyde	ug/kg	-	-	ND (0.45)	ND (0.39)	ND (0.40)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.42)	ND (0.42)	ND (0.42)	ND (0.40)
Endosulfan-I	ug/kg	2400	24000	ND (0.46)	ND (0.40)	ND (0.40)	ND (0.44)	ND (0.44)	ND (0.44)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.41)
Endosulfan-II	ug/kg	2400	24000	ND (0.50)	ND (0.43)	ND (0.44)	ND (0.47)	ND (0.48)	ND (0.48)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.44)
Heptachlor	ug/kg	42	2100	ND (0.69)	ND (0.60)	ND (0.61)	ND (0.65)	ND (0.66)	ND (0.66)	ND (0.64)	ND (0.64)	ND (0.64)	ND (0.61)
Heptachlor epoxide	ug/kg	-	-	ND (0.56)	ND (0.49)	ND (0.49)	ND (0.53)	ND (0.53)	ND (0.54)	ND (0.52)	ND (0.52)	ND (0.52)	ND (0.49)
Methoxychlor	ug/kg	-	-	ND (0.64)	ND (0.55)	ND (0.56)	ND (0.60)	ND (0.61)	ND (0.61)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.56)
Endrin ketone	ug/kg	-	-	ND (0.58) ^b	ND (0.50) ^b	ND (0.51) ^b	ND (0.55) ^b	ND (0.55) ^b	ND (0.55)	ND (0.53) ^b	ND (0.53)	ND (0.54)	ND (0.51)
Toxaphene	ug/kg	-	-	ND (19)	ND (16)	ND (16)	ND (18)	ND (18)	ND (18)	ND (17)	ND (17)	ND (17)	ND (16)
GC/LC Semi-volatiles (SW846 8082A)													
Aroclor 1016	ug/kg	100	1000	ND (19)	ND (16)	ND (16)	ND (18)	ND (18)	ND (18)	ND (17)	ND (17)	ND (17)	ND (16)
Aroclor 1221	ug/kg	100	1000	ND (25)	ND (21)	ND (22)	ND (24)	ND (25)	ND (24)	ND (23)	ND (23)	ND (23)	ND (22)
Aroclor 1232	ug/kg	100	1000	ND (26)	ND (22)	ND (22)	ND (24)	ND (25)	ND (24)	ND (24)	ND (24)	ND (24)	ND (22)
Aroclor 1242	ug/kg	100	1000	ND (16)	ND (14)	ND (14)	ND (16)	ND (16)	ND (16)	ND (15)	ND (15)	ND (15)	ND (14)
Aroclor 1248	ug/kg	100	1000	ND (36)	ND (31)	ND (31)	ND (34)	ND (35)	ND (34)	ND (33)	ND (33)	ND (33)	ND (31)
Aroclor 1254	ug/kg	100	1000	ND (22)	ND (19)	ND (19)	ND (20)	ND (21)	ND (21)	ND (20)	ND (20)	ND (20)	ND (19)
Aroclor 1260	ug/kg	100	1000	ND (17)	ND (15)	ND (15)	ND (16)	ND (17)	ND (16)	ND (16)	ND (16) ^b	ND (16) ^b	ND (15) ^b
Aroclor 1268	ug/kg	100	1000	ND (17)	ND (15)	ND (15)	ND (16)	ND (17)	ND (16)	ND (16)	ND (16)	ND (16)	ND (15)
Aroclor 1262	ug/kg	100	1000	ND (26)	ND (23)	ND (23)	ND (25)	ND (26)	ND (25)	ND (24)	ND (24)	ND (24)	ND (23)

Notes:
ND = Compound not detected
J = An estimated value

Table 5
Pesticides and PCBs in Soil
1001 Whitlock Avenue, Bronx, NY

Client Sample ID:		NY SCO - Unrestricted Use (6 NYCRR 375-6.12/06)	NY SCO - Restricted Residential w/CP-51 (10/10) (6 NYCRR 375-6 12/06)	RI-SB8 (4.5-5')	RI-SB8 (9.5- 10')	RI-SB8 (12.5- 13')	DUP-2	RI-SB9 (4.5-5')	RI-SB9 (9.5- 10')	RI-SB9 (14.5- 15')	R1-SB10(2-2.5')
Lab Sample ID:				JD39846-5	JD39846-6	JD39846-7	JD39846-8	JD39846-9	JD39846-10	JD39846-11	JD39915-1
Date Sampled:				2/16/2022	2/16/2022	2/16/2022	2/16/2022	2/16/2022	2/16/2022	2/16/2022	2/17/2022
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
GC/LC Semi-volatiles (SW846 8081B)											
Aldrin	ug/kg	5	97	ND (0.59)	ND (0.59)	ND (0.55)	ND (0.60)	ND (0.62)	ND (0.59)	ND (0.66)	ND (0.59)
alpha-BHC	ug/kg	20	480	ND (0.59)	ND (0.58)	ND (0.55)	ND (0.60)	ND (0.61)	ND (0.58)	ND (0.66)	ND (0.58)
beta-BHC	ug/kg	36	360	ND (0.65)	ND (0.65)	ND (0.61)	ND (0.66)	ND (0.68)	ND (0.65)	ND (0.73)	ND (0.64)
delta-BHC	ug/kg	40	100000	ND (0.69)	ND (0.69)	ND (0.64)	ND (0.70)	ND (0.72)	ND (0.69)	ND (0.77)	ND (0.68)
gamma-BHC (Lindane)	ug/kg	100	1300	ND (0.53)	ND (0.53)	ND (0.49)	ND (0.54)	ND (0.55)	ND (0.53)	ND (0.59)	ND (0.52)
alpha-Chlordane	ug/kg	94	4200	ND (0.58)	ND (0.58)	ND (0.54)	ND (0.59)	ND (0.60)	ND (0.58)	ND (0.65)	ND (0.57)
gamma-Chlordane	ug/kg	-	-	ND (0.33)	ND (0.33)	ND (0.30)	ND (0.33)	ND (0.34)	ND (0.32)	ND (0.37)	ND (0.32)
Dieldrin	ug/kg	5	200	ND (0.50)	ND (0.49)	ND (0.46)	ND (0.50)	ND (0.51)	ND (0.49)	ND (0.55)	ND (0.49)
4,4'-DDD	ug/kg	3.3	13000	ND (0.66)	ND (0.66)	ND (0.62)	ND (0.67)	ND (0.69)	ND (0.66)	ND (0.74)	ND (0.65)
4,4'-DDE	ug/kg	3.3	8900	ND (0.63)	ND (0.63)	ND (0.59)	ND (0.64)	ND (0.66)	ND (0.63)	ND (0.71)	ND (0.62)
4,4'-DDT	ug/kg	3.3	7900	ND (0.64)	ND (0.64)	ND (0.59)	ND (0.65)	ND (0.66)	ND (0.63)	ND (0.71)	0.92 ^b
Endrin	ug/kg	14	11000	ND (0.56)	ND (0.56)	ND (0.52)	ND (0.57)	ND (0.58)	ND (0.56)	ND (0.63)	ND (0.55)
Endosulfan sulfate	ug/kg	2400	24000	ND (0.56)	ND (0.56)	ND (0.52)	ND (0.57)	ND (0.59)	ND (0.56)	ND (0.63)	ND (0.55)
Endrin aldehyde	ug/kg	-	-	ND (0.41)	ND (0.41)	ND (0.38)	ND (0.42)	ND (0.42)	ND (0.41)	ND (0.46)	ND (0.40)
Endosulfan-I	ug/kg	2400	24000	ND (0.42)	ND (0.41)	ND (0.39)	ND (0.42)	ND (0.43)	ND (0.41)	ND (0.46)	ND (0.41)
Endosulfan-II	ug/kg	2400	24000	ND (0.45)	ND (0.45)	ND (0.42)	ND (0.46)	ND (0.47)	ND (0.45)	ND (0.50)	ND (0.44)
Heptachlor	ug/kg	42	2100	ND (0.62)	ND (0.62)	ND (0.58)	ND (0.63)	ND (0.65)	ND (0.62)	ND (0.69)	ND (0.61)
Heptachlor epoxide	ug/kg	-	-	ND (0.51)	ND (0.50)	ND (0.47)	ND (0.51)	ND (0.53)	ND (0.50)	ND (0.56)	ND (0.50)
Methoxychlor	ug/kg	-	-	ND (0.57)	ND (0.57)	ND (0.53)	ND (0.58)	ND (0.60)	ND (0.57)	ND (0.64)	ND (0.56)
Endrin ketone	ug/kg	-	-	ND (0.52)	ND (0.52)	ND (0.49)	ND (0.53)	ND (0.54)	ND (0.52)	ND (0.58)	ND (0.51) ^b
Toxaphene	ug/kg	-	-	ND (17)	ND (17)	ND (16)	ND (17)	ND (17)	ND (17)	ND (19)	ND (17)
GC/LC Semi-volatiles (SW846 8082A)											
Aroclor 1016	ug/kg	100	1000	ND (17)	ND (17)	ND (16)	ND (17)	ND (17)	ND (16)	ND (19)	ND (17)
Aroclor 1221	ug/kg	100	1000	ND (22)	ND (22)	ND (21)	ND (23)	ND (23)	ND (21)	ND (25)	ND (22)
Aroclor 1232	ug/kg	100	1000	ND (23)	ND (23)	ND (21)	ND (23)	ND (24)	ND (22)	ND (26)	ND (23)
Aroclor 1242	ug/kg	100	1000	ND (15)	ND (15)	ND (14)	ND (15)	ND (15)	ND (14)	ND (17)	ND (15)
Aroclor 1248	ug/kg	100	1000	ND (32)	ND (32)	ND (30)	ND (33)	ND (33)	ND (31)	ND (36)	ND (32)
Aroclor 1254	ug/kg	100	1000	ND (19)	ND (19)	ND (18)	ND (20)	ND (20)	ND (19)	ND (22)	ND (19)
Aroclor 1260	ug/kg	100	1000	ND (15) ^a	ND (15) ^b	ND (14) ^b	ND (16) ^b	ND (16) ^b	ND (15) ^b	ND (17) ^b	ND (15)
Aroclor 1268	ug/kg	100	1000	ND (15)	ND (15)	ND (14)	ND (15)	ND (16)	ND (15)	ND (17)	ND (15)
Aroclor 1262	ug/kg	100	1000	ND (24)	ND (24)	ND (22)	ND (24)	ND (25)	ND (23)	ND (26)	ND (23)

Notes:
ND = Compound not detected
J = An estimated value

Table 6
Metals and Cyanide in Soil
1001 Whitlock Avenue, Bronx, NY

Client Sample ID:		NY SCO - Unrestricted Use (6 NYCRR 375-6 12/06)	NY SCO - Restricted Residential w/CP-51 (10/10) (6 NYCRR 375-6 12/06)	RI-SB3 (4.5-5')	RI-SB3 (9.5- 10')	RI-SB3 (14.5- 15')	RI-SB4 (4.5-5')	DUP-1	RI-SB4 (9.5- 10')	RI-SB4 (14.5- 15')
Lab Sample ID:				JD39775-1	JD39775-2	JD39775-3	JD39775-5	JD39775-6	JD39775-7	JD39775-8
Date Sampled:				2/14/2022	2/14/2022	2/14/2022	2/15/2022	2/15/2022	2/15/2022	2/15/2022
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil
Metals Analysis										
Aluminum	mg/kg	-		18200	13300	15800	22100	22700	11500	24600
Antimony	mg/kg	-		<2.5	4.6 ¹	<4.6 ¹	<12 ¹	<12 ¹	<2.3	10.7 ¹
Arsenic	mg/kg	13	16	3.3	<4.3 ¹	<4.6 ¹	<12 ¹	<12 ¹	2.4	<10 ¹
Barium	mg/kg	350	400	94.5	108	85.7	404	202	73.5	220
Beryllium	mg/kg	7.2	72	0.47	0.68 ¹	0.31	1.3 ¹	1.6 ¹	<0.23	1.1 ¹
Cadmium	mg/kg	2.5	4.3	<0.62	<0.54	<0.58	0.83	0.61	<0.56	<0.51
Calcium	mg/kg	-		1930	1650	1540	1940	1780	1360	1110
Chromium	mg/kg	-	-	30.5	33.6	27.1 ¹	39.7	39.5 ¹	22.9	42.4
Cobalt	mg/kg	-		10.1	11.1	8.9	18.4	18.8	9.4	23.3
Copper	mg/kg	50	270	26.5	28.9 ¹	24.0 ¹	52.2 ¹	63.4 ¹	26.9	26.7 ¹
Iron	mg/kg	-		22200	26700	24100	35900	38300	18800	40000
Lead	mg/kg	63	400	21.8	5.5	6.4	63.8	40.2	12.8	5.4
Magnesium	mg/kg	-	-	4760	4860	4540	9560	8420	3130	12000
Manganese	mg/kg	1600	2000	406	278	1240 ¹	751	1450 ¹	562	399
Mercury	mg/kg	0.18	0.81	0.047	0.057	<0.035	<0.037	<0.037	0.16	0.052
Nickel	mg/kg	30	310	20.5	23.3	19.2	34.1	33.2	19.4	49.4
Potassium	mg/kg	-	-	3150	4610	2380	11000	9610	2800	15600
Selenium	mg/kg	3.9	180	<2.5	<4.3 ¹	<4.6 ¹	<12 ¹	<12 ¹	<2.3	<10 ¹
Silver	mg/kg	2	180	<0.62	<1.1 ¹	<1.2 ¹	<3.0 ¹	<2.9 ¹	0.64	<2.5 ¹
Sodium	mg/kg	-	-	<1200	<1100	<1200	<1200	<1200	<1100	<1000
Thallium	mg/kg	-		<1.2	<2.2 ¹	<2.3 ¹	<6.0 ¹	<5.8 ¹	<1.1	<5.1 ¹
Vanadium	mg/kg	-		37.6	42.4	37.7	50.1	51	29.1	63.6
Zinc	mg/kg	109	10000	59.1	53.9	49.7	285	154	37.9	112
General Chemistry										
Cyanide	mg/kg	27	27	<0.32	<0.25	<0.28	<0.25	<0.29	<0.23	<0.29
Solids, Percent	%	-	-	82.7	88.2	86.2	84.2	86.3	89.7	96.9

Notes:

Exceeds SCOs

Table 6
Metals and Cyanide in Soil
1001 Whitlock Avenue, Bronx, NY

Client Sample ID:		NY SCO - Unrestricted Use (6 NYCRR 375-6 12/06)	NY SCO - Restricted Residential w/CP-51 (10/10) (6 NYCRR 375-6 12/06)	RI-SB5 (4.5-5')	RI-SB5 (9.5- 10')	RI-SB5 (14.5- 15')	RI-SB5 (19.5- 20')	RI-SB6 (4.5-5')	RI-SB6 (9.5- 10')	RI-SB6 (12.5- 13')	RI-SB7 (4.5-5')	RI-SB7 (9.5- 10')	RI-SB7 (14.5- 15')
Lab Sample ID:				JD39775-10	JD39775-11	JD39775-12	JD39775-13	JD39775-14	JD39775-15	JD39775-16	JD39846-1	JD39846-2	JD39846-3
Date Sampled:				2/15/2022	2/15/2022	2/15/2022	2/15/2022	2/15/2022	2/15/2022	2/15/2022	2/16/2022	2/16/2022	2/16/2022
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Metals Analysis													
Aluminum	mg/kg	-		18200	16400	19500	16700	15700	18200	14200	16400	22800	11600
Antimony	mg/kg	-		<12 ¹	<11 ¹	<10 ¹	<2.4	<12 ¹	<4.8 ¹	<2.4	<2.3	3.6	<2.4
Arsenic	mg/kg	13	16	<12 ¹	<11 ¹	<10 ¹	3.1	<12 ¹	<4.8 ¹	2.4	<4.6 ¹	<12 ¹	2.7
Barium	mg/kg	350	400	96.5	135	198	98.2	221	97.3	95.6	112	119	55.5
Beryllium	mg/kg	7.2	72	<1.2 ¹	<1.1 ¹	<1.0 ¹	0.73	<1.2 ¹	0.94 ¹	0.7	0.64 ¹	<1.2 ¹	0.44
Cadmium	mg/kg	2.5	4.3	<0.61	<0.54	<0.52	<0.61	0.87	<0.60	<0.59	<0.58	<0.58	<0.59
Calcium	mg/kg	-		2840	1530	1040	1850	3130	1820	1350	2450	2050	1410
Chromium	mg/kg	-	-	36.8	27.8	43	23.7	29	32.6	31.8	28.6	48.5	22.2
Cobalt	mg/kg	-		16.8	15.4	16.1	10.3	14.9	12	13.6	12.4	22.7	9.4
Copper	mg/kg	50	270	47.3 ¹	32.1 ¹	33.0 ¹	19	55.6 ¹	39.0 ¹	27.2	28.9 ¹	133 ¹	26.3
Iron	mg/kg	-		32000	33400	36000	20300	33200	25200	21300	26100	43500	17300
Lead	mg/kg	63	400	36	5.8	5.6	25.2	101	335	10.4	35.3	12.7	5.6
Magnesium	mg/kg	-	-	5660	6280	8500	3650	6120	5360	3960	4630	7860	3330
Manganese	mg/kg	1600	2000	410	527	263	458	909	203	213	651 ¹	585 ¹	326
Mercury	mg/kg	0.18	0.81	0.075	<0.035	<0.034	<0.036	0.15	0.31	0.15	0.083	0.061	<0.034
Nickel	mg/kg	30	310	31.3	28.1	27.6	20.3	301	23.3	25.8	25.1	31.3	20.1
Potassium	mg/kg	-	-	3140	6420	12600	<1200	5410	2380	2380	3280	3520	2400
Selenium	mg/kg	3.9	180	<12 ¹	<11 ¹	<10 ¹	<2.4	<12 ¹	<4.8 ¹	<2.4	<4.6 ¹	<12 ¹	<2.4
Silver	mg/kg	2	180	<3.0 ¹	<2.7 ¹	<2.6 ¹	<0.61	<2.9 ¹	<1.2 ¹	<0.59	<1.2 ¹	<2.9 ¹	0.63
Sodium	mg/kg	-	-	<1200	<1100	<1000	<1200	<1200	<1200	<1200	<1200	<1200	<1200
Thallium	mg/kg	-		<6.1 ¹	<5.4 ¹	<5.2 ¹	<1.2	<5.9 ¹	<2.4 ¹	<1.2	<2.3 ¹	<5.8 ¹	<1.2
Vanadium	mg/kg	-		54.3	44.4	55.3	38.4	39.4	44.7	38.3	37.6	61.9	29.8
Zinc	mg/kg	109	10000	75.3	83.2	92.2	55.8	177	96.7	58.5	86.8	71.8	38.4
General Chemistry													
Cyanide	mg/kg	27	27	<0.29	<0.25	<0.30	<0.26	0.27	<0.27	<0.23	<0.24	<0.28	<0.24
Solids, Percent	%	-	-	81.7	90.9	94.2	81.4	83.5	81.7	88.5	87.9	82.7	88.8

Notes:

Exceeds SCOs

Table 6
Metals and Cyanide in Soil
1001 Whitlock Avenue, Bronx, NY

Client Sample ID:		NY SCO - Unrestricted Use (6 NYCRR 375-6 12/06)	NY SCO - Restricted Residential w/CP-51 (10/10) (6 NYCRR 375-6 12/06)	RI-SB8 (4.5-5')	RI-SB8 (9.5- 10')	RI-SB8 (12.5- 13')	DUP-2	RI-SB9 (4.5-5')	RI-SB9 (9.5- 10')	RI-SB9 (14.5- 15')	RI-SB10(2-2.5')
Lab Sample ID:				JD39846-5	JD39846-6	JD39846-7	JD39846-8	JD39846-9	JD39846-10	JD39846-11	JD39915-1
Date Sampled:				2/16/2022	2/16/2022	2/16/2022	2/16/2022	2/16/2022	2/16/2022	2/16/2022	2/17/2022
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Metals Analysis											
Aluminum	mg/kg	-		23300	17700	24400	17200	16300	21300	14900	16300
Antimony	mg/kg	-		3	<2.3	3.7	<2.4	2.8	3.4	<2.7	2.5
Arsenic	mg/kg	13	16	<4.8 ¹	<4.6 ¹	<11 ¹	<4.8 ¹	<11 ¹	<11 ¹	3.6	3.1
Barium	mg/kg	350	400	107	117	160	78.8	211	195	71.1	152
Beryllium	mg/kg	7.2	72	0.70 ¹	0.62 ¹	<1.1 ¹	0.61 ¹	<1.1 ¹	<1.1 ¹	0.57	<1.2 ¹
Cadmium	mg/kg	2.5	4.3	0.6	<0.57	<0.56	<0.60	<0.55	<0.56	<0.67	3.2
Calcium	mg/kg	-		1910	1380	1570	1360	2750	642	1080	9050
Chromium	mg/kg	-	-	37	28.1	36.7	29.6	28.3	34.1	27.7	31.5
Cobalt	mg/kg	-		19.6	13.4	24.4	11.9	14.1	19.9	11.3	13.4
Copper	mg/kg	50	270	78.0¹	24.6 ¹	21.9 ¹	21.0 ¹	46.6 ¹	35.4 ¹	18.1	39.6
Iron	mg/kg	-		37800	28400	48000	27400	29600	41200	20300	22900
Lead	mg/kg	63	400	25.5	33.6	6.5	15	101	16.5	25.1	209
Magnesium	mg/kg	-	-	7870	5440	11100	5190	6470	7530	3180	9700
Manganese	mg/kg	1600	2000	558 ¹	269 ¹	286 ¹	572 ¹	297 ¹	1320 ¹	243	386
Mercury	mg/kg	0.18	0.81	0.1	0.12	<0.033	0.061	0.24	<0.036	0.059	0.33
Nickel	mg/kg	30	310	41.1	24.6	46.1	22.9	24.7	38.3	18.4	28.9
Potassium	mg/kg	-	-	4680	2290	11600	2320	6480	9040	<1300	3030
Selenium	mg/kg	3.9	180	<4.8 ¹	<4.6 ¹	<11 ¹	<4.8 ¹	<11 ¹	<11 ¹	<2.7	<2.3
Silver	mg/kg	2	180	<1.2 ¹	<1.1 ¹	<2.8 ¹	<1.2 ¹	<2.7 ¹	<2.8 ¹	<0.67	<2.9 ¹
Sodium	mg/kg	-	-	<1200	<1100	<1100	<1200	<1100	<1100	<1300	<1200
Thallium	mg/kg	-		<2.4 ¹	<2.3 ¹	<5.6 ¹	<2.4 ¹	<5.5 ¹	<5.6 ¹	<1.3	<5.9 ¹
Vanadium	mg/kg	-		54.2	39	48.4	41.9	47.6	41.9	39.1	39.1
Zinc	mg/kg	109	10000	424	80.1	117	65	125	103	52.2	2270
General Chemistry											
Cyanide	mg/kg	27	27	<0.26	<0.25	<0.24	<0.28	<0.26	<0.25	<0.33	<0.28
Solids, Percent	%	-	-	85	84.3	90.8	84.3	87.2	90.7	76.6	86.9

Notes:

Exceeds SCOs

Table 7
PFAS in Soil
1001 Whitlock Avenue, Bronx, NY

Client Sample ID:		NY PFAS Soil Guidance Value Unrestricted Use (2021)	NY PFAS Soil Guidance Value Residential (2021)	RI-SB3 (4.5-5')	RI-SB3 (9.5-10')	RI-SB3 (14.5-15')	RI-SB4 (4.5-5')	DUP-1	RI-SB4 (9.5-10')	RI-SB4 (14.5-15')	RI-SB5 (4.5-5')	RI-SB5 (9.5-10')
Lab Sample ID:				JD39775-1A	JD39775-2A	JD39775-3A	JD39775-5A	JD39775-6A	JD39775-7A	JD39775-8A	JD39775-10A	JD39775-11A
Date Sampled:				2/14/2022	2/14/2022	2/14/2022	2/15/2022	2/15/2022	2/15/2022	2/15/2022	2/15/2022	2/15/2022
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
MS Semi-volatiles (EPA 537M BY ID)												
Perfluorobutanoic acid	ug/kg	-		ND (0.45)	ND (0.44)	ND (0.44)	ND (0.45)	ND (0.44)	ND (0.43)	ND (0.40)	ND (0.47)	ND (0.42)
Perfluoropentanoic acid	ug/kg	-		ND (0.30)	ND (0.29)	ND (0.29)	ND (0.30)	ND (0.29)	ND (0.29)	ND (0.27)	ND (0.31)	ND (0.28)
Perfluorohexanoic acid	ug/kg	-		ND (0.30)	ND (0.29)	ND (0.29)	ND (0.30)	ND (0.29)	ND (0.29)	ND (0.27)	ND (0.31)	ND (0.28)
Perfluoroheptanoic acid	ug/kg	-		ND (0.30)	ND (0.29)	ND (0.29)	ND (0.30)	ND (0.29)	ND (0.29)	ND (0.27)	ND (0.31)	ND (0.28)
Perfluorooctanoic acid	ug/kg	0.66	6.6	ND (0.30)	ND (0.29)	ND (0.29)	ND (0.30)	ND (0.29)	ND (0.29)	ND (0.27)	ND (0.31)	ND (0.28)
Perfluorononanoic acid	ug/kg	-		ND (0.30)	ND (0.29)	ND (0.29)	ND (0.30)	ND (0.29)	ND (0.29)	ND (0.27)	ND (0.31)	ND (0.28)
Perfluorodecanoic acid	ug/kg	-		ND (0.30)	ND (0.29)	ND (0.29)	ND (0.30)	ND (0.29)	ND (0.29)	ND (0.27)	ND (0.31)	ND (0.28)
Perfluoroundecanoic acid	ug/kg	-		ND (0.30)	ND (0.29)	ND (0.29)	ND (0.30)	ND (0.29)	ND (0.29)	ND (0.27)	ND (0.31)	ND (0.28)
Perfluorododecanoic acid	ug/kg	-		ND (0.30)	ND (0.29)	ND (0.29)	ND (0.30)	ND (0.29)	ND (0.29)	ND (0.27)	ND (0.31)	ND (0.28)
Perfluorotridecanoic acid	ug/kg	-		ND (0.32)	ND (0.31)	ND (0.30)	ND (0.31)	ND (0.31)	ND (0.30)	ND (0.28)	ND (0.32)	ND (0.29)
Perfluorotetradecanoic acid	ug/kg	-		ND (0.30)	ND (0.29)	ND (0.29)	ND (0.30)	ND (0.29)	ND (0.29)	ND (0.27)	ND (0.31)	ND (0.28)
Perfluorobutanesulfonic acid	ug/kg	-		ND (0.30)	ND (0.29)	ND (0.29)	ND (0.30)	ND (0.29)	ND (0.29)	ND (0.27)	ND (0.31)	ND (0.28)
Perfluorohexanesulfonic acid	ug/kg	-		ND (0.30)	ND (0.29)	ND (0.29)	ND (0.30)	ND (0.29)	ND (0.29)	ND (0.27)	0.61	ND (0.28)
Perfluoroheptanesulfonic acid	ug/kg	-		ND (0.30)	ND (0.29)	ND (0.29)	ND (0.30)	ND (0.29)	ND (0.29)	ND (0.27)	ND (0.31)	ND (0.28)
Perfluorooctanesulfonic acid	ug/kg	0.88	8.8	0.38 J	ND (0.23)	ND (0.23)	0.56 J	ND (0.23)	0.27 J	ND (0.21)	10.9	ND (0.22)
Perfluorodecanesulfonic acid	ug/kg	-		ND (0.30)	ND (0.29)	ND (0.29)	ND (0.30)	ND (0.29)	ND (0.29)	ND (0.27)	ND (0.31)	ND (0.28)
PFOSA	ug/kg	-		ND (0.30)	ND (0.29)	ND (0.29)	ND (0.30)	ND (0.29)	ND (0.29)	ND (0.27)	ND (0.31)	ND (0.28)
MeFOSAA	ug/kg	-		ND (0.60)	ND (0.58)	ND (0.57)	ND (0.59)	ND (0.58)	ND (0.57)	ND (0.53)	ND (0.61)	ND (0.55)
EtFOSAA	ug/kg	-		ND (0.60)	ND (0.58)	ND (0.57)	ND (0.59)	ND (0.58)	ND (0.57)	ND (0.53)	ND (0.61)	ND (0.55)
6:2 Fluorotelomer sulfonate	ug/kg	-		ND (0.30)	ND (0.29)	ND (0.29)	ND (0.30)	ND (0.29)	ND (0.29)	ND (0.27)	ND (0.31)	ND (0.28)
8:2 Fluorotelomer sulfonate	ug/kg	-		ND (0.30)	ND (0.29)	ND (0.29)	ND (0.30)	ND (0.29)	ND (0.29)	ND (0.27)	ND (0.31)	ND (0.28)

Notes:

ND = Compound not detected

J = An estimated value

Exceeds Guidance Values

Table 7
PFAS in Soil
1001 Whitlock Avenue, Bronx, NY

Client Sample ID:		NY PFAS Soil Guidance Value	NY PFAS Soil Guidance Value	RI-SB5 (14.5- 15')	RI-SB5 (19.5- 20')	RI-SB6 (4.5-5')	RI-SB6 (9.5- 10')	RI-SB6 (12.5- 13')	RI-SB7 (4.5-5')	RI-SB7 (9.5- 10')	RI-SB7 (14.5- 15')	RI-SB8 (4.5-5')	RI-SB8 (9.5- 10')
Lab Sample ID:		Unrestricted	Residential	JD39775-12A	JD39775-13A	JD39775-14A	JD39775-15A	JD39775-16A	JD39846-1A	JD39846-2A	JD39846-3A	JD39846-5A	JD39846-6A
Date Sampled:		Use		2/15/2022	2/15/2022	2/15/2022	2/15/2022	2/15/2022	2/16/2022	2/16/2022	2/16/2022	2/16/2022	2/16/2022
Matrix:		(2021)	(2021)	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
MS Semi-volatiles (EPA 537M BY ID)													
Perfluorobutanoic acid	ug/kg	-		ND (0.40)	ND (0.46)	ND (0.45)	ND (0.46)	ND (0.42)	ND (0.44)	ND (0.45)	ND (0.42)	ND (0.45)	ND (0.46)
Perfluoropentanoic acid	ug/kg	-		ND (0.26)	ND (0.31)	ND (0.30)	ND (0.30)	ND (0.28)	ND (0.29)	ND (0.30)	ND (0.28)	ND (0.30)	ND (0.30)
Perfluorohexanoic acid	ug/kg	-		ND (0.26)	ND (0.31)	ND (0.30)	ND (0.30)	ND (0.28)	ND (0.29)	ND (0.30)	ND (0.28)	ND (0.30)	ND (0.30)
Perfluoroheptanoic acid	ug/kg	-		ND (0.26)	ND (0.31)	ND (0.30)	ND (0.30)	ND (0.28)	ND (0.29)	ND (0.30)	ND (0.28)	ND (0.30)	ND (0.30)
Perfluorooctanoic acid	ug/kg	0.66	6.6	ND (0.26)	ND (0.31)	ND (0.30)	ND (0.30)	ND (0.28)	ND (0.29)	ND (0.30)	ND (0.28)	ND (0.30)	ND (0.30)
Perfluorononanoic acid	ug/kg	-		ND (0.26)	ND (0.31)	ND (0.30)	ND (0.30)	ND (0.28)	ND (0.29)	ND (0.30)	ND (0.28)	ND (0.30)	ND (0.30)
Perfluorodecanoic acid	ug/kg	-		ND (0.26)	ND (0.31)	ND (0.30)	ND (0.30)	ND (0.28)	ND (0.29)	ND (0.30)	ND (0.28)	ND (0.30)	ND (0.30)
Perfluoroundecanoic acid	ug/kg	-		ND (0.26)	ND (0.31)	ND (0.30)	ND (0.30)	ND (0.28)	ND (0.29)	ND (0.30)	ND (0.28)	ND (0.30)	ND (0.30)
Perfluorododecanoic acid	ug/kg	-		ND (0.26)	ND (0.31)	ND (0.30)	ND (0.30)	ND (0.28)	ND (0.29)	ND (0.30)	ND (0.28)	ND (0.30)	ND (0.30)
Perfluorotridecanoic acid	ug/kg	-		ND (0.28)	ND (0.32)	ND (0.32)	ND (0.32)	ND (0.29)	ND (0.31)	ND (0.32)	ND (0.29)	ND (0.31)	ND (0.32)
Perfluorotetradecanoic acid	ug/kg	-		ND (0.26)	ND (0.31)	ND (0.30)	ND (0.30)	ND (0.28)	ND (0.29)	ND (0.30)	ND (0.28)	ND (0.30)	ND (0.30)
Perfluorobutanesulfonic acid	ug/kg	-		ND (0.26)	ND (0.31)	ND (0.30)	ND (0.30)	ND (0.28)	ND (0.29)	ND (0.30)	ND (0.28)	ND (0.30)	ND (0.30)
Perfluorohexanesulfonic acid	ug/kg	-		ND (0.26)	ND (0.31)	ND (0.30)	ND (0.30)	ND (0.28)	ND (0.29)	ND (0.30)	ND (0.28)	ND (0.30)	ND (0.30)
Perfluoroheptanesulfonic acid	ug/kg	-		ND (0.26)	ND (0.31)	ND (0.30)	ND (0.30)	ND (0.28)	ND (0.29)	ND (0.30)	ND (0.28)	ND (0.30)	ND (0.30)
Perfluorooctanesulfonic acid	ug/kg	0.88	8.8	ND (0.21)	ND (0.24)	0.64	ND (0.24)	ND (0.22)	0.33 J	ND (0.24)	ND (0.22)	0.29 J	ND (0.24)
Perfluorodecanesulfonic acid	ug/kg	-		ND (0.26)	ND (0.31)	ND (0.30)	ND (0.30)	ND (0.28)	ND (0.29)	ND (0.30)	ND (0.28)	ND (0.30)	ND (0.30)
PFOSA	ug/kg	-		ND (0.26)	ND (0.31)	ND (0.30)	ND (0.30)	ND (0.28)	ND (0.29)	ND (0.30)	ND (0.28)	ND (0.30)	ND (0.30)
MeFOSAA	ug/kg	-		ND (0.52)	ND (0.61)	ND (0.60)	ND (0.60)	ND (0.55)	ND (0.58)	ND (0.60)	ND (2.8) [†]	ND (2.9)	ND (0.60)
EtFOSAA	ug/kg	-		ND (0.52)	ND (0.61)	ND (0.60)	ND (0.60)	ND (0.55)	ND (0.58)	ND (0.60)	ND (2.8)	ND (0.59)	ND (0.60)
6:2 Fluorotelomer sulfonate	ug/kg	-		ND (0.26)	ND (0.31)	ND (0.30)	ND (0.30)	ND (0.28)	ND (0.29)	ND (0.30)	ND (0.28)	ND (0.30)	ND (0.30)
8:2 Fluorotelomer sulfonate	ug/kg	-		ND (0.26)	ND (0.31)	ND (0.30)	ND (0.30)	ND (0.28)	ND (0.29)	ND (0.30)	ND (0.28)	ND (0.30)	ND (0.30)

Notes:

ND = Compound not detected

J = An estimated value

Exceeds Guidance Values

Table 7
PFAS in Soil
1001 Whitlock Avenue, Bronx, NY

Client Sample ID:		NY PFAS Soil Guidance Value	NY PFAS Soil Guidance Value	RI-SB8 (12.5- 13')	DUP-2	RI-SB9 (4.5-5')	RI-SB9 (9.5- 10')	RI-SB9 (14.5- 15')	R1-SB10(2-2.5')
Lab Sample ID:		Unrestricted Use	Residential	JD39846-7	JD39846-8	JD39846-9	JD39846-10	JD39846-11	JD39915-1
Date Sampled:		2/16/2022	2/16/2022	2/16/2022	2/16/2022	2/16/2022	2/16/2022	2/16/2022	2/17/2022
Matrix:		(2021)	(2021)	Soil	Soil	Soil	Soil	Soil	Soil
MS Semi-volatiles (EPA 537M BY ID)									
Perfluorobutanoic acid	ug/kg	-		ND (0.42)	ND (0.45)	ND (0.44)	ND (0.42)	ND (0.50)	ND (0.42)
Perfluoropentanoic acid	ug/kg	-		ND (0.28)	ND (0.30)	ND (0.29)	ND (0.28)	ND (0.33)	ND (0.28)
Perfluorohexanoic acid	ug/kg	-		ND (0.28)	ND (0.30)	ND (0.29)	ND (0.28)	ND (0.33)	ND (0.28)
Perfluoroheptanoic acid	ug/kg	-		ND (0.28)	ND (0.30)	ND (0.29)	ND (0.28)	ND (0.33)	ND (0.28)
Perfluorooctanoic acid	ug/kg	0.66	6.6	ND (0.28)	ND (0.30)	ND (0.29)	ND (0.28)	ND (0.33)	ND (0.28)
Perfluorononanoic acid	ug/kg	-		ND (0.28)	ND (0.30)	ND (0.29)	ND (0.28)	ND (0.33)	ND (0.28)
Perfluorodecanoic acid	ug/kg	-		ND (0.28)	ND (0.30)	ND (0.29)	ND (0.28)	ND (0.33)	ND (0.28)
Perfluoroundecanoic acid	ug/kg	-		ND (0.28)	ND (0.30)	ND (0.29)	ND (0.28)	ND (0.33)	ND (0.28)
Perfluorododecanoic acid	ug/kg	-		ND (0.28)	ND (0.30)	ND (0.29)	ND (0.28)	ND (0.33)	ND (0.28)
Perfluorotridecanoic acid	ug/kg	-		ND (0.29)	ND (0.32)	ND (0.30)	ND (0.29)	ND (0.35)	ND (0.30)
Perfluorotetradecanoic acid	ug/kg	-		ND (0.28)	ND (0.30)	ND (0.29)	ND (0.28)	ND (0.33)	ND (0.28)
Perfluorobutanesulfonic acid	ug/kg	-		ND (0.28)	ND (0.30)	ND (0.29)	ND (0.28)	ND (0.33)	ND (0.28)
Perfluorohexanesulfonic acid	ug/kg	-		ND (0.28)	ND (0.30)	ND (0.29)	ND (0.28)	ND (0.33)	ND (0.28)
Perfluoroheptanesulfonic acid	ug/kg	-		ND (0.28)	ND (0.30)	ND (0.29)	ND (0.28)	ND (0.33)	ND (0.28)
Perfluorooctanesulfonic acid	ug/kg	0.88	8.8	ND (0.22)	0.55 J	0.27 J	ND (0.22)	ND (0.26)	8.5
Perfluorodecanesulfonic acid	ug/kg	-		ND (0.28)	ND (0.30)	ND (0.29)	ND (0.28)	ND (0.33)	ND (0.28)
PFOSA	ug/kg	-		ND (0.28)	ND (0.30)	ND (0.29)	ND (0.28)	ND (0.33)	ND (0.28)
MeFOSAA	ug/kg	-		ND (2.7) ^f	ND (0.60)	ND (0.57)	ND (0.55)	ND (0.65)	ND (0.56)
EtFOSAA	ug/kg	-		ND (2.7)	ND (0.60)	ND (0.57)	ND (0.55)	ND (0.65)	ND (0.56)
6:2 Fluorotelomer sulfonate	ug/kg	-		ND (0.28)	ND (0.30)	ND (0.29)	ND (0.28)	ND (0.33)	ND (0.28)
8:2 Fluorotelomer sulfonate	ug/kg	-		ND (0.28)	ND (0.30)	ND (0.29)	ND (0.28)	ND (0.33)	ND (0.28)

Notes:

ND = Compound not detected

J = An estimated value

Exceeds Guidance Values

Table 8
VOCs in Groundwater
1001 Whitlock Avenue, Bronx, NY

Client Sample ID:		NY TOGS	MW-3R	R1-MW-4	MW-2R	RI-MW-4 DUP	FIELD BLANK	TRIP BLANK
Lab Sample ID:		Class GA+GV GW	JD40006-1	JD40006-2	JD40006-3	JD40006-4	JD40006-5	JD40006-6
Date Sampled:		Standards	2/18/2022	2/18/2022	2/18/2022	2/18/2022	2/18/2022	2/18/2022
Matrix:		(NYSDEC 6/2004) ¹	Ground Water	Ground Water	Ground Water	Ground Water	Field Blank Water	Trip Blank Water
MS Volatiles (SW846 8260D)								
Acetone	ug/l	50	44.2	18.8	61	17.5	ND (3.1)	ND (3.1)
Benzene	ug/l	1	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)
Bromochloromethane	ug/l	5	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)
Bromodichloromethane	ug/l	50	ND (0.45)	ND (0.45)	ND (0.45)	ND (0.45)	1.4	ND (0.45)
Bromoform	ug/l	50	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)	ND (0.63)
Bromomethane	ug/l	5	ND (1.6)	ND (1.6)	ND (1.6)	ND (1.6) ^a	ND (1.6)	ND (1.6)
2-Butanone (MEK)	ug/l	50	8.3 J	ND (6.9)	7.4 J	ND (6.9)	ND (6.9)	ND (6.9)
Carbon disulfide	ug/l	60	0.48 J	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.46)
Carbon tetrachloride	ug/l	5	ND (0.55)	ND (0.55)	ND (0.55)	ND (0.55)	ND (0.55)	ND (0.55)
Chlorobenzene	ug/l	5	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)
Chloroethane	ug/l	5	ND (0.73)	ND (0.73)	ND (0.73)	ND (0.73) ^a	ND (0.73)	ND (0.73)
Chloroform	ug/l	7	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	6	0.51 J
Chloromethane	ug/l	5	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)	ND (0.76)
Cyclohexane	ug/l	-	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)
1,2-Dibromo-3-chloropropane	ug/l	0.04	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)
Dibromochloromethane	ug/l	50	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)	ND (0.56)
1,2-Dibromoethane	ug/l	0.0006	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.48)
1,2-Dichlorobenzene	ug/l	3	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)
1,3-Dichlorobenzene	ug/l	3	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)
1,4-Dichlorobenzene	ug/l	3	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)
Dichlorodifluoromethane	ug/l	5	ND (0.56) ^a	ND (0.56) ^a	ND (0.56) ^a	ND (0.56)	ND (0.56) ^a	ND (0.56) ^a
1,1-Dichloroethane	ug/l	5	ND (0.57)	ND (0.57)	ND (0.57)	ND (0.57)	ND (0.57)	ND (0.57)
1,2-Dichloroethane	ug/l	0.6	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)
1,1,1-Dichloroethene	ug/l	5	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)
cis-1,2-Dichloroethene	ug/l	5	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)
trans-1,2-Dichloroethene	ug/l	5	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)
1,2-Dichloropropane	ug/l	1	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)
cis-1,3-Dichloropropene	ug/l	-	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.47)
trans-1,3-Dichloropropene	ug/l	-	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)	ND (0.43)
Ethylbenzene	ug/l	5	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)
Freon 113	ug/l	5	ND (0.58)	ND (0.58)	ND (0.58)	ND (0.58)	ND (0.58)	ND (0.58)
2-Hexanone	ug/l	50	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)
Isopropylbenzene	ug/l	5	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)
Methyl Acetate	ug/l	-	ND (0.80)	ND (0.80)	ND (0.80)	ND (0.80)	ND (0.80)	ND (0.80)
Methylcyclohexane	ug/l	-	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)	ND (0.60)
Methyl Tert Butyl Ether	ug/l	10	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)	ND (0.51)
4-Methyl-2-pentanone (MIBK)	ug/l	-	ND (1.9)	ND (1.9)	10.7	ND (1.9)	ND (1.9)	ND (1.9)
Methylene chloride	ug/l	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Styrene	ug/l	5	ND (0.49)	ND (0.49)	ND (0.49)	ND (0.49)	ND (0.49)	ND (0.49)
1,1,2,2-Tetrachloroethane	ug/l	5	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)	ND (0.65)
Tetrachloroethene	ug/l	5	ND (0.90)	ND (0.90)	ND (0.90)	ND (0.90)	ND (0.90)	ND (0.90)
Toluene	ug/l	5	0.73 J	0.53 J	0.71 J	ND (0.53)	ND (0.53)	ND (0.53)
1,2,3-Trichlorobenzene	ug/l	5	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
1,2,4-Trichlorobenzene	ug/l	5	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
1,1,1-Trichloroethane	ug/l	5	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)	ND (0.54)
1,1,2-Trichloroethane	ug/l	1	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)
Trichloroethene	ug/l	5	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)	ND (0.53)
Trichlorofluoromethane	ug/l	5	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)
Vinyl chloride	ug/l	2	ND (0.79)	ND (0.79)	ND (0.79)	ND (0.79) ^a	ND (0.79)	ND (0.79)
m,p-Xylene	ug/l	-	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)	ND (0.78)
o-Xylene	ug/l	5	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)
Xylene (total)	ug/l	5	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)	ND (0.59)

Notes:

ND - Compound not detected

J - An estimated value

Exceeds NYSDEC Standard

Table 9
Semivolatile Organic Compounds in Groundwater
1001 Whitlock Avenue, Bronx, NY

Client Sample ID:		SESI-NY TOGS	MW-3R	R1-MW-4	RI-MW-4 DUP	MW-2R
Lab Sample ID:		Class GA+GV GW	JD40098-1	JD40098-2	JD40098-3	JD40098-4
Date Sampled:		Standards	2/22/2022	2/22/2022	2/22/2022	2/22/2022
Matrix:		(NYSDEC 6/2004) ¹	Ground Water	Ground Water	Ground Water	Ground Water
2-Chlorophenol	ug/l	-	ND (0.78)	ND (0.82)	ND (0.82)	ND (1.6)
4-Chloro-3-methyl phenol	ug/l	-	ND (0.85)	ND (0.89)	ND (0.89)	ND (1.8)
2,4-Dichlorophenol	ug/l	1	ND (1.2)	ND (1.3)	ND (1.3)	ND (2.5)
2,4-Dimethylphenol	ug/l	1	ND (2.3)	ND (2.4)	ND (2.4)	ND (4.9)
2,4-Dinitrophenol	ug/l	1	ND (1.5)	ND (1.6)	ND (1.6)	ND (3.1)
4,6-Dinitro-o-cresol	ug/l	-	ND (1.2)	ND (1.3)	ND (1.3)	ND (2.6)
2-Methylphenol	ug/l	-	ND (0.85)	ND (0.89)	ND (0.89)	ND (1.8)
3&4-Methylphenol	ug/l	-	ND (0.84)	ND (0.88)	ND (0.88)	ND (1.8)
2-Nitrophenol	ug/l	-	ND (0.91)	ND (0.96)	ND (0.96)	ND (1.9)
4-Nitrophenol	ug/l	-	ND (1.1)	ND (1.2)	ND (1.2)	ND (2.3)
Pentachlorophenol	ug/l	1	ND (1.3)	ND (1.4)	ND (1.4)	ND (2.8)
Phenol	ug/l	1	ND (0.37)	ND (0.39)	ND (0.39)	ND (0.78)
2,3,4,6-Tetrachlorophenol	ug/l	-	ND (1.4)	ND (1.5)	ND (1.5)	ND (2.9)
2,4,5-Trichlorophenol	ug/l	-	ND (1.3)	ND (1.3)	ND (1.3)	ND (2.7)
2,4,6-Trichlorophenol	ug/l	-	ND (0.88)	ND (0.92)	ND (0.92)	ND (1.8)
Acenaphthene	ug/l	20	ND (0.18)	ND (0.19)	ND (0.19)	ND (0.38)
Acenaphthylene	ug/l	-	ND (0.13)	ND (0.14)	ND (0.14)	ND (0.27)
Acetophenone	ug/l	-	ND (0.20)	ND (0.21)	ND (0.21)	ND (0.42)
Anthracene	ug/l	50	ND (0.20)	ND (0.21)	ND (0.21)	ND (0.42)
Atrazine	ug/l	7.5	ND (0.43)	ND (0.45)	ND (0.45)	ND (0.89)
Benzaldehyde	ug/l	-	ND (0.28)	ND (0.29)	ND (0.29)	ND (0.58)
Benzo(a)anthracene	ug/l	0.002	ND (0.19)	ND (0.20)	ND (0.20)	ND (0.41)
Benzo(a)pyrene	ug/l	0	0.67 J	ND (0.21)	ND (0.21)	1.2 J
Benzo(b)fluoranthene	ug/l	0.002	ND (0.20)	ND (0.21)	ND (0.21)	ND (0.41)
Benzo(g,h,i)perylene	ug/l	-	ND (0.32)	ND (0.34)	ND (0.34)	ND (0.68)
Benzo(k)fluoranthene	ug/l	0.002	ND (0.20)	ND (0.21)	ND (0.21)	ND (0.41)
4-Bromophenyl phenyl ether	ug/l	-	ND (0.38)	ND (0.40)	ND (0.40)	ND (0.81)
Butyl benzyl phthalate	ug/l	50	ND (0.44)	ND (0.46)	ND (0.46)	ND (0.91)
1,1'-Biphenyl	ug/l	5	ND (0.20)	ND (0.21)	ND (0.21)	0.48 J
2-Chloronaphthalene	ug/l	-	ND (0.22)	ND (0.24)	ND (0.24)	ND (0.47)
4-Chloroaniline	ug/l	5	ND (0.32)	ND (0.34)	ND (0.34)	ND (0.68)
Carbazole	ug/l	-	ND (0.22)	ND (0.23)	ND (0.23)	ND (0.46)
Caprolactam	ug/l	-	ND (0.62)	ND (0.65)	ND (0.65)	ND (1.3)
Chrysene	ug/l	0.002	ND (0.17)	ND (0.18)	ND (0.18)	ND (0.35)
bis(2-Chloroethoxy)methane	ug/l	5	ND (0.26)	ND (0.28)	ND (0.28)	ND (0.56)
bis(2-Chloroethyl)ether	ug/l	1	ND (0.24)	ND (0.25)	ND (0.25)	ND (0.50)
2,2'-Oxybis(1-chloropropane)	ug/l	5	ND (0.38)	ND (0.40)	ND (0.40)	ND (0.81)
4-Chlorophenyl phenyl ether	ug/l	-	ND (0.35)	ND (0.37)	ND (0.37)	ND (0.73)
2,4-Dinitrotoluene	ug/l	5	ND (0.53)	ND (0.55)	ND (0.55)	ND (1.1)
2,6-Dinitrotoluene	ug/l	5	ND (0.45)	ND (0.48)	ND (0.48)	ND (0.95)
3,3'-Dichlorobenzidine	ug/l	5	ND (0.48)	ND (0.51)	ND (0.51)	ND (1.0)
1,4-Dioxane	ug/l	-	ND (0.63)	1.1	ND (0.66)	ND (1.3)
Dibenzo(a,h)anthracene	ug/l	-	ND (0.32)	ND (0.33)	ND (0.33)	ND (0.66)
Dibenzofuran	ug/l	-	ND (0.21)	ND (0.22)	ND (0.22)	ND (0.44)
Di-n-butyl phthalate	ug/l	50	ND (0.47)	ND (0.50)	ND (0.50)	ND (0.99)
Di-n-octyl phthalate	ug/l	50	ND (0.22)	ND (0.23)	ND (0.23)	ND (0.47)
Diethyl phthalate	ug/l	50	0.58 J	ND (0.26)	ND (0.26)	ND (0.52)
Dimethyl phthalate	ug/l	50	ND (0.21)	ND (0.22)	ND (0.22)	ND (0.44)
bis(2-Ethylhexyl)phthalate	ug/l	5	ND (1.6)	ND (1.7)	ND (1.7)	3.4 J
Fluoranthene	ug/l	50	ND (0.16)	ND (0.17)	ND (0.17)	ND (0.34)
Fluorene	ug/l	50	ND (0.16)	ND (0.17)	ND (0.17)	ND (0.34)
Hexachlorobenzene	ug/l	0.04	ND (0.31)	ND (0.33)	ND (0.33)	ND (0.65)
Hexachlorobutadiene	ug/l	0.5	ND (0.47)	ND (0.49)	ND (0.49)	ND (0.98)
Hexachlorocyclopentadiene	ug/l	5	ND (2.6)	ND (2.8)	ND (2.8)	ND (5.6)
Hexachloroethane	ug/l	5	ND (0.37)	ND (0.39)	ND (0.39)	ND (0.78)
Indeno(1,2,3-cd)pyrene	ug/l	0.002	ND (0.32)	ND (0.33)	ND (0.33)	ND (0.66)
Isophorone	ug/l	50	ND (0.26)	ND (0.28)	ND (0.28)	ND (0.55)
2-Methylnaphthalene	ug/l	-	ND (0.20)	ND (0.21)	ND (0.21)	ND (0.42)
2-Nitroaniline	ug/l	5	ND (0.26)	ND (0.28)	ND (0.28)	ND (0.55)
3-Nitroaniline	ug/l	5	ND (0.37)	ND (0.39)	ND (0.39)	ND (0.77)
4-Nitroaniline	ug/l	5	ND (0.42)	ND (0.44)	ND (0.44)	ND (0.88)
Naphthalene	ug/l	10	ND (0.22)	ND (0.23)	ND (0.23)	ND (0.46)
Nitrobenzene	ug/l	0.4	ND (0.61)	ND (0.64)	ND (0.64)	ND (1.3)
N-Nitroso-di-n-propylamine	ug/l	-	ND (0.46)	ND (0.48)	ND (0.48)	ND (0.96)
N-Nitrosodiphenylamine	ug/l	50	ND (0.21)	ND (0.22)	ND (0.22)	ND (0.44)
Phenanthrene	ug/l	50	ND (0.17)	ND (0.18)	ND (0.18)	ND (0.35)
Pyrene	ug/l	50	ND (0.21)	ND (0.22)	ND (0.22)	ND (0.44)
1,2,4,5-Tetrachlorobenzene	ug/l	5	ND (0.35)	ND (0.37)	ND (0.37)	ND (0.74)

Notes:

ND - Compound not detected

J - An estimated value

Exceeds NYSDEC Standard

Table 10
Pesticides and PCBs in Groundwater
1001 Whitlock Avenue, Bronx, NY

Client Sample ID:		SESI-NY TOGS Class GA+GV GW Standards (NYSDEC 6/2004) ¹	MW-3R	R1-MW-4	RI-MW-4 DUP	MW-2R
Lab Sample ID:			JD40098-1	JD40098-2	JD40098-3	JD40098-4
Date Sampled:			2/22/2022	2/22/2022	2/22/2022	2/22/2022
Matrix:			Ground Water	Ground Water	Ground Water	Ground Water
GC/LC Semi-volatiles (SW846 8081B)						
Aldrin	ug/l	0	ND (0.0026)	ND (0.0026)	ND (0.0026)	ND (0.0026)
alpha-BHC	ug/l	0.01	ND (0.0026)	ND (0.0026)	ND (0.0026)	ND (0.0026)
beta-BHC	ug/l	0.04	ND (0.0040)	ND (0.0040)	ND (0.0040)	ND (0.0040)
delta-BHC	ug/l	0.04	ND (0.0033)	ND (0.0033)	ND (0.0033)	ND (0.0033)
gamma-BHC (Lindane)	ug/l	0.05	ND (0.0030)	ND (0.0030)	ND (0.0030)	ND (0.0030)
alpha-Chlordane	ug/l	-	ND (0.0025)	ND (0.0025)	ND (0.0025)	ND (0.0025)
gamma-Chlordane	ug/l	-	0.0067 °	ND (0.0021)	0.0053 °	0.0068
Dieldrin	ug/l	0.004	ND (0.0038)	ND (0.0038)	ND (0.0038)	ND (0.0038)
4,4'-DDD	ug/l	0.3	ND (0.0029)	ND (0.0029)	ND (0.0029)	ND (0.0029)
4,4'-DDE	ug/l	0.2	ND (0.0025)	0.0056 °	0.0062	ND (0.0025)
4,4'-DDT	ug/l	0.2	ND (0.0034)	ND (0.0034)	ND (0.0034)	ND (0.0034)
Endrin	ug/l	0	ND (0.0030)	ND (0.0030)	ND (0.0030)	ND (0.0030)
Endosulfan sulfate	ug/l	-	ND (0.0027)	ND (0.0027)	ND (0.0027)	ND (0.0027)
Endrin aldehyde	ug/l	5	ND (0.0034)	ND (0.0034)	ND (0.0034)	ND (0.0034)
Endrin ketone	ug/l	5	ND (0.0031)	ND (0.0031)	ND (0.0031)	ND (0.0031)
Endosulfan-I	ug/l	-	ND (0.0026)	ND (0.0026)	ND (0.0026)	ND (0.0026)
Endosulfan-II	ug/l	-	ND (0.0024)	ND (0.0024)	ND (0.0024)	ND (0.0024)
Heptachlor	ug/l	0.04	ND (0.0022)	ND (0.0022)	ND (0.0022)	ND (0.0022)
Heptachlor epoxide	ug/l	0.03	ND (0.0030)	ND (0.0030)	ND (0.0030)	ND (0.0030)
Methoxychlor	ug/l	35	ND (0.0034)	ND (0.0034)	ND (0.0034)	ND (0.0034)
Toxaphene	ug/l	0.06	ND (0.082)	ND (0.082)	ND (0.082)	ND (0.082)
GC/LC Semi-volatiles (SW846 8082A)						
Aroclor 1016	ug/l	0.09	ND (0.098)	ND (0.098)	ND (0.098)	ND (0.098)
Aroclor 1221	ug/l	0.09	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)
Aroclor 1232	ug/l	0.09	ND (0.13)	ND (0.13)	ND (0.13)	ND (0.13)
Aroclor 1242	ug/l	0.09	ND (0.11)	ND (0.11)	ND (0.11)	ND (0.11)
Aroclor 1248	ug/l	0.09	ND (0.063)	ND (0.063)	ND (0.063)	ND (0.063)
Aroclor 1254	ug/l	0.09	ND (0.21)	ND (0.21)	ND (0.21)	ND (0.21)
Aroclor 1260	ug/l	0.09	ND (0.076)	ND (0.076)	ND (0.076)	ND (0.076)
Aroclor 1268	ug/l	0.09	ND (0.087)	ND (0.087)	ND (0.087)	ND (0.087)
Aroclor 1262	ug/l	0.09	ND (0.097)	ND (0.097)	ND (0.097)	ND (0.097)

Notes:

° More than 40 % RPD for detected concentrations between the two GC columns.

ND = Compound not detected

Table 11
Metals and Cyanide in Groundwater
1001 Whitlock Avenue, Bronx, NY

Client Sample ID:		SESI-NY TOGS	MW-3R	R1-MW-4	MW-2R	RI-MW-4 DUP	FIELD BLANK
Lab Sample ID:		Class GA+GV GW	JD40098-1	JD40006-2	JD40006-3	JD40006-4	JD40006-5
Date Sampled:		Standards	2/22/2022	2/18/2022	2/18/2022	2/18/2022	2/18/2022
Matrix:		(NYSDEC 6/2004) ¹	Ground Water	Ground Water	Ground Water	Ground Water	Field Blank Water
Metals Analysis							
Aluminum	ug/l	-	1070	2280 ^d	58400 ^d	5760 ^d	<200
Antimony	ug/l	3	<6.0	<20 ^d	<40	<20 ^d	<6.0
Arsenic	ug/l	25	<3.0	<10 ^d	11.0 ^d	10.3 ^d	<3.0
Barium	ug/l	1000	<200	<670 ^d	751 ^d	<670 ^d	<200
Beryllium	ug/l	-	<1.0	<3.3 ^d	<3.3 ^d	<3.3 ^d	<1.0
Cadmium	ug/l	5	<3.0	<10 ^d	<20	<10 ^d	<3.0
Calcium	ug/l	-	63100	227000 ^d	53700 ^d	210000 ^d	<5000
Chromium	ug/l	50	<10	<33 ^d	211 ^d	33.0 ^d	<10
Cobalt	ug/l	-	<50	<170 ^d	<170 ^d	<170 ^d	<50
Copper	ug/l	200	<10	<33 ^d	116 ^d	<33 ^d	<10
Iron	ug/l	300	3440	4490 ^d	98200 ^d	11000 ^d	<100
Lead	ug/l	25	4.4	<10 ^d	216	16.7 ^d	<3.0
Magnesium	ug/l	-	17600	20500 ^d	38200 ^d	19600 ^d	<5000
Manganese	ug/l	300	2030	2720 ^d	3890 ^d	2570 ^d	<15
Mercury	ug/l	0.7	<0.20	<0.20	<0.60 ^e	<0.20	<0.20
Nickel	ug/l	100	<10	<33 ^d	94.0 ^d	<33 ^d	<10
Potassium	ug/l	-	<10000	<33000 ^d	45200 ^d	<33000 ^d	<10000
Selenium	ug/l	10	<10	<33 ^d	<33 ^d	<33 ^d	<10
Silver	ug/l	50	<10	<33 ^d	<33 ^d	<33 ^d	<10
Sodium	ug/l	20000	31800	45300 ^d	<33000 ^d	41900 ^d	<10000
Thallium	ug/l	-	<10	<33 ^d	<33 ^d	<33 ^d	<10
Vanadium	ug/l	-	<50	<170 ^d	<170 ^d	<170 ^d	<50
Zinc	ug/l	-	22.3	<67 ^d	407 ^d	73.3 ^d	<20
General Chemistry							
Cyanide	mg/l	0.2	<0.010	<0.010	<0.010	<0.010	-

Notes:

^d Elevated sample detection limit due to limited volume.

Table 12
PFAS and 1,4-Dioxane in Groundwater
1001 Whitlock Avenue, Bronx, NY

Client Sample ID:		NY PFAS GW Standards (NYSDEC 2021) ¹	MW-3R	R1-MW-4	MW-2R	RI-MW-4 DUP	FIELD BLANK
Lab Sample ID:			JD40006-1A	JD40006-2A	JD40006-3A	JD40006-4A	JD40006-5A
Date Sampled:			2/18/2022	2/18/2022	2/18/2022	2/18/2022	2/18/2022
Matrix:			Ground Water	Ground Water	Ground Water	Ground Water	Field Blank Water
MS Semi-volatiles (EPA 537M BY ID)							
Perfluorobutanoic acid	ng/l	-	24.1	9.3	17.7	9.7	ND (1.9)
Perfluoropentanoic acid	ng/l	-	13.9	17.2	15.1	17.4	ND (0.93)
Perfluorohexanoic acid	ng/l	-	12.5	16.9	13.7	17.3	ND (0.93)
Perfluoroheptanoic acid	ng/l	-	11.2	18.4	15.6	18.2	ND (0.93)
Perfluorooctanoic acid	ng/l	10	23.3	46.7	30.1	47.2	ND (0.93)
Perfluorononanoic acid	ng/l	-	2.1	1.2 J	6.9	ND (0.93)	ND (0.93)
Perfluorodecanoic acid	ng/l	-	ND (0.98)	ND (0.93)	1.4 J	ND (0.93)	ND (0.93)
Perfluoroundecanoic acid	ng/l	-	ND (0.98)	ND (0.93)	ND (0.93)	ND (0.93)	ND (0.93)
Perfluorododecanoic acid	ng/l	-	ND (0.98)	ND (0.93)	ND (0.93)	ND (0.93)	ND (0.93)
Perfluorotridecanoic acid	ng/l	-	ND (0.98)	ND (0.93)	ND (0.93)	ND (0.93)	ND (0.93)
Perfluorotetradecanoic acid	ng/l	-	ND (0.98)	ND (0.93)	ND (0.93)	ND (0.93)	ND (0.93)
Perfluorobutanesulfonic acid	ng/l	-	5.1	6.2	6.6	6.6	ND (0.93)
Perfluorohexanesulfonic acid	ng/l	-	12.5	11.1	4.5	11.2	ND (0.93)
Perfluoroheptanesulfonic acid	ng/l	-	ND (0.98)	ND (0.93)	ND (0.93)	ND (0.93)	ND (0.93)
Perfluorooctanesulfonic acid	ng/l	10	15	12.1	52.8	12.3	ND (0.93)
Perfluorodecanesulfonic acid	ng/l	-	ND (0.98)	ND (0.93)	ND (0.93)	ND (0.93)	ND (0.93)
PFOSA	ng/l	-	ND (2.0)	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9)
MeFOSAA	ng/l	-	ND (2.0)	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9)
EtFOSAA	ng/l	-	ND (2.0)	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9)
6:2 Fluorotelomer sulfonate	ng/l	-	ND (2.0)	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9)
8:2 Fluorotelomer sulfonate	ng/l	-	ND (2.0)	ND (1.9)	ND (1.9)	ND (1.9)	ND (1.9)
MS Semi-volatiles (SW846 8270E BY SIM)							
1,4-Dioxane	ug/l	1	ND (0.19) ^b	ND (0.18) ^b	ND (0.19) ^b	ND (0.18) ^b	ND (0.049)

Notes:

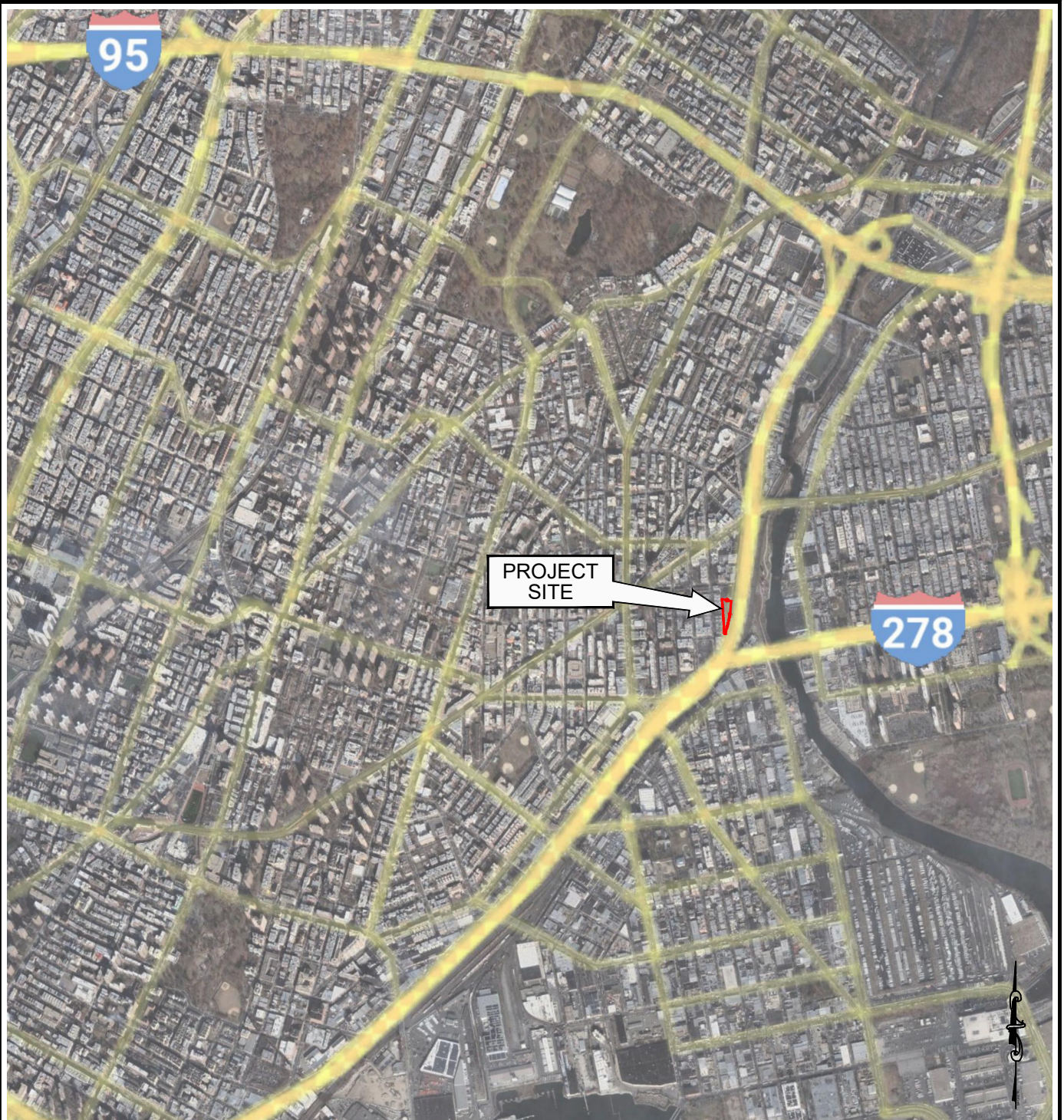
ND - Compound not detected

J - An estimated value

Exceeds NYSDEC Standard

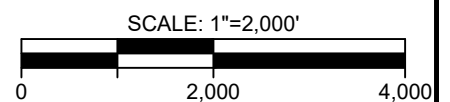
Figures

N:\ACAD\11819\CAD\11819 SITE LOCATION PLAN.DWG 02/07/22 02:14:22PM, yelena.zolotova, LAYOUT: FIG-1



REFERENCE:

ALL INFORMATION TAKEN FROM GOOGLE EARTH AERIAL, DATED 1/24/2021.



1001 WHITLOCK AVENUE
BRONX, NEW YORK 10459

SITE LOCATION PLAN

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12A MAPLE AVE, PINE BROOK, N.J. 07058 PH: 973-808-9050

SOILS / FOUNDATIONS
SITE DESIGN
ENVIRONMENTAL

FIG-1.1

DRAWN BY: yy

CHECKED BY: SG

SCALE: AS NOTED

DATE: 02/07/2022

JOB NO.: 11819

N:\ACAD\11819\CAD\11819 - FIG-2 SITE PLAN.DWG 02/07/22 02:21:59PM, yelena.zolotova, LAYOUT:FIG-2

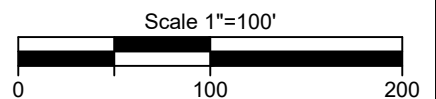


LEGEND:

--- SITE AND PROPERTY BOUNDARY

REFERENCE:

ALL INFORMATION TAKEN FROM GOOGLE EARTH AERIAL, DATED 1/24/2021.



1001 WHITLOCK AVENUE
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SITE PLAN

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CERT. OF AUTH. # 24GA27934700
SOILS / FOUNDATIONS
SITE DESIGN
ENVIRONMENTAL

FIG-1.2

DRAWN BY: yy

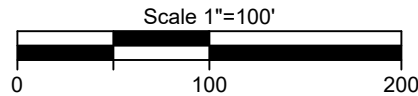
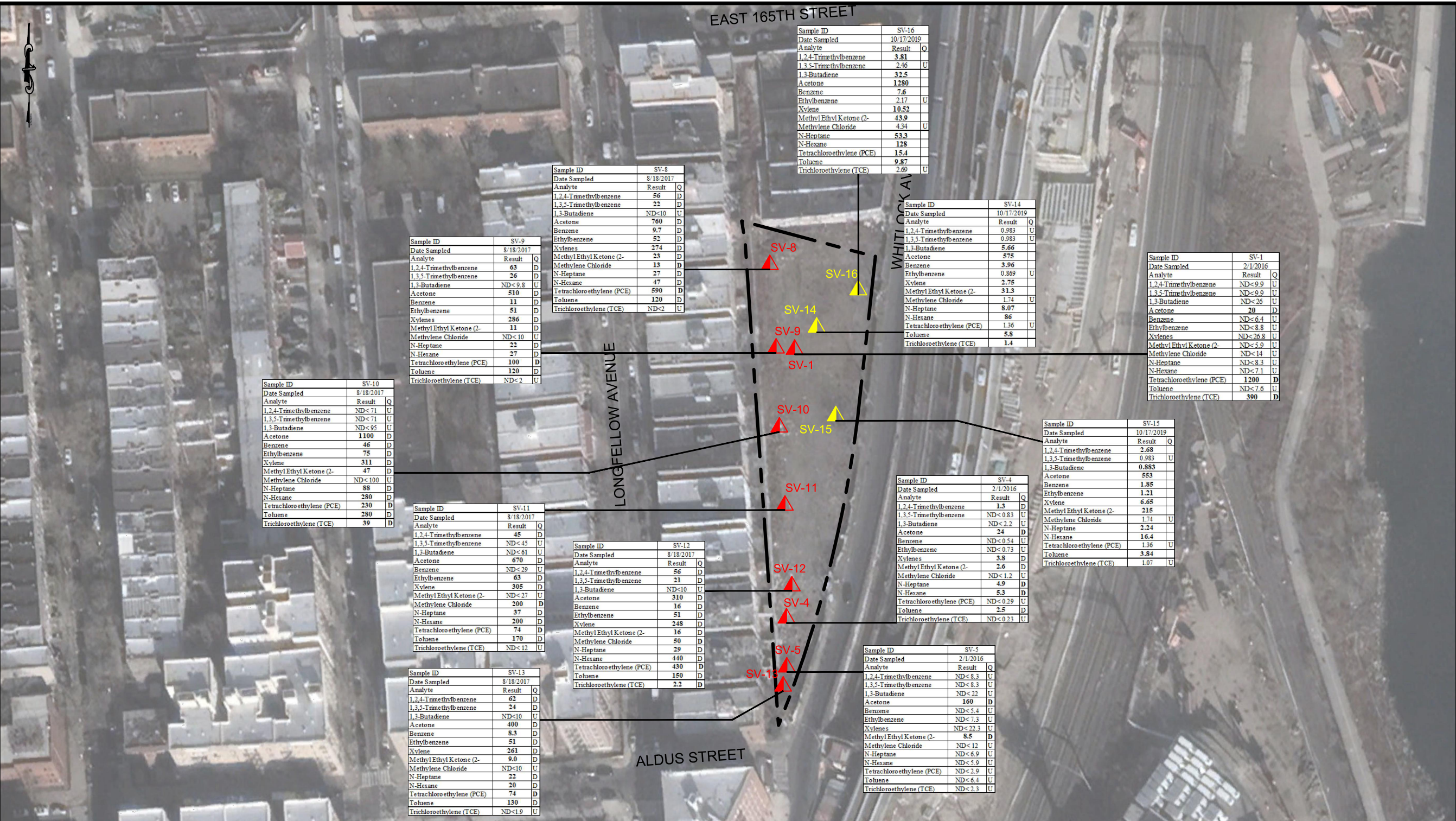
CHECKED BY: SG

SCALE: AS NOTED

DATE: 02/07/2022

JOB NO.: 11819

N:\ACAD\11819\CAD\11819 - FIG-4C - RIR SOIL VAPOR SAMPLE LOCATION PLAN & RESULTS.DWG 02/08/22 09:29:22AM, yelena.zolotova, LAYOUT: FIG-4C



LEGEND:

- SITE AND PROPERTY BOUNDARY
- ▲ SV-6 - PVE SOIL VAPOR NUMBER & APPROX. LOCATION
- ▲ SV-14 - SESI SOIL VAPOR NUMBER & APPROX. LOCATION

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NOTES:

- THIS PLAN IS FOR LOCATING VAPOR LOCATIONS ONLY. OTHER SITE WORK SHOWN HERE IS NOT INTENDED FOR CONSTRUCTION.
- ALL CONCENTRATIONS ARE IN MICROGRAMS PER CUBIC METER ($\mu\text{g}/\text{m}^3$)
- J: ESTIMATED CONCENTRATION

project:

1001 WHITLOCK AVENUE
BRONX, NEW YORK 10459

job no: 11819
drawing no:

RIR SOIL VAPOR SAMPLE
LOCATION PLAN & RESULTS

title:

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ENGINEERS
SOILS / FOUNDATIONS
SITE DESIGN
ENVIRONMENTAL

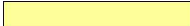
12A MAPLE AVE. PINE BROOK, N.J. 07068 PH: 973-808-9050

dwg by: AS
chk by: JAM
scale: AS NOTED
date: 02/08/2022

FIG-2.1

N:\ACAD\11819\CAD\11819 - FIG-4.1 - SOIL BORING SAMPLE RESULTS PLAN.DWG 05/31/22 03:26:50PM. Pinnacle, LAYOUT:FIG-4.1

Analyte	USCO	RRSCO
SVOCs (ug/kg)		
Indeno(1,2,3-cd)pyrene	500	500
METALS (mg/kg)		
Barium	350	400
Cadmium	2.5	4.3
Copper	50	270
Lead	63	400
Mercury	0.18	0.81
Nickel	30	310
Zinc	109	10000

 = Concentration exceeds USCO.
 = Concentration exceeds RRSCO.

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Sample ID:	R1-SB10 (2-2.5')
Sample Date:	2/17/2022
Sample Depth (ft-bgs):	2.0-2.5
METALS (mg/kg)	
Cadmium	3.2
Lead	209
Mercury	0.33
Zinc	2270

Sample ID:	RI-SB7 (9.5-10')	RI-SB7 (14.5-15')
Sample Date:	2/16/2022	2/16/2022
Sample Depth (ft-bgs):	9.5-10.0	14.5-15.0
METALS (mg/kg)		
Copper	133 ^f	NO EXCEEDANCES
Nickel	31.3	

Sample ID:	RI-SB6 (4.5-5')	RI-SB6 (9.5-10')	RI-SB6 (12.5-13')
Sample Date:	2/15/2022	2/15/2022	2/15/2022
Sample Depth (ft-bgs):	4.5-5.0	9.5-10.0	12.5-13.0
SVOCs (ug/kg)			
Indeno(1,2,3-cd)pyrene	164	34.7 J	573
METALS (mg/kg)			
Copper	55.6 ^f	39.0 ^f	27.2
Lead	101	335	10.4
Mercury	0.15	0.31	0.15
Nickel	301	23.3	25.8
Zinc	177	96.7	58.5

Sample ID:	R1-SB3
Sample Date:	2/14/2022
Sample Depths (ft-bgs):	4.5-5, 9.5-10, 14.5-15
NO EXCEEDANCES	

Sample ID:	RI-SB1 (14.5-15')	RI-SB1 (17.5-18')
Sample Date:	2/14/2022	2/14/2022
Sample Depth (ft-bgs):	14.5-15.0	17.5-18.0
METALS (mg/kg)		
Copper	65.1	NO EXCEEDANCES
Lead	69.2	

Sample ID:	RI-SB2 (3.5-4')	RI-SB2 (9.5-10')	RI-SB2 (14.5-15')
Sample Date:	2/14/2022	2/14/2022	2/14/2022
Sample Depth (ft-bgs):	3.5-4.0	9.5-10.0	14.5-15.0
METALS (mg/kg)			
Lead	87.7	8.3	NO EXCEEDANCES
Nickel	23.8	30.4	
Zinc	224	74.8	

Sample ID:	RI-SB4 (4.5-5')	RI-SB4 (14.5-15')
Sample Date:	2/15/2022	2/15/2022
Sample Depth (ft-bgs):	4.5-5.0	14.5-15.0
METALS (mg/kg)		
Barium	404	220
Copper	52.2 ^f	26.7 ^f
Lead	63.8	5.4
Nickel	34.1	49.4
Zinc	285	112

Sample ID:	RI-SB5 (4.5-5')	RI-SB5 (9.5-10')
Sample Date:	2/15/2022	2/15/2022
Sample Depth (ft-bgs):	4.5-5.0	9.5-10.0
METALS (mg/kg)		
Nickel	31.3	NO EXCEEDANCE

Sample ID:	RI-SB8 (4.5-5')	RI-SB8 (12.5-13')
Sample Date:	2/16/2022	2/16/2022
Sample Depth (ft-bgs):	4.5-5.0	12.5-13.0
METALS (mg/kg)		
Copper	78.0 ^f	21.9 ^f
Nickel	41.1	46.1
Zinc	424	117

Sample ID:	RI-SB9 (4.5-5')	RI-SB9 (9.5-10')	RI-SB9 (14.5-15')
Sample Date:	2/16/2022	2/16/2022	2/16/2022
Sample Depth (ft-bgs):	4.5-5.0	9.5-10.0	14.5-15.0
METALS (mg/kg)			
Lead	101	16.5	NO EXCEEDANCES
Mercury	0.24	ND (0.036)	
Nickel	24.7	38.3	
Zinc	125	103	

NOTES:

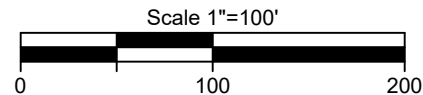
mg/kg = MILIGRAMS PER KILOGRAM.
ug/kg = MICROGRAMS PER KILOGRAM.
ft-bgs = FEET BELOW GRADE SURFACE.
ND = NOT DETECTED ABOVE REPORTING LIMIT.
^f = ELEVATED DETECTION LIMIT DUE TO DILUTION REQUIRED FOR HIGH INTERFERING ELEMENT.
USCO = NY UNRESTRICTED USE SOIL CLEANUP OBJECTIVES (6 NYCRR 375-6 12/06).
RRSCO = NY RESTRICTED RESIDENTIAL USE SOIL CLEANUP OBJECTIVES W/CP-51 (10/10) (6 NYCRR 375-6 12/06).

REFERENCE:

ALL INFORMATION TAKEN FROM GOOGLE EARTH AERIAL, DATED 1/24/2021.

LEGEND:

-  - SITE AND PROPERTY BOUNDARY
-  - SOIL BORING NUMBER & APPROX. LOCATION



SOILS / FOUNDATIONS
SITE DESIGN
ENVIRONMENTAL

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1001 WHITLOCK AVENUE
BRONX, NEW YORK 10459

SOIL BORING SAMPLE RESULTS PLAN

job no: 11819
drawing no:

FIG-4.1

dwg by: yy
chk by: SG
scale: AS NOTED
date: 05/31/2022

N:\ACAD\11819\CAD\11819 - FIG-4.2 - GROUNDWATER SAMPLING LOCATION PLAN.DWG 03/15/22 04:41:49PM, apg, LAYOUT:FIG-4.2

Analyte	NYSDEC AWQS or Guidance Value
PFAS (ng/l)	
Perfluorooctanoic acid	10
Perfluorooctanesulfonic acid	10
SVOCs (ug/l)	
Benzo(a)pyrene	0
METALS (ug/l)	
Chromium	50
Iron	300
Lead	25
Manganese	300
Sodium	20000

= Concentration of compound exceeds the NY TOGs Class GA GW or associated Guidance (noted as AWQS)

NOTE:

THIS PLAN IS FOR LOCATING MONITORING WELLS ONLY.
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NOTES:

NYSDEC
AWQS
ng/l
ug/l

J

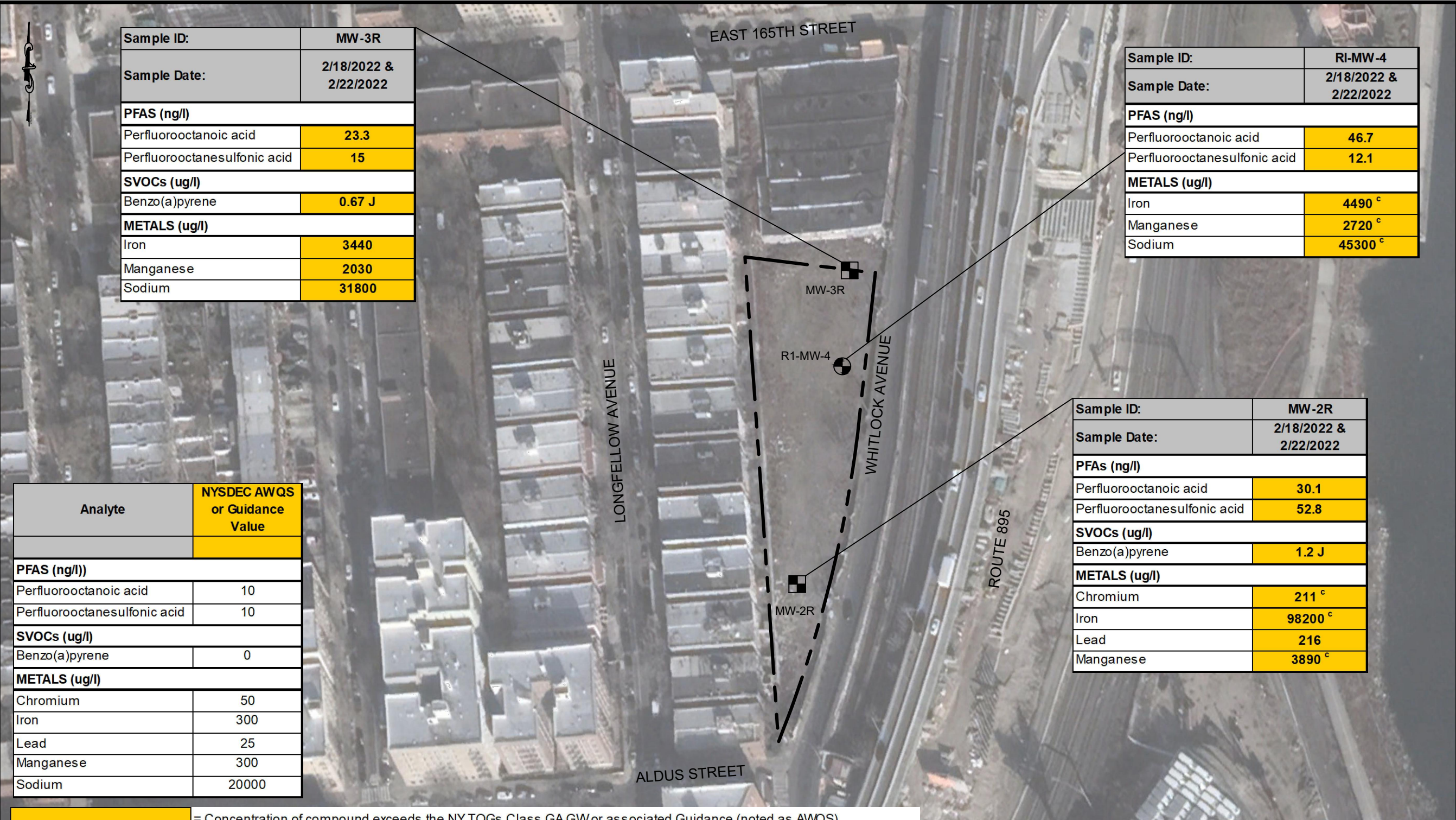
= NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION.
= AMBIENT WATER QUALITY STANDARDS.
= NANOGRAMS PER LITER.
= MICROGRAMS PER LITER.

c

= ELEVATED SAMPLE DETECTION LIMIT DUE TO LIMITED VOLUME.
= THE REPORTED RESULT IS AN ESTIMATE. THE VALUE IS LESS THAN THE MINIMUM CALIBRATION LEVEL
BUT GREATER THAN THE ESTIMATED DETECTION LIMIT (EDL)

REFERENCE:

ALL INFORMATION TAKEN FROM GOOGLE EARTH AERIAL, DATED 1/24/2021.



Sample ID:	MW-2R
Sample Date:	2/18/2022 & 2/22/2022
PFAs (ng/l)	
Perfluorooctanoic acid	30.1
Perfluorooctanesulfonic acid	52.8
SVOCs (ug/l)	
Benzo(a)pyrene	1.2 J
METALS (ug/l)	
Chromium	211 ^c
Iron	98200 ^c
Lead	216
Manganese	3890 ^c

Sample ID:	RI-MW-4
Sample Date:	2/18/2022 & 2/22/2022
PFAS (ng/l)	
Perfluorooctanoic acid	46.7
Perfluorooctanesulfonic acid	12.1
METALS (ug/l)	
Iron	4490 ^c
Manganese	2720 ^c
Sodium	45300 ^c

Sample ID:	MW-3R
Sample Date:	2/18/2022 & 2/22/2022
PFAS (ng/l)	
Perfluorooctanoic acid	23.3
Perfluorooctanesulfonic acid	15
SVOCs (ug/l)	
Benzo(a)pyrene	0.67 J
METALS (ug/l)	
Iron	3440
Manganese	2030
Sodium	31800

project:

1001 WHITLOCK AVENUE
BRONX, NEW YORK 10459

title:

GROUNDWATER SAMPLING
LOCATION PLAN

job no: 11819
drawing no:

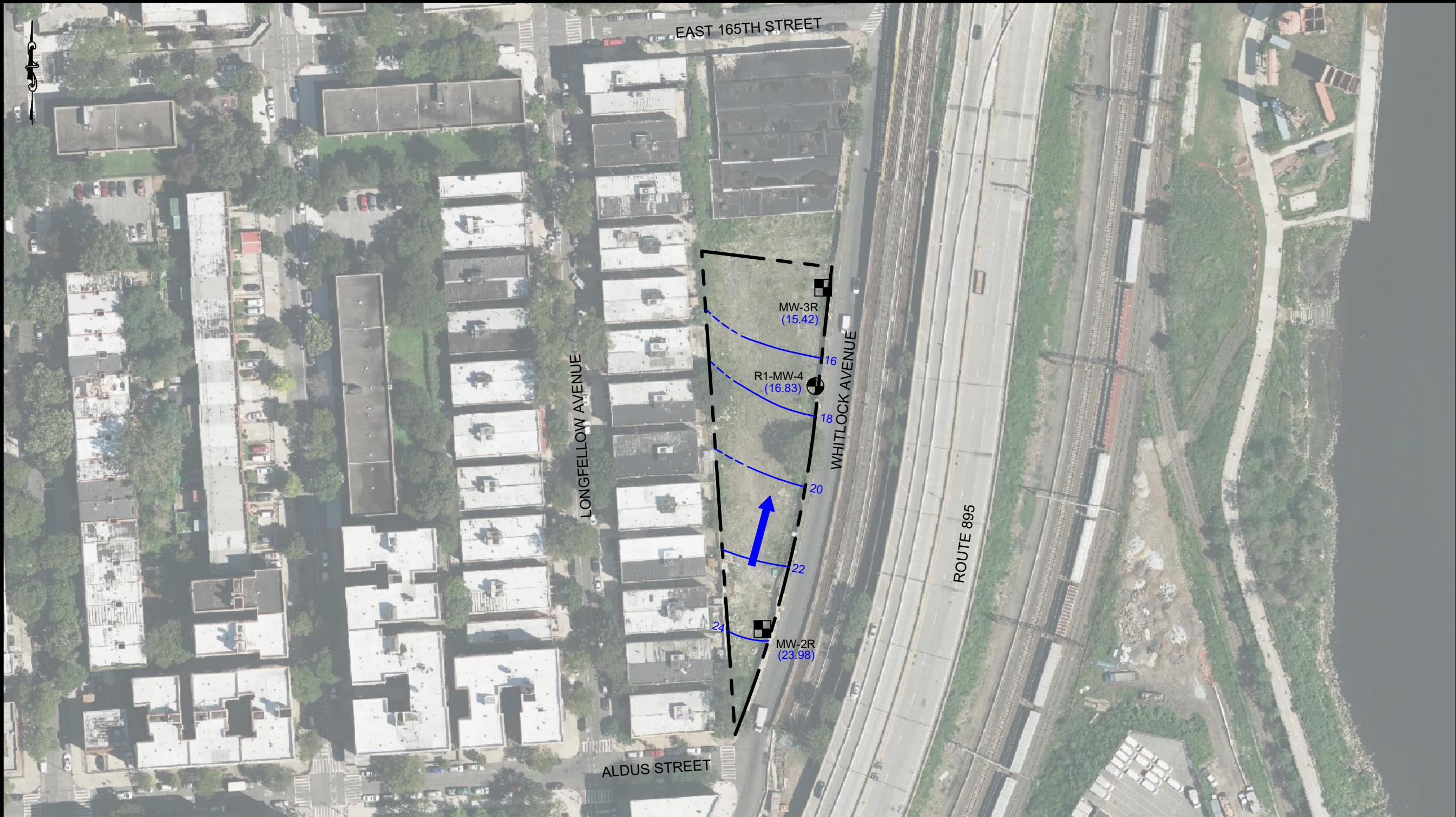
FIG-4.2

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SITE DESIGN
ENVIRONMENTAL

12A MAPLE AVE, PINE BROOK, N.J. 07058 PH: 973-808-9050

dwg by: aas
chk by: SSG
scale: AS NOTED
date: 03/09/2022

N:\ACAD\11819\CAD\11819 - FIG-4.3 - GROUNDWATER CONTOUR MAP - (04-04-22).DWG 04/04/22 04:43:20PM, alan.ward, LAYOUT: FIG-4.3



NOTE:
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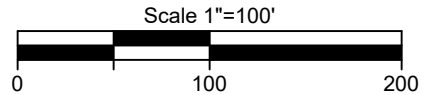
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REFERENCE:

1. ALL INFORMATION TAKEN FROM GOOGLE EARTH AERIAL, DATED 1/24/2021.
2. GEOD CORPORATION SURVEY LOCATIONS, DATED 3/16/2022.

LEGEND:

- - - - - SITE AND PROPERTY BOUNDARY
- RI-MW-4 - MONITORING WELL NUMBER & APPROX. LOCATION
- - - - - GROUNDWATER ELEVATION CONTOUR (FEET AMSL)
(DASHED WHERE INFERRED)
- (20.83) - GROUNDWATER ELEVATION (FEET AMSL)
- - GROUNDWATER FLOW DIRECTION



project:

1001 WHITLOCK AVENUE
BRONX, NEW YORK 10459

title:

GROUNDWATER CONTOUR
MAP

job no: 11819
drawing no:

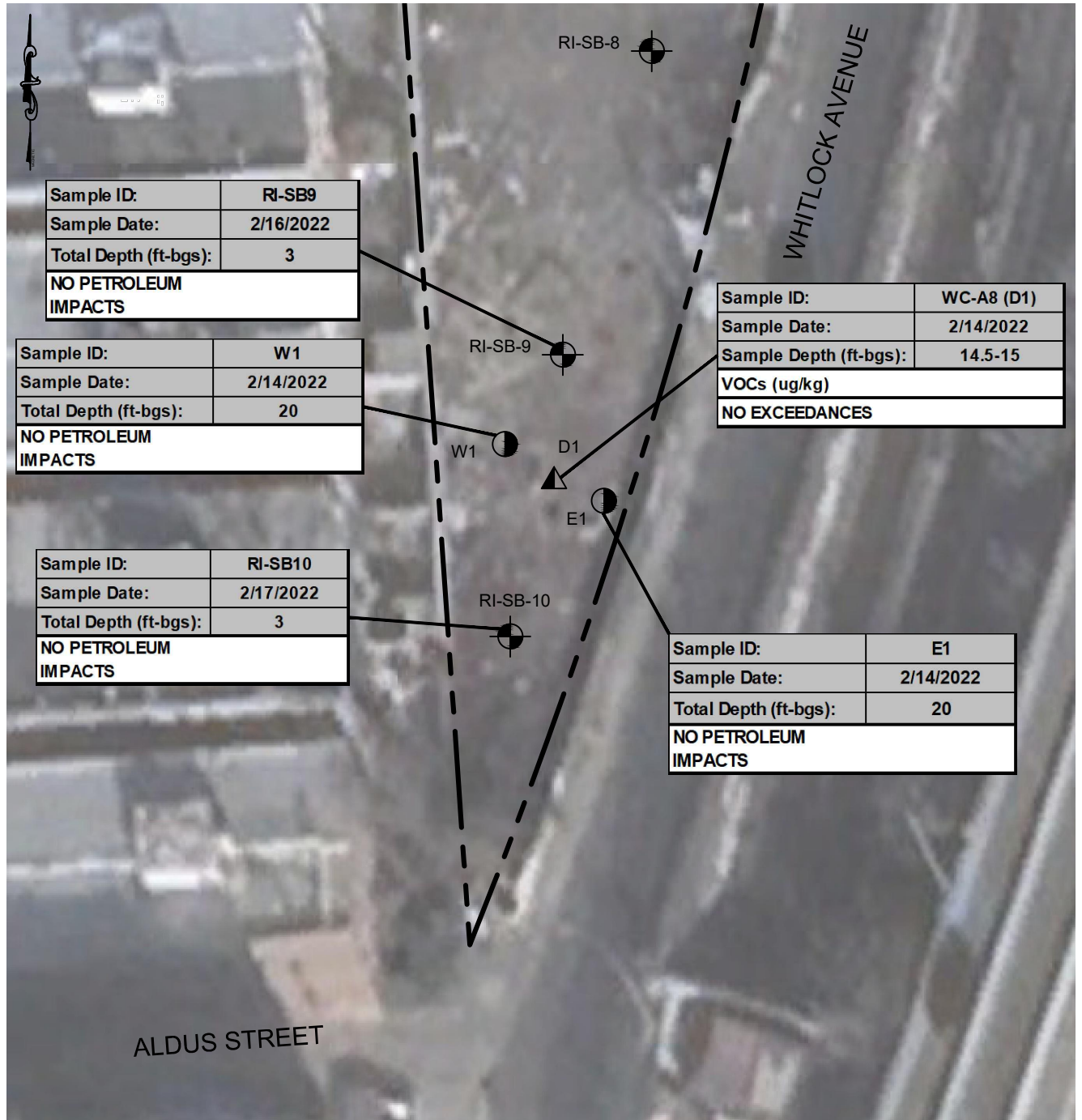
FIG-4.3

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SITE DESIGN
ENVIRONMENTAL

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dwg by: aas
chk by: SSG
scale: AS NOTED
date: 03/23/2022

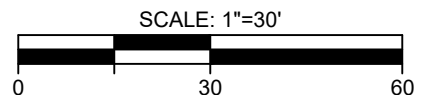
N:\ACAD\11819\CAD\11819 - FIG-5.1 - PETROLEUM DELINEATION BORING LOCATIONS.DWG 05/24/22 11:28:17AM, yelena.zolotova, LAYOUT: FIG-5.1



LEGEND:

- SITE AND PROPERTY BOUNDARY
- RI-SB-10
 - SOIL BORING NUMBER & APPROX. LOCATION
- W1
 - DELINEATION BORING NUMBER & APPROX. LOCATION (NO CONTAMINATION OBSERVED)
- D1
 - PETROLEUM IMPACTS OBSERVED FROM 11-15 FT. BGS

REFERENCE:
ALL INFORMATION TAKEN FROM GOOGLE EARTH AERIAL, DATED 1/24/2021.



1001 WHITLOCK AVENUE
BRONX, NEW YORK 10459

PETROLEUM DELINEATION
SAMPLE LOCATIONS MAP

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SOILS / FOUNDATIONS
SITE DESIGN
ENVIRONMENTAL

12A MAPLE AVE. PINE BROOK, N.J. 07058 PH: 973-808-9050

FIG-5.1

DRAWN BY: AG

CHECKED BY: SG

SCALE: AS NOTED

DATE: 05/24/2022

JOB NO.: 11819

Appendix A: Community Air Monitoring Data

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530094504
Firmware Version	3.1
Calibration Date	9/2/2021
Test Name	MANUAL_001
Test Start Time	9:53:47 AM
Test Start Date	2/14/2022
Test Length [D:H:M]	0:05:45
Test Interval [M:S]	1:00
Mass Average [mg/m3]	0.01
Mass Minimum [mg/m3]	0.006
Mass Maximum [mg/m3]	0.036
Mass TWA [mg/m3]	0.007
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	345

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
60	0.036		
120	0.024		
180	0.024		
240	0.024		
300	0.022		
360	0.022		
420	0.023		
480	0.025		
540	0.023		
600	0.021		
660	0.021		
720	0.021		
780	0.02		
840	0.021		
900	0.021		
960	0.02		
1020	0.02		
1080	0.019		
1140	0.019		
1200	0.018		
1260	0.018		
1320	0.019		
1380	0.018		
1440	0.02		
1500	0.027		
1560	0.02		
1620	0.02		

1680	0.019
1740	0.016
1800	0.018
1860	0.017
1920	0.016
1980	0.016
2040	0.014
2100	0.016
2160	0.013
2220	0.014
2280	0.013
2340	0.013
2400	0.012
2460	0.012
2520	0.012
2580	0.013
2640	0.012
2700	0.014
2760	0.011
2820	0.011
2880	0.012
2940	0.011
3000	0.011
3060	0.014
3120	0.01
3180	0.009
3240	0.012
3300	0.009
3360	0.009
3420	0.01
3480	0.011
3540	0.011
3600	0.009
3660	0.009
3720	0.008
3780	0.01
3840	0.009
3900	0.008
3960	0.007
4020	0.006
4080	0.006
4140	0.009
4200	0.008
4260	0.006
4320	0.011
4380	0.007
4440	0.006

4500	0.013
4560	0.009
4620	0.008
4680	0.01
4740	0.007
4800	0.01
4860	0.012
4920	0.007
4980	0.011
5040	0.008
5100	0.013
5160	0.01
5220	0.012
5280	0.01
5340	0.012
5400	0.01
5460	0.007
5520	0.008
5580	0.009
5640	0.009
5700	0.007
5760	0.011
5820	0.009
5880	0.007
5940	0.007
6000	0.015
6060	0.009
6120	0.007
6180	0.008
6240	0.007
6300	0.008
6360	0.007
6420	0.007
6480	0.007
6540	0.009
6600	0.009
6660	0.023
6720	0.016
6780	0.016
6840	0.01
6900	0.01
6960	0.008
7020	0.007
7080	0.009
7140	0.008
7200	0.014
7260	0.011

7320	0.008
7380	0.009
7440	0.007
7500	0.009
7560	0.011
7620	0.009
7680	0.008
7740	0.009
7800	0.007
7860	0.008
7920	0.007
7980	0.008
8040	0.011
8100	0.01
8160	0.008
8220	0.01
8280	0.011
8340	0.01
8400	0.009
8460	0.009
8520	0.01
8580	0.01
8640	0.009
8700	0.009
8760	0.009
8820	0.012
8880	0.009
8940	0.009
9000	0.012
9060	0.01
9120	0.01
9180	0.008
9240	0.009
9300	0.009
9360	0.009
9420	0.008
9480	0.009
9540	0.011
9600	0.012
9660	0.011
9720	0.008
9780	0.008
9840	0.007
9900	0.007
9960	0.007
10020	0.007
10080	0.007

10140	0.008
10200	0.007
10260	0.007
10320	0.006
10380	0.007
10440	0.01
10500	0.011
10560	0.014
10620	0.01
10680	0.011
10740	0.008
10800	0.009
10860	0.012
10920	0.009
10980	0.008
11040	0.01
11100	0.008
11160	0.008
11220	0.011
11280	0.011
11340	0.013
11400	0.01
11460	0.009
11520	0.013
11580	0.009
11640	0.009
11700	0.012
11760	0.012
11820	0.011
11880	0.01
11940	0.009
12000	0.01
12060	0.012
12120	0.012
12180	0.008
12240	0.009
12300	0.008
12360	0.008
12420	0.008
12480	0.01
12540	0.009
12600	0.011
12660	0.01
12720	0.01
12780	0.01
12840	0.009
12900	0.011

12960	0.009
13020	0.011
13080	0.009
13140	0.013
13200	0.011
13260	0.011
13320	0.01
13380	0.011
13440	0.009
13500	0.009
13560	0.008
13620	0.009
13680	0.01
13740	0.009
13800	0.012
13860	0.01
13920	0.009
13980	0.008
14040	0.008
14100	0.009
14160	0.008
14220	0.008
14280	0.008
14340	0.008
14400	0.009
14460	0.011
14520	0.008
14580	0.007
14640	0.007
14700	0.008
14760	0.008
14820	0.009
14880	0.01
14940	0.008
15000	0.009
15060	0.009
15120	0.012
15180	0.019
15240	0.007
15300	0.01
15360	0.008
15420	0.008
15480	0.009
15540	0.01
15600	0.008
15660	0.008
15720	0.007

15780	0.008
15840	0.008
15900	0.008
15960	0.01
16020	0.009
16080	0.009
16140	0.007
16200	0.008
16260	0.007
16320	0.007
16380	0.007
16440	0.008
16500	0.008
16560	0.008
16620	0.008
16680	0.008
16740	0.008
16800	0.007
16860	0.007
16920	0.008
16980	0.009
17040	0.009
17100	0.009
17160	0.01
17220	0.008
17280	0.008
17340	0.008
17400	0.008
17460	0.008
17520	0.011
17580	0.009
17640	0.009
17700	0.008
17760	0.008
17820	0.008
17880	0.008
17940	0.008
18000	0.008
18060	0.007
18120	0.007
18180	0.008
18240	0.009
18300	0.011
18360	0.008
18420	0.008
18480	0.012
18540	0.008

18600	0.009
18660	0.008
18720	0.008
18780	0.008
18840	0.008
18900	0.008
18960	0.008
19020	0.008
19080	0.009
19140	0.009
19200	0.008
19260	0.008
19320	0.009
19380	0.01
19440	0.007
19500	0.008
19560	0.009
19620	0.008
19680	0.008
19740	0.008
19800	0.009
19860	0.008
19920	0.008
19980	0.01
20040	0.008
20100	0.008
20160	0.009
20220	0.009
20280	0.01
20340	0.01
20400	0.009
20460	0.009
20520	0.009
20580	0.008
20640	0.009
20700	0.008

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530094504
Firmware Version	3.1
Calibration Date	9/2/2021
Test Name	MANUAL_002
Test Start Time	7:50:41 AM
Test Start Date	2/15/2022
Test Length [D:H:M]	0:07:04
Test Interval [M:S]	1:00
Mass Average [mg/m3]	0.015
Mass Minimum [mg/m3]	0.006
Mass Maximum [mg/m3]	0.048
Mass TWA [mg/m3]	0.013
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	424

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
60	0.031		
120	0.032		
180	0.032		
240	0.044		
300	0.034		
360	0.032		
420	0.032		
480	0.03		
540	0.03		
600	0.031		
660	0.032		
720	0.034		
780	0.03		
840	0.03		
900	0.031		
960	0.031		
1020	0.034		
1080	0.032		
1140	0.031		
1200	0.036		
1260	0.038		
1320	0.031		
1380	0.027		
1440	0.032		
1500	0.032		
1560	0.029		
1620	0.027		

1680	0.028
1740	0.033
1800	0.033
1860	0.027
1920	0.028
1980	0.031
2040	0.028
2100	0.029
2160	0.026
2220	0.026
2280	0.027
2340	0.028
2400	0.028
2460	0.027
2520	0.026
2580	0.026
2640	0.027
2700	0.028
2760	0.028
2820	0.027
2880	0.026
2940	0.025
3000	0.026
3060	0.031
3120	0.028
3180	0.03
3240	0.026
3300	0.025
3360	0.025
3420	0.027
3480	0.033
3540	0.027
3600	0.025
3660	0.033
3720	0.026
3780	0.027
3840	0.025
3900	0.024
3960	0.023
4020	0.023
4080	0.027
4140	0.025
4200	0.025
4260	0.023
4320	0.025
4380	0.022
4440	0.024

4500	0.023
4560	0.048
4620	0.034
4680	0.029
4740	0.027
4800	0.026
4860	0.022
4920	0.021
4980	0.021
5040	0.02
5100	0.02
5160	0.019
5220	0.02
5280	0.028
5340	0.025
5400	0.021
5460	0.018
5520	0.017
5580	0.028
5640	0.02
5700	0.022
5760	0.019
5820	0.017
5880	0.016
5940	0.016
6000	0.015
6060	0.015
6120	0.015
6180	0.015
6240	0.015
6300	0.017
6360	0.014
6420	0.021
6480	0.016
6540	0.015
6600	0.024
6660	0.017
6720	0.016
6780	0.016
6840	0.017
6900	0.013
6960	0.013
7020	0.012
7080	0.012
7140	0.012
7200	0.011
7260	0.016

7320	0.021
7380	0.012
7440	0.013
7500	0.012
7560	0.013
7620	0.011
7680	0.01
7740	0.011
7800	0.011
7860	0.011
7920	0.016
7980	0.011
8040	0.013
8100	0.012
8160	0.014
8220	0.015
8280	0.017
8340	0.013
8400	0.011
8460	0.009
8520	0.009
8580	0.009
8640	0.011
8700	0.009
8760	0.009
8820	0.013
8880	0.011
8940	0.012
9000	0.013
9060	0.013
9120	0.017
9180	0.012
9240	0.012
9300	0.015
9360	0.015
9420	0.014
9480	0.012
9540	0.011
9600	0.011
9660	0.011
9720	0.01
9780	0.011
9840	0.013
9900	0.015
9960	0.012
10020	0.013
10080	0.012

10140	0.012
10200	0.013
10260	0.015
10320	0.013
10380	0.019
10440	0.013
10500	0.012
10560	0.021
10620	0.012
10680	0.011
10740	0.011
10800	0.012
10860	0.012
10920	0.011
10980	0.015
11040	0.014
11100	0.016
11160	0.015
11220	0.012
11280	0.017
11340	0.015
11400	0.011
11460	0.014
11520	0.01
11580	0.012
11640	0.012
11700	0.013
11760	0.013
11820	0.018
11880	0.013
11940	0.012
12000	0.014
12060	0.017
12120	0.013
12180	0.011
12240	0.011
12300	0.012
12360	0.012
12420	0.011
12480	0.015
12540	0.018
12600	0.022
12660	0.02
12720	0.012
12780	0.017
12840	0.017
12900	0.016

12960	0.016
13020	0.015
13080	0.011
13140	0.012
13200	0.012
13260	0.011
13320	0.013
13380	0.012
13440	0.011
13500	0.011
13560	0.015
13620	0.01
13680	0.01
13740	0.009
13800	0.015
13860	0.011
13920	0.012
13980	0.01
14040	0.009
14100	0.009
14160	0.013
14220	0.015
14280	0.013
14340	0.02
14400	0.013
14460	0.012
14520	0.009
14580	0.009
14640	0.009
14700	0.009
14760	0.009
14820	0.009
14880	0.009
14940	0.009
15000	0.009
15060	0.01
15120	0.01
15180	0.011
15240	0.01
15300	0.01
15360	0.011
15420	0.013
15480	0.011
15540	0.013
15600	0.012
15660	0.01
15720	0.011

15780	0.01
15840	0.011
15900	0.011
15960	0.01
16020	0.009
16080	0.012
16140	0.01
16200	0.009
16260	0.009
16320	0.009
16380	0.01
16440	0.012
16500	0.012
16560	0.012
16620	0.01
16680	0.009
16740	0.01
16800	0.011
16860	0.01
16920	0.009
16980	0.012
17040	0.015
17100	0.016
17160	0.009
17220	0.01
17280	0.009
17340	0.009
17400	0.01
17460	0.01
17520	0.009
17580	0.01
17640	0.009
17700	0.008
17760	0.007
17820	0.008
17880	0.008
17940	0.01
18000	0.007
18060	0.007
18120	0.01
18180	0.008
18240	0.008
18300	0.008
18360	0.009
18420	0.009
18480	0.008
18540	0.009

18600	0.008
18660	0.007
18720	0.008
18780	0.008
18840	0.009
18900	0.008
18960	0.008
19020	0.008
19080	0.008
19140	0.008
19200	0.007
19260	0.007
19320	0.007
19380	0.008
19440	0.008
19500	0.007
19560	0.006
19620	0.007
19680	0.007
19740	0.007
19800	0.007
19860	0.008
19920	0.008
19980	0.007
20040	0.008
20100	0.009
20160	0.007
20220	0.008
20280	0.007
20340	0.007
20400	0.008
20460	0.007
20520	0.007
20580	0.008
20640	0.008
20700	0.008
20760	0.008
20820	0.009
20880	0.008
20940	0.008
21000	0.008
21060	0.008
21120	0.009
21180	0.008
21240	0.008
21300	0.008
21360	0.008

21420	0.008
21480	0.008
21540	0.008
21600	0.008
21660	0.008
21720	0.008
21780	0.009
21840	0.009
21900	0.014
21960	0.009
22020	0.009
22080	0.008
22140	0.008
22200	0.008
22260	0.008
22320	0.008
22380	0.008
22440	0.009
22500	0.009
22560	0.011
22620	0.009
22680	0.007
22740	0.007
22800	0.007
22860	0.008
22920	0.009
22980	0.009
23040	0.01
23100	0.008
23160	0.008
23220	0.007
23280	0.007
23340	0.007
23400	0.007
23460	0.008
23520	0.008
23580	0.009
23640	0.008
23700	0.008
23760	0.008
23820	0.009
23880	0.009
23940	0.009
24000	0.009
24060	0.01
24120	0.01
24180	0.009

24240	0.011
24300	0.009
24360	0.01
24420	0.011
24480	0.01
24540	0.011
24600	0.01
24660	0.009
24720	0.009
24780	0.009
24840	0.009
24900	0.01
24960	0.011
25020	0.01
25080	0.009
25140	0.008
25200	0.009
25260	0.01
25320	0.012
25380	0.009
25440	0.009

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530094504
Firmware Version	3.1
Calibration Date	9/2/2021
Test Name	MANUAL_003
Test Start Time	7:36:43 AM
Test Start Date	2/16/2022
Test Length [D:H:M]	0:06:44
Test Interval [M:S]	1:00
Mass Average [mg/m3]	0.03
Mass Minimum [mg/m3]	0.016
Mass Maximum [mg/m3]	0.085
Mass TWA [mg/m3]	0.025
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	404

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
60	0.07		
120	0.085		
180	0.079		
240	0.071		
300	0.06		
360	0.059		
420	0.061		
480	0.061		
540	0.061		
600	0.062		
660	0.06		
720	0.057		
780	0.056		
840	0.055		
900	0.056		
960	0.055		
1020	0.055		
1080	0.054		
1140	0.052		
1200	0.053		
1260	0.052		
1320	0.055		
1380	0.059		
1440	0.054		
1500	0.056		
1560	0.055		
1620	0.056		

1680	0.065
1740	0.065
1800	0.059
1860	0.065
1920	0.062
1980	0.063
2040	0.065
2100	0.056
2160	0.057
2220	0.055
2280	0.053
2340	0.049
2400	0.049
2460	0.054
2520	0.053
2580	0.055
2640	0.059
2700	0.053
2760	0.045
2820	0.043
2880	0.045
2940	0.046
3000	0.042
3060	0.044
3120	0.049
3180	0.042
3240	0.041
3300	0.039
3360	0.038
3420	0.039
3480	0.044
3540	0.045
3600	0.055
3660	0.059
3720	0.051
3780	0.047
3840	0.043
3900	0.04
3960	0.043
4020	0.039
4080	0.038
4140	0.046
4200	0.047
4260	0.043
4320	0.046
4380	0.039
4440	0.039

4500	0.034
4560	0.032
4620	0.033
4680	0.039
4740	0.033
4800	0.032
4860	0.032
4920	0.037
4980	0.034
5040	0.034
5100	0.038
5160	0.031
5220	0.032
5280	0.03
5340	0.033
5400	0.034
5460	0.03
5520	0.028
5580	0.036
5640	0.04
5700	0.032
5760	0.027
5820	0.032
5880	0.037
5940	0.03
6000	0.029
6060	0.026
6120	0.025
6180	0.028
6240	0.026
6300	0.025
6360	0.027
6420	0.025
6480	0.03
6540	0.026
6600	0.027
6660	0.029
6720	0.027
6780	0.024
6840	0.024
6900	0.029
6960	0.026
7020	0.027
7080	0.024
7140	0.025
7200	0.024
7260	0.024

7320	0.025
7380	0.029
7440	0.027
7500	0.024
7560	0.023
7620	0.024
7680	0.024
7740	0.025
7800	0.024
7860	0.027
7920	0.029
7980	0.03
8040	0.027
8100	0.027
8160	0.026
8220	0.028
8280	0.03
8340	0.026
8400	0.025
8460	0.025
8520	0.029
8580	0.025
8640	0.031
8700	0.029
8760	0.024
8820	0.024
8880	0.022
8940	0.027
9000	0.027
9060	0.028
9120	0.029
9180	0.027
9240	0.026
9300	0.021
9360	0.024
9420	0.023
9480	0.027
9540	0.024
9600	0.024
9660	0.027
9720	0.03
9780	0.026
9840	0.025
9900	0.028
9960	0.028
10020	0.024
10080	0.025

10140	0.024
10200	0.024
10260	0.024
10320	0.024
10380	0.022
10440	0.026
10500	0.028
10560	0.027
10620	0.024
10680	0.028
10740	0.034
10800	0.025
10860	0.02
10920	0.024
10980	0.029
11040	0.03
11100	0.029
11160	0.028
11220	0.025
11280	0.024
11340	0.025
11400	0.026
11460	0.027
11520	0.028
11580	0.024
11640	0.024
11700	0.031
11760	0.043
11820	0.032
11880	0.022
11940	0.027
12000	0.026
12060	0.021
12120	0.02
12180	0.024
12240	0.026
12300	0.026
12360	0.021
12420	0.024
12480	0.026
12540	0.024
12600	0.027
12660	0.023
12720	0.025
12780	0.034
12840	0.028
12900	0.026

12960	0.023
13020	0.021
13080	0.021
13140	0.024
13200	0.023
13260	0.026
13320	0.025
13380	0.025
13440	0.024
13500	0.023
13560	0.026
13620	0.025
13680	0.023
13740	0.023
13800	0.024
13860	0.026
13920	0.026
13980	0.026
14040	0.027
14100	0.025
14160	0.025
14220	0.027
14280	0.025
14340	0.027
14400	0.027
14460	0.023
14520	0.029
14580	0.025
14640	0.028
14700	0.022
14760	0.028
14820	0.023
14880	0.022
14940	0.022
15000	0.022
15060	0.022
15120	0.022
15180	0.021
15240	0.02
15300	0.022
15360	0.022
15420	0.021
15480	0.025
15540	0.023
15600	0.026
15660	0.03
15720	0.022

15780	0.025
15840	0.041
15900	0.026
15960	0.022
16020	0.026
16080	0.023
16140	0.023
16200	0.022
16260	0.021
16320	0.02
16380	0.024
16440	0.023
16500	0.023
16560	0.021
16620	0.022
16680	0.02
16740	0.019
16800	0.02
16860	0.022
16920	0.021
16980	0.021
17040	0.019
17100	0.021
17160	0.019
17220	0.022
17280	0.023
17340	0.022
17400	0.022
17460	0.022
17520	0.019
17580	0.018
17640	0.02
17700	0.02
17760	0.019
17820	0.02
17880	0.02
17940	0.022
18000	0.022
18060	0.025
18120	0.02
18180	0.02
18240	0.021
18300	0.021
18360	0.023
18420	0.02
18480	0.019
18540	0.021

18600	0.028
18660	0.02
18720	0.018
18780	0.021
18840	0.025
18900	0.023
18960	0.021
19020	0.021
19080	0.019
19140	0.02
19200	0.017
19260	0.017
19320	0.021
19380	0.017
19440	0.016
19500	0.018
19560	0.022
19620	0.02
19680	0.018
19740	0.017
19800	0.018
19860	0.021
19920	0.02
19980	0.025
20040	0.021
20100	0.019
20160	0.021
20220	0.017
20280	0.021
20340	0.022
20400	0.018
20460	0.019
20520	0.027
20580	0.021
20640	0.025
20700	0.02
20760	0.023
20820	0.021
20880	0.017
20940	0.017
21000	0.02
21060	0.023
21120	0.024
21180	0.028
21240	0.024
21300	0.02
21360	0.019

21420	0.019
21480	0.022
21540	0.02
21600	0.021
21660	0.02
21720	0.021
21780	0.021
21840	0.023
21900	0.022
21960	0.025
22020	0.023
22080	0.025
22140	0.026
22200	0.026
22260	0.026
22320	0.019
22380	0.021
22440	0.017
22500	0.016
22560	0.018
22620	0.018
22680	0.018
22740	0.024
22800	0.021
22860	0.02
22920	0.022
22980	0.03
23040	0.032
23100	0.022
23160	0.021
23220	0.022
23280	0.024
23340	0.019
23400	0.02
23460	0.02
23520	0.02
23580	0.02
23640	0.02
23700	0.022
23760	0.021
23820	0.021
23880	0.025
23940	0.022
24000	0.024
24060	0.023
24120	0.019
24180	0.019

24240

0.024

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530094504
Firmware Version	3.1
Calibration Date	9/2/2021
Test Name	MANUAL_004
Test Start Time	7:54:08 AM
Test Start Date	2/17/2022
Test Length [D:H:M]	0:05:26
Test Interval [M:S]	1:00
Mass Average [mg/m3]	0.018
Mass Minimum [mg/m3]	0.007
Mass Maximum [mg/m3]	0.038
Mass TWA [mg/m3]	0.012
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	326

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
60	0.019		
120	0.021		
180	0.02		
240	0.022		
300	0.024		
360	0.021		
420	0.019		
480	0.018		
540	0.018		
600	0.019		
660	0.018		
720	0.02		
780	0.019		
840	0.02		
900	0.019		
960	0.019		
1020	0.019		
1080	0.018		
1140	0.02		
1200	0.016		
1260	0.015		
1320	0.016		
1380	0.015		
1440	0.017		
1500	0.018		
1560	0.018		
1620	0.021		

1680	0.018
1740	0.019
1800	0.017
1860	0.016
1920	0.015
1980	0.014
2040	0.015
2100	0.018
2160	0.018
2220	0.017
2280	0.021
2340	0.018
2400	0.017
2460	0.018
2520	0.02
2580	0.027
2640	0.019
2700	0.016
2760	0.015
2820	0.015
2880	0.019
2940	0.018
3000	0.018
3060	0.015
3120	0.015
3180	0.017
3240	0.017
3300	0.017
3360	0.017
3420	0.017
3480	0.018
3540	0.018
3600	0.014
3660	0.015
3720	0.015
3780	0.014
3840	0.013
3900	0.017
3960	0.017
4020	0.012
4080	0.013
4140	0.014
4200	0.013
4260	0.015
4320	0.012
4380	0.013
4440	0.014

4500	0.013
4560	0.012
4620	0.014
4680	0.014
4740	0.015
4800	0.023
4860	0.014
4920	0.014
4980	0.012
5040	0.013
5100	0.012
5160	0.013
5220	0.015
5280	0.014
5340	0.012
5400	0.015
5460	0.012
5520	0.014
5580	0.012
5640	0.012
5700	0.014
5760	0.012
5820	0.012
5880	0.012
5940	0.011
6000	0.015
6060	0.011
6120	0.013
6180	0.012
6240	0.014
6300	0.016
6360	0.014
6420	0.018
6480	0.015
6540	0.017
6600	0.016
6660	0.012
6720	0.011
6780	0.012
6840	0.009
6900	0.01
6960	0.014
7020	0.009
7080	0.009
7140	0.01
7200	0.008
7260	0.009

7320	0.01
7380	0.01
7440	0.014
7500	0.017
7560	0.013
7620	0.009
7680	0.013
7740	0.012
7800	0.012
7860	0.01
7920	0.009
7980	0.011
8040	0.012
8100	0.013
8160	0.014
8220	0.011
8280	0.01
8340	0.011
8400	0.009
8460	0.01
8520	0.011
8580	0.01
8640	0.013
8700	0.013
8760	0.011
8820	0.01
8880	0.011
8940	0.009
9000	0.011
9060	0.013
9120	0.012
9180	0.01
9240	0.01
9300	0.009
9360	0.011
9420	0.009
9480	0.01
9540	0.01
9600	0.009
9660	0.008
9720	0.009
9780	0.013
9840	0.014
9900	0.011
9960	0.013
10020	0.008
10080	0.011

10140	0.01
10200	0.013
10260	0.01
10320	0.011
10380	0.01
10440	0.008
10500	0.008
10560	0.007
10620	0.01
10680	0.012
10740	0.01
10800	0.011
10860	0.013
10920	0.011
10980	0.011
11040	0.011
11100	0.01
11160	0.009
11220	0.013
11280	0.023
11340	0.02
11400	0.021
11460	0.015
11520	0.009
11580	0.012
11640	0.012
11700	0.015
11760	0.016
11820	0.02
11880	0.021
11940	0.022
12000	0.026
12060	0.02
12120	0.026
12180	0.024
12240	0.023
12300	0.024
12360	0.032
12420	0.027
12480	0.026
12540	0.03
12600	0.03
12660	0.035
12720	0.032
12780	0.026
12840	0.024
12900	0.024

12960	0.027
13020	0.025
13080	0.026
13140	0.029
13200	0.028
13260	0.02
13320	0.023
13380	0.025
13440	0.026
13500	0.025
13560	0.026
13620	0.02
13680	0.018
13740	0.022
13800	0.029
13860	0.024
13920	0.023
13980	0.021
14040	0.026
14100	0.021
14160	0.022
14220	0.029
14280	0.027
14340	0.026
14400	0.024
14460	0.025
14520	0.025
14580	0.021
14640	0.025
14700	0.033
14760	0.029
14820	0.029
14880	0.022
14940	0.026
15000	0.034
15060	0.037
15120	0.032
15180	0.03
15240	0.03
15300	0.031
15360	0.031
15420	0.033
15480	0.035
15540	0.031
15600	0.028
15660	0.024
15720	0.024

15780	0.029
15840	0.031
15900	0.03
15960	0.038
16020	0.037
16080	0.026
16140	0.027
16200	0.024
16260	0.021
16320	0.018
16380	0.021
16440	0.024
16500	0.021
16560	0.021
16620	0.021
16680	0.021
16740	0.022
16800	0.021
16860	0.02
16920	0.022
16980	0.02
17040	0.026
17100	0.024
17160	0.022
17220	0.024
17280	0.035
17340	0.022
17400	0.022
17460	0.022
17520	0.024
17580	0.025
17640	0.025
17700	0.022
17760	0.023
17820	0.023
17880	0.023
17940	0.018
18000	0.023
18060	0.023
18120	0.029
18180	0.026
18240	0.023
18300	0.023
18360	0.024
18420	0.025
18480	0.024
18540	0.025

18600	0.021
18660	0.021
18720	0.027
18780	0.024
18840	0.019
18900	0.02
18960	0.033
19020	0.024
19080	0.022
19140	0.022
19200	0.019
19260	0.021
19320	0.019
19380	0.022
19440	0.021
19500	0.017
19560	0.02

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530113202
Firmware Version	3.1
Calibration Date	5/4/2021
Test Name	MANUAL_001
Test Start Time	10:29:40 AM
Test Start Date	2/14/2022
Test Length [D:H:M]	0:06:05
Test Interval [M:S]	1:00
Mass Average [mg/m3]	0.008
Mass Minimum [mg/m3]	0.006
Mass Maximum [mg/m3]	0.025
Mass TWA [mg/m3]	0.006
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	365

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
60	0.025		
120	0.02		
180	0.013		
240	0.012		
300	0.012		
360	0.012		
420	0.011		
480	0.012		
540	0.01		
600	0.009		
660	0.009		
720	0.009		
780	0.012		
840	0.011		
900	0.011		
960	0.012		
1020	0.011		
1080	0.011		
1140	0.011		
1200	0.011		
1260	0.01		
1320	0.01		
1380	0.01		
1440	0.011		
1500	0.013		
1560	0.012		
1620	0.01		

1680	0.01
1740	0.011
1800	0.011
1860	0.011
1920	0.011
1980	0.012
2040	0.011
2100	0.01
2160	0.01
2220	0.012
2280	0.011
2340	0.011
2400	0.012
2460	0.012
2520	0.011
2580	0.01
2640	0.009
2700	0.01
2760	0.011
2820	0.01
2880	0.01
2940	0.009
3000	0.01
3060	0.01
3120	0.009
3180	0.009
3240	0.01
3300	0.009
3360	0.009
3420	0.009
3480	0.008
3540	0.009
3600	0.01
3660	0.01
3720	0.011
3780	0.01
3840	0.01
3900	0.01
3960	0.009
4020	0.009
4080	0.009
4140	0.008
4200	0.008
4260	0.008
4320	0.008
4380	0.007
4440	0.007

4500	0.007
4560	0.008
4620	0.009
4680	0.008
4740	0.007
4800	0.008
4860	0.008
4920	0.009
4980	0.008
5040	0.008
5100	0.008
5160	0.009
5220	0.009
5280	0.009
5340	0.008
5400	0.008
5460	0.008
5520	0.008
5580	0.008
5640	0.008
5700	0.008
5760	0.008
5820	0.009
5880	0.007
5940	0.008
6000	0.007
6060	0.007
6120	0.007
6180	0.008
6240	0.008
6300	0.007
6360	0.007
6420	0.007
6480	0.008
6540	0.008
6600	0.008
6660	0.008
6720	0.007
6780	0.006
6840	0.006
6900	0.006
6960	0.006
7020	0.007
7080	0.007
7140	0.008
7200	0.007
7260	0.007

7320	0.007
7380	0.007
7440	0.007
7500	0.007
7560	0.007
7620	0.007
7680	0.007
7740	0.007
7800	0.007
7860	0.007
7920	0.007
7980	0.007
8040	0.007
8100	0.008
8160	0.007
8220	0.007
8280	0.007
8340	0.007
8400	0.007
8460	0.007
8520	0.007
8580	0.008
8640	0.007
8700	0.007
8760	0.007
8820	0.007
8880	0.007
8940	0.007
9000	0.007
9060	0.007
9120	0.007
9180	0.007
9240	0.006
9300	0.007
9360	0.007
9420	0.008
9480	0.007
9540	0.008
9600	0.007
9660	0.008
9720	0.008
9780	0.008
9840	0.008
9900	0.008
9960	0.008
10020	0.008
10080	0.008

10140	0.008
10200	0.008
10260	0.008
10320	0.008
10380	0.008
10440	0.008
10500	0.008
10560	0.007
10620	0.007
10680	0.007
10740	0.007
10800	0.007
10860	0.007
10920	0.008
10980	0.008
11040	0.008
11100	0.007
11160	0.007
11220	0.007
11280	0.007
11340	0.007
11400	0.007
11460	0.007
11520	0.007
11580	0.008
11640	0.007
11700	0.007
11760	0.007
11820	0.008
11880	0.009
11940	0.008
12000	0.008
12060	0.008
12120	0.008
12180	0.008
12240	0.008
12300	0.009
12360	0.008
12420	0.008
12480	0.008
12540	0.008
12600	0.009
12660	0.008
12720	0.009
12780	0.008
12840	0.009
12900	0.009

12960	0.008
13020	0.009
13080	0.008
13140	0.008
13200	0.008
13260	0.008
13320	0.008
13380	0.008
13440	0.008
13500	0.007
13560	0.007
13620	0.007
13680	0.007
13740	0.007
13800	0.008
13860	0.008
13920	0.008
13980	0.008
14040	0.009
14100	0.008
14160	0.008
14220	0.008
14280	0.009
14340	0.008
14400	0.008
14460	0.008
14520	0.008
14580	0.008
14640	0.009
14700	0.008
14760	0.009
14820	0.009
14880	0.008
14940	0.008
15000	0.008
15060	0.008
15120	0.008
15180	0.008
15240	0.008
15300	0.009
15360	0.009
15420	0.008
15480	0.008
15540	0.008
15600	0.008
15660	0.008
15720	0.008

15780	0.007
15840	0.007
15900	0.007
15960	0.007
16020	0.007
16080	0.007
16140	0.007
16200	0.008
16260	0.007
16320	0.008
16380	0.009
16440	0.009
16500	0.008
16560	0.008
16620	0.007
16680	0.008
16740	0.008
16800	0.007
16860	0.007
16920	0.009
16980	0.008
17040	0.007
17100	0.007
17160	0.008
17220	0.008
17280	0.008
17340	0.009
17400	0.008
17460	0.008
17520	0.008
17580	0.008
17640	0.009
17700	0.009
17760	0.008
17820	0.008
17880	0.008
17940	0.008
18000	0.008
18060	0.008
18120	0.008
18180	0.008
18240	0.008
18300	0.008
18360	0.009
18420	0.009
18480	0.009
18540	0.009

18600	0.009
18660	0.009
18720	0.009
18780	0.008
18840	0.009
18900	0.009
18960	0.008
19020	0.008
19080	0.008
19140	0.008
19200	0.008
19260	0.008
19320	0.008
19380	0.008
19440	0.007
19500	0.008
19560	0.008
19620	0.008
19680	0.009
19740	0.008
19800	0.008
19860	0.008
19920	0.009
19980	0.008
20040	0.008
20100	0.008
20160	0.008
20220	0.008
20280	0.008
20340	0.009
20400	0.009
20460	0.009
20520	0.009
20580	0.01
20640	0.009
20700	0.008
20760	0.009
20820	0.008
20880	0.008
20940	0.009
21000	0.009
21060	0.008
21120	0.008
21180	0.009
21240	0.009
21300	0.008
21360	0.008

21420	0.008
21480	0.008
21540	0.009
21600	0.009
21660	0.009
21720	0.01
21780	0.009
21840	0.009
21900	0.01

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530113202
Firmware Version	3.1
Calibration Date	5/4/2021
Test Name	MANUAL_002
Test Start Time	8:47:27 AM
Test Start Date	2/15/2022
Test Length [D:H:M]	0:07:02
Test Interval [M:S]	1:00
Mass Average [mg/m3]	0.012
Mass Minimum [mg/m3]	0.008
Mass Maximum [mg/m3]	0.024
Mass TWA [mg/m3]	0.011
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	422

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
60	0.022		
120	0.02		
180	0.019		
240	0.018		
300	0.018		
360	0.018		
420	0.017		
480	0.017		
540	0.017		
600	0.017		
660	0.017		
720	0.018		
780	0.019		
840	0.018		
900	0.02		
960	0.02		
1020	0.019		
1080	0.018		
1140	0.018		
1200	0.02		
1260	0.02		
1320	0.019		
1380	0.018		
1440	0.019		
1500	0.019		
1560	0.02		
1620	0.019		

1680	0.02
1740	0.022
1800	0.024
1860	0.019
1920	0.019
1980	0.019
2040	0.018
2100	0.019
2160	0.019
2220	0.02
2280	0.018
2340	0.018
2400	0.02
2460	0.019
2520	0.02
2580	0.02
2640	0.018
2700	0.018
2760	0.02
2820	0.019
2880	0.02
2940	0.02
3000	0.019
3060	0.018
3120	0.018
3180	0.018
3240	0.018
3300	0.018
3360	0.019
3420	0.018
3480	0.017
3540	0.016
3600	0.016
3660	0.017
3720	0.018
3780	0.018
3840	0.018
3900	0.017
3960	0.017
4020	0.016
4080	0.016
4140	0.018
4200	0.018
4260	0.018
4320	0.017
4380	0.017
4440	0.017

4500	0.016
4560	0.016
4620	0.016
4680	0.016
4740	0.018
4800	0.018
4860	0.02
4920	0.019
4980	0.02
5040	0.02
5100	0.02
5160	0.019
5220	0.017
5280	0.017
5340	0.017
5400	0.017
5460	0.016
5520	0.014
5580	0.014
5640	0.015
5700	0.017
5760	0.016
5820	0.016
5880	0.016
5940	0.016
6000	0.015
6060	0.014
6120	0.013
6180	0.012
6240	0.012
6300	0.012
6360	0.012
6420	0.013
6480	0.013
6540	0.014
6600	0.014
6660	0.014
6720	0.014
6780	0.014
6840	0.015
6900	0.015
6960	0.014
7020	0.012
7080	0.012
7140	0.012
7200	0.011
7260	0.011

7320	0.01
7380	0.011
7440	0.012
7500	0.011
7560	0.011
7620	0.012
7680	0.01
7740	0.011
7800	0.011
7860	0.011
7920	0.01
7980	0.011
8040	0.011
8100	0.011
8160	0.011
8220	0.012
8280	0.012
8340	0.011
8400	0.012
8460	0.012
8520	0.011
8580	0.009
8640	0.009
8700	0.011
8760	0.01
8820	0.01
8880	0.01
8940	0.01
9000	0.009
9060	0.01
9120	0.011
9180	0.012
9240	0.012
9300	0.011
9360	0.012
9420	0.013
9480	0.013
9540	0.012
9600	0.011
9660	0.012
9720	0.012
9780	0.011
9840	0.011
9900	0.011
9960	0.012
10020	0.011
10080	0.012

10140	0.011
10200	0.012
10260	0.011
10320	0.011
10380	0.011
10440	0.012
10500	0.012
10560	0.014
10620	0.012
10680	0.012
10740	0.012
10800	0.01
10860	0.011
10920	0.012
10980	0.011
11040	0.011
11100	0.011
11160	0.012
11220	0.011
11280	0.009
11340	0.01
11400	0.011
11460	0.011
11520	0.01
11580	0.01
11640	0.011
11700	0.009
11760	0.009
11820	0.01
11880	0.011
11940	0.012
12000	0.01
12060	0.011
12120	0.011
12180	0.01
12240	0.01
12300	0.01
12360	0.011
12420	0.011
12480	0.011
12540	0.01
12600	0.01
12660	0.009
12720	0.01
12780	0.012
12840	0.01
12900	0.01

12960	0.011
13020	0.012
13080	0.014
13140	0.011
13200	0.01
13260	0.009
13320	0.009
13380	0.01
13440	0.01
13500	0.011
13560	0.011
13620	0.01
13680	0.009
13740	0.01
13800	0.01
13860	0.01
13920	0.013
13980	0.015
14040	0.013
14100	0.011
14160	0.01
14220	0.011
14280	0.009
14340	0.01
14400	0.01
14460	0.01
14520	0.009
14580	0.009
14640	0.009
14700	0.01
14760	0.009
14820	0.01
14880	0.01
14940	0.01
15000	0.01
15060	0.009
15120	0.009
15180	0.009
15240	0.01
15300	0.01
15360	0.01
15420	0.01
15480	0.012
15540	0.011
15600	0.011
15660	0.01
15720	0.011

15780	0.01
15840	0.01
15900	0.01
15960	0.01
16020	0.01
16080	0.01
16140	0.01
16200	0.009
16260	0.01
16320	0.012
16380	0.01
16440	0.01
16500	0.011
16560	0.01
16620	0.011
16680	0.011
16740	0.011
16800	0.011
16860	0.012
16920	0.018
16980	0.015
17040	0.014
17100	0.018
17160	0.015
17220	0.013
17280	0.011
17340	0.01
17400	0.01
17460	0.01
17520	0.01
17580	0.01
17640	0.01
17700	0.01
17760	0.01
17820	0.016
17880	0.009
17940	0.009
18000	0.009
18060	0.01
18120	0.009
18180	0.009
18240	0.009
18300	0.012
18360	0.011
18420	0.01
18480	0.012
18540	0.009

18600	0.009
18660	0.009
18720	0.009
18780	0.01
18840	0.009
18900	0.009
18960	0.009
19020	0.009
19080	0.009
19140	0.009
19200	0.009
19260	0.012
19320	0.009
19380	0.009
19440	0.008
19500	0.01
19560	0.009
19620	0.009
19680	0.01
19740	0.009
19800	0.009
19860	0.009
19920	0.009
19980	0.01
20040	0.011
20100	0.01
20160	0.01
20220	0.009
20280	0.01
20340	0.012
20400	0.01
20460	0.011
20520	0.01
20580	0.01
20640	0.009
20700	0.01
20760	0.009
20820	0.011
20880	0.01
20940	0.01
21000	0.01
21060	0.009
21120	0.01
21180	0.009
21240	0.009
21300	0.009
21360	0.009

21420	0.009
21480	0.009
21540	0.009
21600	0.009
21660	0.01
21720	0.009
21780	0.01
21840	0.01
21900	0.011
21960	0.011
22020	0.014
22080	0.011
22140	0.011
22200	0.011
22260	0.01
22320	0.01
22380	0.01
22440	0.01
22500	0.01
22560	0.01
22620	0.011
22680	0.011
22740	0.01
22800	0.01
22860	0.01
22920	0.01
22980	0.01
23040	0.01
23100	0.01
23160	0.01
23220	0.01
23280	0.011
23340	0.011
23400	0.01
23460	0.009
23520	0.009
23580	0.009
23640	0.01
23700	0.01
23760	0.01
23820	0.01
23880	0.01
23940	0.01
24000	0.01
24060	0.01
24120	0.01
24180	0.01

24240	0.011
24300	0.01
24360	0.01
24420	0.01
24480	0.011
24540	0.013
24600	0.011
24660	0.011
24720	0.011
24780	0.011
24840	0.011
24900	0.013
24960	0.018
25020	0.012
25080	0.01
25140	0.01
25200	0.011
25260	0.01
25320	0.01

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530113202
Firmware Version	3.1
Calibration Date	5/4/2021
Test Name	MANUAL_003
Test Start Time	8:31:47 AM
Test Start Date	2/16/2022
Test Length [D:H:M]	0:06:51
Test Interval [M:S]	1:00
Mass Average [mg/m3]	0.027
Mass Minimum [mg/m3]	0.016
Mass Maximum [mg/m3]	0.069
Mass TWA [mg/m3]	0.023
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	411

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
60	0.063		
120	0.059		
180	0.056		
240	0.057		
300	0.059		
360	0.061		
420	0.054		
480	0.053		
540	0.045		
600	0.046		
660	0.048		
720	0.045		
780	0.047		
840	0.045		
900	0.047		
960	0.044		
1020	0.042		
1080	0.042		
1140	0.041		
1200	0.041		
1260	0.041		
1320	0.042		
1380	0.04		
1440	0.039		
1500	0.044		
1560	0.044		
1620	0.042		

1680	0.041
1740	0.042
1800	0.044
1860	0.048
1920	0.051
1980	0.045
2040	0.047
2100	0.048
2160	0.047
2220	0.048
2280	0.048
2340	0.042
2400	0.042
2460	0.043
2520	0.039
2580	0.039
2640	0.045
2700	0.039
2760	0.043
2820	0.046
2880	0.046
2940	0.039
3000	0.035
3060	0.034
3120	0.037
3180	0.034
3240	0.034
3300	0.038
3360	0.035
3420	0.032
3480	0.032
3540	0.033
3600	0.031
3660	0.032
3720	0.033
3780	0.036
3840	0.041
3900	0.044
3960	0.04
4020	0.034
4080	0.032
4140	0.034
4200	0.037
4260	0.032
4320	0.034
4380	0.039
4440	0.039

4500	0.037
4560	0.033
4620	0.033
4680	0.032
4740	0.029
4800	0.029
4860	0.03
4920	0.031
4980	0.029
5040	0.028
5100	0.032
5160	0.03
5220	0.031
5280	0.033
5340	0.034
5400	0.028
5460	0.026
5520	0.031
5580	0.034
5640	0.037
5700	0.026
5760	0.036
5820	0.04
5880	0.032
5940	0.027
6000	0.026
6060	0.034
6120	0.027
6180	0.025
6240	0.025
6300	0.023
6360	0.023
6420	0.022
6480	0.022
6540	0.024
6600	0.025
6660	0.03
6720	0.024
6780	0.027
6840	0.033
6900	0.026
6960	0.024
7020	0.023
7080	0.023
7140	0.023
7200	0.022
7260	0.021

7320	0.022
7380	0.022
7440	0.021
7500	0.023
7560	0.024
7620	0.023
7680	0.022
7740	0.024
7800	0.024
7860	0.024
7920	0.026
7980	0.023
8040	0.023
8100	0.025
8160	0.027
8220	0.027
8280	0.024
8340	0.024
8400	0.027
8460	0.028
8520	0.025
8580	0.023
8640	0.024
8700	0.026
8760	0.027
8820	0.026
8880	0.026
8940	0.022
9000	0.023
9060	0.02
9120	0.024
9180	0.024
9240	0.024
9300	0.03
9360	0.028
9420	0.027
9480	0.021
9540	0.025
9600	0.021
9660	0.024
9720	0.024
9780	0.023
9840	0.029
9900	0.034
9960	0.023
10020	0.026
10080	0.023

10140	0.024
10200	0.025
10260	0.025
10320	0.022
10380	0.021
10440	0.025
10500	0.025
10560	0.024
10620	0.024
10680	0.029
10740	0.025
10800	0.025
10860	0.022
10920	0.021
10980	0.022
11040	0.022
11100	0.022
11160	0.039
11220	0.029
11280	0.03
11340	0.029
11400	0.024
11460	0.024
11520	0.023
11580	0.02
11640	0.027
11700	0.026
11760	0.023
11820	0.021
11880	0.028
11940	0.041
12000	0.038
12060	0.022
12120	0.022
12180	0.021
12240	0.022
12300	0.019
12360	0.021
12420	0.023
12480	0.022
12540	0.022
12600	0.021
12660	0.022
12720	0.023
12780	0.029
12840	0.025
12900	0.026

12960	0.043
13020	0.036
13080	0.03
13140	0.028
13200	0.022
13260	0.023
13320	0.025
13380	0.024
13440	0.026
13500	0.026
13560	0.023
13620	0.025
13680	0.024
13740	0.024
13800	0.024
13860	0.023
13920	0.022
13980	0.024
14040	0.025
14100	0.026
14160	0.025
14220	0.027
14280	0.025
14340	0.025
14400	0.026
14460	0.025
14520	0.028
14580	0.027
14640	0.024
14700	0.024
14760	0.032
14820	0.034
14880	0.023
14940	0.025
15000	0.024
15060	0.024
15120	0.024
15180	0.023
15240	0.023
15300	0.023
15360	0.022
15420	0.022
15480	0.022
15540	0.022
15600	0.022
15660	0.026
15720	0.024

15780	0.025
15840	0.034
15900	0.023
15960	0.029
16020	0.069
16080	0.045
16140	0.027
16200	0.025
16260	0.023
16320	0.023
16380	0.02
16440	0.021
16500	0.02
16560	0.023
16620	0.026
16680	0.023
16740	0.022
16800	0.022
16860	0.02
16920	0.021
16980	0.02
17040	0.023
17100	0.024
17160	0.02
17220	0.022
17280	0.023
17340	0.021
17400	0.021
17460	0.021
17520	0.022
17580	0.025
17640	0.024
17700	0.021
17760	0.018
17820	0.019
17880	0.019
17940	0.019
18000	0.019
18060	0.02
18120	0.022
18180	0.025
18240	0.027
18300	0.019
18360	0.019
18420	0.023
18480	0.02
18540	0.022

18600	0.022
18660	0.019
18720	0.019
18780	0.023
18840	0.019
18900	0.02
18960	0.019
19020	0.025
19080	0.026
19140	0.023
19200	0.021
19260	0.019
19320	0.019
19380	0.018
19440	0.018
19500	0.018
19560	0.017
19620	0.016
19680	0.016
19740	0.02
19800	0.021
19860	0.016
19920	0.017
19980	0.019
20040	0.021
20100	0.019
20160	0.018
20220	0.018
20280	0.019
20340	0.02
20400	0.018
20460	0.019
20520	0.021
20580	0.021
20640	0.02
20700	0.026
20760	0.022
20820	0.019
20880	0.019
20940	0.023
21000	0.023
21060	0.02
21120	0.018
21180	0.019
21240	0.02
21300	0.02
21360	0.022

21420	0.024
21480	0.02
21540	0.02
21600	0.02
21660	0.021
21720	0.02
21780	0.022
21840	0.022
21900	0.02
21960	0.021
22020	0.024
22080	0.024
22140	0.022
22200	0.02
22260	0.021
22320	0.029
22380	0.037
22440	0.022
22500	0.02
22560	0.018
22620	0.018
22680	0.016
22740	0.016
22800	0.017
22860	0.017
22920	0.019
22980	0.021
23040	0.019
23100	0.02
23160	0.026
23220	0.033
23280	0.025
23340	0.022
23400	0.022
23460	0.023
23520	0.019
23580	0.021
23640	0.019
23700	0.019
23760	0.02
23820	0.02
23880	0.021
23940	0.021
24000	0.021
24060	0.024
24120	0.023
24180	0.022

24240	0.024
24300	0.023
24360	0.021
24420	0.028
24480	0.028
24540	0.026
24600	0.025
24660	0.028

Instrument Name	DustTrak II
Model Number	8530
Serial Number	8530113202
Firmware Version	3.1
Calibration Date	5/4/2021
Test Name	MANUAL_004
Test Start Time	8:49:07 AM
Test Start Date	2/17/2022
Test Length [D:H:M]	0:05:34
Test Interval [M:S]	1:00
Mass Average [mg/m3]	0.018
Mass Minimum [mg/m3]	0.008
Mass Maximum [mg/m3]	0.061
Mass TWA [mg/m3]	0.012
Photometric User Cal	1
Flow User Cal	0
Errors	
Number of Samples	334

Elapsed Time [s]	Mass [mg/m3]	Alarms	Errors
60	0.021		
120	0.016		
180	0.019		
240	0.015		
300	0.018		
360	0.018		
420	0.018		
480	0.015		
540	0.014		
600	0.012		
660	0.012		
720	0.011		
780	0.012		
840	0.013		
900	0.016		
960	0.014		
1020	0.014		
1080	0.012		
1140	0.013		
1200	0.015		
1260	0.013		
1320	0.014		
1380	0.018		
1440	0.012		
1500	0.014		
1560	0.014		
1620	0.012		

1680	0.014
1740	0.016
1800	0.016
1860	0.017
1920	0.015
1980	0.015
2040	0.013
2100	0.012
2160	0.012
2220	0.012
2280	0.013
2340	0.015
2400	0.015
2460	0.014
2520	0.016
2580	0.016
2640	0.016
2700	0.027
2760	0.017
2820	0.035
2880	0.026
2940	0.018
3000	0.02
3060	0.021
3120	0.061
3180	0.031
3240	0.02
3300	0.034
3360	0.017
3420	0.023
3480	0.014
3540	0.021
3600	0.031
3660	0.013
3720	0.016
3780	0.014
3840	0.014
3900	0.016
3960	0.012
4020	0.012
4080	0.018
4140	0.016
4200	0.011
4260	0.01
4320	0.013
4380	0.014
4440	0.012

4500	0.01
4560	0.011
4620	0.015
4680	0.014
4740	0.009
4800	0.011
4860	0.009
4920	0.012
4980	0.014
5040	0.015
5100	0.011
5160	0.01
5220	0.012
5280	0.011
5340	0.011
5400	0.012
5460	0.012
5520	0.009
5580	0.016
5640	0.008
5700	0.016
5760	0.011
5820	0.008
5880	0.012
5940	0.013
6000	0.012
6060	0.01
6120	0.008
6180	0.015
6240	0.02
6300	0.019
6360	0.013
6420	0.021
6480	0.021
6540	0.019
6600	0.027
6660	0.019
6720	0.014
6780	0.02
6840	0.019
6900	0.022
6960	0.026
7020	0.014
7080	0.012
7140	0.015
7200	0.01
7260	0.009

7320	0.01
7380	0.01
7440	0.011
7500	0.009
7560	0.011
7620	0.013
7680	0.013
7740	0.011
7800	0.013
7860	0.009
7920	0.013
7980	0.013
8040	0.011
8100	0.012
8160	0.012
8220	0.013
8280	0.014
8340	0.015
8400	0.013
8460	0.009
8520	0.01
8580	0.008
8640	0.009
8700	0.018
8760	0.01
8820	0.012
8880	0.014
8940	0.013
9000	0.014
9060	0.013
9120	0.01
9180	0.01
9240	0.018
9300	0.016
9360	0.012
9420	0.011
9480	0.011
9540	0.011
9600	0.016
9660	0.011
9720	0.011
9780	0.013
9840	0.009
9900	0.01
9960	0.017
10020	0.021
10080	0.013

10140	0.016
10200	0.014
10260	0.011
10320	0.014
10380	0.013
10440	0.011
10500	0.017
10560	0.012
10620	0.009
10680	0.01
10740	0.008
10800	0.009
10860	0.01
10920	0.012
10980	0.01
11040	0.012
11100	0.012
11160	0.01
11220	0.01
11280	0.009
11340	0.009
11400	0.01
11460	0.016
11520	0.016
11580	0.02
11640	0.017
11700	0.014
11760	0.011
11820	0.011
11880	0.013
11940	0.015
12000	0.033
12060	0.026
12120	0.021
12180	0.022
12240	0.021
12300	0.021
12360	0.026
12420	0.039
12480	0.02
12540	0.027
12600	0.023
12660	0.028
12720	0.022
12780	0.036
12840	0.031
12900	0.032

12960	0.025
13020	0.03
13080	0.034
13140	0.026
13200	0.035
13260	0.025
13320	0.037
13380	0.025
13440	0.021
13500	0.028
13560	0.032
13620	0.024
13680	0.026
13740	0.025
13800	0.021
13860	0.019
13920	0.016
13980	0.018
14040	0.024
14100	0.022
14160	0.017
14220	0.02
14280	0.022
14340	0.053
14400	0.022
14460	0.026
14520	0.029
14580	0.026
14640	0.019
14700	0.021
14760	0.022
14820	0.019
14880	0.021
14940	0.019
15000	0.02
15060	0.02
15120	0.019
15180	0.023
15240	0.027
15300	0.029
15360	0.031
15420	0.025
15480	0.022
15540	0.025
15600	0.026
15660	0.026
15720	0.03

15780	0.027
15840	0.026
15900	0.024
15960	0.021
16020	0.029
16080	0.027
16140	0.027
16200	0.022
16260	0.021
16320	0.021
16380	0.02
16440	0.019
16500	0.016
16560	0.018
16620	0.022
16680	0.023
16740	0.018
16800	0.017
16860	0.019
16920	0.017
16980	0.018
17040	0.018
17100	0.018
17160	0.018
17220	0.019
17280	0.02
17340	0.02
17400	0.021
17460	0.022
17520	0.021
17580	0.021
17640	0.02
17700	0.02
17760	0.023
17820	0.022
17880	0.023
17940	0.021
18000	0.021
18060	0.021
18120	0.017
18180	0.019
18240	0.022
18300	0.023
18360	0.024
18420	0.026
18480	0.021
18540	0.021

18600	0.021
18660	0.02
18720	0.022
18780	0.021
18840	0.02
18900	0.022
18960	0.022
19020	0.022
19080	0.019
19140	0.025
19200	0.023
19260	0.019
19320	0.019
19380	0.022
19440	0.021
19500	0.02
19560	0.02
19620	0.021
19680	0.018
19740	0.017
19800	0.02
19860	0.019
19920	0.02
19980	0.019
20040	0.021

Appendix B:
Boring/Monitoring Well Construction
Logs

					PROJECT NAME:		1001 Whitlock Ave		GEOPROBE NO.		D1	
					LOCATION:		Bronx, NY		JOB NO.		11819	
					METHOD:		Direct Push		GROUND ELEVATION:			
GEOPROBE BY:					Coastal		DATE STARTED:		2/17/2022		GROUNDWATER TABLE DEPTH:	
INSPECTOR:					CM		DATE COMPLETED:		2/17/2022		0 Hr. 24 Hr. Date	
DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM TO (ft) (ft)		ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION				PID		
0						Asphalt and vegetation				0		
5	30	1								0		
										0		
										0		
										0		
10	41	2				Brown fine to coarse SAND, trace Silt				0		
										0		
										0		
										0.3		
15	32	3				Black SILT, little fine to medium Sand				12.5		
										12.3		
										11.6		
										2.4		
20	35	4				Black and Brown SILT, little fine to medium Sand				9.5		
										66.2		
										36.8		
										308		
25	10	5				Grey SILT, trace fine to medium Sand				417		
										179.3		
						Petroleum sheen in GW 20-22'				58.4		
										58.4		
30						BEDROCK REFUSAL AT ± 22 FEET BGS				61.2		
35												
40												

Nominal I.D. of Hole	in.	The subsurface information shown hereon was obtained for the design and estimating purposes for our client. It is made available to authorized users only that they may have access to the same information available to our client. It is presented in good faith, but it is not intended as a substitute for investigations, interpretations or judgment of such authorized users. Information on the logs should not be relied upon without the geotechnical engineers recommendations contained in the report from which these logs were extracted.
Nominal I.D. of Barrel Sampler	1 3/8 in	

Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _____

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE 2.1

					PROJECT NAME:		1001 Whitlock Ave		GEOPROBE NO.		E1 (7')	
					LOCATION:		Bronx, NY		JOB NO.		11819	
					METHOD:		Direct Push		GROUND ELEVATION:			
GEOPROBE BY:					Coastal		DATE STARTED:		2/17/2022		GROUNDWATER TABLE DEPTH:	
INSPECTOR:					CM		DATE COMPLETED:		2/17/2022		0 Hr. 24 Hr. Date	
DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM TO (ft) (ft)		ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION				PID		
0						Topsoil				0		
5	27	1				White and brown fine to coarse SAND, little Gravel, trace Silt. Bedrock pieces				0		
						Black fine to coarse SAND, trace Gravel, trace Bedrock pieces				0		
										0		
										0		
10	35	2				No Recovery				0		
										0		
										0		
										0		
15	17	3				Black fine to coarse SAND, little Gravel, trace Silt, trace Bedrock pieces				0		
						BEDROCK REFUSAL AT ± 12 FEET BGS				0		
20												
25												
30												
35												
40												

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1 3/8 in.

The subsurface information shown hereon was obtained for the design and estimating purposes for our client. It is made available to authorized users only that they may have access to the same information available to our client. It is presented in good faith, but it is not intended as a substitute for investigations, interpretations or judgment of such authorized users. Information on the logs should not be relied upon without the geotechnical engineers recommendations contained in the report from which these logs were extracted.

Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _____

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE 2.1

					PROJECT NAME:		1001 Whitlock Ave		GEOPROBE NO.		W1 (7')	
					LOCATION:		Bronx, NY		JOB NO.		11819	
					METHOD:		Direct Push		GROUND ELEVATION:			
GEOPROBE BY:					Coastal		DATE STARTED:		2/17/2022		GROUNDWATER TABLE DEPTH:	
INSPECTOR:					CM		DATE COMPLETED:		2/17/2022		0 Hr. 24 Hr. Date	
DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH		ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID					
			FROM (ft)	TO (ft)								
0						Topsoil	0					
5	23	1					0					
							0					
							0					
							0					
10	28	2				Red-Brown fine to coarse SAND, little Bedrock pieces, trace Gravel	0					
							0					
							0					
							0					
15						Brown fine to coarse SAND, trace Silt with Weathered Bedrock	0					
							0					
							0					
							0					
20							0					
							0					
							0					
							0					
25							0					
							0					
							0					
							0					
30							0					
							0					
							0					
							0					
35							0					
							0					
							0					
							0					
40							0					
							0					
							0					
							0					

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1 3/8 in.

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _____

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE 2.1

					PROJECT NAME:	1001 Whitlock Ave	GEOPROBE NO.	RI-SB-1
					LOCATION:	Bronx, NY	JOB NO.	11819
					METHOD:	Direct Push	GROUND ELEVATION:	
GEOPROBE BY: Coastal					DATE STARTED:	2/14/2022	GROUNDWATER TABLE DEPTH:~13	
INSPECTOR: CM					DATE COMPLETED:	2/14/2022	0 Hr.	24 Hr.
					Date			
DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH		ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION		PID
			FROM (ft)	TO (ft)				
0						Asphalt and gravel subgrade fill		0
								0
								0
			4.5			Brown-grey fine to coarse SAND, some Gravel		0
5	15	1		5	RI-SB1 (4.5-5')	Brick at 5'		0
								0
						Brown fine to coarse SAND with weathered Bedrock pieces		0
						Brown fine to medium SAND, trace Silt		0
			9.5			Red-Brown fine to coars SAND, trace weathered Bedrock.		0
10	42	2		10	RI-SB1 (9.5-10')	Brown fine to coarse SAND, with weathered Bedrock		0
						Brown coarse to fine SAND, trace Silt		0
								0
								0
			14.5			Grey-Brown SILT, trace coarse to fine Sand		0
15	32	3		15	RI-SB1 (14.5-15')			0
						Brown SILT, trace coarse to fine SAND		0
			17.5					0
	30	4		18	RI-SB1 (17.5-18')	Weathered Bedrock		0
						REFUSAL AT ± 18 FEET BGS		0
								0
25								
30								
35								
40								

Nominal I.D. of Hole	in.	The subsurface information shown hereon was obtained for the design and estimating purposes for our client. It is made available to authorized users only that they may have access to the same information available to our client. It is presented in good faith, but it is not intended as a substitute for investigations, interpretations or judgment of such authorized users. Information on the logs should not be relied upon without the geotechnical engineers recommendations contained in the report from which these logs were extracted.
Nominal I.D. of Barrel Sampler	1 3/8 in	

Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _____

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE 2.1

					PROJECT NAME:		1001 Whitlock Ave		GEOPROBE NO.		RI-SB-2	
					LOCATION:		Bronx, NY		JOB NO.		11819	
					METHOD:		Direct Push		GROUND ELEVATION:			
GEOPROBE BY:					Coastal		DATE STARTED:		2/14/2022		GROUNDWATER TABLE DEPTH:	
INSPECTOR:					CM		DATE COMPLETED:		2/14/2022		0 Hr. 24 Hr. Date	
DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH		ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID					
			FROM (ft)	TO (ft)								
0												
5	29	1				Brown coarse to fine SAND, some Silt	0					
							0					
			3.5			Grey coarse to fine SAND, little Gravel	0					
				4	RI-SB2 (3.5-4')	0						
10	34	2				Brown fine to coarse SAND, trace Silt	0					
							0					
			9.5				0					
				10	RI-SB2 (9.5-10')	0						
15	17	3				Brown SILT, little coarse to fine Sand	0					
							0					
							0					
			14.5				0					
20	34	4					0					
							0					
							0					
			19.5			Grey-Brown fine to coarse SAND, trace Silt	0					
25							0					
							0					
							0					
							0					
30							0					
							0					
							0					
							0					
35							0					
							0					
							0					
							0					
40							0					
							0					
							0					
							0					

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1 1/8 in.

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _____

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE 2.1

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1% in.

The subsurface information shown hereon was obtained for the design and estimating purposes for our client. It is made available to authorized users only that they may have access to the same information available to our client. It is presented in good faith, but it is not intended as a substitute for investigations, interpretations or judgment of such authorized users. Information on the logs should not be relied upon without the geotechnical engineers recommendations contained in the report from which these logs were extracted.

Approximate Change in Strata: _____ Inferred Change in Strata: _____

Page 1 of 1

					PROJECT NAME:	1001 Whitlock Ave	GEOPROBE NO.	RI-SB-4
					LOCATION:	Bronx, NY	JOB NO.	11819
					METHOD:	Direct Push	GROUND ELEVATION:	
GEOPROBE BY: Coastal					DATE STARTED:	2/15/2022	GROUNDWATER TABLE DEPTH: ~12'	
INSPECTOR: CM					DATE COMPLETED:	2/15/2022	0 Hr.	24 Hr.
DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH		ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION		PID
			FROM (ft)	TO (ft)				
0						Asphalt		0
						Brown fine to coarse SAND, trace Silt, with weathered Bedrock pieces		0
								0
			4.5					0
5	38	1		5	RI-SB4 (4.5-5') DUP-1	Brown fine to coarse SAND, trace Silt		0
								0
								0
						Brown fine to coarse SAND, trace Silt, trace Gravel, trace Brick		0
			9.5					0
10	36	2		10	RI-SB4 (9.5-10')			0
						Brown fine to coarse SAND, trace Silt, trace Gravel, trace Weathered Bedrock		0
								0
			14.5			Grey fine to coarse SAND, trace Silt, with Weathered Bedrock		0
15	37	3		15	RI-SB4 (14.5-15')			0
						Dark Grey fine to medium SAND, trace Silt		0
								0
			19.5					0
20	42	4		20	RI-SB4 (19.5-20')			0
						BORING COMPLETED AT ± 20 FEET BGS		
25								
30								
35								
40								

Nominal I.D. of Hole	in.	The subsurface information shown hereon was obtained for the design and estimating purposes for our client. It is made available to authorized users only that they may have access to the same information available to our client. It is presented in good faith, but it is not intended as a substitute for investigations, interpretations or judgment of such authorized users. Information on the logs should not be relied upon without the geotechnical engineers recommendations contained in the report from which these logs were extracted.
Nominal I.D. of Barrel Sampler	1 3/8 in	

Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _____

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE 2.1

					PROJECT NAME:		1001 Whitlock Ave		GEOPROBE NO.		RI-SB-5	
					LOCATION:		Bronx, NY		JOB NO.		11819	
					METHOD:		Direct Push		GROUND ELEVATION:			
GEOPROBE BY:					Coastal		DATE STARTED:		2/15/2022		GROUNDWATER TABLE DEPTH:	
INSPECTOR:					CM		DATE COMPLETED:		2/15/2022		0 Hr. 24 Hr. Date	
DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH		ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID					
			FROM (ft)	TO (ft)								
0						Asphalt and vegetation	0					
5	54	1	4.5	5	RI-SB5 (4.5-5')	Brown fine to coarse SA ND, trace Gravel, trace Silt	0					
							0					
						Grey-Brown fine to coarse SAND, trace Gravel, little Bedrock pieces	0					
						Grey SILT, little fine to medium Sand	0					
10	48	2	9.5	10	RI-SB5 (9.5-10')		0					
							0					
							0					
						Grey-Brown fine to coarse SAND, trace Silt, little Weathered Bedrock	0					
15	56	3	14.5	15	RI-SB5 (14.5-15')		0					
							0					
							0					
						Grey fine to coarse SAND, trace Silt, little Weathered Bedrock	0					
20	40	4	19.5	20	RI-SB5 (19.5-20')		0					
							0					
							0					
						Grey SILT, little fine to coarse Sand	0					
25						Orange-Brown Weathered Bedrock, trace fine to coarse Sand, trace Silt	0					
30												
35												
40												

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1 1/8 in.

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _____

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE 2.1

					PROJECT NAME:		1001 Whitlock Ave		GEOPROBE NO.		RI-SB-6	
					LOCATION:		Bronx, NY		JOB NO.		11819	
					METHOD:		Direct Push		GROUND ELEVATION:			
GEOPROBE BY:					Coastal		DATE STARTED:		2/15/2022		GROUNDWATER TABLE DEPTH:	
INSPECTOR:					CM		DATE COMPLETED:		2/15/2022		0 Hr. 24 Hr. Date	
DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM TO (ft) (ft)		ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION				PID		
0						Asphalt and vegetation				0		
5	35	1	4.5	5	RI-SB6 (4.5-5')	Brown fine to coarse SAND, trace Silt, trace Bedrock pieces				0		
										0		
										0		
										0		
10	40	2	9.5	10	RI-SB6 (9.5-10')	Trace Roots at 5'				0		
						Grey-Brown fine to medium SAND, trace Silt				0		
										0		
										0		
15	25	3	12.5	13	RI-SB6 (12.5-13')	Brown fine to coarse SAND, little Silt, trace Gravel, trace Bedrock pieces				0		
										0		
										0		
										0		
20						Brown fine to coarse SAND, trace Silt, trace Gravel, trace Bedrock pieces				0		
										0		
										0		
										0		
25						REFUSAL AT ± 13 FEET BGS						
30												
35												
40												

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1 3/8 in.

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _____

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE 2.1

					PROJECT NAME:		1001 Whitlock Ave		GEOPROBE NO.		RI-SB-7	
					LOCATION:		Bronx, NY		JOB NO.		11819	
					METHOD:		Direct Push		GROUND ELEVATION:			
GEOPROBE BY:					Coastal		DATE STARTED:		2/16/2022		GROUNDWATER TABLE DEPTH:	
INSPECTOR:					CM		DATE COMPLETED:		2/16/2022		0 Hr. 24 Hr. Date	
DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH		ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID					
			FROM (ft)	TO (ft)								
0						Asphalt and vegetation	0					
5	27	1	4.5	5	RI-SB7 (4.5-5')	Brown fine to coarse SA ND, trace Gravel, trace Silt	0					
							0					
						Grey-Brown fine to coarse SAND, trace Gravel, little Bedrock pieces	0					
						Grey SILT, little fine to medium Sand	0					
10	28	2	9.5	10	RI-SB7 (9.5-10')		0					
							0					
							0					
						Grey-Brown fine to coarse SAND, trace Silt, little Weathered Bedrock	0					
15	36	3	14.5	15	RI-SB7 (14.5-15')		0					
							0					
							0					
						Grey fine to coarse SAND, trace Silt, little Weathered Bedrock	0					
20	12		16.5	17	RI-SB7 (16.5-17')		0					
							0					
							0					
						BEDROCK REFUSAL AT ± 17 FEET BGS						
25												
30												
35												
40												

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1½ in.

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _____

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE 2.1

					PROJECT NAME:		1001 Whitlock Ave		GEOPROBE NO.		RI-SB-8	
					LOCATION:		Bronx, NY		JOB NO.		11819	
					METHOD:		Direct Push		GROUND ELEVATION:			
GEOPROBE BY:					Coastal		DATE STARTED:		2/16/2022		GROUNDWATER TABLE DEPTH:	
INSPECTOR:					CM		DATE COMPLETED:		2/16/2022		0 Hr. 24 Hr. Date	
DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH		ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID					
			FROM (ft)	TO (ft)								
0						Asphalt and vegetation	0					
5	23	1	4.5	5	RI-SB8 (4.5-5') DUP-2	Brown fine to coarse SAND, trace Silt	0					
						Brick at 4'	0					
						Brown fine to coarse SAND, little Silt	0					
							0					
							0					
10	35	2	9.5	10	RI-SB8 (9.5-10')	Mottling at 7'	0					
						Grey-Brown fine to coarse SAND, little Silt, trace Weathered Bedrock	0					
							0					
						Grey-Brown fine to coarse SAND, little Silt, little Weathered Bedrock	0					
							0					
15	26	3	12.5	13	RI-SB8 (12.5-13')	Brown coarse to fine SAND, few Bedrock pieces	0					
							0					
							0					
							0					
							0					
20												
25												
30												
35												
40												

Nominal I.D. of Hole	in.	The subsurface information shown hereon was obtained for the design and estimating purposes for our client. It is made available to authorized users only that they may have access to the same information available to our client. It is presented in good faith, but it is not intended as a substitute for investigations, interpretations or judgment of such authorized users. Information on the logs should not be relied upon without the geotechnical engineers recommendations contained in the report from which these logs were extracted.
Nominal I.D. of Barrel Sampler	1 3/8 in.	

Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _____

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE 2.1

					PROJECT NAME:		1001 Whitlock Ave		GEOPROBE NO.		RI-SB-9	
					LOCATION:		Bronx, NY		JOB NO.		11819	
					METHOD:		Direct Push		GROUND ELEVATION:			
GEOPROBE BY:					Coastal		DATE STARTED:		2/16/2022		GROUNDWATER TABLE DEPTH:	
INSPECTOR:					CM		DATE COMPLETED:		2/16/2022		0 Hr. 24 Hr. Date	
DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH		ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION	PID					
			FROM (ft)	TO (ft)								
0						Asphalt and vegetation	0					
5	32	1	4.5	5	RI-SB9 (4.5-5')	Brick at 5'	0					
							0					
							0					
							0					
10	26	2	9.5	10	RI-SB9 (9.5-10')	Brown fine to coarse SAND, little Gravel, trace Silt, trace Bedrock pieces	0					
							0					
							0					
							0					
15	23	3	14.5	15	RI-SB9 (14.5-15')	Red-Brown SILT, fine to medium Sand	0					
							0					
							0					
							0					
20	41	4	19.5	20	RI-SB9 (19.5-20')	Grey-Brown SILT, little fine to medium Sand	0					
							0					
							0					
							0					
25						Weathered Bedrock	0					
30						BEDROCK REFUSAL AT ± 20 FEET BGS						
35												
40												

Nominal I.D. of Hole	in.
Nominal I.D. of Barrel Sampler	1 1/8 in.

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Pp: Pocket Penetrometer; DP: Direct Push

Approximate Change in Strata: _____ Inferred Change in Strata: _____

Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE 2.1

				PROJECT NAME:		1001 Whitlock Ave		GEOPROBE NO.		RI-SB-10	
				LOCATION:		Bronx, NY		JOB NO.		11819	
				METHOD:		Direct Push		GROUND ELEVATION:			
GEOPROBE BY:				Coastal		DATE STARTED:		2/17/2022		GROUNDWATER TABLE DEPTH:	
INSPECTOR:				CM		DATE COMPLETED:		2/17/2022		0 Hr. 24 Hr. Date	
DEPTH (ft)	RECOVERY (in)	SAMPLE TUBE No.	DEPTH FROM TO (ft) (ft)		ENVIRONMENTAL SOIL SAMPLE NAME	SOIL DESCRIPTION AND STRATIFICATION				PID	
0						Building debris and vegetation				0	
			2			Brown-Grey fine to coarse SAND, little Silt. Brick and Bedrock pieces at 2.5'				0	
	18	1		2.5	RI-SB10 (2-2.5')	BEDROCK REFUSAL AT ± 2.5 FEET BGS				0	
5											
10											
15											
20											
25											
30											
35											
40											

Nominal I.D. of Hole	in.	The subsurface information shown hereon was obtained for the design and estimating purposes for our client. It is made available to authorized users only that they may have access to the same information available to our client. It is presented in good faith, but it is not intended as a substitute for investigations, interpretations or judgment of such authorized users. Information on the logs should not be relied upon without the geotechnical engineers recommendations contained in the report from which these logs were extracted. Pp: Pocket Penetrometer; DP: Direct Push Approximate Change in Strata: _____ Inferred Change in Strata: _____
Nominal I.D. of Barrel Sampler	1 3/8 in	

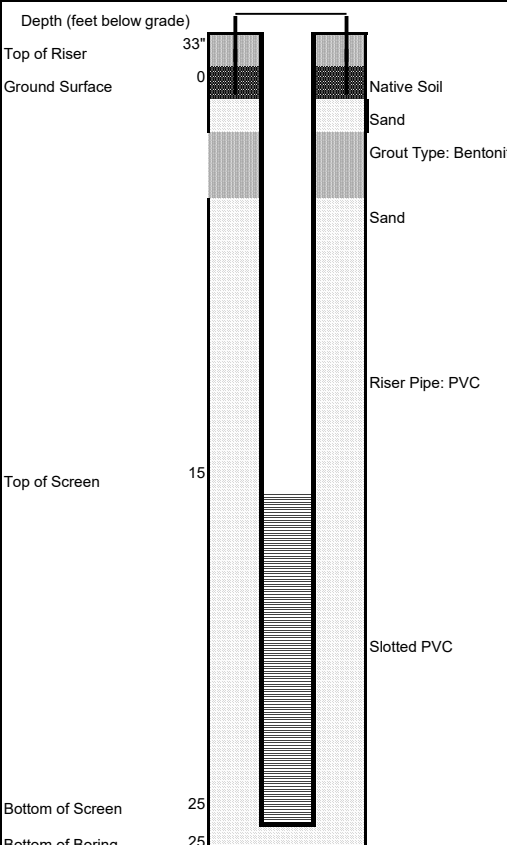
Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

FIGURE 2.1

	PROJECT NAME:	1001 Whitlock Ave				MONITORING WELL NO.		MW-2R		
	PROJECT LOCATION:	Bronx, NY				JOB NO.		11819		
					GROUND ELEVATION:					
BORING BY: Coastal	DATE STARTED	2/17/22	DEVELOPMENT PERIOD				INSIDE CASING DIAMETER (in)		2	
INSPECTOR: CCM	DATE COMPLETED	2/17/22	DEVELOPMENT METHOD				BOREHOLE DIAMETER (in)		6	
NJ DEP PERMIT NO.:	DATE DEVELOPED	N/A	DEVELOPMENT RATE				INITIAL WATER LEVEL (ft):		18.25	
WELL CONSTRUCTION		DEPTH (ft)	Sample	Blows on Spoon				REC	SOIL DESCRIPTION AND STRATIFICATION	P.I.D. (ppm)
		0		0/6	6/12	12/18	18/24	(in)		
Depth (feet below grade) 15" Top of Riser Ground Surface 0 Native Soil Sand Grout Type: Bentonite 5 Sand Riser Pipe: PVC 10 Top of Screen 15 Slotted PVC 19 Bottom of Screen Bottom of Boring 20 25 30 35 40 Remarks										

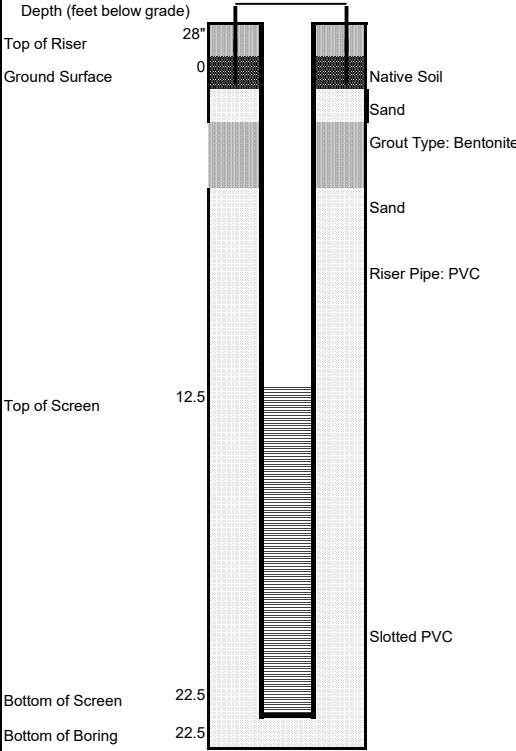
Approximate Change in Strata: _____ Inferred Change in Strata: _____

The subsurface information shown hereon was obtained for the design and estimating purposes for our client. It is made available to authorized users only that they may have access to the same information available to our client. It is presented in good faith, but it is not intended as a substitute for investigations, interpretations or judgment of such authorized users. Information on the logs should not be relied upon without the geotechnical engineers recommendations contained in the report from which these logs were extracted. Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

	PROJECT NAME:	1001 Whitlock Ave				MONITORING WELL NO.		MW-3R		
	PROJECT LOCATION:	Bronx, NY				JOB NO.		11819		
					GROUND ELEVATION:					
BORING BY: Coastal	DATE STARTED	2/15/22	DEVELOPMENT PERIOD				INSIDE CASING DIAMETER (in)		2	
INSPECTOR: CCM	DATE COMPLETED	2/15/22	DEVELOPMENT METHOD				BOREHOLE DIAMETER (in)		6	
NJ DEP PERMIT NO.:	DATE DEVELOPED	N/A	DEVELOPMENT RATE				INITIAL WATER LEVEL (ft):		20.1	
WELL CONSTRUCTION		DEPTH (ft)	Sample	Blows on Spoon				REC	SOIL DESCRIPTION AND STRATIFICATION	P.I.D. (ppm)
				0/6	6/12	12/18	18/24			
		0								
		5								
		10								
		15								
		20								
		25								
		30								
		35								
		40								
Remarks										

Approximate Change in Strata: _____ Inferred Change in Strata: _____

The subsurface information shown hereon was obtained for the design and estimating purposes for our client. It is made available to authorized users only that they may have access to the same information available to our client. It is presented in good faith, but it is not intended as a substitute for investigations, interpretations or judgment of such authorized users. Information on the logs should not be relied upon without the geotechnical engineers recommendations contained in the report from which these logs were extracted. Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

	PROJECT NAME:	1001 Whitlock Ave				MONITORING WELL NO.		RI-MW-4		
	PROJECT LOCATION:	Bronx, NY				JOB NO.		11819		
					GROUND ELEVATION:					
BORING BY: Coastal	DATE STARTED	2/15/22	DEVELOPMENT PERIOD				INSIDE CASING DIAMETER (in)		2	
INSPECTOR: CCM	DATE COMPLETED	2/15/22	DEVELOPMENT METHOD				BOREHOLE DIAMETER (in)		6	
NJ DEP PERMIT NO.:	DATE DEVELOPED	N/A	DEVELOPMENT RATE				INITIAL WATER LEVEL (ft):		20.87	
WELL CONSTRUCTION		DEPTH (ft)	Sample	Blows on Spoon				REC	SOIL DESCRIPTION AND STRATIFICATION	P.I.D. (ppm)
				0/6	6/12	12/18	18/24			
		0								
		5								
		10								
		15								
		20								
		25								
		30								
		35								
		40								
Remarks										

Approximate Change in Strata: _____ Inferred Change in Strata: _____

The subsurface information shown hereon was obtained for the design and estimating purposes for our client. It is made available to authorized users only that they may have access to the same information available to our client. It is presented in good faith, but it is not intended as a substitute for investigations, interpretations or judgment of such authorized users. Information on the logs should not be relied upon without the geotechnical engineers recommendations contained in the report from which these logs were extracted. Soil descriptions represent a field identification after D. M. Burmister unless otherwise noted.

Appendix C:

Waste Classification Sampling Data

N:\ACAD\11819\CAD\11819 - FIG-2 SITE PLAN.DWG 02/07/22 02:21:59PM, yelena.zolotova, LAYOUT: FIG-2

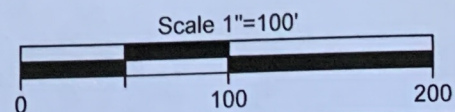


LEGEND:

----- SITE AND PROPERTY BOUNDARY

REFERENCE:

ALL INFORMATION TAKEN FROM GOOGLE EARTH AERIAL, DATED 1/24/2021.



1001 WHITLOCK AVENUE
BRONX, NEW YORK 10459

SITE PLAN

SESI
CONSULTING
ENGINEERS

CERT. OF AUTH. # 24GA27934700
SOILS / FOUNDATIONS
SITE DESIGN
ENVIRONMENTAL

12A MAPLE AVE. PINE BROOK, N.J. 07058 PH: 973-808-9050

FIG-2

DRAWN BY: yy

CHECKED BY: SG

SCALE: AS NOTED

DATE: 02/07/2022

JOB NO.: 11819

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

SESI Consulting Engineers

1001 Whitlock Avenue, Bronx, NY

11819

SGS Job Number: JD39687

Sampling Date: 02/14/22

Report to:

SESI Consulting Engineers

jam@sesi.org

ATTN: Jesse Mausner

Total number of pages in report: **170**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Mike Earp
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

This report shall not be reproduced, except in its entirety, without the written approval of SGS.
Test results relate only to samples analyzed.

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Sample Summary

SESI Consulting Engineers

Job No: JD39687

1001 Whitlock Avenue, Bronx, NY

Project No: 11819

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
---------------	----------------	---------	----------	-------------	------	------------------

This report contains results reported as ND = Not detected. The following applies:

Organics ND = Not detected above the MDL

JD39687-1	02/14/22	12:30	CM	02/14/22	SO	Soil	RI-SB1 (4.5-5')
JD39687-1A	02/14/22	12:30	CM	02/14/22	SO	Soil	RI-SB1 (4.5-5')
JD39687-2	02/14/22	12:50	CM	02/14/22	SO	Soil	RI-SB1 (9.5-10')
JD39687-2A	02/14/22	12:50	CM	02/14/22	SO	Soil	RI-SB1 (9.5-10')
JD39687-3	02/14/22	13:00	CM	02/14/22	SO	Soil	RI-SB1 (14.5-15')
JD39687-3A	02/14/22	13:00	CM	02/14/22	SO	Soil	RI-SB1 (14.5-15')
JD39687-4	02/14/22	13:20	CM	02/14/22	SO	Soil	RI-SB1 (17.5-18')
JD39687-4A	02/14/22	13:20	CM	02/14/22	SO	Soil	RI-SB1 (17.5-18')
JD39687-5	02/14/22	10:21	CM	02/14/22	SO	Soil	RI-SB2 (3.5-4')
JD39687-5A	02/14/22	10:21	CM	02/14/22	SO	Soil	RI-SB2 (3.5-4')
JD39687-6	02/14/22	10:24	CM	02/14/22	SO	Soil	RI-SB2 (9.5-10')
JD39687-6A	02/14/22	10:24	CM	02/14/22	SO	Soil	RI-SB2 (9.5-10')

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary

(continued)

SESI Consulting Engineers

Job No: JD39687

1001 Whitlock Avenue, Bronx, NY
Project No: 11819

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JD39687-7	02/14/22	10:34 CM	02/14/22	SO	Soil	RI-SB2 (14.5-15')
JD39687-7A	02/14/22	10:34 CM	02/14/22	SO	Soil	RI-SB2 (14.5-15')
JD39687-8	02/14/22	10:48 CM	02/14/22	SO	Soil	RI-SB2 (19.5-20')
JD39687-8A	02/14/22	10:48 CM	02/14/22	SO	Soil	RI-SB2 (19.5-20')
JD39687-9	02/14/22	13:00 CM	02/14/22	AQ	Field Blank Soil	FIELD BLANK
JD39687-9A	02/14/22	13:00 CM	02/14/22	AQ	Field Blank Soil	FIELD BLANK
JD39687-10	02/14/22	11:01 CM	02/14/22	SO	Soil	WC-B1 (0-7.5')
JD39687-10A	02/14/22	11:01 CM	02/14/22	SO	Soil	WC-B1 (0-7.5')
JD39687-11	02/14/22	11:21 CM	02/14/22	SO	Soil	WC-B1 (7.5-15')
JD39687-11A	02/14/22	11:21 CM	02/14/22	SO	Soil	WC-B1 (7.5-15')
JD39687-12	02/14/22	13:30 CM	02/14/22	SO	Soil	WC-A1 (0-7.5')
JD39687-12A	02/14/22	13:30 CM	02/14/22	SO	Soil	WC-A1 (0-7.5')
JD39687-13	02/14/22	13:40 CM	02/14/22	SO	Soil	WC-A1 (7.5-15')

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Sample Summary
(continued)

SESI Consulting Engineers

Job No: JD39687

1001 Whitlock Avenue, Bronx, NY
Project No: 11819

Sample Number	Collected		Matrix		Client	
	Date	Time By	Received	Code Type	Sample ID	
JD39687-13A	02/14/22	13:40 CM	02/14/22	SO Soil	WC-A1 (7.5-15')	

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

2

Client: SESI Consulting Engineers

Job No: JD39687

Site: 1001 Whitlock Avenue, Bronx, NY

Report Date 3/4/2022 1:41:02 PM

On 02/14/2022, 23 Sample(s), 0 Trip Blank(s) and 1 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 0.4 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD39687 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260D

Matrix: AQ

Batch ID: V3D7368

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD39533-1MS, JD39533-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for 4-Methyl-2-pentanone(MIBK) are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for Ethylbenzene, m,p-Xylene, o-Xylene, Toluene, Xylene (total) are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- RPD(s) for MS/MSD for Bromomethane are outside control limits. Outside control limits due to matrix interference.
- JD39687-9 for 2-Butanone (MEK): Associated CCV outside of control limits high, sample was ND.
- JD39687-9 for 2-Hexanone: Associated CCV outside of control limits high, sample was ND.
- JD39687-9 for Trichlorofluoromethane: Associated CCV outside of control limits high, sample was ND.
- JD39687-9 for 4-Methyl-2-pentanone(MIBK): Associated CCV outside of control limits high, sample was ND.
- JD39687-9 for Acetone: Associated CCV outside of control limits high, sample was ND.
- JD39687-9 for Chloroform: Associated CCV outside of control limits high, sample was ND.

Matrix: SO

Batch ID: VI9838

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD39687-1MS, JD39687-2DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Chloromethane, Vinyl chloride are outside control limits. Outside control limits due to matrix interference.
- JD39687-11 for Bromomethane: Associated CCV outside of control limits high, sample was ND.
- JD39687-2 for Chloroethane: This compound in blank spike is outside in house QC limits bias high.
- JD39687-10 for Chloroethane: This compound in blank spike is outside in house QC limits bias high.
- JD39687-5 for Bromomethane: Associated CCV outside of control limits high, sample was ND.
- JD39687-4 for Bromomethane: Associated CCV outside of control limits high, sample was ND.
- JD39687-1 for Bromomethane: Associated CCV outside of control limits high, sample was ND.
- JD39687-10 for Bromomethane: Associated CCV outside of control limits high, sample was ND.
- JD39687-6 for Chloroethane: This compound in blank spike is outside in house QC limits bias high.
- JD39687-6 for Bromomethane: Associated CCV outside of control limits high, sample was ND.
- JD39687-5 for Chloroethane: This compound in blank spike is outside in house QC limits bias high.
- VI9838-BS for Chloroethane: High percent recovery and no associated positive reported in the QC batch.

Friday, March 4, 2022

Page 1 of 9

MS Volatiles By Method SW846 8260D

Matrix: SO

Batch ID: VI9838

- JD39687-3 for Bromomethane: Associated CCV outside of control limits high, sample was ND.
- JD39687-13 for Chloroethane: This compound in blank spike is outside in house QC limits bias high.
- JD39687-1 for Chloroethane: This compound in blank spike is outside in house QC limits bias high.
- JD39687-13 for Bromomethane: Associated CCV outside of control limits high, sample was ND.
- JD39687-4 for Chloroethane: This compound in blank spike is outside in house QC limits bias high.
- JD39687-11 for Chloroethane: This compound in blank spike is outside in house QC limits bias high.
- JD39687-2 for Bromomethane: Associated CCV outside of control limits high, sample was ND.
- JD39687-12 for Chloroethane: This compound in blank spike is outside in house QC limits bias high.
- JD39687-12 for Bromomethane: Associated CCV outside of control limits high, sample was ND.
- JD39687-3 for Chloroethane: This compound in blank spike is outside in house QC limits bias high.
- JD39687-7 for Chloroethane: This compound in blank spike is outside in house QC limits bias high.
- JD39687-7 for Bromomethane: Associated CCV outside of control limits high, sample was ND.

MS Semi-volatiles By Method EPA 537M BY ID

Matrix: AQ

Batch ID: F:OP89856

- The data for EPA 537M BY ID meets quality control requirements.
- JD39687-9A: Analysis performed at SGS Orlando, FL.

Matrix: SO

Batch ID: F:OP89835

- The data for EPA 537M BY ID meets quality control requirements.
- JD39687-4A: Analysis performed at SGS Orlando, FL.
- JD39687-7A: Analysis performed at SGS Orlando, FL.
- JD39687-6A: Analysis performed at SGS Orlando, FL.
- JD39687-5A: Analysis performed at SGS Orlando, FL.
- JD39687-3A: Analysis performed at SGS Orlando, FL.
- JD39687-2A: Analysis performed at SGS Orlando, FL.
- JD39687-13A: Analysis performed at SGS Orlando, FL.
- JD39687-12A: Analysis performed at SGS Orlando, FL.
- JD39687-10A: Analysis performed at SGS Orlando, FL.
- JD39687-4A: Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.
- JD39687-11A: Analysis performed at SGS Orlando, FL.
- JD39687-1A: Analysis performed at SGS Orlando, FL.

MS Semi-volatiles By Method SW846 8270E

Matrix: AQ

Batch ID: OP38145

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- JD39687-9 for Caprolactam: Associated CCV outside of control limits high, sample was ND.

Matrix: SO

Batch ID: OP38141

- All samples were extracted within the recommended method holding time.
- Sample(s) JD39659-1MS, JD39659-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for bis(2-Ethylhexyl)phthalate are outside control limits.
- JD39687-10 for Acetophenone: Associated CCV outside of control limits high, sample was ND.
- JD39687-13 for 4-Chloroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39687-13 for N-Nitroso-di-n-propylamine: Associated CCV outside of control limits high, sample was ND.
- JD39687-1 for 3&4-Methylphenol: Associated CCV outside of control limits high, sample was ND.
- JD39687-5 for 3&4-Methylphenol: Associated CCV outside of control limits high, sample was ND.
- JD39687-5 for Acetophenone: Associated CCV outside of control limits high, sample was ND.
- JD39687-13 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD39687-13 for Acetophenone: Associated CCV outside of control limits high, sample was ND.
- JD39687-5 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD39687-7 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD39687-6 for Acetophenone: Associated CCV outside of control limits high, sample was ND.
- JD39687-13 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39687-3 for 4-Chloroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39687-5 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39687-13 for 3&4-Methylphenol: Associated CCV outside of control limits high, sample was ND.
- JD39687-4 for 4-Chloroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39687-2 for N-Nitroso-di-n-propylamine: Associated CCV outside of control limits high, sample was ND.
- JD39687-12 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD39687-12 for N-Nitroso-di-n-propylamine: Associated CCV outside of control limits high, sample was ND.
- JD39687-12 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39687-10 for 4-Chloroaniline: Associated CCV outside of control limits high, sample was ND.
- OP38141-BS1 for bis(2-Ethylhexyl)phthalate: Outside of in house control limits.
- JD39687-1 for 4-Chloroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39687-12 for 4-Chloroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39687-7 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39687-10 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD39687-10 for N-Nitroso-di-n-propylamine: Associated CCV outside of control limits high, sample was ND.
- JD39687-10 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39687-11 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD39687-12 for 3&4-Methylphenol: Associated CCV outside of control limits high, sample was ND.
- JD39687-4 for N-Nitroso-di-n-propylamine: Associated CCV outside of control limits high, sample was ND.
- JD39687-11 for N-Nitroso-di-n-propylamine: Associated CCV outside of control limits high, sample was ND.
- JD39687-7 for 4-Chloroaniline: Associated CCV outside of control limits high, sample was ND.

Friday, March 4, 2022

Page 3 of 9

MS Semi-volatiles By Method SW846 8270E

Matrix: SO

Batch ID: OP38141

- JD39687-5 for 4-Chloroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39687-6 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD39687-6 for 4-Chloroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39687-6 for 3&4-Methylphenol: Associated CCV outside of control limits high, sample was ND.
- JD39687-4 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD39687-2 for 4-Chloroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39687-2 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD39687-2 for Acetophenone: Associated CCV outside of control limits high, sample was ND.
- JD39687-3 for 3&4-Methylphenol: Associated CCV outside of control limits high, sample was ND.
- JD39687-1 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD39687-4 for 3&4-Methylphenol: Associated CCV outside of control limits high, sample was ND.
- JD39687-3 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD39687-3 for N-Nitroso-di-n-propylamine: Associated CCV outside of control limits high, sample was ND.
- JD39687-3 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39687-3 for Acetophenone: Associated CCV outside of control limits high, sample was ND.
- JD39687-6 for N-Nitroso-di-n-propylamine: Associated CCV outside of control limits high, sample was ND.
- JD39687-7 for 3&4-Methylphenol: Associated CCV outside of control limits high, sample was ND.
- JD39687-11 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39687-11 for Acetophenone: Associated CCV outside of control limits high, sample was ND.
- JD39687-10 for 3&4-Methylphenol: Associated CCV outside of control limits high, sample was ND.
- JD39687-11 for 3&4-Methylphenol: Associated CCV outside of control limits high, sample was ND.
- JD39687-12 for Acetophenone: Associated CCV outside of control limits high, sample was ND.
- JD39687-7 for N-Nitroso-di-n-propylamine: Associated CCV outside of control limits high, sample was ND.
- JD39687-11 for 4-Chloroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39687-2 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39687-4 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39687-2 for 3&4-Methylphenol: Associated CCV outside of control limits high, sample was ND.
- JD39687-1 for Acetophenone: Associated CCV outside of control limits high, sample was ND.
- JD39687-1 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39687-4 for Acetophenone: Associated CCV outside of control limits high, sample was ND.
- JD39687-1 for N-Nitroso-di-n-propylamine: Associated CCV outside of control limits high, sample was ND.
- JD39687-7 for Acetophenone: Associated CCV outside of control limits high, sample was ND.
- JD39687-6 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39687-5 for N-Nitroso-di-n-propylamine: Associated CCV outside of control limits high, sample was ND.

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GC/LC Semi-volatiles By Method SW846 8081B

Matrix: AQ

Batch ID: OP38165

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- JD39687-9 for Endrin ketone: Associated CCV outside of control limits high, sample was ND.
- OP38165-BSD for Heptachlor epoxide: Analytical precision exceeds in-house control limits.
- OP38165-BSD for Endosulfan-II: Analytical precision exceeds in-house control limits.

Matrix: SO

Batch ID: OP38151

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39687-1MS, JD39687-1MSD were used as the QC samples indicated.
- JD39687-3: Had TBA cleanup.
- OP38151-MB1: Had TBA cleanup.
- OP38151-BS1: Had TBA cleanup.
- JD39687-12: Had TBA cleanup.
- JD39687-13: Had TBA cleanup.
- OP38151-BS1 for Heptachlor epoxide: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

GC/LC Semi-volatiles By Method SW846 8082A

Matrix: AQ

Batch ID: OP38166

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Matrix: SO

Batch ID: OP38152

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39687-3MS, JD39687-3MSD were used as the QC samples indicated.
- OP38152-BS1: BS1 and BSD both prepped and analyzed. Since BSD is within method limits data are qualified and reported.
- OP38152-MB1: Had TBA cleanup.
- JD39687-13: Had TBA cleanup.
- OP38152-BS1 for Decachlorobiphenyl: Outside of in house control limits.
- JD39687-13 for Aroclor 1016: Associated CCV outside of control limits high, sample was ND.
- JD39687-7 for Aroclor 1016: This compound outside control limits biased low in the associated BS.
- JD39687-1 for Aroclor 1016: This compound outside control limits biased low in the associated BS.
- JD39687-2 for Aroclor 1260: This compound outside control limits biased low in the associated BS.
- JD39687-3 for Aroclor 1016: This compound outside control limits biased low in the associated BS.
- JD39687-1 for Aroclor 1260: This compound outside control limits biased low in the associated BS.
- OP38152-BSD for Aroclor 1260: Analytical precision exceeds in-house control limits.
- JD39687-4 for Aroclor 1260: This compound outside control limits biased low in the associated BS.
- JD39687-4 for Aroclor 1016: This compound outside control limits biased low in the associated BS.
- OP38152-BSD for Aroclor 1016: Analytical precision exceeds in-house control limits.
- JD39687-7 for Aroclor 1260: This compound outside control limits biased low in the associated BS.
- JD39687-3 for Aroclor 1260: This compound outside control limits biased low in the associated BS.
- JD39687-6 for Aroclor 1260: This compound outside control limits biased low in the associated BS.
- JD39687-6 for Aroclor 1016: This compound outside control limits biased low in the associated BS.
- JD39687-5 for Aroclor 1260: This compound outside control limits biased low in the associated BS.
- JD39687-5 for Aroclor 1016: This compound outside control limits biased low in the associated BS.
- JD39687-2 for Aroclor 1016: This compound outside control limits biased low in the associated BS.

Metals Analysis By Method SW846 6010D

Matrix: AQ

Batch ID: MP31312

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39634-8FSDL, JD39634-8MS, JD39634-8MSD, JD39634-8SDL were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Calcium, Sodium are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for Serial Dilution for Arsenic, Cobalt, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc are outside control limits. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- Samples(s) JD39687-9: New York does not offer 3010A certification for antimony and silver. The laboratory is certified for method 3010A (Acid Digestion for Total Metals) for all other metals and is certified for the associated analytical methods of 6010C (ICP Analysis) and 6020A (ICP-MS Analysis). New York does certify for method 3005A (Acid Digestion for Total Recoverable or Dissolved Metals) for antimony and silver and the laboratory holds that certification, but that provides total recoverable rather than total metals results.
- MP31312-SD2 for Sodium: Serial dilution indicates possible matrix interference.

Matrix: SO

Batch ID: MP31310

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39687-1MS, JD39687-1MSD, JD39687-1PS, JD39687-1SDL were used as the QC samples for metals.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for Antimony are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for Iron, Aluminum are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for MS/MSD for Iron, Lead are outside control limits. High rpd due to possible sample nonhomogeneity.
- RPD(s) for Serial Dilution for Antimony, Silver, Thallium, Arsenic, Sodium are outside control limits, Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- JD39687-11 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39687-4 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39687-4 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39687-1 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39687-1 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39687-2 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39687-1 for Antimony: Elevated detection limit due to dilution required for high interfering element.
- JD39687-6 for Antimony: Elevated detection limit due to dilution required for high interfering element.
- JD39687-2 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39687-4 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39687-5 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39687-5 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39687-5 for Antimony: Elevated detection limit due to dilution required for high interfering element.
- JD39687-4 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39687-4 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39687-4 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39687-2 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39687-6 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39687-2 for Antimony: Elevated detection limit due to dilution required for high interfering element.
- JD39687-4 for Antimony: Elevated detection limit due to dilution required for high interfering element.
- JD39687-10 for Selenium: Elevated detection limit due to dilution required for high interfering element.

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Batch ID: MP31310

- Friday, March 4, 2022**

SGS

Metals Analysis By Method SW846 7470A

Matrix: AQ

Batch ID: MP31326

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39700-1MS, JD39700-1MSD were used as the QC samples for metals.

Metals Analysis By Method SW846 7471B

Matrix: SO

Batch ID: MP31323

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39633-14MS, JD39633-14MSD were used as the QC samples for metals.

General Chemistry By Method EPA 335.4/LACHAT

Matrix: AQ

Batch ID: GP38571

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

General Chemistry By Method SM2540 G 18TH ED MOD

Matrix: SO

Batch ID: GN26404

- Sample(s) JD39687-12DUP were used as the QC samples for Solids, Percent.

Matrix: SO

Batch ID: GN26410

- Sample(s) JD39687-13DUP were used as the QC samples for Solids, Percent.

General Chemistry By Method SW846 9012B/LACHAT

Matrix: SO

Batch ID: GP38543

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39633-7DUP, JD39633-7MS were used as the QC samples for Cyanide.
- Matrix Spike Recovery(s) for Cyanide are outside control limits. Spike recovery indicates possible matrix interference.

Matrix: SO

Batch ID: GP38545

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39687-12DUP, JD39687-12MS were used as the QC samples for Cyanide.
- Matrix Spike Recovery(s) for Cyanide are outside control limits. Spike recovery indicates possible matrix interference.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Friday, March 4, 2022

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SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: SGS Dayton, NJ

Job No: JD39687

Site: SESINJPB: 1001 Whitlock Avenue, Bronx, NY

Report Date 3/3/2022 2:29:10 PM

On 02/14/2022, 11 Sample(s), 0 Trip Blank(s) and 1 Field Blank(s) were received at SGS North America Inc - Orlando. at a maximum corrected temperature of 2 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. - Orlando Job Number of JD39687 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section. Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

MS Semi-volatiles By Method EPA 537M BY ID

Matrix: AQ

Batch ID: OP89856

Sample(s) FA93293-1MS, FA93293-7DUP were used as the QC samples indicated.

Matrix: SO

Batch ID: OP89835

Sample(s) JD39599-1MS, JD39599-1MSD were used as the QC samples indicated.

Sample(s) JD39687-4A have surrogates outside control limits.

JD39687-4A: Dilution required due to matrix interference (ID recovery standard failure).

JD39687-4A for d3-MeFOSAA: Outside control limits.

SGS North America Inc. - Orlando certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted. Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria. SGS North America Inc.- Orlando is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety.

Narrative prepared by:

Ariel Hartney, Client Services (signature on file)

Summary of Hits

Job Number: JD39687
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JD39687-1 RI-SB1 (4.5-5')

Benzo(a)anthracene	50.3	36	10	ug/kg	SW846 8270E
Benzo(a)pyrene	53.8	36	17	ug/kg	SW846 8270E
Benzo(b)fluoranthene	62.0	36	16	ug/kg	SW846 8270E
Benzo(g,h,i)perylene	33.8 J	36	18	ug/kg	SW846 8270E
Benzo(k)fluoranthene	24.5 J	36	17	ug/kg	SW846 8270E
Chrysene	49.5	36	11	ug/kg	SW846 8270E
Fluoranthene	66.3	36	16	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	39.0	36	17	ug/kg	SW846 8270E
Phenanthrene	24.7 J	36	12	ug/kg	SW846 8270E
Pyrene	75.8	36	12	ug/kg	SW846 8270E
Aluminum	11400	55		mg/kg	SW846 6010D
Arsenic	2.4	2.2		mg/kg	SW846 6010D
Barium	86.2	22		mg/kg	SW846 6010D
Beryllium ^a	0.85	0.44		mg/kg	SW846 6010D
Calcium	1260	550		mg/kg	SW846 6010D
Chromium	24.4	1.1		mg/kg	SW846 6010D
Cobalt	9.1	5.5		mg/kg	SW846 6010D
Copper	23.6	2.8		mg/kg	SW846 6010D
Iron	20300	55		mg/kg	SW846 6010D
Lead	14.9	2.2		mg/kg	SW846 6010D
Magnesium	3280	550		mg/kg	SW846 6010D
Manganese	169	1.7		mg/kg	SW846 6010D
Nickel	17.5	4.4		mg/kg	SW846 6010D
Potassium	3540	1100		mg/kg	SW846 6010D
Vanadium	28.2	5.5		mg/kg	SW846 6010D
Zinc	56.2	5.5		mg/kg	SW846 6010D

JD39687-1A RI-SB1 (4.5-5')

Perfluorooctanesulfonic acid ^b	0.78	0.55	0.22	ug/kg	EPA 537M BY ID
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JD39687-2 RI-SB1 (9.5-10')

Aluminum	14600	58		mg/kg	SW846 6010D
Barium	109	23		mg/kg	SW846 6010D
Beryllium ^a	1.2	0.46		mg/kg	SW846 6010D
Calcium	1260	580		mg/kg	SW846 6010D
Chromium	31.7	1.2		mg/kg	SW846 6010D
Cobalt	13.6	5.8		mg/kg	SW846 6010D
Copper ^a	26.5	5.8		mg/kg	SW846 6010D
Iron	29000	120		mg/kg	SW846 6010D
Lead	9.8	2.3		mg/kg	SW846 6010D
Magnesium	6030	580		mg/kg	SW846 6010D

Summary of Hits

Job Number: JD39687
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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Manganese		349	1.7		mg/kg	SW846 6010D
Nickel		25.3	4.6		mg/kg	SW846 6010D
Potassium		7550	1200		mg/kg	SW846 6010D
Vanadium		36.3	5.8		mg/kg	SW846 6010D
Zinc		82.0	5.8		mg/kg	SW846 6010D

JD39687-2A RI-SB1 (9.5-10')

Perfluorooctanesulfonic acid ^b	0.26 J	0.55	0.22	ug/kg	EPA 537M BY ID
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JD39687-3 RI-SB1 (14.5-15')

Acetone	27.2	10	4.3	ug/kg	SW846 8260D
2-Butanone (MEK)	2.9 J	10	2.5	ug/kg	SW846 8260D
Benzo(a)anthracene	29.1 J	42	12	ug/kg	SW846 8270E
Benzo(a)pyrene	23.7 J	42	19	ug/kg	SW846 8270E
Benzo(b)fluoranthene	24.5 J	42	19	ug/kg	SW846 8270E
Benzo(g,h,i)perylene	33.5 J	42	21	ug/kg	SW846 8270E
Chrysene	31.3 J	42	13	ug/kg	SW846 8270E
Fluoranthene	32.3 J	42	19	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	21.5 J	42	20	ug/kg	SW846 8270E
Phenanthrene	20.6 J	42	14	ug/kg	SW846 8270E
Pyrene	49.4	42	13	ug/kg	SW846 8270E
Total TIC, Semi-Volatile	370 J			ug/kg	
Aluminum	13900	64		mg/kg	SW846 6010D
Arsenic	3.4	2.6		mg/kg	SW846 6010D
Barium	87.6	26		mg/kg	SW846 6010D
Beryllium	0.72	0.26		mg/kg	SW846 6010D
Calcium	2860	640		mg/kg	SW846 6010D
Chromium	24.5	1.3		mg/kg	SW846 6010D
Cobalt	7.8	6.4		mg/kg	SW846 6010D
Copper	65.1	3.2		mg/kg	SW846 6010D
Iron	17600	64		mg/kg	SW846 6010D
Lead	69.2	2.6		mg/kg	SW846 6010D
Magnesium	3500	640		mg/kg	SW846 6010D
Manganese	123	1.9		mg/kg	SW846 6010D
Mercury	0.18	0.037		mg/kg	SW846 7471B
Nickel	17.3	5.1		mg/kg	SW846 6010D
Potassium	1520	1300		mg/kg	SW846 6010D
Vanadium	31.8	6.4		mg/kg	SW846 6010D
Zinc	69.8	6.4		mg/kg	SW846 6010D

JD39687-3A RI-SB1 (14.5-15')

Perfluorooctanesulfonic acid ^b	0.34 J	0.62	0.25	ug/kg	EPA 537M BY ID
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Summary of Hits

Job Number: JD39687
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JD39687-4 RI-SB1 (17.5-18')

Total TIC, Semi-Volatile	220 J				ug/kg	
Aluminum	26100	54			mg/kg	SW846 6010D
Barium	151	22			mg/kg	SW846 6010D
Beryllium ^a	1.3	1.1			mg/kg	SW846 6010D
Calcium	2340	540			mg/kg	SW846 6010D
Chromium	42.6	1.1			mg/kg	SW846 6010D
Cobalt	21.6	5.4			mg/kg	SW846 6010D
Copper ^a	49.3	14			mg/kg	SW846 6010D
Iron	39000	270			mg/kg	SW846 6010D
Lead	12.8	2.2			mg/kg	SW846 6010D
Magnesium	11800	540			mg/kg	SW846 6010D
Manganese	572	1.6			mg/kg	SW846 6010D
Nickel	27.7	4.3			mg/kg	SW846 6010D
Potassium	9480	1100			mg/kg	SW846 6010D
Vanadium	58.0	5.4			mg/kg	SW846 6010D
Zinc	78.9	5.4			mg/kg	SW846 6010D

JD39687-4A RI-SB1 (17.5-18')

No hits reported in this sample.

JD39687-5 RI-SB2 (3.5-4')

Tetrachloroethene	1.4 J	2.8	0.80		ug/kg	SW846 8260D
Benzo(a)anthracene	82.8	37	10		ug/kg	SW846 8270E
Benzo(a)pyrene	90.4	37	17		ug/kg	SW846 8270E
Benzo(b)fluoranthene	110	37	16		ug/kg	SW846 8270E
Benzo(g,h,i)perylene	70.3	37	19		ug/kg	SW846 8270E
Benzo(k)fluoranthene	37.3	37	17		ug/kg	SW846 8270E
Carbazole	9.6 J	74	5.4		ug/kg	SW846 8270E
Chrysene	89.9	37	12		ug/kg	SW846 8270E
Dibenzo(a,h)anthracene	18.5 J	37	16		ug/kg	SW846 8270E
Fluoranthene	133	37	17		ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	76.9	37	17		ug/kg	SW846 8270E
Phenanthrene	72.0	37	12		ug/kg	SW846 8270E
Pyrene	127	37	12		ug/kg	SW846 8270E
Total TIC, Semi-Volatile	590 J				ug/kg	
Aluminum	17700	60			mg/kg	SW846 6010D
Barium	167	24			mg/kg	SW846 6010D
Beryllium ^a	0.90	0.48			mg/kg	SW846 6010D
Calcium	2750	600			mg/kg	SW846 6010D
Chromium	32.0	1.2			mg/kg	SW846 6010D

Summary of Hits

Job Number: JD39687
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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Cobalt		13.1	6.0		mg/kg	SW846 6010D
Copper ^a		43.7	6.0		mg/kg	SW846 6010D
Iron		29500	120		mg/kg	SW846 6010D
Lead		87.7	2.4		mg/kg	SW846 6010D
Magnesium		5480	600		mg/kg	SW846 6010D
Manganese		493	1.8		mg/kg	SW846 6010D
Mercury		0.18	0.036		mg/kg	SW846 7471B
Nickel		23.8	4.8		mg/kg	SW846 6010D
Potassium		4200	1200		mg/kg	SW846 6010D
Vanadium		40.3	6.0		mg/kg	SW846 6010D
Zinc		224	6.0		mg/kg	SW846 6010D

JD39687-5A RI-SB2 (3.5-4')

Perfluorooctanesulfonic acid ^b	1.1	0.56	0.22	ug/kg	EPA 537M BY ID
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JD39687-6 RI-SB2 (9.5-10')

Aluminum	15600	57		mg/kg	SW846 6010D
Barium	87.9	23		mg/kg	SW846 6010D
Calcium	2000	570		mg/kg	SW846 6010D
Chromium	34.3	1.1		mg/kg	SW846 6010D
Cobalt	14.6	5.7		mg/kg	SW846 6010D
Copper ^a	24.9	14		mg/kg	SW846 6010D
Iron	30000	280		mg/kg	SW846 6010D
Lead	8.3	2.3		mg/kg	SW846 6010D
Magnesium	6210	570		mg/kg	SW846 6010D
Manganese	463	1.7		mg/kg	SW846 6010D
Nickel	30.4	4.5		mg/kg	SW846 6010D
Potassium	5530	1100		mg/kg	SW846 6010D
Vanadium	40.1	5.7		mg/kg	SW846 6010D
Zinc	74.8	5.7		mg/kg	SW846 6010D

JD39687-6A RI-SB2 (9.5-10')

No hits reported in this sample.

JD39687-7 RI-SB2 (14.5-15')

Aluminum	12700	57		mg/kg	SW846 6010D
Arsenic	2.9	2.3		mg/kg	SW846 6010D
Barium	146	23		mg/kg	SW846 6010D
Beryllium ^a	0.65	0.46		mg/kg	SW846 6010D
Calcium	1480	570		mg/kg	SW846 6010D
Chromium	24.2	1.1		mg/kg	SW846 6010D

Summary of Hits

Job Number: JD39687
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Cobalt		9.8	5.7		mg/kg	SW846 6010D
Copper		21.9	2.9		mg/kg	SW846 6010D
Iron		20500	57		mg/kg	SW846 6010D
Lead		7.5	2.3		mg/kg	SW846 6010D
Magnesium		4240	570		mg/kg	SW846 6010D
Manganese		240	1.7		mg/kg	SW846 6010D
Nickel		20.2	4.6		mg/kg	SW846 6010D
Potassium		3850	1100		mg/kg	SW846 6010D
Vanadium		30.0	5.7		mg/kg	SW846 6010D
Zinc		47.3	5.7		mg/kg	SW846 6010D

JD39687-7A RI-SB2 (14.5-15')

No hits reported in this sample.

JD39687-9 FIELD BLANK

No hits reported in this sample.

JD39687-9A FIELD BLANK

No hits reported in this sample.

JD39687-10 WC-B1 (0-7.5')

Anthracene	24.7 J	36	22	ug/kg	SW846 8270E
Benzo(a)anthracene	152	36	10	ug/kg	SW846 8270E
Benzo(a)pyrene	169	36	16	ug/kg	SW846 8270E
Benzo(b)fluoranthene	209	36	16	ug/kg	SW846 8270E
Benzo(g,h,i)perylene	158	36	18	ug/kg	SW846 8270E
Benzo(k)fluoranthene	75.4	36	17	ug/kg	SW846 8270E
Carbazole	18.0 J	72	5.2	ug/kg	SW846 8270E
Chrysene	165	36	11	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene	34.3 J	36	16	ug/kg	SW846 8270E
bis(2-Ethylhexyl)phthalate	99.5	72	8.4	ug/kg	SW846 8270E
Fluoranthene	295	36	16	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	165	36	17	ug/kg	SW846 8270E
Phenanthrene	148	36	12	ug/kg	SW846 8270E
Pyrene	274	36	12	ug/kg	SW846 8270E
Total TIC, Semi-Volatile	720 J			ug/kg	
Aluminum	16600	56		mg/kg	SW846 6010D
Barium	145	23		mg/kg	SW846 6010D
Beryllium ^a	0.81	0.45		mg/kg	SW846 6010D
Calcium	3470	560		mg/kg	SW846 6010D
Chromium	31.3	1.1		mg/kg	SW846 6010D

Summary of Hits

Job Number: JD39687
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Cobalt		14.2	5.6		mg/kg	SW846 6010D
Copper ^a		36.2	5.6		mg/kg	SW846 6010D
Iron		28100	110		mg/kg	SW846 6010D
Lead		65.3	2.3		mg/kg	SW846 6010D
Magnesium		5490	560		mg/kg	SW846 6010D
Manganese		672	1.7		mg/kg	SW846 6010D
Mercury		0.068	0.035		mg/kg	SW846 7471B
Nickel		26.2	4.5		mg/kg	SW846 6010D
Potassium		4910	1100		mg/kg	SW846 6010D
Vanadium		40.9	5.6		mg/kg	SW846 6010D
Zinc		219	5.6		mg/kg	SW846 6010D

JD39687-10A WC-B1 (0-7.5')

Perfluorooctanesulfonic acid ^b	0.47 J	0.56	0.22	ug/kg	EPA 537M BY ID
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JD39687-11 WC-B1 (7.5-15')

Acetone	16.1	9.7	4.0	ug/kg	SW846 8260D
Aluminum	14200	56		mg/kg	SW846 6010D
Barium	95.8	22		mg/kg	SW846 6010D
Beryllium ^a	0.97	0.45		mg/kg	SW846 6010D
Calcium	1530	560		mg/kg	SW846 6010D
Chromium	29.3	1.1		mg/kg	SW846 6010D
Cobalt	12.7	5.6		mg/kg	SW846 6010D
Copper ^a	28.5	5.6		mg/kg	SW846 6010D
Iron	25600	110		mg/kg	SW846 6010D
Lead	11.7	2.2		mg/kg	SW846 6010D
Magnesium	5170	560		mg/kg	SW846 6010D
Manganese	567	1.7		mg/kg	SW846 6010D
Nickel	22.5	4.5		mg/kg	SW846 6010D
Potassium	4970	1100		mg/kg	SW846 6010D
Vanadium	37.1	5.6		mg/kg	SW846 6010D
Zinc	69.8	5.6		mg/kg	SW846 6010D

JD39687-11A WC-B1 (7.5-15')

No hits reported in this sample.

JD39687-12 WC-A1 (0-7.5')

Acetone	13.4	9.3	3.8	ug/kg	SW846 8260D
Acenaphthylene	38.6	37	19	ug/kg	SW846 8270E
Anthracene	32.7 J	37	22	ug/kg	SW846 8270E
Benzo(a)anthracene	197	37	10	ug/kg	SW846 8270E

Summary of Hits

Job Number: JD39687
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Benzo(a)pyrene		210	37	17	ug/kg	SW846 8270E
Benzo(b)fluoranthene		213	37	16	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		131	37	18	ug/kg	SW846 8270E
Benzo(k)fluoranthene		91.1	37	17	ug/kg	SW846 8270E
Chrysene		189	37	12	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		40.2	37	16	ug/kg	SW846 8270E
Fluoranthene		266	37	16	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		161	37	17	ug/kg	SW846 8270E
Phenanthrene		71.5	37	12	ug/kg	SW846 8270E
Pyrene		270	37	12	ug/kg	SW846 8270E
Total TIC, Semi-Volatile		880 J			ug/kg	
Aluminum		14200	58		mg/kg	SW846 6010D
Barium		138	23		mg/kg	SW846 6010D
Beryllium ^a		1.8	1.2		mg/kg	SW846 6010D
Calcium		5970	580		mg/kg	SW846 6010D
Chromium		39.9	1.2		mg/kg	SW846 6010D
Cobalt		17.9	5.8		mg/kg	SW846 6010D
Copper ^a		65.8	14		mg/kg	SW846 6010D
Iron		42100	290		mg/kg	SW846 6010D
Lead		71.2	2.3		mg/kg	SW846 6010D
Magnesium		5830	580		mg/kg	SW846 6010D
Manganese		428	1.7		mg/kg	SW846 6010D
Mercury		0.094	0.037		mg/kg	SW846 7471B
Nickel		31.0	4.6		mg/kg	SW846 6010D
Potassium		4730	1200		mg/kg	SW846 6010D
Vanadium		45.5	5.8		mg/kg	SW846 6010D
Zinc		168	5.8		mg/kg	SW846 6010D

JD39687-12A WC-A1 (0-7.5')

No hits reported in this sample.

JD39687-13 WC-A1 (7.5-15')

Acetone	97.2	11	4.4	ug/kg	SW846 8260D
2-Butanone (MEK)	26.5	11	2.6	ug/kg	SW846 8260D
Benzo(a)anthracene	18.5 J	38	11	ug/kg	SW846 8270E
Benzo(b)fluoranthene	18.1 J	38	17	ug/kg	SW846 8270E
Chrysene	20.2 J	38	12	ug/kg	SW846 8270E
Fluoranthene	25.9 J	38	17	ug/kg	SW846 8270E
Phenanthrene	15.1 J	38	13	ug/kg	SW846 8270E
Pyrene	25.0 J	38	12	ug/kg	SW846 8270E
Total TIC, Semi-Volatile	8360 J			ug/kg	
Aluminum	18100	60		mg/kg	SW846 6010D
Barium	68.8	24		mg/kg	SW846 6010D

Summary of Hits

Page 8 of 8

Job Number: JD39687
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Beryllium		0.68	0.24		mg/kg	SW846 6010D
Calcium		1520	600		mg/kg	SW846 6010D
Chromium		29.4	1.2		mg/kg	SW846 6010D
Cobalt		11.0	6.0		mg/kg	SW846 6010D
Copper ^a		17.6	6.0		mg/kg	SW846 6010D
Iron		25200	120		mg/kg	SW846 6010D
Lead		43.3	2.4		mg/kg	SW846 6010D
Magnesium		3830	600		mg/kg	SW846 6010D
Manganese		687	1.8		mg/kg	SW846 6010D
Mercury		0.074	0.036		mg/kg	SW846 7471B
Nickel		17.8	4.8		mg/kg	SW846 6010D
Potassium		1660	1200		mg/kg	SW846 6010D
Vanadium		40.1	6.0		mg/kg	SW846 6010D
Zinc		46.7	6.0		mg/kg	SW846 6010D

JD39687-13A WC-A1 (7.5-15')

Perfluorooctanesulfonic acid ^b	0.31 J	0.58	0.23	ug/kg	EPA 537M BY ID
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(a) Elevated detection limit due to dilution required for high interfering element.

(b) Analysis performed at SGS Orlando, FL.

Sample Results

Report of Analysis

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB1 (4.5-5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-1	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	90.8
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242244.D	1	02/15/22 11:45	PS	02/15/22 09:00	n/a	VI9838
Run #2							

	Initial Weight
Run #1	5.3 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	4.3	ug/kg	
71-43-2	Benzene	ND	0.52	0.47	ug/kg	
74-97-5	Bromochloromethane	ND	5.2	0.58	ug/kg	
75-27-4	Bromodichloromethane	ND	2.1	0.45	ug/kg	
75-25-2	Bromoform	ND	5.2	1.4	ug/kg	
74-83-9	Bromomethane ^a	ND	5.2	0.79	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/kg	
75-15-0	Carbon disulfide	ND	2.1	0.56	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.1	0.64	ug/kg	
108-90-7	Chlorobenzene	ND	2.1	0.48	ug/kg	
75-00-3	Chloroethane ^b	ND	5.2	0.61	ug/kg	
67-66-3	Chloroform	ND	2.1	0.54	ug/kg	
74-87-3	Chloromethane	ND	5.2	2.0	ug/kg	
110-82-7	Cyclohexane	ND	2.1	0.68	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	0.72	ug/kg	
124-48-1	Dibromochloromethane	ND	2.1	0.58	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.44	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.57	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.52	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.2	0.76	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.51	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.49	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.68	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.87	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.63	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.1	0.49	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	0.49	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	0.47	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.47	ug/kg	
76-13-1	Freon 113	ND	5.2	2.8	ug/kg	
591-78-6	2-Hexanone	ND	5.2	2.2	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB1 (4.5-5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-1	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	90.8
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.1	1.5	ug/kg	
79-20-9	Methyl Acetate	ND	5.2	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.1	0.91	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.49	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.2	2.4	ug/kg	
75-09-2	Methylene chloride	ND	5.2	2.7	ug/kg	
100-42-5	Styrene	ND	2.1	0.42	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.62	ug/kg	
127-18-4	Tetrachloroethene	ND	2.1	0.60	ug/kg	
108-88-3	Toluene	ND	1.0	0.55	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.2	2.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	2.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.1	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.58	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.79	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.2	0.71	ug/kg	
75-01-4	Vinyl chloride	ND	2.1	0.50	ug/kg	
	m,p-Xylene	ND	1.0	0.93	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.48	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.48	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		80-124%
17060-07-0	1,2-Dichloroethane-D4	115%		75-133%
2037-26-5	Toluene-D8	100%		79-125%
460-00-4	4-Bromofluorobenzene	89%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

(b) This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	RI-SB1 (4.5-5')	
Lab Sample ID:	JD39687-1	Date Sampled: 02/14/22
Matrix:	SO - Soil	Date Received: 02/14/22
Method:	SW846 8270E SW846 3546	Percent Solids: 90.8
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155039.D	1	02/16/22 16:26	KLS	02/15/22 12:40	OP38141	EZ7704
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	73	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	22	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	31	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	65	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	180	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	180	39	ug/kg	
95-48-7	2-Methylphenol	ND	73	23	ug/kg	
	3&4-Methylphenol ^a	ND	73	30	ug/kg	
88-75-5	2-Nitrophenol	ND	180	24	ug/kg	
100-02-7	4-Nitrophenol	ND	360	97	ug/kg	
87-86-5	Pentachlorophenol ^a	ND	150	34	ug/kg	
108-95-2	Phenol	ND	73	19	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	24	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	27	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	22	ug/kg	
83-32-9	Acenaphthene	ND	36	13	ug/kg	
208-96-8	Acenaphthylene	ND	36	19	ug/kg	
98-86-2	Acetophenone ^a	ND	180	7.8	ug/kg	
120-12-7	Anthracene	ND	36	22	ug/kg	
1912-24-9	Atrazine	ND	73	16	ug/kg	
56-55-3	Benzo(a)anthracene	50.3	36	10	ug/kg	
50-32-8	Benzo(a)pyrene	53.8	36	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	62.0	36	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	33.8	36	18	ug/kg	J
207-08-9	Benzo(k)fluoranthene	24.5	36	17	ug/kg	J
101-55-3	4-Bromophenyl phenyl ether	ND	73	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	73	8.9	ug/kg	
92-52-4	1,1'-Biphenyl	ND	73	5.0	ug/kg	
100-52-7	Benzaldehyde	ND	180	9.0	ug/kg	
91-58-7	2-Chloronaphthalene	ND	73	8.7	ug/kg	
106-47-8	4-Chloroaniline ^a	ND	180	13	ug/kg	
86-74-8	Carbazole	ND	73	5.3	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	RI-SB1 (4.5-5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-1	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	90.8
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	73	14	ug/kg	
218-01-9	Chrysene	49.5	36	11	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	73	7.8	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	73	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	73	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	73	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	36	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	36	18	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	73	30	ug/kg	
123-91-1	1,4-Dioxane	ND	36	24	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	36	16	ug/kg	
132-64-9	Dibenzofuran	ND	73	15	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	73	5.9	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	73	9.1	ug/kg	
84-66-2	Diethyl phthalate	ND	73	7.8	ug/kg	
131-11-3	Dimethyl phthalate	ND	73	6.5	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	73	8.5	ug/kg	
206-44-0	Fluoranthene	66.3	36	16	ug/kg	
86-73-7	Fluorene	ND	36	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	73	9.2	ug/kg	
87-68-3	Hexachlorobutadiene	ND	36	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	360	15	ug/kg	
67-72-1	Hexachloroethane	ND	180	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	39.0	36	17	ug/kg	
78-59-1	Isophorone	ND	73	7.8	ug/kg	
91-57-6	2-Methylnaphthalene	ND	36	8.2	ug/kg	
88-74-4	2-Nitroaniline	ND	180	8.6	ug/kg	
99-09-2	3-Nitroaniline	ND	180	9.1	ug/kg	
100-01-6	4-Nitroaniline	ND	180	9.4	ug/kg	
91-20-3	Naphthalene	ND	36	10	ug/kg	
98-95-3	Nitrobenzene	ND	73	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine ^a	ND	73	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	13	ug/kg	
85-01-8	Phenanthrene	24.7	36	12	ug/kg	J
129-00-0	Pyrene	75.8	36	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	9.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	66%		10-109%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	RI-SB1 (4.5-5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-1	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	90.8
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	65%		10-105%
118-79-6	2,4,6-Tribromophenol	66%		10-135%
4165-60-0	Nitrobenzene-d5	69%		10-119%
321-60-8	2-Fluorobiphenyl	77%		18-112%
1718-51-0	Terphenyl-d14	80%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB1 (4.5-5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-1	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	90.8
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174203.D	1	02/17/22 04:14	CP	02/15/22 11:30	OP38151	G1G6018
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.72	0.59	ug/kg	
319-84-6	alpha-BHC	ND	0.72	0.58	ug/kg	
319-85-7	beta-BHC	ND	0.72	0.65	ug/kg	
319-86-8	delta-BHC	ND	0.72	0.69	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.72	0.53	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.72	0.58	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.72	0.32	ug/kg	
60-57-1	Dieldrin	ND	0.72	0.49	ug/kg	
72-54-8	4,4' -DDD	ND	0.72	0.66	ug/kg	
72-55-9	4,4' -DDE	ND	0.72	0.63	ug/kg	
50-29-3	4,4' -DDT	ND	0.72	0.63	ug/kg	
72-20-8	Endrin	ND	0.72	0.56	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.72	0.56	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.72	0.41	ug/kg	
959-98-8	Endosulfan-I	ND	0.72	0.41	ug/kg	
33213-65-9	Endosulfan-II	ND	0.72	0.45	ug/kg	
76-44-8	Heptachlor	ND	0.72	0.62	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.72	0.50	ug/kg	
72-43-5	Methoxychlor	ND	1.4	0.57	ug/kg	
53494-70-5	Endrin ketone	ND	0.72	0.52	ug/kg	
8001-35-2	Toxaphene	ND	18	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	52%		14-145%
877-09-8	Tetrachloro-m-xylene	50%		14-145%
2051-24-3	Decachlorobiphenyl	57%		10-197%
2051-24-3	Decachlorobiphenyl	54%		10-197%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB1 (4.5-5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-1	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	90.8
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK7907.D	1	02/15/22 23:41	RK	02/15/22 08:00	OP38152	GRK207
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016 ^a	ND	36	17	ug/kg	
11104-28-2	Aroclor 1221	ND	36	22	ug/kg	
11141-16-5	Aroclor 1232	ND	36	23	ug/kg	
53469-21-9	Aroclor 1242	ND	36	15	ug/kg	
12672-29-6	Aroclor 1248	ND	36	32	ug/kg	
11097-69-1	Aroclor 1254	ND	36	19	ug/kg	
11096-82-5	Aroclor 1260 ^a	ND	36	15	ug/kg	
11100-14-4	Aroclor 1268	ND	36	15	ug/kg	
37324-23-5	Aroclor 1262	ND	36	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	40%		10-163%
877-09-8	Tetrachloro-m-xylene	39%		10-163%
2051-24-3	Decachlorobiphenyl	38%		10-215%
2051-24-3	Decachlorobiphenyl	64%		10-215%

(a) This compound outside control limits biased low in the associated BS.

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J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB1 (4.5-5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-1	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	90.8
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	11400	55	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Antimony ^a	< 4.4	4.4	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³
Arsenic	2.4	2.2	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Barium	86.2	22	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Beryllium ^a	0.85	0.44	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³
Cadmium	< 0.55	0.55	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Calcium	1260	550	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Chromium	24.4	1.1	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Cobalt	9.1	5.5	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Copper	23.6	2.8	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Iron	20300	55	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Lead	14.9	2.2	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Magnesium	3280	550	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Manganese	169	1.7	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Mercury	< 0.036	0.036	mg/kg	1	02/16/22	02/16/22	LM	SW846 7471B ¹
Nickel	17.5	4.4	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Potassium	3540	1100	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Selenium	< 2.2	2.2	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Silver ^a	< 1.1	1.1	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³
Sodium	< 1100	1100	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Thallium ^a	< 2.2	2.2	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³
Vanadium	28.2	5.5	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Zinc	56.2	5.5	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²

(1) Instrument QC Batch: MA51916

(2) Instrument QC Batch: MA51921

(3) Instrument QC Batch: MA51929

(4) Prep QC Batch: MP31310

(5) Prep QC Batch: MP31323

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB1 (4.5-5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-1	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	90.8
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.24	0.24	mg/kg	1	02/16/22 14:36	MM	SW846 9012B/LACHAT
Solids, Percent	90.8		%	1	02/15/22 16:40	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	RI-SB1 (4.5-5')	
Lab Sample ID:	JD39687-1A	Date Sampled: 02/14/22
Matrix:	SO - Soil	Date Received: 02/14/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 90.8
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q85757.D	1	02/25/22 21:23	AFL	02/18/22 08:30	F:OP89835	F:S2Q1211
Run #2							

	Initial Weight	Final Volume
Run #1	2.01 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.42	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.27	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.55	0.27	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.55	0.27	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.55	0.27	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.55	0.27	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.55	0.27	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.55	0.27	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.55	0.27	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.55	0.29	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.55	0.27	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.55	0.27	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.55	0.27	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.55	0.27	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.78	0.55	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.55	0.27	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.55	0.27	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.1	0.55	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.55	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	

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B = Indicates analyte found in associated method blank

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Report of Analysis

Client Sample ID:	RI-SB1 (4.5-5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-1A	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	90.8
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	74%		40-140%
	13C5-PFPeA	79%		50-150%
	13C5-PFHxA	81%		50-150%
	13C4-PFHpA	80%		50-150%
	13C8-PFOA	81%		50-150%
	13C9-PFNA	84%		50-150%
	13C6-PFDA	86%		50-150%
	13C7-PFUnDA	88%		40-140%
	13C2-PFDoDA	73%		40-140%
	13C2-PFTeDA	75%		30-130%
	13C3-PFBS	76%		50-150%
	13C3-PFHxS	81%		50-150%
	13C8-PFOS	77%		50-150%
	13C8-FOSA	56%		30-130%
	d3-MeFOSAA	74%		40-140%
	d5-EtFOSAA	77%		40-140%
	13C2-6:2FTS	76%		50-150%
	13C2-8:2FTS	76%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB1 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-2	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	87.6
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242245.D	1	02/15/22 12:05	PS	02/15/22 09:00	n/a	VI9838
Run #2							

	Initial Weight
Run #1	5.7 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	4.1	ug/kg	
71-43-2	Benzene	ND	0.50	0.46	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.56	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.43	ug/kg	
75-25-2	Bromoform	ND	5.0	1.4	ug/kg	
74-83-9	Bromomethane ^a	ND	5.0	0.77	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	2.4	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.54	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.62	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.46	ug/kg	
75-00-3	Chloroethane ^b	ND	5.0	0.59	ug/kg	
67-66-3	Chloroform	ND	2.0	0.52	ug/kg	
74-87-3	Chloromethane	ND	5.0	2.0	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.66	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.56	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.42	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.55	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.49	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.73	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.47	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.66	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.61	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.47	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.48	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.46	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.45	ug/kg	
76-13-1	Freon 113	ND	5.0	2.7	ug/kg	
591-78-6	2-Hexanone	ND	5.0	2.1	ug/kg	

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB1 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-2	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	87.6
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	1.4	ug/kg	
79-20-9	Methyl Acetate	ND	5.0	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.88	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.47	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	2.3	ug/kg	
75-09-2	Methylene chloride	ND	5.0	2.6	ug/kg	
100-42-5	Styrene	ND	2.0	0.40	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.60	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.58	ug/kg	
108-88-3	Toluene	ND	1.0	0.53	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.48	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.55	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.76	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.68	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.48	ug/kg	
	m,p-Xylene	ND	1.0	0.90	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.46	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.46	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		80-124%
17060-07-0	1,2-Dichloroethane-D4	114%		75-133%
2037-26-5	Toluene-D8	99%		79-125%
460-00-4	4-Bromofluorobenzene	87%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	3.61	5.8	ug/kg	J
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

(b) This compound in blank spike is outside in house QC limits bias high.

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Report of Analysis

Page 1 of 3

Client Sample ID:	RI-SB1 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-2	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	87.6
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155040.D	1	02/16/22 16:51	KLS	02/15/22 12:40	OP38141	EZ7704
Run #2							

	Initial Weight	Final Volume
Run #1	32.2 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	71	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	22	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	30	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	63	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	180	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	180	38	ug/kg	
95-48-7	2-Methylphenol	ND	71	23	ug/kg	
	3&4-Methylphenol ^a	ND	71	29	ug/kg	
88-75-5	2-Nitrophenol	ND	180	23	ug/kg	
100-02-7	4-Nitrophenol	ND	350	95	ug/kg	
87-86-5	Pentachlorophenol ^a	ND	140	33	ug/kg	
108-95-2	Phenol	ND	71	19	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	23	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	27	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	21	ug/kg	
83-32-9	Acenaphthene	ND	35	12	ug/kg	
208-96-8	Acenaphthylene	ND	35	18	ug/kg	
98-86-2	Acetophenone ^a	ND	180	7.6	ug/kg	
120-12-7	Anthracene	ND	35	22	ug/kg	
1912-24-9	Atrazine	ND	71	15	ug/kg	
56-55-3	Benzo(a)anthracene	ND	35	10	ug/kg	
50-32-8	Benzo(a)pyrene	ND	35	16	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	35	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	35	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	35	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	71	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	71	8.7	ug/kg	
92-52-4	1,1'-Biphenyl	ND	71	4.9	ug/kg	
100-52-7	Benzaldehyde	ND	180	8.8	ug/kg	
91-58-7	2-Chloronaphthalene	ND	71	8.4	ug/kg	
106-47-8	4-Chloroaniline ^a	ND	180	13	ug/kg	
86-74-8	Carbazole	ND	71	5.1	ug/kg	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	RI-SB1 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-2	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	87.6
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	71	14	ug/kg	
218-01-9	Chrysene	ND	35	11	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	71	7.6	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	71	15	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	71	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	71	11	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	35	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	35	18	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	71	30	ug/kg	
123-91-1	1,4-Dioxane	ND	35	23	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	35	16	ug/kg	
132-64-9	Dibenzofuran	ND	71	14	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	71	5.8	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	71	8.8	ug/kg	
84-66-2	Diethyl phthalate	ND	71	7.6	ug/kg	
131-11-3	Dimethyl phthalate	ND	71	6.3	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	71	8.3	ug/kg	
206-44-0	Fluoranthene	ND	35	16	ug/kg	
86-73-7	Fluorene	ND	35	16	ug/kg	
118-74-1	Hexachlorobenzene	ND	71	9.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	35	14	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	350	14	ug/kg	
67-72-1	Hexachloroethane	ND	180	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	35	17	ug/kg	
78-59-1	Isophorone	ND	71	7.6	ug/kg	
91-57-6	2-Methylnaphthalene	ND	35	8.0	ug/kg	
88-74-4	2-Nitroaniline	ND	180	8.4	ug/kg	
99-09-2	3-Nitroaniline	ND	180	8.9	ug/kg	
100-01-6	4-Nitroaniline	ND	180	9.2	ug/kg	
91-20-3	Naphthalene	ND	35	10	ug/kg	
98-95-3	Nitrobenzene	ND	71	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine ^a	ND	71	10	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	13	ug/kg	
85-01-8	Phenanthrene	ND	35	12	ug/kg	
129-00-0	Pyrene	ND	35	11	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	9.0	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	73%		10-109%

ND = Not detected MDL = Method Detection Limit

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	RI-SB1 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-2	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	87.6
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	71%		10-105%
118-79-6	2,4,6-Tribromophenol	74%		10-135%
4165-60-0	Nitrobenzene-d5	76%		10-119%
321-60-8	2-Fluorobiphenyl	85%		18-112%
1718-51-0	Terphenyl-d14	91%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	System artifact/aldol-condensation	3.39	180	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

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 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB1 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-2	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	87.6
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174206.D	1	02/17/22 05:09	CP	02/15/22 11:30	OP38151	G1G6018
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.74	0.61	ug/kg	
319-84-6	alpha-BHC	ND	0.74	0.60	ug/kg	
319-85-7	beta-BHC	ND	0.74	0.67	ug/kg	
319-86-8	delta-BHC	ND	0.74	0.71	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.74	0.55	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.74	0.60	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.74	0.34	ug/kg	
60-57-1	Dieldrin	ND	0.74	0.51	ug/kg	
72-54-8	4,4' -DDD	ND	0.74	0.68	ug/kg	
72-55-9	4,4' -DDE	ND	0.74	0.65	ug/kg	
50-29-3	4,4' -DDT	ND	0.74	0.66	ug/kg	
72-20-8	Endrin	ND	0.74	0.58	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.74	0.58	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.74	0.42	ug/kg	
959-98-8	Endosulfan-I	ND	0.74	0.43	ug/kg	
33213-65-9	Endosulfan-II	ND	0.74	0.46	ug/kg	
76-44-8	Heptachlor	ND	0.74	0.64	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.74	0.52	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.59	ug/kg	
53494-70-5	Endrin ketone	ND	0.74	0.54	ug/kg	
8001-35-2	Toxaphene	ND	19	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	75%		14-145%
877-09-8	Tetrachloro-m-xylene	75%		14-145%
2051-24-3	Decachlorobiphenyl	86%		10-197%
2051-24-3	Decachlorobiphenyl	78%		10-197%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB1 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-2	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	87.6
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK7908.D	1	02/15/22 23:58	RK	02/15/22 08:00	OP38152	GRK207
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016 ^a	ND	37	17	ug/kg	
11104-28-2	Aroclor 1221	ND	37	23	ug/kg	
11141-16-5	Aroclor 1232	ND	37	24	ug/kg	
53469-21-9	Aroclor 1242	ND	37	15	ug/kg	
12672-29-6	Aroclor 1248	ND	37	33	ug/kg	
11097-69-1	Aroclor 1254	ND	37	20	ug/kg	
11096-82-5	Aroclor 1260 ^a	ND	37	16	ug/kg	
11100-14-4	Aroclor 1268	ND	37	16	ug/kg	
37324-23-5	Aroclor 1262	ND	37	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%		10-163%
877-09-8	Tetrachloro-m-xylene	86%		10-163%
2051-24-3	Decachlorobiphenyl	66%		10-215%
2051-24-3	Decachlorobiphenyl	80%		10-215%

(a) This compound outside control limits biased low in the associated BS.

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Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB1 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-2	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	87.6
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	14600	58	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Antimony ^a	< 4.6	4.6	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Arsenic ^a	< 4.6	4.6	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Barium	109	23	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Beryllium ^a	1.2	0.46	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Cadmium	< 0.58	0.58	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Calcium	1260	580	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Chromium	31.7	1.2	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cobalt	13.6	5.8	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Copper ^a	26.5	5.8	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Iron	29000	120	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Lead	9.8	2.3	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Magnesium	6030	580	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Manganese	349	1.7	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	< 0.034	0.034	mg/kg	1	02/16/22	02/16/22	LM	SW846 7471B ¹	SW846 7471B ⁵
Nickel	25.3	4.6	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Potassium	7550	1200	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Selenium ^a	< 4.6	4.6	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Silver ^a	< 1.2	1.2	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Sodium	< 1200	1200	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Thallium ^a	< 2.3	2.3	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Vanadium	36.3	5.8	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Zinc	82.0	5.8	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA51916

(2) Instrument QC Batch: MA51921

(3) Instrument QC Batch: MA51929

(4) Prep QC Batch: MP31310

(5) Prep QC Batch: MP31323

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB1 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-2	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	87.6
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.24	0.24	mg/kg	1	02/16/22 14:37	MM	SW846 9012B/LACHAT
Solids, Percent	87.6		%	1	02/15/22 16:40	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.3
4

Report of Analysis

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Client Sample ID:	RI-SB1 (9.5-10')	
Lab Sample ID:	JD39687-2A	Date Sampled: 02/14/22
Matrix:	SO - Soil	Date Received: 02/14/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 87.6
Project:	1001 Whitlock Avenue, Bronx, NY	

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q85979.D	1	03/01/22 18:24	AFL	02/18/22 08:30	F:OP89835	F:S2Q1214
Run #2							

Run	Initial Weight	Final Volume
Run #1	2.06 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.42	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.28	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.55	0.28	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.55	0.28	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.55	0.28	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.55	0.28	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.55	0.28	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.55	0.28	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.55	0.28	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.55	0.29	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.55	0.28	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.55	0.28	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.55	0.28	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.55	0.28	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.26	0.55	0.22	ug/kg	J
335-77-3	Perfluorodecanesulfonic acid	ND	0.55	0.28	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.55	0.28	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.1	0.55	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.55	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB1 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-2A	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	87.6
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	81%		40-140%
	13C5-PFPeA	88%		50-150%
	13C5-PFHxA	91%		50-150%
	13C4-PFHpA	93%		50-150%
	13C8-PFOA	96%		50-150%
	13C9-PFNA	97%		50-150%
	13C6-PFDA	103%		50-150%
	13C7-PFUnDA	104%		40-140%
	13C2-PFDoDA	92%		40-140%
	13C2-PFTeDA	87%		30-130%
	13C3-PFBS	88%		50-150%
	13C3-PFHxS	93%		50-150%
	13C8-PFOS	92%		50-150%
	13C8-FOSA	84%		30-130%
	d3-MeFOSAA	55%		40-140%
	d5-EtFOSAA	60%		40-140%
	13C2-6:2FTS	87%		50-150%
	13C2-8:2FTS	85%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
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 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB1 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-3	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	79.3
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242246.D	1	02/15/22 12:26	PS	02/15/22 09:00	n/a	VI9838
Run #2							

	Initial Weight
Run #1	6.1 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	27.2	10	4.3	ug/kg	
71-43-2	Benzene	ND	0.52	0.47	ug/kg	
74-97-5	Bromochloromethane	ND	5.2	0.58	ug/kg	
75-27-4	Bromodichloromethane	ND	2.1	0.44	ug/kg	
75-25-2	Bromoform	ND	5.2	1.4	ug/kg	
74-83-9	Bromomethane ^a	ND	5.2	0.79	ug/kg	
78-93-3	2-Butanone (MEK)	2.9	10	2.5	ug/kg	J
75-15-0	Carbon disulfide	ND	2.1	0.55	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.1	0.64	ug/kg	
108-90-7	Chlorobenzene	ND	2.1	0.47	ug/kg	
75-00-3	Chloroethane ^b	ND	5.2	0.61	ug/kg	
67-66-3	Chloroform	ND	2.1	0.54	ug/kg	
74-87-3	Chloromethane	ND	5.2	2.0	ug/kg	
110-82-7	Cyclohexane	ND	2.1	0.68	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	0.72	ug/kg	
124-48-1	Dibromochloromethane	ND	2.1	0.58	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.44	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.56	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.51	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.2	0.75	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.51	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.49	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.68	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.87	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.63	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.1	0.49	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	0.49	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	0.47	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.47	ug/kg	
76-13-1	Freon 113	ND	5.2	2.8	ug/kg	
591-78-6	2-Hexanone	ND	5.2	2.2	ug/kg	

ND = Not detected MDL = Method Detection Limit

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RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB1 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-3	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	79.3
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.1	1.5	ug/kg	
79-20-9	Methyl Acetate	ND	5.2	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.1	0.90	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.48	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.2	2.3	ug/kg	
75-09-2	Methylene chloride	ND	5.2	2.7	ug/kg	
100-42-5	Styrene	ND	2.1	0.42	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.62	ug/kg	
127-18-4	Tetrachloroethene	ND	2.1	0.60	ug/kg	
108-88-3	Toluene	ND	1.0	0.54	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.2	2.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	2.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.1	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.57	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.79	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.2	0.71	ug/kg	
75-01-4	Vinyl chloride	ND	2.1	0.50	ug/kg	
	m,p-Xylene	ND	1.0	0.93	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.47	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.47	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		80-124%
17060-07-0	1,2-Dichloroethane-D4	116%		75-133%
2037-26-5	Toluene-D8	100%		79-125%
460-00-4	4-Bromofluorobenzene	91%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

(b) This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	RI-SB1 (14.5-15')		
Lab Sample ID:	JD39687-3	Date Sampled:	02/14/22
Matrix:	SO - Soil	Date Received:	02/14/22
Method:	SW846 8270E SW846 3546	Percent Solids:	79.3
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155041.D	1	02/16/22 17:15	KLS	02/15/22 12:40	OP38141	EZ7704
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	84	21	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	210	26	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	210	36	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	210	75	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	210	160	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	210	45	ug/kg	
95-48-7	2-Methylphenol	ND	84	27	ug/kg	
	3&4-Methylphenol ^a	ND	84	34	ug/kg	
88-75-5	2-Nitrophenol	ND	210	28	ug/kg	
100-02-7	4-Nitrophenol	ND	420	110	ug/kg	
87-86-5	Pentachlorophenol ^a	ND	170	39	ug/kg	
108-95-2	Phenol	ND	84	22	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	210	28	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	210	31	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	210	25	ug/kg	
83-32-9	Acenaphthene	ND	42	14	ug/kg	
208-96-8	Acenaphthylene	ND	42	21	ug/kg	
98-86-2	Acetophenone ^a	ND	210	9.0	ug/kg	
120-12-7	Anthracene	ND	42	26	ug/kg	
1912-24-9	Atrazine	ND	84	18	ug/kg	
56-55-3	Benzo(a)anthracene	29.1	42	12	ug/kg	J
50-32-8	Benzo(a)pyrene	23.7	42	19	ug/kg	J
205-99-2	Benzo(b)fluoranthene	24.5	42	19	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	33.5	42	21	ug/kg	J
207-08-9	Benzo(k)fluoranthene	ND	42	20	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	84	16	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	84	10	ug/kg	
92-52-4	1,1'-Biphenyl	ND	84	5.7	ug/kg	
100-52-7	Benzaldehyde	ND	210	10	ug/kg	
91-58-7	2-Chloronaphthalene	ND	84	10	ug/kg	
106-47-8	4-Chloroaniline ^a	ND	210	15	ug/kg	
86-74-8	Carbazole	ND	84	6.1	ug/kg	

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	RI-SB1 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-3	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	79.3
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	84	17	ug/kg	
218-01-9	Chrysene	31.3	42	13	ug/kg	J
111-91-1	bis(2-Chloroethoxy)methane	ND	84	9.0	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	84	18	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	84	15	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	84	14	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	42	13	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	42	21	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	84	35	ug/kg	
123-91-1	1,4-Dioxane	ND	42	28	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	42	19	ug/kg	
132-64-9	Dibenzofuran	ND	84	17	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	84	6.8	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	84	10	ug/kg	
84-66-2	Diethyl phthalate	ND	84	8.9	ug/kg	
131-11-3	Dimethyl phthalate	ND	84	7.5	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	84	9.8	ug/kg	
206-44-0	Fluoranthene	32.3	42	19	ug/kg	J
86-73-7	Fluorene	ND	42	19	ug/kg	
118-74-1	Hexachlorobenzene	ND	84	11	ug/kg	
87-68-3	Hexachlorobutadiene	ND	42	17	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	420	17	ug/kg	
67-72-1	Hexachloroethane	ND	210	21	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	21.5	42	20	ug/kg	J
78-59-1	Isophorone	ND	84	9.0	ug/kg	
91-57-6	2-Methylnaphthalene	ND	42	9.5	ug/kg	
88-74-4	2-Nitroaniline	ND	210	9.9	ug/kg	
99-09-2	3-Nitroaniline	ND	210	10	ug/kg	
100-01-6	4-Nitroaniline	ND	210	11	ug/kg	
91-20-3	Naphthalene	ND	42	12	ug/kg	
98-95-3	Nitrobenzene	ND	84	16	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine ^a	ND	84	12	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	210	15	ug/kg	
85-01-8	Phenanthrene	20.6	42	14	ug/kg	J
129-00-0	Pyrene	49.4	42	13	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	210	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	78%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	RI-SB1 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-3	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	79.3
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	76%		10-105%
118-79-6	2,4,6-Tribromophenol	80%		10-135%
4165-60-0	Nitrobenzene-d5	81%		10-119%
321-60-8	2-Fluorobiphenyl	91%		18-112%
1718-51-0	Terphenyl-d14	94%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	System artifact/aldol-condensation	3.39	270	ug/kg	J
10544-50-0	Cyclic octatomic sulfur	10.19	370	ug/kg	JN
	Total TIC, Semi-Volatile		370	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

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 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB1 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-3	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	79.3
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1G174262.D	1	02/18/22 01:32	CP	02/15/22 11:30	OP38151	G1G6020
Run #2							

	Initial Weight	Final Volume
Run #1	15.9 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.79	0.65	ug/kg	
319-84-6	alpha-BHC	ND	0.79	0.64	ug/kg	
319-85-7	beta-BHC	ND	0.79	0.72	ug/kg	
319-86-8	delta-BHC	ND	0.79	0.76	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.79	0.58	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.79	0.64	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.79	0.36	ug/kg	
60-57-1	Dieldrin	ND	0.79	0.54	ug/kg	
72-54-8	4,4' -DDD	ND	0.79	0.73	ug/kg	
72-55-9	4,4' -DDE	ND	0.79	0.70	ug/kg	
50-29-3	4,4' -DDT	ND	0.79	0.70	ug/kg	
72-20-8	Endrin	ND	0.79	0.62	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.79	0.62	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.79	0.45	ug/kg	
959-98-8	Endosulfan-I	ND	0.79	0.46	ug/kg	
33213-65-9	Endosulfan-II	ND	0.79	0.49	ug/kg	
76-44-8	Heptachlor	ND	0.79	0.68	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.79	0.56	ug/kg	
72-43-5	Methoxychlor	ND	1.6	0.63	ug/kg	
53494-70-5	Endrin ketone	ND	0.79	0.57	ug/kg	
8001-35-2	Toxaphene	ND	20	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	85%		14-145%
877-09-8	Tetrachloro-m-xylene	89%		14-145%
2051-24-3	Decachlorobiphenyl	76%		10-197%
2051-24-3	Decachlorobiphenyl	102%		10-197%

(a) Had TBA cleanup.

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Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB1 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-3	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	79.3
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK7913.D	1	02/16/22 01:20	RK	02/15/22 08:00	OP38152	GRK207
Run #2							

	Initial Weight	Final Volume
Run #1	15.9 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016 ^a	ND	40	18	ug/kg	
11104-28-2	Aroclor 1221	ND	40	25	ug/kg	
11141-16-5	Aroclor 1232	ND	40	25	ug/kg	
53469-21-9	Aroclor 1242	ND	40	16	ug/kg	
12672-29-6	Aroclor 1248	ND	40	35	ug/kg	
11097-69-1	Aroclor 1254	ND	40	21	ug/kg	
11096-82-5	Aroclor 1260 ^a	ND	40	17	ug/kg	
11100-14-4	Aroclor 1268	ND	40	17	ug/kg	
37324-23-5	Aroclor 1262	ND	40	26	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%		10-163%
877-09-8	Tetrachloro-m-xylene	104%		10-163%
2051-24-3	Decachlorobiphenyl	67%		10-215%
2051-24-3	Decachlorobiphenyl	92%		10-215%

(a) This compound outside control limits biased low in the associated BS.

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Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB1 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-3	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	79.3
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	13900	64	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Antimony	< 2.6	2.6	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Arsenic	3.4	2.6	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Barium	87.6	26	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Beryllium	0.72	0.26	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cadmium	< 0.64	0.64	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Calcium	2860	640	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Chromium	24.5	1.3	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cobalt	7.8	6.4	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Copper	65.1	3.2	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Iron	17600	64	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Lead	69.2	2.6	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Magnesium	3500	640	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Manganese	123	1.9	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	0.18	0.037	mg/kg	1	02/16/22	02/16/22	LM	SW846 7471B ¹	SW846 7471B ⁵
Nickel	17.3	5.1	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Potassium	1520	1300	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Selenium	< 2.6	2.6	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Silver	< 0.64	0.64	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Sodium	< 1300	1300	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Thallium	< 1.3	1.3	mg/kg	1	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Vanadium	31.8	6.4	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Zinc	69.8	6.4	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA51916

(2) Instrument QC Batch: MA51921

(3) Instrument QC Batch: MA51929

(4) Prep QC Batch: MP31310

(5) Prep QC Batch: MP31323

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB1 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-3	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	79.3
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.26	0.26	mg/kg	1	02/16/22 14:38	MM	SW846 9012B/LACHAT
Solids, Percent	79.3		%	1	02/15/22 16:40	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.5
4

Report of Analysis

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Client Sample ID:	RI-SB1 (14.5-15')	
Lab Sample ID:	JD39687-3A	Date Sampled: 02/14/22
Matrix:	SO - Soil	Date Received: 02/14/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 79.3
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q85759.D	1	02/25/22 21:56	AFL	02/18/22 08:30	F:OP89835	F:S2Q1211
Run #2							

	Initial Weight	Final Volume
Run #1	2.04 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.47	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.62	0.31	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.62	0.31	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.62	0.31	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.62	0.31	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.62	0.31	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.62	0.31	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.62	0.31	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.62	0.31	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.62	0.33	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.62	0.31	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.62	0.31	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.62	0.31	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.62	0.31	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.34	0.62	0.25	ug/kg	J
335-77-3	Perfluorodecanesulfonic acid	ND	0.62	0.31	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.62	0.31	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.62	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.62	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.31	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.31	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB1 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-3A	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	79.3
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	62%		40-140%
	13C5-PFPeA	66%		50-150%
	13C5-PFHxA	68%		50-150%
	13C4-PFHpA	68%		50-150%
	13C8-PFOA	72%		50-150%
	13C9-PFNA	76%		50-150%
	13C6-PFDA	81%		50-150%
	13C7-PFUnDA	81%		40-140%
	13C2-PFDoDA	72%		40-140%
	13C2-PFTeDA	73%		30-130%
	13C3-PFBS	68%		50-150%
	13C3-PFHxS	72%		50-150%
	13C8-PFOS	72%		50-150%
	13C8-FOSA	53%		30-130%
	d3-MeFOSAA	74%		40-140%
	d5-EtFOSAA	75%		40-140%
	13C2-6:2FTS	70%		50-150%
	13C2-8:2FTS	71%		50-150%

(a) Analysis performed at SGS Orlando, FL.

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 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB1 (17.5-18')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-4	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	95.3
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242247.D	1	02/15/22 12:46	PS	02/15/22 09:00	n/a	VI9838
Run #2							

	Initial Weight
Run #1	5.6 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	9.4	3.9	ug/kg	
71-43-2	Benzene	ND	0.47	0.43	ug/kg	
74-97-5	Bromochloromethane	ND	4.7	0.52	ug/kg	
75-27-4	Bromodichloromethane	ND	1.9	0.40	ug/kg	
75-25-2	Bromoform	ND	4.7	1.3	ug/kg	
74-83-9	Bromomethane ^a	ND	4.7	0.72	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.4	2.3	ug/kg	
75-15-0	Carbon disulfide	ND	1.9	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.9	0.58	ug/kg	
108-90-7	Chlorobenzene	ND	1.9	0.43	ug/kg	
75-00-3	Chloroethane ^b	ND	4.7	0.55	ug/kg	
67-66-3	Chloroform	ND	1.9	0.49	ug/kg	
74-87-3	Chloromethane	ND	4.7	1.8	ug/kg	
110-82-7	Cyclohexane	ND	1.9	0.62	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.9	0.65	ug/kg	
124-48-1	Dibromochloromethane	ND	1.9	0.52	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.94	0.39	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.94	0.51	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.94	0.46	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.94	0.46	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.7	0.68	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.94	0.46	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.94	0.44	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.94	0.61	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.94	0.79	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.94	0.57	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.9	0.44	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.9	0.45	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.9	0.43	ug/kg	
100-41-4	Ethylbenzene	ND	0.94	0.42	ug/kg	
76-13-1	Freon 113	ND	4.7	2.5	ug/kg	
591-78-6	2-Hexanone	ND	4.7	2.0	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB1 (17.5-18')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-4	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	95.3
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.9	1.3	ug/kg	
79-20-9	Methyl Acetate	ND	4.7	1.3	ug/kg	
108-87-2	Methylcyclohexane	ND	1.9	0.82	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.94	0.44	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.7	2.1	ug/kg	
75-09-2	Methylene chloride	ND	4.7	2.4	ug/kg	
100-42-5	Styrene	ND	1.9	0.38	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.9	0.56	ug/kg	
127-18-4	Tetrachloroethene	ND	1.9	0.54	ug/kg	
108-88-3	Toluene	ND	0.94	0.49	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.7	2.3	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.7	2.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.9	0.45	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.9	0.52	ug/kg	
79-01-6	Trichloroethene	ND	0.94	0.71	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.7	0.64	ug/kg	
75-01-4	Vinyl chloride	ND	1.9	0.45	ug/kg	
	m,p-Xylene	ND	0.94	0.84	ug/kg	
95-47-6	o-Xylene	ND	0.94	0.43	ug/kg	
1330-20-7	Xylene (total)	ND	0.94	0.43	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	114%		80-124%
17060-07-0	1,2-Dichloroethane-D4	113%		75-133%
2037-26-5	Toluene-D8	101%		79-125%
460-00-4	4-Bromofluorobenzene	87%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	3.61	6.8	ug/kg	J
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

(b) This compound in blank spike is outside in house QC limits bias high.

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	RI-SB1 (17.5-18')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-4	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	95.3
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155042.D	1	02/16/22 17:40	KLS	02/15/22 12:40	OP38141	EZ7704
Run #2							

Run #	Initial Weight	Final Volume
Run #1	32.1 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	65	16	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	160	20	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	160	28	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	160	58	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	160	120	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	160	35	ug/kg	
95-48-7	2-Methylphenol	ND	65	21	ug/kg	
	3&4-Methylphenol ^a	ND	65	27	ug/kg	
88-75-5	2-Nitrophenol	ND	160	22	ug/kg	
100-02-7	4-Nitrophenol	ND	330	87	ug/kg	
87-86-5	Pentachlorophenol ^a	ND	130	31	ug/kg	
108-95-2	Phenol	ND	65	17	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	160	22	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	160	24	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	160	19	ug/kg	
83-32-9	Acenaphthene	ND	33	11	ug/kg	
208-96-8	Acenaphthylene	ND	33	17	ug/kg	
98-86-2	Acetophenone ^a	ND	160	7.0	ug/kg	
120-12-7	Anthracene	ND	33	20	ug/kg	
1912-24-9	Atrazine	ND	65	14	ug/kg	
56-55-3	Benzo(a)anthracene	ND	33	9.3	ug/kg	
50-32-8	Benzo(a)pyrene	ND	33	15	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	33	14	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	33	16	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	33	15	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	65	13	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	65	8.0	ug/kg	
92-52-4	1,1'-Biphenyl	ND	65	4.5	ug/kg	
100-52-7	Benzaldehyde	ND	160	8.1	ug/kg	
91-58-7	2-Chloronaphthalene	ND	65	7.8	ug/kg	
106-47-8	4-Chloroaniline ^a	ND	160	12	ug/kg	
86-74-8	Carbazole	ND	65	4.7	ug/kg	

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Report of Analysis

Page 2 of 3

Client Sample ID:	RI-SB1 (17.5-18')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-4	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	95.3
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	65	13	ug/kg	
218-01-9	Chrysene	ND	33	10	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	65	7.0	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	65	14	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	65	12	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	65	11	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	33	10	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	33	16	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	65	27	ug/kg	
123-91-1	1,4-Dioxane	ND	33	22	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	33	14	ug/kg	
132-64-9	Dibenzofuran	ND	65	13	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	65	5.3	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	65	8.1	ug/kg	
84-66-2	Diethyl phthalate	ND	65	7.0	ug/kg	
131-11-3	Dimethyl phthalate	ND	65	5.8	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	65	7.6	ug/kg	
206-44-0	Fluoranthene	ND	33	15	ug/kg	
86-73-7	Fluorene	ND	33	15	ug/kg	
118-74-1	Hexachlorobenzene	ND	65	8.3	ug/kg	
87-68-3	Hexachlorobutadiene	ND	33	13	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	330	13	ug/kg	
67-72-1	Hexachloroethane	ND	160	16	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	33	15	ug/kg	
78-59-1	Isophorone	ND	65	7.0	ug/kg	
91-57-6	2-Methylnaphthalene	ND	33	7.4	ug/kg	
88-74-4	2-Nitroaniline	ND	160	7.7	ug/kg	
99-09-2	3-Nitroaniline	ND	160	8.2	ug/kg	
100-01-6	4-Nitroaniline	ND	160	8.5	ug/kg	
91-20-3	Naphthalene	ND	33	9.2	ug/kg	
98-95-3	Nitrobenzene	ND	65	13	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine ^a	ND	65	9.4	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	160	12	ug/kg	
85-01-8	Phenanthrene	ND	33	11	ug/kg	
129-00-0	Pyrene	ND	33	10	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	160	8.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	64%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	RI-SB1 (17.5-18')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-4	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	95.3
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	63%		10-105%
118-79-6	2,4,6-Tribromophenol	68%		10-135%
4165-60-0	Nitrobenzene-d5	67%		10-119%
321-60-8	2-Fluorobiphenyl	74%		18-112%
1718-51-0	Terphenyl-d14	77%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	System artifact/aldol-condensation	3.39	280	ug/kg	J
	Unknown	13.54	220	ug/kg	J
	Total TIC, Semi-Volatile		220	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB1 (17.5-18')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-4	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	95.3
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174208.D	1	02/17/22 05:46	CP	02/15/22 11:30	OP38151	G1G6018
Run #2							

	Initial Weight	Final Volume
Run #1	15.8 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.66	0.55	ug/kg	
319-84-6	alpha-BHC	ND	0.66	0.54	ug/kg	
319-85-7	beta-BHC	ND	0.66	0.60	ug/kg	
319-86-8	delta-BHC	ND	0.66	0.64	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.66	0.49	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.66	0.54	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.66	0.30	ug/kg	
60-57-1	Dieldrin	ND	0.66	0.46	ug/kg	
72-54-8	4,4' -DDD	ND	0.66	0.61	ug/kg	
72-55-9	4,4' -DDE	ND	0.66	0.58	ug/kg	
50-29-3	4,4' -DDT	ND	0.66	0.59	ug/kg	
72-20-8	Endrin	ND	0.66	0.52	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.66	0.52	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.66	0.38	ug/kg	
959-98-8	Endosulfan-I	ND	0.66	0.38	ug/kg	
33213-65-9	Endosulfan-II	ND	0.66	0.41	ug/kg	
76-44-8	Heptachlor	ND	0.66	0.57	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.66	0.47	ug/kg	
72-43-5	Methoxychlor	ND	1.3	0.53	ug/kg	
53494-70-5	Endrin ketone	ND	0.66	0.48	ug/kg	
8001-35-2	Toxaphene	ND	17	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	36%		14-145%
877-09-8	Tetrachloro-m-xylene	34%		14-145%
2051-24-3	Decachlorobiphenyl	41%		10-197%
2051-24-3	Decachlorobiphenyl	38%		10-197%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB1 (17.5-18')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-4	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	95.3
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK7916.D	1	02/16/22 02:09	RK	02/15/22 08:00	OP38152	GRK207
Run #2							

	Initial Weight	Final Volume
Run #1	15.8 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016 ^a	ND	33	15	ug/kg	
11104-28-2	Aroclor 1221	ND	33	21	ug/kg	
11141-16-5	Aroclor 1232	ND	33	21	ug/kg	
53469-21-9	Aroclor 1242	ND	33	14	ug/kg	
12672-29-6	Aroclor 1248	ND	33	30	ug/kg	
11097-69-1	Aroclor 1254	ND	33	18	ug/kg	
11096-82-5	Aroclor 1260 ^a	ND	33	14	ug/kg	
11100-14-4	Aroclor 1268	ND	33	14	ug/kg	
37324-23-5	Aroclor 1262	ND	33	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	63%		10-163%
877-09-8	Tetrachloro-m-xylene	73%		10-163%
2051-24-3	Decachlorobiphenyl	51%		10-215%
2051-24-3	Decachlorobiphenyl	67%		10-215%

(a) This compound outside control limits biased low in the associated BS.

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 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB1 (17.5-18')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-4	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	95.3
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	26100	54	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Antimony ^a	< 11	11	mg/kg	5	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Arsenic ^a	< 11	11	mg/kg	5	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Barium	151	22	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Beryllium ^a	1.3	1.1	mg/kg	5	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Cadmium	< 0.54	0.54	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Calcium	2340	540	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Chromium	42.6	1.1	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cobalt	21.6	5.4	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Copper ^a	49.3	14	mg/kg	5	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Iron	39000	270	mg/kg	5	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Lead	12.8	2.2	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Magnesium	11800	540	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Manganese	572	1.6	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	< 0.032	0.032	mg/kg	1	02/16/22	02/16/22	LM	SW846 7471B ¹	SW846 7471B ⁵
Nickel	27.7	4.3	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Potassium	9480	1100	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Selenium ^a	< 11	11	mg/kg	5	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Silver ^a	< 2.7	2.7	mg/kg	5	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Sodium	< 1100	1100	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Thallium ^a	< 5.4	5.4	mg/kg	5	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Vanadium	58.0	5.4	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Zinc	78.9	5.4	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA51916

(2) Instrument QC Batch: MA51921

(3) Instrument QC Batch: MA51929

(4) Prep QC Batch: MP31310

(5) Prep QC Batch: MP31323

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB1 (17.5-18')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-4	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	95.3
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.25	0.25	mg/kg	1	02/16/22 14:40	MM	SW846 9012B/LACHAT
Solids, Percent	95.3		%	1	02/15/22 16:40	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB1 (17.5-18')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-4A	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	95.3
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q85760.D	1	02/25/22 22:13	AFL	02/18/22 08:30	F:OP89835	F:S2Q1211
Run #2 ^b	2Q85855.D	5	02/27/22 05:51	AFL	02/18/22 08:30	F:OP89835	F:S2Q1212

	Initial Weight	Final Volume
Run #1	1.98 g	1.0 ml
Run #2	1.98 g	1.0 ml

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
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PERFLUOROALKYLCARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	ND	1.1	0.40	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.53	0.26	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.53	0.26	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.53	0.26	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.53	0.26	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.53	0.26	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.53	0.26	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.53	0.26	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.53	0.26	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.53	0.28	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.53	0.26	ug/kg	

PERFLUOROALKYLSULFONIC ACIDS

375-73-5	Perfluorobutanesulfonic acid	ND	0.53	0.26	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.53	0.26	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.53	0.26	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.53	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.53	0.26	ug/kg	

PERFLUOROCTANESULFONAMIDES

754-91-6	PFOSA	ND	0.53	0.26	ug/kg	
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PERFLUOROCTANESULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	ND ^c	5.3	2.6	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.53	ug/kg	

FLUOROTELOMER SULFONATES

27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.26	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: RI-SB1 (17.5-18')	
Lab Sample ID: JD39687-4A	Date Sampled: 02/14/22
Matrix: SO - Soil	Date Received: 02/14/22
Method: EPA 537M BY ID IN HOUSE	Percent Solids: 95.3
Project: 1001 Whitlock Avenue, Bronx, NY	

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	56%	69%	40-140%
	13C5-PFPeA	60%	73%	50-150%
	13C5-PFHxA	64%	77%	50-150%
	13C4-PFHpA	65%	79%	50-150%
	13C8-PFOA	69%	85%	50-150%
	13C9-PFNA	71%	90%	50-150%
	13C6-PFDA	74%	93%	50-150%
	13C7-PFUnDA	74%	93%	40-140%
	13C2-PFDoDA	67%	82%	40-140%
	13C2-PFTeDA	68%	83%	30-130%
	13C3-PFBS	65%	79%	50-150%
	13C3-PFHxS	68%	85%	50-150%
	13C8-PFOS	66%	83%	50-150%
	13C8-FOSA	52%	68%	30-130%
	d3-MeFOSAA	34% ^d	47%	40-140%
	d5-EtFOSAA	40%	51%	40-140%
	13C2-6:2FTS	63%	78%	50-150%
	13C2-8:2FTS	61%	75%	50-150%

(a) Analysis performed at SGS Orlando, FL.

(b) Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.

(c) Result is from Run# 2

(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB2 (3.5-4')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-5	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.4
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242248.D	1	02/15/22 13:07	PS	02/15/22 09:00	n/a	VI9838
Run #2							

	Initial Weight
Run #1	4.2 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	14	5.7	ug/kg	
71-43-2	Benzene	ND	0.69	0.63	ug/kg	
74-97-5	Bromochloromethane	ND	6.9	0.77	ug/kg	
75-27-4	Bromodichloromethane	ND	2.8	0.59	ug/kg	
75-25-2	Bromoform	ND	6.9	1.9	ug/kg	
74-83-9	Bromomethane ^a	ND	6.9	1.1	ug/kg	
78-93-3	2-Butanone (MEK)	ND	14	3.3	ug/kg	
75-15-0	Carbon disulfide	ND	2.8	0.74	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.8	0.85	ug/kg	
108-90-7	Chlorobenzene	ND	2.8	0.63	ug/kg	
75-00-3	Chloroethane ^b	ND	6.9	0.81	ug/kg	
67-66-3	Chloroform	ND	2.8	0.72	ug/kg	
74-87-3	Chloromethane	ND	6.9	2.7	ug/kg	
110-82-7	Cyclohexane	ND	2.8	0.91	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.8	0.96	ug/kg	
124-48-1	Dibromochloromethane	ND	2.8	0.77	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.4	0.58	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.4	0.75	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.4	0.68	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.4	0.68	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	6.9	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.4	0.68	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.4	0.65	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.4	0.90	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.4	1.2	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.4	0.84	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.8	0.65	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.8	0.65	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.8	0.63	ug/kg	
100-41-4	Ethylbenzene	ND	1.4	0.62	ug/kg	
76-13-1	Freon 113	ND	6.9	3.7	ug/kg	
591-78-6	2-Hexanone	ND	6.9	2.9	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: RI-SB2 (3.5-4')
Lab Sample ID: JD39687-5
Matrix: SO - Soil
Method: SW846 8260D SW846 5035
Project: 1001 Whitlock Avenue, Bronx, NY

Date Sampled: 02/14/22**Date Received:** 02/14/22**Percent Solids:** 86.4

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.8	2.0	ug/kg	
79-20-9	Methyl Acetate	ND	6.9	1.9	ug/kg	
108-87-2	Methylcyclohexane	ND	2.8	1.2	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.4	0.65	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.9	3.1	ug/kg	
75-09-2	Methylene chloride	ND	6.9	3.6	ug/kg	
100-42-5	Styrene	ND	2.8	0.55	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.8	0.83	ug/kg	
127-18-4	Tetrachloroethene	1.4	2.8	0.80	ug/kg	J
108-88-3	Toluene	ND	1.4	0.72	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	6.9	3.4	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.9	3.4	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.8	0.67	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.8	0.76	ug/kg	
79-01-6	Trichloroethene	ND	1.4	1.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.9	0.94	ug/kg	
75-01-4	Vinyl chloride	ND	2.8	0.66	ug/kg	
	m,p-Xylene	ND	1.4	1.2	ug/kg	
95-47-6	o-Xylene	ND	1.4	0.63	ug/kg	
1330-20-7	Xylene (total)	ND	1.4	0.63	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	114%		80-124%
17060-07-0	1,2-Dichloroethane-D4	116%		75-133%
2037-26-5	Toluene-D8	100%		79-125%
460-00-4	4-Bromofluorobenzene	88%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	3.61	6.9	ug/kg	J
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

(b) This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	RI-SB2 (3.5-4')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-5	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.4
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155048.D	1	02/16/22 20:09	KLS	02/15/22 12:40	OP38141	EZ7704
Run #2							

	Initial Weight	Final Volume
Run #1	31.2 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	74	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	32	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	66	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	190	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	190	40	ug/kg	
95-48-7	2-Methylphenol	ND	74	24	ug/kg	
	3&4-Methylphenol ^a	ND	74	30	ug/kg	
88-75-5	2-Nitrophenol	ND	190	25	ug/kg	
100-02-7	4-Nitrophenol	ND	370	99	ug/kg	
87-86-5	Pentachlorophenol ^a	ND	150	35	ug/kg	
108-95-2	Phenol	ND	74	19	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	190	25	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	28	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	22	ug/kg	
83-32-9	Acenaphthene	ND	37	13	ug/kg	
208-96-8	Acenaphthylene	ND	37	19	ug/kg	
98-86-2	Acetophenone ^a	ND	190	8.0	ug/kg	
120-12-7	Anthracene	ND	37	23	ug/kg	
1912-24-9	Atrazine	ND	74	16	ug/kg	
56-55-3	Benzo(a)anthracene	82.8	37	10	ug/kg	
50-32-8	Benzo(a)pyrene	90.4	37	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	110	37	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	70.3	37	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	37.3	37	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	74	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	74	9.1	ug/kg	
92-52-4	1,1'-Biphenyl	ND	74	5.1	ug/kg	
100-52-7	Benzaldehyde	ND	190	9.2	ug/kg	
91-58-7	2-Chloronaphthalene	ND	74	8.8	ug/kg	
106-47-8	4-Chloroaniline ^a	ND	190	13	ug/kg	
86-74-8	Carbazole	9.6	74	5.4	ug/kg	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID: RI-SB2 (3.5-4')
Lab Sample ID: JD39687-5
Matrix: SO - Soil
Method: SW846 8270E SW846 3546
Project: 1001 Whitlock Avenue, Bronx, NY

Date Sampled: 02/14/22**Date Received:** 02/14/22**Percent Solids:** 86.4

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	74	15	ug/kg	
218-01-9	Chrysene	89.9	37	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	74	7.9	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	74	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	74	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	74	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	37	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	37	19	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	74	31	ug/kg	
123-91-1	1,4-Dioxane	ND	37	25	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	18.5	37	16	ug/kg	J
132-64-9	Dibenzofuran	ND	74	15	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	74	6.0	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	74	9.2	ug/kg	
84-66-2	Diethyl phthalate	ND	74	7.9	ug/kg	
131-11-3	Dimethyl phthalate	ND	74	6.6	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	74	8.7	ug/kg	
206-44-0	Fluoranthene	133	37	17	ug/kg	
86-73-7	Fluorene	ND	37	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	74	9.4	ug/kg	
87-68-3	Hexachlorobutadiene	ND	37	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	370	15	ug/kg	
67-72-1	Hexachloroethane	ND	190	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	76.9	37	17	ug/kg	
78-59-1	Isophorone	ND	74	7.9	ug/kg	
91-57-6	2-Methylnaphthalene	ND	37	8.4	ug/kg	
88-74-4	2-Nitroaniline	ND	190	8.8	ug/kg	
99-09-2	3-Nitroaniline	ND	190	9.3	ug/kg	
100-01-6	4-Nitroaniline	ND	190	9.6	ug/kg	
91-20-3	Naphthalene	ND	37	10	ug/kg	
98-95-3	Nitrobenzene	ND	74	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine ^a	ND	74	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	14	ug/kg	
85-01-8	Phenanthrene	72.0	37	12	ug/kg	
129-00-0	Pyrene	127	37	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	190	9.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	59%		10-109%

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	RI-SB2 (3.5-4')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-5	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.4
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	58%		10-105%
118-79-6	2,4,6-Tribromophenol	61%		10-135%
4165-60-0	Nitrobenzene-d5	61%		10-119%
321-60-8	2-Fluorobiphenyl	69%		18-112%
1718-51-0	Terphenyl-d14	69%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Unknown	15.26	310	ug/kg	J
	Unknown	15.64	280	ug/kg	J
	Total TIC, Semi-Volatile		590	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB2 (3.5-4')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-5	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.4
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174209.D	1	02/17/22 06:04	CP	02/15/22 11:30	OP38151	G1G6018
Run #2							

	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.74	0.61	ug/kg	
319-84-6	alpha-BHC	ND	0.74	0.60	ug/kg	
319-85-7	beta-BHC	ND	0.74	0.67	ug/kg	
319-86-8	delta-BHC	ND	0.74	0.71	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.74	0.54	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.74	0.59	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.74	0.33	ug/kg	
60-57-1	Dieldrin	ND	0.74	0.51	ug/kg	
72-54-8	4,4' -DDD	ND	0.74	0.68	ug/kg	
72-55-9	4,4' -DDE	ND	0.74	0.65	ug/kg	
50-29-3	4,4' -DDT	ND	0.74	0.65	ug/kg	
72-20-8	Endrin	ND	0.74	0.57	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.74	0.58	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.74	0.42	ug/kg	
959-98-8	Endosulfan-I	ND	0.74	0.42	ug/kg	
33213-65-9	Endosulfan-II	ND	0.74	0.46	ug/kg	
76-44-8	Heptachlor	ND	0.74	0.64	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.74	0.52	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.59	ug/kg	
53494-70-5	Endrin ketone	ND	0.74	0.53	ug/kg	
8001-35-2	Toxaphene	ND	18	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	99%		14-145%
877-09-8	Tetrachloro-m-xylene	100%		14-145%
2051-24-3	Decachlorobiphenyl	73%		10-197%
2051-24-3	Decachlorobiphenyl	114%		10-197%

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB2 (3.5-4')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-5	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.4
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK7917.D	1	02/16/22 02:25	RK	02/15/22 08:00	OP38152	GRK207
Run #2							

	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016 ^a	ND	37	17	ug/kg	
11104-28-2	Aroclor 1221	ND	37	23	ug/kg	
11141-16-5	Aroclor 1232	ND	37	24	ug/kg	
53469-21-9	Aroclor 1242	ND	37	15	ug/kg	
12672-29-6	Aroclor 1248	ND	37	33	ug/kg	
11097-69-1	Aroclor 1254	ND	37	20	ug/kg	
11096-82-5	Aroclor 1260 ^a	ND	37	16	ug/kg	
11100-14-4	Aroclor 1268	ND	37	16	ug/kg	
37324-23-5	Aroclor 1262	ND	37	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	95%		10-163%
877-09-8	Tetrachloro-m-xylene	112%		10-163%
2051-24-3	Decachlorobiphenyl	92%		10-215%
2051-24-3	Decachlorobiphenyl	108%		10-215%

(a) This compound outside control limits biased low in the associated BS.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB2 (3.5-4')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-5	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.4
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	17700	60	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Antimony ^a	< 4.8	4.8	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³
Arsenic ^a	< 4.8	4.8	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³
Barium	167	24	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Beryllium ^a	0.90	0.48	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³
Cadmium	< 0.60	0.60	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Calcium	2750	600	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Chromium	32.0	1.2	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Cobalt	13.1	6.0	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Copper ^a	43.7	6.0	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³
Iron	29500	120	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³
Lead	87.7	2.4	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Magnesium	5480	600	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Manganese	493	1.8	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Mercury	0.18	0.036	mg/kg	1	02/16/22	02/16/22	LM	SW846 7471B ¹
Nickel	23.8	4.8	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Potassium	4200	1200	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Selenium ^a	< 4.8	4.8	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³
Silver ^a	< 1.2	1.2	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³
Sodium	< 1200	1200	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Thallium ^a	< 2.4	2.4	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³
Vanadium	40.3	6.0	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Zinc	224	6.0	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²

(1) Instrument QC Batch: MA51916

(2) Instrument QC Batch: MA51921

(3) Instrument QC Batch: MA51929

(4) Prep QC Batch: MP31310

(5) Prep QC Batch: MP31323

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB2 (3.5-4')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-5	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.4
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.26	0.26	mg/kg	1	02/16/22 14:41	MM	SW846 9012B/LACHAT
Solids, Percent	86.4		%	1	02/15/22 16:40	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	RI-SB2 (3.5-4')	
Lab Sample ID:	JD39687-5A	Date Sampled: 02/14/22
Matrix:	SO - Soil	Date Received: 02/14/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 86.4
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q85761.D	1	02/25/22 22:30	AFL	02/18/22 08:30	F:OP89835	F:S2Q1211
Run #2							

	Initial Weight	Final Volume
Run #1	2.06 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.43	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.56	0.28	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.56	0.28	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.56	0.28	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.56	0.28	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.56	0.28	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.56	0.28	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.56	0.28	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.56	0.28	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.56	0.30	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.56	0.28	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.56	0.28	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.56	0.28	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.56	0.28	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.1	0.56	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.56	0.28	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.56	0.28	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.1	0.56	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.56	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB2 (3.5-4')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-5A	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.4
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	65%		40-140%
	13C5-PFPeA	69%		50-150%
	13C5-PFHxA	73%		50-150%
	13C4-PFHpA	76%		50-150%
	13C8-PFOA	81%		50-150%
	13C9-PFNA	84%		50-150%
	13C6-PFDA	90%		50-150%
	13C7-PFUnDA	90%		40-140%
	13C2-PFDoDA	81%		40-140%
	13C2-PFTeDA	85%		30-130%
	13C3-PFBS	81%		50-150%
	13C3-PFHxS	85%		50-150%
	13C8-PFOS	84%		50-150%
	13C8-FOSA	64%		30-130%
	d3-MeFOSAA	41%		40-140%
	d5-EtFOSAA	48%		40-140%
	13C2-6:2FTS	80%		50-150%
	13C2-8:2FTS	79%		50-150%

(a) Analysis performed at SGS Orlando, FL.

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Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB2 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-6	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	87.2
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242249.D	1	02/15/22 13:27	PS	02/15/22 09:00	n/a	VI9838
Run #2							

	Initial Weight
Run #1	6.2 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	9.2	3.8	ug/kg	
71-43-2	Benzene	ND	0.46	0.42	ug/kg	
74-97-5	Bromochloromethane	ND	4.6	0.52	ug/kg	
75-27-4	Bromodichloromethane	ND	1.8	0.40	ug/kg	
75-25-2	Bromoform	ND	4.6	1.3	ug/kg	
74-83-9	Bromomethane ^a	ND	4.6	0.71	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.2	2.2	ug/kg	
75-15-0	Carbon disulfide	ND	1.8	0.49	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.8	0.57	ug/kg	
108-90-7	Chlorobenzene	ND	1.8	0.42	ug/kg	
75-00-3	Chloroethane ^b	ND	4.6	0.55	ug/kg	
67-66-3	Chloroform	ND	1.8	0.48	ug/kg	
74-87-3	Chloromethane	ND	4.6	1.8	ug/kg	
110-82-7	Cyclohexane	ND	1.8	0.61	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.8	0.64	ug/kg	
124-48-1	Dibromochloromethane	ND	1.8	0.52	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.92	0.39	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.92	0.50	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.92	0.46	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.92	0.46	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.6	0.67	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.92	0.46	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.92	0.43	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.92	0.61	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.92	0.78	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.92	0.57	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.8	0.44	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.8	0.44	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.8	0.42	ug/kg	
100-41-4	Ethylbenzene	ND	0.92	0.42	ug/kg	
76-13-1	Freon 113	ND	4.6	2.5	ug/kg	
591-78-6	2-Hexanone	ND	4.6	2.0	ug/kg	

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Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB2 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-6	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	87.2
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.8	1.3	ug/kg	
79-20-9	Methyl Acetate	ND	4.6	1.3	ug/kg	
108-87-2	Methylcyclohexane	ND	1.8	0.81	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.92	0.43	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.6	2.1	ug/kg	
75-09-2	Methylene chloride	ND	4.6	2.4	ug/kg	
100-42-5	Styrene	ND	1.8	0.37	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.8	0.55	ug/kg	
127-18-4	Tetrachloroethene	ND	1.8	0.54	ug/kg	
108-88-3	Toluene	ND	0.92	0.49	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.6	2.3	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.6	2.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.8	0.45	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.8	0.51	ug/kg	
79-01-6	Trichloroethene	ND	0.92	0.70	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.6	0.63	ug/kg	
75-01-4	Vinyl chloride	ND	1.8	0.44	ug/kg	
	m,p-Xylene	ND	0.92	0.83	ug/kg	
95-47-6	o-Xylene	ND	0.92	0.42	ug/kg	
1330-20-7	Xylene (total)	ND	0.92	0.42	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	114%		80-124%
17060-07-0	1,2-Dichloroethane-D4	116%		75-133%
2037-26-5	Toluene-D8	100%		79-125%
460-00-4	4-Bromofluorobenzene	88%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	3.61	4.8	ug/kg	J
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

(b) This compound in blank spike is outside in house QC limits bias high.

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Report of Analysis

Page 1 of 3

Client Sample ID:	RI-SB2 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-6	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	87.2
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155043.D	1	02/16/22 18:05	KLS	02/15/22 12:40	OP38141	EZ7704
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	76	19	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	32	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	68	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	190	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	190	41	ug/kg	
95-48-7	2-Methylphenol	ND	76	24	ug/kg	
	3&4-Methylphenol ^a	ND	76	31	ug/kg	
88-75-5	2-Nitrophenol	ND	190	25	ug/kg	
100-02-7	4-Nitrophenol	ND	380	100	ug/kg	
87-86-5	Pentachlorophenol ^a	ND	150	36	ug/kg	
108-95-2	Phenol	ND	76	20	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	190	25	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	28	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	23	ug/kg	
83-32-9	Acenaphthene	ND	38	13	ug/kg	
208-96-8	Acenaphthylene	ND	38	19	ug/kg	
98-86-2	Acetophenone ^a	ND	190	8.2	ug/kg	
120-12-7	Anthracene	ND	38	23	ug/kg	
1912-24-9	Atrazine	ND	76	16	ug/kg	
56-55-3	Benzo(a)anthracene	ND	38	11	ug/kg	
50-32-8	Benzo(a)pyrene	ND	38	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	38	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	38	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	38	18	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	76	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	76	9.3	ug/kg	
92-52-4	1,1'-Biphenyl	ND	76	5.2	ug/kg	
100-52-7	Benzaldehyde	ND	190	9.4	ug/kg	
91-58-7	2-Chloronaphthalene	ND	76	9.0	ug/kg	
106-47-8	4-Chloroaniline ^a	ND	190	14	ug/kg	
86-74-8	Carbazole	ND	76	5.5	ug/kg	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	RI-SB2 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-6	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	87.2
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	76	15	ug/kg	
218-01-9	Chrysene	ND	38	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	76	8.1	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	76	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	76	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	76	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	38	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	38	19	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	76	32	ug/kg	
123-91-1	1,4-Dioxane	ND	38	25	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	38	17	ug/kg	
132-64-9	Dibenzofuran	ND	76	15	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	76	6.2	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	76	9.5	ug/kg	
84-66-2	Diethyl phthalate	ND	76	8.1	ug/kg	
131-11-3	Dimethyl phthalate	ND	76	6.8	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	76	8.9	ug/kg	
206-44-0	Fluoranthene	ND	38	17	ug/kg	
86-73-7	Fluorene	ND	38	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	76	9.6	ug/kg	
87-68-3	Hexachlorobutadiene	ND	38	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	380	15	ug/kg	
67-72-1	Hexachloroethane	ND	190	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	38	18	ug/kg	
78-59-1	Isophorone	ND	76	8.1	ug/kg	
91-57-6	2-Methylnaphthalene	ND	38	8.6	ug/kg	
88-74-4	2-Nitroaniline	ND	190	9.0	ug/kg	
99-09-2	3-Nitroaniline	ND	190	9.5	ug/kg	
100-01-6	4-Nitroaniline	ND	190	9.8	ug/kg	
91-20-3	Naphthalene	ND	38	11	ug/kg	
98-95-3	Nitrobenzene	ND	76	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine ^a	ND	76	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	14	ug/kg	
85-01-8	Phenanthrene	ND	38	13	ug/kg	
129-00-0	Pyrene	ND	38	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	190	9.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	72%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	RI-SB2 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-6	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	87.2
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	72%		10-105%
118-79-6	2,4,6-Tribromophenol	80%		10-135%
4165-60-0	Nitrobenzene-d5	76%		10-119%
321-60-8	2-Fluorobiphenyl	89%		18-112%
1718-51-0	Terphenyl-d14	97%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB2 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-6	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	87.2
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174210.D	1	02/17/22 06:22	CP	02/15/22 11:30	OP38151	G1G6018
Run #2							

	Initial Weight	Final Volume
Run #1	15.8 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.73	0.60	ug/kg	
319-84-6	alpha-BHC	ND	0.73	0.59	ug/kg	
319-85-7	beta-BHC	ND	0.73	0.66	ug/kg	
319-86-8	delta-BHC	ND	0.73	0.70	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.73	0.53	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.73	0.59	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.73	0.33	ug/kg	
60-57-1	Dieldrin	ND	0.73	0.50	ug/kg	
72-54-8	4,4' -DDD	ND	0.73	0.67	ug/kg	
72-55-9	4,4' -DDE	ND	0.73	0.64	ug/kg	
50-29-3	4,4' -DDT	ND	0.73	0.64	ug/kg	
72-20-8	Endrin	ND	0.73	0.56	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.73	0.57	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.73	0.41	ug/kg	
959-98-8	Endosulfan-I	ND	0.73	0.42	ug/kg	
33213-65-9	Endosulfan-II	ND	0.73	0.45	ug/kg	
76-44-8	Heptachlor	ND	0.73	0.63	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.73	0.51	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.58	ug/kg	
53494-70-5	Endrin ketone	ND	0.73	0.52	ug/kg	
8001-35-2	Toxaphene	ND	18	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	87%		14-145%
877-09-8	Tetrachloro-m-xylene	84%		14-145%
2051-24-3	Decachlorobiphenyl	86%		10-197%
2051-24-3	Decachlorobiphenyl	87%		10-197%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB2 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-6	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	87.2
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK7918.D	1	02/16/22 02:41	RK	02/15/22 08:00	OP38152	GRK207
Run #2							

	Initial Weight	Final Volume
Run #1	15.8 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016 ^a	ND	36	17	ug/kg	
11104-28-2	Aroclor 1221	ND	36	23	ug/kg	
11141-16-5	Aroclor 1232	ND	36	23	ug/kg	
53469-21-9	Aroclor 1242	ND	36	15	ug/kg	
12672-29-6	Aroclor 1248	ND	36	32	ug/kg	
11097-69-1	Aroclor 1254	ND	36	20	ug/kg	
11096-82-5	Aroclor 1260 ^a	ND	36	15	ug/kg	
11100-14-4	Aroclor 1268	ND	36	15	ug/kg	
37324-23-5	Aroclor 1262	ND	36	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	93%		10-163%
877-09-8	Tetrachloro-m-xylene	112%		10-163%
2051-24-3	Decachlorobiphenyl	91%		10-215%
2051-24-3	Decachlorobiphenyl	98%		10-215%

(a) This compound outside control limits biased low in the associated BS.

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J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB2 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-6	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	87.2
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	15600	57	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Antimony ^a	< 11	11	mg/kg	5	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Arsenic ^a	< 11	11	mg/kg	5	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Barium	87.9	23	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Beryllium ^a	< 1.1	1.1	mg/kg	5	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Cadmium	< 0.57	0.57	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Calcium	2000	570	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Chromium	34.3	1.1	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cobalt	14.6	5.7	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Copper ^a	24.9	14	mg/kg	5	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Iron	30000	280	mg/kg	5	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Lead	8.3	2.3	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Magnesium	6210	570	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Manganese	463	1.7	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	< 0.037	0.037	mg/kg	1	02/16/22	02/16/22	LM	SW846 7471B ¹	SW846 7471B ⁵
Nickel	30.4	4.5	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Potassium	5530	1100	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Selenium ^a	< 11	11	mg/kg	5	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Silver ^a	< 2.8	2.8	mg/kg	5	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Sodium	< 1100	1100	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Thallium ^a	< 5.7	5.7	mg/kg	5	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Vanadium	40.1	5.7	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Zinc	74.8	5.7	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA51916

(2) Instrument QC Batch: MA51921

(3) Instrument QC Batch: MA51929

(4) Prep QC Batch: MP31310

(5) Prep QC Batch: MP31323

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB2 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-6	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	87.2
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.28	0.28	mg/kg	1	02/16/22 14:45	MM	SW846 9012B/LACHAT
Solids, Percent	87.2		%	1	02/15/22 16:40	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.11
4

Report of Analysis

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Client Sample ID:	RI-SB2 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-6A	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	87.2
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q85762.D	1	02/25/22 22:46	AFL	02/18/22 08:30	F:OP89835	F:S2Q1211
Run #2							

	Initial Weight	Final Volume
Run #1	1.97 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.44	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.29	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.58	0.29	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.58	0.29	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.58	0.29	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.58	0.29	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.58	0.29	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.58	0.29	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.58	0.29	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.58	0.31	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.58	0.29	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.58	0.29	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.58	0.29	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.58	0.29	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.58	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.58	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.58	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.58	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.58	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB2 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-6A	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	87.2
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	55%		40-140%
	13C5-PFPeA	58%		50-150%
	13C5-PFHxA	61%		50-150%
	13C4-PFHpA	64%		50-150%
	13C8-PFOA	70%		50-150%
	13C9-PFNA	75%		50-150%
	13C6-PFDA	80%		50-150%
	13C7-PFUnDA	79%		40-140%
	13C2-PFDoDA	72%		40-140%
	13C2-PFTeDA	74%		30-130%
	13C3-PFBS	71%		50-150%
	13C3-PFHxS	75%		50-150%
	13C8-PFOS	74%		50-150%
	13C8-FOSA	62%		30-130%
	d3-MeFOSAA	46%		40-140%
	d5-EtFOSAA	51%		40-140%
	13C2-6:2FTS	69%		50-150%
	13C2-8:2FTS	68%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	RI-SB2 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-7	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	91.8
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242250.D	1	02/15/22 13:48	PS	02/15/22 09:00	n/a	VI9838
Run #2							

	Initial Weight
Run #1	5.4 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	4.2	ug/kg	
71-43-2	Benzene	ND	0.50	0.46	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.56	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.43	ug/kg	
75-25-2	Bromoform	ND	5.0	1.4	ug/kg	
74-83-9	Bromomethane ^a	ND	5.0	0.77	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.54	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.62	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.46	ug/kg	
75-00-3	Chloroethane ^b	ND	5.0	0.60	ug/kg	
67-66-3	Chloroform	ND	2.0	0.52	ug/kg	
74-87-3	Chloromethane	ND	5.0	2.0	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.66	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.70	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.56	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.42	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.55	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.73	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.47	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.66	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.85	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.62	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.48	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.48	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.46	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.46	ug/kg	
76-13-1	Freon 113	ND	5.0	2.7	ug/kg	
591-78-6	2-Hexanone	ND	5.0	2.1	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB2 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-7	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	91.8
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	1.4	ug/kg	
79-20-9	Methyl Acetate	ND	5.0	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.88	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.47	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	2.3	ug/kg	
75-09-2	Methylene chloride	ND	5.0	2.6	ug/kg	
100-42-5	Styrene	ND	2.0	0.41	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.60	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.59	ug/kg	
108-88-3	Toluene	ND	1.0	0.53	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.49	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.56	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.77	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.69	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.49	ug/kg	
	m,p-Xylene	ND	1.0	0.90	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.46	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.46	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		80-124%
17060-07-0	1,2-Dichloroethane-D4	113%		75-133%
2037-26-5	Toluene-D8	100%		79-125%
460-00-4	4-Bromofluorobenzene	89%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

(b) This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	RI-SB2 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-7	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	91.8
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155044.D	1	02/16/22 18:30	KLS	02/15/22 12:40	OP38141	EZ7704
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	73	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	22	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	31	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	65	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	180	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	180	39	ug/kg	
95-48-7	2-Methylphenol	ND	73	23	ug/kg	
	3&4-Methylphenol ^a	ND	73	30	ug/kg	
88-75-5	2-Nitrophenol	ND	180	24	ug/kg	
100-02-7	4-Nitrophenol	ND	360	97	ug/kg	
87-86-5	Pentachlorophenol ^a	ND	150	34	ug/kg	
108-95-2	Phenol	ND	73	19	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	24	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	27	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	22	ug/kg	
83-32-9	Acenaphthene	ND	36	13	ug/kg	
208-96-8	Acenaphthylene	ND	36	18	ug/kg	
98-86-2	Acetophenone ^a	ND	180	7.8	ug/kg	
120-12-7	Anthracene	ND	36	22	ug/kg	
1912-24-9	Atrazine	ND	73	16	ug/kg	
56-55-3	Benzo(a)anthracene	ND	36	10	ug/kg	
50-32-8	Benzo(a)pyrene	ND	36	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	36	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	36	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	36	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	73	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	73	8.9	ug/kg	
92-52-4	1,1'-Biphenyl	ND	73	5.0	ug/kg	
100-52-7	Benzaldehyde	ND	180	9.0	ug/kg	
91-58-7	2-Chloronaphthalene	ND	73	8.6	ug/kg	
106-47-8	4-Chloroaniline ^a	ND	180	13	ug/kg	
86-74-8	Carbazole	ND	73	5.3	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	RI-SB2 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-7	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	91.8
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	73	14	ug/kg	
218-01-9	Chrysene	ND	36	11	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	73	7.8	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	73	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	73	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	73	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	36	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	36	18	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	73	30	ug/kg	
123-91-1	1,4-Dioxane	ND	36	24	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	36	16	ug/kg	
132-64-9	Dibenzofuran	ND	73	15	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	73	5.9	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	73	9.0	ug/kg	
84-66-2	Diethyl phthalate	ND	73	7.7	ug/kg	
131-11-3	Dimethyl phthalate	ND	73	6.5	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	73	8.5	ug/kg	
206-44-0	Fluoranthene	ND	36	16	ug/kg	
86-73-7	Fluorene	ND	36	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	73	9.2	ug/kg	
87-68-3	Hexachlorobutadiene	ND	36	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	360	14	ug/kg	
67-72-1	Hexachloroethane	ND	180	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	36	17	ug/kg	
78-59-1	Isophorone	ND	73	7.8	ug/kg	
91-57-6	2-Methylnaphthalene	ND	36	8.2	ug/kg	
88-74-4	2-Nitroaniline	ND	180	8.6	ug/kg	
99-09-2	3-Nitroaniline	ND	180	9.1	ug/kg	
100-01-6	4-Nitroaniline	ND	180	9.4	ug/kg	
91-20-3	Naphthalene	ND	36	10	ug/kg	
98-95-3	Nitrobenzene	ND	73	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine ^a	ND	73	10	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	13	ug/kg	
85-01-8	Phenanthrene	ND	36	12	ug/kg	
129-00-0	Pyrene	ND	36	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	9.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	75%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	RI-SB2 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-7	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	91.8
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	73%		10-105%
118-79-6	2,4,6-Tribromophenol	79%		10-135%
4165-60-0	Nitrobenzene-d5	77%		10-119%
321-60-8	2-Fluorobiphenyl	87%		18-112%
1718-51-0	Terphenyl-d14	91%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	System artifact/aldol-condensation	3.39	150	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
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 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB2 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-7	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	91.8
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174211.D	1	02/17/22 06:41	CP	02/15/22 11:30	OP38151	G1G6018
Run #2							

	Initial Weight	Final Volume
Run #1	16.8 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.65	0.53	ug/kg	
319-84-6	alpha-BHC	ND	0.65	0.53	ug/kg	
319-85-7	beta-BHC	ND	0.65	0.59	ug/kg	
319-86-8	delta-BHC	ND	0.65	0.62	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.65	0.48	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.65	0.52	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.65	0.29	ug/kg	
60-57-1	Dieldrin	ND	0.65	0.45	ug/kg	
72-54-8	4,4' -DDD	ND	0.65	0.60	ug/kg	
72-55-9	4,4' -DDE	ND	0.65	0.57	ug/kg	
50-29-3	4,4' -DDT	ND	0.65	0.57	ug/kg	
72-20-8	Endrin	ND	0.65	0.50	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.65	0.51	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.65	0.37	ug/kg	
959-98-8	Endosulfan-I	ND	0.65	0.37	ug/kg	
33213-65-9	Endosulfan-II	ND	0.65	0.40	ug/kg	
76-44-8	Heptachlor	ND	0.65	0.56	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.65	0.45	ug/kg	
72-43-5	Methoxychlor	ND	1.3	0.52	ug/kg	
53494-70-5	Endrin ketone	ND	0.65	0.47	ug/kg	
8001-35-2	Toxaphene	ND	16	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	49%		14-145%
877-09-8	Tetrachloro-m-xylene	48%		14-145%
2051-24-3	Decachlorobiphenyl	50%		10-197%
2051-24-3	Decachlorobiphenyl	48%		10-197%

ND = Not detected MDL = Method Detection Limit

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB2 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-7	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	91.8
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK7919.D	1	02/16/22 02:58	RK	02/15/22 08:00	OP38152	GRK207
Run #2							

	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016 ^a	ND	35	16	ug/kg	
11104-28-2	Aroclor 1221	ND	35	22	ug/kg	
11141-16-5	Aroclor 1232	ND	35	22	ug/kg	
53469-21-9	Aroclor 1242	ND	35	14	ug/kg	
12672-29-6	Aroclor 1248	ND	35	31	ug/kg	
11097-69-1	Aroclor 1254	ND	35	19	ug/kg	
11096-82-5	Aroclor 1260 ^a	ND	35	15	ug/kg	
11100-14-4	Aroclor 1268	ND	35	15	ug/kg	
37324-23-5	Aroclor 1262	ND	35	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	69%		10-163%
877-09-8	Tetrachloro-m-xylene	81%		10-163%
2051-24-3	Decachlorobiphenyl	65%		10-215%
2051-24-3	Decachlorobiphenyl	75%		10-215%

(a) This compound outside control limits biased low in the associated BS.

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Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB2 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-7	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	91.8
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	12700	57	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Antimony ^a	< 4.6	4.6	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Arsenic	2.9	2.3	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Barium	146	23	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Beryllium ^a	0.65	0.46	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Cadmium	< 0.57	0.57	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Calcium	1480	570	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Chromium	24.2	1.1	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cobalt	9.8	5.7	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Copper	21.9	2.9	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Iron	20500	57	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Lead	7.5	2.3	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Magnesium	4240	570	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Manganese	240	1.7	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	< 0.034	0.034	mg/kg	1	02/16/22	02/16/22	LM	SW846 7471B ¹	SW846 7471B ⁵
Nickel	20.2	4.6	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Potassium	3850	1100	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Selenium	< 2.3	2.3	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Silver ^a	< 1.1	1.1	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Sodium	< 1100	1100	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Thallium ^a	< 2.3	2.3	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Vanadium	30.0	5.7	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Zinc	47.3	5.7	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA51916

(2) Instrument QC Batch: MA51921

(3) Instrument QC Batch: MA51929

(4) Prep QC Batch: MP31310

(5) Prep QC Batch: MP31323

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB2 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-7	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	91.8
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.24	0.24	mg/kg	1	02/16/22 14:46	MM	SW846 9012B/LACHAT
Solids, Percent	91.8		%	1	02/15/22 16:40	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	RI-SB2 (14.5-15')	
Lab Sample ID:	JD39687-7A	Date Sampled: 02/14/22
Matrix:	SO - Soil	Date Received: 02/14/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 91.8
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q85763.D	1	02/25/22 23:03	AFL	02/18/22 08:30	F:OP89835	F:S2Q1211
Run #2							

	Initial Weight	Final Volume
Run #1	2.01 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.41	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.54	0.27	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.54	0.27	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.54	0.27	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.54	0.27	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.54	0.27	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.54	0.27	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.54	0.27	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.54	0.27	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.54	0.29	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.54	0.27	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.54	0.27	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.54	0.27	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.54	0.27	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.54	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.54	0.27	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.54	0.27	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.1	0.54	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.54	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB2 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-7A	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	91.8
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	79%		40-140%
	13C5-PFPeA	83%		50-150%
	13C5-PFHxA	85%		50-150%
	13C4-PFHpA	84%		50-150%
	13C8-PFOA	88%		50-150%
	13C9-PFNA	90%		50-150%
	13C6-PFDA	94%		50-150%
	13C7-PFUnDA	92%		40-140%
	13C2-PFDoDA	83%		40-140%
	13C2-PFTeDA	87%		30-130%
	13C3-PFBS	80%		50-150%
	13C3-PFHxS	85%		50-150%
	13C8-PFOS	84%		50-150%
	13C8-FOSA	66%		30-130%
	d3-MeFOSAA	71%		40-140%
	d5-EtFOSAA	77%		40-140%
	13C2-6:2FTS	81%		50-150%
	13C2-8:2FTS	80%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
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Report of Analysis

Page 1 of 2

Client Sample ID:	FIELD BLANK	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-9	Date Received:	02/14/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D173737.D	1	02/15/22 16:38	NH	n/a	n/a	V3D7368
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^a	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK) ^a	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform ^a	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	0.58	ug/l	
591-78-6	2-Hexanone ^a	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	FIELD BLANK	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-9	Date Received:	02/14/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK ^a	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane ^a	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		80-120%
17060-07-0	1,2-Dichloroethane-D4	105%		80-120%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	96%		82-114%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	FIELD BLANK	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-9	Date Received:	02/14/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155073.D	1	02/17/22 17:08	KLS	02/16/22 10:00	OP38145	EZ7705
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	5.0	1.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.0	1.3	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.96	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	1.5	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
98-86-2	Acetophenone	ND	2.0	0.21	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
1912-24-9	Atrazine	ND	2.0	0.45	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.29	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.21	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.40	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.21	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
86-74-8	Carbazole	ND	1.0	0.23	ug/l	

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Report of Analysis

Page 2 of 3

Client Sample ID:	FIELD BLANK	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-9	Date Received:	02/14/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	2.0	0.65	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
123-91-1	1,4-Dioxane	ND	1.0	0.66	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.22	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.21	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.28	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.39	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.44	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.37	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	29%		10-90%

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Report of Analysis

Page 3 of 3

Client Sample ID:	FIELD BLANK	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-9	Date Received:	02/14/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	19%		10-101%
118-79-6	2,4,6-Tribromophenol	70%		23-155%
4165-60-0	Nitrobenzene-d5	63%		25-141%
321-60-8	2-Fluorobiphenyl	67%		35-126%
1718-51-0	Terphenyl-d14	85%		15-139%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

(a) Associated CCV outside of control limits high, sample was ND.

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Report of Analysis

Page 1 of 1

Client Sample ID:	FIELD BLANK	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-9	Date Received:	02/14/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8081B SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G41409.D	1	02/21/22 10:46	CP	02/17/22 16:24	OP38165	G8G1768
Run #2							

	Initial Volume	Final Volume
Run #1	245 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0082	0.0042	ug/l	
319-84-6	alpha-BHC	ND	0.0082	0.0042	ug/l	
319-85-7	beta-BHC	ND	0.0082	0.0065	ug/l	
319-86-8	delta-BHC	ND	0.0082	0.0054	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0082	0.0049	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0082	0.0040	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0082	0.0035	ug/l	
60-57-1	Dieldrin	ND	0.0082	0.0063	ug/l	
72-54-8	4,4' -DDD	ND	0.0082	0.0047	ug/l	
72-55-9	4,4' -DDE	ND	0.0082	0.0041	ug/l	
50-29-3	4,4' -DDT	ND	0.0082	0.0056	ug/l	
72-20-8	Endrin	ND	0.0082	0.0049	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0082	0.0044	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0082	0.0055	ug/l	
53494-70-5	Endrin ketone ^a	ND	0.0082	0.0051	ug/l	
959-98-8	Endosulfan-I	ND	0.0082	0.0043	ug/l	
33213-65-9	Endosulfan-II	ND	0.0082	0.0040	ug/l	
76-44-8	Heptachlor	ND	0.0082	0.0037	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0082	0.0049	ug/l	
72-43-5	Methoxychlor	ND	0.016	0.0055	ug/l	
8001-35-2	Toxaphene	ND	0.20	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	65%		10-190%
877-09-8	Tetrachloro-m-xylene	62%		10-190%
2051-24-3	Decachlorobiphenyl	16%		10-156%
2051-24-3	Decachlorobiphenyl	15%		10-156%

(a) Associated CCV outside of control limits high, sample was ND.

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	FIELD BLANK	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-9	Date Received:	02/14/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8082A SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G114267.D	1	02/20/22 22:44	TL	02/17/22 16:24	OP38166	G5G2906
Run #2							

	Initial Volume	Final Volume
Run #1	245 ml	2.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.41	0.16	ug/l	
11104-28-2	Aroclor 1221	ND	0.41	0.34	ug/l	
11141-16-5	Aroclor 1232	ND	0.41	0.21	ug/l	
53469-21-9	Aroclor 1242	ND	0.41	0.19	ug/l	
12672-29-6	Aroclor 1248	ND	0.41	0.10	ug/l	
11097-69-1	Aroclor 1254	ND	0.41	0.34	ug/l	
11096-82-5	Aroclor 1260	ND	0.41	0.12	ug/l	
11100-14-4	Aroclor 1268	ND	0.41	0.14	ug/l	
37324-23-5	Aroclor 1262	ND	0.41	0.16	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	68%		10-174%
877-09-8	Tetrachloro-m-xylene	73%		10-174%
2051-24-3	Decachlorobiphenyl	20%		10-151%
2051-24-3	Decachlorobiphenyl	20%		10-151%

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Report of Analysis

Page 1 of 1

Client Sample ID: FIELD BLANK**Lab Sample ID:** JD39687-9**Matrix:** AQ - Field Blank Soil**Project:** 1001 Whitlock Avenue, Bronx, NY**Date Sampled:** 02/14/22**Date Received:** 02/14/22**Percent Solids:** n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	< 200	200	ug/l	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3010A ⁴
Antimony	< 6.0	6.0	ug/l	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3010A ⁴
Arsenic	< 3.0	3.0	ug/l	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3010A ⁴
Barium	< 200	200	ug/l	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3010A ⁴
Beryllium	< 1.0	1.0	ug/l	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3010A ⁴
Cadmium	< 3.0	3.0	ug/l	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3010A ⁴
Calcium	< 5000	5000	ug/l	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3010A ⁴
Chromium	< 10	10	ug/l	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3010A ⁴
Cobalt	< 50	50	ug/l	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3010A ⁴
Copper	< 10	10	ug/l	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3010A ⁴
Iron	< 100	100	ug/l	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3010A ⁴
Lead	< 3.0	3.0	ug/l	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3010A ⁴
Magnesium	< 5000	5000	ug/l	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3010A ⁴
Manganese	< 15	15	ug/l	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3010A ⁴
Mercury	< 0.20	0.20	ug/l	1	02/16/22	02/16/22	LM	SW846 7470A ¹	SW846 7470A ⁵
Nickel	< 10	10	ug/l	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3010A ⁴
Potassium	< 10000	10000	ug/l	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3010A ⁴
Selenium	< 10	10	ug/l	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3010A ⁴
Silver	< 10	10	ug/l	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3010A ⁴
Sodium	< 10000	10000	ug/l	1	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3010A ⁴
Thallium	< 10	10	ug/l	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3010A ⁴
Vanadium	< 50	50	ug/l	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3010A ⁴
Zinc	< 20	20	ug/l	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3010A ⁴

(1) Instrument QC Batch: MA51915

(2) Instrument QC Batch: MA51921

(3) Instrument QC Batch: MA51930

(4) Prep QC Batch: MP31312

(5) Prep QC Batch: MP31326

RL = Reporting Limit

Report of Analysis

Client Sample ID:	FIELD BLANK	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-9	Date Received:	02/14/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	0.0041 U	0.010	mg/l	1	02/17/22 14:06	MM	EPA 335.4/LACHAT

RL = Reporting Limit

4.15
4

Report of Analysis

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Client Sample ID:	FIELD BLANK	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-9A	Date Received:	02/14/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55077.D	1	02/23/22 15:41	AFL	02/21/22 08:00	F:OP89856	F:S3Q760
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	3.7	1.9	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	1.9	0.93	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.9	0.93	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	1.9	0.93	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.9	0.93	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.93	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.93	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.93	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.93	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.93	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.93	ng/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.93	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.93	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.93	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.93	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.93	ng/l	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	3.7	1.9	ng/l	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	3.7	1.9	ng/l	
2991-50-6	EtFOSAA	ND	3.7	1.9	ng/l	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.4	1.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.4	1.9	ng/l	

ND = Not detected MDL = Method Detection Limit

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-9A	Date Received:	02/14/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	80%		35-135%
	13C5-PFPeA	75%		50-150%
	13C5-PFHxA	90%		50-150%
	13C4-PFHpA	97%		50-150%
	13C8-PFOA	105%		50-150%
	13C9-PFNA	108%		50-150%
	13C6-PFDA	112%		50-150%
	13C7-PFUnDA	101%		40-140%
	13C2-PFDoDA	95%		40-140%
	13C2-PFTeDA	89%		30-130%
	13C3-PFBS	89%		50-150%
	13C3-PFHxS	102%		50-150%
	13C8-PFOS	109%		50-150%
	13C8-FOSA	106%		30-130%
	d3-MeFOSAA	100%		40-140%
	d5-EtFOSAA	101%		40-140%
	13C2-6:2FTS	107%		50-150%
	13C2-8:2FTS	106%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-B1 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-10	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242252.D	1	02/15/22 14:29	PS	02/15/22 09:00	n/a	VI9838
Run #2							

	Initial Weight
Run #1	5.4 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	4.3	ug/kg	
71-43-2	Benzene	ND	0.52	0.48	ug/kg	
74-97-5	Bromochloromethane	ND	5.2	0.59	ug/kg	
75-27-4	Bromodichloromethane	ND	2.1	0.45	ug/kg	
75-25-2	Bromoform	ND	5.2	1.4	ug/kg	
74-83-9	Bromomethane ^a	ND	5.2	0.80	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/kg	
75-15-0	Carbon disulfide	ND	2.1	0.56	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.1	0.65	ug/kg	
108-90-7	Chlorobenzene	ND	2.1	0.48	ug/kg	
75-00-3	Chloroethane ^b	ND	5.2	0.62	ug/kg	
67-66-3	Chloroform	ND	2.1	0.54	ug/kg	
74-87-3	Chloromethane	ND	5.2	2.1	ug/kg	
110-82-7	Cyclohexane	ND	2.1	0.69	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	0.73	ug/kg	
124-48-1	Dibromochloromethane	ND	2.1	0.59	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.44	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.57	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.52	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.52	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.2	0.76	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.52	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.49	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.69	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.88	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.64	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.1	0.49	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	0.48	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.47	ug/kg	
76-13-1	Freon 113	ND	5.2	2.8	ug/kg	
591-78-6	2-Hexanone	ND	5.2	2.2	ug/kg	

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Report of Analysis

Page 2 of 2

Client Sample ID:	WC-B1 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-10	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.1	1.5	ug/kg	
79-20-9	Methyl Acetate	ND	5.2	1.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.1	0.92	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.49	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.2	2.4	ug/kg	
75-09-2	Methylene chloride	ND	5.2	2.7	ug/kg	
100-42-5	Styrene	ND	2.1	0.42	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.63	ug/kg	
127-18-4	Tetrachloroethene	ND	2.1	0.61	ug/kg	
108-88-3	Toluene	ND	1.0	0.55	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.2	2.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	2.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.1	0.51	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.58	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.80	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.2	0.72	ug/kg	
75-01-4	Vinyl chloride	ND	2.1	0.50	ug/kg	
	m,p-Xylene	ND	1.0	0.94	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.48	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.48	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	116%		80-124%
17060-07-0	1,2-Dichloroethane-D4	115%		75-133%
2037-26-5	Toluene-D8	100%		79-125%
460-00-4	4-Bromofluorobenzene	90%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	3.61	8.5	ug/kg	J
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

(b) This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	WC-B1 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-10	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155054.D	1	02/16/22 22:37	KLS	02/15/22 12:40	OP38141	EZ7704
Run #2							

Run #	Initial Weight	Final Volume
Run #1	31.3 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	72	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	22	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	31	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	64	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	180	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	180	39	ug/kg	
95-48-7	2-Methylphenol	ND	72	23	ug/kg	
	3&4-Methylphenol ^a	ND	72	30	ug/kg	
88-75-5	2-Nitrophenol	ND	180	24	ug/kg	
100-02-7	4-Nitrophenol	ND	360	96	ug/kg	
87-86-5	Pentachlorophenol ^a	ND	140	34	ug/kg	
108-95-2	Phenol	ND	72	19	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	24	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	27	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	22	ug/kg	
83-32-9	Acenaphthene	ND	36	12	ug/kg	
208-96-8	Acenaphthylene	ND	36	18	ug/kg	
98-86-2	Acetophenone ^a	ND	180	7.8	ug/kg	
120-12-7	Anthracene	24.7	36	22	ug/kg	J
1912-24-9	Atrazine	ND	72	15	ug/kg	
56-55-3	Benzo(a)anthracene	152	36	10	ug/kg	
50-32-8	Benzo(a)pyrene	169	36	16	ug/kg	
205-99-2	Benzo(b)fluoranthene	209	36	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	158	36	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	75.4	36	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	72	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	72	8.8	ug/kg	
92-52-4	1,1'-Biphenyl	ND	72	4.9	ug/kg	
100-52-7	Benzaldehyde	ND	180	9.0	ug/kg	
91-58-7	2-Chloronaphthalene	ND	72	8.6	ug/kg	
106-47-8	4-Chloroaniline ^a	ND	180	13	ug/kg	
86-74-8	Carbazole	18.0	72	5.2	ug/kg	J

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Report of Analysis

Page 2 of 3

Client Sample ID:	WC-B1 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-10	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	72	14	ug/kg	
218-01-9	Chrysene	165	36	11	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	72	7.7	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	72	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	72	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	72	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	36	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	36	18	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	72	30	ug/kg	
123-91-1	1,4-Dioxane	ND	36	24	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	34.3	36	16	ug/kg	J
132-64-9	Dibenzofuran	ND	72	15	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	72	5.9	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	72	9.0	ug/kg	
84-66-2	Diethyl phthalate	ND	72	7.7	ug/kg	
131-11-3	Dimethyl phthalate	ND	72	6.4	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	99.5	72	8.4	ug/kg	
206-44-0	Fluoranthene	295	36	16	ug/kg	
86-73-7	Fluorene	ND	36	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	72	9.1	ug/kg	
87-68-3	Hexachlorobutadiene	ND	36	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	360	14	ug/kg	
67-72-1	Hexachloroethane	ND	180	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	165	36	17	ug/kg	
78-59-1	Isophorone	ND	72	7.7	ug/kg	
91-57-6	2-Methylnaphthalene	ND	36	8.2	ug/kg	
88-74-4	2-Nitroaniline	ND	180	8.5	ug/kg	
99-09-2	3-Nitroaniline	ND	180	9.0	ug/kg	
100-01-6	4-Nitroaniline	ND	180	9.4	ug/kg	
91-20-3	Naphthalene	ND	36	10	ug/kg	
98-95-3	Nitrobenzene	ND	72	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine ^a	ND	72	10	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	13	ug/kg	
85-01-8	Phenanthrene	148	36	12	ug/kg	
129-00-0	Pyrene	274	36	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	9.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	67%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	WC-B1 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-10	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	66%		10-105%
118-79-6	2,4,6-Tribromophenol	69%		10-135%
4165-60-0	Nitrobenzene-d5	72%		10-119%
321-60-8	2-Fluorobiphenyl	79%		18-112%
1718-51-0	Terphenyl-d14	75%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
80-05-7	Phenol, 4,4'-(1-methylethylidene)b	10.61	190	ug/kg	JN
	Unknown	13.72	170	ug/kg	J
	Unknown PAH substance	14.23	190	ug/kg	J
	Unknown	15.14	170	ug/kg	J
	Total TIC, Semi-Volatile		720	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
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 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B1 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-10	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174213.D	1	02/17/22 07:17	CP	02/15/22 11:30	OP38151	G1G6018
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.73	0.60	ug/kg	
319-84-6	alpha-BHC	ND	0.73	0.60	ug/kg	
319-85-7	beta-BHC	ND	0.73	0.66	ug/kg	
319-86-8	delta-BHC	ND	0.73	0.70	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.73	0.54	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.73	0.59	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.73	0.33	ug/kg	
60-57-1	Dieldrin	ND	0.73	0.50	ug/kg	
72-54-8	4,4' -DDD	ND	0.73	0.67	ug/kg	
72-55-9	4,4' -DDE	ND	0.73	0.64	ug/kg	
50-29-3	4,4' -DDT	ND	0.73	0.65	ug/kg	
72-20-8	Endrin	ND	0.73	0.57	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.73	0.57	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.73	0.42	ug/kg	
959-98-8	Endosulfan-I	ND	0.73	0.42	ug/kg	
33213-65-9	Endosulfan-II	ND	0.73	0.46	ug/kg	
76-44-8	Heptachlor	ND	0.73	0.63	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.73	0.51	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.58	ug/kg	
53494-70-5	Endrin ketone	ND	0.73	0.53	ug/kg	
8001-35-2	Toxaphene	ND	18	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	68%		14-145%
877-09-8	Tetrachloro-m-xylene	67%		14-145%
2051-24-3	Decachlorobiphenyl	54%		10-197%
2051-24-3	Decachlorobiphenyl	81%		10-197%

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Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B1 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-10	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK7925.D	1	02/16/22 04:36	RK	02/15/22 11:30	OP38152	GRK207
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	17	ug/kg	
11104-28-2	Aroclor 1221	ND	37	23	ug/kg	
11141-16-5	Aroclor 1232	ND	37	23	ug/kg	
53469-21-9	Aroclor 1242	ND	37	15	ug/kg	
12672-29-6	Aroclor 1248	ND	37	33	ug/kg	
11097-69-1	Aroclor 1254	ND	37	20	ug/kg	
11096-82-5	Aroclor 1260	ND	37	16	ug/kg	
11100-14-4	Aroclor 1268	ND	37	15	ug/kg	
37324-23-5	Aroclor 1262	ND	37	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	73%		10-163%
877-09-8	Tetrachloro-m-xylene	85%		10-163%
2051-24-3	Decachlorobiphenyl	55%		10-215%
2051-24-3	Decachlorobiphenyl	87%		10-215%

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Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B1 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-10	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	88.5
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	16600	56	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Antimony ^a	< 4.5	4.5	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³
Arsenic ^a	< 4.5	4.5	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³
Barium	145	23	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Beryllium ^a	0.81	0.45	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³
Cadmium	< 0.56	0.56	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Calcium	3470	560	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Chromium	31.3	1.1	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Cobalt	14.2	5.6	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Copper ^a	36.2	5.6	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³
Iron	28100	110	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³
Lead	65.3	2.3	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Magnesium	5490	560	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Manganese	672	1.7	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Mercury	0.068	0.035	mg/kg	1	02/16/22	02/16/22	LM	SW846 7471B ¹
Nickel	26.2	4.5	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Potassium	4910	1100	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Selenium ^a	< 4.5	4.5	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³
Silver ^a	< 1.1	1.1	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³
Sodium	< 1100	1100	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Thallium ^a	< 2.3	2.3	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³
Vanadium	40.9	5.6	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²
Zinc	219	5.6	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²

(1) Instrument QC Batch: MA51916

(2) Instrument QC Batch: MA51921

(3) Instrument QC Batch: MA51929

(4) Prep QC Batch: MP31310

(5) Prep QC Batch: MP31323

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WC-B1 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-10	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	88.5
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.23	0.23	mg/kg	1	02/16/22 14:49	MM	SW846 9012B/LACHAT
Solids, Percent	88.5		%	1	02/15/22 16:40	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-B1 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-10A	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q85764.D	1	02/25/22 23:20	AFL	02/18/22 08:30	F:OP89835	F:S2Q1211
Run #2							

Run	Initial Weight	Final Volume
Run #1	2.02 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.43	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.56	0.28	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.56	0.28	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.56	0.28	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.56	0.28	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.56	0.28	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.56	0.28	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.56	0.28	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.56	0.28	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.56	0.30	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.56	0.28	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.56	0.28	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.56	0.28	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.56	0.28	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.47	0.56	0.22	ug/kg	J
335-77-3	Perfluorodecanesulfonic acid	ND	0.56	0.28	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.56	0.28	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.1	0.56	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.56	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-B1 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-10A	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	79%		40-140%
	13C5-PFPeA	82%		50-150%
	13C5-PFHxA	84%		50-150%
	13C4-PFHpA	84%		50-150%
	13C8-PFOA	86%		50-150%
	13C9-PFNA	88%		50-150%
	13C6-PFDA	91%		50-150%
	13C7-PFUnDA	89%		40-140%
	13C2-PFDoDA	75%		40-140%
	13C2-PFTeDA	80%		30-130%
	13C3-PFBS	78%		50-150%
	13C3-PFHxS	84%		50-150%
	13C8-PFOS	81%		50-150%
	13C8-FOSA	51%		30-130%
	d3-MeFOSAA	66%		40-140%
	d5-EtFOSAA	73%		40-140%
	13C2-6:2FTS	79%		50-150%
	13C2-8:2FTS	77%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-B1 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-11	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.3
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242256.D	1	02/15/22 15:51	PS	02/15/22 09:00	n/a	VI9838
Run #2							

	Initial Weight
Run #1	6.0 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	16.1	9.7	4.0	ug/kg	
71-43-2	Benzene	ND	0.48	0.44	ug/kg	
74-97-5	Bromochloromethane	ND	4.8	0.54	ug/kg	
75-27-4	Bromodichloromethane	ND	1.9	0.41	ug/kg	
75-25-2	Bromoform	ND	4.8	1.3	ug/kg	
74-83-9	Bromomethane ^a	ND	4.8	0.74	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.7	2.3	ug/kg	
75-15-0	Carbon disulfide	ND	1.9	0.52	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.9	0.60	ug/kg	
108-90-7	Chlorobenzene	ND	1.9	0.44	ug/kg	
75-00-3	Chloroethane ^b	ND	4.8	0.57	ug/kg	
67-66-3	Chloroform	ND	1.9	0.50	ug/kg	
74-87-3	Chloromethane	ND	4.8	1.9	ug/kg	
110-82-7	Cyclohexane	ND	1.9	0.63	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.9	0.67	ug/kg	
124-48-1	Dibromochloromethane	ND	1.9	0.54	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.97	0.41	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.97	0.53	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.97	0.48	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.97	0.48	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.8	0.70	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.97	0.48	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.97	0.45	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.97	0.63	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.97	0.81	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.97	0.59	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.9	0.46	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.9	0.46	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.9	0.44	ug/kg	
100-41-4	Ethylbenzene	ND	0.97	0.44	ug/kg	
76-13-1	Freon 113	ND	4.8	2.6	ug/kg	
591-78-6	2-Hexanone	ND	4.8	2.0	ug/kg	

ND = Not detected MDL = Method Detection Limit

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RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	WC-B1 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-11	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.3
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.9	1.4	ug/kg	
79-20-9	Methyl Acetate	ND	4.8	1.3	ug/kg	
108-87-2	Methylcyclohexane	ND	1.9	0.84	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.97	0.45	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.8	2.2	ug/kg	
75-09-2	Methylene chloride	ND	4.8	2.5	ug/kg	
100-42-5	Styrene	ND	1.9	0.39	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.9	0.58	ug/kg	
127-18-4	Tetrachloroethene	ND	1.9	0.56	ug/kg	
108-88-3	Toluene	ND	0.97	0.51	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.8	2.4	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	2.4	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.9	0.47	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.9	0.53	ug/kg	
79-01-6	Trichloroethene	ND	0.97	0.74	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.8	0.66	ug/kg	
75-01-4	Vinyl chloride	ND	1.9	0.46	ug/kg	
	m,p-Xylene	ND	0.97	0.87	ug/kg	
95-47-6	o-Xylene	ND	0.97	0.44	ug/kg	
1330-20-7	Xylene (total)	ND	0.97	0.44	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		80-124%
17060-07-0	1,2-Dichloroethane-D4	115%		75-133%
2037-26-5	Toluene-D8	101%		79-125%
460-00-4	4-Bromofluorobenzene	87%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	3.61	5.5	ug/kg	J
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

(b) This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	WC-B1 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-11	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.3
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155046.D	1	02/16/22 19:19	KLS	02/15/22 12:40	OP38141	EZ7704
Run #2							

	Initial Weight	Final Volume
Run #1	31.0 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	75	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	32	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	67	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	190	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	190	40	ug/kg	
95-48-7	2-Methylphenol	ND	75	24	ug/kg	
	3&4-Methylphenol ^a	ND	75	31	ug/kg	
88-75-5	2-Nitrophenol	ND	190	25	ug/kg	
100-02-7	4-Nitrophenol	ND	370	100	ug/kg	
87-86-5	Pentachlorophenol ^a	ND	150	35	ug/kg	
108-95-2	Phenol	ND	75	20	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	190	25	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	28	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	22	ug/kg	
83-32-9	Acenaphthene	ND	37	13	ug/kg	
208-96-8	Acenaphthylene	ND	37	19	ug/kg	
98-86-2	Acetophenone ^a	ND	190	8.0	ug/kg	
120-12-7	Anthracene	ND	37	23	ug/kg	
1912-24-9	Atrazine	ND	75	16	ug/kg	
56-55-3	Benzo(a)anthracene	ND	37	11	ug/kg	
50-32-8	Benzo(a)pyrene	ND	37	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	37	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	37	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	37	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	75	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	75	9.1	ug/kg	
92-52-4	1,1'-Biphenyl	ND	75	5.1	ug/kg	
100-52-7	Benzaldehyde	ND	190	9.3	ug/kg	
91-58-7	2-Chloronaphthalene	ND	75	8.9	ug/kg	
106-47-8	4-Chloroaniline ^a	ND	190	13	ug/kg	
86-74-8	Carbazole	ND	75	5.4	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	WC-B1 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-11	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.3
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	75	15	ug/kg	
218-01-9	Chrysene	ND	37	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	75	8.0	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	75	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	75	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	75	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	37	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	37	19	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	75	31	ug/kg	
123-91-1	1,4-Dioxane	ND	37	25	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	37	17	ug/kg	
132-64-9	Dibenzofuran	ND	75	15	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	75	6.1	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	75	9.3	ug/kg	
84-66-2	Diethyl phthalate	ND	75	8.0	ug/kg	
131-11-3	Dimethyl phthalate	ND	75	6.7	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	75	8.7	ug/kg	
206-44-0	Fluoranthene	ND	37	17	ug/kg	
86-73-7	Fluorene	ND	37	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	75	9.5	ug/kg	
87-68-3	Hexachlorobutadiene	ND	37	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	370	15	ug/kg	
67-72-1	Hexachloroethane	ND	190	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	37	18	ug/kg	
78-59-1	Isophorone	ND	75	8.0	ug/kg	
91-57-6	2-Methylnaphthalene	ND	37	8.4	ug/kg	
88-74-4	2-Nitroaniline	ND	190	8.8	ug/kg	
99-09-2	3-Nitroaniline	ND	190	9.3	ug/kg	
100-01-6	4-Nitroaniline	ND	190	9.7	ug/kg	
91-20-3	Naphthalene	ND	37	11	ug/kg	
98-95-3	Nitrobenzene	ND	75	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine ^a	ND	75	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	14	ug/kg	
85-01-8	Phenanthrene	ND	37	13	ug/kg	
129-00-0	Pyrene	ND	37	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	190	9.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	67%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	WC-B1 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-11	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.3
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	68%		10-105%
118-79-6	2,4,6-Tribromophenol	73%		10-135%
4165-60-0	Nitrobenzene-d5	72%		10-119%
321-60-8	2-Fluorobiphenyl	82%		18-112%
1718-51-0	Terphenyl-d14	87%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B1 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-11	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.3
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174214.D	1	02/17/22 07:35	CP	02/15/22 11:30	OP38151	G1G6018
Run #2							

	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.74	0.61	ug/kg	
319-84-6	alpha-BHC	ND	0.74	0.60	ug/kg	
319-85-7	beta-BHC	ND	0.74	0.67	ug/kg	
319-86-8	delta-BHC	ND	0.74	0.71	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.74	0.54	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.74	0.60	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.74	0.33	ug/kg	
60-57-1	Dieldrin	ND	0.74	0.51	ug/kg	
72-54-8	4,4' -DDD	ND	0.74	0.68	ug/kg	
72-55-9	4,4' -DDE	ND	0.74	0.65	ug/kg	
50-29-3	4,4' -DDT	ND	0.74	0.65	ug/kg	
72-20-8	Endrin	ND	0.74	0.57	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.74	0.58	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.74	0.42	ug/kg	
959-98-8	Endosulfan-I	ND	0.74	0.43	ug/kg	
33213-65-9	Endosulfan-II	ND	0.74	0.46	ug/kg	
76-44-8	Heptachlor	ND	0.74	0.64	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.74	0.52	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.59	ug/kg	
53494-70-5	Endrin ketone	ND	0.74	0.53	ug/kg	
8001-35-2	Toxaphene	ND	18	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	65%		14-145%
877-09-8	Tetrachloro-m-xylene	61%		14-145%
2051-24-3	Decachlorobiphenyl	55%		10-197%
2051-24-3	Decachlorobiphenyl	70%		10-197%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B1 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-11	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.3
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK7926.D	1	02/16/22 04:52	RK	02/15/22 11:30	OP38152	GRK207
Run #2							

	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	17	ug/kg	
11104-28-2	Aroclor 1221	ND	37	23	ug/kg	
11141-16-5	Aroclor 1232	ND	37	24	ug/kg	
53469-21-9	Aroclor 1242	ND	37	15	ug/kg	
12672-29-6	Aroclor 1248	ND	37	33	ug/kg	
11097-69-1	Aroclor 1254	ND	37	20	ug/kg	
11096-82-5	Aroclor 1260	ND	37	16	ug/kg	
11100-14-4	Aroclor 1268	ND	37	16	ug/kg	
37324-23-5	Aroclor 1262	ND	37	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	70%		10-163%
877-09-8	Tetrachloro-m-xylene	82%		10-163%
2051-24-3	Decachlorobiphenyl	50%		10-215%
2051-24-3	Decachlorobiphenyl	79%		10-215%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B1 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-11	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.3
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	14200	56	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Antimony ^a	< 4.5	4.5	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Arsenic ^a	< 4.5	4.5	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Barium	95.8	22	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Beryllium ^a	0.97	0.45	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Cadmium	< 0.56	0.56	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Calcium	1530	560	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Chromium	29.3	1.1	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cobalt	12.7	5.6	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Copper ^a	28.5	5.6	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Iron	25600	110	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Lead	11.7	2.2	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Magnesium	5170	560	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Manganese	567	1.7	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	< 0.037	0.037	mg/kg	1	02/16/22	02/16/22	LM	SW846 7471B ¹	SW846 7471B ⁵
Nickel	22.5	4.5	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Potassium	4970	1100	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Selenium ^a	< 4.5	4.5	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Silver ^a	< 1.1	1.1	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Sodium	< 1100	1100	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Thallium ^a	< 2.2	2.2	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Vanadium	37.1	5.6	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Zinc	69.8	5.6	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA51916

(2) Instrument QC Batch: MA51921

(3) Instrument QC Batch: MA51929

(4) Prep QC Batch: MP31310

(5) Prep QC Batch: MP31323

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WC-B1 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-11	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.3
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.26	0.26	mg/kg	1	02/16/22 14:50	MM	SW846 9012B/LACHAT
Solids, Percent	86.3		%	1	02/15/22 16:40	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.19
4

Report of Analysis

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Client Sample ID:	WC-B1 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-11A	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.3
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q85767.D	1	02/26/22 00:10	AFL	02/18/22 08:30	F:OP89835	F:S2Q1211
Run #2							

	Initial Weight	Final Volume
Run #1	1.97 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.45	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.59	0.29	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.59	0.29	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.59	0.29	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.59	0.29	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.59	0.29	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.59	0.29	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.59	0.29	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.59	0.29	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.59	0.31	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.59	0.29	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.59	0.29	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.59	0.29	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.59	0.29	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.59	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.59	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.59	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.59	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.59	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	

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Report of Analysis

Client Sample ID:	WC-B1 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-11A	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.3
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	74%		40-140%
	13C5-PFPeA	77%		50-150%
	13C5-PFHxA	79%		50-150%
	13C4-PFHpA	79%		50-150%
	13C8-PFOA	80%		50-150%
	13C9-PFNA	82%		50-150%
	13C6-PFDA	86%		50-150%
	13C7-PFUnDA	83%		40-140%
	13C2-PFDoDA	75%		40-140%
	13C2-PFTeDA	77%		30-130%
	13C3-PFBS	73%		50-150%
	13C3-PFHxS	78%		50-150%
	13C8-PFOS	76%		50-150%
	13C8-FOSA	43%		30-130%
	d3-MeFOSAA	62%		40-140%
	d5-EtFOSAA	67%		40-140%
	13C2-6:2FTS	73%		50-150%
	13C2-8:2FTS	71%		50-150%

(a) Analysis performed at SGS Orlando, FL.

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Report of Analysis

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Client Sample ID:	WC-A1 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-12	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.8
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242257.D	1	02/15/22 16:11	PS	02/15/22 09:00	n/a	VI9838
Run #2							

	Initial Weight
Run #1	6.2 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	13.4	9.3	3.8	ug/kg	
71-43-2	Benzene	ND	0.46	0.42	ug/kg	
74-97-5	Bromochloromethane	ND	4.6	0.52	ug/kg	
75-27-4	Bromodichloromethane	ND	1.9	0.40	ug/kg	
75-25-2	Bromoform	ND	4.6	1.3	ug/kg	
74-83-9	Bromomethane ^a	ND	4.6	0.71	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.3	2.3	ug/kg	
75-15-0	Carbon disulfide	ND	1.9	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.9	0.57	ug/kg	
108-90-7	Chlorobenzene	ND	1.9	0.43	ug/kg	
75-00-3	Chloroethane ^b	ND	4.6	0.55	ug/kg	
67-66-3	Chloroform	ND	1.9	0.48	ug/kg	
74-87-3	Chloromethane	ND	4.6	1.8	ug/kg	
110-82-7	Cyclohexane	ND	1.9	0.61	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.9	0.64	ug/kg	
124-48-1	Dibromochloromethane	ND	1.9	0.52	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.93	0.39	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.93	0.51	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.93	0.46	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.93	0.46	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.6	0.68	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.93	0.46	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.93	0.44	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.93	0.61	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.93	0.78	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.93	0.57	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.9	0.44	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.9	0.44	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.9	0.42	ug/kg	
100-41-4	Ethylbenzene	ND	0.93	0.42	ug/kg	
76-13-1	Freon 113	ND	4.6	2.5	ug/kg	
591-78-6	2-Hexanone	ND	4.6	2.0	ug/kg	

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Report of Analysis

Page 2 of 2

Client Sample ID:	WC-A1 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-12	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.8
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.9	1.3	ug/kg	
79-20-9	Methyl Acetate	ND	4.6	1.3	ug/kg	
108-87-2	Methylcyclohexane	ND	1.9	0.81	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.93	0.44	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.6	2.1	ug/kg	
75-09-2	Methylene chloride	ND	4.6	2.4	ug/kg	
100-42-5	Styrene	ND	1.9	0.37	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.9	0.56	ug/kg	
127-18-4	Tetrachloroethene	ND	1.9	0.54	ug/kg	
108-88-3	Toluene	ND	0.93	0.49	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.6	2.3	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.6	2.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.9	0.45	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.9	0.51	ug/kg	
79-01-6	Trichloroethene	ND	0.93	0.71	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.6	0.64	ug/kg	
75-01-4	Vinyl chloride	ND	1.9	0.45	ug/kg	
	m,p-Xylene	ND	0.93	0.83	ug/kg	
95-47-6	o-Xylene	ND	0.93	0.43	ug/kg	
1330-20-7	Xylene (total)	ND	0.93	0.43	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	114%		80-124%
17060-07-0	1,2-Dichloroethane-D4	119%		75-133%
2037-26-5	Toluene-D8	100%		79-125%
460-00-4	4-Bromofluorobenzene	89%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

(b) This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	WC-A1 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-12	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.8
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155055.D	1	02/16/22 23:01	KLS	02/15/22 12:40	OP38141	EZ7704
Run #2							

Run #	Initial Weight	Final Volume
Run #1	31.5 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	73	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	22	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	31	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	65	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	180	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	180	39	ug/kg	
95-48-7	2-Methylphenol	ND	73	23	ug/kg	
	3&4-Methylphenol ^a	ND	73	30	ug/kg	
88-75-5	2-Nitrophenol	ND	180	24	ug/kg	
100-02-7	4-Nitrophenol	ND	370	98	ug/kg	
87-86-5	Pentachlorophenol ^a	ND	150	34	ug/kg	
108-95-2	Phenol	ND	73	19	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	24	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	27	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	22	ug/kg	
83-32-9	Acenaphthene	ND	37	13	ug/kg	
208-96-8	Acenaphthylene	38.6	37	19	ug/kg	
98-86-2	Acetophenone ^a	ND	180	7.9	ug/kg	
120-12-7	Anthracene	32.7	37	22	ug/kg	J
1912-24-9	Atrazine	ND	73	16	ug/kg	
56-55-3	Benzo(a)anthracene	197	37	10	ug/kg	
50-32-8	Benzo(a)pyrene	210	37	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	213	37	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	131	37	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	91.1	37	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	73	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	73	8.9	ug/kg	
92-52-4	1,1'-Biphenyl	ND	73	5.0	ug/kg	
100-52-7	Benzaldehyde	ND	180	9.1	ug/kg	
91-58-7	2-Chloronaphthalene	ND	73	8.7	ug/kg	
106-47-8	4-Chloroaniline ^a	ND	180	13	ug/kg	
86-74-8	Carbazole	ND	73	5.3	ug/kg	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	WC-A1 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-12	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.8
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	73	14	ug/kg	
218-01-9	Chrysene	189	37	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	73	7.8	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	73	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	73	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	73	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	37	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	37	18	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	73	31	ug/kg	
123-91-1	1,4-Dioxane	ND	37	24	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	40.2	37	16	ug/kg	
132-64-9	Dibenzofuran	ND	73	15	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	73	6.0	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	73	9.1	ug/kg	
84-66-2	Diethyl phthalate	ND	73	7.8	ug/kg	
131-11-3	Dimethyl phthalate	ND	73	6.5	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	73	8.6	ug/kg	
206-44-0	Fluoranthene	266	37	16	ug/kg	
86-73-7	Fluorene	ND	37	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	73	9.3	ug/kg	
87-68-3	Hexachlorobutadiene	ND	37	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	370	15	ug/kg	
67-72-1	Hexachloroethane	ND	180	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	161	37	17	ug/kg	
78-59-1	Isophorone	ND	73	7.8	ug/kg	
91-57-6	2-Methylnaphthalene	ND	37	8.3	ug/kg	
88-74-4	2-Nitroaniline	ND	180	8.6	ug/kg	
99-09-2	3-Nitroaniline	ND	180	9.1	ug/kg	
100-01-6	4-Nitroaniline	ND	180	9.5	ug/kg	
91-20-3	Naphthalene	ND	37	10	ug/kg	
98-95-3	Nitrobenzene	ND	73	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine ^a	ND	73	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	13	ug/kg	
85-01-8	Phenanthrene	71.5	37	12	ug/kg	
129-00-0	Pyrene	270	37	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	9.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	68%		10-109%

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-A1 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-12	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.8
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	67%		10-105%
118-79-6	2,4,6-Tribromophenol	73%		10-135%
4165-60-0	Nitrobenzene-d5	75%		10-119%
321-60-8	2-Fluorobiphenyl	81%		18-112%
1718-51-0	Terphenyl-d14	78%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	System artifact/aldol-condensation	3.39	150	ug/kg	J
10544-50-0	Cyclic octaatomic sulfur	10.19	310	ug/kg	JN
	Unknown	13.72	210	ug/kg	J
	Unknown PAH substance	14.23	150	ug/kg	J
	Unknown	15.15	210	ug/kg	J
	Total TIC, Semi-Volatile		880	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
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J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A1 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-12	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.8
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1G174264.D	1	02/18/22 02:08	CP	02/15/22 11:30	OP38151	G1G6020
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.76	0.62	ug/kg	
319-84-6	alpha-BHC	ND	0.76	0.62	ug/kg	
319-85-7	beta-BHC	ND	0.76	0.69	ug/kg	
319-86-8	delta-BHC	ND	0.76	0.73	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.76	0.56	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.76	0.61	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.76	0.34	ug/kg	
60-57-1	Dieldrin	ND	0.76	0.52	ug/kg	
72-54-8	4,4' -DDD	ND	0.76	0.70	ug/kg	
72-55-9	4,4' -DDE	ND	0.76	0.66	ug/kg	
50-29-3	4,4' -DDT	ND	0.76	0.67	ug/kg	
72-20-8	Endrin	ND	0.76	0.59	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.76	0.59	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.76	0.43	ug/kg	
959-98-8	Endosulfan-I	ND	0.76	0.44	ug/kg	
33213-65-9	Endosulfan-II	ND	0.76	0.47	ug/kg	
76-44-8	Heptachlor	ND	0.76	0.65	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.76	0.53	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.60	ug/kg	
53494-70-5	Endrin ketone	ND	0.76	0.55	ug/kg	
8001-35-2	Toxaphene	ND	19	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	64%		14-145%
877-09-8	Tetrachloro-m-xylene	65%		14-145%
2051-24-3	Decachlorobiphenyl	48%		10-197%
2051-24-3	Decachlorobiphenyl	104%		10-197%

(a) Had TBA cleanup.

ND = Not detected MDL = Method Detection Limit

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A1 (0-7.5')		
Lab Sample ID:	JD39687-12	Date Sampled:	02/14/22
Matrix:	SO - Soil	Date Received:	02/14/22
Method:	SW846 8082A SW846 3546	Percent Solids:	86.8
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK7927.D	1	02/16/22 05:08	RK	02/15/22 11:30	OP38152	GRK207
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	38	18	ug/kg	
11104-28-2	Aroclor 1221	ND	38	23	ug/kg	
11141-16-5	Aroclor 1232	ND	38	24	ug/kg	
53469-21-9	Aroclor 1242	ND	38	16	ug/kg	
12672-29-6	Aroclor 1248	ND	38	34	ug/kg	
11097-69-1	Aroclor 1254	ND	38	20	ug/kg	
11096-82-5	Aroclor 1260	ND	38	16	ug/kg	
11100-14-4	Aroclor 1268	ND	38	16	ug/kg	
37324-23-5	Aroclor 1262	ND	38	25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	63%		10-163%
877-09-8	Tetrachloro-m-xylene	73%		10-163%
2051-24-3	Decachlorobiphenyl	50%		10-215%
2051-24-3	Decachlorobiphenyl	89%		10-215%

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Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A1 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-12	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.8
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	14200	58	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Antimony ^a	< 12	12	mg/kg	5	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Arsenic ^a	< 12	12	mg/kg	5	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Barium	138	23	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Beryllium ^a	1.8	1.2	mg/kg	5	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Cadmium	< 0.58	0.58	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Calcium	5970	580	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Chromium	39.9	1.2	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cobalt	17.9	5.8	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Copper ^a	65.8	14	mg/kg	5	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Iron	42100	290	mg/kg	5	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Lead	71.2	2.3	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Magnesium	5830	580	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Manganese	428	1.7	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	0.094	0.037	mg/kg	1	02/16/22	02/16/22	LM	SW846 7471B ¹	SW846 7471B ⁵
Nickel	31.0	4.6	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Potassium	4730	1200	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Selenium ^a	< 12	12	mg/kg	5	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Silver ^a	< 2.9	2.9	mg/kg	5	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Sodium	< 1200	1200	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Thallium ^a	< 5.8	5.8	mg/kg	5	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Vanadium	45.5	5.8	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Zinc	168	5.8	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA51916

(2) Instrument QC Batch: MA51921

(3) Instrument QC Batch: MA51929

(4) Prep QC Batch: MP31310

(5) Prep QC Batch: MP31323

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WC-A1 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-12	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.8
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.25	0.25	mg/kg	1	02/17/22 16:23	MM	SW846 9012B/LACHAT
Solids, Percent	86.8		%	1	02/15/22 16:40	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.21
4

Report of Analysis

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Client Sample ID:	WC-A1 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-12A	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.8
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q85768.D	1	02/26/22 00:27	AFL	02/18/22 08:30	F:OP89835	F:S2Q1211
Run #2							

	Initial Weight	Final Volume
Run #1	2.00 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.44	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.29	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.58	0.29	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.58	0.29	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.58	0.29	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.58	0.29	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.58	0.29	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.58	0.29	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.58	0.29	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.58	0.31	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.58	0.29	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.58	0.29	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.58	0.29	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.58	0.29	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.58	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.58	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.58	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.58	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.58	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	

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RL = Reporting Limit

E = Indicates value exceeds calibration range

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-A1 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-12A	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	86.8
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	82%		40-140%
	13C5-PFPeA	87%		50-150%
	13C5-PFHxA	88%		50-150%
	13C4-PFHpA	87%		50-150%
	13C8-PFOA	89%		50-150%
	13C9-PFNA	91%		50-150%
	13C6-PFDA	95%		50-150%
	13C7-PFUnDA	94%		40-140%
	13C2-PFDoDA	81%		40-140%
	13C2-PFTeDA	84%		30-130%
	13C3-PFBS	82%		50-150%
	13C3-PFHxS	86%		50-150%
	13C8-PFOS	84%		50-150%
	13C8-FOSA	80%		30-130%
	d3-MeFOSAA	81%		40-140%
	d5-EtFOSAA	85%		40-140%
	13C2-6:2FTS	83%		50-150%
	13C2-8:2FTS	83%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
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 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-A1 (7.5-15')		
Lab Sample ID:	JD39687-13	Date Sampled:	02/14/22
Matrix:	SO - Soil	Date Received:	02/14/22
Method:	SW846 8260D SW846 5035	Percent Solids:	84.8
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242258.D	1	02/15/22 16:32	PS	02/15/22 09:00	n/a	VI9838
Run #2							

	Initial Weight
Run #1	5.5 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	97.2	11	4.4	ug/kg	
71-43-2	Benzene	ND	0.54	0.49	ug/kg	
74-97-5	Bromochloromethane	ND	5.4	0.60	ug/kg	
75-27-4	Bromodichloromethane	ND	2.1	0.46	ug/kg	
75-25-2	Bromoform	ND	5.4	1.5	ug/kg	
74-83-9	Bromomethane ^a	ND	5.4	0.82	ug/kg	
78-93-3	2-Butanone (MEK)	26.5	11	2.6	ug/kg	
75-15-0	Carbon disulfide	ND	2.1	0.57	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.1	0.66	ug/kg	
108-90-7	Chlorobenzene	ND	2.1	0.49	ug/kg	
75-00-3	Chloroethane ^b	ND	5.4	0.63	ug/kg	
67-66-3	Chloroform	ND	2.1	0.56	ug/kg	
74-87-3	Chloromethane	ND	5.4	2.1	ug/kg	
110-82-7	Cyclohexane	ND	2.1	0.70	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	0.74	ug/kg	
124-48-1	Dibromochloromethane	ND	2.1	0.60	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.45	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.1	0.59	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.1	0.53	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.1	0.53	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.4	0.78	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.1	0.53	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.50	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.1	0.70	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.1	0.90	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.1	0.66	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.1	0.51	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	0.51	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	0.49	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.49	ug/kg	
76-13-1	Freon 113	ND	5.4	2.9	ug/kg	
591-78-6	2-Hexanone	ND	5.4	2.3	ug/kg	

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	WC-A1 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-13	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	84.8
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.1	1.5	ug/kg	
79-20-9	Methyl Acetate	ND	5.4	1.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.1	0.94	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.4	2.4	ug/kg	
75-09-2	Methylene chloride	ND	5.4	2.8	ug/kg	
100-42-5	Styrene	ND	2.1	0.43	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.64	ug/kg	
127-18-4	Tetrachloroethene	ND	2.1	0.62	ug/kg	
108-88-3	Toluene	ND	1.1	0.56	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.4	2.7	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	2.7	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.1	0.52	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.59	ug/kg	
79-01-6	Trichloroethene	ND	1.1	0.82	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.4	0.73	ug/kg	
75-01-4	Vinyl chloride	ND	2.1	0.52	ug/kg	
	m,p-Xylene	ND	1.1	0.96	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.49	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	115%		80-124%
17060-07-0	1,2-Dichloroethane-D4	117%		75-133%
2037-26-5	Toluene-D8	100%		79-125%
460-00-4	4-Bromofluorobenzene	89%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	3.62	5.5	ug/kg	J
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

(b) This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

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Report of Analysis

Page 1 of 3

Client Sample ID:	WC-A1 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-13	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	84.8
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155047.D	1	02/16/22 19:44	KLS	02/15/22 12:40	OP38141	EZ7704
Run #2							

Run #	Initial Weight	Final Volume
Run #1	31.3 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	75	19	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	32	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	67	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	190	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	190	40	ug/kg	
95-48-7	2-Methylphenol	ND	75	24	ug/kg	
	3&4-Methylphenol ^a	ND	75	31	ug/kg	
88-75-5	2-Nitrophenol	ND	190	25	ug/kg	
100-02-7	4-Nitrophenol	ND	380	100	ug/kg	
87-86-5	Pentachlorophenol ^a	ND	150	35	ug/kg	
108-95-2	Phenol	ND	75	20	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	190	25	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	28	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	22	ug/kg	
83-32-9	Acenaphthene	ND	38	13	ug/kg	
208-96-8	Acenaphthylene	ND	38	19	ug/kg	
98-86-2	Acetophenone ^a	ND	190	8.1	ug/kg	
120-12-7	Anthracene	ND	38	23	ug/kg	
1912-24-9	Atrazine	ND	75	16	ug/kg	
56-55-3	Benzo(a)anthracene	18.5	38	11	ug/kg	J
50-32-8	Benzo(a)pyrene	ND	38	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	18.1	38	17	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	ND	38	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	38	18	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	75	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	75	9.2	ug/kg	
92-52-4	1,1'-Biphenyl	ND	75	5.2	ug/kg	
100-52-7	Benzaldehyde	ND	190	9.3	ug/kg	
91-58-7	2-Chloronaphthalene	ND	75	9.0	ug/kg	
106-47-8	4-Chloroaniline ^a	ND	190	14	ug/kg	
86-74-8	Carbazole	ND	75	5.5	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	WC-A1 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-13	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	84.8
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	75	15	ug/kg	
218-01-9	Chrysene	20.2	38	12	ug/kg	J
111-91-1	bis(2-Chloroethoxy)methane	ND	75	8.1	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	75	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	75	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	75	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	38	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	38	19	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	75	31	ug/kg	
123-91-1	1,4-Dioxane	ND	38	25	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	38	17	ug/kg	
132-64-9	Dibenzofuran	ND	75	15	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	75	6.1	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	75	9.4	ug/kg	
84-66-2	Diethyl phthalate	ND	75	8.0	ug/kg	
131-11-3	Dimethyl phthalate	ND	75	6.7	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	75	8.8	ug/kg	
206-44-0	Fluoranthene	25.9	38	17	ug/kg	J
86-73-7	Fluorene	ND	38	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	75	9.5	ug/kg	
87-68-3	Hexachlorobutadiene	ND	38	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	380	15	ug/kg	
67-72-1	Hexachloroethane	ND	190	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	38	18	ug/kg	
78-59-1	Isophorone	ND	75	8.1	ug/kg	
91-57-6	2-Methylnaphthalene	ND	38	8.5	ug/kg	
88-74-4	2-Nitroaniline	ND	190	8.9	ug/kg	
99-09-2	3-Nitroaniline	ND	190	9.4	ug/kg	
100-01-6	4-Nitroaniline	ND	190	9.8	ug/kg	
91-20-3	Naphthalene	ND	38	11	ug/kg	
98-95-3	Nitrobenzene	ND	75	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine ^a	ND	75	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	14	ug/kg	
85-01-8	Phenanthrene	15.1	38	13	ug/kg	J
129-00-0	Pyrene	25.0	38	12	ug/kg	J
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	190	9.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	50%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	WC-A1 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-13	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	84.8
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	49%		10-105%
118-79-6	2,4,6-Tribromophenol	51%		10-135%
4165-60-0	Nitrobenzene-d5	53%		10-119%
321-60-8	2-Fluorobiphenyl	59%		18-112%
1718-51-0	Terphenyl-d14	57%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
13798-23-7	Sulfur	7.18	290	ug/kg	JN
10544-50-0	Cyclic octaatomic sulfur	10.22	4000	ug/kg	JN
80-05-7	Phenol, 4,4'-(1-methylethylidene)b	10.61	620	ug/kg	JN
	Unknown	16.34	210	ug/kg	J
	Unknown	16.71	440	ug/kg	J
	Unknown	16.92	2800	ug/kg	J
	Total TIC, Semi-Volatile		8360	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A1 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-13	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	84.8
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1G174265.D	1	02/18/22 02:27	CP	02/15/22 11:30	OP38151	G1G6020
Run #2							

	Initial Weight	Final Volume
Run #1	16.0 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.74	0.61	ug/kg	
319-84-6	alpha-BHC	ND	0.74	0.60	ug/kg	
319-85-7	beta-BHC	ND	0.74	0.67	ug/kg	
319-86-8	delta-BHC	ND	0.74	0.71	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.74	0.54	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.74	0.59	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.74	0.33	ug/kg	
60-57-1	Dieldrin	ND	0.74	0.51	ug/kg	
72-54-8	4,4' -DDD	ND	0.74	0.68	ug/kg	
72-55-9	4,4' -DDE	ND	0.74	0.65	ug/kg	
50-29-3	4,4' -DDT	ND	0.74	0.65	ug/kg	
72-20-8	Endrin	ND	0.74	0.57	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.74	0.58	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.74	0.42	ug/kg	
959-98-8	Endosulfan-I	ND	0.74	0.42	ug/kg	
33213-65-9	Endosulfan-II	ND	0.74	0.46	ug/kg	
76-44-8	Heptachlor	ND	0.74	0.64	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.74	0.52	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.59	ug/kg	
53494-70-5	Endrin ketone	ND	0.74	0.53	ug/kg	
8001-35-2	Toxaphene	ND	18	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		14-145%
877-09-8	Tetrachloro-m-xylene	102%		14-145%
2051-24-3	Decachlorobiphenyl	91%		10-197%
2051-24-3	Decachlorobiphenyl	109%		10-197%

(a) Had TBA cleanup.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A1 (7.5-15')						
Lab Sample ID:	JD39687-13					Date Sampled:	02/14/22
Matrix:	SO - Soil					Date Received:	02/14/22
Method:	SW846 8082A SW846 3546					Percent Solids:	84.8
Project:	1001 Whitlock Avenue, Bronx, NY						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	RK8001.D	1	02/17/22 20:26	TL	02/15/22 11:30	OP38152	GRK209
Run #2							

	Initial Weight	Final Volume
Run #1	15.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016 ^b	ND	39	18	ug/kg	
11104-28-2	Aroclor 1221	ND	39	24	ug/kg	
11141-16-5	Aroclor 1232	ND	39	25	ug/kg	
53469-21-9	Aroclor 1242	ND	39	16	ug/kg	
12672-29-6	Aroclor 1248	ND	39	35	ug/kg	
11097-69-1	Aroclor 1254	ND	39	21	ug/kg	
11096-82-5	Aroclor 1260 ^b	ND	39	17	ug/kg	
11100-14-4	Aroclor 1268	ND	39	17	ug/kg	
37324-23-5	Aroclor 1262	ND	39	26	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	124%		10-163%
877-09-8	Tetrachloro-m-xylene	150%		10-163%
2051-24-3	Decachlorobiphenyl	104%		10-215%
2051-24-3	Decachlorobiphenyl	129%		10-215%

(a) Had TBA cleanup.

(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: WC-A1 (7.5-15')**Lab Sample ID:** JD39687-13**Matrix:** SO - Soil**Date Sampled:** 02/14/22**Date Received:** 02/14/22**Percent Solids:** 84.8**Project:** 1001 Whitlock Avenue, Bronx, NY

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	18100	60	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Antimony	< 2.4	2.4	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Arsenic ^a	< 4.8	4.8	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Barium	68.8	24	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Beryllium	0.68	0.24	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cadmium	< 0.60	0.60	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Calcium	1520	600	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Chromium	29.4	1.2	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cobalt	11.0	6.0	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Copper ^a	17.6	6.0	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Iron	25200	120	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Lead	43.3	2.4	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Magnesium	3830	600	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Manganese	687	1.8	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	0.074	0.036	mg/kg	1	02/16/22	02/16/22	LM	SW846 7471B ¹	SW846 7471B ⁵
Nickel	17.8	4.8	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Potassium	1660	1200	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Selenium ^a	< 4.8	4.8	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Silver ^a	< 1.2	1.2	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Sodium	< 1200	1200	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Thallium ^a	< 2.4	2.4	mg/kg	2	02/16/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Vanadium	40.1	6.0	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴
Zinc	46.7	6.0	mg/kg	1	02/16/22	02/16/22	ND	SW846 6010D ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA51916

(2) Instrument QC Batch: MA51921

(3) Instrument QC Batch: MA51929

(4) Prep QC Batch: MP31310

(5) Prep QC Batch: MP31323

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WC-A1 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-13	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	84.8
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.27	0.27	mg/kg	1	02/17/22 16:25	MM	SW846 9012B/LACHAT
Solids, Percent	84.8		%	1	02/15/22 16:40	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-A1 (7.5-15')	
Lab Sample ID:	JD39687-13A	Date Sampled: 02/14/22
Matrix:	SO - Soil	Date Received: 02/14/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 84.8
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q85769.D	1	02/26/22 00:44	AFL	02/18/22 08:30	F:OP89835	F:S2Q1211
Run #2							

	Initial Weight	Final Volume
Run #1	2.02 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.44	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.29	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.58	0.29	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.58	0.29	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.58	0.29	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.58	0.29	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.58	0.29	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.58	0.29	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.58	0.29	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.58	0.31	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.58	0.29	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.58	0.29	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.58	0.29	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.58	0.29	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.31	0.58	0.23	ug/kg	J
335-77-3	Perfluorodecanesulfonic acid	ND	0.58	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.58	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.58	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.58	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-A1 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39687-13A	Date Received:	02/14/22
Matrix:	SO - Soil	Percent Solids:	84.8
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	66%		40-140%
	13C5-PFPeA	72%		50-150%
	13C5-PFHxA	76%		50-150%
	13C4-PFHpA	78%		50-150%
	13C8-PFOA	82%		50-150%
	13C9-PFNA	86%		50-150%
	13C6-PFDA	91%		50-150%
	13C7-PFUnDA	90%		40-140%
	13C2-PFDoDA	80%		40-140%
	13C2-PFTeDA	84%		30-130%
	13C3-PFBS	79%		50-150%
	13C3-PFHxS	83%		50-150%
	13C8-PFOS	82%		50-150%
	13C8-FOSA	54%		30-130%
	d3-MeFOSAA	66%		40-140%
	d5-EtFOSAA	71%		40-140%
	13C2-6:2FTS	79%		50-150%
	13C2-8:2FTS	80%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Chain of Custody (SGS Orlando, FL)

Job Change Order: JD39687

Requested Date:	2/16/2022	Received Date:	2/14/2022
Account Name:	SESI Consulting Engineers	Due Date:	2/16/2022
Project Description:	1001 Whitlock Avenue, Bronx, NY	Deliverable:	NYASPB
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	4

=====

Sample #: JD39687-8 **Change:**
Please cancel XTCL20+ and log in for P8081XH, P8082XH, AB8270X
NO OUT DATA for V8260TCL20+ and SOL104

Dept:

TAT: 4

RI-SB2 (19.5-20')

=====

Sample #: JD39687-8A **Change:**
Please cancel LCID537NY21, LCMS+14DAY and place sample on HC

Dept:

TAT: 4

RI-SB2 (19.5-20')

=====

Above Changes Per: Jesse Mausner **Date/Time:** 2/16/2022

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

SGS Sample Receipt Summary

Job Number: JD39687

Client: SESI

Project: 11819

Date / Time Received: 2/14/2022 4:56:00 PM

Delivery Method:

Airbill #'s:

Cooler Temps (Raw Measured) °C: Cooler 1: (1.5); Cooler 2: (1.7); Cooler 3: (2.0);

Cooler Temps (Corrected) °C: Cooler 1: (-0.1); Cooler 2: (0.1); Cooler 3: (0.4);

Cooler Security

Y or N

1. Custody Seals Present:

☒ ☐

3. COC Present:

☒ ☐

2. Custody Seals Intact:

☒ ☐

4. Smpl Dates/Time OK

☒ ☐

Cooler Temperature

Y or N

1. Temp criteria achieved:

☒ ☐

2. Cooler temp verification:

IR Gun

3. Cooler media:

Ice (Bag)

4. No. Coolers:

3

Quality Control Preservation

Y or N

N/A

1. Trip Blank present / cooler:

☒ ☐ ☐

2. Trip Blank listed on COC:

☒ ☐ ☐

3. Samples preserved properly:

☒ ☐ ☐

4. VOCs headspace free:

☒ ☐ ☐

Sample Integrity - Documentation

Y or N

1. Sample labels present on bottles:

☒ ☐

2. Container labeling complete:

☒ ☐

3. Sample container label / COC agree:

☒ ☐

Sample Integrity - Condition

Y or N

1. Sample recvd within HT:

☒ ☐

2. All containers accounted for:

☒ ☐

3. Condition of sample:

Intact

Sample Integrity - Instructions

Y or N N/A

1. Analysis requested is clear:

☒ ☐

2. Bottles received for unspecified tests

☐ ☒

3. Sufficient volume recvd for analysis:

☒ ☐

4. Compositing instructions clear:

☐ ☐ ☒

5. Filtering instructions clear:

☐ ☐ ☒

Test Strip Lot #s:

pH 1-12: 231619

pH 12+: 203117A

Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JD39687: Chain of Custody

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SGS

SO
SL
FB

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL 732-329-0200 FAX 732-329-3499
www.sgs.com/enhusa

PAGE 1 OF 2

FED-EX Tracking #		Open Chain Control #	
SGS Quote #		SGS Job # JD 39687	
Matrix Codes			
GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Waste FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank			
LAB USE ONLY			

Company Name: **SES1** Project Name: **11819**

Street Address: **12A MAINE AVE** City: **ROSELAND** State: **NY** Zip: **11519**

Project Contact: **Sam@sesi.com** E-mail: **Sam@sesi.com** Project # **11819** Client Purchase Order #

Sampler(s) Name(s): **CHRIS MANUEL** Phone # Project Manager: **SEAN MANUEL** Attention:

Lab Sample #	Field ID / Point of Collection	MEQ/DO1 Val #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NO ₃	NO ₂	H ₂ O ₂	H ₂ SO ₄	NO ₃	NO ₂	H ₂ O ₂	H ₂ SO ₄	DI Water	MEQ	ENCORE	
1	R1-SB1 (4.5-5')		2/14/22	12:30	CM	S	3													
2	R1-SB1 (9.5-10')		2/14/22	12:50	CM	S	3													
3	R1-SB1 (14.5-15')		2/14/22	13:00	CM	S	3													
4	R1-SB1 (17.5-18')		2/14/22	13:20	CM	S	3													
5	R1-SB2 (4.5-5')		2/14/22	10:21	CM	S	3													
6	R1-SB2 (9.5-10')		2/14/22	10:24	CM	S	3													
7	R1-SB2 (14.5-15')		2/14/22	10:34	CM	S	3													
8	R1-SB2 (19.5-20')		2/14/22	10:48	CM	S	3													
9	Field Blank		2/14/22	13:00	CM	W														

Turnaround Time (Business days): **3** Days

Approved by (SGS Project Manager)/Date: _____

Emergency & Rush T/A data available via LabLink

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by:	Date/Time:	Received by:	Date/Time:	Relinquished by:	Date/Time:	Received by:	Date/Time:
1	2/14/22 12:30	2	2/14/22 12:50	3	2/14/22 13:00	4	2/14/22 13:20
3		5					
5							

Custody Seal # ☐ Intact ☐ Not Intact Preserved where applicable

Sample inventory is verified upon receipt in the Laboratory

Comments / Special Instructions: **3x55 encls**

Form:SM088-03C (revised 2/12/18)

<http://www.sgs.com/en/terms-and-conditions>

JD39687: Chain of Custody

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SGS

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JD39687



CHAIN OF CUSTODY

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SGS North America Inc. - Dayton
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TEL 732-329-0200 FAX 732-329-3499
www.sgs.com/ehsusa

FED-EX Tracking #		Order Order Control #	
SGS Quote #		SGS Job #	
		30 39687	
Client / Reporting Information		Matrix Codes	
Company Name: SEST		Matrix Codes: DM - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rose Blank TB - Trip Blank	
Project Name: 11819		Matrix Codes: LAB USE ONLY	
Street Address: 1001 WINDYKAYE			
City: BRIDGE STATE: NJ			
Project Contact: jpm@sest.com			
Phone #			
E-mail			
Fax			
Sampler(s) Name(s): CHRIS MAMICINI			
Phone #			
Project Manager: JESSE NASHAR			
Attention:			
Collection			
MECH/CON Vial #			
Date			
Time			
Sampled by			
Matrix			
# of bottles			
HCl			
NaOH			
HNO3			
H2SO4			
H2O2			
H2O			
DI Water			
MESH			
ENCLOSURE			
Turnaround Time (Business days)			
Approved by (SGS Project Manager) Date:			
Emergency & Rush TJA data available via LabLink			
Data Deliverable Information			
Comments / Special Instructions			
Initial Assessment: AR20			
Label Verification			
Sample inventory is verified upon receipt in the Laboratory			
Sample Custody must be documented below each time samples change possession, including courier delivery.			
Relinquished by: 1		Received By: 1	
Date Time: 2/14/12		Date Time: 2/14/12	
Relinquished by: 3		Received By: 3	
Date Time: 2/14/12		Date Time: 2/14/12	
Relinquished by: 5		Received By: 5	
Date Time: 2/14/12		Date Time: 2/14/12	
Custody Seal #		Intact	
		Not Intact	
Preserved where applicable		On Ice	
		Cooler Temp.	

Form: SM088-03C (revised 2/12/18)

<http://www.sgs.com/en/terms-and-conditions>

JD39687: Chain of Custody

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JD39687

Job Change Order: JD39687

Requested Date:	2/16/2022	Received Date:	2/14/2022
Account Name:	SESI Consulting Engineers	Due Date:	2/16/2022
Project Description:	1001 Whitlock Avenue, Bronx, NY	Deliverable:	NYASPB
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	4

=====

Sample #: JD39687-8 **Change:**
Please cancel XTCL20+ and log in for P808LXH, P8082XH, AB8270X
NO OUT DATA for V8260TCL20+ and SOL104

Dept:

TAT: 4

RI-SB2 (19.5-20')

=====

Sample #: JD39687-8A **Change:**
Please cancel LCID537NY21, LCMS+14DAY and place sample on HC

Dept:

TAT: 4

RI-SB2 (19.5-20')

=====

Above Changes Per: Jesse Mausner **Date/Time:** 2/16/2022

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

Job Change Order: JD39687

Requested Date: 2/25/2022 Received Date: 2/14/2022
Account Name: SESI Consulting Engineers Due Date: 2/25/2022
Project Description: 1001 Whitlock Avenue, Bronx, NY Deliverable: NYASPB
C/O Initiated By: KELLY.RAM PM: KR TAT (Days): 2

Sample #: JD39687-8A Change: Please extract and hold for LCID537XH, LCMS+14DAY
Dept:

TAT: 2

RI-SB2 (19.5-20')

Above Changes Per:

Date/Time: 2/25/2022

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
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www.sgs.com/ehsusa

Page 1 of 2

SGS			SGS North America Inc. - Dayton 2325 Route 130, Dayton, NJ 08810 TEL: 732-329-0200 FAX: 732-329-3499/3480 www.sgs.com/en/ususa				PED-EX Testing # _____ SLT Code # _____		Bottle Order Control # _____ SLT Job # JD35697					
Client / Reporting Information			Project Information					Requested Analysis				Matrix Codes		
Company Name: SGS North America Inc.			Project Name: 1001 Whitlock Avenue, Bronx, NY											
Street Address: 2235 Route 130			Billing Information (If different from Report by)											
City:	State:	Zip:	City:	State:	Company Name:									
Dayton	NJ	08810												
Project Contact E-mail: michelle.jenkins@sgs.com			Project #:											
Phone #: 732-329-0200			Client Purchase Order #:											
Sample(s) Name(s) CM			Athenion:											
Field ID / Point of Collection			Collection		Analysis		Number of preserved bottles							LAB USE ONLY
SGL Sample #	ID	Vial #	Date	Time	Sampled By	Maint.	# of bottles	HU	NCH	TWCS	MOSE	D/Water	MICH	
1A	R-SB1 (4.5'-5')		2/14/22	12:30:00 PM	CM	SO	X							
2A	R-SB1 (9.5'-10')		2/14/22	12:50:00 PM	CM	SO	X							
3A	R-SB1 (14.5'-15')		2/14/22	1:00:00 PM	CM	SO	X							
4A	R-SB1 (17.5'-18')		2/14/22	1:20:00 PM	CM	SO	X							
5A	R-SB2 (3.5'-4')		2/14/22	10:21:00 AM	CM	SO	X							
6A	R-SB2 (9.5'-10')		2/14/22	10:24:00 AM	CM	SO	X							
7A	R-SB2 (14.5'-15')		2/14/22	10:34:00 AM	CM	SO	X							
8A	R-SB2 (19.5'-20')		2/14/22	10:48:00 AM	CM	SO	X							
9A	FIELD BLANK		2/14/22	1:00:00 PM	CM	AQ	X							
10A	WC-B1 (0-7.5')		2/14/22	11:01:00 AM	CM	SO	X							
11A	WC-A1 (7.5'-15')		2/14/22	11:21:00 AM	CM	SO	X							
12A	WC-A1 (0-7.5')		2/14/22	1:30:00 PM	CM	SO	X							
Turnaround Time (Business days)			Data Deliverable Information					Comments / Special Instructions						
Approved By (SGS P#): Date: _____			☐ Commercial "A" (Level 1) ☐ NYASP Category A ☐ Commercial "B" (Level 2) ☐ NYASP Category B ☐ FULL T1 (Level 3+4) ☐ State Form ☐ NJ Reduced ☐ EDD Format ☐ Commercial "C" ☒ Other NYASPB					INITIAL ASSESSMENT						
☐ Standard 10 Business Days ☐ 5 Business Days RUSH ☐ 3 Business Days RUSH ☐ 2 Business Days RUSH ☐ 1 Business DAY EMERGENCY ☒ Other 3			Emergency & Rush T/A dates available via Lablink Approval needed for RUSHEmergency TAT					COMMERCIAL "X" = Results Only COMMERCIAL "YR" = Results + QC Summary COMMERCIAL "CY" = Results + QC Summary + Partial Raw Data LABEL VERIFICATION						
Sample Custody must be documented below each time samples change possession, including courier delivery.														
Relinquished by: [Signature]			Date / Time: 2/16/22 15:31			Received by: 1			Retrieved by: 2			Received by: 3		
Relinquished by: 4			Date / Time: 3			Received by: 5			Retrieved by: 6			Received by: 7		
Relinquished by: 8			Date / Time: 5			Received by: 9			Retrieved by: 10			Received by: 11		
CUSTODY SEAL # _____ ☐ Intact Preserved where applicable On ice Cooler Temp °C ____ ☐ Not intact Absent Thawed Therm ID ____														

1.6.2

jd39687.xls
Rev. Date: 4/10/18

JD39687: Chain of Custody

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SGS Orlando, FL



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JD39687

SGS North America Inc. - Dayton
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TEL: 732-329-0200 FAX: 732-329-3499/3480
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				SGS North America Inc. - Dayton 2235 Route 130, Dayton, NJ 08910 TEL: 732-329-0200 FAX: 732-329-3499/3480 www.sgs.com/ehsusa				PEEX-EX Testing # _____ SGS Quote # _____		Bottle Order Control # _____ SGS Job # JD39687					
Client / Reporting Information Company Name: SGS North America Inc. Street Address: 2235 Route 130 City: Dayton State: NJ Zip: 08910 Project Contact: Michelle Jenkins E-mail: michelle.jenkins@sgs.com Phone #: 732-329-0200 Sample(s) Name(s): CM				Project Information Project Name: 1001 Whillcock Avenue, Bronx, NY Billing Information (if different from Report to): _____ Project #: _____ Street Address: _____ Client Purchase Order #: _____ City: _____ State: _____ Zip: _____ Attention: _____				Requested Analysis Matrix Codes: _____ DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment CI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank							
Field ID / Point of Collection 13A WC-A1 (7.5-15')				Collection Date/Time: 2/14/22 1:40:00 PM Sampled by: CM Matrix: SO # of bottles: 1				Number of preserved bottles: HCl: _____ HNO3: _____ H2O2: _____ NH4OH: _____ DI Water: _____ MASH: _____ ENDORE: _____							
Turnaround Time (Business days): _____				Data Deliverable Information ☐ Commercial "A" (Level 1) ☐ NYASP Category A ☐ Commercial "B" (Level 2) ☐ NYASP Category B ☐ FULLT1 (Level 3+4) ☐ State Forms ☐ NJ Reduced ☐ EDD Format ☐ Commercial "C" ☒ Other: NYASPB Commercial "A" = Results Only Commercial "B" = Results + QC Summary Commercial "C" = Results + QC Summary + Partial Raw data				Comments / Special Instructions 							
Approved By (SGS PMS) / Date: _____ _____ _____ _____ ☒ Other: 9				Sample Custody must be documented below each time samples change possession, including courier delivery.				http://www.sgs.com/en/terms-and-conditions							
Relinquished by: 1 Date / Time: _____ Relinquished by: 3 Date / Time: _____ Relinquished by: 5 Date / Time: _____				Received By: 1 Date / Time: _____ Received By: 3 Date / Time: _____ Received By: 5 Date / Time: _____				Relinquished by: 2 Date / Time: 2/17/22 Relinquished by: 4 Date / Time: 9:45 Custody Seal # _____				Initial: _____ Preserved where applicable: ☐ On Ice: ☐ Cooler Temp: _____ Signature:			

jd39687.xls
Rev. Date: 4/10/16

JD39687: Chain of Custody

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SGS Sample Receipt Summary

Job Number: JD39687

Client: SGS NJ

Project: 1001 WHITLOCK AVENUE, BRONX, NY

Date / Time Received: 2/17/2022 9:45:00 AM

Delivery Method: FX

Airbill #s:

Therm ID: IR 1;

Therm CF: 0.4;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 1: (1.6);

Cooler Temps (Corrected) °C: Cooler 1: (2.0);

Cooler Information

Y or N

- | | | |
|-----------------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present | ☒ | ☐ |
| 2. Custody Seals Intact | ☒ | ☐ |
| 3. Temp criteria achieved | ☒ | ☐ |
| 4. Cooler temp verification | <u>IR Gun</u> | |
| 5. Cooler media | <u>Ice (Bag)</u> | |

Trip Blank Information

Y or N N/A

- | | | | |
|--------------------------------|--------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler | ☐ | ☐ | ☒ |
| 2. Trip Blank listed on COC | ☐ | ☐ | ☒ |
| | <u>W</u> or <u>S</u> | <u>N/A</u> | |
| 3. Type Of TB Received | ☐ | ☐ | ☒ |

Sample Information

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Sample labels present on bottles | ☒ | ☐ | |
| 2. Samples preserved properly | ☒ | ☐ | |
| 3. Sufficient volume/containers recvd for analysis: | ☒ | ☐ | |
| 4. Condition of sample | <u>Intact</u> | | |
| 5. Sample recvd within HT | ☒ | ☐ | |
| 6. Dates/Times/IDs on COC match Sample Label | ☒ | ☐ | |
| 7. VOCs have headspace | ☐ | ☐ | ☒ |
| 8. Bottles received for unspecified tests | ☐ | ☒ | |
| 9. Compositing instructions clear | ☐ | ☐ | ☒ |
| 10. Voa Soil Kits/Jars received past 48hrs? | ☐ | ☐ | ☒ |
| 11. % Solids Jar received? | ☐ | ☐ | ☒ |
| 12. Residual Chlorine Present? | ☐ | ☐ | ☒ |

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____
 Test Strip Lot #s: pH 0-3 230315
 Residual Chlorine Test Strip Lot #: _____

Number of 5035 Field Kits: _____
 pH 10-12 219813A

Number of Lab Filtered Metals: _____
 Other: (Specify) _____

Comments DID NOT RECEIVE SAMPLE #9A LISTED ON COC
 ID: "FIELD BLANK" // DATE: "2/14/22" // TIME: "10:48"

SM001
 Rev. Date 05/24/17

Technician: NATHANS

Date: 2/17/2022 9:45:00 AM

Reviewer: _____

Date: _____

Responded to by: Caitlin Mason

Response Date: 2/18/2022

Missing Sample #9 "Field Blank" has been shipped for Saturday delivery to Orlando, as per Dayton.

JD39687: Chain of Custody

Page 3 of 7

SGS Sample Receipt Summary

Job Number: JD39687

Client: SGS NJ

Project: 1001 WHITLOCK AVENUE, BRONX, NY

Date / Time Received: 2/19/2022 9:20:00 AM

Delivery Method: FX

Airbill #s: 5272 0639 1187

Therm ID: IR 1;

Therm CF: 0.4;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 2: (1.6);

Cooler Temps (Corrected) °C: Cooler 2: (2.0);

Cooler Information

Y or N

1. Custody Seals Present ☒ ☐
2. Custody Seals Intact ☒ ☐
3. Temp criteria achieved ☒ ☐
4. Cooler temp verification IR Gun
5. Cooler media Ice (Bag)

Trip Blank Information

Y or N N/A

1. Trip Blank present / cooler ☐ ☐ ☒
 2. Trip Blank listed on COC ☐ ☐ ☒
- W or S N/A
3. Type Of TB Received ☐ ☐ ☒

Sample Information

Y or N N/A

1. Sample labels present on bottles ☒ ☐
2. Samples preserved properly ☒ ☐
3. Sufficient volume/containers recvd for analysis: ☒ ☐
4. Condition of sample Intact
5. Sample recvd within HT ☒ ☐
6. Dates/Times/IDs on COC match Sample Label ☒ ☐
7. VOCs have headspace ☐ ☐ ☒
8. Bottles received for unspecified tests ☐ ☒ ☐
9. Compositing instructions clear ☐ ☐ ☒
10. Voa Soil Kits/Jars received past 48hrs? ☐ ☐ ☒
11. % Solids Jar received? ☐ ☐ ☒
12. Residual Chlorine Present? ☐ ☐ ☒

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____
Test Strip Lot #s: pH 0-3 230315
Residual Chlorine Test Strip Lot #: _____

Number of 5035 Field Kits: _____
pH 10-12 219813A

Number of Lab Filtered Metals: _____
Other: (Specify) _____

Comments

SM001
Rev. Date 05/24/17

Technician: SAMUELM

Date: 2/19/2022 9:20:00 AM

Reviewer: _____

Date: _____

JD39687: Chain of Custody

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Job Change Order: JD39687

Requested Date:	2/16/2022	Received Date:	2/14/2022
Account Name:	SESI Consulting Engineers	Due Date:	2/16/2022
Project Description:	1001 Whitlock Avenue, Bronx, NY	Deliverable:	NYASPB
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	4

=====

Sample #:	JD39687-8	Change:	
Dept:			Please cancel XTCL20+ and log in for P8081XH, P8082XH, AB8270X NO OUT DATA for V8260TCL20+ and SOL104
TAT:	4		

RI-SB2 (19.5-20')

=====

=====

Sample #:	JD39687-8A	Change:	
Dept:			Please cancel LCID537NY21, LCMS+14DAY and place sample on HC
TAT:	4		

RI-SB2 (19.5-20')

=====

JD39687: Chain of Custody
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Above Changes Per: Jesse Mausner **Date/Time:** 2/16/2022

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

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[illegible]

field BLANK only - 9

Job Change Order: JD39687

Requested Date:	2/25/2022	Received Date:	2/14/2022
Account Name:	SESI Consulting Engineers	Due Date:	2/25/2022
Project Description:	1001 Whitlock Avenue, Bronx, NY	Deliverable:	NYASPB
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	2

=====

Sample #:	JD39687-8A	Change:	
Dept:			Please extract and hold for LCID537XH, LCMS+14DAY
TAT:	2		
	RI-SB2 (19.5-20')		

=====

JD39687: Chain of Custody
Page 7 of 7

Above Changes Per: **Date/Time:** 2/25/2022

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

SESI Consulting Engineers

1001 Whitlock Avenue, Bronx, NY

11819

SGS Job Number: JD39776

Sampling Dates: 02/14/22 - 02/15/22

Report to:

SESI Consulting Engineers

jam@sesi.org

ATTN: Jesse Mausner

Total number of pages in report: **160**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A handwritten signature in black ink, appearing to read 'Mike Earp'.

Mike Earp
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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Test results relate only to samples analyzed.

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Sample Summary

SESI Consulting Engineers

Job No: JD39776

1001 Whitlock Avenue, Bronx, NY
Project No: 11819

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
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This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

JD39776-1	02/14/22	15:30	CM	02/15/22	SO	Soil	WC-A2 (0-7.5')
JD39776-1A	02/14/22	15:30	CM	02/15/22	SO	Soil	WC-A2 (0-7.5')
JD39776-2	02/14/22	15:40	CM	02/15/22	SO	Soil	WC-A2 (7.5-15')
JD39776-2A	02/14/22	15:40	CM	02/15/22	SO	Soil	WC-A2 (7.5-15')
JD39776-3	02/15/22	10:40	CM	02/15/22	SO	Soil	WC-B2 (0-7.5')
JD39776-3A	02/15/22	10:40	CM	02/15/22	SO	Soil	WC-B2 (0-7.5')
JD39776-4	02/15/22	10:50	CM	02/15/22	SO	Soil	WC-B2 (7.5-15')
JD39776-4A	02/15/22	10:50	CM	02/15/22	SO	Soil	WC-B2 (7.5-15')
JD39776-5	02/15/22	11:15	CM	02/15/22	SO	Soil	WC-A3 (0-7.5')
JD39776-5A	02/15/22	11:15	CM	02/15/22	SO	Soil	WC-A3 (0-7.5')
JD39776-6	02/15/22	11:30	CM	02/15/22	SO	Soil	WC-A3 (7.5-15')
JD39776-6A	02/15/22	11:30	CM	02/15/22	SO	Soil	WC-A3 (7.5-15')

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary

(continued)

SESI Consulting Engineers

Job No: JD39776

1001 Whitlock Avenue, Bronx, NY
Project No: 11819

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JD39776-7	02/15/22	09:40 CM	02/15/22	SO	Soil	WC-B3 (0-7.5')
JD39776-7A	02/15/22	09:40 CM	02/15/22	SO	Soil	WC-B3 (0-7.5')
JD39776-8	02/15/22	09:47 CM	02/15/22	SO	Soil	WC-B3 (7.5-15')
JD39776-8A	02/15/22	09:47 CM	02/15/22	SO	Soil	WC-B3 (7.5-15')
JD39776-9	02/15/22	13:10 CM	02/15/22	SO	Soil	WC-A4 (0-7.5')
JD39776-9A	02/15/22	13:10 CM	02/15/22	SO	Soil	WC-A4 (0-7.5')
JD39776-10	02/15/22	13:19 CM	02/15/22	SO	Soil	WC-A4 (7.5-15')
JD39776-10A	02/15/22	13:19 CM	02/15/22	SO	Soil	WC-A4 (7.5-15')
JD39776-11	02/15/22	14:30 CM	02/15/22	SO	Soil	WC-B4 (0-7.5')
JD39776-11A	02/15/22	14:30 CM	02/15/22	SO	Soil	WC-B4 (0-7.5')
JD39776-12	02/15/22	14:42 CM	02/15/22	SO	Soil	WC-B4 (7.5-15')
JD39776-12A	02/15/22	14:42 CM	02/15/22	SO	Soil	WC-B4 (7.5-15')

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: SESI Consulting Engineers

Job No: JD39776

Site: 1001 Whitlock Avenue, Bronx, NY

Report Date 3/3/2022 11:46:51 AM

On 02/15/2022, 24 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 1.4 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD39776 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260D

Matrix: SO

Batch ID: VI9840

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD39776-1MS, JD39776-2DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- VI9840-BS for Chloroethane: High percent recovery and no associated positive reported in the QC batch.
- JD39776-1 for Bromomethane: Associated CCV outside of control limits high, sample was ND.
- JD39776-1 for Chloroethane: This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.
- JD39776-2 for Bromomethane: Associated CCV outside of control limits high, sample was ND.
- JD39776-5 for Bromomethane: Associated CCV outside of control limits high, sample was ND.
- JD39776-10 for Chloroethane: This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.
- JD39776-5 for Chloroethane: This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.
- JD39776-12 for Chloroethane: This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.
- JD39776-3 for Chloroethane: This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.
- JD39776-3 for Bromomethane: Associated CCV outside of control limits high, sample was ND.
- JD39776-4 for Bromomethane: Associated CCV outside of control limits high, sample was ND.
- JD39776-4 for Chloroethane: This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.
- JD39776-2 for Chloroethane: This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.
- JD39776-10 for Bromomethane: Associated CCV outside of control limits high, sample was ND.
- JD39776-7 for Chloroethane: This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.
- JD39776-8 for Bromomethane: Associated CCV outside of control limits high, sample was ND.
- JD39776-7 for Bromomethane: Associated CCV outside of control limits high, sample was ND.
- JD39776-6 for Chloroethane: This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.
- JD39776-8 for Chloroethane: This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.
- JD39776-6 for Bromomethane: Associated CCV outside of control limits high, sample was ND.

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MS Volatiles By Method SW846 8260D

Matrix: SO

Batch ID: VI9840

- JD39776-9 for Chloroethane: This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.
- JD39776-11 for Bromomethane: Associated CCV outside of control limits high, sample was ND.
- JD39776-11 for Chloroethane: This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.
- JD39776-12 for Bromomethane: Associated CCV outside of control limits high, sample was ND.
- JD39776-9 for Bromomethane: Associated CCV outside of control limits high, sample was ND.

MS Semi-volatiles By Method EPA 537M BY ID

Matrix: SO

Batch ID: F:OP89836

- The data for EPA 537M BY ID meets quality control requirements.
- JD39776-3A: Analysis performed at SGS Orlando, FL.
- JD39776-4A: Analysis performed at SGS Orlando, FL.
- JD39776-1A: Analysis performed at SGS Orlando, FL.
- JD39776-8A: Analysis performed at SGS Orlando, FL.
- JD39776-9A: Analysis performed at SGS Orlando, FL.
- JD39776-10A: Analysis performed at SGS Orlando, FL.
- JD39776-6A: Analysis performed at SGS Orlando, FL.
- JD39776-7A: Analysis performed at SGS Orlando, FL.
- JD39776-5A: Analysis performed at SGS Orlando, FL.
- JD39776-2A: Analysis performed at SGS Orlando, FL.

Matrix: SO

Batch ID: F:OP89837

- The data for EPA 537M BY ID meets quality control requirements.
- JD39776-11A: Analysis performed at SGS Orlando, FL.
- JD39776-12A: Analysis performed at SGS Orlando, FL.

MS Semi-volatiles By Method SW846 8270E

Matrix: SO

Batch ID: OP38181

- All samples were extracted within the recommended method holding time.
- Sample(s) JD39762-1MS, JD39762-1MSD were used as the QC samples indicated.
- Sample(s) JD39776-1, JD39776-10, JD39776-11, JD39776-12, JD39776-2, JD39776-3, JD39776-4, JD39776-5, JD39776-6, JD39776-7, JD39776-8, JD39776-9 have compound(s) reported with a "B" qualifier, indicating analyte is found in the associated method blank.
- JD39776-4 for Hexachlorobutadiene: Associated CCV outside of control limits high, sample was ND.
- JD39776-10 for Hexachlorobutadiene: Associated CCV outside of control limits high, sample was ND.
- JD39776-5 for Hexachlorobutadiene: Associated CCV outside of control limits high, sample was ND.
- JD39776-8 for Hexachlorobutadiene: Associated CCV outside of control limits high, sample was ND.
- JD39776-6 for Hexachlorobutadiene: Associated CCV outside of control limits high, sample was ND.
- JD39776-12 for Hexachlorobutadiene: Associated CCV outside of control limits high, sample was ND.
- JD39776-9 for Hexachlorobutadiene: Associated CCV outside of control limits high, sample was ND.
- JD39776-3 for Hexachlorobutadiene: Associated CCV outside of control limits high, sample was ND.
- JD39776-11 for Hexachlorobutadiene: Associated CCV outside of control limits high, sample was ND.
- JD39776-7 for Hexachlorobutadiene: Associated CCV outside of control limits high, sample was ND.
- JD39776-1 for Hexachlorobutadiene: Associated CCV outside of control limits high, sample was ND.
- JD39776-2 for Hexachlorobutadiene: Associated CCV outside of control limits high, sample was ND.

GC/LC Semi-volatiles By Method SW846 8081B

Matrix: SO

Batch ID: OP38184

- All samples were extracted within the recommended method holding time.
- Sample(s) JD39763-1MS, JD39763-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Duplicate Recovery(s) for Aldrin, alpha-BHC, gamma-BHC (Lindane) are outside of in house control limits.
- Matrix Spike Duplicate Recovery(s) for Heptachlor epoxide are outside control limits. Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only. Outside of in house control limits.
- OP38184-MB1: Had TBA cleanup.
- JD39776-12: Had TBA cleanup.
- OP38184-BS1: Had TBA cleanup.
- JD39776-5: Had TBA cleanup.
- JD39776-11 for Tetrachloro-m-xylene: Outside control limits due to matrix interference.
- OP38184-MS for Heptachlor epoxide: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.
- JD39776-2 for Tetrachloro-m-xylene: High percent recoveries and no positive found in the sample.

GC/LC Semi-volatiles By Method SW846 8082A

Matrix: SO

Batch ID: OP38185

- All samples were extracted within the recommended method holding time.
- Sample(s) JD39764-1MS, JD39764-1MSD, OP38185-MSMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JD39776-2 for Tetrachloro-m-xylene: High percent recoveries and no positive found in the sample.
- OP38185-BS1 for Aroclor 1260: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

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Metals Analysis By Method SW846 6010D

Matrix: SO

Batch ID: MP31339

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39775-3MS, JD39775-3MSD, JD39775-3PS, JD39775-3SDL were used as the QC samples for metals.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for Antimony, Magnesium, Potassium are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- Matrix Spike Duplicate Recovery(s) for Iron are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- Matrix Spike Recovery(s) for Iron, Manganese are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for Serial Dilution for Antimony, Arsenic, Silver, Thallium, Beryllium, Cadmium, Lead are outside control limits. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- JD39776-3 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39776-3 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-3 for Antimony: Elevated detection limit due to dilution required for high interfering element.
- JD39776-4 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39776-4 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-4 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39776-4 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-4 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-3 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39776-3 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-1 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-1 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39776-1 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-1 for Antimony: Elevated detection limit due to dilution required for high interfering element.
- JD39776-1 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39776-4 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39776-4 for Antimony: Elevated detection limit due to dilution required for high interfering element.
- JD39776-3 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39776-2 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-2 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39776-2 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-2 for Antimony: Elevated detection limit due to dilution required for high interfering element.
- JD39776-1 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-3 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-1 for Silver: Elevated detection limit due to dilution required for high interfering element.
- RPD(s) for Serial Dilution for Cobalt, Nickel, Sodium, Zinc are outside control limits. Serial dilution indicates possible matrix interference.

Matrix: SO

Batch ID: MP31340

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39776-8MS, JD39776-8MSD, JD39776-8PS, JD39776-8SDL were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Antimony are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

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Metals Analysis By Method SW846 6010D

Matrix: SO

Batch ID: MP31340

- Matrix Spike Duplicate Recovery(s) for Antimony, Manganese are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for Iron, Aluminum are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for Serial Dilution for Antimony, Arsenic, Beryllium, Silver, Cadmium are outside control limits. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- JD39776-10 for Antimony: Elevated detection limit due to dilution required for high interfering element.
- JD39776-8 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-12 for Antimony: Elevated detection limit due to dilution required for high interfering element.
- JD39776-12 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39776-12 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-8 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39776-7 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-11 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-10 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-12 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-9 for Chromium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-9 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39776-8 for Antimony: Elevated detection limit due to dilution required for high interfering element.
- JD39776-7 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39776-12 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39776-10 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39776-9 for Antimony: Elevated detection limit due to dilution required for high interfering element.
- JD39776-11 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-10 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-11 for Antimony: Elevated detection limit due to dilution required for high interfering element.
- JD39776-11 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39776-11 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39776-11 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39776-11 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-10 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-10 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39776-5 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-5 for Antimony: Elevated detection limit due to dilution required for high interfering element.
- JD39776-8 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-5 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-5 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39776-5 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-8 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39776-5 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39776-5 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39776-12 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-10 for Copper: Elevated detection limit due to dilution required for high interfering element.

Thursday, March 3, 2022

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Metals Analysis By Method SW846 6010D

Matrix: SO

Batch ID: MP31340

- JD39776-8 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39776-12 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39776-9 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-7 for Antimony: Elevated detection limit due to dilution required for high interfering element.
- JD39776-9 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-8 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-9 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-7 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-7 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39776-7 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39776-7 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39776-9 for Copper: Elevated detection limit due to dilution required for high interfering element.
- RPD(s) for Serial Dilution for Sodium are outside control limits. Serial dilution indicates possible matrix interference.

Metals Analysis By Method SW846 7471B

Matrix: SO

Batch ID: MP31346

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39715-11MS, JD39715-11MSD were used as the QC samples for metals.

Matrix: SO

Batch ID: MP31347

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39776-2MS, JD39776-2MSD were used as the QC samples for metals.

General Chemistry By Method SM2540 G 18TH ED MOD

Matrix: SO

Batch ID: GN26442

- Sample(s) JD39715-13DUP were used as the QC samples for Solids, Percent.

Matrix: SO

Batch ID: GN26444

- Sample(s) JD39721-1DUP were used as the QC samples for Solids, Percent.

General Chemistry By Method SW846 9012B/LACHAT

Matrix: SO

Batch ID: GP38569

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39775-9QDUP, JD39775-10MS were used as the QC samples for Cyanide.
- Matrix Spike Recovery(s) for Cyanide are outside control limits. Spike recovery indicates possible matrix interference.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: SGS Dayton, NJ

Job No: JD39776

Site: SESINJPB: 1001 Whitlock Avenue, Bronx, NY

Report Date 3/3/2022 9:31:41 AM

On 02/15/2022, 12 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc - Orlando. at a maximum corrected temperature of 2.6 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. - Orlando Job Number of JD39776 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section. Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

MS Semi-volatiles By Method EPA 537M BY ID

Matrix: SO

Batch ID: OP89836

Sample(s) JD39776-9AMS, JD39776-9AMSD were used as the QC samples indicated.

Matrix: SO

Batch ID: OP89837

Sample(s) JD39776-11AMS, JD39776-11AMSD were used as the QC samples indicated.

SGS North America Inc. - Orlando certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted. Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria. SGS North America Inc.- Orlando is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety.

Narrative prepared by:

Ariel Hartney, Client Services (signature on file)

Summary of Hits

Job Number: JD39776
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22 thru 02/15/22



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JD39776-1 WC-A2 (0-7.5')

Benzo(a)anthracene	81.3	36	10	ug/kg	SW846 8270E
Benzo(a)pyrene	87.1	36	16	ug/kg	SW846 8270E
Benzo(b)fluoranthene	104	36	16	ug/kg	SW846 8270E
Benzo(g,h,i)perylene	65.0	36	18	ug/kg	SW846 8270E
Benzo(k)fluoranthene	38.6	36	17	ug/kg	SW846 8270E
Chrysene	84.6	36	11	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene	17.7 J	36	16	ug/kg	SW846 8270E
Di-n-butyl phthalate	135 B	71	5.8	ug/kg	SW846 8270E
bis(2-Ethylhexyl)phthalate	25.9 J	71	8.4	ug/kg	SW846 8270E
Fluoranthene	89.7	36	16	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	76.3	36	17	ug/kg	SW846 8270E
Phenanthrene	30.0 J	36	12	ug/kg	SW846 8270E
Pyrene	115	36	11	ug/kg	SW846 8270E
Total TIC, Semi-Volatile	1730 J			ug/kg	
Aluminum	13600	57		mg/kg	SW846 6010D
Barium	100	23		mg/kg	SW846 6010D
Beryllium ^a	1.0	0.46		mg/kg	SW846 6010D
Calcium	1240	570		mg/kg	SW846 6010D
Chromium	31.1	1.1		mg/kg	SW846 6010D
Cobalt	12.5	5.7		mg/kg	SW846 6010D
Copper ^a	33.9	5.7		mg/kg	SW846 6010D
Iron	24000	110		mg/kg	SW846 6010D
Lead	9.8	2.3		mg/kg	SW846 6010D
Magnesium	4210	570		mg/kg	SW846 6010D
Manganese	585	1.7		mg/kg	SW846 6010D
Nickel	21.9	4.6		mg/kg	SW846 6010D
Potassium	4460	1100		mg/kg	SW846 6010D
Vanadium	36.9	5.7		mg/kg	SW846 6010D
Zinc	65.1	5.7		mg/kg	SW846 6010D

JD39776-1A WC-A2 (0-7.5')

No hits reported in this sample.

JD39776-2 WC-A2 (7.5-15')

Acetone	9.8	8.7	3.6	ug/kg	SW846 8260D
Di-n-butyl phthalate	176 B	77	6.3	ug/kg	SW846 8270E
Pyrene	14.0 J	39	12	ug/kg	SW846 8270E
Aluminum	13700	58		mg/kg	SW846 6010D
Arsenic	2.9	2.3		mg/kg	SW846 6010D
Barium	91.5	23		mg/kg	SW846 6010D
Beryllium ^a	0.73	0.46		mg/kg	SW846 6010D

Summary of Hits

Job Number: JD39776
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22 thru 02/15/22

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Calcium		1190	580		mg/kg	SW846 6010D
Chromium		25.7	1.2		mg/kg	SW846 6010D
Cobalt		9.8	5.8		mg/kg	SW846 6010D
Copper		30.8	2.9		mg/kg	SW846 6010D
Iron		22000	58		mg/kg	SW846 6010D
Lead		11.1	2.3		mg/kg	SW846 6010D
Magnesium		4300	580		mg/kg	SW846 6010D
Manganese		310	1.7		mg/kg	SW846 6010D
Nickel		19.4	4.6		mg/kg	SW846 6010D
Potassium		3990	1200		mg/kg	SW846 6010D
Vanadium		32.7	5.8		mg/kg	SW846 6010D
Zinc		51.3	5.8		mg/kg	SW846 6010D

JD39776-2A WC-A2 (7.5-15')

No hits reported in this sample.

JD39776-3 WC-B2 (0-7.5')

Di-n-butyl phthalate	156 B	76	6.2	ug/kg	SW846 8270E
4,4' -DDD	1.8	0.75	0.69	ug/kg	SW846 8081B
4,4' -DDT	2.2	0.75	0.66	ug/kg	SW846 8081B
Aluminum	14600	57		mg/kg	SW846 6010D
Barium	90.8	23		mg/kg	SW846 6010D
Beryllium ^a	0.82	0.46		mg/kg	SW846 6010D
Calcium	1630	570		mg/kg	SW846 6010D
Chromium	30.2	1.1		mg/kg	SW846 6010D
Cobalt	12.3	5.7		mg/kg	SW846 6010D
Copper ^a	32.5	5.7		mg/kg	SW846 6010D
Iron	26400	110		mg/kg	SW846 6010D
Lead	10.3	2.3		mg/kg	SW846 6010D
Magnesium	4570	570		mg/kg	SW846 6010D
Manganese	359	1.7		mg/kg	SW846 6010D
Nickel	23.7	4.6		mg/kg	SW846 6010D
Potassium	3830	1100		mg/kg	SW846 6010D
Vanadium	38.3	5.7		mg/kg	SW846 6010D
Zinc	63.7	5.7		mg/kg	SW846 6010D

JD39776-3A WC-B2 (0-7.5')

Perfluorooctanesulfonic acid ^b	0.33 J	0.58	0.23	ug/kg	EPA 537M BY ID
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JD39776-4 WC-B2 (7.5-15')

Acetone	12.2	8.8	3.6	ug/kg	SW846 8260D
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Summary of Hits

Job Number: JD39776
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22 thru 02/15/22



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Benzo(a)anthracene		17.7 J	36	10	ug/kg	SW846 8270E
Chrysene		13.1 J	36	11	ug/kg	SW846 8270E
Di-n-butyl phthalate		89.8 B	71	5.8	ug/kg	SW846 8270E
Fluoranthene		20.6 J	36	16	ug/kg	SW846 8270E
Pyrene		26.0 J	36	11	ug/kg	SW846 8270E
Total TIC, Semi-Volatile		220 J			ug/kg	
Aluminum		13200	56		mg/kg	SW846 6010D
Barium		93.1	23		mg/kg	SW846 6010D
Beryllium ^a		0.73	0.45		mg/kg	SW846 6010D
Calcium		1530	560		mg/kg	SW846 6010D
Chromium		29.7	1.1		mg/kg	SW846 6010D
Cobalt		10.9	5.6		mg/kg	SW846 6010D
Copper ^a		30.2	5.6		mg/kg	SW846 6010D
Iron		24700	110		mg/kg	SW846 6010D
Lead		8.5	2.3		mg/kg	SW846 6010D
Magnesium		4230	560		mg/kg	SW846 6010D
Manganese		317	1.7		mg/kg	SW846 6010D
Mercury		0.10	0.034		mg/kg	SW846 7471B
Nickel		23.0	4.5		mg/kg	SW846 6010D
Potassium		3620	1100		mg/kg	SW846 6010D
Vanadium		36.9	5.6		mg/kg	SW846 6010D
Zinc		58.9	5.6		mg/kg	SW846 6010D

JD39776-4A WC-B2 (7.5-15')

No hits reported in this sample.

JD39776-5 WC-A3 (0-7.5')

Acetone	7.5 J	9.9	4.1	ug/kg	SW846 8260D
Acenaphthene	650	38	13	ug/kg	SW846 8270E
Anthracene	1000	38	23	ug/kg	SW846 8270E
Benzo(a)anthracene	1550	38	11	ug/kg	SW846 8270E
Benzo(a)pyrene	1130	38	17	ug/kg	SW846 8270E
Benzo(b)fluoranthene	1320	38	17	ug/kg	SW846 8270E
Benzo(g,h,i)perylene	589	38	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene	458	38	18	ug/kg	SW846 8270E
1,1'-Biphenyl	46.5 J	76	5.2	ug/kg	SW846 8270E
Carbazole	307	76	5.5	ug/kg	SW846 8270E
Chrysene	1510	38	12	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene	186	38	17	ug/kg	SW846 8270E
Dibenzofuran	195	76	16	ug/kg	SW846 8270E
Di-n-butyl phthalate	114 B	76	6.2	ug/kg	SW846 8270E
Fluoranthene	3000	38	17	ug/kg	SW846 8270E
Fluorene	540	38	17	ug/kg	SW846 8270E

Summary of Hits

Job Number: JD39776
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22 thru 02/15/22

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Analyte						
Indeno(1,2,3-cd)pyrene		698	38	18	ug/kg	SW846 8270E
2-Methylnaphthalene		237	38	8.6	ug/kg	SW846 8270E
Naphthalene		149	38	11	ug/kg	SW846 8270E
Phenanthrene		4240	190	64	ug/kg	SW846 8270E
Pyrene		3040	38	12	ug/kg	SW846 8270E
Total TIC, Semi-Volatile		9460 J			ug/kg	
Aluminum		20900	55		mg/kg	SW846 6010D
Barium		162	22		mg/kg	SW846 6010D
Beryllium ^a		1.4	1.1		mg/kg	SW846 6010D
Calcium		1780	550		mg/kg	SW846 6010D
Chromium		34.6	1.1		mg/kg	SW846 6010D
Cobalt		17.2	5.5		mg/kg	SW846 6010D
Copper ^a		43.9	14		mg/kg	SW846 6010D
Iron		39600	280		mg/kg	SW846 6010D
Lead		29.0	2.2		mg/kg	SW846 6010D
Magnesium		8040	550		mg/kg	SW846 6010D
Manganese		1020	8.3		mg/kg	SW846 6010D
Mercury		0.043	0.035		mg/kg	SW846 7471B
Nickel		25.9	4.4		mg/kg	SW846 6010D
Potassium		8790	1100		mg/kg	SW846 6010D
Vanadium		46.2	5.5		mg/kg	SW846 6010D
Zinc		98.4	5.5		mg/kg	SW846 6010D

JD39776-5A WC-A3 (0-7.5')

No hits reported in this sample.

JD39776-6 WC-A3 (7.5-15')

Acetone	13.6	9.3	3.9	ug/kg	SW846 8260D
Di-n-butyl phthalate	139 B	73	6.0	ug/kg	SW846 8270E
Pyrene	16.2 J	37	12	ug/kg	SW846 8270E
Total TIC, Semi-Volatile	410 J			ug/kg	
Aluminum	9250	56		mg/kg	SW846 6010D
Barium	53.4	22		mg/kg	SW846 6010D
Beryllium	0.53	0.22		mg/kg	SW846 6010D
Calcium	995	560		mg/kg	SW846 6010D
Chromium	15.4	1.1		mg/kg	SW846 6010D
Cobalt	7.1	5.6		mg/kg	SW846 6010D
Copper	16.7	2.8		mg/kg	SW846 6010D
Iron	13800	56		mg/kg	SW846 6010D
Lead	16.3	2.2		mg/kg	SW846 6010D
Magnesium	2590	560		mg/kg	SW846 6010D
Manganese	360	1.7		mg/kg	SW846 6010D
Nickel	13.7	4.5		mg/kg	SW846 6010D

Summary of Hits

Job Number: JD39776
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22 thru 02/15/22



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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Potassium		2750	1100		mg/kg	SW846 6010D
Silver		0.81	0.56		mg/kg	SW846 6010D
Vanadium		19.2	5.6		mg/kg	SW846 6010D
Zinc		38.3	5.6		mg/kg	SW846 6010D

JD39776-6A WC-A3 (7.5-15')

No hits reported in this sample.

JD39776-7 WC-B3 (0-7.5')

Acenaphthylene	26.7 J	37	19	ug/kg	SW846 8270E
Benzo(a)anthracene	106	37	10	ug/kg	SW846 8270E
Benzo(a)pyrene	126	37	17	ug/kg	SW846 8270E
Benzo(b)fluoranthene	149	37	16	ug/kg	SW846 8270E
Benzo(g,h,i)perylene	112	37	18	ug/kg	SW846 8270E
Benzo(k)fluoranthene	61.0	37	17	ug/kg	SW846 8270E
Chrysene	119	37	12	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene	30.2 J	37	16	ug/kg	SW846 8270E
Di-n-butyl phthalate	81.9 B	74	6.0	ug/kg	SW846 8270E
Fluoranthene	122	37	16	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	125	37	17	ug/kg	SW846 8270E
Phenanthrene	40.7	37	12	ug/kg	SW846 8270E
Pyrene	139	37	12	ug/kg	SW846 8270E
Total TIC, Semi-Volatile	340 J			ug/kg	
Endosulfan-II	0.98	0.74	0.46	ug/kg	SW846 8081B
Aluminum	15200	57		mg/kg	SW846 6010D
Barium	125	23		mg/kg	SW846 6010D
Beryllium ^a	0.84	0.46		mg/kg	SW846 6010D
Calcium	4380	570		mg/kg	SW846 6010D
Chromium	28.4	1.1		mg/kg	SW846 6010D
Cobalt	13.1	5.7		mg/kg	SW846 6010D
Copper ^a	37.8	5.7		mg/kg	SW846 6010D
Iron	26000	110		mg/kg	SW846 6010D
Lead	45.8	2.3		mg/kg	SW846 6010D
Magnesium	5310	570		mg/kg	SW846 6010D
Manganese	603	1.7		mg/kg	SW846 6010D
Mercury	0.35	0.037		mg/kg	SW846 7471B
Nickel	22.3	4.6		mg/kg	SW846 6010D
Potassium	4980	1100		mg/kg	SW846 6010D
Vanadium	37.3	5.7		mg/kg	SW846 6010D
Zinc	133	5.7		mg/kg	SW846 6010D

Summary of Hits

Job Number: JD39776
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22 thru 02/15/22



Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
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JD39776-7A **WC-B3 (0-7.5')**

No hits reported in this sample.

JD39776-8 **WC-B3 (7.5-15')**

Acetone	12.2	9.0	3.7	ug/kg	SW846 8260D
Di-n-butyl phthalate	113 B	72	5.8	ug/kg	SW846 8270E
Total TIC, Semi-Volatile	160 J			ug/kg	
Aluminum	17000	58		mg/kg	SW846 6010D
Barium	130	23		mg/kg	SW846 6010D
Calcium	1460	580		mg/kg	SW846 6010D
Chromium	34.2	1.2		mg/kg	SW846 6010D
Cobalt	17.1	5.8		mg/kg	SW846 6010D
Copper ^a	44.3	15		mg/kg	SW846 6010D
Iron	32700	290		mg/kg	SW846 6010D
Lead	13.7	2.3		mg/kg	SW846 6010D
Magnesium	6250	580		mg/kg	SW846 6010D
Manganese	391	1.7		mg/kg	SW846 6010D
Nickel	28.8	4.6		mg/kg	SW846 6010D
Potassium	6610	1200		mg/kg	SW846 6010D
Vanadium	45.1	5.8		mg/kg	SW846 6010D
Zinc	75.6	5.8		mg/kg	SW846 6010D

JD39776-8A **WC-B3 (7.5-15')**

No hits reported in this sample.

JD39776-9 **WC-A4 (0-7.5')**

Acetone	19.8	8.6	3.6	ug/kg	SW846 8260D
Benzo(a)anthracene	18.0 J	37	10	ug/kg	SW846 8270E
Benzo(b)fluoranthene	19.7 J	37	16	ug/kg	SW846 8270E
Chrysene	17.3 J	37	12	ug/kg	SW846 8270E
Di-n-butyl phthalate	73.7 JB	74	6.0	ug/kg	SW846 8270E
Fluoranthene	25.9 J	37	16	ug/kg	SW846 8270E
Phenanthrene	15.2 J	37	12	ug/kg	SW846 8270E
Pyrene	30.9 J	37	12	ug/kg	SW846 8270E
Total TIC, Semi-Volatile	370 J			ug/kg	
Aluminum	19900	54		mg/kg	SW846 6010D
Barium	136	22		mg/kg	SW846 6010D
Beryllium ^a	1.2	1.1		mg/kg	SW846 6010D
Calcium	1840	540		mg/kg	SW846 6010D
Chromium ^a	36.7	5.4		mg/kg	SW846 6010D
Cobalt	18.3	5.4		mg/kg	SW846 6010D

Summary of Hits

Job Number: JD39776
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22 thru 02/15/22



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Copper ^a		43.0	13		mg/kg	SW846 6010D
Iron		35200	270		mg/kg	SW846 6010D
Lead		18.1	2.2		mg/kg	SW846 6010D
Magnesium		8210	540		mg/kg	SW846 6010D
Manganese		1010	8.1		mg/kg	SW846 6010D
Mercury		0.055	0.036		mg/kg	SW846 7471B
Nickel		29.3	4.3		mg/kg	SW846 6010D
Potassium		7590	1100		mg/kg	SW846 6010D
Vanadium		48.4	5.4		mg/kg	SW846 6010D
Zinc		83.0	5.4		mg/kg	SW846 6010D

JD39776-9A WC-A4 (0-7.5')

No hits reported in this sample.

JD39776-10 WC-A4 (7.5-15')

Acetone	95.0	10	4.3	ug/kg	SW846 8260D
2-Butanone (MEK)	21.2	10	2.5	ug/kg	SW846 8260D
Carbon disulfide	0.81 J	2.1	0.56	ug/kg	SW846 8260D
Benzo(a)anthracene	60.1	38	11	ug/kg	SW846 8270E
Benzo(a)pyrene	67.5	38	17	ug/kg	SW846 8270E
Benzo(b)fluoranthene	74.3	38	17	ug/kg	SW846 8270E
Benzo(g,h,i)perylene	44.0	38	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene	25.6 J	38	18	ug/kg	SW846 8270E
Chrysene	60.3	38	12	ug/kg	SW846 8270E
Di-n-butyl phthalate	111 B	75	6.1	ug/kg	SW846 8270E
Fluoranthene	91.4	38	17	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	47.9	38	18	ug/kg	SW846 8270E
Phenanthrene	56.6	38	13	ug/kg	SW846 8270E
Pyrene	109	38	12	ug/kg	SW846 8270E
Total TIC, Semi-Volatile	380 J			ug/kg	
Aluminum	16500	55		mg/kg	SW846 6010D
Antimony ^a	5.0	4.4		mg/kg	SW846 6010D
Barium	119	22		mg/kg	SW846 6010D
Beryllium ^a	0.89	0.44		mg/kg	SW846 6010D
Calcium	1520	550		mg/kg	SW846 6010D
Chromium	33.7	1.1		mg/kg	SW846 6010D
Cobalt	14.0	5.5		mg/kg	SW846 6010D
Copper ^a	35.4	5.5		mg/kg	SW846 6010D
Iron	27100	110		mg/kg	SW846 6010D
Lead	13.7	2.2		mg/kg	SW846 6010D
Magnesium	5370	550		mg/kg	SW846 6010D
Manganese	579	1.6		mg/kg	SW846 6010D
Mercury	0.043	0.036		mg/kg	SW846 7471B

Summary of Hits

Job Number: JD39776
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22 thru 02/15/22

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Nickel		26.5	4.4		mg/kg	SW846 6010D
Potassium		4410	1100		mg/kg	SW846 6010D
Vanadium		44.8	5.5		mg/kg	SW846 6010D
Zinc		64.8	5.5		mg/kg	SW846 6010D

JD39776-10A WC-A4 (7.5-15')

No hits reported in this sample.

JD39776-11 WC-B4 (0-7.5')

Acenaphthylene	25.7 J	39	20	ug/kg	SW846 8270E
Anthracene	30.2 J	39	24	ug/kg	SW846 8270E
Benzo(a)anthracene	142	39	11	ug/kg	SW846 8270E
Benzo(a)pyrene	167	39	18	ug/kg	SW846 8270E
Benzo(b)fluoranthene	190	39	17	ug/kg	SW846 8270E
Benzo(g,h,i)perylene	135	39	20	ug/kg	SW846 8270E
Benzo(k)fluoranthene	80.6	39	18	ug/kg	SW846 8270E
Carbazole	11.7 J	79	5.7	ug/kg	SW846 8270E
Chrysene	160	39	12	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene	37.8 J	39	17	ug/kg	SW846 8270E
Di-n-butyl phthalate	87.0 B	79	6.4	ug/kg	SW846 8270E
Fluoranthene	199	39	18	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	148	39	19	ug/kg	SW846 8270E
Phenanthrene	104	39	13	ug/kg	SW846 8270E
Pyrene	219	39	13	ug/kg	SW846 8270E
Total TIC, Semi-Volatile	3150 J			ug/kg	
Endosulfan-II	1.3	0.73	0.46	ug/kg	SW846 8081B
Aluminum	17300	61		mg/kg	SW846 6010D
Barium	156	24		mg/kg	SW846 6010D
Beryllium ^a	0.86	0.48		mg/kg	SW846 6010D
Calcium	4430	610		mg/kg	SW846 6010D
Chromium	34.0	1.2		mg/kg	SW846 6010D
Cobalt	12.4	6.1		mg/kg	SW846 6010D
Copper ^a	51.5	6.1		mg/kg	SW846 6010D
Iron	28200	120		mg/kg	SW846 6010D
Lead	92.8	2.4		mg/kg	SW846 6010D
Magnesium	6370	610		mg/kg	SW846 6010D
Manganese	410	1.8		mg/kg	SW846 6010D
Mercury	0.15	0.038		mg/kg	SW846 7471B
Nickel	24.9	4.8		mg/kg	SW846 6010D
Potassium	3300	1200		mg/kg	SW846 6010D
Vanadium	43.5	6.1		mg/kg	SW846 6010D
Zinc	147	6.1		mg/kg	SW846 6010D

Summary of Hits

Job Number: JD39776
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22 thru 02/15/22

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JD39776-11A WC-B4 (0-7.5')

Perfluorooctanesulfonic acid ^b	0.60	0.60	0.24	ug/kg	EPA 537M BY ID
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JD39776-12 WC-B4 (7.5-15')

Acetone	28.3	9.9	4.1	ug/kg	SW846 8260D
Benzo(a)anthracene	13.3 J	36	10	ug/kg	SW846 8270E
Butyl benzyl phthalate	15.0 J	72	8.8	ug/kg	SW846 8270E
Di-n-butyl phthalate	32.5 JB	72	5.9	ug/kg	SW846 8270E
Pyrene	13.0 J	36	12	ug/kg	SW846 8270E
Total TIC, Semi-Volatile	21630 J			ug/kg	
Aluminum	18200	59		mg/kg	SW846 6010D
Antimony ^a	5.4	4.7		mg/kg	SW846 6010D
Barium	141	24		mg/kg	SW846 6010D
Beryllium ^a	0.92	0.47		mg/kg	SW846 6010D
Calcium	2340	590		mg/kg	SW846 6010D
Chromium	35.8	1.2		mg/kg	SW846 6010D
Cobalt	13.0	5.9		mg/kg	SW846 6010D
Copper ^a	35.1	5.9		mg/kg	SW846 6010D
Iron	27100	120		mg/kg	SW846 6010D
Lead	40.3	2.4		mg/kg	SW846 6010D
Magnesium	6840	590		mg/kg	SW846 6010D
Manganese	545	1.8		mg/kg	SW846 6010D
Mercury	0.042	0.035		mg/kg	SW846 7471B
Nickel	21.3	4.7		mg/kg	SW846 6010D
Potassium	6040	1200		mg/kg	SW846 6010D
Vanadium	51.1	5.9		mg/kg	SW846 6010D
Zinc	72.1	5.9		mg/kg	SW846 6010D

JD39776-12A WC-B4 (7.5-15')

Perfluorooctanesulfonic acid ^b	0.26 J	0.56	0.23	ug/kg	EPA 537M BY ID
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(a) Elevated detection limit due to dilution required for high interfering element.

(b) Analysis performed at SGS Orlando, FL.

Sample Results

Report of Analysis

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-A2 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39776-1	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.6
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242312.D	1	02/17/22 13:38	PS	02/16/22 11:00	n/a	VI9840
Run #2							

	Initial Weight
Run #1	5.1 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	4.6	ug/kg	
71-43-2	Benzene	ND	0.55	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.5	0.62	ug/kg	
75-27-4	Bromodichloromethane	ND	2.2	0.47	ug/kg	
75-25-2	Bromoform	ND	5.5	1.5	ug/kg	
74-83-9	Bromomethane ^a	ND	5.5	0.85	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.7	ug/kg	
75-15-0	Carbon disulfide	ND	2.2	0.59	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.2	0.68	ug/kg	
108-90-7	Chlorobenzene	ND	2.2	0.51	ug/kg	
75-00-3	Chloroethane ^b	ND	5.5	0.65	ug/kg	
67-66-3	Chloroform	ND	2.2	0.57	ug/kg	
74-87-3	Chloromethane	ND	5.5	2.2	ug/kg	
110-82-7	Cyclohexane	ND	2.2	0.73	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.2	0.77	ug/kg	
124-48-1	Dibromochloromethane	ND	2.2	0.62	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.47	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.1	0.60	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.1	0.55	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.1	0.55	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.5	0.80	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.1	0.55	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.52	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.1	0.72	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.1	0.93	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.1	0.68	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.2	0.52	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.2	0.53	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	0.51	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.50	ug/kg	
76-13-1	Freon 113	ND	5.5	3.0	ug/kg	
591-78-6	2-Hexanone	ND	5.5	2.3	ug/kg	

ND = Not detected MDL = Method Detection Limit

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RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	WC-A2 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39776-1	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.6
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.2	1.6	ug/kg	
79-20-9	Methyl Acetate	ND	5.5	1.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.2	0.97	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.52	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.5	2.5	ug/kg	
75-09-2	Methylene chloride	ND	5.5	2.9	ug/kg	
100-42-5	Styrene	ND	2.2	0.44	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.2	0.66	ug/kg	
127-18-4	Tetrachloroethene	ND	2.2	0.64	ug/kg	
108-88-3	Toluene	ND	1.1	0.58	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.5	2.8	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.5	2.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.2	0.53	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.2	0.61	ug/kg	
79-01-6	Trichloroethene	ND	1.1	0.84	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.5	0.76	ug/kg	
75-01-4	Vinyl chloride	ND	2.2	0.53	ug/kg	
	m,p-Xylene	ND	1.1	0.99	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.51	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.51	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		80-124%
17060-07-0	1,2-Dichloroethane-D4	117%		75-133%
2037-26-5	Toluene-D8	100%		79-125%
460-00-4	4-Bromofluorobenzene	93%		58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

(b) This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.

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RL = Reporting Limit

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B = Indicates analyte found in associated method blank

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Report of Analysis

Page 1 of 3

Client Sample ID:	WC-A2 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39776-1	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.6
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155109.D	1	02/18/22 09:31	CS	02/16/22 11:30	OP38181	EZ7706
Run #2							

	Initial Weight	Final Volume
Run #1	31.6 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	71	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	22	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	30	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	64	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	180	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	180	38	ug/kg	
95-48-7	2-Methylphenol	ND	71	23	ug/kg	
	3&4-Methylphenol	ND	71	29	ug/kg	
88-75-5	2-Nitrophenol	ND	180	24	ug/kg	
100-02-7	4-Nitrophenol	ND	360	95	ug/kg	
87-86-5	Pentachlorophenol	ND	140	34	ug/kg	
108-95-2	Phenol	ND	71	19	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	24	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	27	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	21	ug/kg	
83-32-9	Acenaphthene	ND	36	12	ug/kg	
208-96-8	Acenaphthylene	ND	36	18	ug/kg	
98-86-2	Acetophenone	ND	180	7.7	ug/kg	
120-12-7	Anthracene	ND	36	22	ug/kg	
1912-24-9	Atrazine	ND	71	15	ug/kg	
56-55-3	Benzo(a)anthracene	81.3	36	10	ug/kg	
50-32-8	Benzo(a)pyrene	87.1	36	16	ug/kg	
205-99-2	Benzo(b)fluoranthene	104	36	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	65.0	36	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	38.6	36	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	71	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	71	8.7	ug/kg	
92-52-4	1,1'-Biphenyl	ND	71	4.9	ug/kg	
100-52-7	Benzaldehyde	ND	180	8.9	ug/kg	
91-58-7	2-Chloronaphthalene	ND	71	8.5	ug/kg	
106-47-8	4-Chloroaniline	ND	180	13	ug/kg	
86-74-8	Carbazole	ND	71	5.2	ug/kg	

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Report of Analysis

Page 2 of 3

Client Sample ID:	WC-A2 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39776-1	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.6
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	71	14	ug/kg	
218-01-9	Chrysene	84.6	36	11	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	71	7.6	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	71	15	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	71	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	71	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	36	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	36	18	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	71	30	ug/kg	
123-91-1	1,4-Dioxane	ND	36	24	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	17.7	36	16	ug/kg	J
132-64-9	Dibenzofuran	ND	71	15	ug/kg	
84-74-2	Di-n-butyl phthalate	135	71	5.8	ug/kg	B
117-84-0	Di-n-octyl phthalate	ND	71	8.9	ug/kg	
84-66-2	Diethyl phthalate	ND	71	7.6	ug/kg	
131-11-3	Dimethyl phthalate	ND	71	6.4	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	25.9	71	8.4	ug/kg	J
206-44-0	Fluoranthene	89.7	36	16	ug/kg	
86-73-7	Fluorene	ND	36	16	ug/kg	
118-74-1	Hexachlorobenzene	ND	71	9.0	ug/kg	
87-68-3	Hexachlorobutadiene ^a	ND	36	14	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	360	14	ug/kg	
67-72-1	Hexachloroethane	ND	180	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	76.3	36	17	ug/kg	
78-59-1	Isophorone	ND	71	7.6	ug/kg	
91-57-6	2-Methylnaphthalene	ND	36	8.1	ug/kg	
88-74-4	2-Nitroaniline	ND	180	8.4	ug/kg	
99-09-2	3-Nitroaniline	ND	180	8.9	ug/kg	
100-01-6	4-Nitroaniline	ND	180	9.3	ug/kg	
91-20-3	Naphthalene	ND	36	10	ug/kg	
98-95-3	Nitrobenzene	ND	71	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	71	10	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	13	ug/kg	
85-01-8	Phenanthrene	30.0	36	12	ug/kg	J
129-00-0	Pyrene	115	36	11	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	9.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	55%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	WC-A2 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39776-1	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.6
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	51%		10-105%
118-79-6	2,4,6-Tribromophenol	56%		10-135%
4165-60-0	Nitrobenzene-d5	60%		10-119%
321-60-8	2-Fluorobiphenyl	68%		18-112%
1718-51-0	Terphenyl-d14	65%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	1.86	150	ug/kg	J
	system artifact	2.96	180	ug/kg	J
	system artifact	3.32	190	ug/kg	J
	system artifact/aldol-condensation	3.36	260	ug/kg	J
1740-19-8	1-Phenanthrenecarboxylic acid, 1,2,3,4,4	12.04	600	ug/kg	JN
	unknown	13.49	560	ug/kg	J
	unknown	14.94	360	ug/kg	J
	alkane	16.07	210	ug/kg	J
	Total TIC, Semi-Volatile		1730	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

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 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A2 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39776-1	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.6
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174372.D	1	02/21/22 14:59	TL	02/16/22 13:50	OP38184	G1G6024
Run #2							

	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.72	0.60	ug/kg	
319-84-6	alpha-BHC	ND	0.72	0.59	ug/kg	
319-85-7	beta-BHC	ND	0.72	0.65	ug/kg	
319-86-8	delta-BHC	ND	0.72	0.69	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.72	0.53	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.72	0.58	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.72	0.33	ug/kg	
60-57-1	Dieldrin	ND	0.72	0.50	ug/kg	
72-54-8	4,4' -DDD	ND	0.72	0.66	ug/kg	
72-55-9	4,4' -DDE	ND	0.72	0.63	ug/kg	
50-29-3	4,4' -DDT	ND	0.72	0.64	ug/kg	
72-20-8	Endrin	ND	0.72	0.56	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.72	0.57	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.72	0.41	ug/kg	
959-98-8	Endosulfan-I	ND	0.72	0.42	ug/kg	
33213-65-9	Endosulfan-II	ND	0.72	0.45	ug/kg	
76-44-8	Heptachlor	ND	0.72	0.62	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.72	0.51	ug/kg	
72-43-5	Methoxychlor	ND	1.4	0.58	ug/kg	
53494-70-5	Endrin ketone	ND	0.72	0.52	ug/kg	
8001-35-2	Toxaphene	ND	18	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	120%		14-145%
877-09-8	Tetrachloro-m-xylene	121%		14-145%
2051-24-3	Decachlorobiphenyl	87%		10-197%
2051-24-3	Decachlorobiphenyl	126%		10-197%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A2 (0-7.5')		
Lab Sample ID:	JD39776-1	Date Sampled:	02/14/22
Matrix:	SO - Soil	Date Received:	02/15/22
Method:	SW846 8082A SW846 3546	Percent Solids:	88.6
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G114270.D	1	02/20/22 23:33	TL	02/16/22 13:50	OP38185	G5G2906
Run #2							

	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	17	ug/kg	
11104-28-2	Aroclor 1221	ND	36	22	ug/kg	
11141-16-5	Aroclor 1232	ND	36	23	ug/kg	
53469-21-9	Aroclor 1242	ND	36	15	ug/kg	
12672-29-6	Aroclor 1248	ND	36	32	ug/kg	
11097-69-1	Aroclor 1254	ND	36	19	ug/kg	
11096-82-5	Aroclor 1260	ND	36	15	ug/kg	
11100-14-4	Aroclor 1268	ND	36	15	ug/kg	
37324-23-5	Aroclor 1262	ND	36	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	108%		10-163%
877-09-8	Tetrachloro-m-xylene	125%		10-163%
2051-24-3	Decachlorobiphenyl	114%		10-215%
2051-24-3	Decachlorobiphenyl	130%		10-215%

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Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A2 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39776-1	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.6
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	13600	57	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Antimony ^a	< 4.6	4.6	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Arsenic ^a	< 4.6	4.6	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Barium	100	23	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Beryllium ^a	1.0	0.46	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Cadmium	< 0.57	0.57	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Calcium	1240	570	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Chromium	31.1	1.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cobalt	12.5	5.7	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Copper ^a	33.9	5.7	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Iron	24000	110	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Lead	9.8	2.3	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Magnesium	4210	570	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Manganese	585	1.7	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	< 0.037	0.037	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹	SW846 7471B ⁵
Nickel	21.9	4.6	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Potassium	4460	1100	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Selenium ^a	< 4.6	4.6	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Silver ^a	< 1.1	1.1	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Sodium	< 1100	1100	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Thallium ^a	< 2.3	2.3	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Vanadium	36.9	5.7	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Zinc	65.1	5.7	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Instrument QC Batch: MA51931

(4) Prep QC Batch: MP31339

(5) Prep QC Batch: MP31346

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WC-A2 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39776-1	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.6
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.27	0.27	mg/kg	1	02/17/22 13:15	MM	SW846 9012B/LACHAT
Solids, Percent	88.6		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-A2 (0-7.5')	
Lab Sample ID:	JD39776-1A	Date Sampled: 02/14/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 88.6
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55198.D	1	02/25/22 23:42	AFL	02/18/22 08:30	F:OP89836	F:S3Q762
Run #2							

	Initial Weight	Final Volume
Run #1	1.97 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.44	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.57	0.29	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.57	0.29	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.57	0.29	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.57	0.29	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.57	0.29	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.57	0.29	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.57	0.29	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.57	0.29	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.57	0.30	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.57	0.29	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.57	0.29	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.57	0.29	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.57	0.29	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.57	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.57	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.57	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.1	0.57	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.57	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.29	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.29	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-A2 (0-7.5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39776-1A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.6
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	93%		40-140%
	13C5-PFPeA	92%		50-150%
	13C5-PFHxA	92%		50-150%
	13C4-PFHpA	94%		50-150%
	13C8-PFOA	96%		50-150%
	13C9-PFNA	97%		50-150%
	13C6-PFDA	99%		50-150%
	13C7-PFUnDA	99%		40-140%
	13C2-PFDoDA	90%		40-140%
	13C2-PFTeDA	98%		30-130%
	13C3-PFBS	93%		50-150%
	13C3-PFHxS	93%		50-150%
	13C8-PFOS	96%		50-150%
	13C8-FOSA	100%		30-130%
	d3-MeFOSAA	87%		40-140%
	d5-EtFOSAA	89%		40-140%
	13C2-6:2FTS	93%		50-150%
	13C2-8:2FTS	99%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-A2 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39776-2	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.0
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242313.D	1	02/17/22 14:00	PS	02/16/22 11:00	n/a	VI9840
Run #2							

	Initial Weight
Run #1	6.7 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	9.8	8.7	3.6	ug/kg	
71-43-2	Benzene	ND	0.43	0.39	ug/kg	
74-97-5	Bromochloromethane	ND	4.3	0.49	ug/kg	
75-27-4	Bromodichloromethane	ND	1.7	0.37	ug/kg	
75-25-2	Bromoform	ND	4.3	1.2	ug/kg	
74-83-9	Bromomethane ^a	ND	4.3	0.66	ug/kg	
78-93-3	2-Butanone (MEK)	ND	8.7	2.1	ug/kg	
75-15-0	Carbon disulfide	ND	1.7	0.46	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.7	0.54	ug/kg	
108-90-7	Chlorobenzene	ND	1.7	0.40	ug/kg	
75-00-3	Chloroethane ^b	ND	4.3	0.51	ug/kg	
67-66-3	Chloroform	ND	1.7	0.45	ug/kg	
74-87-3	Chloromethane	ND	4.3	1.7	ug/kg	
110-82-7	Cyclohexane	ND	1.7	0.57	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.7	0.60	ug/kg	
124-48-1	Dibromochloromethane	ND	1.7	0.49	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.87	0.37	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.87	0.47	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.87	0.43	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.87	0.43	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.3	0.63	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.87	0.43	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.87	0.41	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.87	0.57	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.87	0.73	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.87	0.53	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.7	0.41	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.7	0.41	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.7	0.40	ug/kg	
100-41-4	Ethylbenzene	ND	0.87	0.39	ug/kg	
76-13-1	Freon 113	ND	4.3	2.3	ug/kg	
591-78-6	2-Hexanone	ND	4.3	1.8	ug/kg	

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	WC-A2 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39776-2	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.0
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.7	1.2	ug/kg	
79-20-9	Methyl Acetate	ND	4.3	1.2	ug/kg	
108-87-2	Methylcyclohexane	ND	1.7	0.76	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.87	0.41	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.3	2.0	ug/kg	
75-09-2	Methylene chloride	ND	4.3	2.3	ug/kg	
100-42-5	Styrene	ND	1.7	0.35	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.7	0.52	ug/kg	
127-18-4	Tetrachloroethene	ND	1.7	0.50	ug/kg	
108-88-3	Toluene	ND	0.87	0.46	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.3	2.2	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.3	2.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.7	0.42	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.7	0.48	ug/kg	
79-01-6	Trichloroethene	ND	0.87	0.66	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.3	0.59	ug/kg	
75-01-4	Vinyl chloride	ND	1.7	0.42	ug/kg	
	m,p-Xylene	ND	0.87	0.78	ug/kg	
95-47-6	o-Xylene	ND	0.87	0.40	ug/kg	
1330-20-7	Xylene (total)	ND	0.87	0.40	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		80-124%
17060-07-0	1,2-Dichloroethane-D4	120%		75-133%
2037-26-5	Toluene-D8	102%		79-125%
460-00-4	4-Bromofluorobenzene	91%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

(b) This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	WC-A2 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39776-2	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.0
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155096.D	1	02/18/22 03:55	CS	02/16/22 11:30	OP38181	EZ7706
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	77	19	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	24	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	33	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	69	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	190	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	190	41	ug/kg	
95-48-7	2-Methylphenol	ND	77	25	ug/kg	
	3&4-Methylphenol	ND	77	32	ug/kg	
88-75-5	2-Nitrophenol	ND	190	25	ug/kg	
100-02-7	4-Nitrophenol	ND	390	100	ug/kg	
87-86-5	Pentachlorophenol	ND	150	36	ug/kg	
108-95-2	Phenol	ND	77	20	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	190	25	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	29	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	23	ug/kg	
83-32-9	Acenaphthene	ND	39	13	ug/kg	
208-96-8	Acenaphthylene	ND	39	20	ug/kg	
98-86-2	Acetophenone	ND	190	8.3	ug/kg	
120-12-7	Anthracene	ND	39	24	ug/kg	
1912-24-9	Atrazine	ND	77	16	ug/kg	
56-55-3	Benzo(a)anthracene	ND	39	11	ug/kg	
50-32-8	Benzo(a)pyrene	ND	39	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	39	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	39	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	39	18	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	77	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	77	9.4	ug/kg	
92-52-4	1,1'-Biphenyl	ND	77	5.3	ug/kg	
100-52-7	Benzaldehyde	ND	190	9.5	ug/kg	
91-58-7	2-Chloronaphthalene	ND	77	9.2	ug/kg	
106-47-8	4-Chloroaniline	ND	190	14	ug/kg	
86-74-8	Carbazole	ND	77	5.6	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	WC-A2 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39776-2	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.0
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	77	15	ug/kg	
218-01-9	Chrysene	ND	39	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	77	8.2	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	77	17	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	77	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	77	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	39	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	39	19	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	77	32	ug/kg	
123-91-1	1,4-Dioxane	ND	39	25	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	39	17	ug/kg	
132-64-9	Dibenzofuran	ND	77	16	ug/kg	
84-74-2	Di-n-butyl phthalate	176	77	6.3	ug/kg	B
117-84-0	Di-n-octyl phthalate	ND	77	9.6	ug/kg	
84-66-2	Diethyl phthalate	ND	77	8.2	ug/kg	
131-11-3	Dimethyl phthalate	ND	77	6.9	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	77	9.0	ug/kg	
206-44-0	Fluoranthene	ND	39	17	ug/kg	
86-73-7	Fluorene	ND	39	18	ug/kg	
118-74-1	Hexachlorobenzene	ND	77	9.7	ug/kg	
87-68-3	Hexachlorobutadiene ^a	ND	39	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	390	15	ug/kg	
67-72-1	Hexachloroethane	ND	190	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	39	18	ug/kg	
78-59-1	Isophorone	ND	77	8.2	ug/kg	
91-57-6	2-Methylnaphthalene	ND	39	8.7	ug/kg	
88-74-4	2-Nitroaniline	ND	190	9.1	ug/kg	
99-09-2	3-Nitroaniline	ND	190	9.6	ug/kg	
100-01-6	4-Nitroaniline	ND	190	10	ug/kg	
91-20-3	Naphthalene	ND	39	11	ug/kg	
98-95-3	Nitrobenzene	ND	77	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	77	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	14	ug/kg	
85-01-8	Phenanthrene	ND	39	13	ug/kg	
129-00-0	Pyrene	14.0	39	12	ug/kg	J
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	190	9.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	44%		10-109%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	WC-A2 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39776-2	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.0
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	41%		10-105%
118-79-6	2,4,6-Tribromophenol	43%		10-135%
4165-60-0	Nitrobenzene-d5	48%		10-119%
321-60-8	2-Fluorobiphenyl	52%		18-112%
1718-51-0	Terphenyl-d14	57%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	System artifact	3.32	200	ug/kg	J
	System artifact/aldol-condensation	3.37	260	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A2 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39776-2	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.0
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174373.D	1	02/21/22 15:17	TL	02/16/22 13:50	OP38184	G1G6024
Run #2							

	Initial Weight	Final Volume
Run #1	16.5 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.70	0.58	ug/kg	
319-84-6	alpha-BHC	ND	0.70	0.57	ug/kg	
319-85-7	beta-BHC	ND	0.70	0.64	ug/kg	
319-86-8	delta-BHC	ND	0.70	0.68	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.70	0.52	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.70	0.57	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.70	0.32	ug/kg	
60-57-1	Dieldrin	ND	0.70	0.48	ug/kg	
72-54-8	4,4' -DDD	ND	0.70	0.65	ug/kg	
72-55-9	4,4' -DDE	ND	0.70	0.62	ug/kg	
50-29-3	4,4' -DDT	ND	0.70	0.62	ug/kg	
72-20-8	Endrin	ND	0.70	0.55	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.70	0.55	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.70	0.40	ug/kg	
959-98-8	Endosulfan-I	ND	0.70	0.41	ug/kg	
33213-65-9	Endosulfan-II	ND	0.70	0.44	ug/kg	
76-44-8	Heptachlor	ND	0.70	0.61	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.70	0.49	ug/kg	
72-43-5	Methoxychlor	ND	1.4	0.56	ug/kg	
53494-70-5	Endrin ketone	ND	0.70	0.51	ug/kg	
8001-35-2	Toxaphene	ND	18	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	149% ^a		14-145%
877-09-8	Tetrachloro-m-xylene	149% ^a		14-145%
2051-24-3	Decachlorobiphenyl	113%		10-197%
2051-24-3	Decachlorobiphenyl	137%		10-197%

(a) High percent recoveries and no positive found in the sample.

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A2 (7.5-15')		
Lab Sample ID:	JD39776-2	Date Sampled:	02/14/22
Matrix:	SO - Soil	Date Received:	02/15/22
Method:	SW846 8082A SW846 3546	Percent Solids:	86.0
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G114271.D	1	02/20/22 23:49	TL	02/16/22 13:50	OP38185	G5G2906
Run #2							

	Initial Weight	Final Volume
Run #1	16.5 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	16	ug/kg	
11104-28-2	Aroclor 1221	ND	35	22	ug/kg	
11141-16-5	Aroclor 1232	ND	35	22	ug/kg	
53469-21-9	Aroclor 1242	ND	35	14	ug/kg	
12672-29-6	Aroclor 1248	ND	35	31	ug/kg	
11097-69-1	Aroclor 1254	ND	35	19	ug/kg	
11096-82-5	Aroclor 1260	ND	35	15	ug/kg	
11100-14-4	Aroclor 1268	ND	35	15	ug/kg	
37324-23-5	Aroclor 1262	ND	35	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	145%		10-163%
877-09-8	Tetrachloro-m-xylene	171% ^a		10-163%
2051-24-3	Decachlorobiphenyl	159%		10-215%
2051-24-3	Decachlorobiphenyl	180%		10-215%

(a) High percent recoveries and no positive found in the sample.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A2 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39776-2	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.0
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	13700	58	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Antimony ^a	< 4.6	4.6	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Arsenic	2.9	2.3	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Barium	91.5	23	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Beryllium ^a	0.73	0.46	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Cadmium	< 0.58	0.58	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Calcium	1190	580	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Chromium	25.7	1.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cobalt	9.8	5.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Copper	30.8	2.9	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Iron	22000	58	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Lead	11.1	2.3	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Magnesium	4300	580	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Manganese	310	1.7	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	< 0.037	0.037	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹	SW846 7471B ⁵
Nickel	19.4	4.6	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Potassium	3990	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Selenium	< 2.3	2.3	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Silver ^a	< 1.2	1.2	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Sodium	< 1200	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Thallium ^a	< 2.3	2.3	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Vanadium	32.7	5.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Zinc	51.3	5.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Instrument QC Batch: MA51931

(4) Prep QC Batch: MP31339

(5) Prep QC Batch: MP31347

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WC-A2 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39776-2	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.0
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.33	0.33	mg/kg	1	02/17/22 13:16	MM	SW846 9012B/LACHAT
Solids, Percent	86		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.3
4

Report of Analysis

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Client Sample ID:	WC-A2 (7.5-15')	
Lab Sample ID:	JD39776-2A	Date Sampled: 02/14/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 86.0
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55199.D	1	02/25/22 23:59	AFL	02/18/22 08:30	F:OP89836	F:S3Q762
Run #2							

	Initial Weight	Final Volume
Run #1	2.00 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.44	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.29	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.58	0.29	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.58	0.29	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.58	0.29	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.58	0.29	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.58	0.29	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.58	0.29	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.58	0.29	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.58	0.31	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.58	0.29	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.58	0.29	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.58	0.29	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.58	0.29	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.58	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.58	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.58	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.58	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.58	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	

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Report of Analysis

Client Sample ID:	WC-A2 (7.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39776-2A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.0
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	89%		40-140%
	13C5-PFPeA	89%		50-150%
	13C5-PFHxA	91%		50-150%
	13C4-PFHpA	96%		50-150%
	13C8-PFOA	97%		50-150%
	13C9-PFNA	100%		50-150%
	13C6-PFDA	106%		50-150%
	13C7-PFUnDA	111%		40-140%
	13C2-PFDoDA	99%		40-140%
	13C2-PFTeDA	95%		30-130%
	13C3-PFBS	91%		50-150%
	13C3-PFHxS	96%		50-150%
	13C8-PFOS	102%		50-150%
	13C8-FOSA	90%		30-130%
	d3-MeFOSAA	74%		40-140%
	d5-EtFOSAA	81%		40-140%
	13C2-6:2FTS	92%		50-150%
	13C2-8:2FTS	100%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	WC-B2 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-3	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	85.2
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242314.D	1	02/17/22 14:22	PS	02/16/22 11:00	n/a	VI9840
Run #2							

	Initial Weight
Run #1	6.0 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	9.8	4.0	ug/kg	
71-43-2	Benzene	ND	0.49	0.45	ug/kg	
74-97-5	Bromochloromethane	ND	4.9	0.55	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.42	ug/kg	
75-25-2	Bromoform	ND	4.9	1.3	ug/kg	
74-83-9	Bromomethane ^a	ND	4.9	0.75	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.8	2.4	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.52	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.60	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.45	ug/kg	
75-00-3	Chloroethane ^b	ND	4.9	0.58	ug/kg	
67-66-3	Chloroform	ND	2.0	0.51	ug/kg	
74-87-3	Chloromethane	ND	4.9	1.9	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.64	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.68	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.55	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.98	0.41	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.98	0.53	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.98	0.49	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.98	0.48	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.9	0.71	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.98	0.48	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.98	0.46	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.98	0.64	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.98	0.82	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.98	0.60	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.46	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.46	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.45	ug/kg	
100-41-4	Ethylbenzene	ND	0.98	0.44	ug/kg	
76-13-1	Freon 113	ND	4.9	2.6	ug/kg	
591-78-6	2-Hexanone	ND	4.9	2.1	ug/kg	

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Report of Analysis

Page 2 of 2

Client Sample ID:	WC-B2 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-3	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	85.2
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	1.4	ug/kg	
79-20-9	Methyl Acetate	ND	4.9	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.86	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.98	0.46	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.9	2.2	ug/kg	
75-09-2	Methylene chloride	ND	4.9	2.6	ug/kg	
100-42-5	Styrene	ND	2.0	0.39	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.59	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.57	ug/kg	
108-88-3	Toluene	ND	0.98	0.51	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.9	2.4	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	2.4	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.47	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.54	ug/kg	
79-01-6	Trichloroethene	ND	0.98	0.75	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.9	0.67	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.47	ug/kg	
	m,p-Xylene	ND	0.98	0.88	ug/kg	
95-47-6	o-Xylene	ND	0.98	0.45	ug/kg	
1330-20-7	Xylene (total)	ND	0.98	0.45	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		80-124%
17060-07-0	1,2-Dichloroethane-D4	117%		75-133%
2037-26-5	Toluene-D8	100%		79-125%
460-00-4	4-Bromofluorobenzene	93%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

(b) This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.

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Report of Analysis

Page 1 of 3

Client Sample ID:	WC-B2 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-3	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	85.2
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155097.D	1	02/18/22 04:22	CS	02/16/22 11:30	OP38181	EZ7706
Run #2							

Run #	Initial Weight	Final Volume
Run #1	31.0 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	76	19	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	32	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	67	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	190	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	190	41	ug/kg	
95-48-7	2-Methylphenol	ND	76	24	ug/kg	
	3&4-Methylphenol	ND	76	31	ug/kg	
88-75-5	2-Nitrophenol	ND	190	25	ug/kg	
100-02-7	4-Nitrophenol	ND	380	100	ug/kg	
87-86-5	Pentachlorophenol	ND	150	36	ug/kg	
108-95-2	Phenol	ND	76	20	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	190	25	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	28	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	23	ug/kg	
83-32-9	Acenaphthene	ND	38	13	ug/kg	
208-96-8	Acenaphthylene	ND	38	19	ug/kg	
98-86-2	Acetophenone	ND	190	8.1	ug/kg	
120-12-7	Anthracene	ND	38	23	ug/kg	
1912-24-9	Atrazine	ND	76	16	ug/kg	
56-55-3	Benzo(a)anthracene	ND	38	11	ug/kg	
50-32-8	Benzo(a)pyrene	ND	38	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	38	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	38	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	38	18	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	76	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	76	9.2	ug/kg	
92-52-4	1,1'-Biphenyl	ND	76	5.2	ug/kg	
100-52-7	Benzaldehyde	ND	190	9.4	ug/kg	
91-58-7	2-Chloronaphthalene	ND	76	9.0	ug/kg	
106-47-8	4-Chloroaniline	ND	190	14	ug/kg	
86-74-8	Carbazole	ND	76	5.5	ug/kg	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	WC-B2 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-3	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	85.2
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	76	15	ug/kg	
218-01-9	Chrysene	ND	38	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	76	8.1	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	76	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	76	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	76	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	38	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	38	19	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	76	32	ug/kg	
123-91-1	1,4-Dioxane	ND	38	25	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	38	17	ug/kg	
132-64-9	Dibenzofuran	ND	76	15	ug/kg	
84-74-2	Di-n-butyl phthalate	156	76	6.2	ug/kg	B
117-84-0	Di-n-octyl phthalate	ND	76	9.4	ug/kg	
84-66-2	Diethyl phthalate	ND	76	8.1	ug/kg	
131-11-3	Dimethyl phthalate	ND	76	6.7	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	76	8.9	ug/kg	
206-44-0	Fluoranthene	ND	38	17	ug/kg	
86-73-7	Fluorene	ND	38	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	76	9.6	ug/kg	
87-68-3	Hexachlorobutadiene ^a	ND	38	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	380	15	ug/kg	
67-72-1	Hexachloroethane	ND	190	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	38	18	ug/kg	
78-59-1	Isophorone	ND	76	8.1	ug/kg	
91-57-6	2-Methylnaphthalene	ND	38	8.6	ug/kg	
88-74-4	2-Nitroaniline	ND	190	8.9	ug/kg	
99-09-2	3-Nitroaniline	ND	190	9.5	ug/kg	
100-01-6	4-Nitroaniline	ND	190	9.8	ug/kg	
91-20-3	Naphthalene	ND	38	11	ug/kg	
98-95-3	Nitrobenzene	ND	76	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	76	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	14	ug/kg	
85-01-8	Phenanthrene	ND	38	13	ug/kg	
129-00-0	Pyrene	ND	38	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	190	9.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	60%		10-109%

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	WC-B2 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-3	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	85.2
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	56%		10-105%
118-79-6	2,4,6-Tribromophenol	58%		10-135%
4165-60-0	Nitrobenzene-d5	63%		10-119%
321-60-8	2-Fluorobiphenyl	70%		18-112%
1718-51-0	Terphenyl-d14	77%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	System artifact	3.32	220	ug/kg	J
	System artifact/aldol-condensation	3.38	1700	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B2 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-3	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	85.2
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174374.D	1	02/21/22 15:35	TL	02/16/22 13:50	OP38184	G1G6024
Run #2							

	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.75	0.62	ug/kg	
319-84-6	alpha-BHC	ND	0.75	0.61	ug/kg	
319-85-7	beta-BHC	ND	0.75	0.68	ug/kg	
319-86-8	delta-BHC	ND	0.75	0.72	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.75	0.55	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.75	0.60	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.75	0.34	ug/kg	
60-57-1	Dieldrin	ND	0.75	0.51	ug/kg	
72-54-8	4,4' -DDD	1.8	0.75	0.69	ug/kg	
72-55-9	4,4' -DDE	ND	0.75	0.66	ug/kg	
50-29-3	4,4' -DDT	2.2	0.75	0.66	ug/kg	
72-20-8	Endrin	ND	0.75	0.58	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.75	0.58	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.75	0.42	ug/kg	
959-98-8	Endosulfan-I	ND	0.75	0.43	ug/kg	
33213-65-9	Endosulfan-II	ND	0.75	0.47	ug/kg	
76-44-8	Heptachlor	ND	0.75	0.64	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.75	0.52	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.59	ug/kg	
53494-70-5	Endrin ketone	ND	0.75	0.54	ug/kg	
8001-35-2	Toxaphene	ND	19	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	138%		14-145%
877-09-8	Tetrachloro-m-xylene	137%		14-145%
2051-24-3	Decachlorobiphenyl	94%		10-197%
2051-24-3	Decachlorobiphenyl	129%		10-197%

ND = Not detected MDL = Method Detection Limit

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B2 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-3	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	85.2
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G114272.D	1	02/21/22 00:05	TL	02/16/22 13:50	OP38185	G5G2906
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	39	18	ug/kg	
11104-28-2	Aroclor 1221	ND	39	24	ug/kg	
11141-16-5	Aroclor 1232	ND	39	25	ug/kg	
53469-21-9	Aroclor 1242	ND	39	16	ug/kg	
12672-29-6	Aroclor 1248	ND	39	35	ug/kg	
11097-69-1	Aroclor 1254	ND	39	21	ug/kg	
11096-82-5	Aroclor 1260	ND	39	17	ug/kg	
11100-14-4	Aroclor 1268	ND	39	16	ug/kg	
37324-23-5	Aroclor 1262	ND	39	25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	79%		10-163%
877-09-8	Tetrachloro-m-xylene	89%		10-163%
2051-24-3	Decachlorobiphenyl	88%		10-215%
2051-24-3	Decachlorobiphenyl	100%		10-215%

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Report of Analysis

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Client Sample ID:	WC-B2 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-3	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	85.2
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	14600	57	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Antimony ^a	< 4.6	4.6	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Arsenic ^a	< 4.6	4.6	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Barium	90.8	23	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Beryllium ^a	0.82	0.46	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Cadmium	< 0.57	0.57	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Calcium	1630	570	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Chromium	30.2	1.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Cobalt	12.3	5.7	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Copper ^a	32.5	5.7	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Iron	26400	110	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Lead	10.3	2.3	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Magnesium	4570	570	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Manganese	359	1.7	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Mercury	< 0.038	0.038	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹
Nickel	23.7	4.6	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Potassium	3830	1100	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Selenium ^a	< 4.6	4.6	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Silver ^a	< 1.1	1.1	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Sodium	< 1100	1100	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Thallium ^a	< 2.3	2.3	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Vanadium	38.3	5.7	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Zinc	63.7	5.7	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Instrument QC Batch: MA51931

(4) Prep QC Batch: MP31339

(5) Prep QC Batch: MP31347

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WC-B2 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-3	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	85.2
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.29	0.29	mg/kg	1	02/17/22 13:17	MM	SW846 9012B/LACHAT
Solids, Percent	85.2		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.5
4

Report of Analysis

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Client Sample ID:	WC-B2 (0-7.5')	
Lab Sample ID:	JD39776-3A	Date Sampled: 02/15/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 85.2
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55200.D	1	02/26/22 00:15	AFL	02/18/22 08:30	F:OP89836	F:S3Q762
Run #2							

	Initial Weight	Final Volume
Run #1	2.04 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.44	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.29	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.58	0.29	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.58	0.29	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.58	0.29	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.58	0.29	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.58	0.29	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.58	0.29	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.58	0.29	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.58	0.30	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.58	0.29	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.58	0.29	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.58	0.29	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.58	0.29	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.33	0.58	0.23	ug/kg	J
335-77-3	Perfluorodecanesulfonic acid	ND	0.58	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.58	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.58	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.58	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	

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Report of Analysis

Client Sample ID:	WC-B2 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-3A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	85.2
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	98%		40-140%
	13C5-PFPeA	97%		50-150%
	13C5-PFHxA	98%		50-150%
	13C4-PFHpA	102%		50-150%
	13C8-PFOA	102%		50-150%
	13C9-PFNA	107%		50-150%
	13C6-PFDA	111%		50-150%
	13C7-PFUnDA	122%		40-140%
	13C2-PFDoDA	112%		40-140%
	13C2-PFTeDA	106%		30-130%
	13C3-PFBS	100%		50-150%
	13C3-PFHxS	104%		50-150%
	13C8-PFOS	105%		50-150%
	13C8-FOSA	91%		30-130%
	d3-MeFOSAA	74%		40-140%
	d5-EtFOSAA	79%		40-140%
	13C2-6:2FTS	101%		50-150%
	13C2-8:2FTS	113%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-B2 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-4	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.8
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242315.D	1	02/17/22 14:44	PS	02/16/22 11:00	n/a	VI9840
Run #2							

	Initial Weight
Run #1	6.4 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	12.2	8.8	3.6	ug/kg	
71-43-2	Benzene	ND	0.44	0.40	ug/kg	
74-97-5	Bromochloromethane	ND	4.4	0.49	ug/kg	
75-27-4	Bromodichloromethane	ND	1.8	0.38	ug/kg	
75-25-2	Bromoform	ND	4.4	1.2	ug/kg	
74-83-9	Bromomethane ^a	ND	4.4	0.67	ug/kg	
78-93-3	2-Butanone (MEK)	ND	8.8	2.1	ug/kg	
75-15-0	Carbon disulfide	ND	1.8	0.47	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.8	0.54	ug/kg	
108-90-7	Chlorobenzene	ND	1.8	0.40	ug/kg	
75-00-3	Chloroethane ^b	ND	4.4	0.52	ug/kg	
67-66-3	Chloroform	ND	1.8	0.46	ug/kg	
74-87-3	Chloromethane	ND	4.4	1.7	ug/kg	
110-82-7	Cyclohexane	ND	1.8	0.58	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.8	0.61	ug/kg	
124-48-1	Dibromochloromethane	ND	1.8	0.49	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.88	0.37	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.88	0.48	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.88	0.44	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.88	0.43	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.4	0.64	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.88	0.44	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.88	0.41	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.88	0.58	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.88	0.74	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.88	0.54	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.8	0.42	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.8	0.42	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.8	0.40	ug/kg	
100-41-4	Ethylbenzene	ND	0.88	0.40	ug/kg	
76-13-1	Freon 113	ND	4.4	2.3	ug/kg	
591-78-6	2-Hexanone	ND	4.4	1.9	ug/kg	

ND = Not detected MDL = Method Detection Limit

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	WC-B2 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-4	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.8
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.8	1.2	ug/kg	
79-20-9	Methyl Acetate	ND	4.4	1.2	ug/kg	
108-87-2	Methylcyclohexane	ND	1.8	0.77	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.88	0.41	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.4	2.0	ug/kg	
75-09-2	Methylene chloride	ND	4.4	2.3	ug/kg	
100-42-5	Styrene	ND	1.8	0.35	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.8	0.53	ug/kg	
127-18-4	Tetrachloroethene	ND	1.8	0.51	ug/kg	
108-88-3	Toluene	ND	0.88	0.46	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.4	2.2	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.4	2.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.8	0.42	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.8	0.49	ug/kg	
79-01-6	Trichloroethene	ND	0.88	0.67	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.4	0.60	ug/kg	
75-01-4	Vinyl chloride	ND	1.8	0.42	ug/kg	
	m,p-Xylene	ND	0.88	0.79	ug/kg	
95-47-6	o-Xylene	ND	0.88	0.40	ug/kg	
1330-20-7	Xylene (total)	ND	0.88	0.40	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		80-124%
17060-07-0	1,2-Dichloroethane-D4	118%		75-133%
2037-26-5	Toluene-D8	101%		79-125%
460-00-4	4-Bromofluorobenzene	90%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

(b) This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	WC-B2 (7.5-15')	
Lab Sample ID:	JD39776-4	Date Sampled: 02/15/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	SW846 8270E SW846 3546	Percent Solids: 88.8
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155098.D	1	02/18/22 04:48	CS	02/16/22 11:30	OP38181	EZ7706
Run #2							

	Initial Weight	Final Volume
Run #1	31.7 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	71	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	22	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	30	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	63	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	180	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	180	38	ug/kg	
95-48-7	2-Methylphenol	ND	71	23	ug/kg	
	3&4-Methylphenol	ND	71	29	ug/kg	
88-75-5	2-Nitrophenol	ND	180	23	ug/kg	
100-02-7	4-Nitrophenol	ND	360	95	ug/kg	
87-86-5	Pentachlorophenol	ND	140	33	ug/kg	
108-95-2	Phenol	ND	71	19	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	24	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	27	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	21	ug/kg	
83-32-9	Acenaphthene	ND	36	12	ug/kg	
208-96-8	Acenaphthylene	ND	36	18	ug/kg	
98-86-2	Acetophenone	ND	180	7.6	ug/kg	
120-12-7	Anthracene	ND	36	22	ug/kg	
1912-24-9	Atrazine	ND	71	15	ug/kg	
56-55-3	Benzo(a)anthracene	17.7	36	10	ug/kg	J
50-32-8	Benzo(a)pyrene	ND	36	16	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	36	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	36	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	36	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	71	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	71	8.7	ug/kg	
92-52-4	1,1'-Biphenyl	ND	71	4.9	ug/kg	
100-52-7	Benzaldehyde	ND	180	8.8	ug/kg	
91-58-7	2-Chloronaphthalene	ND	71	8.5	ug/kg	
106-47-8	4-Chloroaniline	ND	180	13	ug/kg	
86-74-8	Carbazole	ND	71	5.2	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	WC-B2 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-4	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.8
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	71	14	ug/kg	
218-01-9	Chrysene	13.1	36	11	ug/kg	J
111-91-1	bis(2-Chloroethoxy)methane	ND	71	7.6	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	71	15	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	71	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	71	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	36	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	36	18	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	71	30	ug/kg	
123-91-1	1,4-Dioxane	ND	36	23	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	36	16	ug/kg	
132-64-9	Dibenzofuran	ND	71	14	ug/kg	
84-74-2	Di-n-butyl phthalate	89.8	71	5.8	ug/kg	B
117-84-0	Di-n-octyl phthalate	ND	71	8.8	ug/kg	
84-66-2	Diethyl phthalate	ND	71	7.6	ug/kg	
131-11-3	Dimethyl phthalate	ND	71	6.3	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	71	8.3	ug/kg	
206-44-0	Fluoranthene	20.6	36	16	ug/kg	J
86-73-7	Fluorene	ND	36	16	ug/kg	
118-74-1	Hexachlorobenzene	ND	71	9.0	ug/kg	
87-68-3	Hexachlorobutadiene ^a	ND	36	14	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	360	14	ug/kg	
67-72-1	Hexachloroethane	ND	180	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	36	17	ug/kg	
78-59-1	Isophorone	ND	71	7.6	ug/kg	
91-57-6	2-Methylnaphthalene	ND	36	8.0	ug/kg	
88-74-4	2-Nitroaniline	ND	180	8.4	ug/kg	
99-09-2	3-Nitroaniline	ND	180	8.9	ug/kg	
100-01-6	4-Nitroaniline	ND	180	9.2	ug/kg	
91-20-3	Naphthalene	ND	36	10	ug/kg	
98-95-3	Nitrobenzene	ND	71	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	71	10	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	13	ug/kg	
85-01-8	Phenanthrene	ND	36	12	ug/kg	
129-00-0	Pyrene	26.0	36	11	ug/kg	J
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	9.0	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	60%		10-109%

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Report of Analysis

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Client Sample ID:	WC-B2 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-4	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.8
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	54%		10-105%
118-79-6	2,4,6-Tribromophenol	60%		10-135%
4165-60-0	Nitrobenzene-d5	63%		10-119%
321-60-8	2-Fluorobiphenyl	70%		18-112%
1718-51-0	Terphenyl-d14	77%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	System artifact	3.32	230	ug/kg	J
	System artifact/aldol-condensation	3.37	590	ug/kg	J
10544-50-0	Cyclic octaatomic sulfur	10.15	220	ug/kg	JN
	Total TIC, Semi-Volatile		220	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

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 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B2 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-4	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.8
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174375.D	1	02/21/22 15:54	TL	02/16/22 13:50	OP38184	G1G6024
Run #2							

	Initial Weight	Final Volume
Run #1	16.4 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.69	0.57	ug/kg	
319-84-6	alpha-BHC	ND	0.69	0.56	ug/kg	
319-85-7	beta-BHC	ND	0.69	0.62	ug/kg	
319-86-8	delta-BHC	ND	0.69	0.66	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.69	0.51	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.69	0.55	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.69	0.31	ug/kg	
60-57-1	Dieldrin	ND	0.69	0.47	ug/kg	
72-54-8	4,4' -DDD	ND	0.69	0.63	ug/kg	
72-55-9	4,4' -DDE	ND	0.69	0.60	ug/kg	
50-29-3	4,4' -DDT	ND	0.69	0.61	ug/kg	
72-20-8	Endrin	ND	0.69	0.53	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.69	0.54	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.69	0.39	ug/kg	
959-98-8	Endosulfan-I	ND	0.69	0.40	ug/kg	
33213-65-9	Endosulfan-II	ND	0.69	0.43	ug/kg	
76-44-8	Heptachlor	ND	0.69	0.59	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.69	0.48	ug/kg	
72-43-5	Methoxychlor	ND	1.4	0.55	ug/kg	
53494-70-5	Endrin ketone	ND	0.69	0.50	ug/kg	
8001-35-2	Toxaphene	ND	17	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	99%		14-145%
877-09-8	Tetrachloro-m-xylene	96%		14-145%
2051-24-3	Decachlorobiphenyl	81%		10-197%
2051-24-3	Decachlorobiphenyl	94%		10-197%

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Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B2 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-4	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.8
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G114273.D	1	02/21/22 00:21	TL	02/16/22 13:50	OP38185	G5G2906
Run #2							

	Initial Weight	Final Volume
Run #1	16.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	34	16	ug/kg	
11104-28-2	Aroclor 1221	ND	34	21	ug/kg	
11141-16-5	Aroclor 1232	ND	34	22	ug/kg	
53469-21-9	Aroclor 1242	ND	34	14	ug/kg	
12672-29-6	Aroclor 1248	ND	34	31	ug/kg	
11097-69-1	Aroclor 1254	ND	34	18	ug/kg	
11096-82-5	Aroclor 1260	ND	34	15	ug/kg	
11100-14-4	Aroclor 1268	ND	34	14	ug/kg	
37324-23-5	Aroclor 1262	ND	34	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%		10-163%
877-09-8	Tetrachloro-m-xylene	104%		10-163%
2051-24-3	Decachlorobiphenyl	100%		10-215%
2051-24-3	Decachlorobiphenyl	109%		10-215%

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Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B2 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-4	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.8
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	13200	56	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Antimony ^a	< 4.5	4.5	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Arsenic ^a	< 4.5	4.5	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Barium	93.1	23	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Beryllium ^a	0.73	0.45	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Cadmium	< 0.56	0.56	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Calcium	1530	560	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Chromium	29.7	1.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Cobalt	10.9	5.6	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Copper ^a	30.2	5.6	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Iron	24700	110	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Lead	8.5	2.3	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Magnesium	4230	560	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Manganese	317	1.7	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Mercury	0.10	0.034	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹
Nickel	23.0	4.5	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Potassium	3620	1100	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Selenium ^a	< 4.5	4.5	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Silver ^a	< 1.1	1.1	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Sodium	< 1100	1100	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Thallium ^a	< 2.3	2.3	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Vanadium	36.9	5.6	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Zinc	58.9	5.6	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Instrument QC Batch: MA51931

(4) Prep QC Batch: MP31339

(5) Prep QC Batch: MP31347

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WC-B2 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-4	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.8
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.26	0.26	mg/kg	1	02/17/22 13:19	MM	SW846 9012B/LACHAT
Solids, Percent	88.8		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.7
4

Report of Analysis

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Client Sample ID:	WC-B2 (7.5-15')	
Lab Sample ID:	JD39776-4A	Date Sampled: 02/15/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 88.8
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55201.D	1	02/26/22 00:32	AFL	02/18/22 08:30	F:OP89836	F:S3Q762
Run #2							

	Initial Weight	Final Volume
Run #1	2.05 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.42	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.27	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.55	0.27	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.55	0.27	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.55	0.27	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.55	0.27	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.55	0.27	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.55	0.27	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.55	0.27	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.55	0.29	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.55	0.27	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.55	0.27	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.55	0.27	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.55	0.27	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.55	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.55	0.27	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.55	0.27	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.1	0.55	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.55	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	

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Report of Analysis

Client Sample ID:	WC-B2 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-4A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.8
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	89%		40-140%
	13C5-PFPeA	88%		50-150%
	13C5-PFHxA	90%		50-150%
	13C4-PFHpA	92%		50-150%
	13C8-PFOA	95%		50-150%
	13C9-PFNA	97%		50-150%
	13C6-PFDA	95%		50-150%
	13C7-PFUnDA	99%		40-140%
	13C2-PFDoDA	87%		40-140%
	13C2-PFTeDA	94%		30-130%
	13C3-PFBS	91%		50-150%
	13C3-PFHxS	91%		50-150%
	13C8-PFOS	94%		50-150%
	13C8-FOSA	83%		30-130%
	d3-MeFOSAA	77%		40-140%
	d5-EtFOSAA	79%		40-140%
	13C2-6:2FTS	93%		50-150%
	13C2-8:2FTS	95%		50-150%

(a) Analysis performed at SGS Orlando, FL.

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Report of Analysis

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Client Sample ID:	WC-A3 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-5	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.5
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242316.D	1	02/17/22 15:06	PS	02/16/22 15:00	n/a	VI9840
Run #2							

	Initial Weight
Run #1	5.8 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	7.5	9.9	4.1	ug/kg	J
71-43-2	Benzene	ND	0.49	0.45	ug/kg	
74-97-5	Bromochloromethane	ND	4.9	0.55	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.42	ug/kg	
75-25-2	Bromoform	ND	4.9	1.3	ug/kg	
74-83-9	Bromomethane ^a	ND	4.9	0.75	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.9	2.4	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.53	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.61	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.45	ug/kg	
75-00-3	Chloroethane ^b	ND	4.9	0.58	ug/kg	
67-66-3	Chloroform	ND	2.0	0.51	ug/kg	
74-87-3	Chloromethane	ND	4.9	1.9	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.65	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.68	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.55	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.99	0.41	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.99	0.54	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.99	0.49	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.99	0.49	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.9	0.72	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.99	0.49	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.99	0.46	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.99	0.65	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.99	0.83	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.99	0.60	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.47	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.47	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.45	ug/kg	
100-41-4	Ethylbenzene	ND	0.99	0.45	ug/kg	
76-13-1	Freon 113	ND	4.9	2.6	ug/kg	
591-78-6	2-Hexanone	ND	4.9	2.1	ug/kg	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	WC-A3 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-5	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.5
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	1.4	ug/kg	
79-20-9	Methyl Acetate	ND	4.9	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.86	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.99	0.46	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.9	2.2	ug/kg	
75-09-2	Methylene chloride	ND	4.9	2.6	ug/kg	
100-42-5	Styrene	ND	2.0	0.40	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.59	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.57	ug/kg	
108-88-3	Toluene	ND	0.99	0.52	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.9	2.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	2.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.48	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.55	ug/kg	
79-01-6	Trichloroethene	ND	0.99	0.75	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.9	0.67	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.47	ug/kg	
	m,p-Xylene	ND	0.99	0.88	ug/kg	
95-47-6	o-Xylene	ND	0.99	0.45	ug/kg	
1330-20-7	Xylene (total)	ND	0.99	0.45	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		80-124%
17060-07-0	1,2-Dichloroethane-D4	122%		75-133%
2037-26-5	Toluene-D8	101%		79-125%
460-00-4	4-Bromofluorobenzene	89%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	3.65	6.4	ug/kg	J
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

(b) This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	WC-A3 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-5	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.5
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155106.D	1	02/18/22 08:17	CS	02/16/22 11:30	OP38181	EZ7706
Run #2	Z155121.D	5	02/18/22 19:33	JY	02/16/22 11:30	OP38181	EZ7707

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2	30.0 g	1.0 ml

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	76	19	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	32	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	68	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	190	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	190	41	ug/kg	
95-48-7	2-Methylphenol	ND	76	24	ug/kg	
	3&4-Methylphenol	ND	76	31	ug/kg	
88-75-5	2-Nitrophenol	ND	190	25	ug/kg	
100-02-7	4-Nitrophenol	ND	380	100	ug/kg	
87-86-5	Pentachlorophenol	ND	150	36	ug/kg	
108-95-2	Phenol	ND	76	20	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	190	25	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	29	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	23	ug/kg	
83-32-9	Acenaphthene	650	38	13	ug/kg	
208-96-8	Acenaphthylene	ND	38	19	ug/kg	
98-86-2	Acetophenone	ND	190	8.2	ug/kg	
120-12-7	Anthracene	1000	38	23	ug/kg	
1912-24-9	Atrazine	ND	76	16	ug/kg	
56-55-3	Benzo(a)anthracene	1550	38	11	ug/kg	
50-32-8	Benzo(a)pyrene	1130	38	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	1320	38	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	589	38	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	458	38	18	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	76	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	76	9.3	ug/kg	
92-52-4	1,1'-Biphenyl	46.5	76	5.2	ug/kg	J
100-52-7	Benzaldehyde	ND	190	9.4	ug/kg	
91-58-7	2-Chloronaphthalene	ND	76	9.1	ug/kg	
106-47-8	4-Chloroaniline	ND	190	14	ug/kg	
86-74-8	Carbazole	307	76	5.5	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-A3 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-5	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.5
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	76	15	ug/kg	
218-01-9	Chrysene	1510	38	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	76	8.2	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	76	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	76	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	76	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	38	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	38	19	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	76	32	ug/kg	
123-91-1	1,4-Dioxane	ND	38	25	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	186	38	17	ug/kg	
132-64-9	Dibenzofuran	195	76	16	ug/kg	
84-74-2	Di-n-butyl phthalate	114	76	6.2	ug/kg	B
117-84-0	Di-n-octyl phthalate	ND	76	9.5	ug/kg	
84-66-2	Diethyl phthalate	ND	76	8.1	ug/kg	
131-11-3	Dimethyl phthalate	ND	76	6.8	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	76	8.9	ug/kg	
206-44-0	Fluoranthene	3000	38	17	ug/kg	
86-73-7	Fluorene	540	38	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	76	9.6	ug/kg	
87-68-3	Hexachlorobutadiene ^a	ND	38	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	380	15	ug/kg	
67-72-1	Hexachloroethane	ND	190	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	698	38	18	ug/kg	
78-59-1	Isophorone	ND	76	8.2	ug/kg	
91-57-6	2-Methylnaphthalene	237	38	8.6	ug/kg	
88-74-4	2-Nitroaniline	ND	190	9.0	ug/kg	
99-09-2	3-Nitroaniline	ND	190	9.5	ug/kg	
100-01-6	4-Nitroaniline	ND	190	9.9	ug/kg	
91-20-3	Naphthalene	149	38	11	ug/kg	
98-95-3	Nitrobenzene	ND	76	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	76	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	14	ug/kg	
85-01-8	Phenanthrene	4240 ^b	190	64	ug/kg	
129-00-0	Pyrene	3040	38	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	190	9.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	53%	50%	10-109%

ND = Not detected MDL = Method Detection Limit

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-A3 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-5	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.5
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	48%	47%	10-105%
118-79-6	2,4,6-Tribromophenol	55%	47%	10-135%
4165-60-0	Nitrobenzene-d5	57%	52%	10-119%
321-60-8	2-Fluorobiphenyl	64%	55%	18-112%
1718-51-0	Terphenyl-d14	59%	57%	18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.32	190	ug/kg	J
	system artifact/aldol-condensation	3.36	180	ug/kg	J
90-12-0	Naphthalene, 1-methyl-	6.12	240	ug/kg	JN
	Naphthalene dimethyl	6.59	240	ug/kg	J
	unknown	7.48	260	ug/kg	J
	9H-Fluorene methyl	8.00	290	ug/kg	J
486-25-9	9H-Fluorene-9-one	8.23	180	ug/kg	JN
	unknown	8.30	200	ug/kg	J
132-65-0	Dibenzothiophene	8.33	270	ug/kg	JN
	Phenanthrene methyl	9.12	850	ug/kg	J
	Anthracene methyl	9.15	980	ug/kg	J
	Phenanthrene methyl	9.21	330	ug/kg	J
	unknown	9.54	730	ug/kg	J
	Phenanthrene dimethyl	9.89	480	ug/kg	J
	Phenanthrene dimethyl	9.93	360	ug/kg	J
	Phenanthrene dimethyl	10.01	270	ug/kg	J
10544-50-0	Cyclic octaatomic sulfur	10.15	870	ug/kg	JN
	unknown	10.30	220	ug/kg	J
	Pyrene methyl	10.92	340	ug/kg	J
	Chrysene methyl	12.87	180	ug/kg	J
	unknown PAH substance	13.95	250	ug/kg	J
	unknown PAH substance	14.18	780	ug/kg	J
	unknown	15.42	180	ug/kg	J
	unknown	15.54	300	ug/kg	J
	unknown	15.83	250	ug/kg	J
	unknown	15.87	210	ug/kg	J
	unknown	16.18	200	ug/kg	J
	Total TIC, Semi-Volatile		9460	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

(b) Result is from Run# 2

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A3 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-5	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.5
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1G174443.D	1	02/22/22 20:34	TL	02/16/22 13:50	OP38184	G1G6026
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.75	0.62	ug/kg	
319-84-6	alpha-BHC	ND	0.75	0.61	ug/kg	
319-85-7	beta-BHC	ND	0.75	0.68	ug/kg	
319-86-8	delta-BHC	ND	0.75	0.72	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.75	0.55	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.75	0.60	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.75	0.34	ug/kg	
60-57-1	Dieldrin	ND	0.75	0.51	ug/kg	
72-54-8	4,4' -DDD	ND	0.75	0.69	ug/kg	
72-55-9	4,4' -DDE	ND	0.75	0.66	ug/kg	
50-29-3	4,4' -DDT	ND	0.75	0.66	ug/kg	
72-20-8	Endrin	ND	0.75	0.58	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.75	0.58	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.75	0.42	ug/kg	
959-98-8	Endosulfan-I	ND	0.75	0.43	ug/kg	
33213-65-9	Endosulfan-II	ND	0.75	0.47	ug/kg	
76-44-8	Heptachlor	ND	0.75	0.64	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.75	0.52	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.59	ug/kg	
53494-70-5	Endrin ketone	ND	0.75	0.54	ug/kg	
8001-35-2	Toxaphene	ND	19	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	121%		14-145%
877-09-8	Tetrachloro-m-xylene	111%		14-145%
2051-24-3	Decachlorobiphenyl	124%		10-197%
2051-24-3	Decachlorobiphenyl	129%		10-197%

(a) Had TBA cleanup.

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A3 (0-7.5')		
Lab Sample ID:	JD39776-5	Date Sampled:	02/15/22
Matrix:	SO - Soil	Date Received:	02/15/22
Method:	SW846 8082A SW846 3546	Percent Solids:	87.5
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G213473.D	1	02/24/22 01:19	CP	02/16/22 13:50	OP38185	G2G5601
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	17	ug/kg	
11104-28-2	Aroclor 1221	ND	37	23	ug/kg	
11141-16-5	Aroclor 1232	ND	37	24	ug/kg	
53469-21-9	Aroclor 1242	ND	37	15	ug/kg	
12672-29-6	Aroclor 1248	ND	37	33	ug/kg	
11097-69-1	Aroclor 1254	ND	37	20	ug/kg	
11096-82-5	Aroclor 1260	ND	37	16	ug/kg	
11100-14-4	Aroclor 1268	ND	37	16	ug/kg	
37324-23-5	Aroclor 1262	ND	37	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	126%		10-163%
877-09-8	Tetrachloro-m-xylene	127%		10-163%
2051-24-3	Decachlorobiphenyl	147%		10-215%
2051-24-3	Decachlorobiphenyl	158%		10-215%

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Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A3 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-5	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.5
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	20900	55	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Antimony ^a	< 11	11	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Arsenic ^a	< 11	11	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Barium	162	22	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Beryllium ^a	1.4	1.1	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Cadmium	< 0.55	0.55	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Calcium	1780	550	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Chromium	34.6	1.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cobalt	17.2	5.5	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Copper ^a	43.9	14	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Iron	39600	280	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Lead	29.0	2.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Magnesium	8040	550	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Manganese	1020	8.3	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Mercury	0.043	0.035	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹	SW846 7471B ⁵
Nickel	25.9	4.4	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Potassium	8790	1100	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Selenium ^a	< 11	11	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Silver ^a	< 2.8	2.8	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Sodium	< 1100	1100	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Thallium ^a	< 5.5	5.5	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Vanadium	46.2	5.5	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Zinc	98.4	5.5	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Instrument QC Batch: MA51931

(4) Prep QC Batch: MP31340

(5) Prep QC Batch: MP31347

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WC-A3 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-5	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.5
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.27	0.27	mg/kg	1	02/17/22 13:20	MM	SW846 9012B/LACHAT
Solids, Percent	87.5		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	WC-A3 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-5A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.5
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55202.D	1	02/26/22 00:48	AFL	02/18/22 08:30	F:OP89836	F:S3Q762
Run #2							

	Initial Weight	Final Volume
Run #1	1.98 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.44	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.29	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.58	0.29	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.58	0.29	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.58	0.29	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.58	0.29	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.58	0.29	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.58	0.29	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.58	0.29	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.58	0.31	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.58	0.29	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.58	0.29	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.58	0.29	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.58	0.29	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.58	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.58	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.58	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.58	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.58	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-A3 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-5A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.5
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	77%		40-140%
	13C5-PFPeA	76%		50-150%
	13C5-PFHxA	77%		50-150%
	13C4-PFHpA	79%		50-150%
	13C8-PFOA	81%		50-150%
	13C9-PFNA	83%		50-150%
	13C6-PFDA	84%		50-150%
	13C7-PFUnDA	86%		40-140%
	13C2-PFDoDA	76%		40-140%
	13C2-PFTeDA	84%		30-130%
	13C3-PFBS	80%		50-150%
	13C3-PFHxS	79%		50-150%
	13C8-PFOS	81%		50-150%
	13C8-FOSA	60%		30-130%
	d3-MeFOSAA	42%		40-140%
	d5-EtFOSAA	48%		40-140%
	13C2-6:2FTS	79%		50-150%
	13C2-8:2FTS	81%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
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 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-A3 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-6	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.4
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242317.D	1	02/17/22 15:28	PS	02/16/22 15:00	n/a	VI9840
Run #2							

	Initial Weight
Run #1	6.2 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	13.6	9.3	3.9	ug/kg	
71-43-2	Benzene	ND	0.47	0.42	ug/kg	
74-97-5	Bromochloromethane	ND	4.7	0.52	ug/kg	
75-27-4	Bromodichloromethane	ND	1.9	0.40	ug/kg	
75-25-2	Bromoform	ND	4.7	1.3	ug/kg	
74-83-9	Bromomethane ^a	ND	4.7	0.71	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.3	2.3	ug/kg	
75-15-0	Carbon disulfide	ND	1.9	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.9	0.58	ug/kg	
108-90-7	Chlorobenzene	ND	1.9	0.43	ug/kg	
75-00-3	Chloroethane ^b	ND	4.7	0.55	ug/kg	
67-66-3	Chloroform	ND	1.9	0.48	ug/kg	
74-87-3	Chloromethane	ND	4.7	1.8	ug/kg	
110-82-7	Cyclohexane	ND	1.9	0.61	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.9	0.65	ug/kg	
124-48-1	Dibromochloromethane	ND	1.9	0.52	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.93	0.39	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.93	0.51	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.93	0.46	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.93	0.46	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.7	0.68	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.93	0.46	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.93	0.44	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.93	0.61	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.93	0.78	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.93	0.57	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.9	0.44	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.9	0.44	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.9	0.43	ug/kg	
100-41-4	Ethylbenzene	ND	0.93	0.42	ug/kg	
76-13-1	Freon 113	ND	4.7	2.5	ug/kg	
591-78-6	2-Hexanone	ND	4.7	2.0	ug/kg	

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B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	WC-A3 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-6	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.4
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.9	1.3	ug/kg	
79-20-9	Methyl Acetate	ND	4.7	1.3	ug/kg	
108-87-2	Methylcyclohexane	ND	1.9	0.82	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.93	0.44	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.7	2.1	ug/kg	
75-09-2	Methylene chloride	ND	4.7	2.4	ug/kg	
100-42-5	Styrene	ND	1.9	0.38	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.9	0.56	ug/kg	
127-18-4	Tetrachloroethene	ND	1.9	0.54	ug/kg	
108-88-3	Toluene	ND	0.93	0.49	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.7	2.3	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.7	2.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.9	0.45	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.9	0.52	ug/kg	
79-01-6	Trichloroethene	ND	0.93	0.71	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.7	0.64	ug/kg	
75-01-4	Vinyl chloride	ND	1.9	0.45	ug/kg	
	m,p-Xylene	ND	0.93	0.84	ug/kg	
95-47-6	o-Xylene	ND	0.93	0.43	ug/kg	
1330-20-7	Xylene (total)	ND	0.93	0.43	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		80-124%
17060-07-0	1,2-Dichloroethane-D4	117%		75-133%
2037-26-5	Toluene-D8	102%		79-125%
460-00-4	4-Bromofluorobenzene	88%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	3.65	5.2	ug/kg	J
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

(b) This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.

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Report of Analysis

Page 1 of 3

Client Sample ID:	WC-A3 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-6	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.4
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155099.D	1	02/18/22 05:15	CS	02/16/22 11:30	OP38181	EZ7706
Run #2							

	Initial Weight	Final Volume
Run #1	31.6 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	73	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	22	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	31	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	65	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	180	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	180	39	ug/kg	
95-48-7	2-Methylphenol	ND	73	23	ug/kg	
	3&4-Methylphenol	ND	73	30	ug/kg	
88-75-5	2-Nitrophenol	ND	180	24	ug/kg	
100-02-7	4-Nitrophenol	ND	370	98	ug/kg	
87-86-5	Pentachlorophenol	ND	150	34	ug/kg	
108-95-2	Phenol	ND	73	19	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	24	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	27	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	22	ug/kg	
83-32-9	Acenaphthene	ND	37	13	ug/kg	
208-96-8	Acenaphthylene	ND	37	19	ug/kg	
98-86-2	Acetophenone	ND	180	7.9	ug/kg	
120-12-7	Anthracene	ND	37	22	ug/kg	
1912-24-9	Atrazine	ND	73	16	ug/kg	
56-55-3	Benzo(a)anthracene	ND	37	10	ug/kg	
50-32-8	Benzo(a)pyrene	ND	37	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	37	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	37	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	37	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	73	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	73	8.9	ug/kg	
92-52-4	1,1'-Biphenyl	ND	73	5.0	ug/kg	
100-52-7	Benzaldehyde	ND	180	9.1	ug/kg	
91-58-7	2-Chloronaphthalene	ND	73	8.7	ug/kg	
106-47-8	4-Chloroaniline	ND	180	13	ug/kg	
86-74-8	Carbazole	ND	73	5.3	ug/kg	

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J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-A3 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-6	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.4
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	73	14	ug/kg	
218-01-9	Chrysene	ND	37	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	73	7.8	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	73	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	73	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	73	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	37	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	37	18	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	73	31	ug/kg	
123-91-1	1,4-Dioxane	ND	37	24	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	37	16	ug/kg	
132-64-9	Dibenzofuran	ND	73	15	ug/kg	
84-74-2	Di-n-butyl phthalate	139	73	6.0	ug/kg	B
117-84-0	Di-n-octyl phthalate	ND	73	9.1	ug/kg	
84-66-2	Diethyl phthalate	ND	73	7.8	ug/kg	
131-11-3	Dimethyl phthalate	ND	73	6.5	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	73	8.6	ug/kg	
206-44-0	Fluoranthene	ND	37	16	ug/kg	
86-73-7	Fluorene	ND	37	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	73	9.3	ug/kg	
87-68-3	Hexachlorobutadiene ^a	ND	37	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	370	15	ug/kg	
67-72-1	Hexachloroethane	ND	180	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	37	17	ug/kg	
78-59-1	Isophorone	ND	73	7.8	ug/kg	
91-57-6	2-Methylnaphthalene	ND	37	8.3	ug/kg	
88-74-4	2-Nitroaniline	ND	180	8.6	ug/kg	
99-09-2	3-Nitroaniline	ND	180	9.2	ug/kg	
100-01-6	4-Nitroaniline	ND	180	9.5	ug/kg	
91-20-3	Naphthalene	ND	37	10	ug/kg	
98-95-3	Nitrobenzene	ND	73	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	73	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	13	ug/kg	
85-01-8	Phenanthrene	ND	37	12	ug/kg	
129-00-0	Pyrene	16.2	37	12	ug/kg	J
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	9.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	53%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	WC-A3 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-6	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.4
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	48%		10-105%
118-79-6	2,4,6-Tribromophenol	53%		10-135%
4165-60-0	Nitrobenzene-d5	56%		10-119%
321-60-8	2-Fluorobiphenyl	62%		18-112%
1718-51-0	Terphenyl-d14	67%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.32	200	ug/kg	J
	system artifact/aldol-condensation	3.37	210	ug/kg	J
10544-50-0	Cyclic octaatomic sulfur	10.15	410	ug/kg	JN
	Total TIC, Semi-Volatile		410	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A3 (7.5-15')		
Lab Sample ID:	JD39776-6	Date Sampled:	02/15/22
Matrix:	SO - Soil	Date Received:	02/15/22
Method:	SW846 8081B SW846 3546	Percent Solids:	86.4
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174381.D	1	02/21/22 17:43	TL	02/16/22 13:50	OP38184	G1G6024
Run #2							

	Initial Weight	Final Volume
Run #1	16.8 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.69	0.57	ug/kg	
319-84-6	alpha-BHC	ND	0.69	0.56	ug/kg	
319-85-7	beta-BHC	ND	0.69	0.62	ug/kg	
319-86-8	delta-BHC	ND	0.69	0.66	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.69	0.51	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.69	0.56	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.69	0.31	ug/kg	
60-57-1	Dieldrin	ND	0.69	0.47	ug/kg	
72-54-8	4,4' -DDD	ND	0.69	0.63	ug/kg	
72-55-9	4,4' -DDE	ND	0.69	0.60	ug/kg	
50-29-3	4,4' -DDT	ND	0.69	0.61	ug/kg	
72-20-8	Endrin	ND	0.69	0.54	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.69	0.54	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.69	0.39	ug/kg	
959-98-8	Endosulfan-I	ND	0.69	0.40	ug/kg	
33213-65-9	Endosulfan-II	ND	0.69	0.43	ug/kg	
76-44-8	Heptachlor	ND	0.69	0.59	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.69	0.48	ug/kg	
72-43-5	Methoxychlor	ND	1.4	0.55	ug/kg	
53494-70-5	Endrin ketone	ND	0.69	0.50	ug/kg	
8001-35-2	Toxaphene	ND	17	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	107%		14-145%
877-09-8	Tetrachloro-m-xylene	108%		14-145%
2051-24-3	Decachlorobiphenyl	92%		10-197%
2051-24-3	Decachlorobiphenyl	109%		10-197%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-A3 (7.5-15')		
Lab Sample ID:	JD39776-6	Date Sampled:	02/15/22
Matrix:	SO - Soil	Date Received:	02/15/22
Method:	SW846 8082A SW846 3546	Percent Solids:	86.4
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G114279.D	1	02/21/22 01:59	TL	02/16/22 13:50	OP38185	G5G2906
Run #2							

	Initial Weight	Final Volume
Run #1	16.8 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	34	16	ug/kg	
11104-28-2	Aroclor 1221	ND	34	21	ug/kg	
11141-16-5	Aroclor 1232	ND	34	22	ug/kg	
53469-21-9	Aroclor 1242	ND	34	14	ug/kg	
12672-29-6	Aroclor 1248	ND	34	31	ug/kg	
11097-69-1	Aroclor 1254	ND	34	19	ug/kg	
11096-82-5	Aroclor 1260	ND	34	15	ug/kg	
11100-14-4	Aroclor 1268	ND	34	15	ug/kg	
37324-23-5	Aroclor 1262	ND	34	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	100%		10-163%
877-09-8	Tetrachloro-m-xylene	118%		10-163%
2051-24-3	Decachlorobiphenyl	122%		10-215%
2051-24-3	Decachlorobiphenyl	137%		10-215%

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Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A3 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-6	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.4
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	9250	56	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Antimony	< 2.2	2.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Arsenic	< 2.2	2.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Barium	53.4	22	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Beryllium	0.53	0.22	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Cadmium	< 0.56	0.56	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Calcium	995	560	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Chromium	15.4	1.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Cobalt	7.1	5.6	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Copper	16.7	2.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Iron	13800	56	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Lead	16.3	2.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Magnesium	2590	560	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Manganese	360	1.7	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Mercury	< 0.036	0.036	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹ SW846 7471B ⁴
Nickel	13.7	4.5	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Potassium	2750	1100	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Selenium	< 2.2	2.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Silver	0.81	0.56	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Sodium	< 1100	1100	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Thallium	< 1.1	1.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Vanadium	19.2	5.6	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Zinc	38.3	5.6	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Prep QC Batch: MP31340

(4) Prep QC Batch: MP31347

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WC-A3 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-6	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.4
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.27	0.27	mg/kg	1	02/17/22 13:21	MM	SW846 9012B/LACHAT
Solids, Percent	86.4		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.11
4

Report of Analysis

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Client Sample ID:	WC-A3 (7.5-15')	
Lab Sample ID:	JD39776-6A	Date Sampled: 02/15/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 86.4
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55203.D	1	02/26/22 01:05	AFL	02/18/22 08:30	F:OP89836	F:S3Q762
Run #2							

	Initial Weight	Final Volume
Run #1	1.97 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.45	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.59	0.29	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.59	0.29	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.59	0.29	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.59	0.29	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.59	0.29	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.59	0.29	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.59	0.29	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.59	0.29	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.59	0.31	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.59	0.29	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.59	0.29	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.59	0.29	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.59	0.29	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.59	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.59	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.59	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.59	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.59	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-A3 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-6A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.4
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	80%		40-140%
	13C5-PFPeA	79%		50-150%
	13C5-PFHxA	81%		50-150%
	13C4-PFHpA	82%		50-150%
	13C8-PFOA	83%		50-150%
	13C9-PFNA	84%		50-150%
	13C6-PFDA	84%		50-150%
	13C7-PFUnDA	88%		40-140%
	13C2-PFDoDA	86%		40-140%
	13C2-PFTeDA	86%		30-130%
	13C3-PFBS	82%		50-150%
	13C3-PFHxS	82%		50-150%
	13C8-PFOS	82%		50-150%
	13C8-FOSA	62%		30-130%
	d3-MeFOSAA	63%		40-140%
	d5-EtFOSAA	68%		40-140%
	13C2-6:2FTS	81%		50-150%
	13C2-8:2FTS	83%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-B3 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-7	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242323.D	1	02/17/22 17:33	PS	02/16/22 15:00	n/a	VI9840
Run #2							

	Initial Weight
Run #1	6.1 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	9.3	3.9	ug/kg	
71-43-2	Benzene	ND	0.47	0.42	ug/kg	
74-97-5	Bromochloromethane	ND	4.7	0.52	ug/kg	
75-27-4	Bromodichloromethane	ND	1.9	0.40	ug/kg	
75-25-2	Bromoform	ND	4.7	1.3	ug/kg	
74-83-9	Bromomethane ^a	ND	4.7	0.71	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.3	2.3	ug/kg	
75-15-0	Carbon disulfide	ND	1.9	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.9	0.58	ug/kg	
108-90-7	Chlorobenzene	ND	1.9	0.43	ug/kg	
75-00-3	Chloroethane ^b	ND	4.7	0.55	ug/kg	
67-66-3	Chloroform	ND	1.9	0.48	ug/kg	
74-87-3	Chloromethane	ND	4.7	1.8	ug/kg	
110-82-7	Cyclohexane	ND	1.9	0.61	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.9	0.65	ug/kg	
124-48-1	Dibromochloromethane	ND	1.9	0.52	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.93	0.39	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.93	0.51	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.93	0.46	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.93	0.46	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.7	0.68	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.93	0.46	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.93	0.44	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.93	0.61	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.93	0.78	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.93	0.57	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.9	0.44	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.9	0.44	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.9	0.43	ug/kg	
100-41-4	Ethylbenzene	ND	0.93	0.42	ug/kg	
76-13-1	Freon 113	ND	4.7	2.5	ug/kg	
591-78-6	2-Hexanone	ND	4.7	2.0	ug/kg	

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RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	WC-B3 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-7	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.9	1.3	ug/kg	
79-20-9	Methyl Acetate	ND	4.7	1.3	ug/kg	
108-87-2	Methylcyclohexane	ND	1.9	0.82	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.93	0.44	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.7	2.1	ug/kg	
75-09-2	Methylene chloride	ND	4.7	2.4	ug/kg	
100-42-5	Styrene	ND	1.9	0.37	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.9	0.56	ug/kg	
127-18-4	Tetrachloroethene	ND	1.9	0.54	ug/kg	
108-88-3	Toluene	ND	0.93	0.49	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.7	2.3	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.7	2.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.9	0.45	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.9	0.52	ug/kg	
79-01-6	Trichloroethene	ND	0.93	0.71	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.7	0.64	ug/kg	
75-01-4	Vinyl chloride	ND	1.9	0.45	ug/kg	
	m,p-Xylene	ND	0.93	0.84	ug/kg	
95-47-6	o-Xylene	ND	0.93	0.43	ug/kg	
1330-20-7	Xylene (total)	ND	0.93	0.43	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		80-124%
17060-07-0	1,2-Dichloroethane-D4	117%		75-133%
2037-26-5	Toluene-D8	102%		79-125%
460-00-4	4-Bromofluorobenzene	91%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

(b) This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	WC-B3 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-7	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155111.D	1	02/18/22 10:20	CS	02/16/22 11:30	OP38181	EZ7706
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.8 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	74	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	32	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	66	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	180	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	180	40	ug/kg	
95-48-7	2-Methylphenol	ND	74	24	ug/kg	
	3&4-Methylphenol	ND	74	30	ug/kg	
88-75-5	2-Nitrophenol	ND	180	24	ug/kg	
100-02-7	4-Nitrophenol	ND	370	99	ug/kg	
87-86-5	Pentachlorophenol	ND	150	35	ug/kg	
108-95-2	Phenol	ND	74	19	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	24	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	28	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	22	ug/kg	
83-32-9	Acenaphthene	ND	37	13	ug/kg	
208-96-8	Acenaphthylene	26.7	37	19	ug/kg	J
98-86-2	Acetophenone	ND	180	7.9	ug/kg	
120-12-7	Anthracene	ND	37	23	ug/kg	
1912-24-9	Atrazine	ND	74	16	ug/kg	
56-55-3	Benzo(a)anthracene	106	37	10	ug/kg	
50-32-8	Benzo(a)pyrene	126	37	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	149	37	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	112	37	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	61.0	37	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	74	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	74	9.0	ug/kg	
92-52-4	1,1'-Biphenyl	ND	74	5.1	ug/kg	
100-52-7	Benzaldehyde	ND	180	9.2	ug/kg	
91-58-7	2-Chloronaphthalene	ND	74	8.8	ug/kg	
106-47-8	4-Chloroaniline	ND	180	13	ug/kg	
86-74-8	Carbazole	ND	74	5.4	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-B3 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-7	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	74	15	ug/kg	
218-01-9	Chrysene	119	37	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	74	7.9	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	74	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	74	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	74	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	37	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	37	19	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	74	31	ug/kg	
123-91-1	1,4-Dioxane	ND	37	24	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	30.2	37	16	ug/kg	J
132-64-9	Dibenzofuran	ND	74	15	ug/kg	
84-74-2	Di-n-butyl phthalate	81.9	74	6.0	ug/kg	B
117-84-0	Di-n-octyl phthalate	ND	74	9.2	ug/kg	
84-66-2	Diethyl phthalate	ND	74	7.9	ug/kg	
131-11-3	Dimethyl phthalate	ND	74	6.6	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	74	8.6	ug/kg	
206-44-0	Fluoranthene	122	37	16	ug/kg	
86-73-7	Fluorene	ND	37	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	74	9.3	ug/kg	
87-68-3	Hexachlorobutadiene ^a	ND	37	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	370	15	ug/kg	
67-72-1	Hexachloroethane	ND	180	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	125	37	17	ug/kg	
78-59-1	Isophorone	ND	74	7.9	ug/kg	
91-57-6	2-Methylnaphthalene	ND	37	8.3	ug/kg	
88-74-4	2-Nitroaniline	ND	180	8.7	ug/kg	
99-09-2	3-Nitroaniline	ND	180	9.2	ug/kg	
100-01-6	4-Nitroaniline	ND	180	9.6	ug/kg	
91-20-3	Naphthalene	ND	37	10	ug/kg	
98-95-3	Nitrobenzene	ND	74	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	74	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	14	ug/kg	
85-01-8	Phenanthrene	40.7	37	12	ug/kg	
129-00-0	Pyrene	139	37	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	9.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	46%		10-109%

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-B3 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-7	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	43%		10-105%
118-79-6	2,4,6-Tribromophenol	47%		10-135%
4165-60-0	Nitrobenzene-d5	51%		10-119%
321-60-8	2-Fluorobiphenyl	58%		18-112%
1718-51-0	Terphenyl-d14	56%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	1.86	260	ug/kg	J
	system artifact	2.96	330	ug/kg	J
	system artifact	3.23	230	ug/kg	J
	system artifact	3.32	180	ug/kg	J
	system artifact/aldol-condensation	3.37	180	ug/kg	J
	Unknown	13.68	180	ug/kg	J
	unknown PAH substance	13.95	160	ug/kg	J
	Total TIC, Semi-Volatile		340	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B3 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-7	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174379.D	1	02/21/22 17:06	TL	02/16/22 13:50	OP38184	G1G6024
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.74	0.61	ug/kg	
319-84-6	alpha-BHC	ND	0.74	0.60	ug/kg	
319-85-7	beta-BHC	ND	0.74	0.67	ug/kg	
319-86-8	delta-BHC	ND	0.74	0.71	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.74	0.55	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.74	0.60	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.74	0.34	ug/kg	
60-57-1	Dieldrin	ND	0.74	0.51	ug/kg	
72-54-8	4,4' -DDD	ND	0.74	0.68	ug/kg	
72-55-9	4,4' -DDE	ND	0.74	0.65	ug/kg	
50-29-3	4,4' -DDT	ND	0.74	0.66	ug/kg	
72-20-8	Endrin	ND	0.74	0.58	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.74	0.58	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.74	0.42	ug/kg	
959-98-8	Endosulfan-I	ND	0.74	0.43	ug/kg	
33213-65-9	Endosulfan-II	0.98	0.74	0.46	ug/kg	
76-44-8	Heptachlor	ND	0.74	0.64	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.74	0.52	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.59	ug/kg	
53494-70-5	Endrin ketone	ND	0.74	0.54	ug/kg	
8001-35-2	Toxaphene	ND	19	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	98%		14-145%
877-09-8	Tetrachloro-m-xylene	101%		14-145%
2051-24-3	Decachlorobiphenyl	66%		10-197%
2051-24-3	Decachlorobiphenyl	128%		10-197%

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B3 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-7	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G114280.D	1	02/21/22 02:15	TL	02/16/22 13:50	OP38185	G5G2906
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	17	ug/kg	
11104-28-2	Aroclor 1221	ND	37	23	ug/kg	
11141-16-5	Aroclor 1232	ND	37	24	ug/kg	
53469-21-9	Aroclor 1242	ND	37	15	ug/kg	
12672-29-6	Aroclor 1248	ND	37	33	ug/kg	
11097-69-1	Aroclor 1254	ND	37	20	ug/kg	
11096-82-5	Aroclor 1260	ND	37	16	ug/kg	
11100-14-4	Aroclor 1268	ND	37	16	ug/kg	
37324-23-5	Aroclor 1262	ND	37	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	94%		10-163%
877-09-8	Tetrachloro-m-xylene	114%		10-163%
2051-24-3	Decachlorobiphenyl	99%		10-215%
2051-24-3	Decachlorobiphenyl	110%		10-215%

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Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B3 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-7	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.9
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	15200	57	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Antimony ^a	< 4.6	4.6	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Arsenic ^a	< 4.6	4.6	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Barium	125	23	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Beryllium ^a	0.84	0.46	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Cadmium	< 0.57	0.57	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Calcium	4380	570	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Chromium	28.4	1.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cobalt	13.1	5.7	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Copper ^a	37.8	5.7	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Iron	26000	110	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Lead	45.8	2.3	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Magnesium	5310	570	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Manganese	603	1.7	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	0.35	0.037	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹	SW846 7471B ⁵
Nickel	22.3	4.6	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Potassium	4980	1100	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Selenium ^a	< 4.6	4.6	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Silver ^a	< 1.1	1.1	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Sodium	< 1100	1100	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Thallium ^a	< 2.3	2.3	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Vanadium	37.3	5.7	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Zinc	133	5.7	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Instrument QC Batch: MA51931

(4) Prep QC Batch: MP31340

(5) Prep QC Batch: MP31347

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WC-B3 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-7	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.9
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.28	0.28	mg/kg	1	02/17/22 13:23	MM	SW846 9012B/LACHAT
Solids, Percent	87.9		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-B3 (0-7.5')		
Lab Sample ID:	JD39776-7A	Date Sampled:	02/15/22
Matrix:	SO - Soil	Date Received:	02/15/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids:	87.9
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55204.D	1	02/26/22 01:21	AFL	02/18/22 08:30	F:OP89836	F:S3Q762
Run #2							

	Initial Weight	Final Volume
Run #1	1.97 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
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PERFLUOROALKYLCARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	ND	1.2	0.44	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.29	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.58	0.29	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.58	0.29	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.58	0.29	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.58	0.29	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.58	0.29	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.58	0.29	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.58	0.29	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.58	0.31	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.58	0.29	ug/kg	

PERFLUOROALKYLSULFONIC ACIDS

375-73-5	Perfluorobutanesulfonic acid	ND	0.58	0.29	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.58	0.29	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.58	0.29	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.58	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.58	0.29	ug/kg	

PERFLUOROCTANESULFONAMIDES

754-91-6	PFOSA	ND	0.58	0.29	ug/kg	
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PERFLUOROCTANESULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	ND	1.2	0.58	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.58	ug/kg	

FLUOROTELOMER SULFONATES

27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	

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B = Indicates analyte found in associated method blank

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Report of Analysis

Client Sample ID:	WC-B3 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-7A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	89%		40-140%
	13C5-PFPeA	88%		50-150%
	13C5-PFHxA	88%		50-150%
	13C4-PFHpA	90%		50-150%
	13C8-PFOA	92%		50-150%
	13C9-PFNA	95%		50-150%
	13C6-PFDA	94%		50-150%
	13C7-PFUnDA	95%		40-140%
	13C2-PFDoDA	89%		40-140%
	13C2-PFTeDA	94%		30-130%
	13C3-PFBS	90%		50-150%
	13C3-PFHxS	88%		50-150%
	13C8-PFOS	91%		50-150%
	13C8-FOSA	74%		30-130%
	d3-MeFOSAA	78%		40-140%
	d5-EtFOSAA	84%		40-140%
	13C2-6:2FTS	89%		50-150%
	13C2-8:2FTS	96%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-B3 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-8	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242324.D	1	02/17/22 17:54	PS	02/16/22 15:00	n/a	VI9840
Run #2							

	Initial Weight
Run #1	6.3 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	12.2	9.0	3.7	ug/kg	
71-43-2	Benzene	ND	0.45	0.41	ug/kg	
74-97-5	Bromochloromethane	ND	4.5	0.51	ug/kg	
75-27-4	Bromodichloromethane	ND	1.8	0.39	ug/kg	
75-25-2	Bromoform	ND	4.5	1.2	ug/kg	
74-83-9	Bromomethane ^a	ND	4.5	0.69	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.0	2.2	ug/kg	
75-15-0	Carbon disulfide	ND	1.8	0.48	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.8	0.56	ug/kg	
108-90-7	Chlorobenzene	ND	1.8	0.41	ug/kg	
75-00-3	Chloroethane ^b	ND	4.5	0.53	ug/kg	
67-66-3	Chloroform	ND	1.8	0.47	ug/kg	
74-87-3	Chloromethane	ND	4.5	1.8	ug/kg	
110-82-7	Cyclohexane	ND	1.8	0.59	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.8	0.63	ug/kg	
124-48-1	Dibromochloromethane	ND	1.8	0.51	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.90	0.38	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.90	0.49	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.90	0.45	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.90	0.45	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.5	0.66	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.90	0.45	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.90	0.42	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.90	0.59	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.90	0.76	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.90	0.55	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.8	0.43	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.8	0.43	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.8	0.41	ug/kg	
100-41-4	Ethylbenzene	ND	0.90	0.41	ug/kg	
76-13-1	Freon 113	ND	4.5	2.4	ug/kg	
591-78-6	2-Hexanone	ND	4.5	1.9	ug/kg	

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Report of Analysis

Page 2 of 2

Client Sample ID:	WC-B3 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-8	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.8	1.3	ug/kg	
79-20-9	Methyl Acetate	ND	4.5	1.3	ug/kg	
108-87-2	Methylcyclohexane	ND	1.8	0.79	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.90	0.42	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.5	2.0	ug/kg	
75-09-2	Methylene chloride	ND	4.5	2.4	ug/kg	
100-42-5	Styrene	ND	1.8	0.36	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.8	0.54	ug/kg	
127-18-4	Tetrachloroethene	ND	1.8	0.52	ug/kg	
108-88-3	Toluene	ND	0.90	0.47	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.5	2.3	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.5	2.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.8	0.44	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.8	0.50	ug/kg	
79-01-6	Trichloroethene	ND	0.90	0.69	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.5	0.62	ug/kg	
75-01-4	Vinyl chloride	ND	1.8	0.43	ug/kg	
	m,p-Xylene	ND	0.90	0.81	ug/kg	
95-47-6	o-Xylene	ND	0.90	0.41	ug/kg	
1330-20-7	Xylene (total)	ND	0.90	0.41	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		80-124%
17060-07-0	1,2-Dichloroethane-D4	119%		75-133%
2037-26-5	Toluene-D8	100%		79-125%
460-00-4	4-Bromofluorobenzene	93%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

(b) This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.

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Report of Analysis

Page 1 of 3

Client Sample ID:	WC-B3 (7.5-15')		
Lab Sample ID:	JD39776-8	Date Sampled:	02/15/22
Matrix:	SO - Soil	Date Received:	02/15/22
Method:	SW846 8270E SW846 3546	Percent Solids:	87.9
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155100.D	1	02/18/22 05:42	CS	02/16/22 11:30	OP38181	EZ7706
Run #2							

	Initial Weight	Final Volume
Run #1	31.8 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	72	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	22	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	31	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	64	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	180	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	180	38	ug/kg	
95-48-7	2-Methylphenol	ND	72	23	ug/kg	
	3&4-Methylphenol	ND	72	29	ug/kg	
88-75-5	2-Nitrophenol	ND	180	24	ug/kg	
100-02-7	4-Nitrophenol	ND	360	96	ug/kg	
87-86-5	Pentachlorophenol	ND	140	34	ug/kg	
108-95-2	Phenol	ND	72	19	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	24	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	27	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	21	ug/kg	
83-32-9	Acenaphthene	ND	36	12	ug/kg	
208-96-8	Acenaphthylene	ND	36	18	ug/kg	
98-86-2	Acetophenone	ND	180	7.7	ug/kg	
120-12-7	Anthracene	ND	36	22	ug/kg	
1912-24-9	Atrazine	ND	72	15	ug/kg	
56-55-3	Benzo(a)anthracene	ND	36	10	ug/kg	
50-32-8	Benzo(a)pyrene	ND	36	16	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	36	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	36	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	36	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	72	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	72	8.7	ug/kg	
92-52-4	1,1'-Biphenyl	ND	72	4.9	ug/kg	
100-52-7	Benzaldehyde	ND	180	8.9	ug/kg	
91-58-7	2-Chloronaphthalene	ND	72	8.5	ug/kg	
106-47-8	4-Chloroaniline	ND	180	13	ug/kg	
86-74-8	Carbazole	ND	72	5.2	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-B3 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-8	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	72	14	ug/kg	
218-01-9	Chrysene	ND	36	11	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	72	7.7	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	72	15	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	72	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	72	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	36	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	36	18	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	72	30	ug/kg	
123-91-1	1,4-Dioxane	ND	36	24	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	36	16	ug/kg	
132-64-9	Dibenzofuran	ND	72	15	ug/kg	
84-74-2	Di-n-butyl phthalate	113	72	5.8	ug/kg	B
117-84-0	Di-n-octyl phthalate	ND	72	8.9	ug/kg	
84-66-2	Diethyl phthalate	ND	72	7.6	ug/kg	
131-11-3	Dimethyl phthalate	ND	72	6.4	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	72	8.4	ug/kg	
206-44-0	Fluoranthene	ND	36	16	ug/kg	
86-73-7	Fluorene	ND	36	16	ug/kg	
118-74-1	Hexachlorobenzene	ND	72	9.1	ug/kg	
87-68-3	Hexachlorobutadiene ^a	ND	36	14	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	360	14	ug/kg	
67-72-1	Hexachloroethane	ND	180	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	36	17	ug/kg	
78-59-1	Isophorone	ND	72	7.7	ug/kg	
91-57-6	2-Methylnaphthalene	ND	36	8.1	ug/kg	
88-74-4	2-Nitroaniline	ND	180	8.4	ug/kg	
99-09-2	3-Nitroaniline	ND	180	8.9	ug/kg	
100-01-6	4-Nitroaniline	ND	180	9.3	ug/kg	
91-20-3	Naphthalene	ND	36	10	ug/kg	
98-95-3	Nitrobenzene	ND	72	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	72	10	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	13	ug/kg	
85-01-8	Phenanthrene	ND	36	12	ug/kg	
129-00-0	Pyrene	ND	36	11	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	9.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	62%		10-109%

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Report of Analysis

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Client Sample ID:	WC-B3 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-8	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	57%		10-105%
118-79-6	2,4,6-Tribromophenol	62%		10-135%
4165-60-0	Nitrobenzene-d5	66%		10-119%
321-60-8	2-Fluorobiphenyl	73%		18-112%
1718-51-0	Terphenyl-d14	81%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.32	200	ug/kg	J
	system artifact/aldol-condensation	3.37	190	ug/kg	J
10544-50-0	Cyclic octaatomic sulfur	10.15	160	ug/kg	JN
	Total TIC, Semi-Volatile		160	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

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 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B3 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-8	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174380.D	1	02/21/22 17:25	TL	02/16/22 13:50	OP38184	G1G6024
Run #2							

	Initial Weight	Final Volume
Run #1	16.3 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.70	0.58	ug/kg	
319-84-6	alpha-BHC	ND	0.70	0.57	ug/kg	
319-85-7	beta-BHC	ND	0.70	0.63	ug/kg	
319-86-8	delta-BHC	ND	0.70	0.67	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.70	0.51	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.70	0.56	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.70	0.32	ug/kg	
60-57-1	Dieldrin	ND	0.70	0.48	ug/kg	
72-54-8	4,4' -DDD	ND	0.70	0.64	ug/kg	
72-55-9	4,4' -DDE	ND	0.70	0.61	ug/kg	
50-29-3	4,4' -DDT	ND	0.70	0.62	ug/kg	
72-20-8	Endrin	ND	0.70	0.54	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.70	0.55	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.70	0.40	ug/kg	
959-98-8	Endosulfan-I	ND	0.70	0.40	ug/kg	
33213-65-9	Endosulfan-II	ND	0.70	0.44	ug/kg	
76-44-8	Heptachlor	ND	0.70	0.60	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.70	0.49	ug/kg	
72-43-5	Methoxychlor	ND	1.4	0.55	ug/kg	
53494-70-5	Endrin ketone	ND	0.70	0.50	ug/kg	
8001-35-2	Toxaphene	ND	17	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	114%		14-145%
877-09-8	Tetrachloro-m-xylene	112%		14-145%
2051-24-3	Decachlorobiphenyl	78%		10-197%
2051-24-3	Decachlorobiphenyl	112%		10-197%

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B = Indicates analyte found in associated method blank

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Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B3 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-8	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G114281.D	1	02/21/22 02:32	TL	02/16/22 13:50	OP38185	G5G2906
Run #2							

	Initial Weight	Final Volume
Run #1	16.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	16	ug/kg	
11104-28-2	Aroclor 1221	ND	35	22	ug/kg	
11141-16-5	Aroclor 1232	ND	35	22	ug/kg	
53469-21-9	Aroclor 1242	ND	35	14	ug/kg	
12672-29-6	Aroclor 1248	ND	35	31	ug/kg	
11097-69-1	Aroclor 1254	ND	35	19	ug/kg	
11096-82-5	Aroclor 1260	ND	35	15	ug/kg	
11100-14-4	Aroclor 1268	ND	35	15	ug/kg	
37324-23-5	Aroclor 1262	ND	35	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	103%		10-163%
877-09-8	Tetrachloro-m-xylene	120%		10-163%
2051-24-3	Decachlorobiphenyl	105%		10-215%
2051-24-3	Decachlorobiphenyl	115%		10-215%

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Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B3 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-8	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.9
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	17000	58	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Antimony ^a	< 12	12	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Arsenic ^a	< 12	12	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Barium	130	23	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Beryllium ^a	< 1.2	1.2	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Cadmium	< 0.58	0.58	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Calcium	1460	580	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Chromium	34.2	1.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Cobalt	17.1	5.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Copper ^a	44.3	15	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Iron	32700	290	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Lead	13.7	2.3	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Magnesium	6250	580	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Manganese	391	1.7	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Mercury	< 0.033	0.033	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹
Nickel	28.8	4.6	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Potassium	6610	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Selenium ^a	< 12	12	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Silver ^a	< 2.9	2.9	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Sodium	< 1200	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Thallium ^a	< 5.8	5.8	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Vanadium	45.1	5.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Zinc	75.6	5.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Instrument QC Batch: MA51931

(4) Prep QC Batch: MP31340

(5) Prep QC Batch: MP31347

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WC-B3 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-8	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.9
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.26	0.26	mg/kg	1	02/17/22 13:24	MM	SW846 9012B/LACHAT
Solids, Percent	87.9		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-B3 (7.5-15')		
Lab Sample ID:	JD39776-8A	Date Sampled:	02/15/22
Matrix:	SO - Soil	Date Received:	02/15/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids:	87.9
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55205.D	1	02/26/22 01:38	AFL	02/18/22 08:30	F:OP89836	F:S3Q762
Run #2							

	Initial Weight	Final Volume
Run #1	2.08 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.42	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.27	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.55	0.27	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.55	0.27	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.55	0.27	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.55	0.27	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.55	0.27	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.55	0.27	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.55	0.27	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.55	0.29	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.55	0.27	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.55	0.27	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.55	0.27	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.55	0.27	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.55	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.55	0.27	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.55	0.27	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.1	0.55	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.55	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	

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Report of Analysis

Page 2 of 2

Client Sample ID: WC-B3 (7.5-15')	Date Sampled: 02/15/22
Lab Sample ID: JD39776-8A	Date Received: 02/15/22
Matrix: SO - Soil	Percent Solids: 87.9
Method: EPA 537M BY ID IN HOUSE	
Project: 1001 Whitlock Avenue, Bronx, NY	

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	82%		40-140%
	13C5-PFPeA	81%		50-150%
	13C5-PFHxA	81%		50-150%
	13C4-PFHpA	82%		50-150%
	13C8-PFOA	84%		50-150%
	13C9-PFNA	86%		50-150%
	13C6-PFDA	86%		50-150%
	13C7-PFUnDA	90%		40-140%
	13C2-PFDoDA	84%		40-140%
	13C2-PFTeDA	86%		30-130%
	13C3-PFBS	82%		50-150%
	13C3-PFHxS	82%		50-150%
	13C8-PFOS	83%		50-150%
	13C8-FOSA	83%		30-130%
	d3-MeFOSAA	63%		40-140%
	d5-EtFOSAA	68%		40-140%
	13C2-6:2FTS	83%		50-150%
	13C2-8:2FTS	86%		50-150%

(a) Analysis performed at SGS Orlando, FL.

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Report of Analysis

Page 1 of 2

Client Sample ID:	WC-A4 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-9	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	89.4
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242325.D	1	02/17/22 18:15	PS	02/16/22 15:00	n/a	VI9840
Run #2							

	Initial Weight
Run #1	6.5 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	19.8	8.6	3.6	ug/kg	
71-43-2	Benzene	ND	0.43	0.39	ug/kg	
74-97-5	Bromochloromethane	ND	4.3	0.48	ug/kg	
75-27-4	Bromodichloromethane	ND	1.7	0.37	ug/kg	
75-25-2	Bromoform	ND	4.3	1.2	ug/kg	
74-83-9	Bromomethane ^a	ND	4.3	0.66	ug/kg	
78-93-3	2-Butanone (MEK)	ND	8.6	2.1	ug/kg	
75-15-0	Carbon disulfide	ND	1.7	0.46	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.7	0.53	ug/kg	
108-90-7	Chlorobenzene	ND	1.7	0.39	ug/kg	
75-00-3	Chloroethane ^b	ND	4.3	0.51	ug/kg	
67-66-3	Chloroform	ND	1.7	0.45	ug/kg	
74-87-3	Chloromethane	ND	4.3	1.7	ug/kg	
110-82-7	Cyclohexane	ND	1.7	0.57	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.7	0.60	ug/kg	
124-48-1	Dibromochloromethane	ND	1.7	0.48	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.86	0.36	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.86	0.47	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.86	0.43	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.86	0.43	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.3	0.63	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.86	0.43	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.86	0.40	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.86	0.56	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.86	0.72	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.86	0.53	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.7	0.41	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.7	0.41	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.7	0.39	ug/kg	
100-41-4	Ethylbenzene	ND	0.86	0.39	ug/kg	
76-13-1	Freon 113	ND	4.3	2.3	ug/kg	
591-78-6	2-Hexanone	ND	4.3	1.8	ug/kg	

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	WC-A4 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-9	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	89.4
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.7	1.2	ug/kg	
79-20-9	Methyl Acetate	ND	4.3	1.2	ug/kg	
108-87-2	Methylcyclohexane	ND	1.7	0.75	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.86	0.40	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.3	2.0	ug/kg	
75-09-2	Methylene chloride	ND	4.3	2.2	ug/kg	
100-42-5	Styrene	ND	1.7	0.35	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.7	0.52	ug/kg	
127-18-4	Tetrachloroethene	ND	1.7	0.50	ug/kg	
108-88-3	Toluene	ND	0.86	0.45	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.3	2.2	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.3	2.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.7	0.42	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.7	0.48	ug/kg	
79-01-6	Trichloroethene	ND	0.86	0.66	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.3	0.59	ug/kg	
75-01-4	Vinyl chloride	ND	1.7	0.41	ug/kg	
	m,p-Xylene	ND	0.86	0.77	ug/kg	
95-47-6	o-Xylene	ND	0.86	0.39	ug/kg	
1330-20-7	Xylene (total)	ND	0.86	0.39	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		80-124%
17060-07-0	1,2-Dichloroethane-D4	117%		75-133%
2037-26-5	Toluene-D8	102%		79-125%
460-00-4	4-Bromofluorobenzene	91%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

(b) This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	WC-A4 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-9	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	89.4
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155101.D	1	02/18/22 06:09	CS	02/16/22 11:30	OP38181	EZ7706
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	74	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	31	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	65	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	180	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	180	39	ug/kg	
95-48-7	2-Methylphenol	ND	74	24	ug/kg	
	3&4-Methylphenol	ND	74	30	ug/kg	
88-75-5	2-Nitrophenol	ND	180	24	ug/kg	
100-02-7	4-Nitrophenol	ND	370	98	ug/kg	
87-86-5	Pentachlorophenol	ND	150	35	ug/kg	
108-95-2	Phenol	ND	74	19	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	24	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	28	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	22	ug/kg	
83-32-9	Acenaphthene	ND	37	13	ug/kg	
208-96-8	Acenaphthylene	ND	37	19	ug/kg	
98-86-2	Acetophenone	ND	180	7.9	ug/kg	
120-12-7	Anthracene	ND	37	23	ug/kg	
1912-24-9	Atrazine	ND	74	16	ug/kg	
56-55-3	Benzo(a)anthracene	18.0	37	10	ug/kg	J
50-32-8	Benzo(a)pyrene	ND	37	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	19.7	37	16	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	ND	37	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	37	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	74	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	74	9.0	ug/kg	
92-52-4	1,1'-Biphenyl	ND	74	5.0	ug/kg	
100-52-7	Benzaldehyde	ND	180	9.1	ug/kg	
91-58-7	2-Chloronaphthalene	ND	74	8.8	ug/kg	
106-47-8	4-Chloroaniline	ND	180	13	ug/kg	
86-74-8	Carbazole	ND	74	5.3	ug/kg	

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	WC-A4 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-9	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	89.4
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	74	15	ug/kg	
218-01-9	Chrysene	17.3	37	12	ug/kg	J
111-91-1	bis(2-Chloroethoxy)methane	ND	74	7.9	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	74	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	74	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	74	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	37	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	37	18	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	74	31	ug/kg	
123-91-1	1,4-Dioxane	ND	37	24	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	37	16	ug/kg	
132-64-9	Dibenzofuran	ND	74	15	ug/kg	
84-74-2	Di-n-butyl phthalate	73.7	74	6.0	ug/kg	JB
117-84-0	Di-n-octyl phthalate	ND	74	9.2	ug/kg	
84-66-2	Diethyl phthalate	ND	74	7.8	ug/kg	
131-11-3	Dimethyl phthalate	ND	74	6.5	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	74	8.6	ug/kg	
206-44-0	Fluoranthene	25.9	37	16	ug/kg	J
86-73-7	Fluorene	ND	37	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	74	9.3	ug/kg	
87-68-3	Hexachlorobutadiene ^a	ND	37	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	370	15	ug/kg	
67-72-1	Hexachloroethane	ND	180	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	37	17	ug/kg	
78-59-1	Isophorone	ND	74	7.9	ug/kg	
91-57-6	2-Methylnaphthalene	ND	37	8.3	ug/kg	
88-74-4	2-Nitroaniline	ND	180	8.7	ug/kg	
99-09-2	3-Nitroaniline	ND	180	9.2	ug/kg	
100-01-6	4-Nitroaniline	ND	180	9.5	ug/kg	
91-20-3	Naphthalene	ND	37	10	ug/kg	
98-95-3	Nitrobenzene	ND	74	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	74	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	13	ug/kg	
85-01-8	Phenanthrene	15.2	37	12	ug/kg	J
129-00-0	Pyrene	30.9	37	12	ug/kg	J
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	9.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	57%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	WC-A4 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-9	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	89.4
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	52%		10-105%
118-79-6	2,4,6-Tribromophenol	57%		10-135%
4165-60-0	Nitrobenzene-d5	58%		10-119%
321-60-8	2-Fluorobiphenyl	67%		18-112%
1718-51-0	Terphenyl-d14	71%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.32	220	ug/kg	J
	system artifact/aldol-condensation	3.37	420	ug/kg	J
10544-50-0	Cyclic octaatomic sulfur	10.15	370	ug/kg	JN
	Total TIC, Semi-Volatile		370	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

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Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A4 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-9	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	89.4
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174376.D	1	02/21/22 16:12	TL	02/16/22 13:50	OP38184	G1G6024
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.73	0.60	ug/kg	
319-84-6	alpha-BHC	ND	0.73	0.59	ug/kg	
319-85-7	beta-BHC	ND	0.73	0.66	ug/kg	
319-86-8	delta-BHC	ND	0.73	0.70	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.73	0.54	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.73	0.59	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.73	0.33	ug/kg	
60-57-1	Dieldrin	ND	0.73	0.50	ug/kg	
72-54-8	4,4' -DDD	ND	0.73	0.67	ug/kg	
72-55-9	4,4' -DDE	ND	0.73	0.64	ug/kg	
50-29-3	4,4' -DDT	ND	0.73	0.64	ug/kg	
72-20-8	Endrin	ND	0.73	0.56	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.73	0.57	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.73	0.41	ug/kg	
959-98-8	Endosulfan-I	ND	0.73	0.42	ug/kg	
33213-65-9	Endosulfan-II	ND	0.73	0.45	ug/kg	
76-44-8	Heptachlor	ND	0.73	0.63	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.73	0.51	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.58	ug/kg	
53494-70-5	Endrin ketone	ND	0.73	0.53	ug/kg	
8001-35-2	Toxaphene	ND	18	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	130%		14-145%
877-09-8	Tetrachloro-m-xylene	135%		14-145%
2051-24-3	Decachlorobiphenyl	83%		10-197%
2051-24-3	Decachlorobiphenyl	136%		10-197%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A4 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-9	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	89.4
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G114282.D	1	02/21/22 02:48	TL	02/16/22 13:50	OP38185	G5G2906
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	17	ug/kg	
11104-28-2	Aroclor 1221	ND	36	23	ug/kg	
11141-16-5	Aroclor 1232	ND	36	23	ug/kg	
53469-21-9	Aroclor 1242	ND	36	15	ug/kg	
12672-29-6	Aroclor 1248	ND	36	32	ug/kg	
11097-69-1	Aroclor 1254	ND	36	20	ug/kg	
11096-82-5	Aroclor 1260	ND	36	15	ug/kg	
11100-14-4	Aroclor 1268	ND	36	15	ug/kg	
37324-23-5	Aroclor 1262	ND	36	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	111%		10-163%
877-09-8	Tetrachloro-m-xylene	129%		10-163%
2051-24-3	Decachlorobiphenyl	113%		10-215%
2051-24-3	Decachlorobiphenyl	138%		10-215%

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Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A4 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-9	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	89.4
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	19900	54	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Antimony ^a	< 11	11	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Arsenic	< 2.2	2.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Barium	136	22	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Beryllium ^a	1.2	1.1	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Cadmium	< 0.54	0.54	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Calcium	1840	540	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Chromium ^a	36.7	5.4	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Cobalt	18.3	5.4	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Copper ^a	43.0	13	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Iron	35200	270	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Lead	18.1	2.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Magnesium	8210	540	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Manganese	1010	8.1	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Mercury	0.055	0.036	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹
Nickel	29.3	4.3	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Potassium	7590	1100	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Selenium ^a	< 11	11	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Silver ^a	< 2.7	2.7	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Sodium	< 1100	1100	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Thallium ^a	< 5.4	5.4	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Vanadium	48.4	5.4	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Zinc	83.0	5.4	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Instrument QC Batch: MA51931

(4) Prep QC Batch: MP31340

(5) Prep QC Batch: MP31347

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WC-A4 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-9	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	89.4
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.27	0.27	mg/kg	1	02/17/22 13:25	MM	SW846 9012B/LACHAT
Solids, Percent	89.4		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.17
4

Report of Analysis

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Client Sample ID:	WC-A4 (0-7.5')	
Lab Sample ID:	JD39776-9A	Date Sampled: 02/15/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 89.4
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55208.D	1	02/26/22 02:28	AFL	02/18/22 08:30	F:OP89836	F:S3Q762
Run #2							

	Initial Weight	Final Volume
Run #1	2.03 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.42	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.28	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.55	0.28	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.55	0.28	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.55	0.28	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.55	0.28	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.55	0.28	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.55	0.28	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.55	0.28	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.55	0.29	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.55	0.28	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.55	0.28	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.55	0.28	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.55	0.28	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.55	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.55	0.28	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.55	0.28	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.1	0.55	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.55	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-A4 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-9A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	89.4
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	98%		40-140%
	13C5-PFPeA	97%		50-150%
	13C5-PFHxA	96%		50-150%
	13C4-PFHpA	97%		50-150%
	13C8-PFOA	100%		50-150%
	13C9-PFNA	102%		50-150%
	13C6-PFDA	103%		50-150%
	13C7-PFUnDA	108%		40-140%
	13C2-PFDoDA	101%		40-140%
	13C2-PFTeDA	102%		30-130%
	13C3-PFBS	99%		50-150%
	13C3-PFHxS	96%		50-150%
	13C8-PFOS	99%		50-150%
	13C8-FOSA	108%		30-130%
	d3-MeFOSAA	90%		40-140%
	d5-EtFOSAA	90%		40-140%
	13C2-6:2FTS	99%		50-150%
	13C2-8:2FTS	101%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
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 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-A4 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-10	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.0
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242326.D	1	02/17/22 18:37	PS	02/16/22 15:00	n/a	VI9840
Run #2							

	Initial Weight
Run #1	5.5 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	95.0	10	4.3	ug/kg	
71-43-2	Benzene	ND	0.52	0.48	ug/kg	
74-97-5	Bromochloromethane	ND	5.2	0.59	ug/kg	
75-27-4	Bromodichloromethane	ND	2.1	0.45	ug/kg	
75-25-2	Bromoform	ND	5.2	1.4	ug/kg	
74-83-9	Bromomethane ^a	ND	5.2	0.80	ug/kg	
78-93-3	2-Butanone (MEK)	21.2	10	2.5	ug/kg	
75-15-0	Carbon disulfide	0.81	2.1	0.56	ug/kg	J
56-23-5	Carbon tetrachloride	ND	2.1	0.65	ug/kg	
108-90-7	Chlorobenzene	ND	2.1	0.48	ug/kg	
75-00-3	Chloroethane ^b	ND	5.2	0.62	ug/kg	
67-66-3	Chloroform	ND	2.1	0.54	ug/kg	
74-87-3	Chloromethane	ND	5.2	2.0	ug/kg	
110-82-7	Cyclohexane	ND	2.1	0.69	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	0.73	ug/kg	
124-48-1	Dibromochloromethane	ND	2.1	0.59	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.44	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.57	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.52	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.52	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.2	0.76	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.52	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.49	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.68	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.88	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.64	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.1	0.49	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	0.48	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.47	ug/kg	
76-13-1	Freon 113	ND	5.2	2.8	ug/kg	
591-78-6	2-Hexanone	ND	5.2	2.2	ug/kg	

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	WC-A4 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-10	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.0
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.1	1.5	ug/kg	
79-20-9	Methyl Acetate	ND	5.2	1.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.1	0.91	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.49	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.2	2.4	ug/kg	
75-09-2	Methylene chloride	ND	5.2	2.7	ug/kg	
100-42-5	Styrene	ND	2.1	0.42	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.63	ug/kg	
127-18-4	Tetrachloroethene	ND	2.1	0.61	ug/kg	
108-88-3	Toluene	ND	1.0	0.55	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.2	2.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	2.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.1	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.58	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.80	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.2	0.71	ug/kg	
75-01-4	Vinyl chloride	ND	2.1	0.50	ug/kg	
	m,p-Xylene	ND	1.0	0.94	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.48	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.48	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		80-124%
17060-07-0	1,2-Dichloroethane-D4	114%		75-133%
2037-26-5	Toluene-D8	100%		79-125%
460-00-4	4-Bromofluorobenzene	94%		58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

(b) This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.

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RL = Reporting Limit

E = Indicates value exceeds calibration range

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	WC-A4 (7.5-15')	
Lab Sample ID:	JD39776-10	Date Sampled: 02/15/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	SW846 8270E SW846 3546	Percent Solids: 87.0
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155102.D	1	02/18/22 06:35	CS	02/16/22 11:30	OP38181	EZ7706
Run #2							

	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	75	19	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	32	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	67	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	190	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	190	40	ug/kg	
95-48-7	2-Methylphenol	ND	75	24	ug/kg	
	3&4-Methylphenol	ND	75	31	ug/kg	
88-75-5	2-Nitrophenol	ND	190	25	ug/kg	
100-02-7	4-Nitrophenol	ND	380	100	ug/kg	
87-86-5	Pentachlorophenol	ND	150	35	ug/kg	
108-95-2	Phenol	ND	75	20	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	190	25	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	28	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	22	ug/kg	
83-32-9	Acenaphthene	ND	38	13	ug/kg	
208-96-8	Acenaphthylene	ND	38	19	ug/kg	
98-86-2	Acetophenone	ND	190	8.1	ug/kg	
120-12-7	Anthracene	ND	38	23	ug/kg	
1912-24-9	Atrazine	ND	75	16	ug/kg	
56-55-3	Benzo(a)anthracene	60.1	38	11	ug/kg	
50-32-8	Benzo(a)pyrene	67.5	38	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	74.3	38	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	44.0	38	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	25.6	38	18	ug/kg	J
101-55-3	4-Bromophenyl phenyl ether	ND	75	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	75	9.2	ug/kg	
92-52-4	1,1'-Biphenyl	ND	75	5.2	ug/kg	
100-52-7	Benzaldehyde	ND	190	9.3	ug/kg	
91-58-7	2-Chloronaphthalene	ND	75	9.0	ug/kg	
106-47-8	4-Chloroaniline	ND	190	14	ug/kg	
86-74-8	Carbazole	ND	75	5.5	ug/kg	

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Report of Analysis

Page 2 of 3

Client Sample ID:	WC-A4 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-10	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.0
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	75	15	ug/kg	
218-01-9	Chrysene	60.3	38	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	75	8.1	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	75	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	75	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	75	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	38	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	38	19	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	75	31	ug/kg	
123-91-1	1,4-Dioxane	ND	38	25	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	38	17	ug/kg	
132-64-9	Dibenzofuran	ND	75	15	ug/kg	
84-74-2	Di-n-butyl phthalate	111	75	6.1	ug/kg	B
117-84-0	Di-n-octyl phthalate	ND	75	9.4	ug/kg	
84-66-2	Diethyl phthalate	ND	75	8.0	ug/kg	
131-11-3	Dimethyl phthalate	ND	75	6.7	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	75	8.8	ug/kg	
206-44-0	Fluoranthene	91.4	38	17	ug/kg	
86-73-7	Fluorene	ND	38	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	75	9.5	ug/kg	
87-68-3	Hexachlorobutadiene ^a	ND	38	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	380	15	ug/kg	
67-72-1	Hexachloroethane	ND	190	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	47.9	38	18	ug/kg	
78-59-1	Isophorone	ND	75	8.1	ug/kg	
91-57-6	2-Methylnaphthalene	ND	38	8.5	ug/kg	
88-74-4	2-Nitroaniline	ND	190	8.9	ug/kg	
99-09-2	3-Nitroaniline	ND	190	9.4	ug/kg	
100-01-6	4-Nitroaniline	ND	190	9.8	ug/kg	
91-20-3	Naphthalene	ND	38	11	ug/kg	
98-95-3	Nitrobenzene	ND	75	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	75	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	14	ug/kg	
85-01-8	Phenanthrene	56.6	38	13	ug/kg	
129-00-0	Pyrene	109	38	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	190	9.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	46%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	WC-A4 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-10	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.0
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	41%		10-105%
118-79-6	2,4,6-Tribromophenol	46%		10-135%
4165-60-0	Nitrobenzene-d5	48%		10-119%
321-60-8	2-Fluorobiphenyl	53%		18-112%
1718-51-0	Terphenyl-d14	57%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.32	160	ug/kg	J
10544-50-0	Cyclic octaatomic sulfur	10.15	380	ug/kg	JN
	Total TIC, Semi-Volatile		380	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

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Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A4 (7.5-15')		
Lab Sample ID:	JD39776-10	Date Sampled:	02/15/22
Matrix:	SO - Soil	Date Received:	02/15/22
Method:	SW846 8081B SW846 3546	Percent Solids:	87.0
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174377.D	1	02/21/22 16:30	TL	02/16/22 13:50	OP38184	G1G6024
Run #2							

	Initial Weight	Final Volume
Run #1	16.2 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.71	0.58	ug/kg	
319-84-6	alpha-BHC	ND	0.71	0.58	ug/kg	
319-85-7	beta-BHC	ND	0.71	0.64	ug/kg	
319-86-8	delta-BHC	ND	0.71	0.68	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.71	0.52	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.71	0.57	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.71	0.32	ug/kg	
60-57-1	Dieldrin	ND	0.71	0.49	ug/kg	
72-54-8	4,4' -DDD	ND	0.71	0.65	ug/kg	
72-55-9	4,4' -DDE	ND	0.71	0.62	ug/kg	
50-29-3	4,4' -DDT	ND	0.71	0.63	ug/kg	
72-20-8	Endrin	ND	0.71	0.55	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.71	0.55	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.71	0.40	ug/kg	
959-98-8	Endosulfan-I	ND	0.71	0.41	ug/kg	
33213-65-9	Endosulfan-II	ND	0.71	0.44	ug/kg	
76-44-8	Heptachlor	ND	0.71	0.61	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.71	0.50	ug/kg	
72-43-5	Methoxychlor	ND	1.4	0.56	ug/kg	
53494-70-5	Endrin ketone	ND	0.71	0.51	ug/kg	
8001-35-2	Toxaphene	ND	18	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	98%		14-145%
877-09-8	Tetrachloro-m-xylene	91%		14-145%
2051-24-3	Decachlorobiphenyl	75%		10-197%
2051-24-3	Decachlorobiphenyl	101%		10-197%

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Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A4 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-10	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.0
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G114283.D	1	02/21/22 03:05	TL	02/16/22 13:50	OP38185	G5G2906
Run #2							

	Initial Weight	Final Volume
Run #1	16.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	17	ug/kg	
11104-28-2	Aroclor 1221	ND	35	22	ug/kg	
11141-16-5	Aroclor 1232	ND	35	23	ug/kg	
53469-21-9	Aroclor 1242	ND	35	15	ug/kg	
12672-29-6	Aroclor 1248	ND	35	32	ug/kg	
11097-69-1	Aroclor 1254	ND	35	19	ug/kg	
11096-82-5	Aroclor 1260	ND	35	15	ug/kg	
11100-14-4	Aroclor 1268	ND	35	15	ug/kg	
37324-23-5	Aroclor 1262	ND	35	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	102%		10-163%
877-09-8	Tetrachloro-m-xylene	118%		10-163%
2051-24-3	Decachlorobiphenyl	111%		10-215%
2051-24-3	Decachlorobiphenyl	121%		10-215%

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Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A4 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-10	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.0
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	16500	55	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Antimony ^a	5.0	4.4	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Arsenic ^a	< 4.4	4.4	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Barium	119	22	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Beryllium ^a	0.89	0.44	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Cadmium	< 0.55	0.55	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Calcium	1520	550	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Chromium	33.7	1.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cobalt	14.0	5.5	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Copper ^a	35.4	5.5	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Iron	27100	110	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Lead	13.7	2.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Magnesium	5370	550	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Manganese	579	1.6	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	0.043	0.036	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹	SW846 7471B ⁵
Nickel	26.5	4.4	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Potassium	4410	1100	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Selenium ^a	< 4.4	4.4	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Silver ^a	< 1.1	1.1	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Sodium	< 1100	1100	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Thallium ^a	< 2.2	2.2	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Vanadium	44.8	5.5	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Zinc	64.8	5.5	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Instrument QC Batch: MA51931

(4) Prep QC Batch: MP31340

(5) Prep QC Batch: MP31347

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WC-A4 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-10	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.0
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.27	0.27	mg/kg	1	02/17/22 13:27	MM	SW846 9012B/LACHAT
Solids, Percent	87		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.19
4

Report of Analysis

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Client Sample ID:	WC-A4 (7.5-15')	
Lab Sample ID:	JD39776-10A	Date Sampled: 02/15/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 87.0
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55211.D	1	02/26/22 03:17	AFL	02/18/22 08:30	F:OP89836	F:S3Q762
Run #2							

	Initial Weight	Final Volume
Run #1	2.04 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.43	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.56	0.28	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.56	0.28	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.56	0.28	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.56	0.28	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.56	0.28	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.56	0.28	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.56	0.28	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.56	0.28	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.56	0.30	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.56	0.28	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.56	0.28	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.56	0.28	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.56	0.28	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.56	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.56	0.28	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.56	0.28	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.1	0.56	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.56	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-A4 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-10A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	87.0
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	88%		40-140%
	13C5-PFPeA	87%		50-150%
	13C5-PFHxA	88%		50-150%
	13C4-PFHpA	89%		50-150%
	13C8-PFOA	91%		50-150%
	13C9-PFNA	93%		50-150%
	13C6-PFDA	92%		50-150%
	13C7-PFUnDA	97%		40-140%
	13C2-PFDoDA	94%		40-140%
	13C2-PFTeDA	93%		30-130%
	13C3-PFBS	88%		50-150%
	13C3-PFHxS	89%		50-150%
	13C8-PFOS	90%		50-150%
	13C8-FOSA	97%		30-130%
	d3-MeFOSAA	79%		40-140%
	d5-EtFOSAA	84%		40-140%
	13C2-6:2FTS	91%		50-150%
	13C2-8:2FTS	91%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-B4 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-11	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	82.5
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242327.D	1	02/17/22 18:58	PS	02/16/22 15:00	n/a	VI9840
Run #2							

	Initial Weight
Run #1	5.8 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	4.3	ug/kg	
71-43-2	Benzene	ND	0.52	0.48	ug/kg	
74-97-5	Bromochloromethane	ND	5.2	0.59	ug/kg	
75-27-4	Bromodichloromethane	ND	2.1	0.45	ug/kg	
75-25-2	Bromoform	ND	5.2	1.4	ug/kg	
74-83-9	Bromomethane ^a	ND	5.2	0.80	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/kg	
75-15-0	Carbon disulfide	ND	2.1	0.56	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.1	0.65	ug/kg	
108-90-7	Chlorobenzene	ND	2.1	0.48	ug/kg	
75-00-3	Chloroethane ^b	ND	5.2	0.62	ug/kg	
67-66-3	Chloroform	ND	2.1	0.54	ug/kg	
74-87-3	Chloromethane	ND	5.2	2.0	ug/kg	
110-82-7	Cyclohexane	ND	2.1	0.69	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	0.73	ug/kg	
124-48-1	Dibromochloromethane	ND	2.1	0.59	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.44	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.57	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.52	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.52	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.2	0.76	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.52	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.49	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.68	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.88	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.64	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.1	0.49	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	0.48	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.47	ug/kg	
76-13-1	Freon 113	ND	5.2	2.8	ug/kg	
591-78-6	2-Hexanone	ND	5.2	2.2	ug/kg	

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	WC-B4 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-11	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	82.5
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.1	1.5	ug/kg	
79-20-9	Methyl Acetate	ND	5.2	1.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.1	0.91	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.49	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.2	2.4	ug/kg	
75-09-2	Methylene chloride	ND	5.2	2.7	ug/kg	
100-42-5	Styrene	ND	2.1	0.42	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.63	ug/kg	
127-18-4	Tetrachloroethene	ND	2.1	0.61	ug/kg	
108-88-3	Toluene	ND	1.0	0.55	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.2	2.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	2.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.1	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.58	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.80	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.2	0.71	ug/kg	
75-01-4	Vinyl chloride	ND	2.1	0.50	ug/kg	
	m,p-Xylene	ND	1.0	0.94	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.48	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.48	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		80-124%
17060-07-0	1,2-Dichloroethane-D4	118%		75-133%
2037-26-5	Toluene-D8	100%		79-125%
460-00-4	4-Bromofluorobenzene	92%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

(b) This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.

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RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	WC-B4 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-11	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	82.5
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155110.D	1	02/18/22 09:55	CS	02/16/22 11:30	OP38181	EZ7706
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.7 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	79	20	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	200	24	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	200	34	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	200	70	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	200	150	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	200	42	ug/kg	
95-48-7	2-Methylphenol	ND	79	25	ug/kg	
	3&4-Methylphenol	ND	79	32	ug/kg	
88-75-5	2-Nitrophenol	ND	200	26	ug/kg	
100-02-7	4-Nitrophenol	ND	390	110	ug/kg	
87-86-5	Pentachlorophenol	ND	160	37	ug/kg	
108-95-2	Phenol	ND	79	21	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	200	26	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	200	30	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	200	24	ug/kg	
83-32-9	Acenaphthene	ND	39	14	ug/kg	
208-96-8	Acenaphthylene	25.7	39	20	ug/kg	J
98-86-2	Acetophenone	ND	200	8.5	ug/kg	
120-12-7	Anthracene	30.2	39	24	ug/kg	J
1912-24-9	Atrazine	ND	79	17	ug/kg	
56-55-3	Benzo(a)anthracene	142	39	11	ug/kg	
50-32-8	Benzo(a)pyrene	167	39	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	190	39	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	135	39	20	ug/kg	
207-08-9	Benzo(k)fluoranthene	80.6	39	18	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	79	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	79	9.6	ug/kg	
92-52-4	1,1'-Biphenyl	ND	79	5.4	ug/kg	
100-52-7	Benzaldehyde	ND	200	9.8	ug/kg	
91-58-7	2-Chloronaphthalene	ND	79	9.4	ug/kg	
106-47-8	4-Chloroaniline	ND	200	14	ug/kg	
86-74-8	Carbazole	11.7	79	5.7	ug/kg	J

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J = Indicates an estimated value

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-B4 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-11	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	82.5
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	79	16	ug/kg	
218-01-9	Chrysene	160	39	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	79	8.4	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	79	17	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	79	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	79	13	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	39	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	39	20	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	79	33	ug/kg	
123-91-1	1,4-Dioxane	ND	39	26	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	37.8	39	17	ug/kg	J
132-64-9	Dibenzofuran	ND	79	16	ug/kg	
84-74-2	Di-n-butyl phthalate	87.0	79	6.4	ug/kg	B
117-84-0	Di-n-octyl phthalate	ND	79	9.8	ug/kg	
84-66-2	Diethyl phthalate	ND	79	8.4	ug/kg	
131-11-3	Dimethyl phthalate	ND	79	7.0	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	79	9.2	ug/kg	
206-44-0	Fluoranthene	199	39	18	ug/kg	
86-73-7	Fluorene	ND	39	18	ug/kg	
118-74-1	Hexachlorobenzene	ND	79	10	ug/kg	
87-68-3	Hexachlorobutadiene ^a	ND	39	16	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	390	16	ug/kg	
67-72-1	Hexachloroethane	ND	200	20	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	148	39	19	ug/kg	
78-59-1	Isophorone	ND	79	8.4	ug/kg	
91-57-6	2-Methylnaphthalene	ND	39	8.9	ug/kg	
88-74-4	2-Nitroaniline	ND	200	9.3	ug/kg	
99-09-2	3-Nitroaniline	ND	200	9.9	ug/kg	
100-01-6	4-Nitroaniline	ND	200	10	ug/kg	
91-20-3	Naphthalene	ND	39	11	ug/kg	
98-95-3	Nitrobenzene	ND	79	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	79	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	200	14	ug/kg	
85-01-8	Phenanthrene	104	39	13	ug/kg	
129-00-0	Pyrene	219	39	13	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	200	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	52%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	WC-B4 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-11	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	82.5
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	48%		10-105%
118-79-6	2,4,6-Tribromophenol	54%		10-135%
4165-60-0	Nitrobenzene-d5	56%		10-119%
321-60-8	2-Fluorobiphenyl	64%		18-112%
1718-51-0	Terphenyl-d14	62%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	1.86	180	ug/kg	J
	system artifact	3.32	210	ug/kg	J
	system artifact/aldol-condensation	3.36	600	ug/kg	J
	unknown	13.68	240	ug/kg	J
	unknown	14.69	220	ug/kg	J
	unknown	14.80	170	ug/kg	J
	unknown	14.99	190	ug/kg	J
	unknown	15.11	350	ug/kg	J
	alkane	15.20	480	ug/kg	J
	unknown	15.25	210	ug/kg	J
	unknown	15.34	230	ug/kg	J
	unknown	15.41	250	ug/kg	J
	unknown	15.47	240	ug/kg	J
	unknown	15.54	310	ug/kg	J
	unknown	16.18	260	ug/kg	J
	Total TIC, Semi-Volatile		3150	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B4 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-11	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	82.5
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174382.D	1	02/21/22 18:01	TL	02/16/22 13:50	OP38184	G1G6024
Run #2							

	Initial Weight	Final Volume
Run #1	16.6 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.73	0.60	ug/kg	
319-84-6	alpha-BHC	ND	0.73	0.59	ug/kg	
319-85-7	beta-BHC	ND	0.73	0.66	ug/kg	
319-86-8	delta-BHC	ND	0.73	0.70	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.73	0.54	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.73	0.59	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.73	0.33	ug/kg	
60-57-1	Dieldrin	ND	0.73	0.50	ug/kg	
72-54-8	4,4' -DDD	ND	0.73	0.67	ug/kg	
72-55-9	4,4' -DDE	ND	0.73	0.64	ug/kg	
50-29-3	4,4' -DDT	ND	0.73	0.65	ug/kg	
72-20-8	Endrin	ND	0.73	0.57	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.73	0.57	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.73	0.41	ug/kg	
959-98-8	Endosulfan-I	ND	0.73	0.42	ug/kg	
33213-65-9	Endosulfan-II	1.3	0.73	0.46	ug/kg	
76-44-8	Heptachlor	ND	0.73	0.63	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.73	0.51	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.58	ug/kg	
53494-70-5	Endrin ketone	ND	0.73	0.53	ug/kg	
8001-35-2	Toxaphene	ND	18	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	157% ^a		14-145%
877-09-8	Tetrachloro-m-xylene	154% ^a		14-145%
2051-24-3	Decachlorobiphenyl	121%		10-197%
2051-24-3	Decachlorobiphenyl	194%		10-197%

(a) Outside control limits due to matrix interference.

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B4 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-11	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	82.5
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G114284.D	1	02/21/22 03:21	TL	02/16/22 13:50	OP38185	G5G2906
Run #2							

	Initial Weight	Final Volume
Run #1	16.6 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	17	ug/kg	
11104-28-2	Aroclor 1221	ND	37	23	ug/kg	
11141-16-5	Aroclor 1232	ND	37	23	ug/kg	
53469-21-9	Aroclor 1242	ND	37	15	ug/kg	
12672-29-6	Aroclor 1248	ND	37	33	ug/kg	
11097-69-1	Aroclor 1254	ND	37	20	ug/kg	
11096-82-5	Aroclor 1260	ND	37	16	ug/kg	
11100-14-4	Aroclor 1268	ND	37	15	ug/kg	
37324-23-5	Aroclor 1262	ND	37	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	128%		10-163%
877-09-8	Tetrachloro-m-xylene	153%		10-163%
2051-24-3	Decachlorobiphenyl	135%		10-215%
2051-24-3	Decachlorobiphenyl	163%		10-215%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B4 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-11	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	82.5
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	17300	61	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Antimony ^a	< 4.8	4.8	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Arsenic ^a	< 4.8	4.8	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Barium	156	24	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Beryllium ^a	0.86	0.48	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Cadmium	< 0.61	0.61	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Calcium	4430	610	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Chromium	34.0	1.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Cobalt	12.4	6.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Copper ^a	51.5	6.1	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Iron	28200	120	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Lead	92.8	2.4	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Magnesium	6370	610	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Manganese	410	1.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Mercury	0.15	0.038	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹
Nickel	24.9	4.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Potassium	3300	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Selenium ^a	< 4.8	4.8	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Silver ^a	< 1.2	1.2	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Sodium	< 1200	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Thallium ^a	< 2.4	2.4	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Vanadium	43.5	6.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Zinc	147	6.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Instrument QC Batch: MA51931

(4) Prep QC Batch: MP31340

(5) Prep QC Batch: MP31347

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WC-B4 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-11	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	82.5
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.25	0.25	mg/kg	1	02/17/22 13:31	MM	SW846 9012B/LACHAT
Solids, Percent	82.5		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-B4 (0-7.5')		
Lab Sample ID:	JD39776-11A	Date Sampled:	02/15/22
Matrix:	SO - Soil	Date Received:	02/15/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids:	82.5
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55467.D	1	03/01/22 05:05	AFL	02/18/22 08:30	F:OP89837	F:S3Q765
Run #2							

	Initial Weight	Final Volume
Run #1	2.02 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.46	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.60	0.30	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.60	0.30	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.60	0.30	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.60	0.30	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.60	0.30	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.60	0.30	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.60	0.30	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.60	0.30	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.60	0.32	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.60	0.30	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.60	0.30	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.60	0.30	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.60	0.30	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.60	0.60	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.60	0.30	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.60	0.30	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.60	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.60	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	

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Report of Analysis

Client Sample ID:	WC-B4 (0-7.5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-11A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	82.5
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	90%		40-140%
	13C5-PFPeA	88%		50-150%
	13C5-PFHxA	88%		50-150%
	13C4-PFHpA	91%		50-150%
	13C8-PFOA	91%		50-150%
	13C9-PFNA	89%		50-150%
	13C6-PFDA	95%		50-150%
	13C7-PFUnDA	84%		40-140%
	13C2-PFDoDA	91%		40-140%
	13C2-PFTeDA	88%		30-130%
	13C3-PFBS	93%		50-150%
	13C3-PFHxS	95%		50-150%
	13C8-PFOS	94%		50-150%
	13C8-FOSA	81%		30-130%
	d3-MeFOSAA	84%		40-140%
	d5-EtFOSAA	91%		40-140%
	13C2-6:2FTS	95%		50-150%
	13C2-8:2FTS	106%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
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Report of Analysis

Page 1 of 2

Client Sample ID:	WC-B4 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-12	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	85.8
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242328.D	1	02/17/22 19:19	PS	02/16/22 15:00	n/a	VI9840
Run #2							

	Initial Weight
Run #1	5.9 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	28.3	9.9	4.1	ug/kg	
71-43-2	Benzene	ND	0.49	0.45	ug/kg	
74-97-5	Bromochloromethane	ND	4.9	0.55	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.42	ug/kg	
75-25-2	Bromoform	ND	4.9	1.3	ug/kg	
74-83-9	Bromomethane ^a	ND	4.9	0.75	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.9	2.4	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.53	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.61	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.45	ug/kg	
75-00-3	Chloroethane ^b	ND	4.9	0.58	ug/kg	
67-66-3	Chloroform	ND	2.0	0.51	ug/kg	
74-87-3	Chloromethane	ND	4.9	1.9	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.65	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.55	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.99	0.42	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.99	0.54	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.99	0.49	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.99	0.49	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.9	0.72	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.99	0.49	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.99	0.46	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.99	0.65	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.99	0.83	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.99	0.60	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.47	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.47	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.45	ug/kg	
100-41-4	Ethylbenzene	ND	0.99	0.45	ug/kg	
76-13-1	Freon 113	ND	4.9	2.6	ug/kg	
591-78-6	2-Hexanone	ND	4.9	2.1	ug/kg	

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Report of Analysis

Page 2 of 2

Client Sample ID:	WC-B4 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-12	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	85.8
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	1.4	ug/kg	
79-20-9	Methyl Acetate	ND	4.9	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.86	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.99	0.46	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.9	2.2	ug/kg	
75-09-2	Methylene chloride	ND	4.9	2.6	ug/kg	
100-42-5	Styrene	ND	2.0	0.40	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.59	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.57	ug/kg	
108-88-3	Toluene	ND	0.99	0.52	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.9	2.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	2.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.48	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.55	ug/kg	
79-01-6	Trichloroethene	ND	0.99	0.75	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.9	0.68	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.48	ug/kg	
	m,p-Xylene	ND	0.99	0.88	ug/kg	
95-47-6	o-Xylene	ND	0.99	0.45	ug/kg	
1330-20-7	Xylene (total)	ND	0.99	0.45	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		80-124%
17060-07-0	1,2-Dichloroethane-D4	121%		75-133%
2037-26-5	Toluene-D8	102%		79-125%
460-00-4	4-Bromofluorobenzene	91%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

(b) This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.

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Report of Analysis

Page 1 of 3

Client Sample ID:	WC-B4 (7.5-15')	
Lab Sample ID:	JD39776-12	Date Sampled: 02/15/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	SW846 8270E SW846 3546	Percent Solids: 85.8
Project:	1001 Whitlock Avenue, Bronx, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155108.D	1	02/18/22 09:06	CS	02/16/22 11:30	OP38181	EZ7706
Run #2							

Run #	Initial Weight	Final Volume
Run #1	32.2 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	72	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	22	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	31	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	64	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	180	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	180	39	ug/kg	
95-48-7	2-Methylphenol	ND	72	23	ug/kg	
	3&4-Methylphenol	ND	72	30	ug/kg	
88-75-5	2-Nitrophenol	ND	180	24	ug/kg	
100-02-7	4-Nitrophenol	ND	360	97	ug/kg	
87-86-5	Pentachlorophenol	ND	140	34	ug/kg	
108-95-2	Phenol	ND	72	19	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	24	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	27	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	22	ug/kg	
83-32-9	Acenaphthene	ND	36	12	ug/kg	
208-96-8	Acenaphthylene	ND	36	18	ug/kg	
98-86-2	Acetophenone	ND	180	7.8	ug/kg	
120-12-7	Anthracene	ND	36	22	ug/kg	
1912-24-9	Atrazine	ND	72	15	ug/kg	
56-55-3	Benzo(a)anthracene	13.3	36	10	ug/kg	J
50-32-8	Benzo(a)pyrene	ND	36	16	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	36	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	36	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	36	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	72	14	ug/kg	
85-68-7	Butyl benzyl phthalate	15.0	72	8.8	ug/kg	J
92-52-4	1,1'-Biphenyl	ND	72	5.0	ug/kg	
100-52-7	Benzaldehyde	ND	180	9.0	ug/kg	
91-58-7	2-Chloronaphthalene	ND	72	8.6	ug/kg	
106-47-8	4-Chloroaniline	ND	180	13	ug/kg	
86-74-8	Carbazole	ND	72	5.2	ug/kg	

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Report of Analysis

Page 2 of 3

Client Sample ID:	WC-B4 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-12	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	85.8
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	72	14	ug/kg	
218-01-9	Chrysene	ND	36	11	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	72	7.7	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	72	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	72	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	72	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	36	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	36	18	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	72	30	ug/kg	
123-91-1	1,4-Dioxane	ND	36	24	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	36	16	ug/kg	
132-64-9	Dibenzofuran	ND	72	15	ug/kg	
84-74-2	Di-n-butyl phthalate	32.5	72	5.9	ug/kg	JB
117-84-0	Di-n-octyl phthalate	ND	72	9.0	ug/kg	
84-66-2	Diethyl phthalate	ND	72	7.7	ug/kg	
131-11-3	Dimethyl phthalate	ND	72	6.4	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	72	8.5	ug/kg	
206-44-0	Fluoranthene	ND	36	16	ug/kg	
86-73-7	Fluorene	ND	36	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	72	9.2	ug/kg	
87-68-3	Hexachlorobutadiene ^a	ND	36	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	360	14	ug/kg	
67-72-1	Hexachloroethane	ND	180	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	36	17	ug/kg	
78-59-1	Isophorone	ND	72	7.7	ug/kg	
91-57-6	2-Methylnaphthalene	ND	36	8.2	ug/kg	
88-74-4	2-Nitroaniline	ND	180	8.5	ug/kg	
99-09-2	3-Nitroaniline	ND	180	9.0	ug/kg	
100-01-6	4-Nitroaniline	ND	180	9.4	ug/kg	
91-20-3	Naphthalene	ND	36	10	ug/kg	
98-95-3	Nitrobenzene	ND	72	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	72	10	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	13	ug/kg	
85-01-8	Phenanthrene	ND	36	12	ug/kg	
129-00-0	Pyrene	13.0	36	12	ug/kg	J
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	9.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	52%		10-109%

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Report of Analysis

Client Sample ID:	WC-B4 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-12	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	85.8
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	47%		10-105%
118-79-6	2,4,6-Tribromophenol	49%		10-135%
4165-60-0	Nitrobenzene-d5	55%		10-119%
321-60-8	2-Fluorobiphenyl	60%		18-112%
1718-51-0	Terphenyl-d14	55%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	1.86	160	ug/kg	J
	system artifact	2.96	170	ug/kg	J
	system artifact	3.32	170	ug/kg	J
	system artifact/aldol-condensation	3.36	180	ug/kg	J
13798-23-7	Sulfur	7.15	480	ug/kg	JN
	Sulfur	8.68	210	ug/kg	J
	Sulfur	9.85	150	ug/kg	J
10544-50-0	Cyclic octaatomic sulfur	10.19	5900	ug/kg	JN
	alkane	13.28	350	ug/kg	J
	alkane	14.68	3400	ug/kg	J
	alkane	15.12	5100	ug/kg	J
	alkane	15.38	290	ug/kg	J
	alkane	15.55	3800	ug/kg	J
	alkane	15.84	250	ug/kg	J
	alkane	16.37	300	ug/kg	J
	alkane	16.58	1400	ug/kg	J
	Total TIC, Semi-Volatile		21630	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B4 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-12	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	85.8
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1G174444.D	1	02/22/22 20:52	TL	02/16/22 13:50	OP38184	G1G6026
Run #2							

	Initial Weight	Final Volume
Run #1	16.2 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.72	0.59	ug/kg	
319-84-6	alpha-BHC	ND	0.72	0.58	ug/kg	
319-85-7	beta-BHC	ND	0.72	0.65	ug/kg	
319-86-8	delta-BHC	ND	0.72	0.69	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.72	0.53	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.72	0.58	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.72	0.33	ug/kg	
60-57-1	Dieldrin	ND	0.72	0.49	ug/kg	
72-54-8	4,4' -DDD	ND	0.72	0.66	ug/kg	
72-55-9	4,4' -DDE	ND	0.72	0.63	ug/kg	
50-29-3	4,4' -DDT	ND	0.72	0.64	ug/kg	
72-20-8	Endrin	ND	0.72	0.56	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.72	0.56	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.72	0.41	ug/kg	
959-98-8	Endosulfan-I	ND	0.72	0.41	ug/kg	
33213-65-9	Endosulfan-II	ND	0.72	0.45	ug/kg	
76-44-8	Heptachlor	ND	0.72	0.62	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.72	0.50	ug/kg	
72-43-5	Methoxychlor	ND	1.4	0.57	ug/kg	
53494-70-5	Endrin ketone	ND	0.72	0.52	ug/kg	
8001-35-2	Toxaphene	ND	18	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	135%		14-145%
877-09-8	Tetrachloro-m-xylene	122%		14-145%
2051-24-3	Decachlorobiphenyl	113%		10-197%
2051-24-3	Decachlorobiphenyl	127%		10-197%

(a) Had TBA cleanup.

ND = Not detected MDL = Method Detection Limit

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B4 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-12	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	85.8
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G213516.D	1	02/24/22 16:30	CL	02/16/22 13:50	OP38185	G2G5602
Run #2							

	Initial Weight	Final Volume
Run #1	16.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	17	ug/kg	
11104-28-2	Aroclor 1221	ND	36	22	ug/kg	
11141-16-5	Aroclor 1232	ND	36	23	ug/kg	
53469-21-9	Aroclor 1242	ND	36	15	ug/kg	
12672-29-6	Aroclor 1248	ND	36	32	ug/kg	
11097-69-1	Aroclor 1254	ND	36	19	ug/kg	
11096-82-5	Aroclor 1260	ND	36	15	ug/kg	
11100-14-4	Aroclor 1268	ND	36	15	ug/kg	
37324-23-5	Aroclor 1262	ND	36	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	127%		10-163%
877-09-8	Tetrachloro-m-xylene	134%		10-163%
2051-24-3	Decachlorobiphenyl	119%		10-215%
2051-24-3	Decachlorobiphenyl	161%		10-215%

ND = Not detected MDL = Method Detection Limit

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: WC-B4 (7.5-15')**Lab Sample ID:** JD39776-12**Matrix:** SO - Soil**Date Sampled:** 02/15/22**Date Received:** 02/15/22**Percent Solids:** 85.8**Project:** 1001 Whitlock Avenue, Bronx, NY

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	18200	59	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Antimony ^a	5.4	4.7	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Arsenic ^a	< 4.7	4.7	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Barium	141	24	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Beryllium ^a	0.92	0.47	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Cadmium	< 0.59	0.59	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Calcium	2340	590	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Chromium	35.8	1.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Cobalt	13.0	5.9	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Copper ^a	35.1	5.9	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Iron	27100	120	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Lead	40.3	2.4	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Magnesium	6840	590	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Manganese	545	1.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Mercury	0.042	0.035	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹
Nickel	21.3	4.7	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Potassium	6040	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Selenium ^a	< 4.7	4.7	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Silver ^a	< 1.2	1.2	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Sodium	< 1200	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Thallium ^a	< 2.4	2.4	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Vanadium	51.1	5.9	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Zinc	72.1	5.9	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Instrument QC Batch: MA51931

(4) Prep QC Batch: MP31340

(5) Prep QC Batch: MP31347

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WC-B4 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-12	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	85.8
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.26	0.26	mg/kg	1	02/17/22 13:32	MM	SW846 9012B/LACHAT
Solids, Percent	85.8		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.23
4

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-B4 (7.5-15')						
Lab Sample ID:	JD39776-12A					Date Sampled:	02/15/22
Matrix:	SO - Soil					Date Received:	02/15/22
Method:	EPA 537M BY ID IN HOUSE					Percent Solids:	85.8
Project:	1001 Whitlock Avenue, Bronx, NY						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55470.D	1	03/01/22 05:56	AFL	02/18/22 08:30	F:OP89837	F:S3Q765
Run #2							

	Initial Weight	Final Volume
Run #1	2.07 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.43	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.56	0.28	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.56	0.28	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.56	0.28	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.56	0.28	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.56	0.28	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.56	0.28	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.56	0.28	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.56	0.28	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.56	0.30	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.56	0.28	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.56	0.28	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.56	0.28	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.56	0.28	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.26	0.56	0.23	ug/kg	J
335-77-3	Perfluorodecanesulfonic acid	ND	0.56	0.28	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.56	0.28	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.1	0.56	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.56	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	

ND = Not detected MDL = Method Detection Limit

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-B4 (7.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39776-12A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	85.8
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	65%		40-140%
	13C5-PFPeA	67%		50-150%
	13C5-PFHxA	71%		50-150%
	13C4-PFHpA	76%		50-150%
	13C8-PFOA	80%		50-150%
	13C9-PFNA	82%		50-150%
	13C6-PFDA	92%		50-150%
	13C7-PFUnDA	71%		40-140%
	13C2-PFDoDA	90%		40-140%
	13C2-PFTeDA	88%		30-130%
	13C3-PFBS	91%		50-150%
	13C3-PFHxS	92%		50-150%
	13C8-PFOS	92%		50-150%
	13C8-FOSA	55%		30-130%
	d3-MeFOSAA	41%		40-140%
	d5-EtFOSAA	47%		40-140%
	13C2-6:2FTS	90%		50-150%
	13C2-8:2FTS	107%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Chain of Custody (SGS Orlando, FL)

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499
www.sgs.com/ehsusa

FED-EX Tracking #	SGS Order #
SGS Order #	SGS Job #
Requested Analysis: (see TEST CODE sheet)	
Matrix Codes	
LAB USE ONLY	

W - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED - Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB - Field Blank
EB - Equipment Blank
RB - Rinse Blank
TB - Trip Blank

Client / Reporting Information		Project Information		Billing Information (if different from Report to)	
Company Name	Project Name	Street	City	State	Company Name
SES1	11819	1001	WHITUCK AVE	NJ	
Street Address	City	State	City	State	City
12A MAPLE AVE	1001	NJ	1001	NJ	1001
City	State	City	State	City	State
PINE BROOK, NJ	1001	PINE BROOK, NJ	1001	PINE BROOK, NJ	1001
Project Contact	E-mail	Project #	Client Purchase Order #	City	State
Sam E. SES1		11819			
Phone #	Fax #	Client Purchase Order #	City	State	Zip
Sampler(s) Name(s)	Phone #	Project Manager	Attention:		
CHRIS MANICINI		JESSIE MANICINI			
Lab Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by
1	WC-A2 (0-7.5')		2/14/22	15:30	CM
2	WC-A2 (7.5-15')		2/14/22	15:40	CM
3	WC-B2 (0-7.5')		2/15/22	10:40	CM
4	WC-B2 (7.5-15')		2/15/22	10:50	CM
5	WC-B2 (15-30')		2/15/22	11:15	CM
6	WC-A3 (7.5-15')		2/15/22	11:30	CM
7	WC-B3 (0-7.5')		2/15/22	9:40	CM
8	WC-B3 (7.5-15')		2/15/22	9:47	CM
9	WC-A4 (0-7.5')		2/15/22	13:10	CM
10	WC-A4 (7.5-15')		2/15/22	13:19	CM
11	WC-B4 (0-7.5')		2/15/22	14:30	CM
Turnaround Time (Business days)		Data Deliverable Information		Comments / Special Instructions	
☒ Std. 10 Business Days SES1		Approved by (SGS Project Manager)/Date:		Sample inventory is verified upon receipt in the Laboratory	
☐ 5 Day RUSH		Initial Assessment: 2/15/22			
☐ 3 Day RUSH		Label Verification: 2/15/22			
☐ 2 Day RUSH					
☐ 1 Day RUSH					
☐ other					
Emergency & Rush T/A data available via LabLink		NJ Data of Known Quality Protocol Reporting			
		Commercial "A" = Results Only; Commercial "B" = Results + QC Summary			
		NJ Reduced = Results + QC Summary + Partial Raw data			
		Sample Custody must be documented below each time samples change possession, including courier delivery.			
Relinquished by Sampler:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:
1 CHRIS MANICINI	2/15/22 15:16	1 JESSIE MANICINI	2/15/22 17:26	2 JESSIE MANICINI	2/15/22 17:26
Relinquished by Sampler:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:
3		3		4	
Relinquished by:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:
5		5		4	
Custody Seal #		Intact		Preserved where applicable	
		Not Intact			
				On Ice	
				Soler Temp.	
				2.6, 2.5, 2.8	
				3.0 CIP	

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX 732-329-3499
www.sgs.com/ehsusa

FED-EX Tracking #		Bottle Order/Control #	
SGS Quote #		SGS Job #	
Requested Analysis (see TEST CODE sheet)		Matrix Codes	
TCE + 30 / TAL PFAS		DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED-Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB-Field Blank EB-Equipment Blank RB- Rinse Blank TB-Trip Blank	
LAB USE ONLY			
Comments / Special Instructions			
Category A Category B Summary Sample inventory is verified upon receipt in the Laboratory Shipping courier delivery.			
Date Time: 1/26 2/15/22 Date Time:		Received By: [Signature] Received By: 4	
Intact Not intact		On Ice Cooler Temp.	

Form:SM088-03C (revised 2/12/18)

<http://www.sqs.com/en/terms-and-conditions>.

JD39776: Chain of Custody

Page 2 of 3

SGS Sample Receipt Summary

Job Number: JD39776

Client: SESI CONSULTING ENGINEERS

Project: 1001 WHITLOCK AVENUE, BRONX, NY

Date / Time Received: 2/15/2022 5:26:00 PM

Delivery Method:
Airbill #s:
Cooler Temps (Raw Measured) °C: Cooler 1: (3.0); Cooler 2: (2.6); Cooler 3: (2.5); Cooler 4: (2.8);

Cooler Temps (Corrected) °C: Cooler 1: (1.4); Cooler 2: (1.0); Cooler 3: (0.9); Cooler 4: (1.2);

Cooler Security
Y or N
Y or N

- | | |
|--|---|
| 1. Custody Seals Present: ☒ ☐ | 3. COC Present: ☒ ☐ |
| 2. Custody Seals Intact: ☒ ☐ | 4. Smpl Dates/Time OK: ☒ ☐ |

Cooler Temperature
Y or N

- | | |
|---|-----------|
| 1. Temp criteria achieved: ☒ ☐ | IR Gun |
| 2. Cooler temp verification: | |
| 3. Cooler media: | Ice (Bag) |
| 4. No. Coolers: | 4 |

Quality Control Preservation
Y or N
N/A

- | | |
|---|---|
| 1. Trip Blank present / cooler: ☐ ☐ | N/A ☒ |
| 2. Trip Blank listed on COC: ☐ ☐ | N/A ☒ |
| 3. Samples preserved properly: ☒ ☐ | |
| 4. VOCs headspace free: ☐ ☐ | N/A ☒ |

Sample Integrity - Documentation
Y or N

- | | |
|---|--|
| 1. Sample labels present on bottles: ☒ ☐ | |
| 2. Container labeling complete: ☒ ☐ | |
| 3. Sample container label / COC agree: ☒ ☐ | |

Sample Integrity - Condition
Y or N

- | | |
|---|--------|
| 1. Sample recvd within HT: ☒ ☐ | |
| 2. All containers accounted for: ☒ ☐ | |
| 3. Condition of sample: | Intact |

Sample Integrity - Instructions
Y or N
N/A

- | | |
|---|---|
| 1. Analysis requested is clear: ☒ ☐ | |
| 2. Bottles received for unspecified tests: ☐ ☒ | |
| 3. Sufficient volume recvd for analysis: ☒ ☐ | |
| 4. Compositing instructions clear: ☐ ☐ | N/A ☒ |
| 5. Filtering instructions clear: ☐ ☐ | N/A ☒ |

Test Strip Lot #s:

pH 1-12: 231619

pH 12+: 203117A

Other: (Specify)

Comments

SM089-03

Rev. Date 12/7/17

JD39776: Chain of Custody

Page 3 of 3

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/enisusa

Client / Reporting Information				Project Information				Requested Analysis												Matrix Options							
Company Name: Street Address City State Zip				Project Name: 1001 Whitlock Avenue, Bronx, NY Street Billing Information (if different from Report to) Company Name Project # Direct Address Phone # Client Purchase Order # City State Zip																DW - Drinking Water GW - Ground Water WM - Water SW - Surface Water SO - Soil SL - Sludge SED-Sediment OL - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Waste FB - Field Blank EB-Equipment Blank RB - Horse Blank TB - Trip Blank							
Samester(s) Name(s) CM				Phonot Project Manager Attention:																							
SGS Sample # Field ID / Point of Collection				Collection																							
MECH/CV# Visit # Date Time Sampled by Matrix # of bottles HCl NaOH HNO ₃ H ₂ O ₂ HOAc CD Value D5 Value EPOXIDE																											
1A WC-A2 (0-7.5')				2/14/22 3:30:00 PM CM SO				X																			
2A WC-A2 (7.5-15')				2/14/22 3:40:00 PM CM SO				X																			
3A WC-B2 (0-7.5')				2/15/22 10:40:00 AM CM SO				X																			
4A WC-B2 (7.5-15')				2/15/22 10:50:00 AM CM SO				X																			
5A WC-A3 (0-7.5')				2/15/22 11:15:00 AM CM SO				X																			
6A WC-A3 (7.5-15')				2/15/22 11:30:00 AM CM SO				X																			
7A WC-B3 (0-7.5')				2/15/22 9:40:00 AM CM SO				X																			
8A WC-B3 (7.5-15')				2/15/22 9:47:00 AM CM SO				X																			
9A WC-A4 (0-7.5')				2/15/22 1:10:00 PM CM SO				X																			
10A WC-A4 (7.5-15')				2/15/22 1:19:00 PM CM SO				X																			
11A WC-B4 (0-7.5')				2/15/22 2:30:00 PM CM SO				X																			
12A WC-B4 (7.5-15')				2/15/22 2:42:00 PM CM SO				X																			
Turnaround Time (Business days)				Data Deliverable Information												Comments / Special Instructions											
☐ Standard 10 Business Days ☐ 5 Business Days RUSH ☐ 3 Business Days RUSH ☐ 2 Business Days RUSH ☐ 1 Business Day EMERGENCY ☒ Other 1/10/2020				Approved By (SGS P#): Date:				☐ Commercial "A" (Level 1) ☐ Commercial "B" (Level 2) ☐ FULLT1 (Level 3+4) ☐ NJ Reduced ☐ Commercial "C" ☐ Commercial "X" = Results Only ☐ Commercial "Y" = Results + QC Summary ☐ Commercial "Z" = Results + QC Summary + Partial Raw data				☐ NYASP Category A ☐ NYASP Category B ☐ State Forms ☐ EDD Format ☒ Other NYASPB				INITIAL ASSESSMENT LABEL VERIFICATION											
Emergency & Rush T/A data available via Lublink Approval needed for RUSH/Emergency TAT				Sample Custody must be documented below each time samples change possession, including courier delivery.												http://www.sgs.com/en/terms-and-conditions											
Relinquished by: 1 [Signature]				Date / Time: 2/14/22 12:30				Received By: 1				Relinquished By: 2				Date / Time: 2/17/22 9:45				Received By: 2 [Signature]							
Relinquished by: 2				Date / Time:				Received By: 2				Relinquished By: 3				Date / Time:				Received By: 4							
Relinquished by: 5				Date / Time:				Received By: 5				Custody Seal #				☐ Intact ☐ Not intact ☐ Preserved where applicable ☐ Absent				☐ On ice ☐ Cooler Temp °C							

j439776.xls
Rev. Date: 4/10/18

JD39776: Chain of Custody

Page 1 of 2

SGS Orlando, FL

SGS Sample Receipt Summary

Job Number: JD39776

Client: SGS NJ

Project: 1001 WHITLOCK AVENUE, BRONX, NY

Date / Time Received: 2/17/2022 9:45:00 AM

Delivery Method: FX

Airbill #s: 527206390478

Therm ID: IR 1;

Therm CF: 0.4;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 1: (2.2);

Cooler Temps (Corrected) °C: Cooler 1: (2.6);

Cooler Information

Y or N

1. Custody Seals Present ☒ ☐
2. Custody Seals Intact ☒ ☐
3. Temp criteria achieved ☒ ☐
4. Cooler temp verification IR Gun
5. Cooler media Ice (Bag)

Trip Blank Information

Y or N N/A

1. Trip Blank present / cooler ☐ ☐ ☒
 2. Trip Blank listed on COC ☐ ☐ ☒
- W or S N/A
3. Type Of TB Received ☐ ☐ ☒

Sample Information

Y or N N/A

1. Sample labels present on bottles ☒ ☐
2. Samples preserved properly ☒ ☐
3. Sufficient volume/containers recvd for analysis: ☒ ☐
4. Condition of sample Intact
5. Sample recvd within HT ☒ ☐
6. Dates/Times/IDs on COC match Sample Label ☒ ☐
7. VOCs have headspace ☐ ☐ ☒
8. Bottles received for unspecified tests ☐ ☒ ☐
9. Compositing instructions clear ☐ ☐ ☒
10. Voa Soil Kits/Jars received past 48hrs? ☐ ☐ ☒
11. % Solids Jar received? ☐ ☐ ☒
12. Residual Chlorine Present? ☐ ☐ ☒

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____
Test Strip Lot #s: pH 0-3 230315
Residual Chlorine Test Strip Lot #: _____

Number of 5035 Field Kits: _____
pH 10-12 219813A

Number of Lab Filtered Metals: _____
Other: (Specify) _____

Comments

SM001
Rev. Date 05/24/17

Technician: NATHANS

Date: 2/17/2022 9:45:00 AM

Reviewer: _____

Date: _____

JD39776: Chain of Custody

Page 2 of 2

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

SESI Consulting Engineers

1001 Whitlock Avenue, Bronx, NY

11819

SGS Job Number: JD39845

Sampling Date: 02/16/22

Report to:

SESI Consulting Engineers

jam@sesi.org

ATTN: Jesse Mausner

Total number of pages in report: **112**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A handwritten signature in black ink, appearing to read 'Mike Earp'.

Mike Earp
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

This report shall not be reproduced, except in its entirety, without the written approval of SGS.
Test results relate only to samples analyzed.

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Sample Summary

SESI Consulting Engineers

Job No: JD39845

1001 Whitlock Avenue, Bronx, NY
Project No: 11819

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
---------------	----------------	---------	----------	-------------	------	------------------

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

JD39845-1	02/16/22	12:22	CM	02/16/22	SO	Soil	WC-A5 (0-7.5')
JD39845-1A	02/16/22	12:22	CM	02/16/22	SO	Soil	WC-A5 (0-7.5')
JD39845-2	02/16/22	12:10	CM	02/16/22	SO	Soil	WC-A5 (7.5-15')
JD39845-2A	02/16/22	12:10	CM	02/16/22	SO	Soil	WC-A5 (7.5-15')
JD39845-3	02/16/22	10:17	CM	02/16/22	SO	Soil	WC-B5 (0-7.5')
JD39845-3A	02/16/22	10:17	CM	02/16/22	SO	Soil	WC-B5 (0-7.5')
JD39845-4	02/16/22	10:30	CM	02/16/22	SO	Soil	WC-B5 (7.5-15')
JD39845-4A	02/16/22	10:30	CM	02/16/22	SO	Soil	WC-B5 (7.5-15')
JD39845-5	02/16/22	12:35	CM	02/16/22	SO	Soil	WC-A6 (0-7.5')
JD39845-5A	02/16/22	12:35	CM	02/16/22	SO	Soil	WC-A6 (0-7.5')
JD39845-6	02/16/22	12:43	CM	02/16/22	SO	Soil	WC-A6 (7.5-15')
JD39845-6A	02/16/22	12:43	CM	02/16/22	SO	Soil	WC-A6 (7.5-15')

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Sample Summary
(continued)

SESI Consulting Engineers

Job No: JD39845

1001 Whitlock Avenue, Bronx, NY
Project No: 11819

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JD39845-7	02/16/22	13:40 CM	02/16/22	SO	Soil	WC-A7 (0-7.5')
JD39845-7A	02/16/22	13:40 CM	02/16/22	SO	Soil	WC-A7 (0-7.5')
JD39845-8	02/16/22	13:58 CM	02/16/22	SO	Soil	WC-A7 (7.5-15')
JD39845-8A	02/16/22	13:58 CM	02/16/22	SO	Soil	WC-A7 (7.5-15')

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

2

Client: SESI Consulting Engineers

Job No JD39845

Site: 1001 Whitlock Avenue, Bronx, NY

Report Date 3/4/2022 11:33:50 AM

On 02/16/2022, 16 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 1.4 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD39845 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260D

Matrix: SO

Batch ID: V3C7643

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD39845-2MS, JD39845-4DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JD39845-4 for Bromomethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD39845-3 for Bromomethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD39845-2 for Bromomethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD39845-1 for Bromomethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD39845-5 for Bromomethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD39845-6 for Bromomethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD39845-7 for Bromomethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD39845-8 for Bromomethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

MS Semi-volatiles By Method EPA 537M BY ID

Matrix: SO

Batch ID: F:OP89889

- The data for EPA 537M BY ID meets quality control requirements.
- JD39845-1A: Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.
- JD39845-4A: Analysis performed at SGS Orlando, FL.
- JD39845-7A: Analysis performed at SGS Orlando, FL.
- JD39845-8A: Analysis performed at SGS Orlando, FL.
- JD39845-6A: Analysis performed at SGS Orlando, FL.
- JD39845-1A: Analysis performed at SGS Orlando, FL.
- JD39845-3A: Analysis performed at SGS Orlando, FL.
- JD39845-2A: Analysis performed at SGS Orlando, FL.
- JD39845-5A: Analysis performed at SGS Orlando, FL.

Friday, March 04, 2022

Page 1 of 6

MS Semi-volatiles By Method SW846 8270E

Matrix: SO

Batch ID: OP38200

- All samples were extracted within the recommended method holding time.
- Sample(s) JD39845-1MS, JD39845-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JD39845-3 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39845-1 for 2,4-Dinitrotoluene: Associated CCV outside of control limits high, sample was ND.
- JD39845-3 for 2,4-Dinitrotoluene: Associated CCV outside of control limits high, sample was ND.
- JD39845-2 for 4-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39845-2 for 2,4-Dinitrotoluene: Associated CCV outside of control limits high, sample was ND.
- JD39845-1 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39845-1 for 4-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39845-5 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39845-5 for 4-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39845-5 for 2,4-Dinitrotoluene: Associated CCV outside of control limits high, sample was ND.
- JD39845-8 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39845-8 for 4-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39845-6 for 2,4-Dinitrotoluene: Associated CCV outside of control limits high, sample was ND.
- JD39845-8 for 2,4-Dinitrotoluene: Associated CCV outside of control limits high, sample was ND.
- JD39845-6 for 4-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39845-7 for 4-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39845-2 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39845-4 for 2,4-Dinitrotoluene: Associated CCV outside of control limits high, sample was ND.
- JD39845-4 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39845-7 for 2,4-Dinitrotoluene: Associated CCV outside of control limits high, sample was ND.
- JD39845-6 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39845-3 for 4-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39845-4 for 4-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39845-7 for Caprolactam: Associated CCV outside of control limits high, sample was ND.

Friday, March 04, 2022

Page 2 of 6

GC/LC Semi-volatiles By Method SW846 8081B

Matrix: SO

Batch ID: OP38204

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39845-2MS, JD39845-2MSD, OP38204-MSMSD were used as the QC samples indicated.
- JD39845-4: Had TBA cleanup.
- OP38204-BS1: Had TBA cleanup.
- OP38204-MB1: Had TBA cleanup.
- JD39845-6 for Decachlorobiphenyl: Outside control limits due to matrix interference.
- JD39845-6 for Dieldrin: More than 40 % RPD for detected concentrations between the two GC columns.
- JD39845-6 for 4,4'-DDT: More than 40 % RPD for detected concentrations between the two GC columns.
- JD39845-5 for Decachlorobiphenyl: Outside control limits due to matrix interference.
- OP38204-BS1 for Methoxychlor: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.
- JD39845-5 for 4,4'-DDD: More than 40 % RPD for detected concentrations between the two GC columns.

GC/LC Semi-volatiles By Method SW846 8082A

Matrix: SO

Batch ID: OP38205

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39845-3MS, JD39845-3MSD, OP38205-MSMSD were used as the QC samples indicated.
- JD39845-1 for Aroclor 1260: Associated CCV outside of control limits low.
- JD39845-7 for Decachlorobiphenyl: Outside control limits due to matrix interference.
- JD39845-8 for Aroclor 1260: Associated CCV outside of control limits high, sample was ND.
- JD39845-8 for Decachlorobiphenyl: Outside control limits due to matrix interference.
- JD39845-6 for Decachlorobiphenyl: Outside control limits due to matrix interference.
- JD39845-2 for Aroclor 1260: Associated CCV outside of control limits low.
- JD39845-6 for Aroclor 1260: Associated CCV outside of control limits high, sample was ND.
- JD39845-3 for Aroclor 1260: Associated CCV outside of control limits low.
- JD39845-5 for Aroclor 1260: Associated CCV outside of control limits high, sample was ND.
- JD39845-4 for Aroclor 1260: Associated CCV outside of control limits high, sample was ND.
- JD39845-7 for Aroclor 1260: Associated CCV outside of control limits high, sample was ND.
- JD39845-5 for Decachlorobiphenyl: Outside control limits due to matrix interference.

Friday, March 04, 2022

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Metals Analysis By Method SW846 6010D

Matrix: SO

Batch ID: MP31355

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39845-5MS, JD39845-5MSD, JD39845-5PS, JD39845-5SDL were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Copper, Antimony, Calcium, Magnesium, Zinc are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- Matrix Spike Duplicate Recovery(s) for Antimony, Copper, Calcium are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for Iron (MS only), Manganese, Aluminum are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for MSD for Copper, Manganese, Calcium, Zinc are outside control limits for sample MP31355-S2. High rpd due to possible sample nonhomogeneity.
- RPD(s) for Serial Dilution for Arsenic, Beryllium, Silver, Thallium are outside control limits for sample MP31355-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- JD39845-3 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39845-3 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39845-7 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39845-1 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39845-3 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39845-8 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39845-8 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39845-3 for Manganese: Elevated detection limit due to dilution required for high interfering element.
- JD39845-8 for Manganese: Elevated detection limit due to dilution required for high interfering element.
- JD39845-8 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39845-5 for Manganese: Elevated detection limit due to dilution required for high interfering element.
- JD39845-6 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39845-8 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39845-6 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39845-7 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39845-3 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39845-3 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39845-4 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39845-4 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39845-6 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39845-4 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39845-4 for Manganese: Elevated detection limit due to dilution required for high interfering element.
- JD39845-4 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39845-4 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39845-3 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39845-4 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39845-8 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39845-2 for Manganese: Elevated detection limit due to dilution required for high interfering element.
- JD39845-5 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39845-5 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39845-1 for Arsenic: Elevated detection limit due to dilution required for high interfering element.

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Page 4 of 6

Metals Analysis By Method SW846 6010D

Matrix: SO

Batch ID: MP31355

- JD39845-1 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39845-1 for Manganese: Elevated detection limit due to dilution required for high interfering element.
- JD39845-1 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39845-5 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39845-2 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39845-7 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39845-2 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39845-7 for Manganese: Elevated detection limit due to dilution required for high interfering element.
- JD39845-2 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39845-8 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39845-7 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39845-2 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39845-7 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39845-5 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39845-1 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39845-5 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39845-5 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39845-2 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39845-2 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39845-7 for Beryllium: Elevated detection limit due to dilution required for high interfering element.

Metals Analysis By Method SW846 7471B

Matrix: SO

Batch ID: MP31420

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39845-1MS, JD39845-1MSD were used as the QC samples for metals.

General Chemistry By Method SM2540 G 18TH ED MOD

Matrix: SO

Batch ID: GN26486

- Sample(s) JD39845-1DUP were used as the QC samples for Solids, Percent.

Matrix: SO

Batch ID: GN26488

- Sample(s) JD39845-5DUP were used as the QC samples for Solids, Percent.

General Chemistry By Method SW846 9012B/LACHAT

Matrix: SO

Batch ID: GP38592

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39843-1DUP, JD39843-1MS were used as the QC samples for Cyanide.
- Matrix Spike Recovery(s) for Cyanide are outside control limits. Spike recovery indicates possible matrix interference.

Friday, March 04, 2022

Page 5 of 6

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: SGS Dayton, NJ

Job No: JD39845

Site: SESINJPB: 1001 Whitlock Avenue, Bronx, NY

Report Date 3/4/2022 10:27:30 AM

On 02/16/2022, 8 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc - Orlando. at a maximum corrected temperature of 4.2 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. - Orlando Job Number of JD39845 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section. Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

MS Semi-volatiles By Method EPA 537M BY ID

Matrix: SO

Batch ID: OP89889

Sample(s) JD39845-5AMS, JD39845-5AMSD were used as the QC samples indicated.

Sample(s) JD39845-1A have surrogates outside control limits.

JD39845-1A: Dilution required due to matrix interference (ID recovery standard failure).

JD39845-1A for d3-MeFOSAA: Outside control limits.

JD39845-1A for d5-EtFOSAA: Outside control limits.

SGS North America Inc. - Orlando certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted. Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria. SGS North America Inc.- Orlando is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety.

Narrative prepared by:

Ariel Hartney, Client Services (signature on file)

Summary of Hits

Job Number: JD39845
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/16/22



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

JD39845-1 WC-A5 (0-7.5')

Acetone	29.2	9.1	3.8	ug/kg	SW846 8260D
2-Butanone (MEK)	5.9 J	9.1	2.2	ug/kg	SW846 8260D
Anthracene	25.4 J	40	24	ug/kg	SW846 8270E
Benzo(a)anthracene	140	40	11	ug/kg	SW846 8270E
Benzo(a)pyrene	136	40	18	ug/kg	SW846 8270E
Benzo(b)fluoranthene	145	40	18	ug/kg	SW846 8270E
Benzo(g,h,i)perylene	75.6	40	20	ug/kg	SW846 8270E
Benzo(k)fluoranthene	52.5	40	19	ug/kg	SW846 8270E
Chrysene	126	40	12	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene	18.7 J	40	18	ug/kg	SW846 8270E
Fluoranthene	245	40	18	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	92.5	40	19	ug/kg	SW846 8270E
Phenanthrene	67.6	40	13	ug/kg	SW846 8270E
Pyrene	239	40	13	ug/kg	SW846 8270E
Aluminum	17400	59		mg/kg	SW846 6010D
Barium	119	23		mg/kg	SW846 6010D
Beryllium	0.62	0.23		mg/kg	SW846 6010D
Calcium	1430	590		mg/kg	SW846 6010D
Chromium	26.5	1.2		mg/kg	SW846 6010D
Cobalt	9.8	5.9		mg/kg	SW846 6010D
Copper ^a	15.1	5.9		mg/kg	SW846 6010D
Iron	27800	120		mg/kg	SW846 6010D
Lead	13.2	2.3		mg/kg	SW846 6010D
Magnesium	4040	590		mg/kg	SW846 6010D
Manganese ^a	267	3.5		mg/kg	SW846 6010D
Nickel	19.3	4.7		mg/kg	SW846 6010D
Potassium	1530	1200		mg/kg	SW846 6010D
Vanadium	39.7	5.9		mg/kg	SW846 6010D
Zinc	55.1	5.9		mg/kg	SW846 6010D

JD39845-1A WC-A5 (0-7.5')

No hits reported in this sample.

JD39845-2 WC-A5 (7.5-15')

Methylene chloride	3.5 J	4.9	2.6	ug/kg	SW846 8260D
Benzo(a)anthracene	29.6 J	38	11	ug/kg	SW846 8270E
Benzo(a)pyrene	26.9 J	38	17	ug/kg	SW846 8270E
Benzo(b)fluoranthene	32.4 J	38	17	ug/kg	SW846 8270E
Chrysene	32.0 J	38	12	ug/kg	SW846 8270E
Fluoranthene	45.2	38	17	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	19.2 J	38	18	ug/kg	SW846 8270E

Summary of Hits

Job Number: JD39845
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/16/22



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Phenanthrene		24.6 J	38	13	ug/kg	SW846 8270E
Pyrene		50.9	38	12	ug/kg	SW846 8270E
Total TIC, Semi-Volatile		2580 J			ug/kg	
Aluminum		19500	61		mg/kg	SW846 6010D
Antimony		2.7	2.5		mg/kg	SW846 6010D
Barium		115	25		mg/kg	SW846 6010D
Beryllium ^a		0.55	0.49		mg/kg	SW846 6010D
Calcium		1670	610		mg/kg	SW846 6010D
Chromium		36.0	1.2		mg/kg	SW846 6010D
Cobalt		14.1	6.1		mg/kg	SW846 6010D
Copper ^a		43.3	6.1		mg/kg	SW846 6010D
Iron		29700	120		mg/kg	SW846 6010D
Lead		36.9	2.5		mg/kg	SW846 6010D
Magnesium		5700	610		mg/kg	SW846 6010D
Manganese ^a		417	3.7		mg/kg	SW846 6010D
Mercury		0.069	0.037		mg/kg	SW846 7471B
Nickel		26.6	4.9		mg/kg	SW846 6010D
Potassium		3580	1200		mg/kg	SW846 6010D
Vanadium		50.0	6.1		mg/kg	SW846 6010D
Zinc		78.1	6.1		mg/kg	SW846 6010D

JD39845-2A WC-A5 (7.5-15')

No hits reported in this sample.

JD39845-3 WC-B5 (0-7.5')

Acenaphthene	34.8 J	39	13	ug/kg	SW846 8270E
Acenaphthylene	42.4	39	20	ug/kg	SW846 8270E
Anthracene	140	39	24	ug/kg	SW846 8270E
Benzo(a)anthracene	440	39	11	ug/kg	SW846 8270E
Benzo(a)pyrene	446	39	18	ug/kg	SW846 8270E
Benzo(b)fluoranthene	474	39	17	ug/kg	SW846 8270E
Benzo(g,h,i)perylene	281	39	20	ug/kg	SW846 8270E
Benzo(k)fluoranthene	182	39	18	ug/kg	SW846 8270E
1,1'-Biphenyl	5.6 J	78	5.3	ug/kg	SW846 8270E
Carbazole	15.0 J	78	5.7	ug/kg	SW846 8270E
Chrysene	432	39	12	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene	70.6	39	17	ug/kg	SW846 8270E
Fluoranthene	878	39	17	ug/kg	SW846 8270E
Fluorene	36.6 J	39	18	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	313	39	18	ug/kg	SW846 8270E
2-Methylnaphthalene	16.7 J	39	8.8	ug/kg	SW846 8270E
Naphthalene	21.5 J	39	11	ug/kg	SW846 8270E
Phenanthrene	484	39	13	ug/kg	SW846 8270E

Summary of Hits

Job Number: JD39845
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/16/22



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Pyrene		820	39	12	ug/kg	SW846 8270E
Total TIC, Semi-Volatile		450 J			ug/kg	
Aluminum		19300	59		mg/kg	SW846 6010D
Antimony		3.2	2.4		mg/kg	SW846 6010D
Barium		159	24		mg/kg	SW846 6010D
Calcium		4390	590		mg/kg	SW846 6010D
Chromium		40.7	1.2		mg/kg	SW846 6010D
Cobalt		18.2	5.9		mg/kg	SW846 6010D
Copper ^a		59.0	15		mg/kg	SW846 6010D
Iron		34200	300		mg/kg	SW846 6010D
Lead		60.4	2.4		mg/kg	SW846 6010D
Magnesium		8940	590		mg/kg	SW846 6010D
Manganese ^a		615	8.9		mg/kg	SW846 6010D
Mercury		0.050	0.038		mg/kg	SW846 7471B
Nickel		33.8	4.7		mg/kg	SW846 6010D
Potassium		6440	1200		mg/kg	SW846 6010D
Vanadium		48.3	5.9		mg/kg	SW846 6010D
Zinc		131	5.9		mg/kg	SW846 6010D

JD39845-3A WC-B5 (0-7.5')

No hits reported in this sample.

JD39845-4 WC-B5 (7.5-15')

Acetone	35.8	10	4.2	ug/kg	SW846 8260D
2-Butanone (MEK)	8.1 J	10	2.5	ug/kg	SW846 8260D
Benzo(a)anthracene	35.1 J	38	11	ug/kg	SW846 8270E
Benzo(a)pyrene	30.8 J	38	17	ug/kg	SW846 8270E
Benzo(b)fluoranthene	35.1 J	38	17	ug/kg	SW846 8270E
Benzo(g,h,i)perylene	19.8 J	38	19	ug/kg	SW846 8270E
Chrysene	33.5 J	38	12	ug/kg	SW846 8270E
Fluoranthene	63.9	38	17	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	22.2 J	38	18	ug/kg	SW846 8270E
Phenanthrene	36.1 J	38	13	ug/kg	SW846 8270E
Pyrene	54.3	38	12	ug/kg	SW846 8270E
Total TIC, Semi-Volatile	4350 J			ug/kg	
Aluminum	19200	56		mg/kg	SW846 6010D
Barium	118	22		mg/kg	SW846 6010D
Beryllium ^a	0.67	0.45		mg/kg	SW846 6010D
Calcium	1590	560		mg/kg	SW846 6010D
Chromium	32.1	1.1		mg/kg	SW846 6010D
Cobalt	13.6	5.6		mg/kg	SW846 6010D
Copper ^a	28.1	5.6		mg/kg	SW846 6010D
Iron	27400	110		mg/kg	SW846 6010D

Summary of Hits

Job Number: JD39845
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/16/22

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Lead		26.0	2.2		mg/kg	SW846 6010D
Magnesium		6530	560		mg/kg	SW846 6010D
Manganese ^a		291	3.4		mg/kg	SW846 6010D
Mercury		0.056	0.035		mg/kg	SW846 7471B
Nickel		28.4	4.5		mg/kg	SW846 6010D
Potassium		2900	1100		mg/kg	SW846 6010D
Vanadium		44.2	5.6		mg/kg	SW846 6010D
Zinc		80.7	5.6		mg/kg	SW846 6010D

JD39845-4A WC-B5 (7.5-15')

No hits reported in this sample.

JD39845-5 WC-A6 (0-7.5')

Tetrachloroethene	1.1 J	2.0	0.58	ug/kg	SW846 8260D
Acenaphthene	46.7	37	13	ug/kg	SW846 8270E
Anthracene	215	37	23	ug/kg	SW846 8270E
Benzo(a)anthracene	685	37	11	ug/kg	SW846 8270E
Benzo(a)pyrene	620	37	17	ug/kg	SW846 8270E
Benzo(b)fluoranthene	692	37	16	ug/kg	SW846 8270E
Benzo(g,h,i)perylene	364	37	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene	253	37	17	ug/kg	SW846 8270E
1,1'-Biphenyl	5.6 J	74	5.1	ug/kg	SW846 8270E
Carbazole	67.9 J	74	5.4	ug/kg	SW846 8270E
Chrysene	677	37	12	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene	97.1	37	16	ug/kg	SW846 8270E
Dibenzofuran	43.3 J	74	15	ug/kg	SW846 8270E
Fluoranthene	1480	37	17	ug/kg	SW846 8270E
Fluorene	43.1	37	17	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	429	37	17	ug/kg	SW846 8270E
2-Methylnaphthalene	8.9 J	37	8.4	ug/kg	SW846 8270E
Naphthalene	18.0 J	37	10	ug/kg	SW846 8270E
Phenanthrene	1030	37	13	ug/kg	SW846 8270E
Pyrene	1240	37	12	ug/kg	SW846 8270E
Total TIC, Semi-Volatile	1290 J			ug/kg	
4,4'-DDD ^b	3.1	0.72	0.67	ug/kg	SW846 8081B
4,4'-DDE	2.3	0.72	0.64	ug/kg	SW846 8081B
4,4'-DDT	5.1	0.72	0.64	ug/kg	SW846 8081B
Aluminum	22600	58		mg/kg	SW846 6010D
Antimony	4.1	2.3		mg/kg	SW846 6010D
Barium	192	23		mg/kg	SW846 6010D
Calcium	3330	580		mg/kg	SW846 6010D
Chromium	40.8	1.2		mg/kg	SW846 6010D
Cobalt	21.9	5.8		mg/kg	SW846 6010D

Summary of Hits

Job Number: JD39845
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/16/22



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Copper ^a		170	14		mg/kg	SW846 6010D
Iron		42800	290		mg/kg	SW846 6010D
Lead		51.3	2.3		mg/kg	SW846 6010D
Magnesium		8500	580		mg/kg	SW846 6010D
Manganese ^a		1370	8.7		mg/kg	SW846 6010D
Mercury		0.039	0.034		mg/kg	SW846 7471B
Nickel		35.7	4.6		mg/kg	SW846 6010D
Potassium		9510	1200		mg/kg	SW846 6010D
Vanadium		52.5	5.8		mg/kg	SW846 6010D
Zinc		155	5.8		mg/kg	SW846 6010D
JD39845-5A WC-A6 (0-7.5')						
Perfluorooctanesulfonic acid ^c		0.38 J	0.56	0.22	ug/kg	EPA 537M BY ID
JD39845-6 WC-A6 (7.5-15')						
Acenaphthene		165	38	13	ug/kg	SW846 8270E
Anthracene		714	38	23	ug/kg	SW846 8270E
Benzo(a)anthracene		3230	38	11	ug/kg	SW846 8270E
Benzo(a)pyrene		2840	38	17	ug/kg	SW846 8270E
Benzo(b)fluoranthene		3050	38	17	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		1600	38	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene		1190	38	18	ug/kg	SW846 8270E
Carbazole		78.8	76	5.5	ug/kg	SW846 8270E
Chrysene		3040	38	12	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		471	38	17	ug/kg	SW846 8270E
Dibenzofuran		36.4 J	76	15	ug/kg	SW846 8270E
Fluoranthene		5190	76	34	ug/kg	SW846 8270E
Fluorene		136	38	17	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		1860	38	18	ug/kg	SW846 8270E
2-Methylnaphthalene		13.0 J	38	8.6	ug/kg	SW846 8270E
Phenanthrene		2520	38	13	ug/kg	SW846 8270E
Pyrene		5210	76	24	ug/kg	SW846 8270E
Total TIC, Semi-Volatile		18130 J			ug/kg	
Aldrin		3.0	0.70	0.58	ug/kg	SW846 8081B
Dieldrin ^b		0.60 J	0.70	0.48	ug/kg	SW846 8081B
4,4' -DDD		2.8	0.70	0.65	ug/kg	SW846 8081B
4,4' -DDE		2.7	0.70	0.62	ug/kg	SW846 8081B
4,4' -DDT ^b		2.7	0.70	0.62	ug/kg	SW846 8081B
Aluminum		14700	59		mg/kg	SW846 6010D
Arsenic		3.1	2.4		mg/kg	SW846 6010D
Barium		118	24		mg/kg	SW846 6010D
Calcium		1330	590		mg/kg	SW846 6010D
Chromium		33.3	1.2		mg/kg	SW846 6010D

Summary of Hits

Job Number: JD39845
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/16/22

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Cobalt		11.9	5.9		mg/kg	SW846 6010D
Copper		25.4	3.0		mg/kg	SW846 6010D
Iron		22700	59		mg/kg	SW846 6010D
Lead		17.6	2.4		mg/kg	SW846 6010D
Magnesium		5760	590		mg/kg	SW846 6010D
Manganese		479	1.8		mg/kg	SW846 6010D
Nickel		25.1	4.8		mg/kg	SW846 6010D
Potassium		4480	1200		mg/kg	SW846 6010D
Vanadium		39.8	5.9		mg/kg	SW846 6010D
Zinc		75.2	5.9		mg/kg	SW846 6010D

JD39845-6A WC-A6 (7.5-15')

No hits reported in this sample.

JD39845-7 WC-A7 (0-7.5')

Benzo(a)anthracene	13.3 J	35	9.9	ug/kg	SW846 8270E
Pyrene	12.7 J	35	11	ug/kg	SW846 8270E
Aluminum	1850	5.5		mg/kg	SW846 6010D
Antimony	0.30	0.22		mg/kg	SW846 6010D
Barium	14.2	2.2		mg/kg	SW846 6010D
Calcium	104	55		mg/kg	SW846 6010D
Chromium	3.1	0.11		mg/kg	SW846 6010D
Cobalt	1.9	0.55		mg/kg	SW846 6010D
Copper ^a	4.5	1.4		mg/kg	SW846 6010D
Iron	3350	28		mg/kg	SW846 6010D
Lead	3.2	0.22		mg/kg	SW846 6010D
Magnesium	697	55		mg/kg	SW846 6010D
Manganese ^a	76.0	0.83		mg/kg	SW846 6010D
Mercury	0.043	0.034		mg/kg	SW846 7471B
Nickel	3.4	0.44		mg/kg	SW846 6010D
Potassium	773	110		mg/kg	SW846 6010D
Vanadium	3.9	0.55		mg/kg	SW846 6010D
Zinc	12.0	0.55		mg/kg	SW846 6010D

JD39845-7A WC-A7 (0-7.5')

Perfluorooctanesulfonic acid ^c	0.22 J	0.54	0.22	ug/kg	EPA 537M BY ID
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JD39845-8 WC-A7 (7.5-15')

Acetone	5.3 J	11	4.4	ug/kg	SW846 8260D
Benzo(a)anthracene	54.1	40	11	ug/kg	SW846 8270E
Benzo(a)pyrene	53.4	40	18	ug/kg	SW846 8270E

Summary of Hits

Job Number: JD39845
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/16/22

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Benzo(b)fluoranthene		69.7	40	18	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		38.0 J	40	20	ug/kg	SW846 8270E
Benzo(k)fluoranthene		26.2 J	40	19	ug/kg	SW846 8270E
Chrysene		68.2	40	13	ug/kg	SW846 8270E
Fluoranthene		106	40	18	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		45.1	40	19	ug/kg	SW846 8270E
Phenanthrene		62.5	40	13	ug/kg	SW846 8270E
Pyrene		92.9	40	13	ug/kg	SW846 8270E
Aluminum		22300	62		mg/kg	SW846 6010D
Antimony		3.5	2.5		mg/kg	SW846 6010D
Barium		180	25		mg/kg	SW846 6010D
Calcium		997	620		mg/kg	SW846 6010D
Chromium		39.6	1.2		mg/kg	SW846 6010D
Cobalt		19.5	6.2		mg/kg	SW846 6010D
Copper ^a		52.1	16		mg/kg	SW846 6010D
Iron		37900	310		mg/kg	SW846 6010D
Lead		23.3	2.5		mg/kg	SW846 6010D
Magnesium		8110	620		mg/kg	SW846 6010D
Manganese ^a		1370	9.3		mg/kg	SW846 6010D
Mercury		0.038	0.038		mg/kg	SW846 7471B
Nickel		31.2	5.0		mg/kg	SW846 6010D
Potassium		9260	1200		mg/kg	SW846 6010D
Vanadium		50.2	6.2		mg/kg	SW846 6010D
Zinc		114	6.2		mg/kg	SW846 6010D

JD39845-8A WC-A7 (7.5-15')

No hits reported in this sample.

(a) Elevated detection limit due to dilution required for high interfering element.

(b) More than 40 % RPD for detected concentrations between the two GC columns.

(c) Analysis performed at SGS Orlando, FL.



Dayton, NJ

Section 4

4

Sample Results

Report of Analysis

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-A5 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-1	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173652.D	1	02/17/22 14:39	PS	02/16/22 20:00	n/a	V3C7643
Run #2							

	Initial Weight
Run #1	6.6 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	29.2	9.1	3.8	ug/kg	
71-43-2	Benzene	ND	0.45	0.41	ug/kg	
74-97-5	Bromochloromethane	ND	4.5	0.51	ug/kg	
75-27-4	Bromodichloromethane	ND	1.8	0.39	ug/kg	
75-25-2	Bromoform	ND	4.5	1.2	ug/kg	
74-83-9	Bromomethane ^a	ND	4.5	0.69	ug/kg	
78-93-3	2-Butanone (MEK)	5.9	9.1	2.2	ug/kg	J
75-15-0	Carbon disulfide	ND	1.8	0.49	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.8	0.56	ug/kg	
108-90-7	Chlorobenzene	ND	1.8	0.42	ug/kg	
75-00-3	Chloroethane	ND	4.5	0.54	ug/kg	
67-66-3	Chloroform	ND	1.8	0.47	ug/kg	
74-87-3	Chloromethane	ND	4.5	1.8	ug/kg	
110-82-7	Cyclohexane	ND	1.8	0.60	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.8	0.63	ug/kg	
124-48-1	Dibromochloromethane	ND	1.8	0.51	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.91	0.38	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.91	0.50	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.91	0.45	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.91	0.45	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.5	0.66	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.91	0.45	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.91	0.43	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.91	0.59	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.91	0.76	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.91	0.55	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.8	0.43	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.8	0.43	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.8	0.41	ug/kg	
100-41-4	Ethylbenzene	ND	0.91	0.41	ug/kg	
76-13-1	Freon 113	ND	4.5	2.4	ug/kg	
591-78-6	2-Hexanone	ND	4.5	1.9	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	WC-A5 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-1	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.8	1.3	ug/kg	
79-20-9	Methyl Acetate	ND	4.5	1.3	ug/kg	
108-87-2	Methylcyclohexane	ND	1.8	0.79	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.91	0.43	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.5	2.1	ug/kg	
75-09-2	Methylene chloride	ND	4.5	2.4	ug/kg	
100-42-5	Styrene	ND	1.8	0.36	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.8	0.54	ug/kg	
127-18-4	Tetrachloroethene	ND	1.8	0.53	ug/kg	
108-88-3	Toluene	ND	0.91	0.48	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.5	2.3	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.5	2.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.8	0.44	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.8	0.50	ug/kg	
79-01-6	Trichloroethene	ND	0.91	0.69	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.5	0.62	ug/kg	
75-01-4	Vinyl chloride	ND	1.8	0.44	ug/kg	
	m,p-Xylene	ND	0.91	0.81	ug/kg	
95-47-6	o-Xylene	ND	0.91	0.42	ug/kg	
1330-20-7	Xylene (total)	ND	0.91	0.42	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		80-124%
17060-07-0	1,2-Dichloroethane-D4	99%		75-133%
2037-26-5	Toluene-D8	98%		79-125%
460-00-4	4-Bromofluorobenzene	101%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	WC-A5 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-1	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155155.D	1	02/21/22 11:21	JY	02/19/22 08:00	OP38200	EZ7709
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	79	20	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	200	24	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	200	34	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	200	71	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	200	150	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	200	42	ug/kg	
95-48-7	2-Methylphenol	ND	79	25	ug/kg	
	3&4-Methylphenol	ND	79	33	ug/kg	
88-75-5	2-Nitrophenol	ND	200	26	ug/kg	
100-02-7	4-Nitrophenol	ND	400	110	ug/kg	
87-86-5	Pentachlorophenol	ND	160	37	ug/kg	
108-95-2	Phenol	ND	79	21	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	200	26	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	200	30	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	200	24	ug/kg	
83-32-9	Acenaphthene	ND	40	14	ug/kg	
208-96-8	Acenaphthylene	ND	40	20	ug/kg	
98-86-2	Acetophenone	ND	200	8.5	ug/kg	
120-12-7	Anthracene	25.4	40	24	ug/kg	J
1912-24-9	Atrazine	ND	79	17	ug/kg	
56-55-3	Benzo(a)anthracene	140	40	11	ug/kg	
50-32-8	Benzo(a)pyrene	136	40	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	145	40	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	75.6	40	20	ug/kg	
207-08-9	Benzo(k)fluoranthene	52.5	40	19	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	79	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	79	9.7	ug/kg	
92-52-4	1,1'-Biphenyl	ND	79	5.4	ug/kg	
100-52-7	Benzaldehyde	ND	200	9.8	ug/kg	
91-58-7	2-Chloronaphthalene	ND	79	9.4	ug/kg	
106-47-8	4-Chloroaniline	ND	200	14	ug/kg	
86-74-8	Carbazole	ND	79	5.8	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-A5 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-1	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	79	16	ug/kg	
218-01-9	Chrysene	126	40	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	79	8.5	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	79	17	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	79	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	79	13	ug/kg	
121-14-2	2,4-Dinitrotoluene ^a	ND	40	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	40	20	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	79	33	ug/kg	
123-91-1	1,4-Dioxane	ND	40	26	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	18.7	40	18	ug/kg	J
132-64-9	Dibenzofuran	ND	79	16	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	79	6.5	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	79	9.9	ug/kg	
84-66-2	Diethyl phthalate	ND	79	8.4	ug/kg	
131-11-3	Dimethyl phthalate	ND	79	7.1	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	79	9.3	ug/kg	
206-44-0	Fluoranthene	245	40	18	ug/kg	
86-73-7	Fluorene	ND	40	18	ug/kg	
118-74-1	Hexachlorobenzene	ND	79	10	ug/kg	
87-68-3	Hexachlorobutadiene	ND	40	16	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	400	16	ug/kg	
67-72-1	Hexachloroethane	ND	200	20	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	92.5	40	19	ug/kg	
78-59-1	Isophorone	ND	79	8.5	ug/kg	
91-57-6	2-Methylnaphthalene	ND	40	9.0	ug/kg	
88-74-4	2-Nitroaniline	ND	200	9.4	ug/kg	
99-09-2	3-Nitroaniline	ND	200	9.9	ug/kg	
100-01-6	4-Nitroaniline ^a	ND	200	10	ug/kg	
91-20-3	Naphthalene	ND	40	11	ug/kg	
98-95-3	Nitrobenzene	ND	79	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	79	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	200	15	ug/kg	
85-01-8	Phenanthrene	67.6	40	13	ug/kg	
129-00-0	Pyrene	239	40	13	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	200	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	59%		10-109%

ND = Not detected MDL = Method Detection Limit

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-A5 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-1	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	59%		10-105%
118-79-6	2,4,6-Tribromophenol	62%		10-135%
4165-60-0	Nitrobenzene-d5	59%		10-119%
321-60-8	2-Fluorobiphenyl	69%		18-112%
1718-51-0	Terphenyl-d14	69%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A5 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-1	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174469.D	1	02/23/22 06:39	CP	02/19/22 10:05	OP38204	G1G6028
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.78	0.64	ug/kg	
319-84-6	alpha-BHC	ND	0.78	0.63	ug/kg	
319-85-7	beta-BHC	ND	0.78	0.70	ug/kg	
319-86-8	delta-BHC	ND	0.78	0.75	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.78	0.57	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.78	0.63	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.78	0.35	ug/kg	
60-57-1	Dieldrin	ND	0.78	0.53	ug/kg	
72-54-8	4,4' -DDD	ND	0.78	0.71	ug/kg	
72-55-9	4,4' -DDE	ND	0.78	0.68	ug/kg	
50-29-3	4,4' -DDT	ND	0.78	0.69	ug/kg	
72-20-8	Endrin	ND	0.78	0.60	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.78	0.61	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.78	0.44	ug/kg	
959-98-8	Endosulfan-I	ND	0.78	0.45	ug/kg	
33213-65-9	Endosulfan-II	ND	0.78	0.49	ug/kg	
76-44-8	Heptachlor	ND	0.78	0.67	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.78	0.55	ug/kg	
72-43-5	Methoxychlor	ND	1.6	0.62	ug/kg	
53494-70-5	Endrin ketone	ND	0.78	0.56	ug/kg	
8001-35-2	Toxaphene	ND	19	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	57%		14-145%
877-09-8	Tetrachloro-m-xylene	57%		14-145%
2051-24-3	Decachlorobiphenyl	55%		10-197%
2051-24-3	Decachlorobiphenyl	75%		10-197%

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Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A5 (0-7.5')		
Lab Sample ID:	JD39845-1	Date Sampled:	02/16/22
Matrix:	SO - Soil	Date Received:	02/16/22
Method:	SW846 8082A SW846 3546	Percent Solids:	83.5
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK8143.D	1	02/22/22 14:02	TL	02/19/22 10:05	OP38205	GRK212
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	39	18	ug/kg	
11104-28-2	Aroclor 1221	ND	39	24	ug/kg	
11141-16-5	Aroclor 1232	ND	39	25	ug/kg	
53469-21-9	Aroclor 1242	ND	39	16	ug/kg	
12672-29-6	Aroclor 1248	ND	39	35	ug/kg	
11097-69-1	Aroclor 1254	ND	39	21	ug/kg	
11096-82-5	Aroclor 1260 ^a	ND	39	17	ug/kg	
11100-14-4	Aroclor 1268	ND	39	16	ug/kg	
37324-23-5	Aroclor 1262	ND	39	25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	58%		10-163%
877-09-8	Tetrachloro-m-xylene	75%		10-163%
2051-24-3	Decachlorobiphenyl	55%		10-215%
2051-24-3	Decachlorobiphenyl	76%		10-215%

(a) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	WC-A5 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-1	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	83.5
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	17400	59	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Antimony	< 2.3	2.3	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Arsenic ^a	< 4.7	4.7	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Barium	119	23	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Beryllium	0.62	0.23	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Cadmium	< 0.59	0.59	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Calcium	1430	590	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Chromium	26.5	1.2	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Cobalt	9.8	5.9	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Copper ^a	15.1	5.9	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Iron	27800	120	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Lead	13.2	2.3	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Magnesium	4040	590	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Manganese ^a	267	3.5	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	< 0.037	0.037	mg/kg	1	02/22/22	02/22/22	LM	SW846 7471B ³	SW846 7471B ⁵
Nickel	19.3	4.7	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Potassium	1530	1200	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Selenium ^a	< 4.7	4.7	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Silver ^a	< 1.2	1.2	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Sodium	< 1200	1200	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Thallium ^a	< 2.3	2.3	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Vanadium	39.7	5.9	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Zinc	55.1	5.9	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴

(1) Instrument QC Batch: MA51933

(2) Instrument QC Batch: MA51936

(3) Instrument QC Batch: MA51938

(4) Prep QC Batch: MP31355

(5) Prep QC Batch: MP31420

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WC-A5 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-1	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	83.5
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.25	0.25	mg/kg	1	02/18/22 15:13	MM	SW846 9012B/LACHAT
Solids, Percent	83.5		%	1	02/17/22 16:06	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	WC-A5 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-1A	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55495.D	1	03/01/22 13:34	AFL	02/22/22 12:00	F:OP89889	F:S3Q766
Run #2 ^b	3Q55620.D	5	03/03/22 02:19	AFL	02/22/22 12:00	F:OP89889	F:S3Q767

	Initial Weight	Final Volume
Run #1	1.97 g	1.0 ml
Run #2	1.97 g	1.0 ml

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
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PERFLUOROALKYLCARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	ND	1.2	0.46	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.61	0.30	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.61	0.30	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.61	0.30	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.61	0.30	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.61	0.30	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.61	0.30	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.61	0.30	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.61	0.30	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.61	0.32	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.61	0.30	ug/kg	

PERFLUOROALKYLSULFONIC ACIDS

375-73-5	Perfluorobutanesulfonic acid	ND	0.61	0.30	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.61	0.30	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.61	0.30	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.61	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.61	0.30	ug/kg	

PERFLUOROCTANESULFONAMIDES

754-91-6	PFOSA	ND	0.61	0.30	ug/kg	
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PERFLUOROCTANESULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	ND ^c	6.1	3.0	ug/kg	
2991-50-6	EtFOSAA	ND ^c	6.1	3.0	ug/kg	

FLUOROTELOMER SULFONATES

27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	WC-A5 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-1A	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	63%	78%	40-140%
	13C5-PFPeA	64%	75%	50-150%
	13C5-PFHxA	65%	78%	50-150%
	13C4-PFHpA	68%	83%	50-150%
	13C8-PFOA	68%	81%	50-150%
	13C9-PFNA	67%	81%	50-150%
	13C6-PFDA	74%	89%	50-150%
	13C7-PFUnDA	75%	93%	40-140%
	13C2-PFDoDA	70%	86%	40-140%
	13C2-PFTeDA	67%	78%	30-130%
	13C3-PFBS	72%	85%	50-150%
	13C3-PFHxS	74%	89%	50-150%
	13C8-PFOS	72%	84%	50-150%
	13C8-FOSA	64%	77%	30-130%
	d3-MeFOSAA	36% ^d	43%	40-140%
	d5-EtFOSAA	36% ^d	48%	40-140%
	13C2-6:2FTS	69%	85%	50-150%
	13C2-8:2FTS	70%	95%	50-150%

(a) Analysis performed at SGS Orlando, FL.

(b) Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.

(c) Result is from Run# 2

(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	WC-A5 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-2	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	85.9
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173653.D	1	02/17/22 15:10	PS	02/16/22 20:00	n/a	V3C7643
Run #2							

	Initial Weight
Run #1	5.9 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	9.9	4.1	ug/kg	
71-43-2	Benzene	ND	0.49	0.45	ug/kg	
74-97-5	Bromochloromethane	ND	4.9	0.55	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.42	ug/kg	
75-25-2	Bromoform	ND	4.9	1.3	ug/kg	
74-83-9	Bromomethane ^a	ND	4.9	0.75	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.9	2.4	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.53	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.61	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.45	ug/kg	
75-00-3	Chloroethane	ND	4.9	0.58	ug/kg	
67-66-3	Chloroform	ND	2.0	0.51	ug/kg	
74-87-3	Chloromethane	ND	4.9	1.9	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.65	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.68	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.55	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.99	0.42	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.99	0.54	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.99	0.49	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.99	0.49	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.9	0.72	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.99	0.49	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.99	0.46	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.99	0.65	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.99	0.83	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.99	0.60	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.47	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.47	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.45	ug/kg	
100-41-4	Ethylbenzene	ND	0.99	0.45	ug/kg	
76-13-1	Freon 113	ND	4.9	2.6	ug/kg	
591-78-6	2-Hexanone	ND	4.9	2.1	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

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B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	WC-A5 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-2	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	85.9
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	1.4	ug/kg	
79-20-9	Methyl Acetate	ND	4.9	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.86	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.99	0.46	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.9	2.2	ug/kg	
75-09-2	Methylene chloride	3.5	4.9	2.6	ug/kg	J
100-42-5	Styrene	ND	2.0	0.40	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.59	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.57	ug/kg	
108-88-3	Toluene	ND	0.99	0.52	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.9	2.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	2.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.48	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.55	ug/kg	
79-01-6	Trichloroethene	ND	0.99	0.75	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.9	0.67	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.47	ug/kg	
	m,p-Xylene	ND	0.99	0.88	ug/kg	
95-47-6	o-Xylene	ND	0.99	0.45	ug/kg	
1330-20-7	Xylene (total)	ND	0.99	0.45	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		80-124%
17060-07-0	1,2-Dichloroethane-D4	98%		75-133%
2037-26-5	Toluene-D8	99%		79-125%
460-00-4	4-Bromofluorobenzene	103%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	WC-A5 (7.5-15')	
Lab Sample ID:	JD39845-2	Date Sampled: 02/16/22
Matrix:	SO - Soil	Date Received: 02/16/22
Method:	SW846 8270E SW846 3546	Percent Solids: 85.9
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155156.D	1	02/21/22 11:45	JY	02/19/22 08:00	OP38200	EZ7709
Run #2							

	Initial Weight	Final Volume
Run #1	30.9 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	75	19	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	32	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	67	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	190	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	190	40	ug/kg	
95-48-7	2-Methylphenol	ND	75	24	ug/kg	
	3&4-Methylphenol	ND	75	31	ug/kg	
88-75-5	2-Nitrophenol	ND	190	25	ug/kg	
100-02-7	4-Nitrophenol	ND	380	100	ug/kg	
87-86-5	Pentachlorophenol	ND	150	35	ug/kg	
108-95-2	Phenol	ND	75	20	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	190	25	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	28	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	22	ug/kg	
83-32-9	Acenaphthene	ND	38	13	ug/kg	
208-96-8	Acenaphthylene	ND	38	19	ug/kg	
98-86-2	Acetophenone	ND	190	8.1	ug/kg	
120-12-7	Anthracene	ND	38	23	ug/kg	
1912-24-9	Atrazine	ND	75	16	ug/kg	
56-55-3	Benzo(a)anthracene	29.6	38	11	ug/kg	J
50-32-8	Benzo(a)pyrene	26.9	38	17	ug/kg	J
205-99-2	Benzo(b)fluoranthene	32.4	38	17	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	ND	38	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	38	18	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	75	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	75	9.2	ug/kg	
92-52-4	1,1'-Biphenyl	ND	75	5.2	ug/kg	
100-52-7	Benzaldehyde	ND	190	9.3	ug/kg	
91-58-7	2-Chloronaphthalene	ND	75	9.0	ug/kg	
106-47-8	4-Chloroaniline	ND	190	14	ug/kg	
86-74-8	Carbazole	ND	75	5.5	ug/kg	

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	WC-A5 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-2	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	85.9
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	75	15	ug/kg	
218-01-9	Chrysene	32.0	38	12	ug/kg	J
111-91-1	bis(2-Chloroethoxy)methane	ND	75	8.1	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	75	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	75	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	75	12	ug/kg	
121-14-2	2,4-Dinitrotoluene ^a	ND	38	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	38	19	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	75	31	ug/kg	
123-91-1	1,4-Dioxane	ND	38	25	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	38	17	ug/kg	
132-64-9	Dibenzofuran	ND	75	15	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	75	6.1	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	75	9.4	ug/kg	
84-66-2	Diethyl phthalate	ND	75	8.0	ug/kg	
131-11-3	Dimethyl phthalate	ND	75	6.7	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	75	8.8	ug/kg	
206-44-0	Fluoranthene	45.2	38	17	ug/kg	
86-73-7	Fluorene	ND	38	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	75	9.5	ug/kg	
87-68-3	Hexachlorobutadiene	ND	38	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	380	15	ug/kg	
67-72-1	Hexachloroethane	ND	190	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	19.2	38	18	ug/kg	J
78-59-1	Isophorone	ND	75	8.1	ug/kg	
91-57-6	2-Methylnaphthalene	ND	38	8.5	ug/kg	
88-74-4	2-Nitroaniline	ND	190	8.9	ug/kg	
99-09-2	3-Nitroaniline	ND	190	9.4	ug/kg	
100-01-6	4-Nitroaniline ^a	ND	190	9.8	ug/kg	
91-20-3	Naphthalene	ND	38	11	ug/kg	
98-95-3	Nitrobenzene	ND	75	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	75	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	14	ug/kg	
85-01-8	Phenanthrene	24.6	38	13	ug/kg	J
129-00-0	Pyrene	50.9	38	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	190	9.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	53%		10-109%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	WC-A5 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-2	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	85.9
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	52%		10-105%
118-79-6	2,4,6-Tribromophenol	55%		10-135%
4165-60-0	Nitrobenzene-d5	52%		10-119%
321-60-8	2-Fluorobiphenyl	60%		18-112%
1718-51-0	Terphenyl-d14	57%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.33	340	ug/kg	J
10544-50-0	Cyclic octaatomic sulfur	10.11	2400	ug/kg	JN
	unknown	14.33	180	ug/kg	J
	Total TIC, Semi-Volatile		2580	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A5 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-2	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	85.9
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174470.D	1	02/23/22 06:57	CP	02/19/22 10:05	OP38204	G1G6028
Run #2							

	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.74	0.61	ug/kg	
319-84-6	alpha-BHC	ND	0.74	0.60	ug/kg	
319-85-7	beta-BHC	ND	0.74	0.67	ug/kg	
319-86-8	delta-BHC	ND	0.74	0.71	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.74	0.55	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.74	0.60	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.74	0.34	ug/kg	
60-57-1	Dieldrin	ND	0.74	0.51	ug/kg	
72-54-8	4,4' -DDD	ND	0.74	0.68	ug/kg	
72-55-9	4,4' -DDE	ND	0.74	0.65	ug/kg	
50-29-3	4,4' -DDT	ND	0.74	0.66	ug/kg	
72-20-8	Endrin	ND	0.74	0.58	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.74	0.58	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.74	0.42	ug/kg	
959-98-8	Endosulfan-I	ND	0.74	0.43	ug/kg	
33213-65-9	Endosulfan-II	ND	0.74	0.46	ug/kg	
76-44-8	Heptachlor	ND	0.74	0.64	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.74	0.52	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.59	ug/kg	
53494-70-5	Endrin ketone	ND	0.74	0.54	ug/kg	
8001-35-2	Toxaphene	ND	19	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	78%		14-145%
877-09-8	Tetrachloro-m-xylene	80%		14-145%
2051-24-3	Decachlorobiphenyl	70%		10-197%
2051-24-3	Decachlorobiphenyl	85%		10-197%

ND = Not detected MDL = Method Detection Limit

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A5 (7.5-15')		
Lab Sample ID:	JD39845-2	Date Sampled:	02/16/22
Matrix:	SO - Soil	Date Received:	02/16/22
Method:	SW846 8082A SW846 3546	Percent Solids:	85.9
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK8144.D	1	02/22/22 14:18	TL	02/19/22 10:05	OP38205	GRK212
Run #2							

	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	17	ug/kg	
11104-28-2	Aroclor 1221	ND	37	23	ug/kg	
11141-16-5	Aroclor 1232	ND	37	24	ug/kg	
53469-21-9	Aroclor 1242	ND	37	15	ug/kg	
12672-29-6	Aroclor 1248	ND	37	33	ug/kg	
11097-69-1	Aroclor 1254	ND	37	20	ug/kg	
11096-82-5	Aroclor 1260 ^a	ND	37	16	ug/kg	
11100-14-4	Aroclor 1268	ND	37	16	ug/kg	
37324-23-5	Aroclor 1262	ND	37	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	73%		10-163%
877-09-8	Tetrachloro-m-xylene	94%		10-163%
2051-24-3	Decachlorobiphenyl	62%		10-215%
2051-24-3	Decachlorobiphenyl	83%		10-215%

(a) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
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 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A5 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-2	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	85.9
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	19500	61	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Antimony	2.7	2.5	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Arsenic ^a	< 4.9	4.9	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Barium	115	25	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Beryllium ^a	0.55	0.49	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cadmium	< 0.61	0.61	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Calcium	1670	610	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Chromium	36.0	1.2	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Cobalt	14.1	6.1	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Copper ^a	43.3	6.1	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Iron	29700	120	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Lead	36.9	2.5	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Magnesium	5700	610	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Manganese ^a	417	3.7	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	0.069	0.037	mg/kg	1	02/22/22	02/22/22	LM	SW846 7471B ³	SW846 7471B ⁵
Nickel	26.6	4.9	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Potassium	3580	1200	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Selenium ^a	< 4.9	4.9	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Silver ^a	< 1.2	1.2	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Sodium	< 1200	1200	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Thallium ^a	< 2.5	2.5	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Vanadium	50.0	6.1	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Zinc	78.1	6.1	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴

(1) Instrument QC Batch: MA51933

(2) Instrument QC Batch: MA51936

(3) Instrument QC Batch: MA51938

(4) Prep QC Batch: MP31355

(5) Prep QC Batch: MP31420

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WC-A5 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-2	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	85.9
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.25	0.25	mg/kg	1	02/18/22 15:14	MM	SW846 9012B/LACHAT
Solids, Percent	85.9		%	1	02/17/22 16:06	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.3
4

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-A5 (7.5-15')	
Lab Sample ID:	JD39845-2A	Date Sampled: 02/16/22
Matrix:	SO - Soil	Date Received: 02/16/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 85.9
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55496.D	1	03/01/22 14:57	AFL	02/22/22 12:00	F:OP89889	F:S3Q766
Run #2							

	Initial Weight	Final Volume
Run #1	1.97 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.45	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.59	0.30	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.59	0.30	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.59	0.30	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.59	0.30	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.59	0.30	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.59	0.30	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.59	0.30	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.59	0.30	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.59	0.31	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.59	0.30	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.59	0.30	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.59	0.30	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.59	0.30	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.59	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.59	0.30	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.59	0.30	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.59	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.59	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-A5 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-2A	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	85.9
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	80%		40-140%
	13C5-PFPeA	81%		50-150%
	13C5-PFHxA	80%		50-150%
	13C4-PFHpA	80%		50-150%
	13C8-PFOA	82%		50-150%
	13C9-PFNA	80%		50-150%
	13C6-PFDA	84%		50-150%
	13C7-PFUnDA	84%		40-140%
	13C2-PFDoDA	84%		40-140%
	13C2-PFTeDA	79%		30-130%
	13C3-PFBS	83%		50-150%
	13C3-PFHxS	83%		50-150%
	13C8-PFOS	83%		50-150%
	13C8-FOSA	64%		30-130%
	d3-MeFOSAA	61%		40-140%
	d5-EtFOSAA	67%		40-140%
	13C2-6:2FTS	81%		50-150%
	13C2-8:2FTS	93%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-B5 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-3	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173654.D	1	02/17/22 15:37	PS	02/16/22 20:00	n/a	V3C7643
Run #2							

	Initial Weight
Run #1	5.9 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	4.2	ug/kg	
71-43-2	Benzene	ND	0.50	0.46	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.56	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.43	ug/kg	
75-25-2	Bromoform	ND	5.0	1.4	ug/kg	
74-83-9	Bromomethane ^a	ND	5.0	0.77	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	2.4	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.54	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.62	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.46	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.59	ug/kg	
67-66-3	Chloroform	ND	2.0	0.52	ug/kg	
74-87-3	Chloromethane	ND	5.0	2.0	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.66	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.70	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.56	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.42	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.55	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.73	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.47	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.66	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.61	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.48	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.48	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.46	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.46	ug/kg	
76-13-1	Freon 113	ND	5.0	2.7	ug/kg	
591-78-6	2-Hexanone	ND	5.0	2.1	ug/kg	

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	WC-B5 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-3	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	1.4	ug/kg	
79-20-9	Methyl Acetate	ND	5.0	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.88	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.47	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	2.3	ug/kg	
75-09-2	Methylene chloride	ND	5.0	2.6	ug/kg	
100-42-5	Styrene	ND	2.0	0.40	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.60	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.58	ug/kg	
108-88-3	Toluene	ND	1.0	0.53	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.49	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.56	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.77	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.69	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.48	ug/kg	
	m,p-Xylene	ND	1.0	0.90	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.46	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.46	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		80-124%
17060-07-0	1,2-Dichloroethane-D4	98%		75-133%
2037-26-5	Toluene-D8	99%		79-125%
460-00-4	4-Bromofluorobenzene	101%		58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	WC-B5 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-3	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155157.D	1	02/21/22 12:10	JY	02/19/22 08:00	OP38200	EZ7709
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	78	19	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	200	24	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	200	33	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	200	69	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	200	150	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	200	42	ug/kg	
95-48-7	2-Methylphenol	ND	78	25	ug/kg	
	3&4-Methylphenol	ND	78	32	ug/kg	
88-75-5	2-Nitrophenol	ND	200	26	ug/kg	
100-02-7	4-Nitrophenol	ND	390	100	ug/kg	
87-86-5	Pentachlorophenol	ND	160	37	ug/kg	
108-95-2	Phenol	ND	78	20	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	200	26	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	200	29	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	200	23	ug/kg	
83-32-9	Acenaphthene	34.8	39	13	ug/kg	J
208-96-8	Acenaphthylene	42.4	39	20	ug/kg	
98-86-2	Acetophenone	ND	200	8.4	ug/kg	
120-12-7	Anthracene	140	39	24	ug/kg	
1912-24-9	Atrazine	ND	78	17	ug/kg	
56-55-3	Benzo(a)anthracene	440	39	11	ug/kg	
50-32-8	Benzo(a)pyrene	446	39	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	474	39	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	281	39	20	ug/kg	
207-08-9	Benzo(k)fluoranthene	182	39	18	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	78	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	78	9.5	ug/kg	
92-52-4	1,1'-Biphenyl	5.6	78	5.3	ug/kg	J
100-52-7	Benzaldehyde	ND	200	9.7	ug/kg	
91-58-7	2-Chloronaphthalene	ND	78	9.3	ug/kg	
106-47-8	4-Chloroaniline	ND	200	14	ug/kg	
86-74-8	Carbazole	15.0	78	5.7	ug/kg	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID: WC-B5 (0-7.5')

Lab Sample ID: JD39845-3

Matrix: SO - Soil

Method: SW846 8270E SW846 3546

Project: 1001 Whitlock Avenue, Bronx, NY

Date Sampled: 02/16/22

Date Received: 02/16/22

Percent Solids: 84.3

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	78	15	ug/kg	
218-01-9	Chrysene	432	39	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	78	8.4	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	78	17	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	78	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	78	13	ug/kg	
121-14-2	2,4-Dinitrotoluene ^a	ND	39	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	39	20	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	78	33	ug/kg	
123-91-1	1,4-Dioxane	ND	39	26	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	70.6	39	17	ug/kg	
132-64-9	Dibenzofuran	ND	78	16	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	78	6.4	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	78	9.7	ug/kg	
84-66-2	Diethyl phthalate	ND	78	8.3	ug/kg	
131-11-3	Dimethyl phthalate	ND	78	6.9	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	78	9.1	ug/kg	
206-44-0	Fluoranthene	878	39	17	ug/kg	
86-73-7	Fluorene	36.6	39	18	ug/kg	J
118-74-1	Hexachlorobenzene	ND	78	9.9	ug/kg	
87-68-3	Hexachlorobutadiene	ND	39	16	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	390	16	ug/kg	
67-72-1	Hexachloroethane	ND	200	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	313	39	18	ug/kg	
78-59-1	Isophorone	ND	78	8.4	ug/kg	
91-57-6	2-Methylnaphthalene	16.7	39	8.8	ug/kg	J
88-74-4	2-Nitroaniline	ND	200	9.2	ug/kg	
99-09-2	3-Nitroaniline	ND	200	9.8	ug/kg	
100-01-6	4-Nitroaniline ^a	ND	200	10	ug/kg	
91-20-3	Naphthalene	21.5	39	11	ug/kg	J
98-95-3	Nitrobenzene	ND	78	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	78	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	200	14	ug/kg	
85-01-8	Phenanthrene	484	39	13	ug/kg	
129-00-0	Pyrene	820	39	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	200	9.9	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	47%		10-109%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	WC-B5 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-3	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	48%		10-105%
118-79-6	2,4,6-Tribromophenol	52%		10-135%
4165-60-0	Nitrobenzene-d5	47%		10-119%
321-60-8	2-Fluorobiphenyl	57%		18-112%
1718-51-0	Terphenyl-d14	54%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	9.20	160	ug/kg	J
	unknown PAH substance	14.12	290	ug/kg	J
	Total TIC, Semi-Volatile		450	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B5 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-3	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174473.D	1	02/23/22 07:52	CP	02/19/22 10:05	OP38204	G1G6028
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.78	0.64	ug/kg	
319-84-6	alpha-BHC	ND	0.78	0.63	ug/kg	
319-85-7	beta-BHC	ND	0.78	0.70	ug/kg	
319-86-8	delta-BHC	ND	0.78	0.74	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.78	0.57	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.78	0.63	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.78	0.35	ug/kg	
60-57-1	Dieldrin	ND	0.78	0.53	ug/kg	
72-54-8	4,4' -DDD	ND	0.78	0.71	ug/kg	
72-55-9	4,4' -DDE	ND	0.78	0.68	ug/kg	
50-29-3	4,4' -DDT	ND	0.78	0.69	ug/kg	
72-20-8	Endrin	ND	0.78	0.60	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.78	0.61	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.78	0.44	ug/kg	
959-98-8	Endosulfan-I	ND	0.78	0.45	ug/kg	
33213-65-9	Endosulfan-II	ND	0.78	0.48	ug/kg	
76-44-8	Heptachlor	ND	0.78	0.67	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.78	0.54	ug/kg	
72-43-5	Methoxychlor	ND	1.6	0.62	ug/kg	
53494-70-5	Endrin ketone	ND	0.78	0.56	ug/kg	
8001-35-2	Toxaphene	ND	19	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	76%		14-145%
877-09-8	Tetrachloro-m-xylene	76%		14-145%
2051-24-3	Decachlorobiphenyl	71%		10-197%
2051-24-3	Decachlorobiphenyl	105%		10-197%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B5 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-3	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK8145.D	1	02/22/22 14:35	TL	02/19/22 10:05	OP38205	GRK212
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	39	18	ug/kg	
11104-28-2	Aroclor 1221	ND	39	24	ug/kg	
11141-16-5	Aroclor 1232	ND	39	25	ug/kg	
53469-21-9	Aroclor 1242	ND	39	16	ug/kg	
12672-29-6	Aroclor 1248	ND	39	35	ug/kg	
11097-69-1	Aroclor 1254	ND	39	21	ug/kg	
11096-82-5	Aroclor 1260 ^a	ND	39	17	ug/kg	
11100-14-4	Aroclor 1268	ND	39	16	ug/kg	
37324-23-5	Aroclor 1262	ND	39	25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	76%		10-163%
877-09-8	Tetrachloro-m-xylene	96%		10-163%
2051-24-3	Decachlorobiphenyl	68%		10-215%
2051-24-3	Decachlorobiphenyl	106%		10-215%

(a) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B5 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-3	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	19300	59	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Antimony	3.2	2.4	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Arsenic ^a	< 12	12	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Barium	159	24	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Beryllium ^a	< 1.2	1.2	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cadmium	< 0.59	0.59	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Calcium	4390	590	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Chromium	40.7	1.2	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Cobalt	18.2	5.9	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Copper ^a	59.0	15	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Iron	34200	300	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Lead	60.4	2.4	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Magnesium	8940	590	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Manganese ^a	615	8.9	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	0.050	0.038	mg/kg	1	02/22/22	02/22/22	LM	SW846 7471B ³	SW846 7471B ⁵
Nickel	33.8	4.7	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Potassium	6440	1200	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Selenium ^a	< 12	12	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Silver ^a	< 3.0	3.0	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Sodium	< 1200	1200	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Thallium ^a	< 5.9	5.9	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Vanadium	48.3	5.9	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Zinc	131	5.9	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴

(1) Instrument QC Batch: MA51933

(2) Instrument QC Batch: MA51936

(3) Instrument QC Batch: MA51938

(4) Prep QC Batch: MP31355

(5) Prep QC Batch: MP31420

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WC-B5 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-3	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.27	0.27	mg/kg	1	02/18/22 15:16	MM	SW846 9012B/LACHAT
Solids, Percent	84.3		%	1	02/17/22 16:06	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.5
4

Report of Analysis

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Client Sample ID:	WC-B5 (0-7.5')	
Lab Sample ID:	JD39845-3A	Date Sampled: 02/16/22
Matrix:	SO - Soil	Date Received: 02/16/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 84.3
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55497.D	1	03/01/22 15:14	AFL	02/22/22 12:00	F:OP89889	F:S3Q766
Run #2							

	Initial Weight	Final Volume
Run #1	1.98 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.46	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.60	0.30	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.60	0.30	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.60	0.30	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.60	0.30	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.60	0.30	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.60	0.30	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.60	0.30	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.60	0.30	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.60	0.32	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.60	0.30	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.60	0.30	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.60	0.30	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.60	0.30	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.60	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.60	0.30	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.60	0.30	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.60	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.60	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-B5 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-3A	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	71%		40-140%
	13C5-PFPeA	71%		50-150%
	13C5-PFHxA	72%		50-150%
	13C4-PFHpA	74%		50-150%
	13C8-PFOA	75%		50-150%
	13C9-PFNA	75%		50-150%
	13C6-PFDA	85%		50-150%
	13C7-PFUnDA	79%		40-140%
	13C2-PFDoDA	75%		40-140%
	13C2-PFTeDA	74%		30-130%
	13C3-PFBS	73%		50-150%
	13C3-PFHxS	76%		50-150%
	13C8-PFOS	79%		50-150%
	13C8-FOSA	60%		30-130%
	d3-MeFOSAA	58%		40-140%
	d5-EtFOSAA	61%		40-140%
	13C2-6:2FTS	73%		50-150%
	13C2-8:2FTS	81%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	WC-B5 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-4	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	85.0
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173655.D	1	02/17/22 16:03	PS	02/16/22 20:00	n/a	V3C7643
Run #2							

	Initial Weight
Run #1	5.8 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	35.8	10	4.2	ug/kg	
71-43-2	Benzene	ND	0.51	0.46	ug/kg	
74-97-5	Bromochloromethane	ND	5.1	0.57	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.44	ug/kg	
75-25-2	Bromoform	ND	5.1	1.4	ug/kg	
74-83-9	Bromomethane ^a	ND	5.1	0.77	ug/kg	
78-93-3	2-Butanone (MEK)	8.1	10	2.5	ug/kg	J
75-15-0	Carbon disulfide	ND	2.0	0.54	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.63	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.47	ug/kg	
75-00-3	Chloroethane	ND	5.1	0.60	ug/kg	
67-66-3	Chloroform	ND	2.0	0.53	ug/kg	
74-87-3	Chloromethane	ND	5.1	2.0	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.67	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.70	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.57	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.43	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.55	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.1	0.74	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.48	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.66	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.85	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.62	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.48	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.48	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.46	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.46	ug/kg	
76-13-1	Freon 113	ND	5.1	2.7	ug/kg	
591-78-6	2-Hexanone	ND	5.1	2.2	ug/kg	

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	WC-B5 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-4	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	85.0
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	1.4	ug/kg	
79-20-9	Methyl Acetate	ND	5.1	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.89	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.48	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.1	2.3	ug/kg	
75-09-2	Methylene chloride	ND	5.1	2.6	ug/kg	
100-42-5	Styrene	ND	2.0	0.41	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.61	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.59	ug/kg	
108-88-3	Toluene	ND	1.0	0.53	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.1	2.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	2.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.49	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.56	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.77	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.1	0.69	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.49	ug/kg	
	m,p-Xylene	ND	1.0	0.91	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.46	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.46	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		80-124%
17060-07-0	1,2-Dichloroethane-D4	97%		75-133%
2037-26-5	Toluene-D8	99%		79-125%
460-00-4	4-Bromofluorobenzene	103%		58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	WC-B5 (7.5-15')	
Lab Sample ID:	JD39845-4	Date Sampled: 02/16/22
Matrix:	SO - Soil	Date Received: 02/16/22
Method:	SW846 8270E SW846 3546	Percent Solids: 85.0
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155170.D	1	02/21/22 17:20	JY	02/19/22 11:30	OP38200	EZ7709
Run #2							

	Initial Weight	Final Volume
Run #1	30.6 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	77	19	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	24	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	33	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	68	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	190	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	190	41	ug/kg	
95-48-7	2-Methylphenol	ND	77	25	ug/kg	
	3&4-Methylphenol	ND	77	32	ug/kg	
88-75-5	2-Nitrophenol	ND	190	25	ug/kg	
100-02-7	4-Nitrophenol	ND	380	100	ug/kg	
87-86-5	Pentachlorophenol	ND	150	36	ug/kg	
108-95-2	Phenol	ND	77	20	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	190	25	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	29	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	23	ug/kg	
83-32-9	Acenaphthene	ND	38	13	ug/kg	
208-96-8	Acenaphthylene	ND	38	20	ug/kg	
98-86-2	Acetophenone	ND	190	8.3	ug/kg	
120-12-7	Anthracene	ND	38	24	ug/kg	
1912-24-9	Atrazine	ND	77	16	ug/kg	
56-55-3	Benzo(a)anthracene	35.1	38	11	ug/kg	J
50-32-8	Benzo(a)pyrene	30.8	38	17	ug/kg	J
205-99-2	Benzo(b)fluoranthene	35.1	38	17	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	19.8	38	19	ug/kg	J
207-08-9	Benzo(k)fluoranthene	ND	38	18	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	77	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	77	9.4	ug/kg	
92-52-4	1,1'-Biphenyl	ND	77	5.3	ug/kg	
100-52-7	Benzaldehyde	ND	190	9.5	ug/kg	
91-58-7	2-Chloronaphthalene	ND	77	9.2	ug/kg	
106-47-8	4-Chloroaniline	ND	190	14	ug/kg	
86-74-8	Carbazole	ND	77	5.6	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	WC-B5 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-4	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	85.0
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	77	15	ug/kg	
218-01-9	Chrysene	33.5	38	12	ug/kg	J
111-91-1	bis(2-Chloroethoxy)methane	ND	77	8.2	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	77	17	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	77	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	77	12	ug/kg	
121-14-2	2,4-Dinitrotoluene ^a	ND	38	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	38	19	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	77	32	ug/kg	
123-91-1	1,4-Dioxane	ND	38	25	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	38	17	ug/kg	
132-64-9	Dibenzofuran	ND	77	16	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	77	6.3	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	77	9.6	ug/kg	
84-66-2	Diethyl phthalate	ND	77	8.2	ug/kg	
131-11-3	Dimethyl phthalate	ND	77	6.8	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	77	9.0	ug/kg	
206-44-0	Fluoranthene	63.9	38	17	ug/kg	
86-73-7	Fluorene	ND	38	18	ug/kg	
118-74-1	Hexachlorobenzene	ND	77	9.7	ug/kg	
87-68-3	Hexachlorobutadiene	ND	38	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	380	15	ug/kg	
67-72-1	Hexachloroethane	ND	190	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	22.2	38	18	ug/kg	J
78-59-1	Isophorone	ND	77	8.2	ug/kg	
91-57-6	2-Methylnaphthalene	ND	38	8.7	ug/kg	
88-74-4	2-Nitroaniline	ND	190	9.1	ug/kg	
99-09-2	3-Nitroaniline	ND	190	9.6	ug/kg	
100-01-6	4-Nitroaniline ^a	ND	190	10	ug/kg	
91-20-3	Naphthalene	ND	38	11	ug/kg	
98-95-3	Nitrobenzene	ND	77	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	77	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	14	ug/kg	
85-01-8	Phenanthrene	36.1	38	13	ug/kg	J
129-00-0	Pyrene	54.3	38	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	190	9.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	56%		10-109%

ND = Not detected MDL = Method Detection Limit

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N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	WC-B5 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-4	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	85.0
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	56%		10-105%
118-79-6	2,4,6-Tribromophenol	62%		10-135%
4165-60-0	Nitrobenzene-d5	56%		10-119%
321-60-8	2-Fluorobiphenyl	67%		18-112%
1718-51-0	Terphenyl-d14	64%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.33	170	ug/kg	J
13798-23-7	Sulfur	7.11	320	ug/kg	JN
	Sulfur	9.87	160	ug/kg	J
10544-50-0	Cyclic octaatomic sulfur	10.12	3500	ug/kg	JN
	unknown	13.89	170	ug/kg	J
	unknown	15.23	200	ug/kg	J
	Total TIC, Semi-Volatile		4350	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B5 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-4	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	85.0
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1G174576.D	1	02/25/22 04:20	RK	02/19/22 10:05	OP38204	G1G6032
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.77	0.64	ug/kg	
319-84-6	alpha-BHC	ND	0.77	0.63	ug/kg	
319-85-7	beta-BHC	ND	0.77	0.70	ug/kg	
319-86-8	delta-BHC	ND	0.77	0.74	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.77	0.57	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.77	0.62	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.77	0.35	ug/kg	
60-57-1	Dieldrin	ND	0.77	0.53	ug/kg	
72-54-8	4,4' -DDD	ND	0.77	0.71	ug/kg	
72-55-9	4,4' -DDE	ND	0.77	0.68	ug/kg	
50-29-3	4,4' -DDT	ND	0.77	0.69	ug/kg	
72-20-8	Endrin	ND	0.77	0.60	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.77	0.60	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.77	0.44	ug/kg	
959-98-8	Endosulfan-I	ND	0.77	0.45	ug/kg	
33213-65-9	Endosulfan-II	ND	0.77	0.48	ug/kg	
76-44-8	Heptachlor	ND	0.77	0.67	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.77	0.54	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.62	ug/kg	
53494-70-5	Endrin ketone	ND	0.77	0.56	ug/kg	
8001-35-2	Toxaphene	ND	19	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	72%		14-145%
877-09-8	Tetrachloro-m-xylene	72%		14-145%
2051-24-3	Decachlorobiphenyl	54%		10-197%
2051-24-3	Decachlorobiphenyl	71%		10-197%

(a) Had TBA cleanup.

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Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B5 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-4	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	85.0
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK8152.D	1	02/22/22 16:37	TL	02/19/22 10:05	OP38205	GRK212
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	39	18	ug/kg	
11104-28-2	Aroclor 1221	ND	39	24	ug/kg	
11141-16-5	Aroclor 1232	ND	39	25	ug/kg	
53469-21-9	Aroclor 1242	ND	39	16	ug/kg	
12672-29-6	Aroclor 1248	ND	39	35	ug/kg	
11097-69-1	Aroclor 1254	ND	39	21	ug/kg	
11096-82-5	Aroclor 1260 ^a	ND	39	16	ug/kg	
11100-14-4	Aroclor 1268	ND	39	16	ug/kg	
37324-23-5	Aroclor 1262	ND	39	25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	73%		10-163%
877-09-8	Tetrachloro-m-xylene	96%		10-163%
2051-24-3	Decachlorobiphenyl	72%		10-215%
2051-24-3	Decachlorobiphenyl	87%		10-215%

(a) Associated CCV outside of control limits high, sample was ND.

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 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-B5 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-4	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	85.0
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	19200	56	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Antimony	< 2.2	2.2	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Arsenic ^a	< 4.5	4.5	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Barium	118	22	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Beryllium ^a	0.67	0.45	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cadmium	< 0.56	0.56	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Calcium	1590	560	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Chromium	32.1	1.1	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Cobalt	13.6	5.6	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Copper ^a	28.1	5.6	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Iron	27400	110	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Lead	26.0	2.2	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Magnesium	6530	560	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Manganese ^a	291	3.4	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	0.056	0.035	mg/kg	1	02/22/22	02/22/22	LM	SW846 7471B ³	SW846 7471B ⁵
Nickel	28.4	4.5	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Potassium	2900	1100	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Selenium ^a	< 4.5	4.5	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Silver ^a	< 1.1	1.1	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Sodium	< 1100	1100	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Thallium ^a	< 2.2	2.2	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Vanadium	44.2	5.6	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Zinc	80.7	5.6	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴

(1) Instrument QC Batch: MA51933

(2) Instrument QC Batch: MA51936

(3) Instrument QC Batch: MA51938

(4) Prep QC Batch: MP31355

(5) Prep QC Batch: MP31420

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WC-B5 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-4	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	85.0
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.25	0.25	mg/kg	1	02/18/22 15:17	MM	SW846 9012B/LACHAT
Solids, Percent	85		%	1	02/17/22 16:06	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.7
4

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-B5 (7.5-15')	
Lab Sample ID:	JD39845-4A	Date Sampled: 02/16/22
Matrix:	SO - Soil	Date Received: 02/16/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 85.0
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55498.D	1	03/01/22 15:31	AFL	02/22/22 12:00	F:OP89889	F:S3Q766
Run #2							

	Initial Weight	Final Volume
Run #1	1.96 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.46	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.60	0.30	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.60	0.30	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.60	0.30	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.60	0.30	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.60	0.30	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.60	0.30	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.60	0.30	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.60	0.30	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.60	0.32	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.60	0.30	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.60	0.30	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.60	0.30	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.60	0.30	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.60	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.60	0.30	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.60	0.30	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.60	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.60	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-B5 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-4A	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	85.0
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	73%		40-140%
	13C5-PFPeA	73%		50-150%
	13C5-PFHxA	75%		50-150%
	13C4-PFHpA	75%		50-150%
	13C8-PFOA	77%		50-150%
	13C9-PFNA	75%		50-150%
	13C6-PFDA	81%		50-150%
	13C7-PFUnDA	78%		40-140%
	13C2-PFDoDA	74%		40-140%
	13C2-PFTeDA	74%		30-130%
	13C3-PFBS	76%		50-150%
	13C3-PFHxS	78%		50-150%
	13C8-PFOS	76%		50-150%
	13C8-FOSA	62%		30-130%
	d3-MeFOSAA	67%		40-140%
	d5-EtFOSAA	80%		40-140%
	13C2-6:2FTS	78%		50-150%
	13C2-8:2FTS	82%		50-150%

(a) Analysis performed at SGS Orlando, FL.

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 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-A6 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-5	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	89.0
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173656.D	1	02/17/22 16:29	PS	02/16/22 20:00	n/a	V3C7643
Run #2							

	Initial Weight
Run #1	5.6 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	4.2	ug/kg	
71-43-2	Benzene	ND	0.50	0.46	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.56	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.43	ug/kg	
75-25-2	Bromoform	ND	5.0	1.4	ug/kg	
74-83-9	Bromomethane ^a	ND	5.0	0.77	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	2.4	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.54	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.62	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.46	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.59	ug/kg	
67-66-3	Chloroform	ND	2.0	0.52	ug/kg	
74-87-3	Chloromethane	ND	5.0	2.0	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.66	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.70	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.56	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.42	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.55	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.73	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.47	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.66	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.61	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.47	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.48	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.46	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.45	ug/kg	
76-13-1	Freon 113	ND	5.0	2.7	ug/kg	
591-78-6	2-Hexanone	ND	5.0	2.1	ug/kg	

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	WC-A6 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-5	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	89.0
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	1.4	ug/kg	
79-20-9	Methyl Acetate	ND	5.0	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.88	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.47	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	2.3	ug/kg	
75-09-2	Methylene chloride	ND	5.0	2.6	ug/kg	
100-42-5	Styrene	ND	2.0	0.40	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.60	ug/kg	
127-18-4	Tetrachloroethene	1.1	2.0	0.58	ug/kg	J
108-88-3	Toluene	ND	1.0	0.53	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.48	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.56	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.76	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.69	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.48	ug/kg	
	m,p-Xylene	ND	1.0	0.90	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.46	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.46	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		80-124%
17060-07-0	1,2-Dichloroethane-D4	96%		75-133%
2037-26-5	Toluene-D8	99%		79-125%
460-00-4	4-Bromofluorobenzene	103%		58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

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 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	WC-A6 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-5	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	89.0
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155168.D	1	02/21/22 16:33	JY	02/19/22 11:30	OP38200	EZ7709
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	74	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	32	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	66	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	190	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	190	40	ug/kg	
95-48-7	2-Methylphenol	ND	74	24	ug/kg	
	3&4-Methylphenol	ND	74	31	ug/kg	
88-75-5	2-Nitrophenol	ND	190	25	ug/kg	
100-02-7	4-Nitrophenol	ND	370	99	ug/kg	
87-86-5	Pentachlorophenol	ND	150	35	ug/kg	
108-95-2	Phenol	ND	74	19	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	190	25	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	28	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	22	ug/kg	
83-32-9	Acenaphthene	46.7	37	13	ug/kg	
208-96-8	Acenaphthylene	ND	37	19	ug/kg	
98-86-2	Acetophenone	ND	190	8.0	ug/kg	
120-12-7	Anthracene	215	37	23	ug/kg	
1912-24-9	Atrazine	ND	74	16	ug/kg	
56-55-3	Benzo(a)anthracene	685	37	11	ug/kg	
50-32-8	Benzo(a)pyrene	620	37	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	692	37	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	364	37	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	253	37	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	74	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	74	9.1	ug/kg	
92-52-4	1,1'-Biphenyl	5.6	74	5.1	ug/kg	J
100-52-7	Benzaldehyde	ND	190	9.2	ug/kg	
91-58-7	2-Chloronaphthalene	ND	74	8.9	ug/kg	
106-47-8	4-Chloroaniline	ND	190	13	ug/kg	
86-74-8	Carbazole	67.9	74	5.4	ug/kg	J

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-A6 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-5	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	89.0
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	74	15	ug/kg	
218-01-9	Chrysene	677	37	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	74	8.0	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	74	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	74	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	74	12	ug/kg	
121-14-2	2,4-Dinitrotoluene ^a	ND	37	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	37	19	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	74	31	ug/kg	
123-91-1	1,4-Dioxane	ND	37	25	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	97.1	37	16	ug/kg	
132-64-9	Dibenzofuran	43.3	74	15	ug/kg	J
84-74-2	Di-n-butyl phthalate	ND	74	6.1	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	74	9.3	ug/kg	
84-66-2	Diethyl phthalate	ND	74	7.9	ug/kg	
131-11-3	Dimethyl phthalate	ND	74	6.6	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	74	8.7	ug/kg	
206-44-0	Fluoranthene	1480	37	17	ug/kg	
86-73-7	Fluorene	43.1	37	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	74	9.4	ug/kg	
87-68-3	Hexachlorobutadiene	ND	37	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	370	15	ug/kg	
67-72-1	Hexachloroethane	ND	190	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	429	37	17	ug/kg	
78-59-1	Isophorone	ND	74	8.0	ug/kg	
91-57-6	2-Methylnaphthalene	8.9	37	8.4	ug/kg	J
88-74-4	2-Nitroaniline	ND	190	8.8	ug/kg	
99-09-2	3-Nitroaniline	ND	190	9.3	ug/kg	
100-01-6	4-Nitroaniline ^a	ND	190	9.6	ug/kg	
91-20-3	Naphthalene	18.0	37	10	ug/kg	J
98-95-3	Nitrobenzene	ND	74	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	74	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	14	ug/kg	
85-01-8	Phenanthrene	1030	37	13	ug/kg	
129-00-0	Pyrene	1240	37	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	190	9.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	35%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	WC-A6 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-5	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	89.0
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	35%		10-105%
118-79-6	2,4,6-Tribromophenol	39%		10-135%
4165-60-0	Nitrobenzene-d5	36%		10-119%
321-60-8	2-Fluorobiphenyl	42%		18-112%
1718-51-0	Terphenyl-d14	42%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Phenanthrene methyl	9.10	160	ug/kg	J
	unknown	9.20	190	ug/kg	J
	unknown	9.49	170	ug/kg	J
	unknown PAH substance	14.12	410	ug/kg	J
	unknown	15.35	160	ug/kg	J
	unknown	15.48	200	ug/kg	J
	Total TIC, Semi-Volatile		1290	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

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Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A6 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-5	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	89.0
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174475.D	1	02/23/22 08:28	CP	02/19/22 10:05	OP38204	G1G6028
Run #2							

	Initial Weight	Final Volume
Run #1	15.5 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.72	0.60	ug/kg	
319-84-6	alpha-BHC	ND	0.72	0.59	ug/kg	
319-85-7	beta-BHC	ND	0.72	0.66	ug/kg	
319-86-8	delta-BHC	ND	0.72	0.70	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.72	0.53	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.72	0.58	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.72	0.33	ug/kg	
60-57-1	Dieldrin	ND	0.72	0.50	ug/kg	
72-54-8	4,4'-DDD ^a	3.1	0.72	0.67	ug/kg	
72-55-9	4,4'-DDE	2.3	0.72	0.64	ug/kg	
50-29-3	4,4'-DDT	5.1	0.72	0.64	ug/kg	
72-20-8	Endrin	ND	0.72	0.56	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.72	0.57	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.72	0.41	ug/kg	
959-98-8	Endosulfan-I	ND	0.72	0.42	ug/kg	
33213-65-9	Endosulfan-II	ND	0.72	0.45	ug/kg	
76-44-8	Heptachlor	ND	0.72	0.62	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.72	0.51	ug/kg	
72-43-5	Methoxychlor	ND	1.4	0.58	ug/kg	
53494-70-5	Endrin ketone	ND	0.72	0.52	ug/kg	
8001-35-2	Toxaphene	ND	18	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	86%		14-145%
877-09-8	Tetrachloro-m-xylene	84%		14-145%
2051-24-3	Decachlorobiphenyl	72%		10-197%
2051-24-3	Decachlorobiphenyl	292% ^b		10-197%

(a) More than 40 % RPD for detected concentrations between the two GC columns.

(b) Outside control limits due to matrix interference.

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Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A6 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-5	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	89.0
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK8153.D	1	02/22/22 16:54	TL	02/19/22 10:05	OP38205	GRK212
Run #2							

	Initial Weight	Final Volume
Run #1	15.5 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	17	ug/kg	
11104-28-2	Aroclor 1221	ND	36	22	ug/kg	
11141-16-5	Aroclor 1232	ND	36	23	ug/kg	
53469-21-9	Aroclor 1242	ND	36	15	ug/kg	
12672-29-6	Aroclor 1248	ND	36	32	ug/kg	
11097-69-1	Aroclor 1254	ND	36	19	ug/kg	
11096-82-5	Aroclor 1260 ^a	ND	36	15	ug/kg	
11100-14-4	Aroclor 1268	ND	36	15	ug/kg	
37324-23-5	Aroclor 1262	ND	36	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	76%		10-163%
877-09-8	Tetrachloro-m-xylene	94%		10-163%
2051-24-3	Decachlorobiphenyl	85%		10-215%
2051-24-3	Decachlorobiphenyl	236% ^b		10-215%

(a) Associated CCV outside of control limits high, sample was ND.

(b) Outside control limits due to matrix interference.

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Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A6 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-5	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	89.0
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	22600	58	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Antimony	4.1	2.3	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Arsenic ^a	< 12	12	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Barium	192	23	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Beryllium ^a	< 1.2	1.2	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cadmium	< 0.58	0.58	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Calcium	3330	580	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Chromium	40.8	1.2	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Cobalt	21.9	5.8	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Copper ^a	170	14	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Iron	42800	290	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Lead	51.3	2.3	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Magnesium	8500	580	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Manganese ^a	1370	8.7	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	0.039	0.034	mg/kg	1	02/22/22	02/22/22	LM	SW846 7471B ³	SW846 7471B ⁵
Nickel	35.7	4.6	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Potassium	9510	1200	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Selenium ^a	< 12	12	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Silver ^a	< 2.9	2.9	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Sodium	< 1200	1200	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Thallium ^a	< 5.8	5.8	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Vanadium	52.5	5.8	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Zinc	155	5.8	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴

(1) Instrument QC Batch: MA51933

(2) Instrument QC Batch: MA51936

(3) Instrument QC Batch: MA51938

(4) Prep QC Batch: MP31355

(5) Prep QC Batch: MP31420

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WC-A6 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-5	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	89.0
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.27	0.27	mg/kg	1	02/18/22 15:21	MM	SW846 9012B/LACHAT
Solids, Percent	89		%	1	02/17/22 16:06	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-A6 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-5A	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	89.0
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

Run	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55499.D	1	03/01/22 15:48	AFL	02/22/22 12:00	F:OP89889	F:S3Q766
Run #2							

Run	Initial Weight	Final Volume
Run #1	2.02 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.42	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.56	0.28	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.56	0.28	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.56	0.28	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.56	0.28	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.56	0.28	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.56	0.28	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.56	0.28	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.56	0.28	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.56	0.29	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.56	0.28	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.56	0.28	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.56	0.28	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.56	0.28	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.38	0.56	0.22	ug/kg	J
335-77-3	Perfluorodecanesulfonic acid	ND	0.56	0.28	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.56	0.28	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.1	0.56	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.56	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	

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Report of Analysis

Client Sample ID:	WC-A6 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-5A	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	89.0
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	71%		40-140%
	13C5-PFPeA	72%		50-150%
	13C5-PFHxA	73%		50-150%
	13C4-PFHpA	75%		50-150%
	13C8-PFOA	76%		50-150%
	13C9-PFNA	78%		50-150%
	13C6-PFDA	84%		50-150%
	13C7-PFUnDA	76%		40-140%
	13C2-PFDoDA	75%		40-140%
	13C2-PFTeDA	75%		30-130%
	13C3-PFBS	73%		50-150%
	13C3-PFHxS	76%		50-150%
	13C8-PFOS	78%		50-150%
	13C8-FOSA	60%		30-130%
	d3-MeFOSAA	78%		40-140%
	d5-EtFOSAA	78%		40-140%
	13C2-6:2FTS	78%		50-150%
	13C2-8:2FTS	86%		50-150%

(a) Analysis performed at SGS Orlando, FL.

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Report of Analysis

Page 1 of 2

Client Sample ID:	WC-A6 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-6	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	87.6
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173657.D	1	02/17/22 16:55	PS	02/16/22 20:00	n/a	V3C7643
Run #2							

	Initial Weight
Run #1	5.8 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	9.8	4.1	ug/kg	
71-43-2	Benzene	ND	0.49	0.45	ug/kg	
74-97-5	Bromochloromethane	ND	4.9	0.55	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.42	ug/kg	
75-25-2	Bromoform	ND	4.9	1.3	ug/kg	
74-83-9	Bromomethane ^a	ND	4.9	0.75	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.8	2.4	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.53	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.61	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.45	ug/kg	
75-00-3	Chloroethane	ND	4.9	0.58	ug/kg	
67-66-3	Chloroform	ND	2.0	0.51	ug/kg	
74-87-3	Chloromethane	ND	4.9	1.9	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.65	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.68	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.55	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.98	0.41	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.98	0.54	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.98	0.49	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.98	0.49	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.9	0.72	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.98	0.49	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.98	0.46	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.98	0.64	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.98	0.83	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.98	0.60	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.47	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.47	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.45	ug/kg	
100-41-4	Ethylbenzene	ND	0.98	0.45	ug/kg	
76-13-1	Freon 113	ND	4.9	2.6	ug/kg	
591-78-6	2-Hexanone	ND	4.9	2.1	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	WC-A6 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-6	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	87.6
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	1.4	ug/kg	
79-20-9	Methyl Acetate	ND	4.9	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.86	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.98	0.46	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.9	2.2	ug/kg	
75-09-2	Methylene chloride	ND	4.9	2.6	ug/kg	
100-42-5	Styrene	ND	2.0	0.40	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.59	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.57	ug/kg	
108-88-3	Toluene	ND	0.98	0.52	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.9	2.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	2.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.48	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.55	ug/kg	
79-01-6	Trichloroethene	ND	0.98	0.75	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.9	0.67	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.47	ug/kg	
	m,p-Xylene	ND	0.98	0.88	ug/kg	
95-47-6	o-Xylene	ND	0.98	0.45	ug/kg	
1330-20-7	Xylene (total)	ND	0.98	0.45	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		80-124%
17060-07-0	1,2-Dichloroethane-D4	97%		75-133%
2037-26-5	Toluene-D8	99%		79-125%
460-00-4	4-Bromofluorobenzene	102%		58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	WC-A6 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-6	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	87.6
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155171.D	1	02/21/22 17:44	JY	02/19/22 11:30	OP38200	EZ7709
Run #2	Z155210.D	2	02/22/22 09:17	CS	02/19/22 11:30	OP38200	EZ7710

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2	30.1 g	1.0 ml

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	76	19	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	32	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	68	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	190	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	190	41	ug/kg	
95-48-7	2-Methylphenol	ND	76	24	ug/kg	
	3&4-Methylphenol	ND	76	31	ug/kg	
88-75-5	2-Nitrophenol	ND	190	25	ug/kg	
100-02-7	4-Nitrophenol	ND	380	100	ug/kg	
87-86-5	Pentachlorophenol	ND	150	36	ug/kg	
108-95-2	Phenol	ND	76	20	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	190	25	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	28	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	23	ug/kg	
83-32-9	Acenaphthene	165	38	13	ug/kg	
208-96-8	Acenaphthylene	ND	38	19	ug/kg	
98-86-2	Acetophenone	ND	190	8.2	ug/kg	
120-12-7	Anthracene	714	38	23	ug/kg	
1912-24-9	Atrazine	ND	76	16	ug/kg	
56-55-3	Benzo(a)anthracene	3230	38	11	ug/kg	
50-32-8	Benzo(a)pyrene	2840	38	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	3050	38	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1600	38	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	1190	38	18	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	76	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	76	9.3	ug/kg	
92-52-4	1,1'-Biphenyl	ND	76	5.2	ug/kg	
100-52-7	Benzaldehyde	ND	190	9.4	ug/kg	
91-58-7	2-Chloronaphthalene	ND	76	9.0	ug/kg	
106-47-8	4-Chloroaniline	ND	190	14	ug/kg	
86-74-8	Carbazole	78.8	76	5.5	ug/kg	

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-A6 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-6	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	87.6
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	76	15	ug/kg	
218-01-9	Chrysene	3040	38	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	76	8.1	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	76	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	76	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	76	12	ug/kg	
121-14-2	2,4-Dinitrotoluene ^a	ND	38	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	38	19	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	76	32	ug/kg	
123-91-1	1,4-Dioxane	ND	38	25	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	471	38	17	ug/kg	
132-64-9	Dibenzofuran	36.4	76	15	ug/kg	J
84-74-2	Di-n-butyl phthalate	ND	76	6.2	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	76	9.4	ug/kg	
84-66-2	Diethyl phthalate	ND	76	8.1	ug/kg	
131-11-3	Dimethyl phthalate	ND	76	6.8	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	76	8.9	ug/kg	
206-44-0	Fluoranthene	5190 ^b	76	34	ug/kg	
86-73-7	Fluorene	136	38	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	76	9.6	ug/kg	
87-68-3	Hexachlorobutadiene	ND	38	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	380	15	ug/kg	
67-72-1	Hexachloroethane	ND	190	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	1860	38	18	ug/kg	
78-59-1	Isophorone	ND	76	8.1	ug/kg	
91-57-6	2-Methylnaphthalene	13.0	38	8.6	ug/kg	J
88-74-4	2-Nitroaniline	ND	190	9.0	ug/kg	
99-09-2	3-Nitroaniline	ND	190	9.5	ug/kg	
100-01-6	4-Nitroaniline ^a	ND	190	9.8	ug/kg	
91-20-3	Naphthalene	ND	38	11	ug/kg	
98-95-3	Nitrobenzene	ND	76	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	76	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	14	ug/kg	
85-01-8	Phenanthrene	2520	38	13	ug/kg	
129-00-0	Pyrene	5210 ^b	76	24	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	190	9.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	51%	44%	10-109%

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Report of Analysis

Client Sample ID:	WC-A6 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-6	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	87.6
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	50%	43%	10-105%
118-79-6	2,4,6-Tribromophenol	55%	49%	10-135%
4165-60-0	Nitrobenzene-d5	52%	45%	10-119%
321-60-8	2-Fluorobiphenyl	60%	54%	18-112%
1718-51-0	Terphenyl-d14	57%	51%	18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Phenanthrene, methyl-	9.07	920	ug/kg	J
	Phenanthrene, methyl-	9.10	1100	ug/kg	J
	Phenanthrene, methyl-	9.17	460	ug/kg	J
	unknown	9.21	1600	ug/kg	J
	Phenanthrene, methyl-	9.25	790	ug/kg	J
	unknown	9.49	930	ug/kg	J
	Phenanthrene, dimethyl-	9.84	960	ug/kg	J
	unknown	9.88	780	ug/kg	J
	Phenanthrene, dimethyl-	9.96	520	ug/kg	J
	unknown	10.25	420	ug/kg	J
	Pyrene, methyl-	10.88	480	ug/kg	J
	unknown PAH substance	13.90	680	ug/kg	J
	unknown PAH substance	14.14	2000	ug/kg	J
	unknown	14.49	340	ug/kg	J
	unknown	14.63	430	ug/kg	J
	unknown	14.75	390	ug/kg	J
	unknown	14.84	610	ug/kg	J
	unknown	15.28	490	ug/kg	J
	unknown	15.37	830	ug/kg	J
	Unknown	15.48	830	ug/kg	J
	-Dibenzophenanthrene	15.77	650	ug/kg	J
	-Dibenzophenanthrene	15.81	520	ug/kg	J
	unknown	15.86	360	ug/kg	J
	unknown	16.12	630	ug/kg	J
	unknown	16.82	410	ug/kg	J
	Total TIC, Semi-Volatile		18130	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A6 (7.5-15')		
Lab Sample ID:	JD39845-6	Date Sampled:	02/16/22
Matrix:	SO - Soil	Date Received:	02/16/22
Method:	SW846 8081B SW846 3546	Percent Solids:	87.6
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174476.D	1	02/23/22 08:47	CP	02/19/22 10:05	OP38204	G1G6028
Run #2							

	Initial Weight	Final Volume
Run #1	16.2 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	3.0	0.70	0.58	ug/kg	
319-84-6	alpha-BHC	ND	0.70	0.57	ug/kg	
319-85-7	beta-BHC	ND	0.70	0.64	ug/kg	
319-86-8	delta-BHC	ND	0.70	0.68	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.70	0.52	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.70	0.57	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.70	0.32	ug/kg	
60-57-1	Dieldrin ^a	0.60	0.70	0.48	ug/kg	J
72-54-8	4,4' -DDD	2.8	0.70	0.65	ug/kg	
72-55-9	4,4' -DDE	2.7	0.70	0.62	ug/kg	
50-29-3	4,4' -DDT ^a	2.7	0.70	0.62	ug/kg	
72-20-8	Endrin	ND	0.70	0.55	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.70	0.55	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.70	0.40	ug/kg	
959-98-8	Endosulfan-I	ND	0.70	0.41	ug/kg	
33213-65-9	Endosulfan-II	ND	0.70	0.44	ug/kg	
76-44-8	Heptachlor	ND	0.70	0.61	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.70	0.49	ug/kg	
72-43-5	Methoxychlor	ND	1.4	0.56	ug/kg	
53494-70-5	Endrin ketone	ND	0.70	0.51	ug/kg	
8001-35-2	Toxaphene	ND	18	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	42%		14-145%
877-09-8	Tetrachloro-m-xylene	47%		14-145%
2051-24-3	Decachlorobiphenyl	48%		10-197%
2051-24-3	Decachlorobiphenyl	269% ^b		10-197%

(a) More than 40 % RPD for detected concentrations between the two GC columns.

(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A6 (7.5-15')		
Lab Sample ID:	JD39845-6	Date Sampled:	02/16/22
Matrix:	SO - Soil	Date Received:	02/16/22
Method:	SW846 8082A SW846 3546	Percent Solids:	87.6
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK8154.D	1	02/22/22 17:10	TL	02/19/22 10:05	OP38205	GRK212
Run #2							

	Initial Weight	Final Volume
Run #1	16.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	16	ug/kg	
11104-28-2	Aroclor 1221	ND	35	22	ug/kg	
11141-16-5	Aroclor 1232	ND	35	22	ug/kg	
53469-21-9	Aroclor 1242	ND	35	14	ug/kg	
12672-29-6	Aroclor 1248	ND	35	31	ug/kg	
11097-69-1	Aroclor 1254	ND	35	19	ug/kg	
11096-82-5	Aroclor 1260 ^a	ND	35	15	ug/kg	
11100-14-4	Aroclor 1268	ND	35	15	ug/kg	
37324-23-5	Aroclor 1262	ND	35	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	41%		10-163%
877-09-8	Tetrachloro-m-xylene	51%		10-163%
2051-24-3	Decachlorobiphenyl	60%		10-215%
2051-24-3	Decachlorobiphenyl	238% ^b		10-215%

(a) Associated CCV outside of control limits high, sample was ND.

(b) Outside control limits due to matrix interference.

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Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A6 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-6	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	87.6
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	14700	59	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹
Antimony	< 2.4	2.4	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹
Arsenic	3.1	2.4	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹
Barium	118	24	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹
Beryllium ^a	< 0.48	0.48	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²
Cadmium	< 0.59	0.59	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹
Calcium	1330	590	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹
Chromium	33.3	1.2	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹
Cobalt	11.9	5.9	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹
Copper	25.4	3.0	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹
Iron	22700	59	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹
Lead	17.6	2.4	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹
Magnesium	5760	590	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹
Manganese	479	1.8	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹
Mercury	< 0.037	0.037	mg/kg	1	02/22/22	02/22/22	LM	SW846 7471B ³
Nickel	25.1	4.8	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹
Potassium	4480	1200	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹
Selenium	< 2.4	2.4	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹
Silver ^a	< 1.2	1.2	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²
Sodium	< 1200	1200	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹
Thallium ^a	< 2.4	2.4	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²
Vanadium	39.8	5.9	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹
Zinc	75.2	5.9	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹

(1) Instrument QC Batch: MA51933

(2) Instrument QC Batch: MA51936

(3) Instrument QC Batch: MA51938

(4) Prep QC Batch: MP31355

(5) Prep QC Batch: MP31420

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WC-A6 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-6	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	87.6
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.25	0.25	mg/kg	1	02/18/22 15:22	MM	SW846 9012B/LACHAT
Solids, Percent	87.6		%	1	02/17/22 16:06	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WC-A6 (7.5-15')	
Lab Sample ID:	JD39845-6A	Date Sampled: 02/16/22
Matrix:	SO - Soil	Date Received: 02/16/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 87.6
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55502.D	1	03/01/22 16:39	AFL	02/22/22 12:00	F:OP89889	F:S3Q766
Run #2							

	Initial Weight	Final Volume
Run #1	2.00 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.43	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.57	0.29	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.57	0.29	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.57	0.29	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.57	0.29	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.57	0.29	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.57	0.29	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.57	0.29	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.57	0.29	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.57	0.30	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.57	0.29	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.57	0.29	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.57	0.29	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.57	0.29	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.57	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.57	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.57	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.1	0.57	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.57	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.29	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.29	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-A6 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-6A	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	87.6
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	75%		40-140%
	13C5-PFPeA	75%		50-150%
	13C5-PFHxA	76%		50-150%
	13C4-PFHpA	77%		50-150%
	13C8-PFOA	79%		50-150%
	13C9-PFNA	78%		50-150%
	13C6-PFDA	81%		50-150%
	13C7-PFUnDA	81%		40-140%
	13C2-PFDoDA	77%		40-140%
	13C2-PFTeDA	75%		30-130%
	13C3-PFBS	77%		50-150%
	13C3-PFHxS	79%		50-150%
	13C8-PFOS	79%		50-150%
	13C8-FOSA	74%		30-130%
	d3-MeFOSAA	74%		40-140%
	d5-EtFOSAA	74%		40-140%
	13C2-6:2FTS	79%		50-150%
	13C2-8:2FTS	95%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-A7 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-7	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.7
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173662.D	1	02/17/22 19:07	PS	02/16/22 20:00	n/a	V3C7643
Run #2							

	Initial Weight
Run #1	5.1 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	4.5	ug/kg	
71-43-2	Benzene	ND	0.54	0.49	ug/kg	
74-97-5	Bromochloromethane	ND	5.4	0.61	ug/kg	
75-27-4	Bromodichloromethane	ND	2.2	0.46	ug/kg	
75-25-2	Bromoform	ND	5.4	1.5	ug/kg	
74-83-9	Bromomethane ^a	ND	5.4	0.83	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.6	ug/kg	
75-15-0	Carbon disulfide	ND	2.2	0.58	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.2	0.67	ug/kg	
108-90-7	Chlorobenzene	ND	2.2	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.4	0.64	ug/kg	
67-66-3	Chloroform	ND	2.2	0.56	ug/kg	
74-87-3	Chloromethane	ND	5.4	2.1	ug/kg	
110-82-7	Cyclohexane	ND	2.2	0.71	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.2	0.75	ug/kg	
124-48-1	Dibromochloromethane	ND	2.2	0.61	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.46	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.1	0.59	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.1	0.54	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.1	0.53	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.4	0.79	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.1	0.54	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.51	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.1	0.71	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.1	0.91	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.1	0.66	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.2	0.51	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.2	0.51	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	0.49	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.49	ug/kg	
76-13-1	Freon 113	ND	5.4	2.9	ug/kg	
591-78-6	2-Hexanone	ND	5.4	2.3	ug/kg	

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RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	WC-A7 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-7	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.7
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.2	1.5	ug/kg	
79-20-9	Methyl Acetate	ND	5.4	1.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.2	0.95	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.51	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.4	2.5	ug/kg	
75-09-2	Methylene chloride	ND	5.4	2.8	ug/kg	
100-42-5	Styrene	ND	2.2	0.43	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.2	0.65	ug/kg	
127-18-4	Tetrachloroethene	ND	2.2	0.63	ug/kg	
108-88-3	Toluene	ND	1.1	0.57	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.4	2.7	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	2.7	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.2	0.52	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.2	0.60	ug/kg	
79-01-6	Trichloroethene	ND	1.1	0.82	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.4	0.74	ug/kg	
75-01-4	Vinyl chloride	ND	2.2	0.52	ug/kg	
	m,p-Xylene	ND	1.1	0.97	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.50	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		80-124%
17060-07-0	1,2-Dichloroethane-D4	96%		75-133%
2037-26-5	Toluene-D8	99%		79-125%
460-00-4	4-Bromofluorobenzene	101%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	WC-A7 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-7	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.7
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155158.D	1	02/21/22 12:34	JY	02/19/22 08:00	OP38200	EZ7709
Run #2							

	Initial Weight	Final Volume
Run #1	31.5 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	70	17	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	21	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	30	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	62	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	180	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	180	37	ug/kg	
95-48-7	2-Methylphenol	ND	70	22	ug/kg	
	3&4-Methylphenol	ND	70	29	ug/kg	
88-75-5	2-Nitrophenol	ND	180	23	ug/kg	
100-02-7	4-Nitrophenol	ND	350	93	ug/kg	
87-86-5	Pentachlorophenol	ND	140	33	ug/kg	
108-95-2	Phenol	ND	70	18	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	23	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	26	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	21	ug/kg	
83-32-9	Acenaphthene	ND	35	12	ug/kg	
208-96-8	Acenaphthylene	ND	35	18	ug/kg	
98-86-2	Acetophenone	ND	180	7.5	ug/kg	
120-12-7	Anthracene	ND	35	21	ug/kg	
1912-24-9	Atrazine	ND	70	15	ug/kg	
56-55-3	Benzo(a)anthracene	13.3	35	9.9	ug/kg	J
50-32-8	Benzo(a)pyrene	ND	35	16	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	35	15	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	35	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	35	16	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	70	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	70	8.5	ug/kg	
92-52-4	1,1'-Biphenyl	ND	70	4.8	ug/kg	
100-52-7	Benzaldehyde	ND	180	8.7	ug/kg	
91-58-7	2-Chloronaphthalene	ND	70	8.3	ug/kg	
106-47-8	4-Chloroaniline	ND	180	13	ug/kg	
86-74-8	Carbazole	ND	70	5.1	ug/kg	

ND = Not detected MDL = Method Detection Limit

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RL = Reporting Limit

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	WC-A7 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-7	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.7
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	70	14	ug/kg	
218-01-9	Chrysene	ND	35	11	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	70	7.5	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	70	15	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	70	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	70	11	ug/kg	
121-14-2	2,4-Dinitrotoluene ^a	ND	35	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	35	18	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	70	29	ug/kg	
123-91-1	1,4-Dioxane	ND	35	23	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	35	15	ug/kg	
132-64-9	Dibenzofuran	ND	70	14	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	70	5.7	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	70	8.7	ug/kg	
84-66-2	Diethyl phthalate	ND	70	7.5	ug/kg	
131-11-3	Dimethyl phthalate	ND	70	6.2	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	70	8.2	ug/kg	
206-44-0	Fluoranthene	ND	35	16	ug/kg	
86-73-7	Fluorene	ND	35	16	ug/kg	
118-74-1	Hexachlorobenzene	ND	70	8.9	ug/kg	
87-68-3	Hexachlorobutadiene	ND	35	14	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	350	14	ug/kg	
67-72-1	Hexachloroethane	ND	180	17	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	35	16	ug/kg	
78-59-1	Isophorone	ND	70	7.5	ug/kg	
91-57-6	2-Methylnaphthalene	ND	35	7.9	ug/kg	
88-74-4	2-Nitroaniline	ND	180	8.3	ug/kg	
99-09-2	3-Nitroaniline	ND	180	8.8	ug/kg	
100-01-6	4-Nitroaniline ^a	ND	180	9.1	ug/kg	
91-20-3	Naphthalene	ND	35	9.9	ug/kg	
98-95-3	Nitrobenzene	ND	70	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	70	10	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	13	ug/kg	
85-01-8	Phenanthrene	ND	35	12	ug/kg	
129-00-0	Pyrene	12.7	35	11	ug/kg	J
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	8.9	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	47%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	WC-A7 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-7	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.7
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	48%		10-105%
118-79-6	2,4,6-Tribromophenol	50%		10-135%
4165-60-0	Nitrobenzene-d5	52%		10-119%
321-60-8	2-Fluorobiphenyl	57%		18-112%
1718-51-0	Terphenyl-d14	63%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.33	290	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
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 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A7 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-7	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.7
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174477.D	1	02/23/22 09:05	CP	02/19/22 10:05	OP38204	G1G6028
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.72	0.59	ug/kg	
319-84-6	alpha-BHC	ND	0.72	0.58	ug/kg	
319-85-7	beta-BHC	ND	0.72	0.65	ug/kg	
319-86-8	delta-BHC	ND	0.72	0.69	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.72	0.53	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.72	0.58	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.72	0.32	ug/kg	
60-57-1	Dieldrin	ND	0.72	0.49	ug/kg	
72-54-8	4,4' -DDD	ND	0.72	0.66	ug/kg	
72-55-9	4,4' -DDE	ND	0.72	0.63	ug/kg	
50-29-3	4,4' -DDT	ND	0.72	0.63	ug/kg	
72-20-8	Endrin	ND	0.72	0.56	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.72	0.56	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.72	0.41	ug/kg	
959-98-8	Endosulfan-I	ND	0.72	0.41	ug/kg	
33213-65-9	Endosulfan-II	ND	0.72	0.45	ug/kg	
76-44-8	Heptachlor	ND	0.72	0.62	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.72	0.50	ug/kg	
72-43-5	Methoxychlor	ND	1.4	0.57	ug/kg	
53494-70-5	Endrin ketone	ND	0.72	0.52	ug/kg	
8001-35-2	Toxaphene	ND	18	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	51%		14-145%
877-09-8	Tetrachloro-m-xylene	49%		14-145%
2051-24-3	Decachlorobiphenyl	32%		10-197%
2051-24-3	Decachlorobiphenyl	50%		10-197%

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A7 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-7	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.7
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK8155.D	1	02/22/22 17:27	TL	02/19/22 10:05	OP38205	GRK212
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	17	ug/kg	
11104-28-2	Aroclor 1221	ND	36	22	ug/kg	
11141-16-5	Aroclor 1232	ND	36	23	ug/kg	
53469-21-9	Aroclor 1242	ND	36	15	ug/kg	
12672-29-6	Aroclor 1248	ND	36	32	ug/kg	
11097-69-1	Aroclor 1254	ND	36	19	ug/kg	
11096-82-5	Aroclor 1260 ^a	ND	36	15	ug/kg	
11100-14-4	Aroclor 1268	ND	36	15	ug/kg	
37324-23-5	Aroclor 1262	ND	36	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		10-163%
877-09-8	Tetrachloro-m-xylene	115%		10-163%
2051-24-3	Decachlorobiphenyl	97%		10-215%
2051-24-3	Decachlorobiphenyl	237% ^b		10-215%

(a) Associated CCV outside of control limits high, sample was ND.

(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A7 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-7	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.7
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	1850	5.5	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Antimony	0.30	0.22	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Arsenic ^a	< 1.1	1.1	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Barium	14.2	2.2	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Beryllium ^a	< 0.11	0.11	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cadmium	< 0.055	0.055	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Calcium	104	55	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Chromium	3.1	0.11	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Cobalt	1.9	0.55	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Copper ^a	4.5	1.4	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Iron	3350	28	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Lead	3.2	0.22	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Magnesium	697	55	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Manganese ^a	76.0	0.83	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	0.043	0.034	mg/kg	1	02/22/22	02/22/22	LM	SW846 7471B ³	SW846 7471B ⁵
Nickel	3.4	0.44	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Potassium	773	110	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Selenium ^a	< 1.1	1.1	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Silver ^a	< 0.28	0.28	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Sodium	< 110	110	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Thallium ^a	< 0.55	0.55	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Vanadium	3.9	0.55	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Zinc	12.0	0.55	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴

(1) Instrument QC Batch: MA51933

(2) Instrument QC Batch: MA51936

(3) Instrument QC Batch: MA51938

(4) Prep QC Batch: MP31355

(5) Prep QC Batch: MP31420

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WC-A7 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-7	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.7
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.26	0.26	mg/kg	1	02/18/22 15:24	MM	SW846 9012B/LACHAT
Solids, Percent	90.7		%	1	02/17/22 16:06	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.13
4

Report of Analysis

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Client Sample ID:	WC-A7 (0-7.5')	
Lab Sample ID:	JD39845-7A	Date Sampled: 02/16/22
Matrix:	SO - Soil	Date Received: 02/16/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 90.7
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55505.D	1	03/01/22 17:30	AFL	02/22/22 12:00	F:OP89889	F:S3Q766
Run #2							

	Initial Weight	Final Volume
Run #1	2.05 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.41	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.54	0.27	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.54	0.27	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.54	0.27	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.54	0.27	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.54	0.27	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.54	0.27	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.54	0.27	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.54	0.27	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.54	0.29	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.54	0.27	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.54	0.27	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.54	0.27	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.54	0.27	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.22	0.54	0.22	ug/kg	J
335-77-3	Perfluorodecanesulfonic acid	ND	0.54	0.27	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.54	0.27	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.1	0.54	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.54	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-A7 (0-7.5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-7A	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.7
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	87%		40-140%
	13C5-PFPeA	89%		50-150%
	13C5-PFHxA	91%		50-150%
	13C4-PFHpA	93%		50-150%
	13C8-PFOA	94%		50-150%
	13C9-PFNA	95%		50-150%
	13C6-PFDA	101%		50-150%
	13C7-PFUnDA	102%		40-140%
	13C2-PFDoDA	94%		40-140%
	13C2-PFTeDA	92%		30-130%
	13C3-PFBS	93%		50-150%
	13C3-PFHxS	94%		50-150%
	13C8-PFOS	99%		50-150%
	13C8-FOSA	79%		30-130%
	d3-MeFOSAA	77%		40-140%
	d5-EtFOSAA	82%		40-140%
	13C2-6:2FTS	92%		50-150%
	13C2-8:2FTS	116%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-A7 (7.5-15')	
Lab Sample ID:	JD39845-8	Date Sampled: 02/16/22
Matrix:	SO - Soil	Date Received: 02/16/22
Method:	SW846 8260D SW846 5035	Percent Solids: 80.4
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173663.D	1	02/17/22 19:35	PS	02/16/22 20:00	n/a	V3C7643
Run #2							

	Initial Weight
Run #1	5.8 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	5.3	11	4.4	ug/kg	J
71-43-2	Benzene	ND	0.54	0.49	ug/kg	
74-97-5	Bromochloromethane	ND	5.4	0.60	ug/kg	
75-27-4	Bromodichloromethane	ND	2.1	0.46	ug/kg	
75-25-2	Bromoform	ND	5.4	1.5	ug/kg	
74-83-9	Bromomethane ^a	ND	5.4	0.82	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.6	ug/kg	
75-15-0	Carbon disulfide	ND	2.1	0.57	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.1	0.66	ug/kg	
108-90-7	Chlorobenzene	ND	2.1	0.49	ug/kg	
75-00-3	Chloroethane	ND	5.4	0.63	ug/kg	
67-66-3	Chloroform	ND	2.1	0.56	ug/kg	
74-87-3	Chloromethane	ND	5.4	2.1	ug/kg	
110-82-7	Cyclohexane	ND	2.1	0.70	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	0.74	ug/kg	
124-48-1	Dibromochloromethane	ND	2.1	0.60	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.45	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.1	0.59	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.1	0.53	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.1	0.53	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.4	0.78	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.1	0.53	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.50	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.1	0.70	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.1	0.90	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.1	0.66	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.1	0.51	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	0.51	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	0.49	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.49	ug/kg	
76-13-1	Freon 113	ND	5.4	2.9	ug/kg	
591-78-6	2-Hexanone	ND	5.4	2.3	ug/kg	

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	WC-A7 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-8	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	80.4
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.1	1.5	ug/kg	
79-20-9	Methyl Acetate	ND	5.4	1.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.1	0.94	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.4	2.4	ug/kg	
75-09-2	Methylene chloride	ND	5.4	2.8	ug/kg	
100-42-5	Styrene	ND	2.1	0.43	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.64	ug/kg	
127-18-4	Tetrachloroethene	ND	2.1	0.62	ug/kg	
108-88-3	Toluene	ND	1.1	0.56	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.4	2.7	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	2.7	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.1	0.52	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.59	ug/kg	
79-01-6	Trichloroethene	ND	1.1	0.82	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.4	0.73	ug/kg	
75-01-4	Vinyl chloride	ND	2.1	0.52	ug/kg	
	m,p-Xylene	ND	1.1	0.96	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.49	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		80-124%
17060-07-0	1,2-Dichloroethane-D4	98%		75-133%
2037-26-5	Toluene-D8	98%		79-125%
460-00-4	4-Bromofluorobenzene	101%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	WC-A7 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-8	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	80.4
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155165.D	1	02/21/22 15:21	JY	02/19/22 08:00	OP38200	EZ7709
Run #2							

Run #	Initial Weight	Final Volume
Run #1	31.3 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	79	20	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	200	24	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	200	34	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	200	71	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	200	150	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	200	43	ug/kg	
95-48-7	2-Methylphenol	ND	79	25	ug/kg	
	3&4-Methylphenol	ND	79	33	ug/kg	
88-75-5	2-Nitrophenol	ND	200	26	ug/kg	
100-02-7	4-Nitrophenol	ND	400	110	ug/kg	
87-86-5	Pentachlorophenol	ND	160	37	ug/kg	
108-95-2	Phenol	ND	79	21	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	200	26	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	200	30	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	200	24	ug/kg	
83-32-9	Acenaphthene	ND	40	14	ug/kg	
208-96-8	Acenaphthylene	ND	40	20	ug/kg	
98-86-2	Acetophenone	ND	200	8.5	ug/kg	
120-12-7	Anthracene	ND	40	24	ug/kg	
1912-24-9	Atrazine	ND	79	17	ug/kg	
56-55-3	Benzo(a)anthracene	54.1	40	11	ug/kg	
50-32-8	Benzo(a)pyrene	53.4	40	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	69.7	40	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	38.0	40	20	ug/kg	J
207-08-9	Benzo(k)fluoranthene	26.2	40	19	ug/kg	J
101-55-3	4-Bromophenyl phenyl ether	ND	79	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	79	9.7	ug/kg	
92-52-4	1,1'-Biphenyl	ND	79	5.4	ug/kg	
100-52-7	Benzaldehyde	ND	200	9.9	ug/kg	
91-58-7	2-Chloronaphthalene	ND	79	9.5	ug/kg	
106-47-8	4-Chloroaniline	ND	200	14	ug/kg	
86-74-8	Carbazole	ND	79	5.8	ug/kg	

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J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	WC-A7 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-8	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	80.4
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	79	16	ug/kg	
218-01-9	Chrysene	68.2	40	13	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	79	8.5	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	79	17	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	79	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	79	13	ug/kg	
121-14-2	2,4-Dinitrotoluene ^a	ND	40	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	40	20	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	79	33	ug/kg	
123-91-1	1,4-Dioxane	ND	40	26	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	40	18	ug/kg	
132-64-9	Dibenzofuran	ND	79	16	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	79	6.5	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	79	9.9	ug/kg	
84-66-2	Diethyl phthalate	ND	79	8.5	ug/kg	
131-11-3	Dimethyl phthalate	ND	79	7.1	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	79	9.3	ug/kg	
206-44-0	Fluoranthene	106	40	18	ug/kg	
86-73-7	Fluorene	ND	40	18	ug/kg	
118-74-1	Hexachlorobenzene	ND	79	10	ug/kg	
87-68-3	Hexachlorobutadiene	ND	40	16	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	400	16	ug/kg	
67-72-1	Hexachloroethane	ND	200	20	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	45.1	40	19	ug/kg	
78-59-1	Isophorone	ND	79	8.5	ug/kg	
91-57-6	2-Methylnaphthalene	ND	40	9.0	ug/kg	
88-74-4	2-Nitroaniline	ND	200	9.4	ug/kg	
99-09-2	3-Nitroaniline	ND	200	9.9	ug/kg	
100-01-6	4-Nitroaniline ^a	ND	200	10	ug/kg	
91-20-3	Naphthalene	ND	40	11	ug/kg	
98-95-3	Nitrobenzene	ND	79	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	79	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	200	15	ug/kg	
85-01-8	Phenanthrene	62.5	40	13	ug/kg	
129-00-0	Pyrene	92.9	40	13	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	200	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	65%		10-109%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	WC-A7 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-8	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	80.4
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	65%		10-105%
118-79-6	2,4,6-Tribromophenol	72%		10-135%
4165-60-0	Nitrobenzene-d5	66%		10-119%
321-60-8	2-Fluorobiphenyl	77%		18-112%
1718-51-0	Terphenyl-d14	77%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.33	160	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A7 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-8	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	80.4
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174478.D	1	02/23/22 09:23	CP	02/19/22 10:05	OP38204	G1G6028
Run #2							

	Initial Weight	Final Volume
Run #1	16.3 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.76	0.63	ug/kg	
319-84-6	alpha-BHC	ND	0.76	0.62	ug/kg	
319-85-7	beta-BHC	ND	0.76	0.69	ug/kg	
319-86-8	delta-BHC	ND	0.76	0.73	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.76	0.56	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.76	0.62	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.76	0.35	ug/kg	
60-57-1	Dieldrin	ND	0.76	0.52	ug/kg	
72-54-8	4,4' -DDD	ND	0.76	0.70	ug/kg	
72-55-9	4,4' -DDE	ND	0.76	0.67	ug/kg	
50-29-3	4,4' -DDT	ND	0.76	0.68	ug/kg	
72-20-8	Endrin	ND	0.76	0.59	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.76	0.60	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.76	0.43	ug/kg	
959-98-8	Endosulfan-I	ND	0.76	0.44	ug/kg	
33213-65-9	Endosulfan-II	ND	0.76	0.48	ug/kg	
76-44-8	Heptachlor	ND	0.76	0.66	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.76	0.53	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.61	ug/kg	
53494-70-5	Endrin ketone	ND	0.76	0.55	ug/kg	
8001-35-2	Toxaphene	ND	19	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	76%		14-145%
877-09-8	Tetrachloro-m-xylene	75%		14-145%
2051-24-3	Decachlorobiphenyl	81%		10-197%
2051-24-3	Decachlorobiphenyl	86%		10-197%

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A7 (7.5-15')		
Lab Sample ID:	JD39845-8	Date Sampled:	02/16/22
Matrix:	SO - Soil	Date Received:	02/16/22
Method:	SW846 8082A SW846 3546	Percent Solids:	80.4
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK8156.D	1	02/22/22 17:43	TL	02/19/22 10:05	OP38205	GRK212
Run #2							

	Initial Weight	Final Volume
Run #1	16.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	38	18	ug/kg	
11104-28-2	Aroclor 1221	ND	38	24	ug/kg	
11141-16-5	Aroclor 1232	ND	38	24	ug/kg	
53469-21-9	Aroclor 1242	ND	38	16	ug/kg	
12672-29-6	Aroclor 1248	ND	38	34	ug/kg	
11097-69-1	Aroclor 1254	ND	38	21	ug/kg	
11096-82-5	Aroclor 1260 ^a	ND	38	16	ug/kg	
11100-14-4	Aroclor 1268	ND	38	16	ug/kg	
37324-23-5	Aroclor 1262	ND	38	25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	78%		10-163%
877-09-8	Tetrachloro-m-xylene	99%		10-163%
2051-24-3	Decachlorobiphenyl	70%		10-215%
2051-24-3	Decachlorobiphenyl	289% ^b		10-215%

(a) Associated CCV outside of control limits high, sample was ND.

(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A7 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-8	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	80.4
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	22300	62	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Antimony	3.5	2.5	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Arsenic ^a	< 12	12	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Barium	180	25	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Beryllium ^a	< 1.2	1.2	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cadmium	< 0.62	0.62	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Calcium	997	620	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Chromium	39.6	1.2	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Cobalt	19.5	6.2	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Copper ^a	52.1	16	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Iron	37900	310	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Lead	23.3	2.5	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Magnesium	8110	620	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Manganese ^a	1370	9.3	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	0.038	0.038	mg/kg	1	02/22/22	02/22/22	LM	SW846 7471B ³	SW846 7471B ⁵
Nickel	31.2	5.0	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Potassium	9260	1200	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Selenium ^a	< 12	12	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Silver ^a	< 3.1	3.1	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Sodium	< 1200	1200	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Thallium ^a	< 6.2	6.2	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Vanadium	50.2	6.2	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Zinc	114	6.2	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴

(1) Instrument QC Batch: MA51933

(2) Instrument QC Batch: MA51936

(3) Instrument QC Batch: MA51938

(4) Prep QC Batch: MP31355

(5) Prep QC Batch: MP31420

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WC-A7 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-8	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	80.4
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.30	0.30	mg/kg	1	02/18/22 15:25	MM	SW846 9012B/LACHAT
Solids, Percent	80.4		%	1	02/17/22 16:06	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.15
4

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-A7 (7.5-15')	
Lab Sample ID:	JD39845-8A	Date Sampled: 02/16/22
Matrix:	SO - Soil	Date Received: 02/16/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 80.4
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55506.D	1	03/01/22 17:47	AFL	02/22/22 12:00	F:OP89889	F:S3Q766
Run #2							

	Initial Weight	Final Volume
Run #1	1.99 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.48	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.63	0.31	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.63	0.31	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.63	0.31	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.63	0.31	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.63	0.31	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.63	0.31	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.63	0.31	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.63	0.31	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.63	0.33	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.63	0.31	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.63	0.31	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.63	0.31	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.63	0.31	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.63	0.25	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.63	0.31	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.63	0.31	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.3	0.63	ug/kg	
2991-50-6	EtFOSAA	ND	1.3	0.63	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.31	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.31	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WC-A7 (7.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39845-8A	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	80.4
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	63%		40-140%
	13C5-PFPeA	65%		50-150%
	13C5-PFHxA	69%		50-150%
	13C4-PFHpA	73%		50-150%
	13C8-PFOA	77%		50-150%
	13C9-PFNA	79%		50-150%
	13C6-PFDA	84%		50-150%
	13C7-PFUnDA	84%		40-140%
	13C2-PFDoDA	82%		40-140%
	13C2-PFTeDA	78%		30-130%
	13C3-PFBS	82%		50-150%
	13C3-PFHxS	81%		50-150%
	13C8-PFOS	83%		50-150%
	13C8-FOSA	55%		30-130%
	d3-MeFOSAA	52%		40-140%
	d5-EtFOSAA	58%		40-140%
	13C2-6:2FTS	85%		50-150%
	13C2-8:2FTS	93%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Chain of Custody (SGS Orlando, FL)



PAGE 1 OF 1

FED-EX Tracking #	Boyle Order Control #
	PREM-M3-021522-8
SGS Quote #	SGS Job #
	JD39845

[illegible]

CIP 2-8/2.3/30/2.1

<http://www.sgs.com/en/terms-and-conditions>.

Page 1 of 2

SGS Sample Receipt Summary

Job Number: JD39845

Client: SESI CONSULTING ENGINEERS

Project: 1001 WHITLOCK AVENUE, BRONX, NY

Date / Time Received: 2/16/2022 5:32:00 PM

Delivery Method:
Airbill #s:
Cooler Temps (Raw Measured) °C: Cooler 1: (2.8); Cooler 2: (2.3); Cooler 3: (3.0); Cooler 4: (2.1);

Cooler Temps (Corrected) °C: Cooler 1: (1.2); Cooler 2: (0.7); Cooler 3: (1.4); Cooler 4: (0.5);

Cooler Security
Y or N
Y or N

- | | |
|--|---|
| 1. Custody Seals Present: ☒ ☐ | 3. COC Present: ☒ ☐ |
| 2. Custody Seals Intact: ☒ ☐ | 4. Smpl Dates/Time OK: ☒ ☐ |

Cooler Temperature
Y or N

- | | |
|---|-----------|
| 1. Temp criteria achieved: ☒ ☐ | IR Gun |
| 2. Cooler temp verification: | |
| 3. Cooler media: | Ice (Bag) |
| 4. No. Coolers: | 4 |

Quality Control Preservation
Y or N
N/A

- | | |
|---|---|
| 1. Trip Blank present / cooler: ☐ ☐ | N/A ☒ |
| 2. Trip Blank listed on COC: ☐ ☐ | N/A ☒ |
| 3. Samples preserved properly: ☒ ☐ | |
| 4. VOCs headspace free: ☐ ☐ | N/A ☒ |

Sample Integrity - Documentation
Y or N

- | | |
|---|--|
| 1. Sample labels present on bottles: ☒ ☐ | |
| 2. Container labeling complete: ☒ ☐ | |
| 3. Sample container label / COC agree: ☒ ☐ | |

Sample Integrity - Condition
Y or N

- | | |
|---|--------|
| 1. Sample recvd within HT: ☒ ☐ | |
| 2. All containers accounted for: ☒ ☐ | |
| 3. Condition of sample: | Intact |

Sample Integrity - Instructions
Y or N
N/A

- | | |
|---|---|
| 1. Analysis requested is clear: ☒ ☐ | |
| 2. Bottles received for unspecified tests: ☐ ☒ | |
| 3. Sufficient volume recvd for analysis: ☒ ☐ | |
| 4. Compositing instructions clear: ☐ ☐ | N/A ☒ |
| 5. Filtering instructions clear: ☐ ☐ | N/A ☒ |

Test Strip Lot #s:

pH 1-12: 231619

pH 12+: 203117A

Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JD39845: Chain of Custody
Page 2 of 2

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

Client / Reporting Information										Project Information										Requested Analysis										Matrix Codes									
Company Name:					Project Name: 1001 Whitlock Avenue, Bronx, NY																																		
Street Address					Street					Billing Information (if different from Report to)																													
City		State			Zip			City		State			Company Name																										
Project Contact <i>michele.jenkins@sgs.com</i>					E-mail					Project #					Street Address																								
Phone #										Client Purchase Order #					City					State					Zip														
Sample(s) Name(s) CM					Phone					Project Manager					Attention:																								
										Collection										Number of preserved bottles																			
SGS Sample #		Field ID / Point of Collection			MECHTR Val #		Date	Time	Sampled by	Matrix	# of bottles	HCl	NACH	MNCH	PASO	PCSO	DYNABE	MECH	ENCODE																				
1A		WC-A5 (0-7.5')					2/19/22	12:22:00 PM	CM	SO										X																			
2A		WC-A5 (7.5'-15')					2/16/22	12:10:00 PM	CM	SO										X																			
3A		WC-B5 (0-7.5')					2/16/22	10:17:00 AM	CM	SO										X																			
4A		WC-B5 (7.5'-15')					2/19/22	10:30:00 AM	CM	SO										X																			
5A		WC-A6 (0-7.5')					2/16/22	12:35:00 PM	CM	SO										X																			
6A		WC-A6 (7.5'-15')					2/16/22	12:43:00 PM	CM	SO										X																			
7A		WC-A7 (0-7.5')					2/19/22	1:40:00 PM	CM	SO										X																			
8A		WC-A7 (7.5'-15')					2/16/22	1:58:00 PM	CM	SO										X																			
Turnaround Time (Business days)										Data Deliverable Information										Comments / Special Instructions																			
☐ Standard 10 Business Days ☐ 5 Business Days RUSH ☐ 3 Business Days RUSH ☐ 2 Business Days RUSH ☒ 1 Business Day EMERGENCY ☒ Other 1/19/2020										Approved By (SGS PMP) / Date: _____ _____ _____ _____ _____ ☐ Commercial "A" (Level 1) ☐ Commercial "B" (Level 2) ☐ FULLT1 (Level 3+4) ☐ NJ Reduced ☐ Commercial "C" ☐ Commercial "A" = Results Only ☐ Commercial "B" = Results + QC Summary ☐ Commercial "C" = Results + QC Summary + Partial Raw Data										☐ NYASP Category A ☐ NYASP Category B ☐ State Forms ☐ EDD Format ☒ Other NYASPB																			
Emergency & Risk TPA data available via Lablink. Approval needed for RUSH/Emergency LAT.																																							
Sample Custody must be documented below each time samples change possession, including courier delivery. http://www.sgs.com/en/terms-and-conditions																																							
Relinquished by:					Date / Time: 2/17/22 15:17					Received By: 1 [Signature]					Relinquished By: 2					Date / Time:					Received By: 2														
Relinquished by: 1 [Signature]					Date / Time:					Received By: 3					Relinquished By: 4					Date / Time:					Received By: 4														
Relinquished by: 5					Date / Time:					Received By: 5					Custody Seal #					☐ Intact ☐ Broken ☐ Preserved where applicable					Office Cooler Temp. °C														

3.8 inch

SGS Sample Receipt Summary

Job Number: JD39845

Client: SGS NA

Project: 1001 WHITLOCK AVENUE

Date / Time Received: 2/21/2022 9:00:00 AM

Delivery Method: FEDEX

Airbill #s: 527206391073

Therm ID: IR 1;

Therm CF: 0.4;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 1: (3.8);

Cooler Temps (Corrected) °C: Cooler 1: (4.2);

Cooler Information

Y or N

- | | | |
|-----------------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present | ☒ | ☐ |
| 2. Custody Seals Intact | ☒ | ☐ |
| 3. Temp criteria achieved | ☒ | ☐ |
| 4. Cooler temp verification | <u>IR Gun</u> | |
| 5. Cooler media | <u>Ice (Bag)</u> | |

Trip Blank Information

Y or N N/A

- | | | | |
|--------------------------------|--------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler | ☐ | ☐ | ☒ |
| 2. Trip Blank listed on COC | ☐ | ☐ | ☒ |
| | <u>W or S</u> | <u>N/A</u> | |
| 3. Type Of TB Received | ☐ | ☐ | ☒ |

Sample Information

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Sample labels present on bottles | ☒ | ☐ | |
| 2. Samples preserved properly | ☒ | ☐ | |
| 3. Sufficient volume/containers recvd for analysis: | ☒ | ☐ | |
| 4. Condition of sample | <u>Intact</u> | | |
| 5. Sample recvd within HT | ☒ | ☐ | |
| 6. Dates/Times/IDs on COC match Sample Label | ☒ | ☐ | |
| 7. VOCs have headspace | ☐ | ☐ | ☒ |
| 8. Bottles received for unspecified tests | ☐ | ☒ | |
| 9. Compositing instructions clear | ☐ | ☐ | ☒ |
| 10. Voa Soil Kits/Jars received past 48hrs? | ☐ | ☐ | ☒ |
| 11. % Solids Jar received? | ☐ | ☐ | ☒ |
| 12. Residual Chlorine Present? | ☐ | ☐ | ☒ |

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____
 Test Strip Lot #s: pH 0-3 230315
 Residual Chlorine Test Strip Lot #: _____

Number of 5035 Field Kits: _____
 pH 10-12 219813A

Number of Lab Filtered Metals: _____
 Other: (Specify) _____

Comments

SM001
Rev. Date 05/24/17

Technician: DEVANO

Date: 2/21/2022 9:00:00 AM

Reviewer: _____

Date: _____

JD39845: Chain of Custody

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Report of Analysis

Page 1 of 3

Client Sample ID:	WC-A8(0-7.5')	Date Sampled:	02/17/22
Lab Sample ID:	JD39916-1	Date Received:	02/17/22
Matrix:	SO - Soil	Percent Solids:	85.7
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M178381.D	1	02/22/22 05:40	CS	02/21/22 08:00	OP38251	EM7687
Run #2							

Run #	Initial Weight	Final Volume
Run #1	32.1 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	73	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	22	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	31	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	65	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	180	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	180	39	ug/kg	
95-48-7	2-Methylphenol	ND	73	23	ug/kg	
	3&4-Methylphenol	ND	73	30	ug/kg	
88-75-5	2-Nitrophenol	ND	180	24	ug/kg	
100-02-7	4-Nitrophenol ^a	ND	360	97	ug/kg	
87-86-5	Pentachlorophenol	ND	150	34	ug/kg	
108-95-2	Phenol	ND	73	19	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	24	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	27	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	22	ug/kg	
83-32-9	Acenaphthene	ND	36	13	ug/kg	
208-96-8	Acenaphthylene	ND	36	18	ug/kg	
98-86-2	Acetophenone	ND	180	7.8	ug/kg	
120-12-7	Anthracene	ND	36	22	ug/kg	
1912-24-9	Atrazine	ND	73	16	ug/kg	
56-55-3	Benzo(a)anthracene	70.0	36	10	ug/kg	
50-32-8	Benzo(a)pyrene	76.2	36	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	95.3	36	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	66.3	36	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	37.2	36	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	73	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	73	8.9	ug/kg	
92-52-4	1,1'-Biphenyl	ND	73	5.0	ug/kg	
100-52-7	Benzaldehyde	ND	180	9.0	ug/kg	
91-58-7	2-Chloronaphthalene	ND	73	8.7	ug/kg	
106-47-8	4-Chloroaniline	ND	180	13	ug/kg	
86-74-8	Carbazole	8.2	73	5.3	ug/kg	J

ND = Not detected MDL = Method Detection Limit

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RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	WC-A8(0-7.5')	Date Sampled:	02/17/22
Lab Sample ID:	JD39916-1	Date Received:	02/17/22
Matrix:	SO - Soil	Percent Solids:	85.7
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	73	14	ug/kg	
218-01-9	Chrysene	82.3	36	11	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	73	7.8	ug/kg	
111-44-4	bis(2-Chloroethyl)ether ^a	ND	73	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	73	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	73	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	36	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	36	18	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	73	30	ug/kg	
123-91-1	1,4-Dioxane	ND	36	24	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	18.5	36	16	ug/kg	J
132-64-9	Dibenzofuran	ND	73	15	ug/kg	
84-74-2	Di-n-butyl phthalate	54.5	73	5.9	ug/kg	JB
117-84-0	Di-n-octyl phthalate ^a	ND	73	9.1	ug/kg	
84-66-2	Diethyl phthalate	ND	73	7.7	ug/kg	
131-11-3	Dimethyl phthalate	ND	73	6.5	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	73	8.5	ug/kg	
206-44-0	Fluoranthene	119	36	16	ug/kg	
86-73-7	Fluorene	ND	36	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	73	9.2	ug/kg	
87-68-3	Hexachlorobutadiene	ND	36	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene ^a	ND	360	14	ug/kg	
67-72-1	Hexachloroethane	ND	180	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	70.6	36	17	ug/kg	
78-59-1	Isophorone ^a	ND	73	7.8	ug/kg	
91-57-6	2-Methylnaphthalene	ND	36	8.2	ug/kg	
88-74-4	2-Nitroaniline ^a	ND	180	8.6	ug/kg	
99-09-2	3-Nitroaniline	ND	180	9.1	ug/kg	
100-01-6	4-Nitroaniline	ND	180	9.4	ug/kg	
91-20-3	Naphthalene	ND	36	10	ug/kg	
98-95-3	Nitrobenzene ^a	ND	73	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	73	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	13	ug/kg	
85-01-8	Phenanthrene	59.2	36	12	ug/kg	
129-00-0	Pyrene	129	36	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	9.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	32%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	WC-A8(0-7.5')	Date Sampled:	02/17/22
Lab Sample ID:	JD39916-1	Date Received:	02/17/22
Matrix:	SO - Soil	Percent Solids:	85.7
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	32%		10-105%
118-79-6	2,4,6-Tribromophenol	47%		10-135%
4165-60-0	Nitrobenzene-d5	33%		10-119%
321-60-8	2-Fluorobiphenyl	48%		18-112%
1718-51-0	Terphenyl-d14	46%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.37	210	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

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Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A8(0-7.5')	Date Sampled:	02/17/22
Lab Sample ID:	JD39916-1	Date Received:	02/17/22
Matrix:	SO - Soil	Percent Solids:	85.7
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G41485.D	1	02/23/22 05:40	CP	02/21/22 09:30	OP38256	G8G1772
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.76	0.63	ug/kg	
319-84-6	alpha-BHC	ND	0.76	0.62	ug/kg	
319-85-7	beta-BHC	ND	0.76	0.69	ug/kg	
319-86-8	delta-BHC	ND	0.76	0.73	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.76	0.56	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.76	0.62	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.76	0.35	ug/kg	
60-57-1	Dieldrin	ND	0.76	0.52	ug/kg	
72-54-8	4,4'-DDD	ND	0.76	0.70	ug/kg	
72-55-9	4,4'-DDE	ND	0.76	0.67	ug/kg	
50-29-3	4,4'-DDT	ND	0.76	0.68	ug/kg	
72-20-8	Endrin	ND	0.76	0.59	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.76	0.60	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.76	0.43	ug/kg	
959-98-8	Endosulfan-I	ND	0.76	0.44	ug/kg	
33213-65-9	Endosulfan-II	ND	0.76	0.48	ug/kg	
76-44-8	Heptachlor	ND	0.76	0.66	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.76	0.53	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.61	ug/kg	
53494-70-5	Endrin ketone ^a	ND	0.76	0.55	ug/kg	
8001-35-2	Toxaphene	ND	19	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	85%		14-145%
877-09-8	Tetrachloro-m-xylene	81%		14-145%
2051-24-3	Decachlorobiphenyl	66%		10-197%
2051-24-3	Decachlorobiphenyl	58%		10-197%

(a) Associated CCV outside of control limits high, sample was ND.

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A8(0-7.5')		
Lab Sample ID:	JD39916-1	Date Sampled:	02/17/22
Matrix:	SO - Soil	Date Received:	02/17/22
Method:	SW846 8082A SW846 3546	Percent Solids:	85.7
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX2478536.D	1	02/28/22 16:01	CL	02/26/22 11:17	OP38351	GXX7742
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	38	18	ug/kg	
11104-28-2	Aroclor 1221	ND	38	24	ug/kg	
11141-16-5	Aroclor 1232	ND	38	24	ug/kg	
53469-21-9	Aroclor 1242	ND	38	16	ug/kg	
12672-29-6	Aroclor 1248	ND	38	34	ug/kg	
11097-69-1	Aroclor 1254	ND	38	21	ug/kg	
11096-82-5	Aroclor 1260	ND	38	16	ug/kg	
11100-14-4	Aroclor 1268	ND	38	16	ug/kg	
37324-23-5	Aroclor 1262	ND	38	25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	85%		10-163%
877-09-8	Tetrachloro-m-xylene	90%		10-163%
2051-24-3	Decachlorobiphenyl	85%		10-215%
2051-24-3	Decachlorobiphenyl	94%		10-215%

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Report of Analysis

Page 1 of 1

Client Sample ID: WC-A8(0-7.5')**Lab Sample ID:** JD39916-1**Matrix:** SO - Soil**Date Sampled:** 02/17/22**Date Received:** 02/17/22**Percent Solids:** 85.7**Project:** 1001 Whitlock Avenue, Bronx, NY

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	13000	56	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ³
Antimony	< 2.2	2.2	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ³
Arsenic	3.4	2.2	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ³
Barium	108	22	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ³
Beryllium	0.67	0.22	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ³
Cadmium	< 0.56	0.56	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ³
Calcium	17700	560	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ³
Chromium	24.5	1.1	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ³
Cobalt	11.9	5.6	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ³
Copper	32.8	2.8	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ³
Iron	19000	56	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ³
Lead	118	2.2	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ³
Magnesium	9440	560	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ³
Manganese	386	1.7	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ³
Mercury	0.32	0.038	mg/kg	1	02/22/22	02/22/22	LM	SW846 7471B ²	SW846 7471B ⁴
Nickel	21.3	4.4	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ³
Potassium	2480	1100	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ³
Selenium	< 2.2	2.2	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ³
Silver	0.72	0.56	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ³
Sodium	< 1100	1100	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ³
Thallium	< 1.1	1.1	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ³
Vanadium	32.2	5.6	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ³
Zinc	121	5.6	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ³

(1) Instrument QC Batch: MA51933

(2) Instrument QC Batch: MA51945

(3) Prep QC Batch: MP31373

(4) Prep QC Batch: MP31421

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A8(0-7.5')	Date Sampled:	02/17/22
Lab Sample ID:	JD39916-1	Date Received:	02/17/22
Matrix:	SO - Soil	Percent Solids:	85.7
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.29	0.29	mg/kg	1	02/21/22 09:48	MM	SW846 9012B/LACHAT
Solids, Percent	85.7		%	1	02/20/22 16:38	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-A8(0-7.5')	
Lab Sample ID:	JD39916-1A	Date Sampled: 02/17/22
Matrix:	SO - Soil	Date Received: 02/17/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 85.7
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55482.D	1	03/01/22 09:50	AFL	02/21/22 07:10	F:OP89888	F:S3Q765
Run #2							

	Initial Weight	Final Volume
Run #1	1.97 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.45	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.59	0.30	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.59	0.30	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.59	0.30	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.59	0.30	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.59	0.30	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.59	0.30	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.59	0.30	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.59	0.30	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.59	0.31	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.59	0.30	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.59	0.30	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.59	0.30	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.59	0.30	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	1.4	0.59	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.59	0.30	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.59	0.30	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.59	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.59	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	WC-A8(0-7.5')	Date Sampled:	02/17/22
Lab Sample ID:	JD39916-1A	Date Received:	02/17/22
Matrix:	SO - Soil	Percent Solids:	85.7
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	80%		40-140%
	13C5-PFPeA	79%		50-150%
	13C5-PFHxA	79%		50-150%
	13C4-PFHpA	81%		50-150%
	13C8-PFOA	81%		50-150%
	13C9-PFNA	81%		50-150%
	13C6-PFDA	85%		50-150%
	13C7-PFUnDA	81%		40-140%
	13C2-PFDoDA	80%		40-140%
	13C2-PFTeDA	79%		30-130%
	13C3-PFBS	82%		50-150%
	13C3-PFHxS	81%		50-150%
	13C8-PFOS	83%		50-150%
	13C8-FOSA	66%		30-130%
	d3-MeFOSAA	73%		40-140%
	d5-EtFOSAA	79%		40-140%
	13C2-6:2FTS	83%		50-150%
	13C2-8:2FTS	90%		50-150%

(a) Analysis performed at SGS Orlando, FL.

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Report of Analysis

Page 1 of 2

Client Sample ID:	WC-A8(7-7.5')	Date Sampled:	02/17/22
Lab Sample ID:	JD39916-2	Date Received:	02/17/22
Matrix:	SO - Soil	Percent Solids:	85.7
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y194733.D	1	02/22/22 17:53	PS	02/18/22 07:48	n/a	VY8531
Run #2							

	Initial Weight
Run #1	5.3 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	6.8	11	4.6	ug/kg	J
71-43-2	Benzene	0.62	0.55	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.5	0.62	ug/kg	
75-27-4	Bromodichloromethane	ND	2.2	0.47	ug/kg	
75-25-2	Bromoform	ND	5.5	1.5	ug/kg	
74-83-9	Bromomethane	ND	5.5	0.84	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.7	ug/kg	
75-15-0	Carbon disulfide	ND	2.2	0.59	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.2	0.68	ug/kg	
108-90-7	Chlorobenzene	ND	2.2	0.51	ug/kg	
75-00-3	Chloroethane	ND	5.5	0.65	ug/kg	
67-66-3	Chloroform	ND	2.2	0.57	ug/kg	
74-87-3	Chloromethane	ND	5.5	2.2	ug/kg	
110-82-7	Cyclohexane	ND	2.2	0.72	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.2	0.76	ug/kg	
124-48-1	Dibromochloromethane	ND	2.2	0.62	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.46	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.1	0.60	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.1	0.55	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.1	0.54	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.5	0.80	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.1	0.54	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.52	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.1	0.72	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.1	0.92	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.1	0.67	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.2	0.52	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.2	0.52	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.50	ug/kg	
76-13-1	Freon 113	ND	5.5	2.9	ug/kg	
591-78-6	2-Hexanone	ND	5.5	2.3	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	WC-A8(7-7.5')	Date Sampled:	02/17/22
Lab Sample ID:	JD39916-2	Date Received:	02/17/22
Matrix:	SO - Soil	Percent Solids:	85.7
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.2	1.6	ug/kg	
79-20-9	Methyl Acetate	ND	5.5	1.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.2	0.96	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.52	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.5	2.5	ug/kg	
75-09-2	Methylene chloride	ND	5.5	2.9	ug/kg	
100-42-5	Styrene	ND	2.2	0.44	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.2	0.66	ug/kg	
127-18-4	Tetrachloroethene	ND	2.2	0.64	ug/kg	
108-88-3	Toluene	0.95	1.1	0.58	ug/kg	J
87-61-6	1,2,3-Trichlorobenzene ^a	ND	5.5	2.8	ug/kg	
120-82-1	1,2,4-Trichlorobenzene ^a	ND	5.5	2.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.2	0.53	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.2	0.61	ug/kg	
79-01-6	Trichloroethene	ND	1.1	0.84	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.5	0.75	ug/kg	
75-01-4	Vinyl chloride	ND	2.2	0.53	ug/kg	
	m,p-Xylene	ND	1.1	0.99	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.50	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		80-124%
17060-07-0	1,2-Dichloroethane-D4	90%		75-133%
2037-26-5	Toluene-D8	99%		79-125%
460-00-4	4-Bromofluorobenzene	107%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	unknown	17.20	6.9	ug/kg	J
702-79-4	Adamantane, 1,3-dimethyl-	17.33	7.5	ug/kg	JN
	Total TIC, Volatile		14.4	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	WC-A8(7.5-15')	
Lab Sample ID:	JD39916-3	Date Sampled: 02/17/22
Matrix:	SO - Soil	Date Received: 02/17/22
Method:	SW846 8270E SW846 3546	Percent Solids: 83.2
Project:	1001 Whitlock Avenue, Bronx, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M178380.D	1	02/22/22 05:09	CS	02/21/22 08:00	OP38251	EM7687
Run #2							

Run #	Initial Weight	Final Volume
Run #1	31.0 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	78	19	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	24	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	33	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	69	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	190	150	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	190	41	ug/kg	
95-48-7	2-Methylphenol	ND	78	25	ug/kg	
	3&4-Methylphenol	ND	78	32	ug/kg	
88-75-5	2-Nitrophenol	ND	190	26	ug/kg	
100-02-7	4-Nitrophenol ^a	ND	390	100	ug/kg	
87-86-5	Pentachlorophenol	ND	160	36	ug/kg	
108-95-2	Phenol	ND	78	20	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	190	26	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	29	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	23	ug/kg	
83-32-9	Acenaphthene	ND	39	13	ug/kg	
208-96-8	Acenaphthylene	ND	39	20	ug/kg	
98-86-2	Acetophenone	ND	190	8.3	ug/kg	
120-12-7	Anthracene	ND	39	24	ug/kg	
1912-24-9	Atrazine	ND	78	17	ug/kg	
56-55-3	Benzo(a)anthracene	ND	39	11	ug/kg	
50-32-8	Benzo(a)pyrene	ND	39	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	39	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	39	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	39	18	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	78	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	78	9.5	ug/kg	
92-52-4	1,1'-Biphenyl	ND	78	5.3	ug/kg	
100-52-7	Benzaldehyde	ND	190	9.6	ug/kg	
91-58-7	2-Chloronaphthalene	ND	78	9.2	ug/kg	
106-47-8	4-Chloroaniline	ND	190	14	ug/kg	
86-74-8	Carbazole	ND	78	5.6	ug/kg	

ND = Not detected MDL = Method Detection Limit

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RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	WC-A8(7.5-15')	Date Sampled:	02/17/22
Lab Sample ID:	JD39916-3	Date Received:	02/17/22
Matrix:	SO - Soil	Percent Solids:	83.2
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	78	15	ug/kg	
218-01-9	Chrysene	ND	39	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	78	8.3	ug/kg	
111-44-4	bis(2-Chloroethyl)ether ^a	ND	78	17	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	78	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	78	13	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	39	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	39	19	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	78	32	ug/kg	
123-91-1	1,4-Dioxane	ND	39	26	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	39	17	ug/kg	
132-64-9	Dibenzofuran	ND	78	16	ug/kg	
84-74-2	Di-n-butyl phthalate	120	78	6.3	ug/kg	B
117-84-0	Di-n-octyl phthalate ^a	ND	78	9.7	ug/kg	
84-66-2	Diethyl phthalate	ND	78	8.3	ug/kg	
131-11-3	Dimethyl phthalate	ND	78	6.9	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	78	9.1	ug/kg	
206-44-0	Fluoranthene	ND	39	17	ug/kg	
86-73-7	Fluorene	ND	39	18	ug/kg	
118-74-1	Hexachlorobenzene	ND	78	9.8	ug/kg	
87-68-3	Hexachlorobutadiene	ND	39	16	ug/kg	
77-47-4	Hexachlorocyclopentadiene ^a	ND	390	15	ug/kg	
67-72-1	Hexachloroethane	ND	190	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	39	18	ug/kg	
78-59-1	Isophorone ^a	ND	78	8.3	ug/kg	
91-57-6	2-Methylnaphthalene	ND	39	8.8	ug/kg	
88-74-4	2-Nitroaniline ^a	ND	190	9.2	ug/kg	
99-09-2	3-Nitroaniline	ND	190	9.7	ug/kg	
100-01-6	4-Nitroaniline	ND	190	10	ug/kg	
91-20-3	Naphthalene	14.6	39	11	ug/kg	J
98-95-3	Nitrobenzene ^a	ND	78	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	78	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	14	ug/kg	
85-01-8	Phenanthrene	14.2	39	13	ug/kg	J
129-00-0	Pyrene	12.9	39	12	ug/kg	J
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	190	9.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	16%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	WC-A8(7.5-15')	Date Sampled:	02/17/22
Lab Sample ID:	JD39916-3	Date Received:	02/17/22
Matrix:	SO - Soil	Percent Solids:	83.2
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	14%		10-105%
118-79-6	2,4,6-Tribromophenol	22%		10-135%
4165-60-0	Nitrobenzene-d5	13%		10-119%
321-60-8	2-Fluorobiphenyl	23%		18-112%
1718-51-0	Terphenyl-d14	22%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	2.84	500	ug/kg	J
	system artifact	3.32	460	ug/kg	J
	system artifact/aldol-condensation	3.37	1000	ug/kg	J
	alkane	3.50	710	ug/kg	J
	unknown	3.75	350	ug/kg	J
	Cyclohexane alkyl	3.81	420	ug/kg	J
	Cyclohexane alkyl	3.93	690	ug/kg	J
	unknown	3.96	390	ug/kg	J
	unknown	4.03	580	ug/kg	J
	alkane	4.09	1200	ug/kg	J
	unknown	4.16	500	ug/kg	J
	unknown	4.22	560	ug/kg	J
	alkane	4.26	710	ug/kg	J
	alkane	4.29	690	ug/kg	J
	Cyclohexane alkyl	4.44	490	ug/kg	J
	alkane	4.72	550	ug/kg	J
	Cyclohexane alkyl	4.74	640	ug/kg	J
	unknown	4.85	590	ug/kg	J
	alkane	4.90	390	ug/kg	J
91-17-8	Naphthalene, decahydro-	4.94	500	ug/kg	JN
	unknown	5.16	780	ug/kg	J
	unknown	5.21	600	ug/kg	J
	C5 alkyl benzene	5.37	540	ug/kg	J
	C5 alkyl benzene	5.40	470	ug/kg	J
	C5 alkyl benzene	5.45	380	ug/kg	J
	C5 alkyl benzene	5.53	610	ug/kg	J
	C5 alkyl benzene	5.58	510	ug/kg	J
	unknown	5.71	430	ug/kg	J
	Total TIC, Semi-Volatile		14280	ug/kg	J

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

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 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A8(7.5-15')	
Lab Sample ID:	JD39916-3	Date Sampled: 02/17/22
Matrix:	SO - Soil	Date Received: 02/17/22
Method:	SW846 8081B SW846 3546	Percent Solids: 83.2
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	8G41569.D	1	02/24/22 21:15	CL	02/21/22 09:30	OP38256	G8G1775
Run #2							

	Initial Weight	Final Volume
Run #1	16.7 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.72	0.59	ug/kg	
319-84-6	alpha-BHC	ND	0.72	0.59	ug/kg	
319-85-7	beta-BHC	ND	0.72	0.65	ug/kg	
319-86-8	delta-BHC	ND	0.72	0.69	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.72	0.53	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.72	0.58	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.72	0.33	ug/kg	
60-57-1	Dieldrin	ND	0.72	0.49	ug/kg	
72-54-8	4,4' -DDD	ND	0.72	0.66	ug/kg	
72-55-9	4,4' -DDE	ND	0.72	0.63	ug/kg	
50-29-3	4,4' -DDT	ND	0.72	0.64	ug/kg	
72-20-8	Endrin	ND	0.72	0.56	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.72	0.56	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.72	0.41	ug/kg	
959-98-8	Endosulfan-I	ND	0.72	0.41	ug/kg	
33213-65-9	Endosulfan-II	ND	0.72	0.45	ug/kg	
76-44-8	Heptachlor	ND	0.72	0.62	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.72	0.50	ug/kg	
72-43-5	Methoxychlor	ND	1.4	0.57	ug/kg	
53494-70-5	Endrin ketone ^b	ND	0.72	0.52	ug/kg	
8001-35-2	Toxaphene	ND	18	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	95%		14-145%
877-09-8	Tetrachloro-m-xylene	80%		14-145%
2051-24-3	Decachlorobiphenyl	99%		10-197%
2051-24-3	Decachlorobiphenyl	85%		10-197%

(a) Had TBA cleanup.

(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

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B = Indicates analyte found in associated method blank

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Report of Analysis

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Client Sample ID:	WC-A8(7.5-15')	
Lab Sample ID:	JD39916-3	Date Sampled: 02/17/22
Matrix:	SO - Soil	Date Received: 02/17/22
Method:	SW846 8082A SW846 3546	Percent Solids: 83.2
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G213657.D	1	02/28/22 14:18	CP	02/21/22 09:30	OP38257	G2G5605
Run #2							

	Initial Weight	Final Volume
Run #1	16.7 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	17	ug/kg	
11104-28-2	Aroclor 1221	ND	36	22	ug/kg	
11141-16-5	Aroclor 1232	ND	36	23	ug/kg	
53469-21-9	Aroclor 1242	ND	36	15	ug/kg	
12672-29-6	Aroclor 1248	ND	36	32	ug/kg	
11097-69-1	Aroclor 1254	ND	36	19	ug/kg	
11096-82-5	Aroclor 1260	ND	36	15	ug/kg	
11100-14-4	Aroclor 1268	ND	36	15	ug/kg	
37324-23-5	Aroclor 1262	ND	36	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	129%		10-163%
877-09-8	Tetrachloro-m-xylene	119%		10-163%
2051-24-3	Decachlorobiphenyl	96%		10-215%
2051-24-3	Decachlorobiphenyl	152%		10-215%

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Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A8(7.5-15')	Date Sampled:	02/17/22
Lab Sample ID:	JD39916-3	Date Received:	02/17/22
Matrix:	SO - Soil	Percent Solids:	83.2
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	13400	63	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3050B ³
Antimony	< 2.5	2.5	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3050B ³
Arsenic	3.4	2.5	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3050B ³
Barium	137	25	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3050B ³
Beryllium	0.60	0.25	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3050B ³
Cadmium	1.7	0.63	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3050B ³
Calcium	18700	630	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3050B ³
Chromium	27.2	1.3	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3050B ³
Cobalt	10.4	6.3	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3050B ³
Copper	36.9	3.1	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3050B ³
Iron	22300	63	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3050B ³
Lead	672	2.5	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3050B ³
Magnesium	13000	630	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3050B ³
Manganese	381	1.9	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3050B ³
Mercury	0.20	0.039	mg/kg	1	02/22/22	02/22/22	LM	SW846 7471B ² SW846 7471B ⁴
Nickel	26.3	5.0	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3050B ³
Potassium	2550	1300	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3050B ³
Selenium	< 2.5	2.5	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3050B ³
Silver	0.83	0.63	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3050B ³
Sodium	< 1300	1300	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3050B ³
Thallium	< 1.3	1.3	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3050B ³
Vanadium	37.4	6.3	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3050B ³
Zinc	570	6.3	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3050B ³

(1) Instrument QC Batch: MA51933

(2) Instrument QC Batch: MA51945

(3) Prep QC Batch: MP31373

(4) Prep QC Batch: MP31421

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	WC-A8(7.5-15')	Date Sampled:	02/17/22
Lab Sample ID:	JD39916-3	Date Received:	02/17/22
Matrix:	SO - Soil	Percent Solids:	83.2
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.30	0.30	mg/kg	1	02/21/22 09:49	MM	SW846 9012B/LACHAT
Solids, Percent	83.2		%	1	02/20/22 16:38	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	WC-A8(7.5-15')	
Lab Sample ID:	JD39916-3A	Date Sampled: 02/17/22
Matrix:	SO - Soil	Date Received: 02/17/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 83.2
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55483.D	1	03/01/22 10:09	AFL	02/21/22 07:10	F:OP89888	F:S3Q765
Run #2							

	Initial Weight	Final Volume
Run #1	2.06 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.44	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.29	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.58	0.29	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.58	0.29	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.58	0.29	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.58	0.29	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.58	0.29	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.58	0.29	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.58	0.29	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.58	0.31	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.58	0.29	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.58	0.29	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.58	0.29	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.58	0.29	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.98	0.58	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.58	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.58	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.58	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.58	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	WC-A8(7.5-15')	Date Sampled:	02/17/22
Lab Sample ID:	JD39916-3A	Date Received:	02/17/22
Matrix:	SO - Soil	Percent Solids:	83.2
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	78%		40-140%
	13C5-PFPeA	77%		50-150%
	13C5-PFHxA	78%		50-150%
	13C4-PFHpA	79%		50-150%
	13C8-PFOA	80%		50-150%
	13C9-PFNA	79%		50-150%
	13C6-PFDA	84%		50-150%
	13C7-PFUnDA	72%		40-140%
	13C2-PFDoDA	76%		40-140%
	13C2-PFTeDA	77%		30-130%
	13C3-PFBS	81%		50-150%
	13C3-PFHxS	80%		50-150%
	13C8-PFOS	81%		50-150%
	13C8-FOSA	63%		30-130%
	d3-MeFOSAA	69%		40-140%
	d5-EtFOSAA	75%		40-140%
	13C2-6:2FTS	82%		50-150%
	13C2-8:2FTS	92%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	WC-A8(14.5-15')	Date Sampled:	02/17/22
Lab Sample ID:	JD39916-4	Date Received:	02/17/22
Matrix:	SO - Soil	Percent Solids:	83.2
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173727.D	1	02/21/22 19:16	PS	02/18/22 07:48	n/a	V3C7645
Run #2							

	Initial Weight
Run #1	5.8 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	25.3	10	4.3	ug/kg	
71-43-2	Benzene	0.70	0.52	0.47	ug/kg	
74-97-5	Bromochloromethane	ND	5.2	0.58	ug/kg	
75-27-4	Bromodichloromethane	ND	2.1	0.44	ug/kg	
75-25-2	Bromoform	ND	5.2	1.4	ug/kg	
74-83-9	Bromomethane ^a	ND	5.2	0.79	ug/kg	
78-93-3	2-Butanone (MEK)	5.5	10	2.5	ug/kg	J
75-15-0	Carbon disulfide	ND	2.1	0.55	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.1	0.64	ug/kg	
108-90-7	Chlorobenzene	ND	2.1	0.48	ug/kg	
75-00-3	Chloroethane	ND	5.2	0.61	ug/kg	
67-66-3	Chloroform	ND	2.1	0.54	ug/kg	
74-87-3	Chloromethane	ND	5.2	2.0	ug/kg	
110-82-7	Cyclohexane	ND	2.1	0.68	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	0.72	ug/kg	
124-48-1	Dibromochloromethane	ND	2.1	0.58	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.44	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.57	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.51	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.2	0.75	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.51	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.49	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.68	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.87	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.63	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.1	0.49	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	0.49	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	0.47	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.47	ug/kg	
76-13-1	Freon 113	ND	5.2	2.8	ug/kg	
591-78-6	2-Hexanone	ND	5.2	2.2	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	WC-A8(14.5-15')	Date Sampled:	02/17/22
Lab Sample ID:	JD39916-4	Date Received:	02/17/22
Matrix:	SO - Soil	Percent Solids:	83.2
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.1	1.5	ug/kg	
79-20-9	Methyl Acetate	ND	5.2	1.4	ug/kg	
108-87-2	Methylcyclohexane	181	2.1	0.91	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.49	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.2	2.4	ug/kg	
75-09-2	Methylene chloride	ND	5.2	2.7	ug/kg	
100-42-5	Styrene	ND	2.1	0.42	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.62	ug/kg	
127-18-4	Tetrachloroethene	ND	2.1	0.60	ug/kg	
108-88-3	Toluene	1.6	1.0	0.54	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.2	2.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	2.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.1	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.57	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.79	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.2	0.71	ug/kg	
75-01-4	Vinyl chloride	ND	2.1	0.50	ug/kg	
	m,p-Xylene	1.9	1.0	0.93	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.47	ug/kg	
1330-20-7	Xylene (total)	1.9	1.0	0.47	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		80-124%
17060-07-0	1,2-Dichloroethane-D4	100%		75-133%
2037-26-5	Toluene-D8	102%		79-125%
460-00-4	4-Bromofluorobenzene	90%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	cycloalkane	5.16	180	ug/kg	J
	alkane	5.32	430	ug/kg	J
	alkane	5.44	430	ug/kg	J
	alkane	5.65	140	ug/kg	J
	alkane	5.83	360	ug/kg	J
	cycloalkane	5.89	930	ug/kg	J
	cycloalkane	6.23	200	ug/kg	J
	cycloalkane	6.34	150	ug/kg	J
	cycloalkane	6.76	210	ug/kg	J
	cycloalkane	7.01	110	ug/kg	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	WC-A8(14.5-15')	Date Sampled:	02/17/22
Lab Sample ID:	JD39916-4	Date Received:	02/17/22
Matrix:	SO - Soil	Percent Solids:	83.2
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	alkane	7.15	110	ug/kg	J
	alkane	7.90	140	ug/kg	J
	cycloalkane	8.01	260	ug/kg	J
540-84-1	Pentane, 2,2,4-trimethyl-	4.17	130	ug/kg	JN
	cycloalkane	7.48	140	ug/kg	J
	Total TIC, Volatile		3920	ug/kg	J

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Appendix D: Laboratory Analytical Reports

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

SESI Consulting Engineers

1001 Whitlock Avenue, Bronx, NY

11819

SGS Job Number: JD39775

Sampling Dates: 02/14/22 - 02/15/22

Report to:

SESI Consulting Engineers

jam@sesi.org

ATTN: Jesse Mausner

Total number of pages in report: **202**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A handwritten signature in black ink, appearing to read "Mike Earp".

Mike Earp
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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Test results relate only to samples analyzed.

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Sample Summary

SESI Consulting Engineers

Job No: JD39775

1001 Whitlock Avenue, Bronx, NY

Project No: 11819

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
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This report contains results reported as ND = Not detected. The following applies:

Organics ND = Not detected above the MDL

JD39775-1	02/14/22	15:00	CN	02/15/22	SO Soil	RI-SB3 (4.5-5')
JD39775-1A	02/14/22	15:00	CN	02/15/22	SO Soil	RI-SB3 (4.5-5')
JD39775-2	02/14/22	15:10	CN	02/15/22	SO Soil	RI-SB3 (9.5-10')
JD39775-2A	02/14/22	15:10	CN	02/15/22	SO Soil	RI-SB3 (9.5-10')
JD39775-3	02/14/22	15:21	CN	02/15/22	SO Soil	RI-SB3 (14.5-15')
JD39775-3A	02/14/22	15:21	CN	02/15/22	SO Soil	RI-SB3 (14.5-15')
JD39775-4	02/14/22	15:28	CN	02/15/22	SO Soil	RI-SB3 (19.5-20')
JD39775-5	02/15/22	09:05	CN	02/15/22	SO Soil	RI-SB4 (4.5-5')
JD39775-5A	02/15/22	09:05	CN	02/15/22	SO Soil	RI-SB4 (4.5-5')
JD39775-6	02/15/22	09:07	CN	02/15/22	SO Soil	DUP-1
JD39775-6A	02/15/22	09:07	CN	02/15/22	SO Soil	DUP-1
JD39775-7	02/15/22	09:15	CN	02/15/22	SO Soil	RI-SB4 (9.5-10')

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary

(continued)

SESI Consulting Engineers

Job No: JD39775

1001 Whitlock Avenue, Bronx, NY
Project No: 11819

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JD39775-7A	02/15/22	09:15 CN	02/15/22	SO	Soil	RI-SB4 (9.5-10')
JD39775-8	02/15/22	09:23 CN	02/15/22	SO	Soil	RI-SB4 (14.5-15')
JD39775-8A	02/15/22	09:23 CN	02/15/22	SO	Soil	RI-SB4 (14.5-15')
JD39775-9	02/15/22	09:30 CN	02/15/22	SO	Soil	RI-SB4 (19.5-20')
JD39775-10	02/15/22	12:35 CN	02/15/22	SO	Soil	RI-SB5 (4.5-5')
JD39775-10A	02/15/22	12:35 CN	02/15/22	SO	Soil	RI-SB5 (4.5-5')
JD39775-11	02/15/22	12:45 CN	02/15/22	SO	Soil	RI-SB5 (9.5-10')
JD39775-11A	02/15/22	12:45 CN	02/15/22	SO	Soil	RI-SB5 (9.5-10')
JD39775-12	02/15/22	12:56 CN	02/15/22	SO	Soil	RI-SB5 (14.5-15')
JD39775-12A	02/15/22	12:56 CN	02/15/22	SO	Soil	RI-SB5 (14.5-15')
JD39775-13	02/15/22	13:03 CN	02/15/22	SO	Soil	RI-SB5 (19.5-20')
JD39775-13A	02/15/22	13:03 CN	02/15/22	SO	Soil	RI-SB5 (19.5-20')
JD39775-14	02/15/22	13:50 CN	02/15/22	SO	Soil	RI-SB6 (4.5-5')

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Sample Summary
(continued)

SESI Consulting Engineers

Job No: JD39775

1001 Whitlock Avenue, Bronx, NY
Project No: 11819

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JD39775-14A	02/15/22	13:50	CN	02/15/22	SO Soil	RI-SB6 (4.5-5')
JD39775-15	02/15/22	14:08	CN	02/15/22	SO Soil	RI-SB6 (9.5-10')
JD39775-15A	02/15/22	14:08	CN	02/15/22	SO Soil	RI-SB6 (9.5-10')
JD39775-16	02/15/22	14:20	CN	02/15/22	SO Soil	RI-SB6 (12.5-13')
JD39775-16A	02/15/22	14:20	CN	02/15/22	SO Soil	RI-SB6 (12.5-13')
JD39775-17	02/14/22	11:50	CN	02/15/22	AQ Field Blank Soil	FIELD BLANK
JD39775-17A	02/14/22	11:50	CN	02/15/22	AQ Field Blank Soil	FIELD BLANK

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

2

Client: SESI Consulting Engineers

Job No: JD39775

Site: 1001 Whitlock Avenue, Bronx, NY

Report Date 3/11/2022 4:07:50 PM

On 02/15/2022, 16 Sample(s), 0 Trip Blank(s) and 1 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 1.4 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD39775 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260D

Matrix: AQ

Batch ID: V4D5144

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD39774-7MS, JD39774-7MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for 1,2-Dibromo-3-chloropropane, 2-Butanone (MEK), 2-Hexanone, 4-Methyl-2-pentanone(MIBK), Methyl Acetate are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for 1,1,2-Trichloroethane, 2-Hexanone, 4-Methyl-2-pentanone(MIBK), Methyl Acetate are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Recovery(s) for o-Xylene are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- JD39775-17 for 1,2-Dibromo-3-chloropropane: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- JD39775-17 for 1,1,2-Trichloroethane: This compound in blank spike is outside in house QC limits bias high.
- JD39775-17 for 2-Butanone (MEK): Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- JD39775-17 for 4-Methyl-2-pentanone(MIBK): Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- JD39775-17 for 1,1,2,2-Tetrachloroethane: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- JD39775-17 for Methyl Acetate: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- JD39775-17 for Dichlorodifluoromethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD39775-17 for 2-Hexanone: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- V4D5144-BS for 1,1,2,2-Tetrachloroethane: High percent recovery and no associated positive reported in the QC batch.
- V4D5144-BS for 2-Butanone (MEK): High percent recovery and no associated positive reported in the QC batch.
- JD39775-17 for Acetone: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- V4D5144-BS for 1,2-Dibromo-3-chloropropane: High percent recovery and no associated positive reported in the QC batch.
- V4D5144-BS for 1,1,2-Trichloroethane: High percent recovery and no associated positive reported in the QC batch.
- V4D5144-BS for 2-Hexanone: High percent recovery and no associated positive reported in the QC batch.
- V4D5144-BS for 4-Methyl-2-pentanone(MIBK): High percent recovery and no associated positive reported in the QC batch.
- V4D5144-BS for Acetone: High percent recovery and no associated positive reported in the QC batch.
- V4D5144-BS for Methyl Acetate: High percent recovery and no associated positive reported in the QC batch.

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MS Volatiles By Method SW846 8260D

Matrix: SO

Batch ID: V3C7641

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39760-2MS, JD39760-4DUP, JD39760-2MS were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Methyl Acetate are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for Duplicate for Acetone, Xylene (total) are outside control limits. Outside control limits due to sample non-homogeneity.
- JD39775-13 for Vinyl chloride: Associated CCV outside of control limits high, sample was ND.
- JD39775-10 for Vinyl chloride: Associated CCV outside of control limits high, sample was ND.
- JD39775-6 for Vinyl chloride: Associated CCV outside of control limits high, sample was ND.
- JD39775-8 for Vinyl chloride: Associated CCV outside of control limits high, sample was ND.
- JD39775-11 for Vinyl chloride: Associated CCV outside of control limits high, sample was ND.
- JD39775-12 for Vinyl chloride: Associated CCV outside of control limits high, sample was ND.
- JD39775-7 for Vinyl chloride: Associated CCV outside of control limits high, sample was ND.

Matrix: SO

Batch ID: VI9839

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39721-1MS, JD39721-2DUP were used as the QC samples indicated.

Matrix: SO

Batch ID: VI9840

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39776-1MS, JD39776-2DUP were used as the QC samples indicated.
- JD39775-16 for Chloroethane: This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.
- VI9840-BS for Chloroethane: High percent recovery and no associated positive reported in the QC batch.
- JD39775-16 for Bromomethane: Associated CCV outside of control limits high, sample was ND.
- JD39775-15 for Chloroethane: This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.
- JD39775-15 for Bromomethane: Associated CCV outside of control limits high, sample was ND.

MS Semi-volatiles By Method EPA 537M BY ID

Matrix: AQ**Batch ID:** F:OP89877

- The data for EPA 537M BY ID meets quality control requirements.
- JD39775-17A: Analysis performed at SGS Orlando, FL.

Matrix: SO**Batch ID:** F:OP89835

- The data for EPA 537M BY ID meets quality control requirements.
- JD39775-1A: Analysis performed at SGS Orlando, FL.
- JD39775-3A: Analysis performed at SGS Orlando, FL.
- JD39775-5A: Analysis performed at SGS Orlando, FL.
- JD39775-2A: Analysis performed at SGS Orlando, FL.

Matrix: SO**Batch ID:** F:OP89836

- The data for EPA 537M BY ID meets quality control requirements.
- JD39775-10A: Analysis performed at SGS Orlando, FL.
- JD39775-14A: Analysis performed at SGS Orlando, FL.
- JD39775-12A: Analysis performed at SGS Orlando, FL.
- JD39775-11A: Analysis performed at SGS Orlando, FL.
- JD39775-15A: Analysis performed at SGS Orlando, FL.
- JD39775-16A: Analysis performed at SGS Orlando, FL.
- JD39775-7A: Analysis performed at SGS Orlando, FL.
- JD39775-6A: Analysis performed at SGS Orlando, FL.
- JD39775-8A: Analysis performed at SGS Orlando, FL.
- JD39775-13A: Analysis performed at SGS Orlando, FL.

MS Semi-volatiles By Method SW846 8270E

Matrix: AQ

Batch ID: OP38217

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- OP38217-BS1 for Hexachlorocyclopentadiene: Outside of in house control limits.

Matrix: SO

Batch ID: OP38180

- All samples were extracted within the recommended method holding time.
- Sample(s) JD39759-1MS, JD39759-1MSD were used as the QC samples indicated.
- Sample(s) JD39775-11, JD39775-12, JD39775-13, JD39775-14, JD39775-16, JD39775-2, JD39775-5, JD39775-6 have compound(s) reported with a "B" qualifier, indicating analyte is found in the associated method blank.
- Matrix Spike Recovery(s) for 2,4-Dinitrophenol, 4,6-Dinitro-o-cresol, Fluoranthene, Hexachlorocyclopentadiene, Phenanthrene, Pyrene are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for 2,4-Dinitrophenol, 4,6-Dinitro-o-cresol, Fluoranthene, Hexachlorocyclopentadiene, Phenanthrene are outside control limits. Outside control limits due to matrix interference.
- JD39775-2 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39775-14 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39775-1 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39775-7 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39775-8 for 2,4-Dinitrophenol: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD39775-10 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39775-13 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39775-6 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39775-11 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39775-16 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39775-3 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39775-15 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39775-12 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39775-5 for Caprolactam: Associated CCV outside of control limits high, sample was ND.

GC/LC Semi-volatiles By Method SW846 8081B

Matrix: AQ

Batch ID: OP38208A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- OP38208A-BS1: Had TBA cleanup.
- OP38208A-MB1: Had TBA cleanup.
- OP38208A-BS1 for Heptachlor epoxide: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.
- OP38208A-BS1 for Heptachlor epoxide: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.
- OP38208A-BS1 for gamma-Chlordane: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

Matrix: SO

Batch ID: OP38182

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39760-1MS, JD39760-1MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Endrin ketone are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Endrin ketone are outside control limits. Outside control limits due to matrix interference.
- JD39775-2: Had TBA cleanup.
- OP38182-MB1: Had TBA cleanup.
- JD39775-16: Had TBA cleanup.
- JD39775-13: Had TBA cleanup.
- JD39775-12: Had TBA cleanup.
- JD39775-8: Had TBA cleanup.
- JD39775-16 for Decachlorobiphenyl: High percent recoveries and no positive found in the sample.
- JD39775-16 for Endrin ketone: Associated CCV outside of control limits high, sample was ND.
- JD39775-13 for Endrin ketone: Associated CCV outside of control limits high, sample was ND.
- JD39775-12 for Endrin ketone: Associated CCV outside of control limits high, sample was ND.
- JD39775-8 for Endrin ketone: Associated CCV outside of control limits high, sample was ND.
- JD39775-7 for Endrin ketone: Associated CCV outside of control limits high, sample was ND.
- JD39775-6 for Endrin ketone: Associated CCV outside of control limits high, sample was ND.
- JD39775-1 for Endrin ketone: Associated CCV outside of control limits high, sample was ND.
- JD39775-3 for Endrin ketone: Associated CCV outside of control limits high, sample was ND.
- JD39775-5 for Endrin ketone: Associated CCV outside of control limits high, sample was ND.
- JD39775-3 for Tetrachloro-m-xylene: High percent recoveries and no positive found in the sample.
- JD39775-11 for Endrin ketone: Associated CCV outside of control limits high, sample was ND.
- JD39775-10 for Endrin ketone: Associated CCV outside of control limits high, sample was ND.
- OP38182-BS1 for Endrin ketone: High percent recoveries and no associated positive found in the QC batch.
- OP38182-BS1 for beta-BHC: High percent recoveries and no associated positive found in the QC batch.
- JD39775-14 for 4,4'-DDT: More than 40 % RPD for detected concentrations between the two GC columns.
- JD39775-14 for Endrin ketone: Associated CCV outside of control limits high, sample was ND.

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GC/LC Semi-volatiles By Method SW846 8082A**Matrix:** AQ**Batch ID:** OP38209

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Matrix: SO**Batch ID:** OP38183

- All samples were extracted within the recommended method holding time.
- Sample(s) JD39760-3MS, JD39760-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- OP38183-MB1: Had TBA clean-up.
- OP38183-BSD: Had TBA clean-up.
- OP38183-BS1: Had TBA clean-up.
- JD39775-10: Had TBA clean-up.
- JD39775-2: Had TBA clean-up.
- JD39775-12 for Tetrachloro-m-xylene: High percent recoveries and no positive found in the sample.
- JD39775-16 for Tetrachloro-m-xylene: Outside control limits due to matrix interference.
- JD39775-16 for Decachlorobiphenyl: Outside control limits due to matrix interference.

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Metals Analysis By Method SW846 6010D

Matrix: AQ

Batch ID: MP31335

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39688-1MS, JD39688-1MSD, JD39688-1SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Aluminum, Arsenic, Chromium, Nickel, Selenium, Vanadium, Zinc are outside control limits. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- Samples(s) JD39775-17: New York does not offer 3010A certification for antimony and silver. The laboratory is certified for method 3010A (Acid Digestion for Total Metals) for all other metals and is certified for the associated analytical methods of 6010C (ICP Analysis) and 6020A (ICP-MS Analysis). New York does certify for method 3005A (Acid Digestion for Total Recoverable or Dissolved Metals) for antimony and silver and the laboratory holds that certification, but that provides total recoverable rather than total metals results.

Matrix: SO

Batch ID: MP31339

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39775-3MS, JD39775-3MSD, JD39775-3PS, JD39775-3SDL were used as the QC samples for metals.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for Antimony, Magnesium, Potassium are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- Matrix Spike Duplicate Recovery(s) for Iron are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- Matrix Spike Recovery(s) for Iron, Manganese are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for Serial Dilution for Antimony, Arsenic, Silver, Thallium, Beryllium, Cadmium, Lead are outside control limits. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- JD39775-8 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39775-6 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39775-5 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39775-8 for Antimony: Elevated detection limit due to dilution required for high interfering element.
- JD39775-8 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39775-10 for Antimony: Elevated detection limit due to dilution required for high interfering element.
- JD39775-6 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39775-8 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39775-2 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39775-8 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39775-5 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39775-10 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39775-5 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39775-14 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39775-6 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39775-2 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39775-8 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39775-6 for Manganese: Elevated detection limit due to dilution required for high interfering element.
- JD39775-10 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39775-15 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39775-6 for Chromium: Elevated detection limit due to dilution required for high interfering element.
- JD39775-6 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39775-6 for Copper: Elevated detection limit due to dilution required for high interfering element.

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Batch ID: MP31339

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Metals Analysis By Method SW846 6010D

Matrix: SO

Batch ID: MP31339

- JD39775-3 for Manganese: Elevated detection limit due to dilution required for high interfering element.
- JD39775-5 for Antimony: Elevated detection limit due to dilution required for high interfering element.
- JD39775-3 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39775-3 for Antimony: Elevated detection limit due to dilution required for high interfering element.
- JD39775-14 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39775-14 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39775-3 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39775-15 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39775-2 for Silver: Elevated detection limit due to dilution required for high interfering element.
- RPD(s) for Serial Dilution for Cobalt, Nickel, Sodium, Zinc are outside control limits. Serial dilution indicates possible matrix interference.

Metals Analysis By Method SW846 7470A

Matrix: AQ

Batch ID: MP31427

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39921-2MS, JD39921-2MSD were used as the QC samples for metals.

Metals Analysis By Method SW846 7471B

Matrix: SO

Batch ID: MP31346

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39715-11MS, JD39715-11MSD were used as the QC samples for metals.

General Chemistry By Method EPA 335.4/LACHAT

Matrix: AQ

Batch ID: GP38590

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39783-12DUP, JD39783-12MS were used as the QC samples for Cyanide.
- Matrix Spike Recovery(s) for Cyanide are outside control limits. Spike recovery indicates possible matrix interference.

General Chemistry By Method SM2540 G 18TH ED MOD

Matrix: SO

Batch ID: GN26442

- Sample(s) JD39715-13DUP were used as the QC samples for Solids, Percent.

General Chemistry By Method SW846 9012B/LACHAT

Matrix: SO

Batch ID: GP38568

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39715-2DUP, JD39715-2MS were used as the QC samples for Cyanide.
- Matrix Spike Recovery(s) for Cyanide are outside control limits. Spike recovery indicates possible matrix interference.

Matrix: SO

Batch ID: GP38569

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39775-9QDUP, JD39775-10MS were used as the QC samples for Cyanide.
- Matrix Spike Recovery(s) for Cyanide are outside control limits. Spike recovery indicates possible matrix interference.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

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SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: SGS Dayton, NJ

Job No: JD39775

Site: SESINJPB: 1001 Whitlock Avenue, Bronx, NY

Report Date 3/3/2022 9:25:21 AM

On 02/15/2022, 14 Sample(s), 0 Trip Blank(s) and 1 Field Blank(s) were received at SGS North America Inc - Orlando. at a maximum corrected temperature of 5.2 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. - Orlando Job Number of JD39775 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section. Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

MS Semi-volatiles By Method EPA 537M BY ID

Matrix: AQ

Batch ID: OP89877

Sample(s) JD39818-4MS, JD39818-5DUP were used as the QC samples indicated.

RPD(s) for Duplicate for Perfluorohexanesulfonic acid are outside control limits for sample OP89877-DUP. Probable cause is due to sample non-homogeneity.

Matrix: SO

Batch ID: OP89835

Sample(s) JD39599-1MS, JD39599-1MSD were used as the QC samples indicated.

Matrix: SO

Batch ID: OP89836

Sample(s) JD39776-9AMS, JD39776-9AMSD were used as the QC samples indicated.

SGS North America Inc. - Orlando certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted. Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria. SGS North America Inc.- Orlando is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety.

Narrative prepared by:

Ariel Hartney, Client Services (signature on file)

Summary of Hits

Job Number: JD39775
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22 thru 02/15/22



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JD39775-1 RI-SB3 (4.5-5')

Benzo(a)anthracene	137	38	11	ug/kg	SW846 8270E
Benzo(a)pyrene	133	38	17	ug/kg	SW846 8270E
Benzo(b)fluoranthene	133	38	17	ug/kg	SW846 8270E
Benzo(g,h,i)perylene	69.5	38	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene	46.3	38	18	ug/kg	SW846 8270E
Chrysene	115	38	12	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene	36.6 J	38	17	ug/kg	SW846 8270E
Fluoranthene	235	38	17	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	100	38	18	ug/kg	SW846 8270E
Phenanthrene	56.4	38	13	ug/kg	SW846 8270E
Pyrene	256	38	12	ug/kg	SW846 8270E
Aluminum	18200	62		mg/kg	SW846 6010D
Arsenic	3.3	2.5		mg/kg	SW846 6010D
Barium	94.5	25		mg/kg	SW846 6010D
Beryllium	0.47	0.25		mg/kg	SW846 6010D
Calcium	1930	620		mg/kg	SW846 6010D
Chromium	30.5	1.2		mg/kg	SW846 6010D
Cobalt	10.1	6.2		mg/kg	SW846 6010D
Copper	26.5	3.1		mg/kg	SW846 6010D
Iron	22200	62		mg/kg	SW846 6010D
Lead	21.8	2.5		mg/kg	SW846 6010D
Magnesium	4760	620		mg/kg	SW846 6010D
Manganese	406	1.9		mg/kg	SW846 6010D
Mercury	0.047	0.038		mg/kg	SW846 7471B
Nickel	20.5	4.9		mg/kg	SW846 6010D
Potassium	3150	1200		mg/kg	SW846 6010D
Vanadium	37.6	6.2		mg/kg	SW846 6010D
Zinc	59.1	6.2		mg/kg	SW846 6010D

JD39775-1A RI-SB3 (4.5-5')

Perfluorooctanesulfonic acid ^a	0.38 J	0.60	0.24	ug/kg	EPA 537M BY ID
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JD39775-2 RI-SB3 (9.5-10')

Acetone	12.3	9.9	4.1	ug/kg	SW846 8260D
Benzo(a)anthracene	17.6 J	36	10	ug/kg	SW846 8270E
Benzo(a)pyrene	33.6 J	36	16	ug/kg	SW846 8270E
Benzo(b)fluoranthene	22.5 J	36	16	ug/kg	SW846 8270E
Chrysene	19.6 J	36	11	ug/kg	SW846 8270E
Di-n-butyl phthalate	61.8 JB	72	5.9	ug/kg	SW846 8270E
bis(2-Ethylhexyl)phthalate	46.0 J	72	8.4	ug/kg	SW846 8270E
Fluoranthene	36.8	36	16	ug/kg	SW846 8270E

Summary of Hits

Job Number: JD39775
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22 thru 02/15/22



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Indeno(1,2,3-cd)pyrene		35.1 J	36	17	ug/kg	SW846 8270E
Phenanthrene		25.0 J	36	12	ug/kg	SW846 8270E
Pyrene		33.0 J	36	12	ug/kg	SW846 8270E
Total TIC, Semi-Volatile		340 J			ug/kg	
Aluminum		13300	54		mg/kg	SW846 6010D
Antimony ^b		4.6	4.3		mg/kg	SW846 6010D
Barium		108	22		mg/kg	SW846 6010D
Beryllium ^b		0.68	0.43		mg/kg	SW846 6010D
Calcium		1650	540		mg/kg	SW846 6010D
Chromium		33.6	1.1		mg/kg	SW846 6010D
Cobalt		11.1	5.4		mg/kg	SW846 6010D
Copper ^b		28.9	5.4		mg/kg	SW846 6010D
Iron		26700	110		mg/kg	SW846 6010D
Lead		5.5	2.2		mg/kg	SW846 6010D
Magnesium		4860	540		mg/kg	SW846 6010D
Manganese		278	1.6		mg/kg	SW846 6010D
Mercury		0.057	0.035		mg/kg	SW846 7471B
Nickel		23.3	4.3		mg/kg	SW846 6010D
Potassium		4610	1100		mg/kg	SW846 6010D
Vanadium		42.4	5.4		mg/kg	SW846 6010D
Zinc		53.9	5.4		mg/kg	SW846 6010D

JD39775-2A RI-SB3 (9.5-10')

No hits reported in this sample.

JD39775-3 RI-SB3 (14.5-15')

Aluminum	15800	58		mg/kg	SW846 6010D
Barium	85.7	23		mg/kg	SW846 6010D
Beryllium	0.31	0.23		mg/kg	SW846 6010D
Calcium	1540	580		mg/kg	SW846 6010D
Chromium ^b	27.1	2.3		mg/kg	SW846 6010D
Cobalt	8.9	5.8		mg/kg	SW846 6010D
Copper ^b	24.0	5.8		mg/kg	SW846 6010D
Iron	24100	120		mg/kg	SW846 6010D
Lead	6.4	2.3		mg/kg	SW846 6010D
Magnesium	4540	580		mg/kg	SW846 6010D
Manganese ^b	1240	3.5		mg/kg	SW846 6010D
Nickel	19.2	4.6		mg/kg	SW846 6010D
Potassium	2380	1200		mg/kg	SW846 6010D
Vanadium	37.7	5.8		mg/kg	SW846 6010D
Zinc	49.7	5.8		mg/kg	SW846 6010D

Summary of Hits

Job Number: JD39775
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22 thru 02/15/22



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JD39775-3A RI-SB3 (14.5-15')

No hits reported in this sample.

JD39775-5 RI-SB4 (4.5-5')

Benzo(a)anthracene	14.7 J	39	11	ug/kg	SW846 8270E
Benzo(a)pyrene	32.4 J	39	18	ug/kg	SW846 8270E
Di-n-butyl phthalate	102 B	77	6.3	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	33.2 J	39	18	ug/kg	SW846 8270E
Aluminum	22100	60		mg/kg	SW846 6010D
Barium	404	24		mg/kg	SW846 6010D
Beryllium ^b	1.3	1.2		mg/kg	SW846 6010D
Cadmium	0.83	0.60		mg/kg	SW846 6010D
Calcium	1940	600		mg/kg	SW846 6010D
Chromium	39.7	1.2		mg/kg	SW846 6010D
Cobalt	18.4	6.0		mg/kg	SW846 6010D
Copper ^b	52.2	15		mg/kg	SW846 6010D
Iron	35900	300		mg/kg	SW846 6010D
Lead	63.8	2.4		mg/kg	SW846 6010D
Magnesium	9560	600		mg/kg	SW846 6010D
Manganese	751	1.8		mg/kg	SW846 6010D
Nickel	34.1	4.8		mg/kg	SW846 6010D
Potassium	11000	1200		mg/kg	SW846 6010D
Vanadium	50.1	6.0		mg/kg	SW846 6010D
Zinc	285	6.0		mg/kg	SW846 6010D

JD39775-5A RI-SB4 (4.5-5')

Perfluorooctanesulfonic acid ^a	0.56 J	0.59	0.24	ug/kg	EPA 537M BY ID
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JD39775-6 DUP-1

Benzo(a)anthracene	17.9 J	38	11	ug/kg	SW846 8270E
Benzo(a)pyrene	37.5 J	38	17	ug/kg	SW846 8270E
Benzo(b)fluoranthene	23.1 J	38	17	ug/kg	SW846 8270E
Chrysene	18.7 J	38	12	ug/kg	SW846 8270E
Di-n-butyl phthalate	74.1 JB	76	6.2	ug/kg	SW846 8270E
Fluoranthene	28.8 J	38	17	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	38.9	38	18	ug/kg	SW846 8270E
Phenanthrene	18.6 J	38	13	ug/kg	SW846 8270E
Pyrene	29.0 J	38	12	ug/kg	SW846 8270E
Total TIC, Semi-Volatile	190 J			ug/kg	
Aluminum	22700	58		mg/kg	SW846 6010D
Barium	202	23		mg/kg	SW846 6010D

Summary of Hits

Job Number: JD39775
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22 thru 02/15/22



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Beryllium ^b		1.6	1.2		mg/kg	SW846 6010D
Cadmium		0.61	0.58		mg/kg	SW846 6010D
Calcium		1780	580		mg/kg	SW846 6010D
Chromium ^b		39.5	5.8		mg/kg	SW846 6010D
Cobalt		18.8	5.8		mg/kg	SW846 6010D
Copper ^b		63.4	14		mg/kg	SW846 6010D
Iron		38300	290		mg/kg	SW846 6010D
Lead		40.2	2.3		mg/kg	SW846 6010D
Magnesium		8420	580		mg/kg	SW846 6010D
Manganese ^b		1450	8.7		mg/kg	SW846 6010D
Nickel		33.2	4.6		mg/kg	SW846 6010D
Potassium		9610	1200		mg/kg	SW846 6010D
Vanadium		51.0	5.8		mg/kg	SW846 6010D
Zinc		154	5.8		mg/kg	SW846 6010D

JD39775-6A DUP-1

No hits reported in this sample.

JD39775-7 RI-SB4 (9.5-10')

Benzo(a)anthracene	57.9	34	9.6	ug/kg	SW846 8270E
Benzo(a)pyrene	79.5	34	16	ug/kg	SW846 8270E
Benzo(b)fluoranthene	78.5	34	15	ug/kg	SW846 8270E
Benzo(g,h,i)perylene	44.6	34	17	ug/kg	SW846 8270E
Benzo(k)fluoranthene	29.5 J	34	16	ug/kg	SW846 8270E
Carbazole	5.1 J	68	4.9	ug/kg	SW846 8270E
Chrysene	57.6	34	11	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene	28.6 J	34	15	ug/kg	SW846 8270E
Fluoranthene	116	34	15	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	70.5	34	16	ug/kg	SW846 8270E
Phenanthrene	45.3	34	11	ug/kg	SW846 8270E
Pyrene	112	34	11	ug/kg	SW846 8270E
Total TIC, Semi-Volatile	200 J			ug/kg	
Aluminum	11500	56		mg/kg	SW846 6010D
Arsenic	2.4	2.3		mg/kg	SW846 6010D
Barium	73.5	23		mg/kg	SW846 6010D
Calcium	1360	560		mg/kg	SW846 6010D
Chromium	22.9	1.1		mg/kg	SW846 6010D
Cobalt	9.4	5.6		mg/kg	SW846 6010D
Copper	26.9	2.8		mg/kg	SW846 6010D
Iron	18800	56		mg/kg	SW846 6010D
Lead	12.8	2.3		mg/kg	SW846 6010D
Magnesium	3130	560		mg/kg	SW846 6010D
Manganese	562	1.7		mg/kg	SW846 6010D

Summary of Hits

Job Number: JD39775
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22 thru 02/15/22



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Mercury		0.16	0.032		mg/kg	SW846 7471B
Nickel		19.4	4.5		mg/kg	SW846 6010D
Potassium		2800	1100		mg/kg	SW846 6010D
Silver		0.64	0.56		mg/kg	SW846 6010D
Vanadium		29.1	5.6		mg/kg	SW846 6010D
Zinc		37.9	5.6		mg/kg	SW846 6010D

JD39775-7A RI-SB4 (9.5-10')

Perfluorooctanesulfonic acid ^a	0.27 J	0.57	0.23	ug/kg	EPA 537M BY ID
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JD39775-8 RI-SB4 (14.5-15')

Acetone	57.0	9.2	3.8	ug/kg	SW846 8260D
2-Butanone (MEK)	9.0 J	9.2	2.2	ug/kg	SW846 8260D
Carbon disulfide	0.76 J	1.8	0.49	ug/kg	SW846 8260D
Total TIC, Semi-Volatile	4500 J			ug/kg	
Aluminum	24600	51		mg/kg	SW846 6010D
Antimony ^b	10.7	10		mg/kg	SW846 6010D
Barium	220	20		mg/kg	SW846 6010D
Beryllium ^b	1.1	1.0		mg/kg	SW846 6010D
Calcium	1110	510		mg/kg	SW846 6010D
Chromium	42.4	1.0		mg/kg	SW846 6010D
Cobalt	23.3	5.1		mg/kg	SW846 6010D
Copper ^b	26.7	13		mg/kg	SW846 6010D
Iron	40000	250		mg/kg	SW846 6010D
Lead	5.4	2.0		mg/kg	SW846 6010D
Magnesium	12000	510		mg/kg	SW846 6010D
Manganese	399	1.5		mg/kg	SW846 6010D
Mercury	0.052	0.032		mg/kg	SW846 7471B
Nickel	49.4	4.0		mg/kg	SW846 6010D
Potassium	15600	1000		mg/kg	SW846 6010D
Vanadium	63.6	5.1		mg/kg	SW846 6010D
Zinc	112	5.1		mg/kg	SW846 6010D

JD39775-8A RI-SB4 (14.5-15')

No hits reported in this sample.

JD39775-10 RI-SB5 (4.5-5')

Acetone	20.0	11	4.4	ug/kg	SW846 8260D
Benzo(a)anthracene	35.1 J	38	11	ug/kg	SW846 8270E
Benzo(a)pyrene	48.9	38	17	ug/kg	SW846 8270E
Benzo(b)fluoranthene	46.7	38	17	ug/kg	SW846 8270E

Summary of Hits

Job Number: JD39775
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22 thru 02/15/22



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Benzo(g,h,i)perylene		25.2 J	38	19	ug/kg	SW846 8270E
Chrysene		42.1	38	12	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		27.7 J	38	17	ug/kg	SW846 8270E
Fluoranthene		71.1	38	17	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		50.7	38	18	ug/kg	SW846 8270E
Naphthalene		11.7 J	38	11	ug/kg	SW846 8270E
Phenanthrene		37.3 J	38	13	ug/kg	SW846 8270E
Pyrene		67.2	38	12	ug/kg	SW846 8270E
Total TIC, Semi-Volatile		170 J			ug/kg	
Aluminum		18200	61		mg/kg	SW846 6010D
Barium		96.5	24		mg/kg	SW846 6010D
Calcium		2840	610		mg/kg	SW846 6010D
Chromium		36.8	1.2		mg/kg	SW846 6010D
Cobalt		16.8	6.1		mg/kg	SW846 6010D
Copper ^b		47.3	15		mg/kg	SW846 6010D
Iron		32000	300		mg/kg	SW846 6010D
Lead		36.0	2.4		mg/kg	SW846 6010D
Magnesium		5660	610		mg/kg	SW846 6010D
Manganese		410	1.8		mg/kg	SW846 6010D
Mercury		0.075	0.037		mg/kg	SW846 7471B
Nickel		31.3	4.8		mg/kg	SW846 6010D
Potassium		3140	1200		mg/kg	SW846 6010D
Vanadium		54.3	6.1		mg/kg	SW846 6010D
Zinc		75.3	6.1		mg/kg	SW846 6010D

JD39775-10A RI-SB5 (4.5-5')

Perfluorohexanesulfonic acid ^a	0.61	0.61	0.31	ug/kg	EPA 537M BY ID
Perfluorooctanesulfonic acid ^a	10.9	0.61	0.24	ug/kg	EPA 537M BY ID

JD39775-11 RI-SB5 (9.5-10')

Acetone	22.9	10	4.3	ug/kg	SW846 8260D
2-Butanone (MEK)	3.0 J	10	2.5	ug/kg	SW846 8260D
Di-n-butyl phthalate	98.8 B	71	5.8	ug/kg	SW846 8270E
Aluminum	16400	54		mg/kg	SW846 6010D
Barium	135	22		mg/kg	SW846 6010D
Calcium	1530	540		mg/kg	SW846 6010D
Chromium	27.8	1.1		mg/kg	SW846 6010D
Cobalt	15.4	5.4		mg/kg	SW846 6010D
Copper ^b	32.1	13		mg/kg	SW846 6010D
Iron	33400	270		mg/kg	SW846 6010D
Lead	5.8	2.2		mg/kg	SW846 6010D
Magnesium	6280	540		mg/kg	SW846 6010D
Manganese	527	1.6		mg/kg	SW846 6010D

Summary of Hits

Job Number: JD39775
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22 thru 02/15/22

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Nickel		28.1	4.3		mg/kg	SW846 6010D
Potassium		6420	1100		mg/kg	SW846 6010D
Vanadium		44.4	5.4		mg/kg	SW846 6010D
Zinc		83.2	5.4		mg/kg	SW846 6010D

JD39775-11A RI-SB5 (9.5-10')

No hits reported in this sample.

JD39775-12 RI-SB5 (14.5-15')

Di-n-butyl phthalate	39.4 JB	68	5.5	ug/kg	SW846 8270E
Total TIC, Semi-Volatile	390 J			ug/kg	
Aluminum	19500	52		mg/kg	SW846 6010D
Barium	198	21		mg/kg	SW846 6010D
Calcium	1040	520		mg/kg	SW846 6010D
Chromium	43.0	1.0		mg/kg	SW846 6010D
Cobalt	16.1	5.2		mg/kg	SW846 6010D
Copper ^b	33.0	13		mg/kg	SW846 6010D
Iron	36000	260		mg/kg	SW846 6010D
Lead	5.6	2.1		mg/kg	SW846 6010D
Magnesium	8500	520		mg/kg	SW846 6010D
Manganese	263	1.5		mg/kg	SW846 6010D
Nickel	27.6	4.1		mg/kg	SW846 6010D
Potassium	12600	1000		mg/kg	SW846 6010D
Vanadium	55.3	5.2		mg/kg	SW846 6010D
Zinc	92.2	5.2		mg/kg	SW846 6010D

JD39775-12A RI-SB5 (14.5-15')

No hits reported in this sample.

JD39775-13 RI-SB5 (19.5-20')

Acetone	47.1	11	4.5	ug/kg	SW846 8260D
2-Butanone (MEK)	13.2	11	2.7	ug/kg	SW846 8260D
Di-n-butyl phthalate	81.7 JB	82	6.7	ug/kg	SW846 8270E
Total TIC, Semi-Volatile	180 J			ug/kg	
Aluminum	16700	61		mg/kg	SW846 6010D
Arsenic	3.1	2.4		mg/kg	SW846 6010D
Barium	98.2	24		mg/kg	SW846 6010D
Beryllium	0.73	0.24		mg/kg	SW846 6010D
Calcium	1850	610		mg/kg	SW846 6010D
Chromium	23.7	1.2		mg/kg	SW846 6010D
Cobalt	10.3	6.1		mg/kg	SW846 6010D

Summary of Hits

Job Number: JD39775
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22 thru 02/15/22



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Copper		19.0	3.0		mg/kg	SW846 6010D
Iron		20300	61		mg/kg	SW846 6010D
Lead		25.2	2.4		mg/kg	SW846 6010D
Magnesium		3650	610		mg/kg	SW846 6010D
Manganese		458	1.8		mg/kg	SW846 6010D
Nickel		20.3	4.9		mg/kg	SW846 6010D
Vanadium		38.4	6.1		mg/kg	SW846 6010D
Zinc		55.8	6.1		mg/kg	SW846 6010D

JD39775-13A RI-SB5 (19.5-20')

No hits reported in this sample.

JD39775-14 RI-SB6 (4.5-5')

Acenaphthylene	56.5	40	20	ug/kg	SW846 8270E
Anthracene	60.3	40	24	ug/kg	SW846 8270E
Benzo(a)anthracene	206	40	11	ug/kg	SW846 8270E
Benzo(a)pyrene	200	40	18	ug/kg	SW846 8270E
Benzo(b)fluoranthene	228	40	18	ug/kg	SW846 8270E
Benzo(g,h,i)perylene	123	40	20	ug/kg	SW846 8270E
Benzo(k)fluoranthene	89.9	40	19	ug/kg	SW846 8270E
Carbazole	18.3 J	80	5.8	ug/kg	SW846 8270E
Chrysene	188	40	13	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene	56.2	40	18	ug/kg	SW846 8270E
Di-n-butyl phthalate	21.0 JB	80	6.5	ug/kg	SW846 8270E
Fluoranthene	407	40	18	ug/kg	SW846 8270E
Fluorene	18.7 J	40	18	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	164	40	19	ug/kg	SW846 8270E
Naphthalene	11.6 J	40	11	ug/kg	SW846 8270E
Phenanthrene	219	40	13	ug/kg	SW846 8270E
Pyrene	340	40	13	ug/kg	SW846 8270E
4,4'-DDD	1.2	0.76	0.70	ug/kg	SW846 8081B
4,4'-DDT ^c	0.75 J	0.76	0.68	ug/kg	SW846 8081B
Aluminum	15700	59		mg/kg	SW846 6010D
Barium	221	23		mg/kg	SW846 6010D
Cadmium	0.87	0.59		mg/kg	SW846 6010D
Calcium	3130	590		mg/kg	SW846 6010D
Chromium	29.0	1.2		mg/kg	SW846 6010D
Cobalt	14.9	5.9		mg/kg	SW846 6010D
Copper ^b	55.6	15		mg/kg	SW846 6010D
Iron	33200	290		mg/kg	SW846 6010D
Lead	101	2.3		mg/kg	SW846 6010D
Magnesium	6120	590		mg/kg	SW846 6010D
Manganese	909	1.8		mg/kg	SW846 6010D

Summary of Hits

Job Number: JD39775
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22 thru 02/15/22



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Mercury		0.15	0.038		mg/kg	SW846 7471B
Nickel		301	4.7		mg/kg	SW846 6010D
Potassium		5410	1200		mg/kg	SW846 6010D
Vanadium		39.4	5.9		mg/kg	SW846 6010D
Zinc		177	5.9		mg/kg	SW846 6010D
Cyanide		0.27	0.27		mg/kg	SW846 9012B/LACHAT

JD39775-14A RI-SB6 (4.5-5')

Perfluorooctanesulfonic acid ^a	0.64	0.60	0.24	ug/kg	EPA 537M BY ID
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JD39775-15 RI-SB6 (9.5-10')

Benzo(a)anthracene	13.2 J	40	11	ug/kg	SW846 8270E
Benzo(a)pyrene	31.9 J	40	18	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene	24.4 J	40	18	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	34.7 J	40	19	ug/kg	SW846 8270E
Pyrene	19.1 J	40	13	ug/kg	SW846 8270E
Total TIC, Semi-Volatile	430 J			ug/kg	
Aluminum	18200	60		mg/kg	SW846 6010D
Barium	97.3	24		mg/kg	SW846 6010D
Beryllium ^b	0.94	0.48		mg/kg	SW846 6010D
Calcium	1820	600		mg/kg	SW846 6010D
Chromium	32.6	1.2		mg/kg	SW846 6010D
Cobalt	12.0	6.0		mg/kg	SW846 6010D
Copper ^b	39.0	6.0		mg/kg	SW846 6010D
Iron	25200	120		mg/kg	SW846 6010D
Lead	335	2.4		mg/kg	SW846 6010D
Magnesium	5360	600		mg/kg	SW846 6010D
Manganese	203	1.8		mg/kg	SW846 6010D
Mercury	0.31	0.040		mg/kg	SW846 7471B
Nickel	23.3	4.8		mg/kg	SW846 6010D
Potassium	2380	1200		mg/kg	SW846 6010D
Vanadium	44.7	6.0		mg/kg	SW846 6010D
Zinc	96.7	6.0		mg/kg	SW846 6010D

JD39775-15A RI-SB6 (9.5-10')

No hits reported in this sample.

JD39775-16 RI-SB6 (12.5-13')

Acetone	81.1	10	4.2	ug/kg	SW846 8260D
2-Butanone (MEK)	16.7	10	2.5	ug/kg	SW846 8260D
Carbon disulfide	0.62 J	2.0	0.54	ug/kg	SW846 8260D

Summary of Hits

Job Number: JD39775
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22 thru 02/15/22

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Acenaphthene		211	37	13	ug/kg	SW846 8270E
Anthracene		143	37	22	ug/kg	SW846 8270E
Benzo(a)anthracene		710	37	10	ug/kg	SW846 8270E
Benzo(a)pyrene		705	37	17	ug/kg	SW846 8270E
Benzo(b)fluoranthene		891	37	16	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		511	37	18	ug/kg	SW846 8270E
Benzo(k)fluoranthene		314	37	17	ug/kg	SW846 8270E
1,1'-Biphenyl		42.8 J	73	5.0	ug/kg	SW846 8270E
Carbazole		93.1	73	5.3	ug/kg	SW846 8270E
Chrysene		664	37	12	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		131	37	16	ug/kg	SW846 8270E
Dibenzofuran		157	73	15	ug/kg	SW846 8270E
Di-n-butyl phthalate		62.8 JB	73	6.0	ug/kg	SW846 8270E
Fluoranthene		1280	37	16	ug/kg	SW846 8270E
Fluorene		146	37	17	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		573	37	17	ug/kg	SW846 8270E
2-Methylnaphthalene		119	37	8.3	ug/kg	SW846 8270E
Naphthalene		582	37	10	ug/kg	SW846 8270E
Phenanthrene		819	37	12	ug/kg	SW846 8270E
Pyrene		1150	37	12	ug/kg	SW846 8270E
Total TIC, Semi-Volatile		1390 J			ug/kg	
Aluminum		14200	59		mg/kg	SW846 6010D
Arsenic		2.4	2.4		mg/kg	SW846 6010D
Barium		95.6	24		mg/kg	SW846 6010D
Beryllium		0.70	0.24		mg/kg	SW846 6010D
Calcium		1350	590		mg/kg	SW846 6010D
Chromium		31.8	1.2		mg/kg	SW846 6010D
Cobalt		13.6	5.9		mg/kg	SW846 6010D
Copper		27.2	3.0		mg/kg	SW846 6010D
Iron		21300	59		mg/kg	SW846 6010D
Lead		10.4	2.4		mg/kg	SW846 6010D
Magnesium		3960	590		mg/kg	SW846 6010D
Manganese		213	1.8		mg/kg	SW846 6010D
Mercury		0.15	0.035		mg/kg	SW846 7471B
Nickel		25.8	4.8		mg/kg	SW846 6010D
Potassium		2380	1200		mg/kg	SW846 6010D
Vanadium		38.3	5.9		mg/kg	SW846 6010D
Zinc		58.5	5.9		mg/kg	SW846 6010D

JD39775-16A RI-SB6 (12.5-13')

No hits reported in this sample.

Summary of Hits

Job Number: JD39775
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/14/22 thru 02/15/22



Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
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JD39775-17 FIELD BLANK

No hits reported in this sample.

JD39775-17A FIELD BLANK

No hits reported in this sample.

- (a) Analysis performed at SGS Orlando, FL.
- (b) Elevated detection limit due to dilution required for high interfering element.
- (c) More than 40 % RPD for detected concentrations between the two GC columns.

Sample Results

Report of Analysis

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB3 (4.5-5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-1	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	82.7
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242296.D	1	02/16/22 18:06	PS	02/16/22 11:00	n/a	VI9839
Run #2							

	Initial Weight
Run #1	6.0 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	4.2	ug/kg	
71-43-2	Benzene	ND	0.50	0.46	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.56	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.43	ug/kg	
75-25-2	Bromoform	ND	5.0	1.4	ug/kg	
74-83-9	Bromomethane	ND	5.0	0.77	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	2.4	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.54	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.62	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.46	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.60	ug/kg	
67-66-3	Chloroform	ND	2.0	0.52	ug/kg	
74-87-3	Chloromethane	ND	5.0	2.0	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.66	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.70	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.56	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.42	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.55	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.73	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.47	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.66	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.85	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.62	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.48	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.48	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.46	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.46	ug/kg	
76-13-1	Freon 113	ND	5.0	2.7	ug/kg	
591-78-6	2-Hexanone	ND	5.0	2.1	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB3 (4.5-5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-1	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	82.7
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	1.4	ug/kg	
79-20-9	Methyl Acetate	ND	5.0	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.88	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.47	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	2.3	ug/kg	
75-09-2	Methylene chloride	ND	5.0	2.6	ug/kg	
100-42-5	Styrene	ND	2.0	0.41	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.60	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.58	ug/kg	
108-88-3	Toluene	ND	1.0	0.53	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.49	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.56	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.77	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.69	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.48	ug/kg	
	m,p-Xylene	ND	1.0	0.90	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.46	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.46	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		80-124%
17060-07-0	1,2-Dichloroethane-D4	114%		75-133%
2037-26-5	Toluene-D8	100%		79-125%
460-00-4	4-Bromofluorobenzene	89%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	3.61	6.5	ug/kg	J
	Total TIC, Volatile		0	ug/kg	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	RI-SB3 (4.5-5')	
Lab Sample ID:	JD39775-1	Date Sampled: 02/14/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	SW846 8270E SW846 3546	Percent Solids: 82.7
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P147603.D	1	02/18/22 17:36	KLS	02/16/22 11:30	OP38180	EP6812
Run #2							

	Initial Weight	Final Volume
Run #1	32.1 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	75	19	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	32	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	67	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	190	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	190	40	ug/kg	
95-48-7	2-Methylphenol	ND	75	24	ug/kg	
	3&4-Methylphenol	ND	75	31	ug/kg	
88-75-5	2-Nitrophenol	ND	190	25	ug/kg	
100-02-7	4-Nitrophenol	ND	380	100	ug/kg	
87-86-5	Pentachlorophenol	ND	150	35	ug/kg	
108-95-2	Phenol	ND	75	20	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	190	25	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	28	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	22	ug/kg	
83-32-9	Acenaphthene	ND	38	13	ug/kg	
208-96-8	Acenaphthylene	ND	38	19	ug/kg	
98-86-2	Acetophenone	ND	190	8.1	ug/kg	
120-12-7	Anthracene	ND	38	23	ug/kg	
1912-24-9	Atrazine	ND	75	16	ug/kg	
56-55-3	Benzo(a)anthracene	137	38	11	ug/kg	
50-32-8	Benzo(a)pyrene	133	38	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	133	38	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	69.5	38	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	46.3	38	18	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	75	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	75	9.2	ug/kg	
92-52-4	1,1'-Biphenyl	ND	75	5.2	ug/kg	
100-52-7	Benzaldehyde	ND	190	9.3	ug/kg	
91-58-7	2-Chloronaphthalene	ND	75	9.0	ug/kg	
106-47-8	4-Chloroaniline	ND	190	14	ug/kg	
86-74-8	Carbazole	ND	75	5.5	ug/kg	

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Report of Analysis

Client Sample ID:	RI-SB3 (4.5-5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-1	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	82.7
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	75	15	ug/kg	
218-01-9	Chrysene	115	38	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	75	8.1	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	75	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	75	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	75	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	38	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	38	19	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	75	31	ug/kg	
123-91-1	1,4-Dioxane	ND	38	25	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	36.6	38	17	ug/kg	J
132-64-9	Dibenzofuran	ND	75	15	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	75	6.1	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	75	9.4	ug/kg	
84-66-2	Diethyl phthalate	ND	75	8.0	ug/kg	
131-11-3	Dimethyl phthalate	ND	75	6.7	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	75	8.8	ug/kg	
206-44-0	Fluoranthene	235	38	17	ug/kg	
86-73-7	Fluorene	ND	38	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	75	9.5	ug/kg	
87-68-3	Hexachlorobutadiene	ND	38	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	380	15	ug/kg	
67-72-1	Hexachloroethane	ND	190	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	100	38	18	ug/kg	
78-59-1	Isophorone	ND	75	8.1	ug/kg	
91-57-6	2-Methylnaphthalene	ND	38	8.5	ug/kg	
88-74-4	2-Nitroaniline	ND	190	8.9	ug/kg	
99-09-2	3-Nitroaniline	ND	190	9.4	ug/kg	
100-01-6	4-Nitroaniline	ND	190	9.8	ug/kg	
91-20-3	Naphthalene	ND	38	11	ug/kg	
98-95-3	Nitrobenzene	ND	75	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	75	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	14	ug/kg	
85-01-8	Phenanthrene	56.4	38	13	ug/kg	
129-00-0	Pyrene	256	38	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	190	9.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	38%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	RI-SB3 (4.5-5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-1	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	82.7
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	39%		10-105%
118-79-6	2,4,6-Tribromophenol	51%		10-135%
4165-60-0	Nitrobenzene-d5	43%		10-119%
321-60-8	2-Fluorobiphenyl	49%		18-112%
1718-51-0	Terphenyl-d14	55%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
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 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB3 (4.5-5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-1	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	82.7
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G41417.D	1	02/21/22 14:51	TL	02/16/22 01:50	OP38182	G8G1769
Run #2							

	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.78	0.64	ug/kg	
319-84-6	alpha-BHC	ND	0.78	0.63	ug/kg	
319-85-7	beta-BHC	ND	0.78	0.70	ug/kg	
319-86-8	delta-BHC	ND	0.78	0.74	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.78	0.57	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.78	0.63	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.78	0.35	ug/kg	
60-57-1	Dieldrin	ND	0.78	0.53	ug/kg	
72-54-8	4,4' -DDD	ND	0.78	0.71	ug/kg	
72-55-9	4,4' -DDE	ND	0.78	0.68	ug/kg	
50-29-3	4,4' -DDT	ND	0.78	0.69	ug/kg	
72-20-8	Endrin	ND	0.78	0.60	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.78	0.61	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.78	0.44	ug/kg	
959-98-8	Endosulfan-I	ND	0.78	0.45	ug/kg	
33213-65-9	Endosulfan-II	ND	0.78	0.48	ug/kg	
76-44-8	Heptachlor	ND	0.78	0.67	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.78	0.54	ug/kg	
72-43-5	Methoxychlor	ND	1.6	0.62	ug/kg	
53494-70-5	Endrin ketone ^a	ND	0.78	0.56	ug/kg	
8001-35-2	Toxaphene	ND	19	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	116%		14-145%
877-09-8	Tetrachloro-m-xylene	115%		14-145%
2051-24-3	Decachlorobiphenyl	128%		10-197%
2051-24-3	Decachlorobiphenyl	121%		10-197%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB3 (4.5-5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-1	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	82.7
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G114202.D	1	02/18/22 00:27	TL	02/16/22 13:50	OP38183	G5G2905
Run #2							

	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	39	18	ug/kg	
11104-28-2	Aroclor 1221	ND	39	24	ug/kg	
11141-16-5	Aroclor 1232	ND	39	25	ug/kg	
53469-21-9	Aroclor 1242	ND	39	16	ug/kg	
12672-29-6	Aroclor 1248	ND	39	35	ug/kg	
11097-69-1	Aroclor 1254	ND	39	21	ug/kg	
11096-82-5	Aroclor 1260	ND	39	17	ug/kg	
11100-14-4	Aroclor 1268	ND	39	16	ug/kg	
37324-23-5	Aroclor 1262	ND	39	25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	117%		10-163%
877-09-8	Tetrachloro-m-xylene	132%		10-163%
2051-24-3	Decachlorobiphenyl	138%		10-215%
2051-24-3	Decachlorobiphenyl	155%		10-215%

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Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB3 (4.5-5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-1	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	82.7
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	18200	62	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Antimony	< 2.5	2.5	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Arsenic	3.3	2.5	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Barium	94.5	25	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Beryllium	0.47	0.25	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Cadmium	< 0.62	0.62	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Calcium	1930	620	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Chromium	30.5	1.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Cobalt	10.1	6.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Copper	26.5	3.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Iron	22200	62	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Lead	21.8	2.5	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Magnesium	4760	620	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Manganese	406	1.9	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Mercury	0.047	0.038	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹
Nickel	20.5	4.9	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Potassium	3150	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Selenium	< 2.5	2.5	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Silver	< 0.62	0.62	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Sodium	< 1200	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Thallium	< 1.2	1.2	mg/kg	1	02/17/22	02/18/22	ND	SW846 6010D ³
Vanadium	37.6	6.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Zinc	59.1	6.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Instrument QC Batch: MA51931

(4) Prep QC Batch: MP31339

(5) Prep QC Batch: MP31346

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB3 (4.5-5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-1	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	82.7
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.32	0.32	mg/kg	1	02/17/22 12:39	MM	SW846 9012B/LACHAT
Solids, Percent	82.7		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.1
4

Report of Analysis

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Client Sample ID:	RI-SB3 (4.5-5')	
Lab Sample ID:	JD39775-1A	Date Sampled: 02/14/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 82.7
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q85770.D	1	02/26/22 01:00	AFL	02/18/22 08:30	F:OP89835	F:S2Q1211
Run #2							

	Initial Weight	Final Volume
Run #1	2.02 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.45	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.60	0.30	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.60	0.30	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.60	0.30	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.60	0.30	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.60	0.30	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.60	0.30	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.60	0.30	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.60	0.30	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.60	0.32	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.60	0.30	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.60	0.30	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.60	0.30	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.60	0.30	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.38	0.60	0.24	ug/kg	J
335-77-3	Perfluorodecanesulfonic acid	ND	0.60	0.30	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.60	0.30	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.60	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.60	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	RI-SB3 (4.5-5')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-1A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	82.7
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	80%		40-140%
	13C5-PFPeA	85%		50-150%
	13C5-PFHxA	86%		50-150%
	13C4-PFHpA	85%		50-150%
	13C8-PFOA	87%		50-150%
	13C9-PFNA	91%		50-150%
	13C6-PFDA	93%		50-150%
	13C7-PFUnDA	93%		40-140%
	13C2-PFDoDA	81%		40-140%
	13C2-PFTeDA	83%		30-130%
	13C3-PFBS	80%		50-150%
	13C3-PFHxS	84%		50-150%
	13C8-PFOS	85%		50-150%
	13C8-FOSA	50%		30-130%
	d3-MeFOSAA	72%		40-140%
	d5-EtFOSAA	78%		40-140%
	13C2-6:2FTS	80%		50-150%
	13C2-8:2FTS	79%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	RI-SB3 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-2	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.2
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242297.D	1	02/16/22 18:27	PS	02/16/22 11:00	n/a	VI9839
Run #2							

	Initial Weight
Run #1	5.7 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	12.3	9.9	4.1	ug/kg	
71-43-2	Benzene	ND	0.50	0.45	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.56	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.43	ug/kg	
75-25-2	Bromoform	ND	5.0	1.4	ug/kg	
74-83-9	Bromomethane	ND	5.0	0.76	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.9	2.4	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.53	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.61	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.46	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.59	ug/kg	
67-66-3	Chloroform	ND	2.0	0.52	ug/kg	
74-87-3	Chloromethane	ND	5.0	1.9	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.65	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.56	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.99	0.42	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.99	0.54	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.99	0.49	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.99	0.49	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.72	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.99	0.49	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.99	0.47	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.99	0.65	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.99	0.84	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.99	0.61	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.47	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.47	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.45	ug/kg	
100-41-4	Ethylbenzene	ND	0.99	0.45	ug/kg	
76-13-1	Freon 113	ND	5.0	2.7	ug/kg	
591-78-6	2-Hexanone	ND	5.0	2.1	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB3 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-2	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.2
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	1.4	ug/kg	
79-20-9	Methyl Acetate	ND	5.0	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.87	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.99	0.47	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	2.3	ug/kg	
75-09-2	Methylene chloride	ND	5.0	2.6	ug/kg	
100-42-5	Styrene	ND	2.0	0.40	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.60	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.58	ug/kg	
108-88-3	Toluene	ND	0.99	0.52	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.48	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.55	ug/kg	
79-01-6	Trichloroethene	ND	0.99	0.76	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.68	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.48	ug/kg	
	m,p-Xylene	ND	0.99	0.89	ug/kg	
95-47-6	o-Xylene	ND	0.99	0.46	ug/kg	
1330-20-7	Xylene (total)	ND	0.99	0.46	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		80-124%
17060-07-0	1,2-Dichloroethane-D4	116%		75-133%
2037-26-5	Toluene-D8	99%		79-125%
460-00-4	4-Bromofluorobenzene	91%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	3.63	7	ug/kg	J
	Total TIC, Volatile		0	ug/kg	

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Report of Analysis

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Client Sample ID:	RI-SB3 (9.5-10')	
Lab Sample ID:	JD39775-2	Date Sampled: 02/14/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	SW846 8270E SW846 3546	Percent Solids: 88.2
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P147604.D	1	02/18/22 18:01	KLS	02/16/22 11:30	OP38180	EP6812
Run #2							

	Initial Weight	Final Volume
Run #1	31.4 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	72	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	22	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	31	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	64	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	180	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	180	39	ug/kg	
95-48-7	2-Methylphenol	ND	72	23	ug/kg	
	3&4-Methylphenol	ND	72	30	ug/kg	
88-75-5	2-Nitrophenol	ND	180	24	ug/kg	
100-02-7	4-Nitrophenol	ND	360	96	ug/kg	
87-86-5	Pentachlorophenol	ND	140	34	ug/kg	
108-95-2	Phenol	ND	72	19	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	24	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	27	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	22	ug/kg	
83-32-9	Acenaphthene	ND	36	12	ug/kg	
208-96-8	Acenaphthylene	ND	36	18	ug/kg	
98-86-2	Acetophenone	ND	180	7.8	ug/kg	
120-12-7	Anthracene	ND	36	22	ug/kg	
1912-24-9	Atrazine	ND	72	15	ug/kg	
56-55-3	Benzo(a)anthracene	17.6	36	10	ug/kg	J
50-32-8	Benzo(a)pyrene	33.6	36	16	ug/kg	J
205-99-2	Benzo(b)fluoranthene	22.5	36	16	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	ND	36	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	36	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	72	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	72	8.8	ug/kg	
92-52-4	1,1'-Biphenyl	ND	72	4.9	ug/kg	
100-52-7	Benzaldehyde	ND	180	9.0	ug/kg	
91-58-7	2-Chloronaphthalene	ND	72	8.6	ug/kg	
106-47-8	4-Chloroaniline	ND	180	13	ug/kg	
86-74-8	Carbazole	ND	72	5.2	ug/kg	

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RL = Reporting Limit

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB3 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-2	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.2
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	72	14	ug/kg	
218-01-9	Chrysene	19.6	36	11	ug/kg	J
111-91-1	bis(2-Chloroethoxy)methane	ND	72	7.7	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	72	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	72	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	72	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	36	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	36	18	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	72	30	ug/kg	
123-91-1	1,4-Dioxane	ND	36	24	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	36	16	ug/kg	
132-64-9	Dibenzofuran	ND	72	15	ug/kg	
84-74-2	Di-n-butyl phthalate	61.8	72	5.9	ug/kg	JB
117-84-0	Di-n-octyl phthalate	ND	72	9.0	ug/kg	
84-66-2	Diethyl phthalate	ND	72	7.7	ug/kg	
131-11-3	Dimethyl phthalate	ND	72	6.4	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	46.0	72	8.4	ug/kg	J
206-44-0	Fluoranthene	36.8	36	16	ug/kg	
86-73-7	Fluorene	ND	36	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	72	9.1	ug/kg	
87-68-3	Hexachlorobutadiene	ND	36	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	360	14	ug/kg	
67-72-1	Hexachloroethane	ND	180	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	35.1	36	17	ug/kg	J
78-59-1	Isophorone	ND	72	7.7	ug/kg	
91-57-6	2-Methylnaphthalene	ND	36	8.2	ug/kg	
88-74-4	2-Nitroaniline	ND	180	8.5	ug/kg	
99-09-2	3-Nitroaniline	ND	180	9.0	ug/kg	
100-01-6	4-Nitroaniline	ND	180	9.4	ug/kg	
91-20-3	Naphthalene	ND	36	10	ug/kg	
98-95-3	Nitrobenzene	ND	72	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	72	10	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	13	ug/kg	
85-01-8	Phenanthrene	25.0	36	12	ug/kg	J
129-00-0	Pyrene	33.0	36	12	ug/kg	J
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	9.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	26%		10-109%

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Report of Analysis

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Client Sample ID:	RI-SB3 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-2	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.2
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	27%		10-105%
118-79-6	2,4,6-Tribromophenol	39%		10-135%
4165-60-0	Nitrobenzene-d5	28%		10-119%
321-60-8	2-Fluorobiphenyl	34%		18-112%
1718-51-0	Terphenyl-d14	40%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	15.53	160	ug/kg	J
	unknown	19.34	180	ug/kg	J
	Total TIC, Semi-Volatile		340	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
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 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB3 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-2	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.2
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	8G41465.D	1	02/22/22 19:02	TL	02/16/22 01:50	OP38182	G8G1771
Run #2							

	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.73	0.60	ug/kg	
319-84-6	alpha-BHC	ND	0.73	0.59	ug/kg	
319-85-7	beta-BHC	ND	0.73	0.66	ug/kg	
319-86-8	delta-BHC	ND	0.73	0.70	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.73	0.54	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.73	0.59	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.73	0.33	ug/kg	
60-57-1	Dieldrin	ND	0.73	0.50	ug/kg	
72-54-8	4,4' -DDD	ND	0.73	0.67	ug/kg	
72-55-9	4,4' -DDE	ND	0.73	0.64	ug/kg	
50-29-3	4,4' -DDT	ND	0.73	0.64	ug/kg	
72-20-8	Endrin	ND	0.73	0.56	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.73	0.57	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.73	0.41	ug/kg	
959-98-8	Endosulfan-I	ND	0.73	0.42	ug/kg	
33213-65-9	Endosulfan-II	ND	0.73	0.45	ug/kg	
76-44-8	Heptachlor	ND	0.73	0.63	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.73	0.51	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.58	ug/kg	
53494-70-5	Endrin ketone	ND	0.73	0.53	ug/kg	
8001-35-2	Toxaphene	ND	18	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	78%		14-145%
877-09-8	Tetrachloro-m-xylene	74%		14-145%
2051-24-3	Decachlorobiphenyl	79%		10-197%
2051-24-3	Decachlorobiphenyl	72%		10-197%

(a) Had TBA cleanup.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	RI-SB3 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-2	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.2
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	5G114249.D	1	02/20/22 17:52	TL	02/16/22 13:50	OP38183	G5G2906
Run #2							

	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	17	ug/kg	
11104-28-2	Aroclor 1221	ND	36	23	ug/kg	
11141-16-5	Aroclor 1232	ND	36	23	ug/kg	
53469-21-9	Aroclor 1242	ND	36	15	ug/kg	
12672-29-6	Aroclor 1248	ND	36	32	ug/kg	
11097-69-1	Aroclor 1254	ND	36	20	ug/kg	
11096-82-5	Aroclor 1260	ND	36	15	ug/kg	
11100-14-4	Aroclor 1268	ND	36	15	ug/kg	
37324-23-5	Aroclor 1262	ND	36	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	86%		10-163%
877-09-8	Tetrachloro-m-xylene	100%		10-163%
2051-24-3	Decachlorobiphenyl	90%		10-215%
2051-24-3	Decachlorobiphenyl	100%		10-215%

(a) Had TBA clean-up.

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB3 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-2	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.2
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	13300	54	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Antimony ^a	4.6	4.3	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Arsenic ^a	< 4.3	4.3	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Barium	108	22	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Beryllium ^a	0.68	0.43	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Cadmium	< 0.54	0.54	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Calcium	1650	540	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Chromium	33.6	1.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cobalt	11.1	5.4	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Copper ^a	28.9	5.4	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Iron	26700	110	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Lead	5.5	2.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Magnesium	4860	540	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Manganese	278	1.6	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	0.057	0.035	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹	SW846 7471B ⁵
Nickel	23.3	4.3	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Potassium	4610	1100	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Selenium ^a	< 4.3	4.3	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Silver ^a	< 1.1	1.1	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Sodium	< 1100	1100	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Thallium ^a	< 2.2	2.2	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Vanadium	42.4	5.4	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Zinc	53.9	5.4	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Instrument QC Batch: MA51931

(4) Prep QC Batch: MP31339

(5) Prep QC Batch: MP31346

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB3 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-2	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.2
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.25	0.25	mg/kg	1	02/17/22 12:43	MM	SW846 9012B/LACHAT
Solids, Percent	88.2		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.3
4

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB3 (9.5-10')	
Lab Sample ID:	JD39775-2A	Date Sampled: 02/14/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 88.2
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q85771.D	1	02/26/22 01:17	AFL	02/18/22 08:30	F:OP89835	F:S2Q1211
Run #2							

	Initial Weight	Final Volume
Run #1	1.97 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.44	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.29	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.58	0.29	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.58	0.29	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.58	0.29	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.58	0.29	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.58	0.29	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.58	0.29	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.58	0.29	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.58	0.31	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.58	0.29	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.58	0.29	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.58	0.29	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.58	0.29	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.58	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.58	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.58	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.58	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.58	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

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Report of Analysis

Client Sample ID:	RI-SB3 (9.5-10')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-2A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.2
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	79%		40-140%
	13C5-PFPeA	84%		50-150%
	13C5-PFHxA	85%		50-150%
	13C4-PFHpA	85%		50-150%
	13C8-PFOA	86%		50-150%
	13C9-PFNA	88%		50-150%
	13C6-PFDA	91%		50-150%
	13C7-PFUnDA	90%		40-140%
	13C2-PFDoDA	79%		40-140%
	13C2-PFTeDA	81%		30-130%
	13C3-PFBS	78%		50-150%
	13C3-PFHxS	82%		50-150%
	13C8-PFOS	80%		50-150%
	13C8-FOSA	64%		30-130%
	d3-MeFOSAA	89%		40-140%
	d5-EtFOSAA	87%		40-140%
	13C2-6:2FTS	80%		50-150%
	13C2-8:2FTS	79%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB3 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-3	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.2
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242298.D	1	02/16/22 18:48	PS	02/16/22 11:00	n/a	VI9839
Run #2							

	Initial Weight
Run #1	5.4 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	4.4	ug/kg	
71-43-2	Benzene	ND	0.54	0.49	ug/kg	
74-97-5	Bromochloromethane	ND	5.4	0.60	ug/kg	
75-27-4	Bromodichloromethane	ND	2.1	0.46	ug/kg	
75-25-2	Bromoform	ND	5.4	1.5	ug/kg	
74-83-9	Bromomethane	ND	5.4	0.82	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.6	ug/kg	
75-15-0	Carbon disulfide	ND	2.1	0.57	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.1	0.66	ug/kg	
108-90-7	Chlorobenzene	ND	2.1	0.49	ug/kg	
75-00-3	Chloroethane	ND	5.4	0.63	ug/kg	
67-66-3	Chloroform	ND	2.1	0.56	ug/kg	
74-87-3	Chloromethane	ND	5.4	2.1	ug/kg	
110-82-7	Cyclohexane	ND	2.1	0.71	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	0.75	ug/kg	
124-48-1	Dibromochloromethane	ND	2.1	0.60	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.45	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.1	0.59	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.1	0.53	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.1	0.53	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.4	0.78	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.1	0.53	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.50	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.1	0.70	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.1	0.90	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.1	0.66	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.1	0.51	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	0.51	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	0.49	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.49	ug/kg	
76-13-1	Freon 113	ND	5.4	2.9	ug/kg	
591-78-6	2-Hexanone	ND	5.4	2.3	ug/kg	

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Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB3 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-3	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.2
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.1	1.5	ug/kg	
79-20-9	Methyl Acetate	ND	5.4	1.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.1	0.94	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.4	2.4	ug/kg	
75-09-2	Methylene chloride	ND	5.4	2.8	ug/kg	
100-42-5	Styrene	ND	2.1	0.43	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.64	ug/kg	
127-18-4	Tetrachloroethene	ND	2.1	0.62	ug/kg	
108-88-3	Toluene	ND	1.1	0.56	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.4	2.7	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	2.7	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.1	0.52	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.60	ug/kg	
79-01-6	Trichloroethene	ND	1.1	0.82	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.4	0.73	ug/kg	
75-01-4	Vinyl chloride	ND	2.1	0.52	ug/kg	
	m,p-Xylene	ND	1.1	0.96	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.49	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		80-124%
17060-07-0	1,2-Dichloroethane-D4	116%		75-133%
2037-26-5	Toluene-D8	101%		79-125%
460-00-4	4-Bromofluorobenzene	88%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	3.63	6.9	ug/kg	J
	Total TIC, Volatile		0	ug/kg	

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Report of Analysis

Page 1 of 3

Client Sample ID:	RI-SB3 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-3	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.2
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P147605.D	1	02/18/22 18:26	KLS	02/16/22 11:30	OP38180	EP6812
Run #2							

	Initial Weight	Final Volume
Run #1	31.5 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	74	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	31	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	66	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	180	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	180	39	ug/kg	
95-48-7	2-Methylphenol	ND	74	24	ug/kg	
	3&4-Methylphenol	ND	74	30	ug/kg	
88-75-5	2-Nitrophenol	ND	180	24	ug/kg	
100-02-7	4-Nitrophenol	ND	370	98	ug/kg	
87-86-5	Pentachlorophenol	ND	150	35	ug/kg	
108-95-2	Phenol	ND	74	19	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	24	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	28	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	22	ug/kg	
83-32-9	Acenaphthene	ND	37	13	ug/kg	
208-96-8	Acenaphthylene	ND	37	19	ug/kg	
98-86-2	Acetophenone	ND	180	7.9	ug/kg	
120-12-7	Anthracene	ND	37	23	ug/kg	
1912-24-9	Atrazine	ND	74	16	ug/kg	
56-55-3	Benzo(a)anthracene	ND	37	10	ug/kg	
50-32-8	Benzo(a)pyrene	ND	37	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	37	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	37	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	37	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	74	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	74	9.0	ug/kg	
92-52-4	1,1'-Biphenyl	ND	74	5.0	ug/kg	
100-52-7	Benzaldehyde	ND	180	9.1	ug/kg	
91-58-7	2-Chloronaphthalene	ND	74	8.8	ug/kg	
106-47-8	4-Chloroaniline	ND	180	13	ug/kg	
86-74-8	Carbazole	ND	74	5.3	ug/kg	

ND = Not detected MDL = Method Detection Limit

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RL = Reporting Limit

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Report of Analysis

Client Sample ID:	RI-SB3 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-3	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.2
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	74	15	ug/kg	
218-01-9	Chrysene	ND	37	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	74	7.9	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	74	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	74	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	74	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	37	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	37	18	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	74	31	ug/kg	
123-91-1	1,4-Dioxane	ND	37	24	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	37	16	ug/kg	
132-64-9	Dibenzofuran	ND	74	15	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	74	6.0	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	74	9.2	ug/kg	
84-66-2	Diethyl phthalate	ND	74	7.8	ug/kg	
131-11-3	Dimethyl phthalate	ND	74	6.6	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	74	8.6	ug/kg	
206-44-0	Fluoranthene	ND	37	16	ug/kg	
86-73-7	Fluorene	ND	37	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	74	9.3	ug/kg	
87-68-3	Hexachlorobutadiene	ND	37	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	370	15	ug/kg	
67-72-1	Hexachloroethane	ND	180	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	37	17	ug/kg	
78-59-1	Isophorone	ND	74	7.9	ug/kg	
91-57-6	2-Methylnaphthalene	ND	37	8.3	ug/kg	
88-74-4	2-Nitroaniline	ND	180	8.7	ug/kg	
99-09-2	3-Nitroaniline	ND	180	9.2	ug/kg	
100-01-6	4-Nitroaniline	ND	180	9.5	ug/kg	
91-20-3	Naphthalene	ND	37	10	ug/kg	
98-95-3	Nitrobenzene	ND	74	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	74	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	13	ug/kg	
85-01-8	Phenanthrene	ND	37	12	ug/kg	
129-00-0	Pyrene	ND	37	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	9.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	30%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	RI-SB3 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-3	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.2
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	29%		10-105%
118-79-6	2,4,6-Tribromophenol	39%		10-135%
4165-60-0	Nitrobenzene-d5	32%		10-119%
321-60-8	2-Fluorobiphenyl	35%		18-112%
1718-51-0	Terphenyl-d14	41%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB3 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-3	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.2
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G41419.D	1	02/21/22 15:24	TL	02/16/22 01:50	OP38182	G8G1769
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.77	0.63	ug/kg	
319-84-6	alpha-BHC	ND	0.77	0.62	ug/kg	
319-85-7	beta-BHC	ND	0.77	0.69	ug/kg	
319-86-8	delta-BHC	ND	0.77	0.74	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.77	0.57	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.77	0.62	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.77	0.35	ug/kg	
60-57-1	Dieldrin	ND	0.77	0.53	ug/kg	
72-54-8	4,4' -DDD	ND	0.77	0.71	ug/kg	
72-55-9	4,4' -DDE	ND	0.77	0.67	ug/kg	
50-29-3	4,4' -DDT	ND	0.77	0.68	ug/kg	
72-20-8	Endrin	ND	0.77	0.60	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.77	0.60	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.77	0.44	ug/kg	
959-98-8	Endosulfan-I	ND	0.77	0.44	ug/kg	
33213-65-9	Endosulfan-II	ND	0.77	0.48	ug/kg	
76-44-8	Heptachlor	ND	0.77	0.66	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.77	0.54	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.61	ug/kg	
53494-70-5	Endrin ketone ^a	ND	0.77	0.56	ug/kg	
8001-35-2	Toxaphene	ND	19	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	148% ^b		14-145%
877-09-8	Tetrachloro-m-xylene	148% ^b		14-145%
2051-24-3	Decachlorobiphenyl	180%		10-197%
2051-24-3	Decachlorobiphenyl	154%		10-197%

(a) Associated CCV outside of control limits high, sample was ND.

(b) High percent recoveries and no positive found in the sample.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB3 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-3	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.2
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G114204.D	1	02/18/22 00:59	TL	02/16/22 13:50	OP38183	G5G2905
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	38	18	ug/kg	
11104-28-2	Aroclor 1221	ND	38	24	ug/kg	
11141-16-5	Aroclor 1232	ND	38	25	ug/kg	
53469-21-9	Aroclor 1242	ND	38	16	ug/kg	
12672-29-6	Aroclor 1248	ND	38	34	ug/kg	
11097-69-1	Aroclor 1254	ND	38	21	ug/kg	
11096-82-5	Aroclor 1260	ND	38	16	ug/kg	
11100-14-4	Aroclor 1268	ND	38	16	ug/kg	
37324-23-5	Aroclor 1262	ND	38	25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	121%		10-163%
877-09-8	Tetrachloro-m-xylene	136%		10-163%
2051-24-3	Decachlorobiphenyl	135%		10-215%
2051-24-3	Decachlorobiphenyl	141%		10-215%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB3 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-3	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.2
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	15800	58	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Antimony ^a	< 4.6	4.6	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Arsenic ^a	< 4.6	4.6	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Barium	85.7	23	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Beryllium	0.31	0.23	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cadmium	< 0.58	0.58	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Calcium	1540	580	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Chromium ^a	27.1	2.3	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Cobalt	8.9	5.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Copper ^a	24.0	5.8	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Iron	24100	120	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Lead	6.4	2.3	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Magnesium	4540	580	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Manganese ^a	1240	3.5	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Mercury	< 0.035	0.035	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹	SW846 7471B ⁵
Nickel	19.2	4.6	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Potassium	2380	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Selenium ^a	< 4.6	4.6	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Silver ^a	< 1.2	1.2	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Sodium	< 1200	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Thallium ^a	< 2.3	2.3	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Vanadium	37.7	5.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Zinc	49.7	5.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Instrument QC Batch: MA51931

(4) Prep QC Batch: MP31339

(5) Prep QC Batch: MP31346

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB3 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-3	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.2
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.28	0.28	mg/kg	1	02/17/22 12:44	MM	SW846 9012B/LACHAT
Solids, Percent	86.2		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.5
4

Report of Analysis

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Client Sample ID:	RI-SB3 (14.5-15')	
Lab Sample ID:	JD39775-3A	Date Sampled: 02/14/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 86.2
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q85772.D	1	02/26/22 01:34	AFL	02/18/22 08:30	F:OP89835	F:S2Q1211
Run #2							

	Initial Weight	Final Volume
Run #1	2.02 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.44	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.57	0.29	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.57	0.29	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.57	0.29	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.57	0.29	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.57	0.29	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.57	0.29	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.57	0.29	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.57	0.29	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.57	0.30	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.57	0.29	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.57	0.29	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.57	0.29	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.57	0.29	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.57	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.57	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.57	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.1	0.57	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.57	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.29	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.29	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB3 (14.5-15')	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-3A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.2
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	75%		40-140%
	13C5-PFPeA	79%		50-150%
	13C5-PFHxA	81%		50-150%
	13C4-PFHpA	80%		50-150%
	13C8-PFOA	82%		50-150%
	13C9-PFNA	83%		50-150%
	13C6-PFDA	88%		50-150%
	13C7-PFUnDA	87%		40-140%
	13C2-PFDoDA	77%		40-140%
	13C2-PFTeDA	80%		30-130%
	13C3-PFBS	75%		50-150%
	13C3-PFHxS	79%		50-150%
	13C8-PFOS	77%		50-150%
	13C8-FOSA	80%		30-130%
	d3-MeFOSAA	76%		40-140%
	d5-EtFOSAA	77%		40-140%
	13C2-6:2FTS	75%		50-150%
	13C2-8:2FTS	74%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	RI-SB4 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-5	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	84.2
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242300.D	1	02/16/22 19:29	PS	02/16/22 11:00	n/a	VI9839
Run #2							

	Initial Weight
Run #1	5.6 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	4.4	ug/kg	
71-43-2	Benzene	ND	0.53	0.48	ug/kg	
74-97-5	Bromochloromethane	ND	5.3	0.59	ug/kg	
75-27-4	Bromodichloromethane	ND	2.1	0.45	ug/kg	
75-25-2	Bromoform	ND	5.3	1.4	ug/kg	
74-83-9	Bromomethane	ND	5.3	0.81	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.6	ug/kg	
75-15-0	Carbon disulfide	ND	2.1	0.57	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.1	0.66	ug/kg	
108-90-7	Chlorobenzene	ND	2.1	0.49	ug/kg	
75-00-3	Chloroethane	ND	5.3	0.63	ug/kg	
67-66-3	Chloroform	ND	2.1	0.55	ug/kg	
74-87-3	Chloromethane	ND	5.3	2.1	ug/kg	
110-82-7	Cyclohexane	ND	2.1	0.70	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	0.74	ug/kg	
124-48-1	Dibromochloromethane	ND	2.1	0.59	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.45	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.1	0.58	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.1	0.53	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.1	0.52	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.3	0.77	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.1	0.52	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.50	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.1	0.69	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.1	0.89	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.1	0.65	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.1	0.50	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	0.48	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.48	ug/kg	
76-13-1	Freon 113	ND	5.3	2.8	ug/kg	
591-78-6	2-Hexanone	ND	5.3	2.2	ug/kg	

ND = Not detected MDL = Method Detection Limit

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RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB4 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-5	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	84.2
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.1	1.5	ug/kg	
79-20-9	Methyl Acetate	ND	5.3	1.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.1	0.93	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.3	2.4	ug/kg	
75-09-2	Methylene chloride	ND	5.3	2.8	ug/kg	
100-42-5	Styrene	ND	2.1	0.43	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.64	ug/kg	
127-18-4	Tetrachloroethene	ND	2.1	0.62	ug/kg	
108-88-3	Toluene	ND	1.1	0.56	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.3	2.7	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.3	2.7	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.1	0.51	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.59	ug/kg	
79-01-6	Trichloroethene	ND	1.1	0.81	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.3	0.73	ug/kg	
75-01-4	Vinyl chloride	ND	2.1	0.51	ug/kg	
	m,p-Xylene	ND	1.1	0.95	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.49	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	114%		80-124%
17060-07-0	1,2-Dichloroethane-D4	115%		75-133%
2037-26-5	Toluene-D8	100%		79-125%
460-00-4	4-Bromofluorobenzene	89%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	3.61	5.7	ug/kg	J
	Total TIC, Volatile		0	ug/kg	

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	RI-SB4 (4.5-5')	
Lab Sample ID:	JD39775-5	Date Sampled: 02/15/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	SW846 8270E SW846 3546	Percent Solids: 84.2
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P147607.D	1	02/18/22 19:16	KLS	02/16/22 11:30	OP38180	EP6812
Run #2							

	Initial Weight	Final Volume
Run #1	30.8 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	77	19	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	24	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	33	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	69	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	190	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	190	41	ug/kg	
95-48-7	2-Methylphenol	ND	77	25	ug/kg	
	3&4-Methylphenol	ND	77	32	ug/kg	
88-75-5	2-Nitrophenol	ND	190	25	ug/kg	
100-02-7	4-Nitrophenol	ND	390	100	ug/kg	
87-86-5	Pentachlorophenol	ND	150	36	ug/kg	
108-95-2	Phenol	ND	77	20	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	190	26	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	29	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	23	ug/kg	
83-32-9	Acenaphthene	ND	39	13	ug/kg	
208-96-8	Acenaphthylene	ND	39	20	ug/kg	
98-86-2	Acetophenone	ND	190	8.3	ug/kg	
120-12-7	Anthracene	ND	39	24	ug/kg	
1912-24-9	Atrazine	ND	77	17	ug/kg	
56-55-3	Benzo(a)anthracene	14.7	39	11	ug/kg	J
50-32-8	Benzo(a)pyrene	32.4	39	18	ug/kg	J
205-99-2	Benzo(b)fluoranthene	ND	39	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	39	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	39	18	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	77	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	77	9.4	ug/kg	
92-52-4	1,1'-Biphenyl	ND	77	5.3	ug/kg	
100-52-7	Benzaldehyde	ND	190	9.6	ug/kg	
91-58-7	2-Chloronaphthalene	ND	77	9.2	ug/kg	
106-47-8	4-Chloroaniline	ND	190	14	ug/kg	
86-74-8	Carbazole	ND	77	5.6	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB4 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-5	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	84.2
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	77	15	ug/kg	
218-01-9	Chrysene	ND	39	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	77	8.3	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	77	17	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	77	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	77	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	39	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	39	19	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	77	32	ug/kg	
123-91-1	1,4-Dioxane	ND	39	25	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	39	17	ug/kg	
132-64-9	Dibenzofuran	ND	77	16	ug/kg	
84-74-2	Di-n-butyl phthalate	102	77	6.3	ug/kg	B
117-84-0	Di-n-octyl phthalate	ND	77	9.6	ug/kg	
84-66-2	Diethyl phthalate	ND	77	8.2	ug/kg	
131-11-3	Dimethyl phthalate	ND	77	6.9	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	77	9.0	ug/kg	
206-44-0	Fluoranthene	ND	39	17	ug/kg	
86-73-7	Fluorene	ND	39	18	ug/kg	
118-74-1	Hexachlorobenzene	ND	77	9.8	ug/kg	
87-68-3	Hexachlorobutadiene	ND	39	16	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	390	15	ug/kg	
67-72-1	Hexachloroethane	ND	190	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	33.2	39	18	ug/kg	J
78-59-1	Isophorone	ND	77	8.3	ug/kg	
91-57-6	2-Methylnaphthalene	ND	39	8.7	ug/kg	
88-74-4	2-Nitroaniline	ND	190	9.1	ug/kg	
99-09-2	3-Nitroaniline	ND	190	9.6	ug/kg	
100-01-6	4-Nitroaniline	ND	190	10	ug/kg	
91-20-3	Naphthalene	ND	39	11	ug/kg	
98-95-3	Nitrobenzene	ND	77	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	77	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	14	ug/kg	
85-01-8	Phenanthrene	ND	39	13	ug/kg	
129-00-0	Pyrene	ND	39	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	190	9.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	23%		10-109%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	RI-SB4 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-5	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	84.2
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	25%		10-105%
118-79-6	2,4,6-Tribromophenol	33%		10-135%
4165-60-0	Nitrobenzene-d5	29%		10-119%
321-60-8	2-Fluorobiphenyl	32%		18-112%
1718-51-0	Terphenyl-d14	37%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB4 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-5	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	84.2
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G41421.D	1	02/21/22 15:57	TL	02/16/22 01:50	OP38182	G8G1769
Run #2							

	Initial Weight	Final Volume
Run #1	16.2 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.73	0.60	ug/kg	
319-84-6	alpha-BHC	ND	0.73	0.60	ug/kg	
319-85-7	beta-BHC	ND	0.73	0.66	ug/kg	
319-86-8	delta-BHC	ND	0.73	0.70	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.73	0.54	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.73	0.59	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.73	0.33	ug/kg	
60-57-1	Dieldrin	ND	0.73	0.50	ug/kg	
72-54-8	4,4' -DDD	ND	0.73	0.67	ug/kg	
72-55-9	4,4' -DDE	ND	0.73	0.64	ug/kg	
50-29-3	4,4' -DDT	ND	0.73	0.65	ug/kg	
72-20-8	Endrin	ND	0.73	0.57	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.73	0.57	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.73	0.42	ug/kg	
959-98-8	Endosulfan-I	ND	0.73	0.42	ug/kg	
33213-65-9	Endosulfan-II	ND	0.73	0.46	ug/kg	
76-44-8	Heptachlor	ND	0.73	0.63	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.73	0.51	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.58	ug/kg	
53494-70-5	Endrin ketone ^a	ND	0.73	0.53	ug/kg	
8001-35-2	Toxaphene	ND	18	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	113%		14-145%
877-09-8	Tetrachloro-m-xylene	118%		14-145%
2051-24-3	Decachlorobiphenyl	146%		10-197%
2051-24-3	Decachlorobiphenyl	137%		10-197%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB4 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-5	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	84.2
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G114210.D	1	02/18/22 02:37	TL	02/16/22 13:50	OP38183	G5G2905
Run #2							

	Initial Weight	Final Volume
Run #1	16.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	17	ug/kg	
11104-28-2	Aroclor 1221	ND	37	23	ug/kg	
11141-16-5	Aroclor 1232	ND	37	23	ug/kg	
53469-21-9	Aroclor 1242	ND	37	15	ug/kg	
12672-29-6	Aroclor 1248	ND	37	33	ug/kg	
11097-69-1	Aroclor 1254	ND	37	20	ug/kg	
11096-82-5	Aroclor 1260	ND	37	16	ug/kg	
11100-14-4	Aroclor 1268	ND	37	15	ug/kg	
37324-23-5	Aroclor 1262	ND	37	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	123%		10-163%
877-09-8	Tetrachloro-m-xylene	137%		10-163%
2051-24-3	Decachlorobiphenyl	145%		10-215%
2051-24-3	Decachlorobiphenyl	162%		10-215%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB4 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-5	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	84.2
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	22100	60	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Antimony ^a	< 12	12	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Arsenic ^a	< 12	12	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Barium	404	24	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Beryllium ^a	1.3	1.2	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Cadmium	0.83	0.60	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Calcium	1940	600	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Chromium	39.7	1.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cobalt	18.4	6.0	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Copper ^a	52.2	15	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Iron	35900	300	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Lead	63.8	2.4	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Magnesium	9560	600	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Manganese	751	1.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	< 0.037	0.037	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹	SW846 7471B ⁵
Nickel	34.1	4.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Potassium	11000	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Selenium ^a	< 12	12	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Silver ^a	< 3.0	3.0	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Sodium	< 1200	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Thallium ^a	< 6.0	6.0	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Vanadium	50.1	6.0	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Zinc	285	6.0	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Instrument QC Batch: MA51931

(4) Prep QC Batch: MP31339

(5) Prep QC Batch: MP31346

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB4 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-5	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	84.2
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.25	0.25	mg/kg	1	02/17/22 12:47	MM	SW846 9012B/LACHAT
Solids, Percent	84.2		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB4 (4.5-5')	
Lab Sample ID:	JD39775-5A	Date Sampled: 02/15/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 84.2
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Q85773.D	1	02/26/22 01:51	AFL	02/18/22 08:30	F:OP89835	F:S2Q1211
Run #2							

	Initial Weight	Final Volume
Run #1	2.01 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
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PERFLUOROALKYLCARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	ND	1.2	0.45	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.59	0.30	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.59	0.30	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.59	0.30	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.59	0.30	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.59	0.30	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.59	0.30	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.59	0.30	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.59	0.30	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.59	0.31	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.59	0.30	ug/kg	

PERFLUOROALKYLSULFONIC ACIDS

375-73-5	Perfluorobutanesulfonic acid	ND	0.59	0.30	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.59	0.30	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.59	0.30	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.56	0.59	0.24	ug/kg	J
335-77-3	Perfluorodecanesulfonic acid	ND	0.59	0.30	ug/kg	

PERFLUOROCTANESULFONAMIDES

754-91-6	PFOSA	ND	0.59	0.30	ug/kg	
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PERFLUOROCTANESULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	ND	1.2	0.59	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.59	ug/kg	

FLUOROTELOMER SULFONATES

27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	

ND = Not detected MDL = Method Detection Limit

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB4 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-5A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	84.2
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	72%		40-140%
	13C5-PFPeA	76%		50-150%
	13C5-PFHxA	78%		50-150%
	13C4-PFHpA	77%		50-150%
	13C8-PFOA	79%		50-150%
	13C9-PFNA	83%		50-150%
	13C6-PFDA	85%		50-150%
	13C7-PFUnDA	84%		40-140%
	13C2-PFDoDA	75%		40-140%
	13C2-PFTeDA	79%		30-130%
	13C3-PFBS	73%		50-150%
	13C3-PFHxS	78%		50-150%
	13C8-PFOS	77%		50-150%
	13C8-FOSA	49%		30-130%
	d3-MeFOSAA	65%		40-140%
	d5-EtFOSAA	69%		40-140%
	13C2-6:2FTS	73%		50-150%
	13C2-8:2FTS	74%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
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 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	DUP-1	
Lab Sample ID:	JD39775-6	Date Sampled: 02/15/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	SW846 8260D SW846 5035	Percent Solids: 86.3
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173633.D	1	02/16/22 19:40	PS	02/16/22 14:00	n/a	V3C7641
Run #2							

	Initial Weight
Run #1	5.9 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	9.8	4.1	ug/kg	
71-43-2	Benzene	ND	0.49	0.45	ug/kg	
74-97-5	Bromochloromethane	ND	4.9	0.55	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.42	ug/kg	
75-25-2	Bromoform	ND	4.9	1.3	ug/kg	
74-83-9	Bromomethane	ND	4.9	0.75	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.8	2.4	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.53	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.61	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.45	ug/kg	
75-00-3	Chloroethane	ND	4.9	0.58	ug/kg	
67-66-3	Chloroform	ND	2.0	0.51	ug/kg	
74-87-3	Chloromethane	ND	4.9	1.9	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.65	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.68	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.55	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.98	0.41	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.98	0.54	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.98	0.49	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.98	0.49	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.9	0.71	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.98	0.49	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.98	0.46	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.98	0.64	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.98	0.82	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.98	0.60	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.46	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.47	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.45	ug/kg	
100-41-4	Ethylbenzene	ND	0.98	0.44	ug/kg	
76-13-1	Freon 113	ND	4.9	2.6	ug/kg	
591-78-6	2-Hexanone	ND	4.9	2.1	ug/kg	

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	DUP-1	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-6	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.3
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	1.4	ug/kg	
79-20-9	Methyl Acetate	ND	4.9	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.86	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.98	0.46	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.9	2.2	ug/kg	
75-09-2	Methylene chloride	ND	4.9	2.6	ug/kg	
100-42-5	Styrene	ND	2.0	0.39	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.59	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.57	ug/kg	
108-88-3	Toluene	ND	0.98	0.52	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.9	2.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	2.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.47	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.54	ug/kg	
79-01-6	Trichloroethene	ND	0.98	0.75	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.9	0.67	ug/kg	
75-01-4	Vinyl chloride ^a	ND	2.0	0.47	ug/kg	
	m,p-Xylene	ND	0.98	0.88	ug/kg	
95-47-6	o-Xylene	ND	0.98	0.45	ug/kg	
1330-20-7	Xylene (total)	ND	0.98	0.45	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		80-124%
17060-07-0	1,2-Dichloroethane-D4	99%		75-133%
2037-26-5	Toluene-D8	98%		79-125%
460-00-4	4-Bromofluorobenzene	102%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

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 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	DUP-1	
Lab Sample ID:	JD39775-6	Date Sampled: 02/15/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	SW846 8270E SW846 3546	Percent Solids: 86.3
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P147608.D	1	02/18/22 19:41	KLS	02/16/22 11:30	OP38180	EP6812
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	76	19	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	33	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	68	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	190	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	190	41	ug/kg	
95-48-7	2-Methylphenol	ND	76	24	ug/kg	
	3&4-Methylphenol	ND	76	31	ug/kg	
88-75-5	2-Nitrophenol	ND	190	25	ug/kg	
100-02-7	4-Nitrophenol	ND	380	100	ug/kg	
87-86-5	Pentachlorophenol	ND	150	36	ug/kg	
108-95-2	Phenol	ND	76	20	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	190	25	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	29	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	23	ug/kg	
83-32-9	Acenaphthene	ND	38	13	ug/kg	
208-96-8	Acenaphthylene	ND	38	19	ug/kg	
98-86-2	Acetophenone	ND	190	8.2	ug/kg	
120-12-7	Anthracene	ND	38	23	ug/kg	
1912-24-9	Atrazine	ND	76	16	ug/kg	
56-55-3	Benzo(a)anthracene	17.9	38	11	ug/kg	J
50-32-8	Benzo(a)pyrene	37.5	38	17	ug/kg	J
205-99-2	Benzo(b)fluoranthene	23.1	38	17	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	ND	38	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	38	18	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	76	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	76	9.3	ug/kg	
92-52-4	1,1'-Biphenyl	ND	76	5.2	ug/kg	
100-52-7	Benzaldehyde	ND	190	9.5	ug/kg	
91-58-7	2-Chloronaphthalene	ND	76	9.1	ug/kg	
106-47-8	4-Chloroaniline	ND	190	14	ug/kg	
86-74-8	Carbazole	ND	76	5.5	ug/kg	

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Report of Analysis

Client Sample ID:	DUP-1	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-6	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.3
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	76	15	ug/kg	
218-01-9	Chrysene	18.7	38	12	ug/kg	J
111-91-1	bis(2-Chloroethoxy)methane	ND	76	8.2	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	76	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	76	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	76	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	38	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	38	19	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	76	32	ug/kg	
123-91-1	1,4-Dioxane	ND	38	25	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	38	17	ug/kg	
132-64-9	Dibenzofuran	ND	76	16	ug/kg	
84-74-2	Di-n-butyl phthalate	74.1	76	6.2	ug/kg	JB
117-84-0	Di-n-octyl phthalate	ND	76	9.5	ug/kg	
84-66-2	Diethyl phthalate	ND	76	8.1	ug/kg	
131-11-3	Dimethyl phthalate	ND	76	6.8	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	76	8.9	ug/kg	
206-44-0	Fluoranthene	28.8	38	17	ug/kg	J
86-73-7	Fluorene	ND	38	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	76	9.6	ug/kg	
87-68-3	Hexachlorobutadiene	ND	38	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	380	15	ug/kg	
67-72-1	Hexachloroethane	ND	190	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	38.9	38	18	ug/kg	
78-59-1	Isophorone	ND	76	8.2	ug/kg	
91-57-6	2-Methylnaphthalene	ND	38	8.6	ug/kg	
88-74-4	2-Nitroaniline	ND	190	9.0	ug/kg	
99-09-2	3-Nitroaniline	ND	190	9.5	ug/kg	
100-01-6	4-Nitroaniline	ND	190	9.9	ug/kg	
91-20-3	Naphthalene	ND	38	11	ug/kg	
98-95-3	Nitrobenzene	ND	76	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	76	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	14	ug/kg	
85-01-8	Phenanthrene	18.6	38	13	ug/kg	J
129-00-0	Pyrene	29.0	38	12	ug/kg	J
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	190	9.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	40%		10-109%

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Report of Analysis

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Client Sample ID:	DUP-1	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-6	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.3
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	39%		10-105%
118-79-6	2,4,6-Tribromophenol	54%		10-135%
4165-60-0	Nitrobenzene-d5	43%		10-119%
321-60-8	2-Fluorobiphenyl	49%		18-112%
1718-51-0	Terphenyl-d14	55%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.06	200	ug/kg	J
	unknown	15.52	190	ug/kg	J
	Total TIC, Semi-Volatile		190	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

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Report of Analysis

Page 1 of 1

Client Sample ID:	DUP-1	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-6	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.3
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G41422.D	1	02/21/22 16:14	TL	02/16/22 01:50	OP38182	G8G1769
Run #2							

	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.74	0.61	ug/kg	
319-84-6	alpha-BHC	ND	0.74	0.60	ug/kg	
319-85-7	beta-BHC	ND	0.74	0.67	ug/kg	
319-86-8	delta-BHC	ND	0.74	0.71	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.74	0.55	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.74	0.60	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.74	0.34	ug/kg	
60-57-1	Dieldrin	ND	0.74	0.51	ug/kg	
72-54-8	4,4' -DDD	ND	0.74	0.68	ug/kg	
72-55-9	4,4' -DDE	ND	0.74	0.65	ug/kg	
50-29-3	4,4' -DDT	ND	0.74	0.66	ug/kg	
72-20-8	Endrin	ND	0.74	0.58	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.74	0.58	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.74	0.42	ug/kg	
959-98-8	Endosulfan-I	ND	0.74	0.43	ug/kg	
33213-65-9	Endosulfan-II	ND	0.74	0.46	ug/kg	
76-44-8	Heptachlor	ND	0.74	0.64	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.74	0.52	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.59	ug/kg	
53494-70-5	Endrin ketone ^a	ND	0.74	0.54	ug/kg	
8001-35-2	Toxaphene	ND	19	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	114%		14-145%
877-09-8	Tetrachloro-m-xylene	110%		14-145%
2051-24-3	Decachlorobiphenyl	128%		10-197%
2051-24-3	Decachlorobiphenyl	122%		10-197%

(a) Associated CCV outside of control limits high, sample was ND.

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Report of Analysis

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Client Sample ID:	DUP-1	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-6	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.3
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G114211.D	1	02/18/22 02:54	TL	02/16/22 13:50	OP38183	G5G2905
Run #2							

	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	17	ug/kg	
11104-28-2	Aroclor 1221	ND	37	23	ug/kg	
11141-16-5	Aroclor 1232	ND	37	24	ug/kg	
53469-21-9	Aroclor 1242	ND	37	15	ug/kg	
12672-29-6	Aroclor 1248	ND	37	33	ug/kg	
11097-69-1	Aroclor 1254	ND	37	20	ug/kg	
11096-82-5	Aroclor 1260	ND	37	16	ug/kg	
11100-14-4	Aroclor 1268	ND	37	16	ug/kg	
37324-23-5	Aroclor 1262	ND	37	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	119%		10-163%
877-09-8	Tetrachloro-m-xylene	133%		10-163%
2051-24-3	Decachlorobiphenyl	141%		10-215%
2051-24-3	Decachlorobiphenyl	151%		10-215%

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Report of Analysis

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Client Sample ID:	DUP-1	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-6	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.3
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	22700	58	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Antimony ^a	< 12	12	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Arsenic ^a	< 12	12	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Barium	202	23	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Beryllium ^a	1.6	1.2	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Cadmium	0.61	0.58	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Calcium	1780	580	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Chromium ^a	39.5	5.8	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Cobalt	18.8	5.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Copper ^a	63.4	14	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Iron	38300	290	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Lead	40.2	2.3	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Magnesium	8420	580	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Manganese ^a	1450	8.7	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Mercury	< 0.037	0.037	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹
Nickel	33.2	4.6	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Potassium	9610	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Selenium ^a	< 12	12	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Silver ^a	< 2.9	2.9	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Sodium	< 1200	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Thallium ^a	< 5.8	5.8	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³
Vanadium	51.0	5.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Zinc	154	5.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Instrument QC Batch: MA51931

(4) Prep QC Batch: MP31339

(5) Prep QC Batch: MP31346

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DUP-1	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-6	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.3
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.29	0.29	mg/kg	1	02/17/22 12:48	MM	SW846 9012B/LACHAT
Solids, Percent	86.3		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	DUP-1	
Lab Sample ID:	JD39775-6A	Date Sampled: 02/15/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 86.3
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55186.D	1	02/25/22 20:23	AFL	02/18/22 08:30	F:OP89836	F:S3Q762
Run #2							

	Initial Weight	Final Volume
Run #1	2.00 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.44	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.29	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.58	0.29	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.58	0.29	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.58	0.29	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.58	0.29	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.58	0.29	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.58	0.29	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.58	0.29	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.58	0.31	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.58	0.29	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.58	0.29	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.58	0.29	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.58	0.29	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.58	0.23	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.58	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.58	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.58	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.58	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	

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Report of Analysis

Page 2 of 2

Client Sample ID:	DUP-1	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-6A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	86.3
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	97%		40-140%
	13C5-PFPeA	95%		50-150%
	13C5-PFHxA	96%		50-150%
	13C4-PFHpA	99%		50-150%
	13C8-PFOA	100%		50-150%
	13C9-PFNA	100%		50-150%
	13C6-PFDA	101%		50-150%
	13C7-PFUnDA	100%		40-140%
	13C2-PFDoDA	92%		40-140%
	13C2-PFTeDA	101%		30-130%
	13C3-PFBS	98%		50-150%
	13C3-PFHxS	97%		50-150%
	13C8-PFOS	98%		50-150%
	13C8-FOSA	78%		30-130%
	d3-MeFOSAA	86%		40-140%
	d5-EtFOSAA	92%		40-140%
	13C2-6:2FTS	101%		50-150%
	13C2-8:2FTS	101%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

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 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB4 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-7	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	89.7
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173634.D	1	02/16/22 20:06	PS	02/16/22 14:00	n/a	V3C7641
Run #2							

	Initial Weight
Run #1	5.6 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	4.1	ug/kg	
71-43-2	Benzene	ND	0.50	0.45	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.56	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.43	ug/kg	
75-25-2	Bromoform	ND	5.0	1.4	ug/kg	
74-83-9	Bromomethane	ND	5.0	0.76	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	2.4	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.53	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.62	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.46	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.59	ug/kg	
67-66-3	Chloroform	ND	2.0	0.52	ug/kg	
74-87-3	Chloromethane	ND	5.0	2.0	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.65	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.69	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.56	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.42	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.54	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.49	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.49	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.72	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.49	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.47	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.65	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.61	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.47	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.47	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.45	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.45	ug/kg	
76-13-1	Freon 113	ND	5.0	2.7	ug/kg	
591-78-6	2-Hexanone	ND	5.0	2.1	ug/kg	

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Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB4 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-7	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	89.7
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	1.4	ug/kg	
79-20-9	Methyl Acetate	ND	5.0	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.87	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.47	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	2.3	ug/kg	
75-09-2	Methylene chloride	ND	5.0	2.6	ug/kg	
100-42-5	Styrene	ND	2.0	0.40	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.60	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.58	ug/kg	
108-88-3	Toluene	ND	1.0	0.52	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.48	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.55	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.76	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.68	ug/kg	
75-01-4	Vinyl chloride ^a	ND	2.0	0.48	ug/kg	
	m,p-Xylene	ND	1.0	0.89	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.46	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.46	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		80-124%
17060-07-0	1,2-Dichloroethane-D4	97%		75-133%
2037-26-5	Toluene-D8	100%		79-125%
460-00-4	4-Bromofluorobenzene	101%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

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Report of Analysis

Page 1 of 3

Client Sample ID:	RI-SB4 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-7	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	89.7
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P147609.D	1	02/18/22 20:06	KLS	02/16/22 11:30	OP38180	EP6812
Run #2							

Run #	Initial Weight	Final Volume
Run #1	32.7 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	68	17	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	21	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	29	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	61	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	170	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	170	36	ug/kg	
95-48-7	2-Methylphenol	ND	68	22	ug/kg	
	3&4-Methylphenol	ND	68	28	ug/kg	
88-75-5	2-Nitrophenol	ND	170	23	ug/kg	
100-02-7	4-Nitrophenol	ND	340	91	ug/kg	
87-86-5	Pentachlorophenol	ND	140	32	ug/kg	
108-95-2	Phenol	ND	68	18	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	170	23	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	26	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	20	ug/kg	
83-32-9	Acenaphthene	ND	34	12	ug/kg	
208-96-8	Acenaphthylene	ND	34	17	ug/kg	
98-86-2	Acetophenone	ND	170	7.3	ug/kg	
120-12-7	Anthracene	ND	34	21	ug/kg	
1912-24-9	Atrazine	ND	68	15	ug/kg	
56-55-3	Benzo(a)anthracene	57.9	34	9.6	ug/kg	
50-32-8	Benzo(a)pyrene	79.5	34	16	ug/kg	
205-99-2	Benzo(b)fluoranthene	78.5	34	15	ug/kg	
191-24-2	Benzo(g,h,i)perylene	44.6	34	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	29.5	34	16	ug/kg	J
101-55-3	4-Bromophenyl phenyl ether	ND	68	13	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	68	8.3	ug/kg	
92-52-4	1,1'-Biphenyl	ND	68	4.7	ug/kg	
100-52-7	Benzaldehyde	ND	170	8.5	ug/kg	
91-58-7	2-Chloronaphthalene	ND	68	8.1	ug/kg	
106-47-8	4-Chloroaniline	ND	170	12	ug/kg	
86-74-8	Carbazole	5.1	68	4.9	ug/kg	J

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Report of Analysis

Client Sample ID:	RI-SB4 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-7	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	89.7
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	68	13	ug/kg	
218-01-9	Chrysene	57.6	34	11	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	68	7.3	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	68	15	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	68	12	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	68	11	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	34	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	34	17	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	68	28	ug/kg	
123-91-1	1,4-Dioxane	ND	34	23	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	28.6	34	15	ug/kg	J
132-64-9	Dibenzofuran	ND	68	14	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	68	5.6	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	68	8.5	ug/kg	
84-66-2	Diethyl phthalate	ND	68	7.3	ug/kg	
131-11-3	Dimethyl phthalate	ND	68	6.1	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	68	8.0	ug/kg	
206-44-0	Fluoranthene	116	34	15	ug/kg	
86-73-7	Fluorene	ND	34	16	ug/kg	
118-74-1	Hexachlorobenzene	ND	68	8.6	ug/kg	
87-68-3	Hexachlorobutadiene	ND	34	14	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	340	14	ug/kg	
67-72-1	Hexachloroethane	ND	170	17	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	70.5	34	16	ug/kg	
78-59-1	Isophorone	ND	68	7.3	ug/kg	
91-57-6	2-Methylnaphthalene	ND	34	7.7	ug/kg	
88-74-4	2-Nitroaniline	ND	170	8.0	ug/kg	
99-09-2	3-Nitroaniline	ND	170	8.5	ug/kg	
100-01-6	4-Nitroaniline	ND	170	8.8	ug/kg	
91-20-3	Naphthalene	ND	34	9.6	ug/kg	
98-95-3	Nitrobenzene	ND	68	13	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	68	9.9	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	12	ug/kg	
85-01-8	Phenanthrene	45.3	34	11	ug/kg	
129-00-0	Pyrene	112	34	11	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	170	8.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	46%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	RI-SB4 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-7	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	89.7
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	45%		10-105%
118-79-6	2,4,6-Tribromophenol	60%		10-135%
4165-60-0	Nitrobenzene-d5	52%		10-119%
321-60-8	2-Fluorobiphenyl	57%		18-112%
1718-51-0	Terphenyl-d14	66%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	15.52	200	ug/kg	J
	Total TIC, Semi-Volatile		200	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

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Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB4 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-7	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	89.7
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G41423.D	1	02/21/22 16:31	TL	02/16/22 01:50	OP38182	G8G1769
Run #2							

	Initial Weight	Final Volume
Run #1	15.8 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.71	0.58	ug/kg	
319-84-6	alpha-BHC	ND	0.71	0.57	ug/kg	
319-85-7	beta-BHC	ND	0.71	0.64	ug/kg	
319-86-8	delta-BHC	ND	0.71	0.68	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.71	0.52	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.71	0.57	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.71	0.32	ug/kg	
60-57-1	Dieldrin	ND	0.71	0.48	ug/kg	
72-54-8	4,4' -DDD	ND	0.71	0.65	ug/kg	
72-55-9	4,4' -DDE	ND	0.71	0.62	ug/kg	
50-29-3	4,4' -DDT	ND	0.71	0.63	ug/kg	
72-20-8	Endrin	ND	0.71	0.55	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.71	0.55	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.71	0.40	ug/kg	
959-98-8	Endosulfan-I	ND	0.71	0.41	ug/kg	
33213-65-9	Endosulfan-II	ND	0.71	0.44	ug/kg	
76-44-8	Heptachlor	ND	0.71	0.61	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.71	0.49	ug/kg	
72-43-5	Methoxychlor	ND	1.4	0.56	ug/kg	
53494-70-5	Endrin ketone ^a	ND	0.71	0.51	ug/kg	
8001-35-2	Toxaphene	ND	18	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	135%		14-145%
877-09-8	Tetrachloro-m-xylene	132%		14-145%
2051-24-3	Decachlorobiphenyl	150%		10-197%
2051-24-3	Decachlorobiphenyl	135%		10-197%

(a) Associated CCV outside of control limits high, sample was ND.

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Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB4 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-7	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	89.7
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G114212.D	1	02/18/22 03:10	TL	02/16/22 13:50	OP38183	G5G2905
Run #2							

	Initial Weight	Final Volume
Run #1	15.8 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	16	ug/kg	
11104-28-2	Aroclor 1221	ND	35	22	ug/kg	
11141-16-5	Aroclor 1232	ND	35	23	ug/kg	
53469-21-9	Aroclor 1242	ND	35	14	ug/kg	
12672-29-6	Aroclor 1248	ND	35	31	ug/kg	
11097-69-1	Aroclor 1254	ND	35	19	ug/kg	
11096-82-5	Aroclor 1260	ND	35	15	ug/kg	
11100-14-4	Aroclor 1268	ND	35	15	ug/kg	
37324-23-5	Aroclor 1262	ND	35	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	119%		10-163%
877-09-8	Tetrachloro-m-xylene	138%		10-163%
2051-24-3	Decachlorobiphenyl	145%		10-215%
2051-24-3	Decachlorobiphenyl	160%		10-215%

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Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB4 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-7	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	89.7
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	11500	56	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Antimony	< 2.3	2.3	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Arsenic	2.4	2.3	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Barium	73.5	23	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Beryllium	< 0.23	0.23	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Cadmium	< 0.56	0.56	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Calcium	1360	560	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Chromium	22.9	1.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Cobalt	9.4	5.6	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Copper	26.9	2.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Iron	18800	56	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Lead	12.8	2.3	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Magnesium	3130	560	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Manganese	562	1.7	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Mercury	0.16	0.032	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹
Nickel	19.4	4.5	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Potassium	2800	1100	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Selenium	< 2.3	2.3	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Silver	0.64	0.56	mg/kg	1	02/17/22	02/18/22	ND	SW846 6010D ³
Sodium	< 1100	1100	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Thallium	< 1.1	1.1	mg/kg	1	02/17/22	02/18/22	ND	SW846 6010D ³
Vanadium	29.1	5.6	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Zinc	37.9	5.6	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Instrument QC Batch: MA51931

(4) Prep QC Batch: MP31339

(5) Prep QC Batch: MP31346

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB4 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-7	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	89.7
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.23	0.23	mg/kg	1	02/17/22 12:49	MM	SW846 9012B/LACHAT
Solids, Percent	89.7		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB4 (9.5-10')	
Lab Sample ID:	JD39775-7A	Date Sampled: 02/15/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 89.7
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55187.D	1	02/25/22 20:40	AFL	02/18/22 08:30	F:OP89836	F:S3Q762
Run #2							

	Initial Weight	Final Volume
Run #1	1.95 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
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PERFLUOROALKYLCARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	ND	1.1	0.43	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.57	0.29	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.57	0.29	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.57	0.29	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.57	0.29	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.57	0.29	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.57	0.29	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.57	0.29	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.57	0.29	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.57	0.30	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.57	0.29	ug/kg	

PERFLUOROALKYLSULFONIC ACIDS

375-73-5	Perfluorobutanesulfonic acid	ND	0.57	0.29	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.57	0.29	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.57	0.29	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.27	0.57	0.23	ug/kg	J
335-77-3	Perfluorodecanesulfonic acid	ND	0.57	0.29	ug/kg	

PERFLUOROCTANESULFONAMIDES

754-91-6	PFOSA	ND	0.57	0.29	ug/kg	
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PERFLUOROCTANESULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	ND	1.1	0.57	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.57	ug/kg	

FLUOROTELOMER SULFONATES

27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.29	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.29	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB4 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-7A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	89.7
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	80%		40-140%
	13C5-PFPeA	79%		50-150%
	13C5-PFHxA	80%		50-150%
	13C4-PFHpA	81%		50-150%
	13C8-PFOA	82%		50-150%
	13C9-PFNA	83%		50-150%
	13C6-PFDA	85%		50-150%
	13C7-PFUnDA	85%		40-140%
	13C2-PFDoDA	78%		40-140%
	13C2-PFTeDA	84%		30-130%
	13C3-PFBS	82%		50-150%
	13C3-PFHxS	81%		50-150%
	13C8-PFOS	83%		50-150%
	13C8-FOSA	81%		30-130%
	d3-MeFOSAA	53%		40-140%
	d5-EtFOSAA	60%		40-140%
	13C2-6:2FTS	81%		50-150%
	13C2-8:2FTS	83%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB4 (14.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-8	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	96.9
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173635.D	1	02/16/22 20:32	PS	02/16/22 14:00	n/a	V3C7641
Run #2							

	Initial Weight
Run #1	5.6 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	57.0	9.2	3.8	ug/kg	
71-43-2	Benzene	ND	0.46	0.42	ug/kg	
74-97-5	Bromochloromethane	ND	4.6	0.52	ug/kg	
75-27-4	Bromodichloromethane	ND	1.8	0.40	ug/kg	
75-25-2	Bromoform	ND	4.6	1.3	ug/kg	
74-83-9	Bromomethane	ND	4.6	0.70	ug/kg	
78-93-3	2-Butanone (MEK)	9.0	9.2	2.2	ug/kg	J
75-15-0	Carbon disulfide	0.76	1.8	0.49	ug/kg	J
56-23-5	Carbon tetrachloride	ND	1.8	0.57	ug/kg	
108-90-7	Chlorobenzene	ND	1.8	0.42	ug/kg	
75-00-3	Chloroethane	ND	4.6	0.54	ug/kg	
67-66-3	Chloroform	ND	1.8	0.48	ug/kg	
74-87-3	Chloromethane	ND	4.6	1.8	ug/kg	
110-82-7	Cyclohexane	ND	1.8	0.61	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.8	0.64	ug/kg	
124-48-1	Dibromochloromethane	ND	1.8	0.52	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.92	0.39	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.92	0.50	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.92	0.46	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.92	0.46	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.6	0.67	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.92	0.46	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.92	0.43	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.92	0.60	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.92	0.77	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.92	0.56	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.8	0.44	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.8	0.44	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.8	0.42	ug/kg	
100-41-4	Ethylbenzene	ND	0.92	0.42	ug/kg	
76-13-1	Freon 113	ND	4.6	2.5	ug/kg	
591-78-6	2-Hexanone	ND	4.6	2.0	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB4 (14.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-8	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	96.9
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.8	1.3	ug/kg	
79-20-9	Methyl Acetate	ND	4.6	1.3	ug/kg	
108-87-2	Methylcyclohexane	ND	1.8	0.81	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.92	0.43	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.6	2.1	ug/kg	
75-09-2	Methylene chloride	ND	4.6	2.4	ug/kg	
100-42-5	Styrene	ND	1.8	0.37	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.8	0.55	ug/kg	
127-18-4	Tetrachloroethene	ND	1.8	0.53	ug/kg	
108-88-3	Toluene	ND	0.92	0.48	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.6	2.3	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.6	2.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.8	0.45	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.8	0.51	ug/kg	
79-01-6	Trichloroethene	ND	0.92	0.70	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.6	0.63	ug/kg	
75-01-4	Vinyl chloride ^a	ND	1.8	0.44	ug/kg	
	m,p-Xylene	ND	0.92	0.83	ug/kg	
95-47-6	o-Xylene	ND	0.92	0.42	ug/kg	
1330-20-7	Xylene (total)	ND	0.92	0.42	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		80-124%
17060-07-0	1,2-Dichloroethane-D4	96%		75-133%
2037-26-5	Toluene-D8	99%		79-125%
460-00-4	4-Bromofluorobenzene	102%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	RI-SB4 (14.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-8	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	96.9
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P147647.D	1	02/21/22 19:00	KLS	02/16/22 11:30	OP38180	EP6814
Run #2							

Run #	Initial Weight	Final Volume
Run #1	32.4 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	64	16	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	160	20	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	160	27	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	160	57	ug/kg	
51-28-5	2,4-Dinitrophenol ^a	ND	160	120	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	160	34	ug/kg	
95-48-7	2-Methylphenol	ND	64	20	ug/kg	
	3&4-Methylphenol	ND	64	26	ug/kg	
88-75-5	2-Nitrophenol	ND	160	21	ug/kg	
100-02-7	4-Nitrophenol	ND	320	85	ug/kg	
87-86-5	Pentachlorophenol	ND	130	30	ug/kg	
108-95-2	Phenol	ND	64	17	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	160	21	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	160	24	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	160	19	ug/kg	
83-32-9	Acenaphthene	ND	32	11	ug/kg	
208-96-8	Acenaphthylene	ND	32	16	ug/kg	
98-86-2	Acetophenone	ND	160	6.8	ug/kg	
120-12-7	Anthracene	ND	32	20	ug/kg	
1912-24-9	Atrazine	ND	64	14	ug/kg	
56-55-3	Benzo(a)anthracene	ND	32	9.0	ug/kg	
50-32-8	Benzo(a)pyrene	ND	32	14	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	32	14	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	32	16	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	32	15	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	64	12	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	64	7.8	ug/kg	
92-52-4	1,1'-Biphenyl	ND	64	4.4	ug/kg	
100-52-7	Benzaldehyde	ND	160	7.9	ug/kg	
91-58-7	2-Chloronaphthalene	ND	64	7.6	ug/kg	
106-47-8	4-Chloroaniline	ND	160	11	ug/kg	
86-74-8	Carbazole	ND	64	4.6	ug/kg	

ND = Not detected MDL = Method Detection Limit

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RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	RI-SB4 (14.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-8	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	96.9
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	64	13	ug/kg	
218-01-9	Chrysene	ND	32	10	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	64	6.8	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	64	14	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	64	11	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	64	10	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	32	9.9	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	32	16	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	64	27	ug/kg	
123-91-1	1,4-Dioxane	ND	32	21	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	32	14	ug/kg	
132-64-9	Dibenzofuran	ND	64	13	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	64	5.2	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	64	7.9	ug/kg	
84-66-2	Diethyl phthalate	ND	64	6.8	ug/kg	
131-11-3	Dimethyl phthalate	ND	64	5.7	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	64	7.5	ug/kg	
206-44-0	Fluoranthene	ND	32	14	ug/kg	
86-73-7	Fluorene	ND	32	15	ug/kg	
118-74-1	Hexachlorobenzene	ND	64	8.1	ug/kg	
87-68-3	Hexachlorobutadiene	ND	32	13	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	320	13	ug/kg	
67-72-1	Hexachloroethane	ND	160	16	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	32	15	ug/kg	
78-59-1	Isophorone	ND	64	6.8	ug/kg	
91-57-6	2-Methylnaphthalene	ND	32	7.2	ug/kg	
88-74-4	2-Nitroaniline	ND	160	7.5	ug/kg	
99-09-2	3-Nitroaniline	ND	160	8.0	ug/kg	
100-01-6	4-Nitroaniline	ND	160	8.2	ug/kg	
91-20-3	Naphthalene	ND	32	9.0	ug/kg	
98-95-3	Nitrobenzene	ND	64	12	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	64	9.2	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	160	12	ug/kg	
85-01-8	Phenanthrene	ND	32	11	ug/kg	
129-00-0	Pyrene	ND	32	10	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	160	8.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	43%		10-109%

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	RI-SB4 (14.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-8	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	96.9
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	43%		10-105%
118-79-6	2,4,6-Tribromophenol	62%		10-135%
4165-60-0	Nitrobenzene-d5	47%		10-119%
321-60-8	2-Fluorobiphenyl	56%		18-112%
1718-51-0	Terphenyl-d14	64%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
10544-50-0	Cyclic octaatomic sulfur	10.56	4500	ug/kg	JN
	Total TIC, Semi-Volatile		4500	ug/kg	J

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB4 (14.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-8	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	96.9
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	8G41695.D	1	02/28/22 17:28	KLS	02/16/22 01:50	OP38182	G8G1781
Run #2							

	Initial Weight	Final Volume
Run #1	16.0 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.64	0.53	ug/kg	
319-84-6	alpha-BHC	ND	0.64	0.52	ug/kg	
319-85-7	beta-BHC	ND	0.64	0.58	ug/kg	
319-86-8	delta-BHC	ND	0.64	0.62	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.64	0.48	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.64	0.52	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.64	0.29	ug/kg	
60-57-1	Dieldrin	ND	0.64	0.44	ug/kg	
72-54-8	4,4' -DDD	ND	0.64	0.59	ug/kg	
72-55-9	4,4' -DDE	ND	0.64	0.57	ug/kg	
50-29-3	4,4' -DDT	ND	0.64	0.57	ug/kg	
72-20-8	Endrin	ND	0.64	0.50	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.64	0.50	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.64	0.37	ug/kg	
959-98-8	Endosulfan-I	ND	0.64	0.37	ug/kg	
33213-65-9	Endosulfan-II	ND	0.64	0.40	ug/kg	
76-44-8	Heptachlor	ND	0.64	0.56	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.64	0.45	ug/kg	
72-43-5	Methoxychlor	ND	1.3	0.51	ug/kg	
53494-70-5	Endrin ketone ^b	ND	0.64	0.47	ug/kg	
8001-35-2	Toxaphene	ND	16	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	142%		14-145%
877-09-8	Tetrachloro-m-xylene	129%		14-145%
2051-24-3	Decachlorobiphenyl	157%		10-197%
2051-24-3	Decachlorobiphenyl	137%		10-197%

(a) Had TBA cleanup.

(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB4 (14.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-8	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	96.9
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G114250.D	1	02/20/22 18:08	TL	02/16/22 13:50	OP38183	G5G2906
Run #2							

	Initial Weight	Final Volume
Run #1	14.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	17	ug/kg	
11104-28-2	Aroclor 1221	ND	37	23	ug/kg	
11141-16-5	Aroclor 1232	ND	37	24	ug/kg	
53469-21-9	Aroclor 1242	ND	37	15	ug/kg	
12672-29-6	Aroclor 1248	ND	37	33	ug/kg	
11097-69-1	Aroclor 1254	ND	37	20	ug/kg	
11096-82-5	Aroclor 1260	ND	37	16	ug/kg	
11100-14-4	Aroclor 1268	ND	37	16	ug/kg	
37324-23-5	Aroclor 1262	ND	37	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	122%		10-163%
877-09-8	Tetrachloro-m-xylene	145%		10-163%
2051-24-3	Decachlorobiphenyl	134%		10-215%
2051-24-3	Decachlorobiphenyl	144%		10-215%

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB4 (14.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-8	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	96.9
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	24600	51	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Antimony ^a	10.7	10	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Arsenic ^a	< 10	10	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Barium	220	20	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Beryllium ^a	1.1	1.0	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Cadmium	< 0.51	0.51	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Calcium	1110	510	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Chromium	42.4	1.0	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cobalt	23.3	5.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Copper ^a	26.7	13	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Iron	40000	250	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Lead	5.4	2.0	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Magnesium	12000	510	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Manganese	399	1.5	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	0.052	0.032	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹	SW846 7471B ⁵
Nickel	49.4	4.0	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Potassium	15600	1000	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Selenium ^a	< 10	10	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Silver ^a	< 2.5	2.5	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Sodium	< 1000	1000	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Thallium ^a	< 5.1	5.1	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Vanadium	63.6	5.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Zinc	112	5.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Instrument QC Batch: MA51931

(4) Prep QC Batch: MP31339

(5) Prep QC Batch: MP31346

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB4 (14.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-8	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	96.9
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.29	0.29	mg/kg	1	02/17/22 12:51	MM	SW846 9012B/LACHAT
Solids, Percent	96.9		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB4 (14.5-15')	
Lab Sample ID:	JD39775-8A	Date Sampled: 02/15/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 96.9
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55476.D	1	03/01/22 07:44	AFL	02/18/22 08:30	F:OP89836	F:S3Q765
Run #2							

	Initial Weight	Final Volume
Run #1	1.94 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
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PERFLUOROALKYLCARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	ND	1.1	0.40	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.53	0.27	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.53	0.27	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.53	0.27	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.53	0.27	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.53	0.27	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.53	0.27	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.53	0.27	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.53	0.27	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.53	0.28	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.53	0.27	ug/kg	

PERFLUOROALKYLSULFONIC ACIDS

375-73-5	Perfluorobutanesulfonic acid	ND	0.53	0.27	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.53	0.27	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.53	0.27	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.53	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.53	0.27	ug/kg	

PERFLUOROCTANESULFONAMIDES

754-91-6	PFOSA	ND	0.53	0.27	ug/kg	
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PERFLUOROCTANESULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	ND	1.1	0.53	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.53	ug/kg	

FLUOROTELOMER SULFONATES

27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB4 (14.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-8A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	96.9
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	81%		40-140%
	13C5-PFPeA	80%		50-150%
	13C5-PFHxA	80%		50-150%
	13C4-PFHpA	81%		50-150%
	13C8-PFOA	82%		50-150%
	13C9-PFNA	80%		50-150%
	13C6-PFDA	87%		50-150%
	13C7-PFUnDA	67%		40-140%
	13C2-PFDoDA	81%		40-140%
	13C2-PFTeDA	79%		30-130%
	13C3-PFBS	83%		50-150%
	13C3-PFHxS	82%		50-150%
	13C8-PFOS	84%		50-150%
	13C8-FOSA	61%		30-130%
	d3-MeFOSAA	73%		40-140%
	d5-EtFOSAA	74%		40-140%
	13C2-6:2FTS	88%		50-150%
	13C2-8:2FTS	90%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB5 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-10	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173637.D	1	02/16/22 21:23	PS	02/16/22 14:00	n/a	V3C7641
Run #2							

	Initial Weight
Run #1	5.8 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	20.0	11	4.4	ug/kg	
71-43-2	Benzene	ND	0.53	0.48	ug/kg	
74-97-5	Bromochloromethane	ND	5.3	0.59	ug/kg	
75-27-4	Bromodichloromethane	ND	2.1	0.45	ug/kg	
75-25-2	Bromoform	ND	5.3	1.4	ug/kg	
74-83-9	Bromomethane	ND	5.3	0.81	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.6	ug/kg	
75-15-0	Carbon disulfide	ND	2.1	0.56	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.1	0.65	ug/kg	
108-90-7	Chlorobenzene	ND	2.1	0.48	ug/kg	
75-00-3	Chloroethane	ND	5.3	0.62	ug/kg	
67-66-3	Chloroform	ND	2.1	0.55	ug/kg	
74-87-3	Chloromethane	ND	5.3	2.1	ug/kg	
110-82-7	Cyclohexane	ND	2.1	0.69	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	0.73	ug/kg	
124-48-1	Dibromochloromethane	ND	2.1	0.59	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.44	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.1	0.58	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.1	0.52	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.1	0.52	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.3	0.77	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.1	0.52	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.50	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.1	0.69	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.1	0.89	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.1	0.64	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.1	0.50	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	0.48	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.48	ug/kg	
76-13-1	Freon 113	ND	5.3	2.8	ug/kg	
591-78-6	2-Hexanone	ND	5.3	2.2	ug/kg	

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B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB5 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-10	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.1	1.5	ug/kg	
79-20-9	Methyl Acetate	ND	5.3	1.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.1	0.92	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.49	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.3	2.4	ug/kg	
75-09-2	Methylene chloride	ND	5.3	2.8	ug/kg	
100-42-5	Styrene	ND	2.1	0.42	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.63	ug/kg	
127-18-4	Tetrachloroethene	ND	2.1	0.61	ug/kg	
108-88-3	Toluene	ND	1.1	0.55	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.3	2.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.3	2.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.1	0.51	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.58	ug/kg	
79-01-6	Trichloroethene	ND	1.1	0.80	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.3	0.72	ug/kg	
75-01-4	Vinyl chloride ^a	ND	2.1	0.51	ug/kg	
	m,p-Xylene	ND	1.1	0.95	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.48	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.48	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		80-124%
17060-07-0	1,2-Dichloroethane-D4	96%		75-133%
2037-26-5	Toluene-D8	99%		79-125%
460-00-4	4-Bromofluorobenzene	102%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

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 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	RI-SB5 (4.5-5')	
Lab Sample ID:	JD39775-10	Date Sampled: 02/15/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	SW846 8270E SW846 3546	Percent Solids: 81.7
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P147612.D	1	02/18/22 21:45	KLS	02/16/22 11:30	OP38180	EP6812
Run #2							

	Initial Weight	Final Volume
Run #1	32.2 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	76	19	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	32	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	68	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	190	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	190	41	ug/kg	
95-48-7	2-Methylphenol	ND	76	24	ug/kg	
	3&4-Methylphenol	ND	76	31	ug/kg	
88-75-5	2-Nitrophenol	ND	190	25	ug/kg	
100-02-7	4-Nitrophenol	ND	380	100	ug/kg	
87-86-5	Pentachlorophenol	ND	150	36	ug/kg	
108-95-2	Phenol	ND	76	20	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	190	25	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	28	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	23	ug/kg	
83-32-9	Acenaphthene	ND	38	13	ug/kg	
208-96-8	Acenaphthylene	ND	38	19	ug/kg	
98-86-2	Acetophenone	ND	190	8.2	ug/kg	
120-12-7	Anthracene	ND	38	23	ug/kg	
1912-24-9	Atrazine	ND	76	16	ug/kg	
56-55-3	Benzo(a)anthracene	35.1	38	11	ug/kg	J
50-32-8	Benzo(a)pyrene	48.9	38	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	46.7	38	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	25.2	38	19	ug/kg	J
207-08-9	Benzo(k)fluoranthene	ND	38	18	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	76	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	76	9.3	ug/kg	
92-52-4	1,1'-Biphenyl	ND	76	5.2	ug/kg	
100-52-7	Benzaldehyde	ND	190	9.4	ug/kg	
91-58-7	2-Chloronaphthalene	ND	76	9.0	ug/kg	
106-47-8	4-Chloroaniline	ND	190	14	ug/kg	
86-74-8	Carbazole	ND	76	5.5	ug/kg	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB5 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-10	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	76	15	ug/kg	
218-01-9	Chrysene	42.1	38	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	76	8.1	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	76	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	76	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	76	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	38	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	38	19	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	76	32	ug/kg	
123-91-1	1,4-Dioxane	ND	38	25	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	27.7	38	17	ug/kg	J
132-64-9	Dibenzofuran	ND	76	15	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	76	6.2	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	76	9.5	ug/kg	
84-66-2	Diethyl phthalate	ND	76	8.1	ug/kg	
131-11-3	Dimethyl phthalate	ND	76	6.8	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	76	8.9	ug/kg	
206-44-0	Fluoranthene	71.1	38	17	ug/kg	
86-73-7	Fluorene	ND	38	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	76	9.6	ug/kg	
87-68-3	Hexachlorobutadiene	ND	38	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	380	15	ug/kg	
67-72-1	Hexachloroethane	ND	190	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	50.7	38	18	ug/kg	
78-59-1	Isophorone	ND	76	8.1	ug/kg	
91-57-6	2-Methylnaphthalene	ND	38	8.6	ug/kg	
88-74-4	2-Nitroaniline	ND	190	9.0	ug/kg	
99-09-2	3-Nitroaniline	ND	190	9.5	ug/kg	
100-01-6	4-Nitroaniline	ND	190	9.8	ug/kg	
91-20-3	Naphthalene	11.7	38	11	ug/kg	J
98-95-3	Nitrobenzene	ND	76	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	76	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	14	ug/kg	
85-01-8	Phenanthrene	37.3	38	13	ug/kg	J
129-00-0	Pyrene	67.2	38	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	190	9.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	43%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	RI-SB5 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-10	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	43%		10-105%
118-79-6	2,4,6-Tribromophenol	64%		10-135%
4165-60-0	Nitrobenzene-d5	48%		10-119%
321-60-8	2-Fluorobiphenyl	56%		18-112%
1718-51-0	Terphenyl-d14	64%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.06	230	ug/kg	J
	unknown	19.34	170	ug/kg	J
	Total TIC, Semi-Volatile		170	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB5 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-10	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G41466.D	1	02/22/22 19:19	TL	02/16/22 01:50	OP38182	G8G1771
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.80	0.66	ug/kg	
319-84-6	alpha-BHC	ND	0.80	0.65	ug/kg	
319-85-7	beta-BHC	ND	0.80	0.72	ug/kg	
319-86-8	delta-BHC	ND	0.80	0.77	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.80	0.59	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.80	0.65	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.80	0.36	ug/kg	
60-57-1	Dieldrin	ND	0.80	0.55	ug/kg	
72-54-8	4,4' -DDD	ND	0.80	0.73	ug/kg	
72-55-9	4,4' -DDE	ND	0.80	0.70	ug/kg	
50-29-3	4,4' -DDT	ND	0.80	0.71	ug/kg	
72-20-8	Endrin	ND	0.80	0.62	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.80	0.62	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.80	0.45	ug/kg	
959-98-8	Endosulfan-I	ND	0.80	0.46	ug/kg	
33213-65-9	Endosulfan-II	ND	0.80	0.50	ug/kg	
76-44-8	Heptachlor	ND	0.80	0.69	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.80	0.56	ug/kg	
72-43-5	Methoxychlor	ND	1.6	0.64	ug/kg	
53494-70-5	Endrin ketone ^a	ND	0.80	0.58	ug/kg	
8001-35-2	Toxaphene	ND	20	19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	130%		14-145%
877-09-8	Tetrachloro-m-xylene	117%		14-145%
2051-24-3	Decachlorobiphenyl	137%		10-197%
2051-24-3	Decachlorobiphenyl	109%		10-197%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB5 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-10	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	5G114257.D	1	02/20/22 20:01	TL	02/16/22 13:50	OP38183	G5G2906
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	40	19	ug/kg	
11104-28-2	Aroclor 1221	ND	40	25	ug/kg	
11141-16-5	Aroclor 1232	ND	40	26	ug/kg	
53469-21-9	Aroclor 1242	ND	40	16	ug/kg	
12672-29-6	Aroclor 1248	ND	40	36	ug/kg	
11097-69-1	Aroclor 1254	ND	40	22	ug/kg	
11096-82-5	Aroclor 1260	ND	40	17	ug/kg	
11100-14-4	Aroclor 1268	ND	40	17	ug/kg	
37324-23-5	Aroclor 1262	ND	40	26	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	119%		10-163%
877-09-8	Tetrachloro-m-xylene	138%		10-163%
2051-24-3	Decachlorobiphenyl	132%		10-215%
2051-24-3	Decachlorobiphenyl	150%		10-215%

(a) Had TBA clean-up.

ND = Not detected MDL = Method Detection Limit
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 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB5 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-10	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.7
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	18200	61	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Antimony ^a	< 12	12	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Arsenic ^a	< 12	12	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Barium	96.5	24	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Beryllium ^a	< 1.2	1.2	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Cadmium	< 0.61	0.61	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Calcium	2840	610	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Chromium	36.8	1.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cobalt	16.8	6.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Copper ^a	47.3	15	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Iron	32000	300	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Lead	36.0	2.4	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Magnesium	5660	610	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Manganese	410	1.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	0.075	0.037	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹	SW846 7471B ⁵
Nickel	31.3	4.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Potassium	3140	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Selenium ^a	< 12	12	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Silver ^a	< 3.0	3.0	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Sodium	< 1200	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Thallium ^a	< 6.1	6.1	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Vanadium	54.3	6.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Zinc	75.3	6.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Instrument QC Batch: MA51931

(4) Prep QC Batch: MP31339

(5) Prep QC Batch: MP31346

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB5 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-10	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.7
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.29	0.29	mg/kg	1	02/17/22 13:03	MM	SW846 9012B/LACHAT
Solids, Percent	81.7		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB5 (4.5-5')	
Lab Sample ID:	JD39775-10A	Date Sampled: 02/15/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 81.7
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55189.D	1	02/25/22 21:13	AFL	02/18/22 08:30	F:OP89836	F:S3Q762
Run #2							

	Initial Weight	Final Volume
Run #1	2.00 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.47	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.61	0.31	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.61	0.31	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.61	0.31	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.61	0.31	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.61	0.31	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.61	0.31	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.61	0.31	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.61	0.31	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.61	0.32	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.61	0.31	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.61	0.31	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	0.61	0.61	0.31	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.61	0.31	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	10.9	0.61	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.61	0.31	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.61	0.31	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.61	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.61	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.31	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.31	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB5 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-10A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	85%		40-140%
	13C5-PFPeA	84%		50-150%
	13C5-PFHxA	86%		50-150%
	13C4-PFHpA	88%		50-150%
	13C8-PFOA	87%		50-150%
	13C9-PFNA	90%		50-150%
	13C6-PFDA	95%		50-150%
	13C7-PFUnDA	95%		40-140%
	13C2-PFDoDA	89%		40-140%
	13C2-PFTeDA	82%		30-130%
	13C3-PFBS	92%		50-150%
	13C3-PFHxS	94%		50-150%
	13C8-PFOS	92%		50-150%
	13C8-FOSA	87%		30-130%
	d3-MeFOSAA	104%		40-140%
	d5-EtFOSAA	109%		40-140%
	13C2-6:2FTS	95%		50-150%
	13C2-8:2FTS	113%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
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 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB5 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-11	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	90.9
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173638.D	1	02/16/22 21:49	PS	02/16/22 14:00	n/a	V3C7641
Run #2							

	Initial Weight
Run #1	5.3 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	22.9	10	4.3	ug/kg	
71-43-2	Benzene	ND	0.52	0.47	ug/kg	
74-97-5	Bromochloromethane	ND	5.2	0.58	ug/kg	
75-27-4	Bromodichloromethane	ND	2.1	0.45	ug/kg	
75-25-2	Bromoform	ND	5.2	1.4	ug/kg	
74-83-9	Bromomethane	ND	5.2	0.79	ug/kg	
78-93-3	2-Butanone (MEK)	3.0	10	2.5	ug/kg	J
75-15-0	Carbon disulfide	ND	2.1	0.56	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.1	0.64	ug/kg	
108-90-7	Chlorobenzene	ND	2.1	0.48	ug/kg	
75-00-3	Chloroethane	ND	5.2	0.61	ug/kg	
67-66-3	Chloroform	ND	2.1	0.54	ug/kg	
74-87-3	Chloromethane	ND	5.2	2.0	ug/kg	
110-82-7	Cyclohexane	ND	2.1	0.68	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	0.72	ug/kg	
124-48-1	Dibromochloromethane	ND	2.1	0.58	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.44	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.57	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.51	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.2	0.75	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.51	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.49	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.68	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.87	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.63	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.1	0.49	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	0.49	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	0.47	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.47	ug/kg	
76-13-1	Freon 113	ND	5.2	2.8	ug/kg	
591-78-6	2-Hexanone	ND	5.2	2.2	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB5 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-11	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	90.9
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.1	1.5	ug/kg	
79-20-9	Methyl Acetate	ND	5.2	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.1	0.91	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.49	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.2	2.4	ug/kg	
75-09-2	Methylene chloride	ND	5.2	2.7	ug/kg	
100-42-5	Styrene	ND	2.1	0.42	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.62	ug/kg	
127-18-4	Tetrachloroethene	ND	2.1	0.60	ug/kg	
108-88-3	Toluene	ND	1.0	0.54	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.2	2.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	2.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.1	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.57	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.79	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.2	0.71	ug/kg	
75-01-4	Vinyl chloride ^a	ND	2.1	0.50	ug/kg	
	m,p-Xylene	ND	1.0	0.93	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.48	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.48	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		80-124%
17060-07-0	1,2-Dichloroethane-D4	96%		75-133%
2037-26-5	Toluene-D8	100%		79-125%
460-00-4	4-Bromofluorobenzene	101%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
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 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	RI-SB5 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-11	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	90.9
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P147613.D	1	02/18/22 22:10	KLS	02/16/22 11:30	OP38180	EP6812
Run #2							

	Initial Weight	Final Volume
Run #1	30.8 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	71	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	22	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	30	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	64	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	180	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	180	38	ug/kg	
95-48-7	2-Methylphenol	ND	71	23	ug/kg	
	3&4-Methylphenol	ND	71	29	ug/kg	
88-75-5	2-Nitrophenol	ND	180	24	ug/kg	
100-02-7	4-Nitrophenol	ND	360	95	ug/kg	
87-86-5	Pentachlorophenol	ND	140	34	ug/kg	
108-95-2	Phenol	ND	71	19	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	24	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	27	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	21	ug/kg	
83-32-9	Acenaphthene	ND	36	12	ug/kg	
208-96-8	Acenaphthylene	ND	36	18	ug/kg	
98-86-2	Acetophenone	ND	180	7.7	ug/kg	
120-12-7	Anthracene	ND	36	22	ug/kg	
1912-24-9	Atrazine	ND	71	15	ug/kg	
56-55-3	Benzo(a)anthracene	ND	36	10	ug/kg	
50-32-8	Benzo(a)pyrene	ND	36	16	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	36	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	36	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	36	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	71	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	71	8.7	ug/kg	
92-52-4	1,1'-Biphenyl	ND	71	4.9	ug/kg	
100-52-7	Benzaldehyde	ND	180	8.9	ug/kg	
91-58-7	2-Chloronaphthalene	ND	71	8.5	ug/kg	
106-47-8	4-Chloroaniline	ND	180	13	ug/kg	
86-74-8	Carbazole	ND	71	5.2	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB5 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-11	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	90.9
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	71	14	ug/kg	
218-01-9	Chrysene	ND	36	11	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	71	7.6	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	71	15	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	71	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	71	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	36	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	36	18	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	71	30	ug/kg	
123-91-1	1,4-Dioxane	ND	36	24	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	36	16	ug/kg	
132-64-9	Dibenzofuran	ND	71	15	ug/kg	
84-74-2	Di-n-butyl phthalate	98.8	71	5.8	ug/kg	B
117-84-0	Di-n-octyl phthalate	ND	71	8.9	ug/kg	
84-66-2	Diethyl phthalate	ND	71	7.6	ug/kg	
131-11-3	Dimethyl phthalate	ND	71	6.4	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	71	8.4	ug/kg	
206-44-0	Fluoranthene	ND	36	16	ug/kg	
86-73-7	Fluorene	ND	36	16	ug/kg	
118-74-1	Hexachlorobenzene	ND	71	9.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	36	14	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	360	14	ug/kg	
67-72-1	Hexachloroethane	ND	180	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	36	17	ug/kg	
78-59-1	Isophorone	ND	71	7.6	ug/kg	
91-57-6	2-Methylnaphthalene	ND	36	8.1	ug/kg	
88-74-4	2-Nitroaniline	ND	180	8.4	ug/kg	
99-09-2	3-Nitroaniline	ND	180	8.9	ug/kg	
100-01-6	4-Nitroaniline	ND	180	9.3	ug/kg	
91-20-3	Naphthalene	ND	36	10	ug/kg	
98-95-3	Nitrobenzene	ND	71	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	71	10	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	13	ug/kg	
85-01-8	Phenanthrene	ND	36	12	ug/kg	
129-00-0	Pyrene	ND	36	11	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	9.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	37%		10-109%

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Report of Analysis

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Client Sample ID:	RI-SB5 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-11	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	90.9
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	38%		10-105%
118-79-6	2,4,6-Tribromophenol	51%		10-135%
4165-60-0	Nitrobenzene-d5	43%		10-119%
321-60-8	2-Fluorobiphenyl	45%		18-112%
1718-51-0	Terphenyl-d14	54%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.05	160	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB5 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-11	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	90.9
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G41427.D	1	02/21/22 17:44	TL	02/16/22 01:50	OP38182	G8G1769
Run #2							

	Initial Weight	Final Volume
Run #1	15.9 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.69	0.57	ug/kg	
319-84-6	alpha-BHC	ND	0.69	0.56	ug/kg	
319-85-7	beta-BHC	ND	0.69	0.63	ug/kg	
319-86-8	delta-BHC	ND	0.69	0.66	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.69	0.51	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.69	0.56	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.69	0.31	ug/kg	
60-57-1	Dieldrin	ND	0.69	0.48	ug/kg	
72-54-8	4,4' -DDD	ND	0.69	0.64	ug/kg	
72-55-9	4,4' -DDE	ND	0.69	0.61	ug/kg	
50-29-3	4,4' -DDT	ND	0.69	0.61	ug/kg	
72-20-8	Endrin	ND	0.69	0.54	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.69	0.54	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.69	0.39	ug/kg	
959-98-8	Endosulfan-I	ND	0.69	0.40	ug/kg	
33213-65-9	Endosulfan-II	ND	0.69	0.43	ug/kg	
76-44-8	Heptachlor	ND	0.69	0.60	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.69	0.49	ug/kg	
72-43-5	Methoxychlor	ND	1.4	0.55	ug/kg	
53494-70-5	Endrin ketone ^a	ND	0.69	0.50	ug/kg	
8001-35-2	Toxaphene	ND	17	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	115%		14-145%
877-09-8	Tetrachloro-m-xylene	109%		14-145%
2051-24-3	Decachlorobiphenyl	121%		10-197%
2051-24-3	Decachlorobiphenyl	116%		10-197%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB5 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-11	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	90.9
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G114216.D	1	02/18/22 04:15	TL	02/16/22 13:50	OP38183	G5G2905
Run #2							

	Initial Weight	Final Volume
Run #1	15.9 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	16	ug/kg	
11104-28-2	Aroclor 1221	ND	35	21	ug/kg	
11141-16-5	Aroclor 1232	ND	35	22	ug/kg	
53469-21-9	Aroclor 1242	ND	35	14	ug/kg	
12672-29-6	Aroclor 1248	ND	35	31	ug/kg	
11097-69-1	Aroclor 1254	ND	35	19	ug/kg	
11096-82-5	Aroclor 1260	ND	35	15	ug/kg	
11100-14-4	Aroclor 1268	ND	35	15	ug/kg	
37324-23-5	Aroclor 1262	ND	35	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	118%		10-163%
877-09-8	Tetrachloro-m-xylene	131%		10-163%
2051-24-3	Decachlorobiphenyl	139%		10-215%
2051-24-3	Decachlorobiphenyl	134%		10-215%

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Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB5 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-11	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	90.9
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	16400	54	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Antimony ^a	< 11	11	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Arsenic ^a	< 11	11	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Barium	135	22	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Beryllium ^a	< 1.1	1.1	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Cadmium	< 0.54	0.54	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Calcium	1530	540	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Chromium	27.8	1.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cobalt	15.4	5.4	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Copper ^a	32.1	13	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Iron	33400	270	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Lead	5.8	2.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Magnesium	6280	540	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Manganese	527	1.6	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	< 0.035	0.035	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹	SW846 7471B ⁵
Nickel	28.1	4.3	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Potassium	6420	1100	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Selenium ^a	< 11	11	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Silver ^a	< 2.7	2.7	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Sodium	< 1100	1100	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Thallium ^a	< 5.4	5.4	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Vanadium	44.4	5.4	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Zinc	83.2	5.4	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Instrument QC Batch: MA51931

(4) Prep QC Batch: MP31339

(5) Prep QC Batch: MP31346

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB5 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-11	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	90.9
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.25	0.25	mg/kg	1	02/17/22 13:04	MM	SW846 9012B/LACHAT
Solids, Percent	90.9		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.17
4

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB5 (9.5-10')	
Lab Sample ID:	JD39775-11A	
Matrix:	SO - Soil	Date Sampled: 02/15/22
Method:	EPA 537M BY ID IN HOUSE	Date Received: 02/15/22
Project:	1001 Whitlock Avenue, Bronx, NY	Percent Solids: 90.9

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55190.D	1	02/25/22 21:30	AFL	02/18/22 08:30	F:OP89836	F:S3Q762
Run #2							

	Initial Weight	Final Volume
Run #1	1.99 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.42	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.28	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.55	0.28	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.55	0.28	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.55	0.28	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.55	0.28	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.55	0.28	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.55	0.28	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.55	0.28	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.55	0.29	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.55	0.28	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.55	0.28	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.55	0.28	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.55	0.28	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.55	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.55	0.28	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.55	0.28	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.1	0.55	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.55	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB5 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-11A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	90.9
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	98%		40-140%
	13C5-PFPeA	95%		50-150%
	13C5-PFHxA	97%		50-150%
	13C4-PFHpA	99%		50-150%
	13C8-PFOA	97%		50-150%
	13C9-PFNA	101%		50-150%
	13C6-PFDA	103%		50-150%
	13C7-PFUnDA	104%		40-140%
	13C2-PFDoDA	94%		40-140%
	13C2-PFTeDA	99%		30-130%
	13C3-PFBS	99%		50-150%
	13C3-PFHxS	98%		50-150%
	13C8-PFOS	101%		50-150%
	13C8-FOSA	108%		30-130%
	d3-MeFOSAA	91%		40-140%
	d5-EtFOSAA	95%		40-140%
	13C2-6:2FTS	99%		50-150%
	13C2-8:2FTS	100%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
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Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB5 (14.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-12	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	94.2
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173639.D	1	02/16/22 22:15	PS	02/16/22 14:00	n/a	V3C7641
Run #2							

	Initial Weight
Run #1	6.0 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	8.8	3.7	ug/kg	
71-43-2	Benzene	ND	0.44	0.40	ug/kg	
74-97-5	Bromochloromethane	ND	4.4	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	1.8	0.38	ug/kg	
75-25-2	Bromoform	ND	4.4	1.2	ug/kg	
74-83-9	Bromomethane	ND	4.4	0.68	ug/kg	
78-93-3	2-Butanone (MEK)	ND	8.8	2.1	ug/kg	
75-15-0	Carbon disulfide	ND	1.8	0.47	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.8	0.55	ug/kg	
108-90-7	Chlorobenzene	ND	1.8	0.41	ug/kg	
75-00-3	Chloroethane	ND	4.4	0.52	ug/kg	
67-66-3	Chloroform	ND	1.8	0.46	ug/kg	
74-87-3	Chloromethane	ND	4.4	1.7	ug/kg	
110-82-7	Cyclohexane	ND	1.8	0.58	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.8	0.61	ug/kg	
124-48-1	Dibromochloromethane	ND	1.8	0.50	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.88	0.37	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.88	0.48	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.88	0.44	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.88	0.44	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.4	0.64	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.88	0.44	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.88	0.42	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.88	0.58	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.88	0.74	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.88	0.54	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.8	0.42	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.8	0.42	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.8	0.40	ug/kg	
100-41-4	Ethylbenzene	ND	0.88	0.40	ug/kg	
76-13-1	Freon 113	ND	4.4	2.4	ug/kg	
591-78-6	2-Hexanone	ND	4.4	1.9	ug/kg	

ND = Not detected MDL = Method Detection Limit

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Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB5 (14.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-12	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	94.2
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.8	1.3	ug/kg	
79-20-9	Methyl Acetate	ND	4.4	1.2	ug/kg	
108-87-2	Methylcyclohexane	ND	1.8	0.77	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.88	0.41	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.4	2.0	ug/kg	
75-09-2	Methylene chloride	ND	4.4	2.3	ug/kg	
100-42-5	Styrene	ND	1.8	0.36	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.8	0.53	ug/kg	
127-18-4	Tetrachloroethene	ND	1.8	0.51	ug/kg	
108-88-3	Toluene	ND	0.88	0.46	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.4	2.2	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.4	2.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.8	0.43	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.8	0.49	ug/kg	
79-01-6	Trichloroethene	ND	0.88	0.67	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.4	0.61	ug/kg	
75-01-4	Vinyl chloride ^a	ND	1.8	0.43	ug/kg	
	m,p-Xylene	ND	0.88	0.79	ug/kg	
95-47-6	o-Xylene	ND	0.88	0.41	ug/kg	
1330-20-7	Xylene (total)	ND	0.88	0.41	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		80-124%
17060-07-0	1,2-Dichloroethane-D4	97%		75-133%
2037-26-5	Toluene-D8	100%		79-125%
460-00-4	4-Bromofluorobenzene	102%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	RI-SB5 (14.5-15')		
Lab Sample ID:	JD39775-12	Date Sampled:	02/15/22
Matrix:	SO - Soil	Date Received:	02/15/22
Method:	SW846 8270E SW846 3546	Percent Solids:	94.2
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P147614.D	1	02/18/22 22:35	KLS	02/16/22 11:30	OP38180	EP6812
Run #2							

	Initial Weight	Final Volume
Run #1	31.4 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	68	17	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	21	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	29	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	60	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	170	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	170	36	ug/kg	
95-48-7	2-Methylphenol	ND	68	22	ug/kg	
	3&4-Methylphenol	ND	68	28	ug/kg	
88-75-5	2-Nitrophenol	ND	170	22	ug/kg	
100-02-7	4-Nitrophenol	ND	340	90	ug/kg	
87-86-5	Pentachlorophenol	ND	140	32	ug/kg	
108-95-2	Phenol	ND	68	18	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	170	22	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	25	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	20	ug/kg	
83-32-9	Acenaphthene	ND	34	12	ug/kg	
208-96-8	Acenaphthylene	ND	34	17	ug/kg	
98-86-2	Acetophenone	ND	170	7.3	ug/kg	
120-12-7	Anthracene	ND	34	21	ug/kg	
1912-24-9	Atrazine	ND	68	14	ug/kg	
56-55-3	Benzo(a)anthracene	ND	34	9.6	ug/kg	
50-32-8	Benzo(a)pyrene	ND	34	15	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	34	15	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	34	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	34	16	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	68	13	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	68	8.2	ug/kg	
92-52-4	1,1'-Biphenyl	ND	68	4.6	ug/kg	
100-52-7	Benzaldehyde	ND	170	8.4	ug/kg	
91-58-7	2-Chloronaphthalene	ND	68	8.0	ug/kg	
106-47-8	4-Chloroaniline	ND	170	12	ug/kg	
86-74-8	Carbazole	ND	68	4.9	ug/kg	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB5 (14.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-12	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	94.2
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	68	13	ug/kg	
218-01-9	Chrysene	ND	34	11	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	68	7.2	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	68	15	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	68	12	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	68	11	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	34	10	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	34	17	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	68	28	ug/kg	
123-91-1	1,4-Dioxane	ND	34	22	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	34	15	ug/kg	
132-64-9	Dibenzofuran	ND	68	14	ug/kg	
84-74-2	Di-n-butyl phthalate	39.4	68	5.5	ug/kg	JB
117-84-0	Di-n-octyl phthalate	ND	68	8.4	ug/kg	
84-66-2	Diethyl phthalate	ND	68	7.2	ug/kg	
131-11-3	Dimethyl phthalate	ND	68	6.0	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	68	7.9	ug/kg	
206-44-0	Fluoranthene	ND	34	15	ug/kg	
86-73-7	Fluorene	ND	34	16	ug/kg	
118-74-1	Hexachlorobenzene	ND	68	8.6	ug/kg	
87-68-3	Hexachlorobutadiene	ND	34	14	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	340	13	ug/kg	
67-72-1	Hexachloroethane	ND	170	17	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	34	16	ug/kg	
78-59-1	Isophorone	ND	68	7.2	ug/kg	
91-57-6	2-Methylnaphthalene	ND	34	7.6	ug/kg	
88-74-4	2-Nitroaniline	ND	170	8.0	ug/kg	
99-09-2	3-Nitroaniline	ND	170	8.5	ug/kg	
100-01-6	4-Nitroaniline	ND	170	8.8	ug/kg	
91-20-3	Naphthalene	ND	34	9.5	ug/kg	
98-95-3	Nitrobenzene	ND	68	13	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	68	9.8	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	12	ug/kg	
85-01-8	Phenanthrene	ND	34	11	ug/kg	
129-00-0	Pyrene	ND	34	11	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	170	8.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	24%		10-109%

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Report of Analysis

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Client Sample ID:	RI-SB5 (14.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-12	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	94.2
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	24%		10-105%
118-79-6	2,4,6-Tribromophenol	37%		10-135%
4165-60-0	Nitrobenzene-d5	23%		10-119%
321-60-8	2-Fluorobiphenyl	29%		18-112%
1718-51-0	Terphenyl-d14	37%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
10544-50-0	Cyclic octaatomic sulfur	10.52	390	ug/kg	JN
	Total TIC, Semi-Volatile		390	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

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 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB5 (14.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-12	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	94.2
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	8G41565.D	1	02/24/22 20:01	CL	02/16/22 01:50	OP38182	G8G1775
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.70	0.58	ug/kg	
319-84-6	alpha-BHC	ND	0.70	0.57	ug/kg	
319-85-7	beta-BHC	ND	0.70	0.64	ug/kg	
319-86-8	delta-BHC	ND	0.70	0.67	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.70	0.52	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.70	0.57	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.70	0.32	ug/kg	
60-57-1	Dieldrin	ND	0.70	0.48	ug/kg	
72-54-8	4,4' -DDD	ND	0.70	0.65	ug/kg	
72-55-9	4,4' -DDE	ND	0.70	0.62	ug/kg	
50-29-3	4,4' -DDT	ND	0.70	0.62	ug/kg	
72-20-8	Endrin	ND	0.70	0.55	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.70	0.55	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.70	0.40	ug/kg	
959-98-8	Endosulfan-I	ND	0.70	0.40	ug/kg	
33213-65-9	Endosulfan-II	ND	0.70	0.44	ug/kg	
76-44-8	Heptachlor	ND	0.70	0.61	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.70	0.49	ug/kg	
72-43-5	Methoxychlor	ND	1.4	0.56	ug/kg	
53494-70-5	Endrin ketone ^b	ND	0.70	0.51	ug/kg	
8001-35-2	Toxaphene	ND	18	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	110%		14-145%
877-09-8	Tetrachloro-m-xylene	102%		14-145%
2051-24-3	Decachlorobiphenyl	117%		10-197%
2051-24-3	Decachlorobiphenyl	112%		10-197%

(a) Had TBA cleanup.

(b) Associated CCV outside of control limits high, sample was ND.

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N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	RI-SB5 (14.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-12	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	94.2
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX2478313.D	1	02/23/22 18:06	CL	02/16/22 13:50	OP38183	GXX7736
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	16	ug/kg	
11104-28-2	Aroclor 1221	ND	35	22	ug/kg	
11141-16-5	Aroclor 1232	ND	35	22	ug/kg	
53469-21-9	Aroclor 1242	ND	35	14	ug/kg	
12672-29-6	Aroclor 1248	ND	35	31	ug/kg	
11097-69-1	Aroclor 1254	ND	35	19	ug/kg	
11096-82-5	Aroclor 1260	ND	35	15	ug/kg	
11100-14-4	Aroclor 1268	ND	35	15	ug/kg	
37324-23-5	Aroclor 1262	ND	35	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	163%		10-163%
877-09-8	Tetrachloro-m-xylene	165% ^a		10-163%
2051-24-3	Decachlorobiphenyl	151%		10-215%
2051-24-3	Decachlorobiphenyl	165%		10-215%

(a) High percent recoveries and no positive found in the sample.

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 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB5 (14.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-12	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	94.2
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	19500	52	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Antimony ^a	< 10	10	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Arsenic ^a	< 10	10	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Barium	198	21	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Beryllium ^a	< 1.0	1.0	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Cadmium	< 0.52	0.52	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Calcium	1040	520	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Chromium	43.0	1.0	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cobalt	16.1	5.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Copper ^a	33.0	13	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Iron	36000	260	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Lead	5.6	2.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Magnesium	8500	520	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Manganese	263	1.5	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	< 0.034	0.034	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹	SW846 7471B ⁵
Nickel	27.6	4.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Potassium	12600	1000	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Selenium ^a	< 10	10	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Silver ^a	< 2.6	2.6	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Sodium	< 1000	1000	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Thallium ^a	< 5.2	5.2	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Vanadium	55.3	5.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Zinc	92.2	5.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Instrument QC Batch: MA51931

(4) Prep QC Batch: MP31339

(5) Prep QC Batch: MP31346

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB5 (14.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-12	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	94.2
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.30	0.30	mg/kg	1	02/17/22 13:05	MM	SW846 9012B/LACHAT
Solids, Percent	94.2		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	RI-SB5 (14.5-15')	
Lab Sample ID:	JD39775-12A	Date Sampled: 02/15/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 94.2
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55191.D	1	02/25/22 21:46	AFL	02/18/22 08:30	F:OP89836	F:S3Q762
Run #2							

	Initial Weight	Final Volume
Run #1	2.04 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.0	0.40	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.52	0.26	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.52	0.26	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.52	0.26	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.52	0.26	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.52	0.26	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.52	0.26	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.52	0.26	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.52	0.26	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.52	0.28	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.52	0.26	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.52	0.26	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.52	0.26	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.52	0.26	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.52	0.21	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.52	0.26	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.52	0.26	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.0	0.52	ug/kg	
2991-50-6	EtFOSAA	ND	1.0	0.52	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.26	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.26	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB5 (14.5-15')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-12A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	94.2
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	76%		40-140%
	13C5-PFPeA	74%		50-150%
	13C5-PFHxA	75%		50-150%
	13C4-PFHpA	77%		50-150%
	13C8-PFOA	77%		50-150%
	13C9-PFNA	78%		50-150%
	13C6-PFDA	81%		50-150%
	13C7-PFUnDA	82%		40-140%
	13C2-PFDoDA	68%		40-140%
	13C2-PFTeDA	80%		30-130%
	13C3-PFBS	77%		50-150%
	13C3-PFHxS	77%		50-150%
	13C8-PFOS	78%		50-150%
	13C8-FOSA	86%		30-130%
	d3-MeFOSAA	70%		40-140%
	d5-EtFOSAA	73%		40-140%
	13C2-6:2FTS	78%		50-150%
	13C2-8:2FTS	82%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB5 (19.5-20')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-13	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.4
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173636.D	1	02/16/22 20:57	PS	02/16/22 14:00	n/a	V3C7641
Run #2							

	Initial Weight
Run #1	5.6 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	47.1	11	4.5	ug/kg	
71-43-2	Benzene	ND	0.55	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.5	0.61	ug/kg	
75-27-4	Bromodichloromethane	ND	2.2	0.47	ug/kg	
75-25-2	Bromoform	ND	5.5	1.5	ug/kg	
74-83-9	Bromomethane	ND	5.5	0.84	ug/kg	
78-93-3	2-Butanone (MEK)	13.2	11	2.7	ug/kg	
75-15-0	Carbon disulfide	ND	2.2	0.59	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.2	0.68	ug/kg	
108-90-7	Chlorobenzene	ND	2.2	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.5	0.65	ug/kg	
67-66-3	Chloroform	ND	2.2	0.57	ug/kg	
74-87-3	Chloromethane	ND	5.5	2.1	ug/kg	
110-82-7	Cyclohexane	ND	2.2	0.72	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.2	0.76	ug/kg	
124-48-1	Dibromochloromethane	ND	2.2	0.61	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.46	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.1	0.60	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.1	0.54	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.1	0.54	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.5	0.80	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.1	0.54	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.52	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.1	0.72	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.1	0.92	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.1	0.67	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.2	0.52	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.2	0.52	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.50	ug/kg	
76-13-1	Freon 113	ND	5.5	2.9	ug/kg	
591-78-6	2-Hexanone	ND	5.5	2.3	ug/kg	

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB5 (19.5-20')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-13	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.4
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.2	1.6	ug/kg	
79-20-9	Methyl Acetate	ND	5.5	1.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.2	0.96	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.51	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.5	2.5	ug/kg	
75-09-2	Methylene chloride	ND	5.5	2.9	ug/kg	
100-42-5	Styrene	ND	2.2	0.44	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.2	0.66	ug/kg	
127-18-4	Tetrachloroethene	ND	2.2	0.64	ug/kg	
108-88-3	Toluene	ND	1.1	0.58	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.5	2.7	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.5	2.7	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.2	0.53	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.2	0.61	ug/kg	
79-01-6	Trichloroethene	ND	1.1	0.84	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.5	0.75	ug/kg	
75-01-4	Vinyl chloride ^a	ND	2.2	0.53	ug/kg	
	m,p-Xylene	ND	1.1	0.98	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.50	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		80-124%
17060-07-0	1,2-Dichloroethane-D4	97%		75-133%
2037-26-5	Toluene-D8	99%		79-125%
460-00-4	4-Bromofluorobenzene	104%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
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 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	RI-SB5 (19.5-20')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-13	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.4
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P147615.D	1	02/18/22 22:59	KLS	02/16/22 11:30	OP38180	EP6812
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	82	20	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	200	25	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	200	35	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	200	73	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	200	150	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	200	44	ug/kg	
95-48-7	2-Methylphenol	ND	82	26	ug/kg	
	3&4-Methylphenol	ND	82	34	ug/kg	
88-75-5	2-Nitrophenol	ND	200	27	ug/kg	
100-02-7	4-Nitrophenol	ND	410	110	ug/kg	
87-86-5	Pentachlorophenol	ND	160	38	ug/kg	
108-95-2	Phenol	ND	82	21	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	200	27	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	200	31	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	200	24	ug/kg	
83-32-9	Acenaphthene	ND	41	14	ug/kg	
208-96-8	Acenaphthylene	ND	41	21	ug/kg	
98-86-2	Acetophenone	ND	200	8.8	ug/kg	
120-12-7	Anthracene	ND	41	25	ug/kg	
1912-24-9	Atrazine	ND	82	18	ug/kg	
56-55-3	Benzo(a)anthracene	ND	41	12	ug/kg	
50-32-8	Benzo(a)pyrene	ND	41	19	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	41	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	41	20	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	41	19	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	82	16	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	82	10	ug/kg	
92-52-4	1,1'-Biphenyl	ND	82	5.6	ug/kg	
100-52-7	Benzaldehyde	ND	200	10	ug/kg	
91-58-7	2-Chloronaphthalene	ND	82	9.7	ug/kg	
106-47-8	4-Chloroaniline	ND	200	15	ug/kg	
86-74-8	Carbazole	ND	82	5.9	ug/kg	

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J = Indicates an estimated value

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB5 (19.5-20')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-13	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.4
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	82	16	ug/kg	
218-01-9	Chrysene	ND	41	13	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	82	8.8	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	82	18	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	82	15	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	82	13	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	41	13	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	41	21	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	82	34	ug/kg	
123-91-1	1,4-Dioxane	ND	41	27	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	41	18	ug/kg	
132-64-9	Dibenzofuran	ND	82	17	ug/kg	
84-74-2	Di-n-butyl phthalate	81.7	82	6.7	ug/kg	JB
117-84-0	Di-n-octyl phthalate	ND	82	10	ug/kg	
84-66-2	Diethyl phthalate	ND	82	8.7	ug/kg	
131-11-3	Dimethyl phthalate	ND	82	7.3	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	82	9.6	ug/kg	
206-44-0	Fluoranthene	ND	41	18	ug/kg	
86-73-7	Fluorene	ND	41	19	ug/kg	
118-74-1	Hexachlorobenzene	ND	82	10	ug/kg	
87-68-3	Hexachlorobutadiene	ND	41	16	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	410	16	ug/kg	
67-72-1	Hexachloroethane	ND	200	20	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	41	19	ug/kg	
78-59-1	Isophorone	ND	82	8.8	ug/kg	
91-57-6	2-Methylnaphthalene	ND	41	9.3	ug/kg	
88-74-4	2-Nitroaniline	ND	200	9.7	ug/kg	
99-09-2	3-Nitroaniline	ND	200	10	ug/kg	
100-01-6	4-Nitroaniline	ND	200	11	ug/kg	
91-20-3	Naphthalene	ND	41	12	ug/kg	
98-95-3	Nitrobenzene	ND	82	16	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	82	12	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	200	15	ug/kg	
85-01-8	Phenanthrene	ND	41	14	ug/kg	
129-00-0	Pyrene	ND	41	13	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	200	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	38%		10-109%

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Report of Analysis

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Client Sample ID:	RI-SB5 (19.5-20')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-13	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.4
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	38%		10-105%
118-79-6	2,4,6-Tribromophenol	51%		10-135%
4165-60-0	Nitrobenzene-d5	43%		10-119%
321-60-8	2-Fluorobiphenyl	48%		18-112%
1718-51-0	Terphenyl-d14	54%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
10544-50-0	Cyclic octaatomic sulfur	10.52	180	ug/kg	JN
	Total TIC, Semi-Volatile		180	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

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J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB5 (19.5-20')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-13	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.4
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	8G41566.D	1	02/24/22 20:17	CL	02/16/22 01:50	OP38182	G8G1775
Run #2							

	Initial Weight	Final Volume
Run #1	16.2 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.76	0.62	ug/kg	
319-84-6	alpha-BHC	ND	0.76	0.62	ug/kg	
319-85-7	beta-BHC	ND	0.76	0.69	ug/kg	
319-86-8	delta-BHC	ND	0.76	0.73	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.76	0.56	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.76	0.61	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.76	0.34	ug/kg	
60-57-1	Dieldrin	ND	0.76	0.52	ug/kg	
72-54-8	4,4' -DDD	ND	0.76	0.70	ug/kg	
72-55-9	4,4' -DDE	ND	0.76	0.67	ug/kg	
50-29-3	4,4' -DDT	ND	0.76	0.67	ug/kg	
72-20-8	Endrin	ND	0.76	0.59	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.76	0.59	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.76	0.43	ug/kg	
959-98-8	Endosulfan-I	ND	0.76	0.44	ug/kg	
33213-65-9	Endosulfan-II	ND	0.76	0.47	ug/kg	
76-44-8	Heptachlor	ND	0.76	0.65	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.76	0.53	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.60	ug/kg	
53494-70-5	Endrin ketone ^b	ND	0.76	0.55	ug/kg	
8001-35-2	Toxaphene	ND	19	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	123%		14-145%
877-09-8	Tetrachloro-m-xylene	109%		14-145%
2051-24-3	Decachlorobiphenyl	139%		10-197%
2051-24-3	Decachlorobiphenyl	135%		10-197%

(a) Had TBA cleanup.

(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

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Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB5 (19.5-20')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-13	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.4
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX2478314.D	1	02/23/22 18:23	CL	02/16/22 13:50	OP38183	GXX7736
Run #2							

	Initial Weight	Final Volume
Run #1	16.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	38	18	ug/kg	
11104-28-2	Aroclor 1221	ND	38	24	ug/kg	
11141-16-5	Aroclor 1232	ND	38	24	ug/kg	
53469-21-9	Aroclor 1242	ND	38	16	ug/kg	
12672-29-6	Aroclor 1248	ND	38	34	ug/kg	
11097-69-1	Aroclor 1254	ND	38	20	ug/kg	
11096-82-5	Aroclor 1260	ND	38	16	ug/kg	
11100-14-4	Aroclor 1268	ND	38	16	ug/kg	
37324-23-5	Aroclor 1262	ND	38	25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	153%		10-163%
877-09-8	Tetrachloro-m-xylene	157%		10-163%
2051-24-3	Decachlorobiphenyl	156%		10-215%
2051-24-3	Decachlorobiphenyl	170%		10-215%

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Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB5 (19.5-20')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-13	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.4
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	16700	61	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Antimony	< 2.4	2.4	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Arsenic	3.1	2.4	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Barium	98.2	24	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Beryllium	0.73	0.24	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Cadmium	< 0.61	0.61	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Calcium	1850	610	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Chromium	23.7	1.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Cobalt	10.3	6.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Copper	19.0	3.0	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Iron	20300	61	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Lead	25.2	2.4	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Magnesium	3650	610	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Manganese	458	1.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Mercury	< 0.036	0.036	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹ SW846 7471B ⁴
Nickel	20.3	4.9	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Potassium	< 1200	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Selenium	< 2.4	2.4	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Silver	< 0.61	0.61	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Sodium	< 1200	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Thallium	< 1.2	1.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Vanadium	38.4	6.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³
Zinc	55.8	6.1	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ² SW846 3050B ³

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Prep QC Batch: MP31339

(4) Prep QC Batch: MP31346

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB5 (19.5-20')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-13	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.4
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.26	0.26	mg/kg	1	02/17/22 13:07	MM	SW846 9012B/LACHAT
Solids, Percent	81.4		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.21
4

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB5 (19.5-20')	
Lab Sample ID:	JD39775-13A	Date Sampled: 02/15/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 81.4
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55192.D	1	02/25/22 22:03	AFL	02/18/22 08:30	F:OP89836	F:S3Q762
Run #2							

	Initial Weight	Final Volume
Run #1	2.01 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.46	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.61	0.31	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.61	0.31	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.61	0.31	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.61	0.31	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.61	0.31	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.61	0.31	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.61	0.31	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.61	0.31	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.61	0.32	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.61	0.31	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.61	0.31	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.61	0.31	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.61	0.31	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.61	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.61	0.31	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.61	0.31	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.61	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.61	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.31	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.31	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB5 (19.5-20')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-13A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.4
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	95%		40-140%
	13C5-PFPeA	93%		50-150%
	13C5-PFHxA	93%		50-150%
	13C4-PFHpA	95%		50-150%
	13C8-PFOA	96%		50-150%
	13C9-PFNA	98%		50-150%
	13C6-PFDA	102%		50-150%
	13C7-PFUnDA	103%		40-140%
	13C2-PFDoDA	90%		40-140%
	13C2-PFTeDA	95%		30-130%
	13C3-PFBS	96%		50-150%
	13C3-PFHxS	96%		50-150%
	13C8-PFOS	98%		50-150%
	13C8-FOSA	87%		30-130%
	d3-MeFOSAA	96%		40-140%
	d5-EtFOSAA	98%		40-140%
	13C2-6:2FTS	97%		50-150%
	13C2-8:2FTS	104%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB6 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-14	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242299.D	1	02/16/22 19:08	PS	02/16/22 14:00	n/a	VI9839
Run #2							

	Initial Weight
Run #1	5.8 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	4.3	ug/kg	
71-43-2	Benzene	ND	0.52	0.47	ug/kg	
74-97-5	Bromochloromethane	ND	5.2	0.58	ug/kg	
75-27-4	Bromodichloromethane	ND	2.1	0.44	ug/kg	
75-25-2	Bromoform	ND	5.2	1.4	ug/kg	
74-83-9	Bromomethane	ND	5.2	0.79	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/kg	
75-15-0	Carbon disulfide	ND	2.1	0.55	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.1	0.64	ug/kg	
108-90-7	Chlorobenzene	ND	2.1	0.47	ug/kg	
75-00-3	Chloroethane	ND	5.2	0.61	ug/kg	
67-66-3	Chloroform	ND	2.1	0.54	ug/kg	
74-87-3	Chloromethane	ND	5.2	2.0	ug/kg	
110-82-7	Cyclohexane	ND	2.1	0.68	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	0.72	ug/kg	
124-48-1	Dibromochloromethane	ND	2.1	0.58	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.43	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.56	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.51	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.2	0.75	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.51	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.49	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.68	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.87	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.63	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.1	0.49	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	0.49	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	0.47	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.47	ug/kg	
76-13-1	Freon 113	ND	5.2	2.8	ug/kg	
591-78-6	2-Hexanone	ND	5.2	2.2	ug/kg	

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RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB6 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-14	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.1	1.5	ug/kg	
79-20-9	Methyl Acetate	ND	5.2	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.1	0.90	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.48	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.2	2.3	ug/kg	
75-09-2	Methylene chloride	ND	5.2	2.7	ug/kg	
100-42-5	Styrene	ND	2.1	0.42	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.62	ug/kg	
127-18-4	Tetrachloroethene	ND	2.1	0.60	ug/kg	
108-88-3	Toluene	ND	1.0	0.54	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.2	2.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	2.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.1	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.57	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.79	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.2	0.71	ug/kg	
75-01-4	Vinyl chloride	ND	2.1	0.50	ug/kg	
	m,p-Xylene	ND	1.0	0.93	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.47	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.47	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		80-124%
17060-07-0	1,2-Dichloroethane-D4	119%		75-133%
2037-26-5	Toluene-D8	100%		79-125%
460-00-4	4-Bromofluorobenzene	94%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	RI-SB6 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-14	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P147618.D	1	02/19/22 00:13	KLS	02/16/22 11:30	OP38180	EP6812
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	80	20	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	200	24	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	200	34	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	200	71	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	200	150	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	200	43	ug/kg	
95-48-7	2-Methylphenol	ND	80	25	ug/kg	
	3&4-Methylphenol	ND	80	33	ug/kg	
88-75-5	2-Nitrophenol	ND	200	26	ug/kg	
100-02-7	4-Nitrophenol	ND	400	110	ug/kg	
87-86-5	Pentachlorophenol	ND	160	37	ug/kg	
108-95-2	Phenol	ND	80	21	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	200	26	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	200	30	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	200	24	ug/kg	
83-32-9	Acenaphthene	ND	40	14	ug/kg	
208-96-8	Acenaphthylene	56.5	40	20	ug/kg	
98-86-2	Acetophenone	ND	200	8.6	ug/kg	
120-12-7	Anthracene	60.3	40	24	ug/kg	
1912-24-9	Atrazine	ND	80	17	ug/kg	
56-55-3	Benzo(a)anthracene	206	40	11	ug/kg	
50-32-8	Benzo(a)pyrene	200	40	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	228	40	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	123	40	20	ug/kg	
207-08-9	Benzo(k)fluoranthene	89.9	40	19	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	80	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	80	9.7	ug/kg	
92-52-4	1,1'-Biphenyl	ND	80	5.5	ug/kg	
100-52-7	Benzaldehyde	ND	200	9.9	ug/kg	
91-58-7	2-Chloronaphthalene	ND	80	9.5	ug/kg	
106-47-8	4-Chloroaniline	ND	200	14	ug/kg	
86-74-8	Carbazole	18.3	80	5.8	ug/kg	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB6 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-14	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	80	16	ug/kg	
218-01-9	Chrysene	188	40	13	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	80	8.5	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	80	17	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	80	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	80	13	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	40	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	40	20	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	80	33	ug/kg	
123-91-1	1,4-Dioxane	ND	40	26	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	56.2	40	18	ug/kg	
132-64-9	Dibenzofuran	ND	80	16	ug/kg	
84-74-2	Di-n-butyl phthalate	21.0	80	6.5	ug/kg	JB
117-84-0	Di-n-octyl phthalate	ND	80	9.9	ug/kg	
84-66-2	Diethyl phthalate	ND	80	8.5	ug/kg	
131-11-3	Dimethyl phthalate	ND	80	7.1	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	80	9.3	ug/kg	
206-44-0	Fluoranthene	407	40	18	ug/kg	
86-73-7	Fluorene	18.7	40	18	ug/kg	J
118-74-1	Hexachlorobenzene	ND	80	10	ug/kg	
87-68-3	Hexachlorobutadiene	ND	40	16	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	400	16	ug/kg	
67-72-1	Hexachloroethane	ND	200	20	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	164	40	19	ug/kg	
78-59-1	Isophorone	ND	80	8.5	ug/kg	
91-57-6	2-Methylnaphthalene	ND	40	9.0	ug/kg	
88-74-4	2-Nitroaniline	ND	200	9.4	ug/kg	
99-09-2	3-Nitroaniline	ND	200	9.9	ug/kg	
100-01-6	4-Nitroaniline	ND	200	10	ug/kg	
91-20-3	Naphthalene	11.6	40	11	ug/kg	J
98-95-3	Nitrobenzene	ND	80	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	80	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	200	15	ug/kg	
85-01-8	Phenanthrene	219	40	13	ug/kg	
129-00-0	Pyrene	340	40	13	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	200	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	26%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	RI-SB6 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-14	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	27%		10-105%
118-79-6	2,4,6-Tribromophenol	37%		10-135%
4165-60-0	Nitrobenzene-d5	29%		10-119%
321-60-8	2-Fluorobiphenyl	35%		18-112%
1718-51-0	Terphenyl-d14	37%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.05	190	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
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 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB6 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-14	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G41454.D	1	02/22/22 13:11	TL	02/16/22 01:50	OP38182	G8G1771
Run #2							

	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.76	0.63	ug/kg	
319-84-6	alpha-BHC	ND	0.76	0.62	ug/kg	
319-85-7	beta-BHC	ND	0.76	0.69	ug/kg	
319-86-8	delta-BHC	ND	0.76	0.73	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.76	0.56	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.76	0.62	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.76	0.35	ug/kg	
60-57-1	Dieldrin	ND	0.76	0.52	ug/kg	
72-54-8	4,4' -DDD	1.2	0.76	0.70	ug/kg	
72-55-9	4,4' -DDE	ND	0.76	0.67	ug/kg	
50-29-3	4,4' -DDT ^a	0.75	0.76	0.68	ug/kg	J
72-20-8	Endrin	ND	0.76	0.59	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.76	0.60	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.76	0.43	ug/kg	
959-98-8	Endosulfan-I	ND	0.76	0.44	ug/kg	
33213-65-9	Endosulfan-II	ND	0.76	0.48	ug/kg	
76-44-8	Heptachlor	ND	0.76	0.66	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.76	0.53	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.61	ug/kg	
53494-70-5	Endrin ketone ^b	ND	0.76	0.55	ug/kg	
8001-35-2	Toxaphene	ND	19	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	104%		14-145%
877-09-8	Tetrachloro-m-xylene	93%		14-145%
2051-24-3	Decachlorobiphenyl	92%		10-197%
2051-24-3	Decachlorobiphenyl	100%		10-197%

(a) More than 40 % RPD for detected concentrations between the two GC columns.

(b) Associated CCV outside of control limits high, sample was ND.

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	RI-SB6 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-14	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G114223.D	1	02/18/22 06:09	TL	02/16/22 13:50	OP38183	G5G2905
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	40	18	ug/kg	
11104-28-2	Aroclor 1221	ND	40	25	ug/kg	
11141-16-5	Aroclor 1232	ND	40	25	ug/kg	
53469-21-9	Aroclor 1242	ND	40	16	ug/kg	
12672-29-6	Aroclor 1248	ND	40	35	ug/kg	
11097-69-1	Aroclor 1254	ND	40	21	ug/kg	
11096-82-5	Aroclor 1260	ND	40	17	ug/kg	
11100-14-4	Aroclor 1268	ND	40	17	ug/kg	
37324-23-5	Aroclor 1262	ND	40	26	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	96%		10-163%
877-09-8	Tetrachloro-m-xylene	113%		10-163%
2051-24-3	Decachlorobiphenyl	103%		10-215%
2051-24-3	Decachlorobiphenyl	132%		10-215%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	RI-SB6 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-14	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	83.5
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	15700	59	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Antimony ^a	< 12	12	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Arsenic ^a	< 12	12	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Barium	221	23	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Beryllium ^a	< 1.2	1.2	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Cadmium	0.87	0.59	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Calcium	3130	590	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Chromium	29.0	1.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cobalt	14.9	5.9	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Copper ^a	55.6	15	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Iron	33200	290	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Lead	101	2.3	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Magnesium	6120	590	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Manganese	909	1.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	0.15	0.038	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹	SW846 7471B ⁵
Nickel	301	4.7	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Potassium	5410	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Selenium ^a	< 12	12	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Silver ^a	< 2.9	2.9	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Sodium	< 1200	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Thallium ^a	< 5.9	5.9	mg/kg	5	02/17/22	02/18/22	ND	SW846 6010D ³	SW846 3050B ⁴
Vanadium	39.4	5.9	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴
Zinc	177	5.9	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Instrument QC Batch: MA51931

(4) Prep QC Batch: MP31339

(5) Prep QC Batch: MP31346

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB6 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-14	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	83.5
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	0.27	0.27	mg/kg	1	02/17/22 13:08	MM	SW846 9012B/LACHAT
Solids, Percent	83.5		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.23
4

Report of Analysis

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Client Sample ID:	RI-SB6 (4.5-5')	
Lab Sample ID:	JD39775-14A	Date Sampled: 02/15/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 83.5
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55193.D	1	02/25/22 22:19	AFL	02/18/22 08:30	F:OP89836	F:S3Q762
Run #2							

	Initial Weight	Final Volume
Run #1	2.01 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.45	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.60	0.30	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.60	0.30	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.60	0.30	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.60	0.30	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.60	0.30	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.60	0.30	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.60	0.30	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.60	0.30	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.60	0.32	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.60	0.30	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.60	0.30	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.60	0.30	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.60	0.30	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.64	0.60	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.60	0.30	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.60	0.30	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.60	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.60	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	

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Report of Analysis

Client Sample ID:	RI-SB6 (4.5-5')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-14A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	83.5
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	99%		40-140%
	13C5-PFPeA	97%		50-150%
	13C5-PFHxA	98%		50-150%
	13C4-PFHpA	102%		50-150%
	13C8-PFOA	102%		50-150%
	13C9-PFNA	104%		50-150%
	13C6-PFDA	105%		50-150%
	13C7-PFUnDA	104%		40-140%
	13C2-PFDoDA	86%		40-140%
	13C2-PFTeDA	100%		30-130%
	13C3-PFBS	101%		50-150%
	13C3-PFHxS	105%		50-150%
	13C8-PFOS	103%		50-150%
	13C8-FOSA	68%		30-130%
	d3-MeFOSAA	111%		40-140%
	d5-EtFOSAA	111%		40-140%
	13C2-6:2FTS	107%		50-150%
	13C2-8:2FTS	117%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
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Report of Analysis

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Client Sample ID:	RI-SB6 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-15	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242310.D	1	02/17/22 12:54	PS	02/16/22 14:00	n/a	VI9840
Run #2							

	Initial Weight
Run #1	5.9 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	4.3	ug/kg	
71-43-2	Benzene	ND	0.52	0.47	ug/kg	
74-97-5	Bromochloromethane	ND	5.2	0.58	ug/kg	
75-27-4	Bromodichloromethane	ND	2.1	0.44	ug/kg	
75-25-2	Bromoform	ND	5.2	1.4	ug/kg	
74-83-9	Bromomethane ^a	ND	5.2	0.79	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/kg	
75-15-0	Carbon disulfide	ND	2.1	0.55	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.1	0.64	ug/kg	
108-90-7	Chlorobenzene	ND	2.1	0.48	ug/kg	
75-00-3	Chloroethane ^b	ND	5.2	0.61	ug/kg	
67-66-3	Chloroform	ND	2.1	0.54	ug/kg	
74-87-3	Chloromethane	ND	5.2	2.0	ug/kg	
110-82-7	Cyclohexane	ND	2.1	0.68	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	0.72	ug/kg	
124-48-1	Dibromochloromethane	ND	2.1	0.58	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.44	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.57	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.51	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.2	0.75	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.51	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.49	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.68	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.87	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.63	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.1	0.49	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	0.49	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	0.47	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.47	ug/kg	
76-13-1	Freon 113	ND	5.2	2.8	ug/kg	
591-78-6	2-Hexanone	ND	5.2	2.2	ug/kg	

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Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB6 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-15	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.1	1.5	ug/kg	
79-20-9	Methyl Acetate	ND	5.2	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.1	0.91	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.49	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.2	2.4	ug/kg	
75-09-2	Methylene chloride	ND	5.2	2.7	ug/kg	
100-42-5	Styrene	ND	2.1	0.42	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.62	ug/kg	
127-18-4	Tetrachloroethene	ND	2.1	0.60	ug/kg	
108-88-3	Toluene	ND	1.0	0.54	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.2	2.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	2.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.1	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.57	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.79	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.2	0.71	ug/kg	
75-01-4	Vinyl chloride	ND	2.1	0.50	ug/kg	
	m,p-Xylene	ND	1.0	0.93	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.48	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.48	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		80-124%
17060-07-0	1,2-Dichloroethane-D4	117%		75-133%
2037-26-5	Toluene-D8	99%		79-125%
460-00-4	4-Bromofluorobenzene	90%		58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

(b) This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

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Report of Analysis

Page 1 of 3

Client Sample ID:	RI-SB6 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-15	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P147616.D	1	02/18/22 23:24	KLS	02/16/22 11:30	OP38180	EP6812
Run #2							

	Initial Weight	Final Volume
Run #1	30.9 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	79	20	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	200	24	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	200	34	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	200	71	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	200	150	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	200	42	ug/kg	
95-48-7	2-Methylphenol	ND	79	25	ug/kg	
	3&4-Methylphenol	ND	79	33	ug/kg	
88-75-5	2-Nitrophenol	ND	200	26	ug/kg	
100-02-7	4-Nitrophenol	ND	400	110	ug/kg	
87-86-5	Pentachlorophenol	ND	160	37	ug/kg	
108-95-2	Phenol	ND	79	21	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	200	26	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	200	30	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	200	24	ug/kg	
83-32-9	Acenaphthene	ND	40	14	ug/kg	
208-96-8	Acenaphthylene	ND	40	20	ug/kg	
98-86-2	Acetophenone	ND	200	8.5	ug/kg	
120-12-7	Anthracene	ND	40	24	ug/kg	
1912-24-9	Atrazine	ND	79	17	ug/kg	
56-55-3	Benzo(a)anthracene	13.2	40	11	ug/kg	J
50-32-8	Benzo(a)pyrene	31.9	40	18	ug/kg	J
205-99-2	Benzo(b)fluoranthene	ND	40	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	40	20	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	40	18	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	79	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	79	9.7	ug/kg	
92-52-4	1,1'-Biphenyl	ND	79	5.4	ug/kg	
100-52-7	Benzaldehyde	ND	200	9.8	ug/kg	
91-58-7	2-Chloronaphthalene	ND	79	9.4	ug/kg	
106-47-8	4-Chloroaniline	ND	200	14	ug/kg	
86-74-8	Carbazole	ND	79	5.7	ug/kg	

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J = Indicates an estimated value

RL = Reporting Limit

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Report of Analysis

Client Sample ID:	RI-SB6 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-15	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	79	16	ug/kg	
218-01-9	Chrysene	ND	40	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	79	8.5	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	79	17	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	79	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	79	13	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	40	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	40	20	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	79	33	ug/kg	
123-91-1	1,4-Dioxane	ND	40	26	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	24.4	40	18	ug/kg	J
132-64-9	Dibenzofuran	ND	79	16	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	79	6.5	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	79	9.9	ug/kg	
84-66-2	Diethyl phthalate	ND	79	8.4	ug/kg	
131-11-3	Dimethyl phthalate	ND	79	7.1	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	79	9.3	ug/kg	
206-44-0	Fluoranthene	ND	40	18	ug/kg	
86-73-7	Fluorene	ND	40	18	ug/kg	
118-74-1	Hexachlorobenzene	ND	79	10	ug/kg	
87-68-3	Hexachlorobutadiene	ND	40	16	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	400	16	ug/kg	
67-72-1	Hexachloroethane	ND	200	20	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	34.7	40	19	ug/kg	J
78-59-1	Isophorone	ND	79	8.5	ug/kg	
91-57-6	2-Methylnaphthalene	ND	40	9.0	ug/kg	
88-74-4	2-Nitroaniline	ND	200	9.3	ug/kg	
99-09-2	3-Nitroaniline	ND	200	9.9	ug/kg	
100-01-6	4-Nitroaniline	ND	200	10	ug/kg	
91-20-3	Naphthalene	ND	40	11	ug/kg	
98-95-3	Nitrobenzene	ND	79	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	79	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	200	14	ug/kg	
85-01-8	Phenanthrene	ND	40	13	ug/kg	
129-00-0	Pyrene	19.1	40	13	ug/kg	J
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	200	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	32%		10-109%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	RI-SB6 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-15	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	33%		10-105%
118-79-6	2,4,6-Tribromophenol	51%		10-135%
4165-60-0	Nitrobenzene-d5	36%		10-119%
321-60-8	2-Fluorobiphenyl	42%		18-112%
1718-51-0	Terphenyl-d14	50%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	15.52	430	ug/kg	J
	Total TIC, Semi-Volatile		430	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB6 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-15	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G41455.D	1	02/22/22 13:28	TL	02/16/22 01:50	OP38182	G8G1771
Run #2							

	Initial Weight	Final Volume
Run #1	16.0 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.76	0.63	ug/kg	
319-84-6	alpha-BHC	ND	0.76	0.62	ug/kg	
319-85-7	beta-BHC	ND	0.76	0.69	ug/kg	
319-86-8	delta-BHC	ND	0.76	0.73	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.76	0.56	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.76	0.62	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.76	0.35	ug/kg	
60-57-1	Dieldrin	ND	0.76	0.53	ug/kg	
72-54-8	4,4' -DDD	ND	0.76	0.70	ug/kg	
72-55-9	4,4' -DDE	ND	0.76	0.67	ug/kg	
50-29-3	4,4' -DDT	ND	0.76	0.68	ug/kg	
72-20-8	Endrin	ND	0.76	0.59	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.76	0.60	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.76	0.43	ug/kg	
959-98-8	Endosulfan-I	ND	0.76	0.44	ug/kg	
33213-65-9	Endosulfan-II	ND	0.76	0.48	ug/kg	
76-44-8	Heptachlor	ND	0.76	0.66	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.76	0.54	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.61	ug/kg	
53494-70-5	Endrin ketone	ND	0.76	0.55	ug/kg	
8001-35-2	Toxaphene	ND	19	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	99%		14-145%
877-09-8	Tetrachloro-m-xylene	92%		14-145%
2051-24-3	Decachlorobiphenyl	121%		10-197%
2051-24-3	Decachlorobiphenyl	99%		10-197%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB6 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-15	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G114224.D	1	02/18/22 06:25	TL	02/16/22 13:50	OP38183	G5G2905
Run #2							

	Initial Weight	Final Volume
Run #1	16.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	38	18	ug/kg	
11104-28-2	Aroclor 1221	ND	38	24	ug/kg	
11141-16-5	Aroclor 1232	ND	38	24	ug/kg	
53469-21-9	Aroclor 1242	ND	38	16	ug/kg	
12672-29-6	Aroclor 1248	ND	38	34	ug/kg	
11097-69-1	Aroclor 1254	ND	38	21	ug/kg	
11096-82-5	Aroclor 1260	ND	38	16	ug/kg	
11100-14-4	Aroclor 1268	ND	38	16	ug/kg	
37324-23-5	Aroclor 1262	ND	38	25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	99%		10-163%
877-09-8	Tetrachloro-m-xylene	107%		10-163%
2051-24-3	Decachlorobiphenyl	114%		10-215%
2051-24-3	Decachlorobiphenyl	137%		10-215%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB6 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-15	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.7
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	18200	60	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Antimony ^a	< 4.8	4.8	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Arsenic ^a	< 4.8	4.8	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Barium	97.3	24	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Beryllium ^a	0.94	0.48	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Cadmium	< 0.60	0.60	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Calcium	1820	600	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Chromium	32.6	1.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Cobalt	12.0	6.0	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Copper ^a	39.0	6.0	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Iron	25200	120	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Lead	335	2.4	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Magnesium	5360	600	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Manganese	203	1.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Mercury	0.31	0.040	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹
Nickel	23.3	4.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Potassium	2380	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Selenium ^a	< 4.8	4.8	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Silver ^a	< 1.2	1.2	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Sodium	< 1200	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Thallium ^a	< 2.4	2.4	mg/kg	2	02/17/22	02/18/22	ND	SW846 6010D ³
Vanadium	44.7	6.0	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²
Zinc	96.7	6.0	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Instrument QC Batch: MA51931

(4) Prep QC Batch: MP31339

(5) Prep QC Batch: MP31346

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB6 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-15	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.7
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.27	0.27	mg/kg	1	02/17/22 13:09	MM	SW846 9012B/LACHAT
Solids, Percent	81.7		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.25
4

Report of Analysis

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Client Sample ID:	RI-SB6 (9.5-10')	
Lab Sample ID:	JD39775-15A	Date Sampled: 02/15/22
Matrix:	SO - Soil	Date Received: 02/15/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 81.7
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55196.D	1	02/25/22 23:09	AFL	02/18/22 08:30	F:OP89836	F:S3Q762
Run #2							

	Initial Weight	Final Volume
Run #1	2.04 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.46	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.60	0.30	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.60	0.30	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.60	0.30	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.60	0.30	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.60	0.30	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.60	0.30	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.60	0.30	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.60	0.30	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.60	0.32	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.60	0.30	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.60	0.30	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.60	0.30	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.60	0.30	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.60	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.60	0.30	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.60	0.30	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.60	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.60	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB6 (9.5-10')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-15A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	79%		40-140%
	13C5-PFPeA	79%		50-150%
	13C5-PFHxA	79%		50-150%
	13C4-PFHpA	82%		50-150%
	13C8-PFOA	84%		50-150%
	13C9-PFNA	87%		50-150%
	13C6-PFDA	89%		50-150%
	13C7-PFUnDA	89%		40-140%
	13C2-PFDoDA	82%		40-140%
	13C2-PFTeDA	88%		30-130%
	13C3-PFBS	85%		50-150%
	13C3-PFHxS	86%		50-150%
	13C8-PFOS	85%		50-150%
	13C8-FOSA	75%		30-130%
	d3-MeFOSAA	62%		40-140%
	d5-EtFOSAA	69%		40-140%
	13C2-6:2FTS	85%		50-150%
	13C2-8:2FTS	92%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
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J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB6 (12.5-13')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-16	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I242311.D	1	02/17/22 13:16	PS	02/16/22 14:00	n/a	VI9840
Run #2							

	Initial Weight
Run #1	5.6 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	81.1	10	4.2	ug/kg	
71-43-2	Benzene	ND	0.50	0.46	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.56	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.43	ug/kg	
75-25-2	Bromoform	ND	5.0	1.4	ug/kg	
74-83-9	Bromomethane ^a	ND	5.0	0.77	ug/kg	
78-93-3	2-Butanone (MEK)	16.7	10	2.5	ug/kg	
75-15-0	Carbon disulfide	0.62	2.0	0.54	ug/kg	J
56-23-5	Carbon tetrachloride	ND	2.0	0.62	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.46	ug/kg	
75-00-3	Chloroethane ^b	ND	5.0	0.60	ug/kg	
67-66-3	Chloroform	ND	2.0	0.52	ug/kg	
74-87-3	Chloromethane	ND	5.0	2.0	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.66	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.70	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.56	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.42	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.55	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.73	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.47	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.66	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.85	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.62	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.48	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.48	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.46	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.46	ug/kg	
76-13-1	Freon 113	ND	5.0	2.7	ug/kg	
591-78-6	2-Hexanone	ND	5.0	2.1	ug/kg	

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB6 (12.5-13')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-16	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	1.4	ug/kg	
79-20-9	Methyl Acetate	ND	5.0	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.88	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.47	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	2.3	ug/kg	
75-09-2	Methylene chloride	ND	5.0	2.6	ug/kg	
100-42-5	Styrene	ND	2.0	0.41	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.60	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.59	ug/kg	
108-88-3	Toluene	ND	1.0	0.53	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.49	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.56	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.77	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.69	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.49	ug/kg	
	m,p-Xylene	ND	1.0	0.90	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.46	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.46	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		80-124%
17060-07-0	1,2-Dichloroethane-D4	119%		75-133%
2037-26-5	Toluene-D8	101%		79-125%
460-00-4	4-Bromofluorobenzene	91%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	3.80	5.1	ug/kg	J
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

(b) This compound in blank spike is outside in house QC limits bias high. Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	RI-SB6 (12.5-13')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-16	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P147617.D	1	02/18/22 23:49	KLS	02/16/22 11:30	OP38180	EP6812
Run #2							

	Initial Weight	Final Volume
Run #1	30.8 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	73	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	22	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	31	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	65	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	180	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	180	39	ug/kg	
95-48-7	2-Methylphenol	ND	73	23	ug/kg	
	3&4-Methylphenol	ND	73	30	ug/kg	
88-75-5	2-Nitrophenol	ND	180	24	ug/kg	
100-02-7	4-Nitrophenol	ND	370	98	ug/kg	
87-86-5	Pentachlorophenol	ND	150	34	ug/kg	
108-95-2	Phenol	ND	73	19	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	24	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	27	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	22	ug/kg	
83-32-9	Acenaphthene	211	37	13	ug/kg	
208-96-8	Acenaphthylene	ND	37	19	ug/kg	
98-86-2	Acetophenone	ND	180	7.9	ug/kg	
120-12-7	Anthracene	143	37	22	ug/kg	
1912-24-9	Atrazine	ND	73	16	ug/kg	
56-55-3	Benzo(a)anthracene	710	37	10	ug/kg	
50-32-8	Benzo(a)pyrene	705	37	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	891	37	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	511	37	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	314	37	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	73	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	73	9.0	ug/kg	
92-52-4	1,1'-Biphenyl	42.8	73	5.0	ug/kg	J
100-52-7	Benzaldehyde	ND	180	9.1	ug/kg	
91-58-7	2-Chloronaphthalene	ND	73	8.7	ug/kg	
106-47-8	4-Chloroaniline	ND	180	13	ug/kg	
86-74-8	Carbazole	93.1	73	5.3	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB6 (12.5-13')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-16	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	73	14	ug/kg	
218-01-9	Chrysene	664	37	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	73	7.9	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	73	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	73	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	73	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	37	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	37	18	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	73	31	ug/kg	
123-91-1	1,4-Dioxane	ND	37	24	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	131	37	16	ug/kg	
132-64-9	Dibenzofuran	157	73	15	ug/kg	
84-74-2	Di-n-butyl phthalate	62.8	73	6.0	ug/kg	JB
117-84-0	Di-n-octyl phthalate	ND	73	9.1	ug/kg	
84-66-2	Diethyl phthalate	ND	73	7.8	ug/kg	
131-11-3	Dimethyl phthalate	ND	73	6.5	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	73	8.6	ug/kg	
206-44-0	Fluoranthene	1280	37	16	ug/kg	
86-73-7	Fluorene	146	37	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	73	9.3	ug/kg	
87-68-3	Hexachlorobutadiene	ND	37	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	370	15	ug/kg	
67-72-1	Hexachloroethane	ND	180	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	573	37	17	ug/kg	
78-59-1	Isophorone	ND	73	7.9	ug/kg	
91-57-6	2-Methylnaphthalene	119	37	8.3	ug/kg	
88-74-4	2-Nitroaniline	ND	180	8.7	ug/kg	
99-09-2	3-Nitroaniline	ND	180	9.2	ug/kg	
100-01-6	4-Nitroaniline	ND	180	9.5	ug/kg	
91-20-3	Naphthalene	582	37	10	ug/kg	
98-95-3	Nitrobenzene	ND	73	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	73	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	13	ug/kg	
85-01-8	Phenanthrene	819	37	12	ug/kg	
129-00-0	Pyrene	1150	37	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	9.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	30%		10-109%

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB6 (12.5-13')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-16	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	31%		10-105%
118-79-6	2,4,6-Tribromophenol	45%		10-135%
4165-60-0	Nitrobenzene-d5	34%		10-119%
321-60-8	2-Fluorobiphenyl	40%		18-112%
1718-51-0	Terphenyl-d14	46%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	15.53	220	ug/kg	J
	unknown PAH substance	16.03	200	ug/kg	J
	unknown PAH substance	16.37	590	ug/kg	J
	unknown	18.37	180	ug/kg	J
	unknown	19.18	200	ug/kg	J
	Total TIC, Semi-Volatile		1390	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB6 (12.5-13')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-16	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	8G41567.D	1	02/24/22 20:41	CL	02/16/22 01:50	OP38182	G8G1775
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.74	0.61	ug/kg	
319-84-6	alpha-BHC	ND	0.74	0.60	ug/kg	
319-85-7	beta-BHC	ND	0.74	0.67	ug/kg	
319-86-8	delta-BHC	ND	0.74	0.71	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.74	0.54	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.74	0.60	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.74	0.33	ug/kg	
60-57-1	Dieldrin	ND	0.74	0.51	ug/kg	
72-54-8	4,4' -DDD	ND	0.74	0.68	ug/kg	
72-55-9	4,4' -DDE	ND	0.74	0.65	ug/kg	
50-29-3	4,4' -DDT	ND	0.74	0.65	ug/kg	
72-20-8	Endrin	ND	0.74	0.57	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.74	0.58	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.74	0.42	ug/kg	
959-98-8	Endosulfan-I	ND	0.74	0.43	ug/kg	
33213-65-9	Endosulfan-II	ND	0.74	0.46	ug/kg	
76-44-8	Heptachlor	ND	0.74	0.64	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.74	0.52	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.59	ug/kg	
53494-70-5	Endrin ketone ^b	ND	0.74	0.53	ug/kg	
8001-35-2	Toxaphene	ND	18	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	249% ^c		14-145%
877-09-8	Tetrachloro-m-xylene	182% ^c		14-145%
2051-24-3	Decachlorobiphenyl	247% ^c		10-197%
2051-24-3	Decachlorobiphenyl	216% ^c		10-197%

(a) Had TBA cleanup.

(b) Associated CCV outside of control limits high, sample was ND.

(c) High percent recoveries and no positive found in the sample.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB6 (12.5-13')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-16	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX2478315.D	1	02/23/22 18:40	CL	02/16/22 13:50	OP38183	GXX7736
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	17	ug/kg	
11104-28-2	Aroclor 1221	ND	37	23	ug/kg	
11141-16-5	Aroclor 1232	ND	37	24	ug/kg	
53469-21-9	Aroclor 1242	ND	37	15	ug/kg	
12672-29-6	Aroclor 1248	ND	37	33	ug/kg	
11097-69-1	Aroclor 1254	ND	37	20	ug/kg	
11096-82-5	Aroclor 1260	ND	37	16	ug/kg	
11100-14-4	Aroclor 1268	ND	37	16	ug/kg	
37324-23-5	Aroclor 1262	ND	37	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	382% ^a		10-163%
877-09-8	Tetrachloro-m-xylene	391% ^a		10-163%
2051-24-3	Decachlorobiphenyl	398% ^a		10-215%
2051-24-3	Decachlorobiphenyl	741% ^a		10-215%

(a) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB6 (12.5-13')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-16	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.5
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	14200	59	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ³
Antimony	< 2.4	2.4	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ³
Arsenic	2.4	2.4	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ³
Barium	95.6	24	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ³
Beryllium	0.70	0.24	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ³
Cadmium	< 0.59	0.59	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ³
Calcium	1350	590	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ³
Chromium	31.8	1.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ³
Cobalt	13.6	5.9	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ³
Copper	27.2	3.0	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ³
Iron	21300	59	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ³
Lead	10.4	2.4	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ³
Magnesium	3960	590	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ³
Manganese	213	1.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ³
Mercury	0.15	0.035	mg/kg	1	02/21/22	02/21/22	LM	SW846 7471B ¹	SW846 7471B ⁴
Nickel	25.8	4.8	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ³
Potassium	2380	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ³
Selenium	< 2.4	2.4	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ³
Silver	< 0.59	0.59	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ³
Sodium	< 1200	1200	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ³
Thallium	< 1.2	1.2	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ³
Vanadium	38.3	5.9	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ³
Zinc	58.5	5.9	mg/kg	1	02/17/22	02/17/22	ND	SW846 6010D ²	SW846 3050B ³

(1) Instrument QC Batch: MA51923

(2) Instrument QC Batch: MA51927

(3) Prep QC Batch: MP31339

(4) Prep QC Batch: MP31346

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB6 (12.5-13')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-16	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.5
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.23	0.23	mg/kg	1	02/17/22 13:11	MM	SW846 9012B/LACHAT
Solids, Percent	88.5		%	1	02/16/22 16:30	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.27
4

Report of Analysis

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Client Sample ID:	RI-SB6 (12.5-13')		
Lab Sample ID:	JD39775-16A	Date Sampled:	02/15/22
Matrix:	SO - Soil	Date Received:	02/15/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids:	88.5
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55197.D	1	02/25/22 23:26	AFL	02/18/22 08:30	F:OP89836	F:S3Q762
Run #2							

	Initial Weight	Final Volume
Run #1	2.04 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.42	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.28	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.55	0.28	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.55	0.28	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.55	0.28	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.55	0.28	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.55	0.28	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.55	0.28	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.55	0.28	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.55	0.29	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.55	0.28	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.55	0.28	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.55	0.28	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.55	0.28	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.55	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.55	0.28	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.55	0.28	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.1	0.55	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.55	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB6 (12.5-13')	Date Sampled:	02/15/22
Lab Sample ID:	JD39775-16A	Date Received:	02/15/22
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	89%		40-140%
	13C5-PFPeA	89%		50-150%
	13C5-PFHxA	90%		50-150%
	13C4-PFHpA	92%		50-150%
	13C8-PFOA	93%		50-150%
	13C9-PFNA	95%		50-150%
	13C6-PFDA	98%		50-150%
	13C7-PFUnDA	97%		40-140%
	13C2-PFDoDA	85%		40-140%
	13C2-PFTeDA	94%		30-130%
	13C3-PFBS	93%		50-150%
	13C3-PFHxS	94%		50-150%
	13C8-PFOS	95%		50-150%
	13C8-FOSA	79%		30-130%
	d3-MeFOSAA	61%		40-140%
	d5-EtFOSAA	65%		40-140%
	13C2-6:2FTS	93%		50-150%
	13C2-8:2FTS	99%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
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J = Indicates an estimated value
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 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	FIELD BLANK	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-17	Date Received:	02/15/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D115737.D	1	02/17/22 16:58	BK	n/a	n/a	V4D5144
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone ^a	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK) ^a	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropan ^a	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane ^b	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	0.58	ug/l	
591-78-6	2-Hexanone ^a	ND	5.0	2.0	ug/l	

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	FIELD BLANK	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-17	Date Received:	02/15/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate ^a	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK ^a	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane ^a	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane ^c	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		80-120%
17060-07-0	1,2-Dichloroethane-D4	108%		80-120%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	101%		82-114%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

- (a) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- (b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- (c) This compound in blank spike is outside in house QC limits bias high.

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J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	FIELD BLANK	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-17	Date Received:	02/15/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P147641.D	1	02/19/22 11:52	CS	02/18/22 10:45	OP38217	EP6813
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.1	0.83	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.1	0.90	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.1	2.5	ug/l	
51-28-5	2,4-Dinitrophenol	ND	5.1	1.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.1	1.3	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.90	ug/l	
	3&4-Methylphenol	ND	2.0	0.89	ug/l	
88-75-5	2-Nitrophenol	ND	5.1	0.97	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.40	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.1	1.5	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.1	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.1	0.93	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
98-86-2	Acetophenone	ND	2.0	0.21	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
1912-24-9	Atrazine	ND	2.0	0.45	ug/l	
100-52-7	Benzaldehyde	ND	5.1	0.29	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.21	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.22	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.41	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.21	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.1	0.34	ug/l	
86-74-8	Carbazole	ND	1.0	0.23	ug/l	

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Report of Analysis

Client Sample ID:	FIELD BLANK	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-17	Date Received:	02/15/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	2.0	0.66	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	2.0	0.41	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.56	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
123-91-1	1,4-Dioxane	ND	1.0	0.66	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
132-64-9	Dibenzofuran	ND	5.1	0.22	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.24	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.50	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.34	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.21	ug/l	
88-74-4	2-Nitroaniline	ND	5.1	0.28	ug/l	
99-09-2	3-Nitroaniline	ND	5.1	0.39	ug/l	
100-01-6	4-Nitroaniline	ND	5.1	0.44	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.65	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.49	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	0.22	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.37	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	19%		10-90%

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Report of Analysis

Client Sample ID:	FIELD BLANK	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-17	Date Received:	02/15/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	13%		10-101%
118-79-6	2,4,6-Tribromophenol	67%		23-155%
4165-60-0	Nitrobenzene-d5	55%		25-141%
321-60-8	2-Fluorobiphenyl	57%		35-126%
1718-51-0	Terphenyl-d14	82%		15-139%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Report of Analysis

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Client Sample ID:	FIELD BLANK	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-17	Date Received:	02/15/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8081B SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174587.D	1	02/25/22 08:25	CP	02/18/22 16:00	OP38208A	G1G6033
Run #2							

	Initial Volume	Final Volume
Run #1	240 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0083	0.0043	ug/l	
319-84-6	alpha-BHC	ND	0.0083	0.0043	ug/l	
319-85-7	beta-BHC	ND	0.0083	0.0067	ug/l	
319-86-8	delta-BHC	ND	0.0083	0.0055	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0083	0.0050	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0083	0.0041	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0083	0.0035	ug/l	
60-57-1	Dieldrin	ND	0.0083	0.0064	ug/l	
72-54-8	4,4' -DDD	ND	0.0083	0.0048	ug/l	
72-55-9	4,4' -DDE	ND	0.0083	0.0042	ug/l	
50-29-3	4,4' -DDT	ND	0.0083	0.0057	ug/l	
72-20-8	Endrin	ND	0.0083	0.0050	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0083	0.0045	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0083	0.0056	ug/l	
53494-70-5	Endrin ketone	ND	0.0083	0.0052	ug/l	
959-98-8	Endosulfan-I	ND	0.0083	0.0044	ug/l	
33213-65-9	Endosulfan-II	ND	0.0083	0.0041	ug/l	
76-44-8	Heptachlor	ND	0.0083	0.0037	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0083	0.0050	ug/l	
72-43-5	Methoxychlor	ND	0.017	0.0056	ug/l	
8001-35-2	Toxaphene	ND	0.21	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	80%		10-190%
877-09-8	Tetrachloro-m-xylene	81%		10-190%
2051-24-3	Decachlorobiphenyl	31%		10-156%
2051-24-3	Decachlorobiphenyl	28%		10-156%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	FIELD BLANK	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-17	Date Received:	02/15/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8082A SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX2478323.D	1	02/23/22 20:56	CL	02/18/22 16:00	OP38209	GXX7736
Run #2							

	Initial Volume	Final Volume
Run #1	240 ml	2.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.42	0.16	ug/l	
11104-28-2	Aroclor 1221	ND	0.42	0.35	ug/l	
11141-16-5	Aroclor 1232	ND	0.42	0.22	ug/l	
53469-21-9	Aroclor 1242	ND	0.42	0.19	ug/l	
12672-29-6	Aroclor 1248	ND	0.42	0.10	ug/l	
11097-69-1	Aroclor 1254	ND	0.42	0.34	ug/l	
11096-82-5	Aroclor 1260	ND	0.42	0.13	ug/l	
11100-14-4	Aroclor 1268	ND	0.42	0.14	ug/l	
37324-23-5	Aroclor 1262	ND	0.42	0.16	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	72%		10-174%
877-09-8	Tetrachloro-m-xylene	83%		10-174%
2051-24-3	Decachlorobiphenyl	31%		10-151%
2051-24-3	Decachlorobiphenyl	30%		10-151%

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Report of Analysis

Page 1 of 1

Client Sample ID:	FIELD BLANK	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-17	Date Received:	02/15/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Project:	1001 Whitlock Avenue, Bronx, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	< 200	200	ug/l	1	02/17/22	02/17/22	ND	SW846 6010D ¹
Antimony	< 6.0	6.0	ug/l	1	02/17/22	02/17/22	ND	SW846 6010D ¹
Arsenic	< 3.0	3.0	ug/l	1	02/17/22	02/17/22	ND	SW846 6010D ¹
Barium	< 200	200	ug/l	1	02/17/22	02/17/22	ND	SW846 6010D ¹
Beryllium	< 1.0	1.0	ug/l	1	02/17/22	02/17/22	ND	SW846 6010D ¹
Cadmium	< 3.0	3.0	ug/l	1	02/17/22	02/17/22	ND	SW846 6010D ¹
Calcium	< 5000	5000	ug/l	1	02/17/22	02/17/22	ND	SW846 6010D ¹
Chromium	< 10	10	ug/l	1	02/17/22	02/17/22	ND	SW846 6010D ¹
Cobalt	< 50	50	ug/l	1	02/17/22	02/17/22	ND	SW846 6010D ¹
Copper	< 10	10	ug/l	1	02/17/22	02/17/22	ND	SW846 6010D ¹
Iron	< 100	100	ug/l	1	02/17/22	02/17/22	ND	SW846 6010D ¹
Lead	< 3.0	3.0	ug/l	1	02/17/22	02/17/22	ND	SW846 6010D ¹
Magnesium	< 5000	5000	ug/l	1	02/17/22	02/17/22	ND	SW846 6010D ¹
Manganese	< 15	15	ug/l	1	02/17/22	02/18/22	ND	SW846 6010D ²
Mercury	< 0.20	0.20	ug/l	1	02/22/22	02/22/22	LM	SW846 7470A ³
Nickel	< 10	10	ug/l	1	02/17/22	02/17/22	ND	SW846 6010D ¹
Potassium	< 10000	10000	ug/l	1	02/17/22	02/17/22	ND	SW846 6010D ¹
Selenium	< 10	10	ug/l	1	02/17/22	02/17/22	ND	SW846 6010D ¹
Silver	< 10	10	ug/l	1	02/17/22	02/17/22	ND	SW846 6010D ¹
Sodium	< 10000	10000	ug/l	1	02/17/22	02/17/22	ND	SW846 6010D ¹
Thallium	< 10	10	ug/l	1	02/17/22	02/17/22	ND	SW846 6010D ¹
Vanadium	< 50	50	ug/l	1	02/17/22	02/17/22	ND	SW846 6010D ¹
Zinc	< 20	20	ug/l	1	02/17/22	02/17/22	ND	SW846 6010D ¹

(1) Instrument QC Batch: MA51927

(2) Instrument QC Batch: MA51931

(3) Instrument QC Batch: MA51940

(4) Prep QC Batch: MP31335

(5) Prep QC Batch: MP31427

RL = Reporting Limit

Report of Analysis

Client Sample ID:	FIELD BLANK	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-17	Date Received:	02/15/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.010	0.010	mg/l	1	02/18/22 14:54	MM	EPA 335.4/LACHAT

RL = Reporting Limit

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Report of Analysis

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Client Sample ID:	FIELD BLANK	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-17A	Date Received:	02/15/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55214.D	1	02/26/22 04:07	AFL	02/22/22 09:00	F:OP89877	F:S3Q762
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
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PERFLUOROALKYLCARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	ND	3.7	1.9	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	1.9	0.93	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.9	0.93	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	1.9	0.93	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.9	0.93	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.93	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.93	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.93	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.93	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.93	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.93	ng/l	

PERFLUOROALKYLSULFONIC ACIDS

375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.93	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.93	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.93	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.93	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.93	ng/l	

PERFLUOROCTANESULFONAMIDES

754-91-6	PFOSA	ND	3.7	1.9	ng/l	
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PERFLUOROCTANESULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	ND	3.7	1.9	ng/l	
2991-50-6	EtFOSAA	ND	3.7	1.9	ng/l	

FLUOROTELOMER SULFONATES

27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.4	1.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.4	1.9	ng/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	FIELD BLANK	Date Sampled:	02/14/22
Lab Sample ID:	JD39775-17A	Date Received:	02/15/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	102%		35-135%
	13C5-PFPeA	101%		50-150%
	13C5-PFHxA	102%		50-150%
	13C4-PFHpA	104%		50-150%
	13C8-PFOA	104%		50-150%
	13C9-PFNA	105%		50-150%
	13C6-PFDA	103%		50-150%
	13C7-PFUnDA	101%		40-140%
	13C2-PFDoDA	91%		40-140%
	13C2-PFTeDA	85%		30-130%
	13C3-PFBS	101%		50-150%
	13C3-PFHxS	102%		50-150%
	13C8-PFOS	97%		50-150%
	13C8-FOSA	96%		30-130%
	d3-MeFOSAA	100%		40-140%
	d5-EtFOSAA	93%		40-140%
	13C2-6:2FTS	108%		50-150%
	13C2-8:2FTS	102%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Chain of Custody (SGS Orlando, FL)

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL 732-329-0200 FAX 732-329-3499
www.sgs.com/ehsusa

FED-EX Tracking #		Bottle Order Control #	
SGS Quote #		SGS Job #	
132		021022-38	
JD39775			

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)		Matrix Codes	
Company Name SESI		Project Name 11819		TCL+30/TAL PFAS		DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED-Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB-Field Blank EB-Equipment Blank RB- Rinse Blank TB-Trip Blank	
Street Address 12A NARAGAVE PINE BROOK, NJ		Street WHITLOCK AVE					
City PINE BROOK, NJ		City BRONX, NY					
Project Contact jam@sesi.org		Project # 11819					
Phone #		Client Purchase Order #					
Sampler(s) Name(s) CHRIS MAWICKI		Project Manager JESSE MAWICKI		Attention:			
Lab Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles
1	R1-SB3 (4.5-5')	9	2/14/22	15:00	cm	SD	3
2	R1-SB3 (9.5-10')		2/14/22	15:10	cm	SD	3
3	R1-SB3 (14.5-15')		2/14/22	15:21	cm	SD	3
4	R1-SB3 (19.5-20')		2/14/22	15:28	cm	SD	3
5	R1-SB4 (4.5-5')		2/15/22	9:05	cm	SD	3
6	DUP-1		2/15/22	9:07	cm	SD	3
7	R1-SB4 (9.5-10')		2/15/22	9:15	cm	SD	3
8	R1-SB4 (14.5-15')		2/15/22	9:23	cm	SD	3
9	R1-SB4 (19.5-20')		2/15/22	9:30	cm	SD	3
10	R1-SB5 (4.5-5')		2/15/22	12:35	cm	SD	3
11	R1-SB5 (9.5-10')		2/15/22	12:45	cm	SD	3
Turnaround Time (Business days)		Data Deliverable Information		Comments / Special Instructions			
☒ Std. 10 Business Days ☐ 5 Day RUSH ☐ 3 Day RUSH ☐ 2 Day RUSH ☐ 1 Day RUSH ☐ other		Approved by (SGS Project Manager) Date: _____ ☐ Commercial "A" (Level 1) ☐ Commercial "B" (Level 2) ☐ FULLT1 (Level 3+4) ☐ NJ Reduced ☐ Commercial "C" ☐ NJ Data of Known Quality Protocol Reporting Commercial "A" = Results Only; Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data		☒ NYASP Category A ☒ NYASP Category B ☐ State Forms ☐ EDD Format ☐ Other		• 3 x 5g Excare	
Emergency & Rush TIA data available via LabLink		Sample inventory is verified upon receipt in the Laboratory		Sample Custody must be documented below each time samples change possession including courier delivery.			
Relinquished by Sampler:	Date Time:	Received By:	Date Time:	Relinquished by:	Date Time:	Received By:	Date Time:
1 CHRIS MAWICKI	2/18/22 15:16	1	2/15/22 17:26	2	2/15/22	3	2/15/22
3		3		4		4	
Relinquished by:	Date Time:	Received By:	Date Time:	Custody Seal #	☐ Intact ☐ Not intact	Preserved where applicable	On Ice Cooling Temp.
5		5					2.8, 2.6, 2.5 30 CIP



CHAIN OF CUSTODY

PAGE 2 OF 2

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FED-EX Tracking #	SGS Order Control #
SGS Quote #	SGS Job #
RE-021022-38 JD39775	
Requested Analysis (see TEST CODE sheet)	
Matrix Codes	
DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LO - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB-Field Blank EB-Equipment Blank RB- Rinse Blank TB-Trip Blank	
LAB USE ONLY	

Client / Reporting Information		Project Information		Billing Information (if different from Report to)	
Company Name SESI		Project Name 11819		Company Name	
Street Address DANAPPE AVE		Street 1001 WHITLOCK AVE		Street Address	
City Pine Brook, NJ		City BRIDGE		City	
State NJ		State NJ		State	
Zip		Zip		Zip	
Project Contact		Project # 11819		Client Purchase Order #	
Phone #		Fax #		Attention:	
Sampler(s) Name(s) CHRIS MANICINI		Project Manager JESSIE MAUSNER			
Lab Sample #		Collection		Number of preserved bottles	
Field ID / Point of Collection		MEOH/DI Vial #		# of bottles	
Date		Time		Matrix	
Sampled by		Matrix		# of bottles	
HCl		HNO3		H2SO4	
NONE		DI Water		MEOH	
ENCORE					
12		R1-SB5 (14.5-15')		2/15/22 12:56 cm SD 3	
13		R1-SB5 (19.5-20')		2/15/22 13:03 cm SD 3	
14		R1-SB6 (4.5-5')		2/15/22 13:50 cm SD 3	
15		R1-SB6 (9.5-10')		2/15/22 14:04 cm SD 3	
16		R1-SB6 (12.5-13')		2/15/22 14:20 cm SD 3	
Field Blank		2/15/22 11:50 cm WW 9 3			
Turnaround Time (Business days)		Data Deliverable Information		Comments / Special Instructions	
Approved by (SGS Project Manager) Date:		Commercial "A" (Level 1)		NYASP Category A	
Initial Assessment		Commercial "B" (Level 2)		NYASP Category B	
Label Verification		FULLT1 (Level 3+4)		State Forms	
		NJ Reduced		EDD Format	
		Commercial "C"		Other	
		NJ Data of Known Quality Protocol Reporting			
		Commercial "A" = Results Only; Commercial "B" = Results + QC Summary			
		NJ Reduced = Results + QC Summary + Partial Raw data			
		Sample inventory is verified upon receipt in the Laboratory			
Emergency & Rush T/A data available via LabLink		Sample Chain of Custody must be documented below each time samples change possession, including courier delivery.			
Relinquished by Sampler:		Date Time:		Received By:	
3		2/13/22 1515		2	
Relinquished by Sampler:		Date Time:		Received By:	
3		2/15/22 1726		4	
Relinquished by:		Date Time:		Received By:	
5		2/15/22 1726		4	
Custody Seal #		Intact		Preserved where applicable	
		Not intact			
		On Ice		Cooler Temp	
		2.6, 2.5, 2.8		3.0 CIP	

Form:SM088-03C (revised 2/12/18)

<http://www.sgs.com/en/terms-and-conditions>

JD39775: Chain of Custody

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JD39775

SGS Sample Receipt Summary

Job Number: JD39775

Client: SESI CONSULTING ENGINEERS

Project: 1001 WHITLOCK AVENUE, BRONX, NY

Date / Time Received: 2/15/2022 5:26:00 PM

Delivery Method:
Airbill #s:
Cooler Temps (Raw Measured) °C: Cooler 1: (2.8); Cooler 2: (2.6); Cooler 3: (2.5); Cooler 4: (3.0);

Cooler Temps (Corrected) °C: Cooler 1: (1.2); Cooler 2: (1.0); Cooler 3: (0.9); Cooler 4: (1.4);

Cooler Security
Y or N
Y or N

- | | |
|--|---|
| 1. Custody Seals Present: ☒ ☐ | 3. COC Present: ☒ ☐ |
| 2. Custody Seals Intact: ☒ ☐ | 4. Smpl Dates/Time OK: ☒ ☐ |

Cooler Temperature
Y or N

- | | |
|---|-----------|
| 1. Temp criteria achieved: ☒ ☐ | IR Gun |
| 2. Cooler temp verification: | |
| 3. Cooler media: | Ice (Bag) |
| 4. No. Coolers: | 4 |

Quality Control Preservation
Y or N
N/A

- | | |
|---|---|
| 1. Trip Blank present / cooler: ☐ ☐ | N/A ☒ |
| 2. Trip Blank listed on COC: ☐ ☐ | N/A ☒ |
| 3. Samples preserved properly: ☒ ☐ | |
| 4. VOCs headspace free: ☐ ☐ | N/A ☒ |

Sample Integrity - Documentation
Y or N

- | | |
|---|--|
| 1. Sample labels present on bottles: ☒ ☐ | |
| 2. Container labeling complete: ☒ ☐ | |
| 3. Sample container label / COC agree: ☒ ☐ | |

Sample Integrity - Condition
Y or N

- | | |
|---|--------|
| 1. Sample recvd within HT: ☒ ☐ | |
| 2. All containers accounted for: ☒ ☐ | |
| 3. Condition of sample: | Intact |

Sample Integrity - Instructions
Y or N
N/A

- | | |
|---|---|
| 1. Analysis requested is clear: ☒ ☐ | |
| 2. Bottles received for unspecified tests: ☐ ☒ | |
| 3. Sufficient volume recvd for analysis: ☒ ☐ | |
| 4. Compositing instructions clear: ☐ ☐ | N/A ☒ |
| 5. Filtering instructions clear: ☐ ☐ | N/A ☒ |

Test Strip Lot #s:

pH 1-12: 231619

pH 12+: 203117A

Other: (Specify)

Comments 1.) Did not receive Field blank volumes.

SM089-03

Rev. Date 12/7/17

JD39775: Chain of Custody

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Job Change Order: JD39775

Requested Date:	2/16/2022	Received Date:	2/15/2022
Account Name:	SESI Consulting Engineers	Due Date:	2/16/2022
Project Description:	1001 Whitlock Avenue, Bronx, NY	Deliverable:	NYASPB
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	4

=====

Sample #:	JD39775-4, -9	Change:	Please cancel XTCL20+, SOL104 and place sample on HOLD
Dept:			
TAT:	4		

=====

Sample #:	JD39775-4A, -9A	Change:	Please cancel LCID537NY21, LCMS+14DAY and place sample on HC
Dept:			
TAT:	4		

=====

CHAIN OF CUSTODY

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SGS North America Inc. - Dayton 2235 Route 130, Dayton, NJ 08810 TEL 732-329-0200 FAX 732-329-3499/3480 www.sgs.com/ehsusia				FedEx Tracking # _____ SGS Quota # _____		Ship Order Control # _____ SGS Job # JD39775												
Client / Reporting Information		Project Information				Requested Analysis										Matrix Codes		
Company Name: SGS North America Inc.		Project Name: 1001 Whitlock Avenue, Bronx, NY																
Street Address: 2235 Route 130		Street:																
City State Zip: Dayton NJ 08810		City State:		Billing Information (if different from Report to) Company Name														
Project Contact E-mail: nichelle.jenkins@sgs.com		Project #		Street Address														
Phone # 732-329-0200		Client Purchase Order #		City State Zip														
Sampler(s) Name(s) CN		Phone		Project Manager		Attention:												
Field ID / Point of Collection		Collection				Number of preserved bottles										LAB USE ONLY		
		METHOD	Date	Time	Sampled by	Matrix	# of bottles	HCl	NH ₄ OH	HNO ₃	H ₂ O ₂	PASADENA	DIAPYCNAL	MEDIA	ENDCORE			
1A	RI-SB3 (4.5'-5')		2/14/22	3:00:00 PM	CN	SO										X		
2A	RI-SB3 (9.5'-10')		2/14/22	3:10:00 PM	CN	SO										X		
3A	RI-SB3 (14.5'-15')		2/14/22	3:21:00 PM	CN	SO										X		
4A	RI-SB3 (19.5'-20')		2/14/22	3:28:00 PM	CN	SO										X		
5A	RI-SB4 (4.5'-5')		2/15/22	9:05:00 AM	CN	SO										X		
6A	DUP-1		2/15/22	9:07:00 AM	CN	SO										X		
7A	RI-SB4 (9.5'-10')		2/15/22	9:15:00 AM	CN	SO										X		
8A	RI-SB4 (14.5'-15')		2/15/22	9:23:00 AM	CN	SO										X		
9A	RI-SB4 (19.5'-20')		2/15/22	9:30:00 AM	CN	SO										X		
10A	RI-SB5 (4.5'-5')		2/15/22	12:35:00 PM	CN	SO										X		
11A	RI-SB5 (9.5'-10')		2/15/22	12:45:00 PM	CN	SO										X		
12A	RI-SB5 (14.5'-15')		2/15/22	12:56:00 PM	CN	SO										X		
Turnaround Time (Business days)						Data Deliverable Information										Comments / Special Instructions		
☐ Standard 10 Business Days ☐ 5 Business Days RUSH ☐ 3 Business Days RUSH ☐ 2 Business Days RUSH ☒ 1 Business Day EMERGENCY ☒ Other		Approved By (SGS P#): [Signature] _____				☐ Commercial "A" (Level 1) ☐ NYASP Category A ☐ Commercial "B" (Level 2) ☐ NYASP Category B ☐ FULLT1 (Level 3+4) ☐ State Forms ☐ NJ Reduced ☐ EDD Format ☐ Commercial "C" ☒ Other NYASPB Commercial "A" = Results Only Commercial "B" = Results + QC Summary Commercial "C" = Results + QC Summary + Partial Raw data										INITIAL ASSESSMENT [Signature]		
Emergency & Rush TA data available via LabLink Approved needed for RUSH Emergency TAT		LABEL VERIFICATION [Signature] http://www.sgs.com/en/terms-and-conditions																
Simple Custody must be documented below each time samples change possession, including courier delivery.																		
Retransmitted by: [Signature]		Date / Time: 2/16/22		Received By: 1		Retransmitted by: 2		Date / Time: 2/17/22		Received By: 2								
Retransmitted by: 3		Date / Time:		Received By: 3		Retransmitted by: 4		Date / Time:		Received By: 4								
Retransmitted by: 5		Date / Time:		Received By: 5		Quotient Seal #		☐ Initial ☐ Not Initiat		☐ Preserved where applicable ☐ Assent		☐ Therm. I/C ☐ On Ice		Cooler Temp. °C				

jd09775.xls
Rev. Date: 4/10/18

JD39775: Chain of Custody

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SGS Orlando, FL



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JD39775

CHAIN OF CUSTODY

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[illegible]

jd39775.xls
Rev. Date: 4/10/18

JD39775: Chain of Custody

Page 2 of 4

SGS Sample Receipt Summary

Job Number: JD39775

Client: SGS NJ

Project: 1001 WHITLOCK AVENUE, BRONX, NY

Date / Time Received: 2/17/2022 9:45:00 AM

Delivery Method: FX

Airbill #s:
Therm ID: IR 1;

Therm CF: 0.4;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 2: (4.8);

Cooler Temps (Corrected) °C: Cooler 2: (5.2);

Cooler Information
Y or N

- | | | |
|-----------------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present | ☒ | ☐ |
| 2. Custody Seals Intact | ☒ | ☐ |
| 3. Temp criteria achieved | ☒ | ☐ |
| 4. Cooler temp verification | <u>IR Gun</u> | |
| 5. Cooler media | <u>Ice (Bag)</u> | |

Trip Blank Information
Y or N N/A

- | | | | |
|--------------------------------|--------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler | ☐ | ☐ | ☒ |
| 2. Trip Blank listed on COC | ☐ | ☐ | ☒ |
| | W or S | N/A | |
| 3. Type Of TB Received | ☐ | ☐ | ☒ |

Sample Information
Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Sample labels present on bottles | ☒ | ☐ | |
| 2. Samples preserved properly | ☒ | ☐ | |
| 3. Sufficient volume/containers recvd for analysis: | ☒ | ☐ | |
| 4. Condition of sample | <u>Intact</u> | | |
| 5. Sample recvd within HT | ☒ | ☐ | |
| 6. Dates/Times/IDs on COC match Sample Label | ☒ | ☐ | |
| 7. VOCs have headspace | ☐ | ☐ | ☒ |
| 8. Bottles received for unspecified tests | ☐ | ☒ | |
| 9. Compositing instructions clear | ☐ | ☐ | ☒ |
| 10. Voa Soil Kits/Jars received past 48hrs? | ☐ | ☐ | ☒ |
| 11. % Solids Jar received? | ☐ | ☐ | ☒ |
| 12. Residual Chlorine Present? | ☐ | ☐ | ☒ |

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____
 Test Strip Lot #s: pH 0-3 _____ 230315 _____
 Residual Chlorine Test Strip Lot #: _____

Number of 5035 Field Kits: _____

Number of Lab Filtered Metals: _____

Other: (Specify) _____

Comments

 SM001
Rev. Date 05/24/17

Technician: NATHANS

Date: 2/17/2022 9:45:00 AM

Reviewer: _____

Date: _____

JD39775: Chain of Custody
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[illegible]

48 PNH

JD39775: Chain of Custody

Page 4 of 4

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

SESI Consulting Engineers

1001 Whitlock Avenue, Bronx, NY

11819

SGS Job Number: JD39846

Sampling Date: 02/16/22

Report to:

SESI Consulting Engineers

jam@sesi.org

ATTN: Jesse Mausner

Total number of pages in report: **149**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A handwritten signature in black ink, appearing to read 'Mike Earp'.

Mike Earp
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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Test results relate only to samples analyzed.

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Sample Summary

SESI Consulting Engineers

Job No: JD39846

1001 Whitlock Avenue, Bronx, NY

Project No: 11819

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
---------------	----------------	---------	----------	-------------	------	------------------

This report contains results reported as ND = Not detected. The following applies:

Organics ND = Not detected above the MDL

JD39846-1	02/16/22	11:30	CM	02/16/22	SO	Soil	RI-SB7 (4.5-5')
JD39846-1A	02/16/22	11:30	CM	02/16/22	SO	Soil	RI-SB7 (4.5-5')
JD39846-2	02/16/22	11:41	CM	02/16/22	SO	Soil	RI-SB7 (9.5-10')
JD39846-2A	02/16/22	11:41	CM	02/16/22	SO	Soil	RI-SB7 (9.5-10')
JD39846-3	02/16/22	11:53	CM	02/16/22	SO	Soil	RI-SB7 (14.5-15')
JD39846-3A	02/16/22	11:53	CM	02/16/22	SO	Soil	RI-SB7 (14.5-15')
JD39846-4	02/16/22	12:00	CM	02/16/22	SO	Soil	RI-SB7 (16.5-17')
JD39846-5	02/16/22	09:53	CM	02/16/22	SO	Soil	RI-SB8 (4.5-5')
JD39846-5A	02/16/22	09:53	CM	02/16/22	SO	Soil	RI-SB8 (4.5-5')
JD39846-6	02/16/22	10:05	CM	02/16/22	SO	Soil	RI-SB8 (9.5-10')
JD39846-6A	02/16/22	10:05	CM	02/16/22	SO	Soil	RI-SB8 (9.5-10')
JD39846-7	02/16/22	10:12	CM	02/16/22	SO	Soil	RI-SB8 (12.5-13')

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary

(continued)

SESI Consulting Engineers

Job No: JD39846

1001 Whitlock Avenue, Bronx, NY
Project No: 11819

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JD39846-7A	02/16/22	10:12 CM	02/16/22	SO	Soil	RI-SB8 (12.5-13')
JD39846-8	02/16/22	09:57 CM	02/16/22	SO	Soil	DUP-2
JD39846-8A	02/16/22	09:57 CM	02/16/22	SO	Soil	DUP-2
JD39846-9	02/16/22	13:01 CM	02/16/22	SO	Soil	RI-SB9 (4.5-5')
JD39846-9A	02/16/22	13:01 CM	02/16/22	SO	Soil	RI-SB9 (4.5-5')
JD39846-10	02/16/22	13:15 CM	02/16/22	SO	Soil	RI-SB9 (9.5-10')
JD39846-10A	02/16/22	13:15 CM	02/16/22	SO	Soil	RI-SB9 (9.5-10')
JD39846-11	02/16/22	13:27 CM	02/16/22	SO	Soil	RI-SB9 (14.5-15')
JD39846-11A	02/16/22	13:27 CM	02/16/22	SO	Soil	RI-SB9 (14.5-15')
JD39846-12	02/16/22	13:35 CM	02/16/22	SO	Soil	RI-SB9 (19.5-20')
JD39846-13	02/16/22	09:00 CM	02/16/22	AQ	Field Blank Soil	FIELD BLANK
JD39846-13A	02/16/22	09:00 CM	02/16/22	AQ	Field Blank Soil	FIELD BLANK

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: SESI Consulting Engineers

Job No: JD39846

Site: 1001 Whitlock Avenue, Bronx, NY

Report Date 3/11/2022 4:30:27 PM

On 02/16/2022, 10 Sample(s), 0 Trip Blank(s) and 1 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 1.4 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD39846 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260D

Matrix: AQ

Batch ID: VA10562

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39850-3MS, JD39850-4DUP were used as the QC samples indicated.
- RPD(s) for Duplicate for Tetrachloroethene are outside control limits. High RPD due to low concentration of hit
- JD39846-13 for Dichlorodifluoromethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD39846-13 for Bromomethane: Associated CCV outside of control limits high, sample was ND.
- JD39846-13 for Chloroethane: Associated CCV outside of control limits high, sample was ND.

Matrix: SO

Batch ID: V3C7643

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD39845-2MS, JD39845-4DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JD39846-8 for Bromomethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD39846-9 for Bromomethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD39846-1 for Bromomethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD39846-7 for Bromomethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD39846-2 for Bromomethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD39846-3 for Bromomethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD39846-5 for Bromomethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD39846-10 for Bromomethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD39846-6 for Bromomethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

Matrix: SO

Batch ID: V3C7644

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39738-1MS, JD39747-1DUP were used as the QC samples indicated.

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MS Volatiles By Method SW846 8260D

Matrix: SO

Batch ID: V3C7644

- RPD(s) for Duplicate for Carbon disulfide are outside control limits. RPD acceptable due to low DUP and sample concentrations.
- JD39846-11 for Dichlorodifluoromethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD39846-11 for Bromomethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

MS Semi-volatiles By Method EPA 537M BY ID

Matrix: AQ

Batch ID: F:OP89877

- The data for EPA 537M BY ID meets quality control requirements.
- JD39846-13A: Analysis performed at SGS Orlando, FL.

Matrix: SO

Batch ID: F:OP89889

- The data for EPA 537M BY ID meets quality control requirements.
- JD39846-3A: Analysis performed at SGS Orlando, FL.
- JD39846-6A: Analysis performed at SGS Orlando, FL.
- JD39846-5A: Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.
- JD39846-10A: Analysis performed at SGS Orlando, FL.
- JD39846-3A: Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.
- JD39846-9A: Analysis performed at SGS Orlando, FL.
- JD39846-1A: Analysis performed at SGS Orlando, FL.
- JD39846-7A: Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.
- JD39846-11A: Analysis performed at SGS Orlando, FL.
- JD39846-5A: Analysis performed at SGS Orlando, FL.
- JD39846-7A: Analysis performed at SGS Orlando, FL.
- JD39846-8A: Analysis performed at SGS Orlando, FL.
- JD39846-2A: Analysis performed at SGS Orlando, FL.
- JD39846-7A for MeFOSAA: Associated ID Standard outside control limits, Confirmed by re-analysis.
- JD39846-3A for MeFOSAA: Associated ID Standard outside control limits, Confirmed by re-analysis.

MS Semi-volatiles By Method SW846 8270E

Matrix: AQ

Batch ID: OP38217

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- OP38217-BS1 for Hexachlorocyclopentadiene: Outside of in house control limits.

Matrix: SO

Batch ID: OP38200

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39845-1MS, JD39845-1MSD were used as the QC samples indicated.
- JD39846-5 for 2,4-Dinitrotoluene: Associated CCV outside of control limits high, sample was ND.
- JD39846-6 for 2,4-Dinitrotoluene: Associated CCV outside of control limits high, sample was ND.
- JD39846-3 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39846-3 for 4-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39846-3 for 2,4-Dinitrotoluene: Associated CCV outside of control limits high, sample was ND.
- JD39846-6 for 4-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39846-7 for 2,4-Dinitrotoluene: Associated CCV outside of control limits high, sample was ND.
- JD39846-11 for 2,4-Dinitrotoluene: Associated CCV outside of control limits high, sample was ND.
- JD39846-2 for 2,4-Dinitrotoluene: Associated CCV outside of control limits high, sample was ND.
- JD39846-10 for 4-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39846-1 for 2,4-Dinitrotoluene: Associated CCV outside of control limits high, sample was ND.
- JD39846-8 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39846-7 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39846-5 for 4-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39846-8 for 4-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39846-8 for 2,4-Dinitrotoluene: Associated CCV outside of control limits high, sample was ND.
- JD39846-11 for 4-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39846-7 for 4-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39846-10 for 2,4-Dinitrotoluene: Associated CCV outside of control limits high, sample was ND.
- JD39846-9 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39846-6 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39846-9 for 4-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39846-9 for 2,4-Dinitrotoluene: Associated CCV outside of control limits high, sample was ND.
- JD39846-2 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39846-11 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39846-1 for 4-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39846-2 for 4-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39846-10 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39846-1 for Caprolactam: Associated CCV outside of control limits high, sample was ND.
- JD39846-5 for Caprolactam: Associated CCV outside of control limits high, sample was ND.

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GC/LC Semi-volatiles By Method SW846 8081B

Matrix: AQ

Batch ID: OP38208A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- OP38208A-MB1: Had TBA cleanup.
- OP38208A-BS1: Had TBA cleanup.
- OP38208A-BSD for Heptachlor epoxide: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.
- OP38208A-BS1 for Heptachlor epoxide: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.
- OP38208A-BS1 for gamma-Chlordane: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

Matrix: SO

Batch ID: OP38204

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39845-2MS, JD39845-2MSD were used as the QC samples indicated.
- JD39846-6: Had TBA cleanup.
- OP38204-MB1: Had TBA cleanup.
- OP38204-BS1: Had TBA cleanup.
- OP38204-BS1 for Methoxychlor: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

GC/LC Semi-volatiles By Method SW846 8082A

Matrix: AQ

Batch ID: OP38209

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Matrix: SO

Batch ID: OP38205

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39845-3MS, JD39845-3MSD were used as the QC samples indicated.
- JD39846-5 for Aroclor 1260: Associated CCV outside of control limits high, sample was ND.
- JD39846-11 for Aroclor 1260: Associated CCV outside of control limits high, sample was ND.
- JD39846-1 for Aroclor 1260: Associated CCV outside of control limits high, sample was ND.
- JD39846-10 for Aroclor 1260: Associated CCV outside of control limits high, sample was ND.
- JD39846-9 for Aroclor 1260: Associated CCV outside of control limits high, sample was ND.
- JD39846-8 for Aroclor 1260: Associated CCV outside of control limits high, sample was ND.
- JD39846-7 for Aroclor 1260: Associated CCV outside of control limits high, sample was ND.
- JD39846-6 for Aroclor 1260: Associated CCV outside of control limits high, sample was ND.
- JD39846-2 for Aroclor 1260: Associated CCV outside of control limits high, sample was ND.
- JD39846-3 for Aroclor 1260: Associated CCV outside of control limits high, sample was ND.

Metals Analysis By Method SW846 6010D

Matrix: AQ

Batch ID: MP31363

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39833-1MS, JD39833-1MSD, JD39833-1SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Aluminum, Arsenic, Cadmium, Chromium, Copper, Nickel, Silver, Vanadium, Zinc are outside control limits. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- Samples(s) JD39846-13: New York does not offer 3010A certification for antimony and silver. The laboratory is certified for method 3010A (Acid Digestion for Total Metals) for all other metals and is certified for the associated analytical methods of 6010C (ICP Analysis) and 6020A (ICP-MS Analysis). New York does certify for method 3005A (Acid Digestion for Total Recoverable or Dissolved Metals) for antimony and silver and the laboratory holds that certification, but that provides total recoverable rather than total metals results.

Matrix: SO

Batch ID: MP31357

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39846-3PS, JD39846-3SDL, JD39846-3MS, JD39846-3MSD were used as the QC samples for metals.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for Manganese, Antimony are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for Aluminum, Iron are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for MS/MSD for Manganese are outside control limits. High rpd due to possible sample nonhomogeneity.
- RPD(s) for Serial Dilution for Antimony, Arsenic, Beryllium, Cadmium, Silver, Thallium are outside control. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- JD39846-10 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39846-6 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39846-9 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39846-1 for Manganese: Elevated detection limit due to dilution required for high interfering element.
- JD39846-6 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39846-8 for Manganese: Elevated detection limit due to dilution required for high interfering element.
- JD39846-10 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39846-7 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39846-10 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39846-10 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39846-9 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39846-9 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39846-2 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39846-9 for Manganese: Elevated detection limit due to dilution required for high interfering element.
- JD39846-10 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39846-7 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39846-7 for Manganese: Elevated detection limit due to dilution required for high interfering element.
- JD39846-7 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39846-7 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39846-8 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39846-8 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39846-10 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39846-7 for Beryllium: Elevated detection limit due to dilution required for high interfering element.

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Metals Analysis By Method SW846 6010D

Matrix: SO

Batch ID: MP31357

- JD39846-9 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39846-6 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39846-6 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39846-6 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39846-6 for Manganese: Elevated detection limit due to dilution required for high interfering element.
- JD39846-8 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39846-7 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39846-8 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39846-1 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39846-2 for Manganese: Elevated detection limit due to dilution required for high interfering element.
- JD39846-5 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39846-5 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39846-5 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39846-5 for Manganese: Elevated detection limit due to dilution required for high interfering element.
- JD39846-5 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39846-5 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39846-5 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39846-10 for Manganese: Elevated detection limit due to dilution required for high interfering element.
- JD39846-2 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39846-9 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39846-6 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39846-2 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39846-1 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39846-8 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39846-9 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39846-2 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39846-8 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39846-2 for Arsenic: Elevated detection limit due to dilution required for high interfering element.
- JD39846-2 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39846-1 for Copper: Elevated detection limit due to dilution required for high interfering element.
- JD39846-1 for Selenium: Elevated detection limit due to dilution required for high interfering element.
- JD39846-1 for Thallium: Elevated detection limit due to dilution required for high interfering element.
- JD39846-1 for Beryllium: Elevated detection limit due to dilution required for high interfering element.

Metals Analysis By Method SW846 7470A

Matrix: AQ

Batch ID: MP31427

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39921-2MS, JD39921-2MSD were used as the QC samples for metals.

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Metals Analysis By Method SW846 7471B

Matrix: SO **Batch ID:** MP31420

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39845-1MS, JD39845-1MSD were used as the QC samples for metals.

General Chemistry By Method EPA 335.4/LACHAT

Matrix: AQ **Batch ID:** GP38591

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

General Chemistry By Method SM2540 G 18TH ED MOD

Matrix: SO **Batch ID:** GN26488

- Sample(s) JD39845-5DUP were used as the QC samples for Solids, Percent.

General Chemistry By Method SW846 9012B/LACHAT

Matrix: SO **Batch ID:** GP38592

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39843-1DUP, JD39843-1MS were used as the QC samples for Cyanide.
- Matrix Spike Recovery(s) for Cyanide are outside control limits. Spike recovery indicates possible matrix interference.

Matrix: SO **Batch ID:** GP38593

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39846-11DUP, JD39846-11MS were used as the QC samples for Cyanide.
- Matrix Spike Recovery(s) for Cyanide are outside control limits. Spike recovery indicates possible matrix interference.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: SGS Dayton, NJ

Job No: JD39846

Site: SESINJPB: 1001 Whitlock Avenue, Bronx, NY

Report Date 3/4/2022 9:51:21 AM

On 02/16/2022, 10 Sample(s), 0 Trip Blank(s) and 1 Field Blank(s) were received at SGS North America Inc - Orlando. at a maximum corrected temperature of 5 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. - Orlando Job Number of JD39846 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section. Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

MS Semi-volatiles By Method EPA 537M BY ID

Matrix: AQ

Batch ID: OP89877

Sample(s) JD39818-4MS, JD39818-5DUP were used as the QC samples indicated.

RPD(s) for Duplicate for Perfluorohexanesulfonic acid are outside control limits for sample OP89877-DUP. Probable cause is due to sample non-homogeneity.

Matrix: SO

Batch ID: OP89889

Sample(s) JD39845-5AMS, JD39845-5AMSD were used as the QC samples indicated.

Sample(s) JD39846-3A, JD39846-5A, JD39846-7A have surrogates outside control limits.

JD39846-3A for d3-MeFOSAA: Outside control limits.

JD39846-3A for d5-EtFOSAA: Outside control limits.

JD39846-3A for MeFOSAA: Associated ID Standard outside control limits, Confirmed by re-analysis.

JD39846-3A: Dilution required due to matrix interference (ID recovery standard failure).

JD39846-5A for d3-MeFOSAA: Outside control limits.

JD39846-5A: Dilution required due to matrix interference (ID recovery standard failure).

JD39846-7A for d3-MeFOSAA: Outside control limits.

JD39846-7A for d5-EtFOSAA: Outside control limits.

JD39846-7A for MeFOSAA: Associated ID Standard outside control limits, Confirmed by re-analysis.

JD39846-7A: Dilution required due to matrix interference (ID recovery standard failure).

SGS North America Inc. - Orlando certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted. Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria. SGS North America Inc.- Orlando is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety.

Narrative prepared by:

Ariel Hartney, Client Services (signature on file)

Summary of Hits

Job Number: JD39846
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/16/22



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JD39846-1 RI-SB7 (4.5-5')

Acenaphthene	18.9 J	38	13	ug/kg	SW846 8270E
Anthracene	49.0	38	23	ug/kg	SW846 8270E
Benzo(a)anthracene	143	38	11	ug/kg	SW846 8270E
Benzo(a)pyrene	117	38	17	ug/kg	SW846 8270E
Benzo(b)fluoranthene	138	38	17	ug/kg	SW846 8270E
Benzo(g,h,i)perylene	67.7	38	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene	56.9	38	18	ug/kg	SW846 8270E
Carbazole	20.5 J	76	5.5	ug/kg	SW846 8270E
Chrysene	146	38	12	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene	23.5 J	38	17	ug/kg	SW846 8270E
Fluoranthene	239	38	17	ug/kg	SW846 8270E
Fluorene	20.4 J	38	17	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	85.2	38	18	ug/kg	SW846 8270E
2-Methylnaphthalene	31.0 J	38	8.6	ug/kg	SW846 8270E
Naphthalene	33.1 J	38	11	ug/kg	SW846 8270E
Phenanthrene	216	38	13	ug/kg	SW846 8270E
Pyrene	215	38	12	ug/kg	SW846 8270E
Total TIC, Semi-Volatile	220 J			ug/kg	
Aluminum	16400	58		mg/kg	SW846 6010D
Barium	112	23		mg/kg	SW846 6010D
Beryllium ^a	0.64	0.46		mg/kg	SW846 6010D
Calcium	2450	580		mg/kg	SW846 6010D
Chromium	28.6	1.2		mg/kg	SW846 6010D
Cobalt	12.4	5.8		mg/kg	SW846 6010D
Copper ^a	28.9	5.8		mg/kg	SW846 6010D
Iron	26100	120		mg/kg	SW846 6010D
Lead	35.3	2.3		mg/kg	SW846 6010D
Magnesium	4630	580		mg/kg	SW846 6010D
Manganese ^a	651	3.5		mg/kg	SW846 6010D
Mercury	0.083	0.036		mg/kg	SW846 7471B
Nickel	25.1	4.6		mg/kg	SW846 6010D
Potassium	3280	1200		mg/kg	SW846 6010D
Vanadium	37.6	5.8		mg/kg	SW846 6010D
Zinc	86.8	5.8		mg/kg	SW846 6010D

JD39846-1A RI-SB7 (4.5-5')

Perfluorooctanesulfonic acid ^b	0.33 J	0.58	0.23	ug/kg	EPA 537M BY ID
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JD39846-2 RI-SB7 (9.5-10')

Aluminum	22800	58		mg/kg	SW846 6010D
Antimony	3.6	2.3		mg/kg	SW846 6010D

Summary of Hits

Job Number: JD39846
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/16/22



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Barium		119	23		mg/kg	SW846 6010D
Calcium		2050	580		mg/kg	SW846 6010D
Chromium		48.5	1.2		mg/kg	SW846 6010D
Cobalt		22.7	5.8		mg/kg	SW846 6010D
Copper ^a		133	14		mg/kg	SW846 6010D
Iron		43500	290		mg/kg	SW846 6010D
Lead		12.7	2.3		mg/kg	SW846 6010D
Magnesium		7860	580		mg/kg	SW846 6010D
Manganese ^a		585	8.6		mg/kg	SW846 6010D
Mercury		0.061	0.036		mg/kg	SW846 7471B
Nickel		31.3	4.6		mg/kg	SW846 6010D
Potassium		3520	1200		mg/kg	SW846 6010D
Vanadium		61.9	5.8		mg/kg	SW846 6010D
Zinc		71.8	5.8		mg/kg	SW846 6010D

JD39846-2A RI-SB7 (9.5-10')

No hits reported in this sample.

JD39846-3 RI-SB7 (14.5-15')

Aluminum	11600	59	mg/kg	SW846 6010D
Arsenic	2.7	2.4	mg/kg	SW846 6010D
Barium	55.5	24	mg/kg	SW846 6010D
Beryllium	0.44	0.24	mg/kg	SW846 6010D
Calcium	1410	590	mg/kg	SW846 6010D
Chromium	22.2	1.2	mg/kg	SW846 6010D
Cobalt	9.4	5.9	mg/kg	SW846 6010D
Copper	26.3	3.0	mg/kg	SW846 6010D
Iron	17300	59	mg/kg	SW846 6010D
Lead	5.6	2.4	mg/kg	SW846 6010D
Magnesium	3330	590	mg/kg	SW846 6010D
Manganese	326	1.8	mg/kg	SW846 6010D
Nickel	20.1	4.7	mg/kg	SW846 6010D
Potassium	2400	1200	mg/kg	SW846 6010D
Silver	0.63	0.59	mg/kg	SW846 6010D
Vanadium	29.8	5.9	mg/kg	SW846 6010D
Zinc	38.4	5.9	mg/kg	SW846 6010D

JD39846-3A RI-SB7 (14.5-15')

No hits reported in this sample.

Summary of Hits

Job Number: JD39846
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/16/22



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JD39846-5 RI-SB8 (4.5-5')

Total TIC, Volatile	5.4 J				ug/kg	
Benzo(a)anthracene	75.6	38	11		ug/kg	SW846 8270E
Benzo(a)pyrene	78.2	38	17		ug/kg	SW846 8270E
Benzo(b)fluoranthene	97.2	38	17		ug/kg	SW846 8270E
Benzo(g,h,i)perylene	55.7	38	19		ug/kg	SW846 8270E
Benzo(k)fluoranthene	36.5 J	38	18		ug/kg	SW846 8270E
Chrysene	87.2	38	12		ug/kg	SW846 8270E
Fluoranthene	135	38	17		ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	65.5	38	18		ug/kg	SW846 8270E
Phenanthrene	71.8	38	13		ug/kg	SW846 8270E
Pyrene	130	38	12		ug/kg	SW846 8270E
Aluminum	23300	60			mg/kg	SW846 6010D
Antimony	3.0	2.4			mg/kg	SW846 6010D
Barium	107	24			mg/kg	SW846 6010D
Beryllium ^a	0.70	0.48			mg/kg	SW846 6010D
Cadmium	0.60	0.60			mg/kg	SW846 6010D
Calcium	1910	600			mg/kg	SW846 6010D
Chromium	37.0	1.2			mg/kg	SW846 6010D
Cobalt	19.6	6.0			mg/kg	SW846 6010D
Copper ^a	78.0	6.0			mg/kg	SW846 6010D
Iron	37800	120			mg/kg	SW846 6010D
Lead	25.5	2.4			mg/kg	SW846 6010D
Magnesium	7870	600			mg/kg	SW846 6010D
Manganese ^a	558	3.6			mg/kg	SW846 6010D
Mercury	0.10	0.033			mg/kg	SW846 7471B
Nickel	41.1	4.8			mg/kg	SW846 6010D
Potassium	4680	1200			mg/kg	SW846 6010D
Vanadium	54.2	6.0			mg/kg	SW846 6010D
Zinc	424	6.0			mg/kg	SW846 6010D

JD39846-5A RI-SB8 (4.5-5')

Perfluorooctanesulfonic acid ^b	0.29 J	0.59	0.24		ug/kg	EPA 537M BY ID
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JD39846-6 RI-SB8 (9.5-10')

Acetone	44.3	10	4.2		ug/kg	SW846 8260D
2-Butanone (MEK)	9.7 J	10	2.4		ug/kg	SW846 8260D
Benzo(a)anthracene	26.8 J	39	11		ug/kg	SW846 8270E
Benzo(a)pyrene	19.0 J	39	18		ug/kg	SW846 8270E
Benzo(b)fluoranthene	23.4 J	39	17		ug/kg	SW846 8270E
Chrysene	23.1 J	39	12		ug/kg	SW846 8270E
Fluoranthene	49.8	39	17		ug/kg	SW846 8270E

Summary of Hits

Job Number: JD39846
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/16/22



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Phenanthrene		38.5 J	39	13	ug/kg	SW846 8270E
Pyrene		41.2	39	12	ug/kg	SW846 8270E
Total TIC, Semi-Volatile		3360 J			ug/kg	
Aluminum		17700	57		mg/kg	SW846 6010D
Barium		117	23		mg/kg	SW846 6010D
Beryllium ^a		0.62	0.46		mg/kg	SW846 6010D
Calcium		1380	570		mg/kg	SW846 6010D
Chromium		28.1	1.1		mg/kg	SW846 6010D
Cobalt		13.4	5.7		mg/kg	SW846 6010D
Copper ^a		24.6	5.7		mg/kg	SW846 6010D
Iron		28400	110		mg/kg	SW846 6010D
Lead		33.6	2.3		mg/kg	SW846 6010D
Magnesium		5440	570		mg/kg	SW846 6010D
Manganese ^a		269	3.4		mg/kg	SW846 6010D
Mercury		0.12	0.035		mg/kg	SW846 7471B
Nickel		24.6	4.6		mg/kg	SW846 6010D
Potassium		2290	1100		mg/kg	SW846 6010D
Vanadium		39.0	5.7		mg/kg	SW846 6010D
Zinc		80.1	5.7		mg/kg	SW846 6010D

JD39846-6A RI-SB8 (9.5-10')

No hits reported in this sample.

JD39846-7 RI-SB8 (12.5-13')

Aluminum	24400	56		mg/kg	SW846 6010D
Antimony	3.7	2.2		mg/kg	SW846 6010D
Barium	160	22		mg/kg	SW846 6010D
Calcium	1570	560		mg/kg	SW846 6010D
Chromium	36.7	1.1		mg/kg	SW846 6010D
Cobalt	24.4	5.6		mg/kg	SW846 6010D
Copper ^a	21.9	14		mg/kg	SW846 6010D
Iron	48000	280		mg/kg	SW846 6010D
Lead	6.5	2.2		mg/kg	SW846 6010D
Magnesium	11100	560		mg/kg	SW846 6010D
Manganese ^a	286	8.4		mg/kg	SW846 6010D
Nickel	46.1	4.5		mg/kg	SW846 6010D
Potassium	11600	1100		mg/kg	SW846 6010D
Vanadium	48.4	5.6		mg/kg	SW846 6010D
Zinc	117	5.6		mg/kg	SW846 6010D

JD39846-7A RI-SB8 (12.5-13')

No hits reported in this sample.

Summary of Hits

Job Number: JD39846
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/16/22



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Analyte						

JD39846-8 DUP-2

Benzo(a)anthracene	49.7	39	11	ug/kg	SW846 8270E
Benzo(a)pyrene	63.6	39	18	ug/kg	SW846 8270E
Benzo(b)fluoranthene	81.1	39	17	ug/kg	SW846 8270E
Benzo(g,h,i)perylene	55.9	39	20	ug/kg	SW846 8270E
Benzo(k)fluoranthene	30.4 J	39	18	ug/kg	SW846 8270E
Chrysene	59.6	39	12	ug/kg	SW846 8270E
Fluoranthene	74.2	39	18	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	66.1	39	18	ug/kg	SW846 8270E
Phenanthrene	37.8 J	39	13	ug/kg	SW846 8270E
Pyrene	69.9	39	13	ug/kg	SW846 8270E
Total TIC, Semi-Volatile	210 J			ug/kg	
Aluminum	17200	60		mg/kg	SW846 6010D
Barium	78.8	24		mg/kg	SW846 6010D
Beryllium ^a	0.61	0.48		mg/kg	SW846 6010D
Calcium	1360	600		mg/kg	SW846 6010D
Chromium	29.6	1.2		mg/kg	SW846 6010D
Cobalt	11.9	6.0		mg/kg	SW846 6010D
Copper ^a	21.0	6.0		mg/kg	SW846 6010D
Iron	27400	120		mg/kg	SW846 6010D
Lead	15.0	2.4		mg/kg	SW846 6010D
Magnesium	5190	600		mg/kg	SW846 6010D
Manganese ^a	572	3.6		mg/kg	SW846 6010D
Mercury	0.061	0.036		mg/kg	SW846 7471B
Nickel	22.9	4.8		mg/kg	SW846 6010D
Potassium	2320	1200		mg/kg	SW846 6010D
Vanadium	41.9	6.0		mg/kg	SW846 6010D
Zinc	65.0	6.0		mg/kg	SW846 6010D

JD39846-8A DUP-2

Perfluorooctanesulfonic acid ^b	0.55 J	0.60	0.24	ug/kg	EPA 537M BY ID
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JD39846-9 RI-SB9 (4.5-5')

Benzo(a)anthracene	15.5 J	36	10	ug/kg	SW846 8270E
Benzo(a)pyrene	24.6 J	36	17	ug/kg	SW846 8270E
Benzo(b)fluoranthene	43.1	36	16	ug/kg	SW846 8270E
Benzo(g,h,i)perylene	36.8	36	18	ug/kg	SW846 8270E
Chrysene	19.7 J	36	11	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	44.0	36	17	ug/kg	SW846 8270E
Pyrene	17.0 J	36	12	ug/kg	SW846 8270E
Total TIC, Semi-Volatile	1120 J			ug/kg	

Summary of Hits

Job Number: JD39846
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/16/22



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Aluminum		16300	55		mg/kg	SW846 6010D
Antimony		2.8	2.2		mg/kg	SW846 6010D
Barium		211	22		mg/kg	SW846 6010D
Calcium		2750	550		mg/kg	SW846 6010D
Chromium		28.3	1.1		mg/kg	SW846 6010D
Cobalt		14.1	5.5		mg/kg	SW846 6010D
Copper ^a		46.6	14		mg/kg	SW846 6010D
Iron		29600	270		mg/kg	SW846 6010D
Lead		101	2.2		mg/kg	SW846 6010D
Magnesium		6470	550		mg/kg	SW846 6010D
Manganese ^a		297	8.2		mg/kg	SW846 6010D
Mercury		0.24	0.036		mg/kg	SW846 7471B
Nickel		24.7	4.4		mg/kg	SW846 6010D
Potassium		6480	1100		mg/kg	SW846 6010D
Vanadium		47.6	5.5		mg/kg	SW846 6010D
Zinc		125	5.5		mg/kg	SW846 6010D
JD39846-9A RI-SB9 (4.5-5')						
Perfluorooctanesulfonic acid ^b		0.27 J	0.57	0.23	ug/kg	EPA 537M BY ID
JD39846-10 RI-SB9 (9.5-10')						
Benzo(a)anthracene		15.2 J	35	10	ug/kg	SW846 8270E
Chrysene		14.2 J	35	11	ug/kg	SW846 8270E
Fluoranthene		16.2 J	35	16	ug/kg	SW846 8270E
Phenanthrene		12.1 J	35	12	ug/kg	SW846 8270E
Pyrene		18.3 J	35	11	ug/kg	SW846 8270E
Total TIC, Semi-Volatile		140 J			ug/kg	
Aluminum		21300	56		mg/kg	SW846 6010D
Antimony		3.4	2.2		mg/kg	SW846 6010D
Barium		195	22		mg/kg	SW846 6010D
Calcium		642	560		mg/kg	SW846 6010D
Chromium		34.1	1.1		mg/kg	SW846 6010D
Cobalt		19.9	5.6		mg/kg	SW846 6010D
Copper ^a		35.4	14		mg/kg	SW846 6010D
Iron		41200	280		mg/kg	SW846 6010D
Lead		16.5	2.2		mg/kg	SW846 6010D
Magnesium		7530	560		mg/kg	SW846 6010D
Manganese ^a		1320	8.4		mg/kg	SW846 6010D
Nickel		38.3	4.5		mg/kg	SW846 6010D
Potassium		9040	1100		mg/kg	SW846 6010D
Vanadium		41.9	5.6		mg/kg	SW846 6010D
Zinc		103	5.6		mg/kg	SW846 6010D

Summary of Hits

Job Number: JD39846
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/16/22



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JD39846-10A RI-SB9 (9.5-10')

No hits reported in this sample.

JD39846-11 RI-SB9 (14.5-15')

Acetone	19.1	11	4.6	ug/kg	SW846 8260D
Benzo(a)anthracene	60.2	42	12	ug/kg	SW846 8270E
Benzo(a)pyrene	51.3	42	19	ug/kg	SW846 8270E
Benzo(b)fluoranthene	57.4	42	18	ug/kg	SW846 8270E
Benzo(g,h,i)perylene	28.8 J	42	21	ug/kg	SW846 8270E
Benzo(k)fluoranthene	24.8 J	42	19	ug/kg	SW846 8270E
Chrysene	50.6	42	13	ug/kg	SW846 8270E
Fluoranthene	87.9	42	19	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	35.4 J	42	20	ug/kg	SW846 8270E
Phenanthrene	26.3 J	42	14	ug/kg	SW846 8270E
Pyrene	78.9	42	13	ug/kg	SW846 8270E
Total TIC, Semi-Volatile	1670 J			ug/kg	
Aluminum	14900	67		mg/kg	SW846 6010D
Arsenic	3.6	2.7		mg/kg	SW846 6010D
Barium	71.1	27		mg/kg	SW846 6010D
Beryllium	0.57	0.27		mg/kg	SW846 6010D
Calcium	1080	670		mg/kg	SW846 6010D
Chromium	27.7	1.3		mg/kg	SW846 6010D
Cobalt	11.3	6.7		mg/kg	SW846 6010D
Copper	18.1	3.4		mg/kg	SW846 6010D
Iron	20300	67		mg/kg	SW846 6010D
Lead	25.1	2.7		mg/kg	SW846 6010D
Magnesium	3180	670		mg/kg	SW846 6010D
Manganese	243	2.0		mg/kg	SW846 6010D
Mercury	0.059	0.041		mg/kg	SW846 7471B
Nickel	18.4	5.4		mg/kg	SW846 6010D
Vanadium	39.1	6.7		mg/kg	SW846 6010D
Zinc	52.2	6.7		mg/kg	SW846 6010D

JD39846-11A RI-SB9 (14.5-15')

No hits reported in this sample.

JD39846-13 FIELD BLANK

Total TIC, Semi-Volatile	26.8 J	ug/l
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Summary of Hits

Job Number: JD39846
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/16/22



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Analyte						

JD39846-13A FIELD BLANK

No hits reported in this sample.

- (a) Elevated detection limit due to dilution required for high interfering element.
- (b) Analysis performed at SGS Orlando, FL.



Dayton, NJ

Section 4

4

Sample Results

Report of Analysis

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB7 (4.5-5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-1	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173664.D	1	02/17/22 20:03	PS	02/16/22 21:00	n/a	V3C7643
Run #2							

	Initial Weight
Run #1	5.3 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	4.4	ug/kg	
71-43-2	Benzene	ND	0.54	0.49	ug/kg	
74-97-5	Bromochloromethane	ND	5.4	0.60	ug/kg	
75-27-4	Bromodichloromethane	ND	2.1	0.46	ug/kg	
75-25-2	Bromoform	ND	5.4	1.5	ug/kg	
74-83-9	Bromomethane ^a	ND	5.4	0.82	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.6	ug/kg	
75-15-0	Carbon disulfide	ND	2.1	0.57	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.1	0.66	ug/kg	
108-90-7	Chlorobenzene	ND	2.1	0.49	ug/kg	
75-00-3	Chloroethane	ND	5.4	0.63	ug/kg	
67-66-3	Chloroform	ND	2.1	0.56	ug/kg	
74-87-3	Chloromethane	ND	5.4	2.1	ug/kg	
110-82-7	Cyclohexane	ND	2.1	0.71	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	0.74	ug/kg	
124-48-1	Dibromochloromethane	ND	2.1	0.60	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.45	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.1	0.59	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.1	0.53	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.1	0.53	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.4	0.78	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.1	0.53	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.50	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.1	0.70	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.1	0.90	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.1	0.66	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.1	0.51	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	0.51	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	0.49	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.49	ug/kg	
76-13-1	Freon 113	ND	5.4	2.9	ug/kg	
591-78-6	2-Hexanone	ND	5.4	2.3	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB7 (4.5-5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-1	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.1	1.5	ug/kg	
79-20-9	Methyl Acetate	ND	5.4	1.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.1	0.94	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.4	2.4	ug/kg	
75-09-2	Methylene chloride	ND	5.4	2.8	ug/kg	
100-42-5	Styrene	ND	2.1	0.43	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.64	ug/kg	
127-18-4	Tetrachloroethene	ND	2.1	0.62	ug/kg	
108-88-3	Toluene	ND	1.1	0.56	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.4	2.7	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	2.7	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.1	0.52	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.59	ug/kg	
79-01-6	Trichloroethene	ND	1.1	0.82	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.4	0.73	ug/kg	
75-01-4	Vinyl chloride	ND	2.1	0.52	ug/kg	
	m,p-Xylene	ND	1.1	0.96	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.49	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		80-124%
17060-07-0	1,2-Dichloroethane-D4	99%		75-133%
2037-26-5	Toluene-D8	98%		79-125%
460-00-4	4-Bromofluorobenzene	102%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
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 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	RI-SB7 (4.5-5')	
Lab Sample ID:	JD39846-1	Date Sampled: 02/16/22
Matrix:	SO - Soil	Date Received: 02/16/22
Method:	SW846 8270E SW846 3546	Percent Solids: 87.9
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155166.D	1	02/21/22 15:45	JY	02/19/22 11:30	OP38200	EZ7709
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	76	19	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	32	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	68	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	190	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	190	41	ug/kg	
95-48-7	2-Methylphenol	ND	76	24	ug/kg	
	3&4-Methylphenol	ND	76	31	ug/kg	
88-75-5	2-Nitrophenol	ND	190	25	ug/kg	
100-02-7	4-Nitrophenol	ND	380	100	ug/kg	
87-86-5	Pentachlorophenol	ND	150	36	ug/kg	
108-95-2	Phenol	ND	76	20	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	190	25	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	28	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	23	ug/kg	
83-32-9	Acenaphthene	18.9	38	13	ug/kg	J
208-96-8	Acenaphthylene	ND	38	19	ug/kg	
98-86-2	Acetophenone	ND	190	8.2	ug/kg	
120-12-7	Anthracene	49.0	38	23	ug/kg	
1912-24-9	Atrazine	ND	76	16	ug/kg	
56-55-3	Benzo(a)anthracene	143	38	11	ug/kg	
50-32-8	Benzo(a)pyrene	117	38	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	138	38	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	67.7	38	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	56.9	38	18	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	76	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	76	9.3	ug/kg	
92-52-4	1,1'-Biphenyl	ND	76	5.2	ug/kg	
100-52-7	Benzaldehyde	ND	190	9.4	ug/kg	
91-58-7	2-Chloronaphthalene	ND	76	9.0	ug/kg	
106-47-8	4-Chloroaniline	ND	190	14	ug/kg	
86-74-8	Carbazole	20.5	76	5.5	ug/kg	J

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB7 (4.5-5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-1	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	76	15	ug/kg	
218-01-9	Chrysene	146	38	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	76	8.1	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	76	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	76	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	76	12	ug/kg	
121-14-2	2,4-Dinitrotoluene ^a	ND	38	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	38	19	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	76	32	ug/kg	
123-91-1	1,4-Dioxane	ND	38	25	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	23.5	38	17	ug/kg	J
132-64-9	Dibenzofuran	ND	76	15	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	76	6.2	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	76	9.4	ug/kg	
84-66-2	Diethyl phthalate	ND	76	8.1	ug/kg	
131-11-3	Dimethyl phthalate	ND	76	6.8	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	76	8.9	ug/kg	
206-44-0	Fluoranthene	239	38	17	ug/kg	
86-73-7	Fluorene	20.4	38	17	ug/kg	J
118-74-1	Hexachlorobenzene	ND	76	9.6	ug/kg	
87-68-3	Hexachlorobutadiene	ND	38	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	380	15	ug/kg	
67-72-1	Hexachloroethane	ND	190	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	85.2	38	18	ug/kg	
78-59-1	Isophorone	ND	76	8.1	ug/kg	
91-57-6	2-Methylnaphthalene	31.0	38	8.6	ug/kg	J
88-74-4	2-Nitroaniline	ND	190	8.9	ug/kg	
99-09-2	3-Nitroaniline	ND	190	9.5	ug/kg	
100-01-6	4-Nitroaniline ^a	ND	190	9.8	ug/kg	
91-20-3	Naphthalene	33.1	38	11	ug/kg	J
98-95-3	Nitrobenzene	ND	76	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	76	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	14	ug/kg	
85-01-8	Phenanthrene	216	38	13	ug/kg	
129-00-0	Pyrene	215	38	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	190	9.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	46%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	RI-SB7 (4.5-5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-1	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	48%		10-105%
118-79-6	2,4,6-Tribromophenol	53%		10-135%
4165-60-0	Nitrobenzene-d5	49%		10-119%
321-60-8	2-Fluorobiphenyl	58%		18-112%
1718-51-0	Terphenyl-d14	58%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.33	230	ug/kg	J
	unknown	13.44	220	ug/kg	J
	Total TIC, Semi-Volatile		220	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

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Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB7 (4.5-5')	
Lab Sample ID:	JD39846-1	Date Sampled: 02/16/22
Matrix:	SO - Soil	Date Received: 02/16/22
Method:	SW846 8081B SW846 3546	Percent Solids: 87.9
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174479.D	1	02/23/22 09:42	CP	02/19/22 10:05	OP38204	G1G6028
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.74	0.61	ug/kg	
319-84-6	alpha-BHC	ND	0.74	0.60	ug/kg	
319-85-7	beta-BHC	ND	0.74	0.67	ug/kg	
319-86-8	delta-BHC	ND	0.74	0.71	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.74	0.54	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.74	0.60	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.74	0.33	ug/kg	
60-57-1	Dieldrin	ND	0.74	0.51	ug/kg	
72-54-8	4,4' -DDD	ND	0.74	0.68	ug/kg	
72-55-9	4,4' -DDE	ND	0.74	0.65	ug/kg	
50-29-3	4,4' -DDT	ND	0.74	0.65	ug/kg	
72-20-8	Endrin	ND	0.74	0.57	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.74	0.58	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.74	0.42	ug/kg	
959-98-8	Endosulfan-I	ND	0.74	0.43	ug/kg	
33213-65-9	Endosulfan-II	ND	0.74	0.46	ug/kg	
76-44-8	Heptachlor	ND	0.74	0.64	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.74	0.52	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.59	ug/kg	
53494-70-5	Endrin ketone	ND	0.74	0.53	ug/kg	
8001-35-2	Toxaphene	ND	18	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	78%		14-145%
877-09-8	Tetrachloro-m-xylene	77%		14-145%
2051-24-3	Decachlorobiphenyl	69%		10-197%
2051-24-3	Decachlorobiphenyl	88%		10-197%

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Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB7 (4.5-5')		
Lab Sample ID:	JD39846-1	Date Sampled:	02/16/22
Matrix:	SO - Soil	Date Received:	02/16/22
Method:	SW846 8082A SW846 3546	Percent Solids:	87.9
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK8157.D	1	02/22/22 18:01	TL	02/19/22 10:05	OP38205	GRK212
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	17	ug/kg	
11104-28-2	Aroclor 1221	ND	37	23	ug/kg	
11141-16-5	Aroclor 1232	ND	37	24	ug/kg	
53469-21-9	Aroclor 1242	ND	37	15	ug/kg	
12672-29-6	Aroclor 1248	ND	37	33	ug/kg	
11097-69-1	Aroclor 1254	ND	37	20	ug/kg	
11096-82-5	Aroclor 1260 ^a	ND	37	16	ug/kg	
11100-14-4	Aroclor 1268	ND	37	16	ug/kg	
37324-23-5	Aroclor 1262	ND	37	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	80%		10-163%
877-09-8	Tetrachloro-m-xylene	102%		10-163%
2051-24-3	Decachlorobiphenyl	94%		10-215%
2051-24-3	Decachlorobiphenyl	96%		10-215%

(a) Associated CCV outside of control limits high, sample was ND.

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 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB7 (4.5-5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-1	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	87.9
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	16400	58	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Antimony	< 2.3	2.3	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Arsenic ^a	< 4.6	4.6	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Barium	112	23	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Beryllium ^a	0.64	0.46	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cadmium	< 0.58	0.58	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Calcium	2450	580	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Chromium	28.6	1.2	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Cobalt	12.4	5.8	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Copper ^a	28.9	5.8	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Iron	26100	120	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Lead	35.3	2.3	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Magnesium	4630	580	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Manganese ^a	651	3.5	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	0.083	0.036	mg/kg	1	02/22/22	02/22/22	LM	SW846 7471B ³	SW846 7471B ⁵
Nickel	25.1	4.6	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Potassium	3280	1200	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Selenium ^a	< 4.6	4.6	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Silver ^a	< 1.2	1.2	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Sodium	< 1200	1200	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Thallium ^a	< 2.3	2.3	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Vanadium	37.6	5.8	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Zinc	86.8	5.8	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴

(1) Instrument QC Batch: MA51933

(2) Instrument QC Batch: MA51936

(3) Instrument QC Batch: MA51938

(4) Prep QC Batch: MP31357

(5) Prep QC Batch: MP31420

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB7 (4.5-5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-1	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	87.9
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.24	0.24	mg/kg	1	02/18/22 15:27	MM	SW846 9012B/LACHAT
Solids, Percent	87.9		%	1	02/17/22 16:06	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.1
4

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB7 (4.5-5')	
Lab Sample ID:	JD39846-1A	Date Sampled: 02/16/22
Matrix:	SO - Soil	Date Received: 02/16/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 87.9
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55507.D	1	03/01/22 18:04	AFL	02/22/22 12:00	F:OP89889	F:S3Q766
Run #2							

	Initial Weight	Final Volume
Run #1	1.95 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.44	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.58	0.29	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.58	0.29	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.58	0.29	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.58	0.29	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.58	0.29	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.58	0.29	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.58	0.29	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.58	0.29	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.58	0.31	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.58	0.29	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.58	0.29	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.58	0.29	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.58	0.29	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.33	0.58	0.23	ug/kg	J
335-77-3	Perfluorodecanesulfonic acid	ND	0.58	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.58	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.58	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.58	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.29	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB7 (4.5-5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-1A	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	78%		40-140%
	13C5-PFPeA	78%		50-150%
	13C5-PFHxA	79%		50-150%
	13C4-PFHpA	80%		50-150%
	13C8-PFOA	80%		50-150%
	13C9-PFNA	79%		50-150%
	13C6-PFDA	79%		50-150%
	13C7-PFUnDA	76%		40-140%
	13C2-PFDoDA	77%		40-140%
	13C2-PFTeDA	75%		30-130%
	13C3-PFBS	78%		50-150%
	13C3-PFHxS	80%		50-150%
	13C8-PFOS	77%		50-150%
	13C8-FOSA	59%		30-130%
	d3-MeFOSAA	84%		40-140%
	d5-EtFOSAA	85%		40-140%
	13C2-6:2FTS	85%		50-150%
	13C2-8:2FTS	94%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB7 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-2	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	82.7
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173665.D	1	02/17/22 20:31	PS	02/16/22 21:00	n/a	V3C7643
Run #2							

	Initial Weight
Run #1	5.4 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	4.6	ug/kg	
71-43-2	Benzene	ND	0.56	0.51	ug/kg	
74-97-5	Bromochloromethane	ND	5.6	0.63	ug/kg	
75-27-4	Bromodichloromethane	ND	2.2	0.48	ug/kg	
75-25-2	Bromoform	ND	5.6	1.5	ug/kg	
74-83-9	Bromomethane ^a	ND	5.6	0.86	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.7	ug/kg	
75-15-0	Carbon disulfide	ND	2.2	0.60	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.2	0.69	ug/kg	
108-90-7	Chlorobenzene	ND	2.2	0.51	ug/kg	
75-00-3	Chloroethane	ND	5.6	0.66	ug/kg	
67-66-3	Chloroform	ND	2.2	0.58	ug/kg	
74-87-3	Chloromethane	ND	5.6	2.2	ug/kg	
110-82-7	Cyclohexane	ND	2.2	0.74	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.2	0.78	ug/kg	
124-48-1	Dibromochloromethane	ND	2.2	0.63	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.47	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.1	0.61	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.1	0.56	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.1	0.55	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.6	0.81	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.1	0.55	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.53	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.1	0.73	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.1	0.94	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.1	0.68	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.2	0.53	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.2	0.53	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	0.51	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.51	ug/kg	
76-13-1	Freon 113	ND	5.6	3.0	ug/kg	
591-78-6	2-Hexanone	ND	5.6	2.4	ug/kg	

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B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB7 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-2	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	82.7
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.2	1.6	ug/kg	
79-20-9	Methyl Acetate	ND	5.6	1.6	ug/kg	
108-87-2	Methylcyclohexane	ND	2.2	0.98	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.53	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.6	2.5	ug/kg	
75-09-2	Methylene chloride	ND	5.6	2.9	ug/kg	
100-42-5	Styrene	ND	2.2	0.45	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.2	0.67	ug/kg	
127-18-4	Tetrachloroethene	ND	2.2	0.65	ug/kg	
108-88-3	Toluene	ND	1.1	0.59	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.6	2.8	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.6	2.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.2	0.54	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.2	0.62	ug/kg	
79-01-6	Trichloroethene	ND	1.1	0.85	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.6	0.77	ug/kg	
75-01-4	Vinyl chloride	ND	2.2	0.54	ug/kg	
	m,p-Xylene	ND	1.1	1.0	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.51	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.51	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		80-124%
17060-07-0	1,2-Dichloroethane-D4	98%		75-133%
2037-26-5	Toluene-D8	98%		79-125%
460-00-4	4-Bromofluorobenzene	104%		58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

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 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	RI-SB7 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-2	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	82.7
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155167.D	1	02/21/22 16:09	JY	02/19/22 11:30	OP38200	EZ7709
Run #2							

	Initial Weight	Final Volume
Run #1	31.4 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	77	19	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	24	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	33	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	69	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	190	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	190	41	ug/kg	
95-48-7	2-Methylphenol	ND	77	25	ug/kg	
	3&4-Methylphenol	ND	77	32	ug/kg	
88-75-5	2-Nitrophenol	ND	190	25	ug/kg	
100-02-7	4-Nitrophenol	ND	390	100	ug/kg	
87-86-5	Pentachlorophenol	ND	150	36	ug/kg	
108-95-2	Phenol	ND	77	20	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	190	25	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	29	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	23	ug/kg	
83-32-9	Acenaphthene	ND	39	13	ug/kg	
208-96-8	Acenaphthylene	ND	39	20	ug/kg	
98-86-2	Acetophenone	ND	190	8.3	ug/kg	
120-12-7	Anthracene	ND	39	24	ug/kg	
1912-24-9	Atrazine	ND	77	16	ug/kg	
56-55-3	Benzo(a)anthracene	ND	39	11	ug/kg	
50-32-8	Benzo(a)pyrene	ND	39	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	39	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	39	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	39	18	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	77	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	77	9.4	ug/kg	
92-52-4	1,1'-Biphenyl	ND	77	5.3	ug/kg	
100-52-7	Benzaldehyde	ND	190	9.6	ug/kg	
91-58-7	2-Chloronaphthalene	ND	77	9.2	ug/kg	
106-47-8	4-Chloroaniline	ND	190	14	ug/kg	
86-74-8	Carbazole	ND	77	5.6	ug/kg	

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Report of Analysis

Client Sample ID:	RI-SB7 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-2	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	82.7
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	77	15	ug/kg	
218-01-9	Chrysene	ND	39	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	77	8.2	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	77	17	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	77	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	77	12	ug/kg	
121-14-2	2,4-Dinitrotoluene ^a	ND	39	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	39	19	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	77	32	ug/kg	
123-91-1	1,4-Dioxane	ND	39	25	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	39	17	ug/kg	
132-64-9	Dibenzofuran	ND	77	16	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	77	6.3	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	77	9.6	ug/kg	
84-66-2	Diethyl phthalate	ND	77	8.2	ug/kg	
131-11-3	Dimethyl phthalate	ND	77	6.9	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	77	9.0	ug/kg	
206-44-0	Fluoranthene	ND	39	17	ug/kg	
86-73-7	Fluorene	ND	39	18	ug/kg	
118-74-1	Hexachlorobenzene	ND	77	9.7	ug/kg	
87-68-3	Hexachlorobutadiene	ND	39	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	390	15	ug/kg	
67-72-1	Hexachloroethane	ND	190	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	39	18	ug/kg	
78-59-1	Isophorone	ND	77	8.2	ug/kg	
91-57-6	2-Methylnaphthalene	ND	39	8.7	ug/kg	
88-74-4	2-Nitroaniline	ND	190	9.1	ug/kg	
99-09-2	3-Nitroaniline	ND	190	9.6	ug/kg	
100-01-6	4-Nitroaniline ^a	ND	190	10	ug/kg	
91-20-3	Naphthalene	ND	39	11	ug/kg	
98-95-3	Nitrobenzene	ND	77	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	77	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	14	ug/kg	
85-01-8	Phenanthrene	ND	39	13	ug/kg	
129-00-0	Pyrene	ND	39	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	190	9.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	53%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	RI-SB7 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-2	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	82.7
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	52%		10-105%
118-79-6	2,4,6-Tribromophenol	58%		10-135%
4165-60-0	Nitrobenzene-d5	54%		10-119%
321-60-8	2-Fluorobiphenyl	64%		18-112%
1718-51-0	Terphenyl-d14	62%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

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Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB7 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-2	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	82.7
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174480.D	1	02/23/22 10:00	CP	02/19/22 10:05	OP38204	G1G6028
Run #2							

	Initial Weight	Final Volume
Run #1	16.3 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.74	0.61	ug/kg	
319-84-6	alpha-BHC	ND	0.74	0.60	ug/kg	
319-85-7	beta-BHC	ND	0.74	0.67	ug/kg	
319-86-8	delta-BHC	ND	0.74	0.71	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.74	0.55	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.74	0.60	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.74	0.34	ug/kg	
60-57-1	Dieldrin	ND	0.74	0.51	ug/kg	
72-54-8	4,4' -DDD	ND	0.74	0.68	ug/kg	
72-55-9	4,4' -DDE	ND	0.74	0.65	ug/kg	
50-29-3	4,4' -DDT	ND	0.74	0.66	ug/kg	
72-20-8	Endrin	ND	0.74	0.58	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.74	0.58	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.74	0.42	ug/kg	
959-98-8	Endosulfan-I	ND	0.74	0.43	ug/kg	
33213-65-9	Endosulfan-II	ND	0.74	0.46	ug/kg	
76-44-8	Heptachlor	ND	0.74	0.64	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.74	0.52	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.59	ug/kg	
53494-70-5	Endrin ketone	ND	0.74	0.54	ug/kg	
8001-35-2	Toxaphene	ND	19	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	65%		14-145%
877-09-8	Tetrachloro-m-xylene	64%		14-145%
2051-24-3	Decachlorobiphenyl	62%		10-197%
2051-24-3	Decachlorobiphenyl	66%		10-197%

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Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB7 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-2	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	82.7
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK8158.D	1	02/22/22 18:17	TL	02/19/22 10:05	OP38205	GRK212
Run #2							

	Initial Weight	Final Volume
Run #1	16.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	17	ug/kg	
11104-28-2	Aroclor 1221	ND	37	23	ug/kg	
11141-16-5	Aroclor 1232	ND	37	24	ug/kg	
53469-21-9	Aroclor 1242	ND	37	15	ug/kg	
12672-29-6	Aroclor 1248	ND	37	33	ug/kg	
11097-69-1	Aroclor 1254	ND	37	20	ug/kg	
11096-82-5	Aroclor 1260 ^a	ND	37	16	ug/kg	
11100-14-4	Aroclor 1268	ND	37	16	ug/kg	
37324-23-5	Aroclor 1262	ND	37	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	69%		10-163%
877-09-8	Tetrachloro-m-xylene	87%		10-163%
2051-24-3	Decachlorobiphenyl	76%		10-215%
2051-24-3	Decachlorobiphenyl	74%		10-215%

(a) Associated CCV outside of control limits high, sample was ND.

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Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB7 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-2	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	82.7
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	22800	58	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Antimony	3.6	2.3	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Arsenic ^a	< 12	12	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Barium	119	23	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Beryllium ^a	< 1.2	1.2	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cadmium	< 0.58	0.58	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Calcium	2050	580	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Chromium	48.5	1.2	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Cobalt	22.7	5.8	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Copper ^a	133	14	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Iron	43500	290	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Lead	12.7	2.3	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Magnesium	7860	580	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Manganese ^a	585	8.6	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	0.061	0.036	mg/kg	1	02/22/22	02/22/22	LM	SW846 7471B ³	SW846 7471B ⁵
Nickel	31.3	4.6	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Potassium	3520	1200	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Selenium ^a	< 12	12	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Silver ^a	< 2.9	2.9	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Sodium	< 1200	1200	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Thallium ^a	< 5.8	5.8	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Vanadium	61.9	5.8	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Zinc	71.8	5.8	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴

(1) Instrument QC Batch: MA51933

(2) Instrument QC Batch: MA51936

(3) Instrument QC Batch: MA51938

(4) Prep QC Batch: MP31357

(5) Prep QC Batch: MP31420

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB7 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-2	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	82.7
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.28	0.28	mg/kg	1	02/18/22 15:28	MM	SW846 9012B/LACHAT
Solids, Percent	82.7		%	1	02/17/22 16:06	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.3
4

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB7 (9.5-10')	
Lab Sample ID:	JD39846-2A	Date Sampled: 02/16/22
Matrix:	SO - Soil	Date Received: 02/16/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 82.7
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55508.D	1	03/01/22 18:21	AFL	02/22/22 12:00	F:OP89889	F:S3Q766
Run #2							

	Initial Weight	Final Volume
Run #1	2.02 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
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PERFLUOROALKYLCARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	ND	1.2	0.45	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.60	0.30	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.60	0.30	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.60	0.30	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.60	0.30	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.60	0.30	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.60	0.30	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.60	0.30	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.60	0.30	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.60	0.32	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.60	0.30	ug/kg	

PERFLUOROALKYLSULFONIC ACIDS

375-73-5	Perfluorobutanesulfonic acid	ND	0.60	0.30	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.60	0.30	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.60	0.30	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.60	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.60	0.30	ug/kg	

PERFLUOROCTANESULFONAMIDES

754-91-6	PFOSA	ND	0.60	0.30	ug/kg	
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PERFLUOROCTANESULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	ND	1.2	0.60	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.60	ug/kg	

FLUOROTELOMER SULFONATES

27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB7 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-2A	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	82.7
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	78%		40-140%
	13C5-PFPeA	80%		50-150%
	13C5-PFHxA	82%		50-150%
	13C4-PFHpA	87%		50-150%
	13C8-PFOA	88%		50-150%
	13C9-PFNA	89%		50-150%
	13C6-PFDA	100%		50-150%
	13C7-PFUnDA	97%		40-140%
	13C2-PFDoDA	90%		40-140%
	13C2-PFTeDA	89%		30-130%
	13C3-PFBS	88%		50-150%
	13C3-PFHxS	92%		50-150%
	13C8-PFOS	92%		50-150%
	13C8-FOSA	61%		30-130%
	d3-MeFOSAA	61%		40-140%
	d5-EtFOSAA	69%		40-140%
	13C2-6:2FTS	93%		50-150%
	13C2-8:2FTS	99%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB7 (14.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-3	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	88.8
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173666.D	1	02/17/22 20:59	PS	02/16/22 21:00	n/a	V3C7643
Run #2							

	Initial Weight
Run #1	5.3 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	4.4	ug/kg	
71-43-2	Benzene	ND	0.53	0.48	ug/kg	
74-97-5	Bromochloromethane	ND	5.3	0.59	ug/kg	
75-27-4	Bromodichloromethane	ND	2.1	0.46	ug/kg	
75-25-2	Bromoform	ND	5.3	1.4	ug/kg	
74-83-9	Bromomethane ^a	ND	5.3	0.81	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.6	ug/kg	
75-15-0	Carbon disulfide	ND	2.1	0.57	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.1	0.66	ug/kg	
108-90-7	Chlorobenzene	ND	2.1	0.49	ug/kg	
75-00-3	Chloroethane	ND	5.3	0.63	ug/kg	
67-66-3	Chloroform	ND	2.1	0.55	ug/kg	
74-87-3	Chloromethane	ND	5.3	2.1	ug/kg	
110-82-7	Cyclohexane	ND	2.1	0.70	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	0.74	ug/kg	
124-48-1	Dibromochloromethane	ND	2.1	0.59	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.45	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.1	0.58	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.1	0.53	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.1	0.52	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.3	0.77	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.1	0.53	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.50	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.1	0.70	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.1	0.89	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.1	0.65	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.1	0.50	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	0.49	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.48	ug/kg	
76-13-1	Freon 113	ND	5.3	2.8	ug/kg	
591-78-6	2-Hexanone	ND	5.3	2.3	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB7 (14.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-3	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	88.8
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.1	1.5	ug/kg	
79-20-9	Methyl Acetate	ND	5.3	1.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.1	0.93	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.3	2.4	ug/kg	
75-09-2	Methylene chloride	ND	5.3	2.8	ug/kg	
100-42-5	Styrene	ND	2.1	0.43	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.64	ug/kg	
127-18-4	Tetrachloroethene	ND	2.1	0.62	ug/kg	
108-88-3	Toluene	ND	1.1	0.56	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.3	2.7	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.3	2.7	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.1	0.51	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.59	ug/kg	
79-01-6	Trichloroethene	ND	1.1	0.81	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.3	0.73	ug/kg	
75-01-4	Vinyl chloride	ND	2.1	0.51	ug/kg	
	m,p-Xylene	ND	1.1	0.95	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.49	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		80-124%
17060-07-0	1,2-Dichloroethane-D4	96%		75-133%
2037-26-5	Toluene-D8	98%		79-125%
460-00-4	4-Bromofluorobenzene	102%		58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	RI-SB7 (14.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-3	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	88.8
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155159.D	1	02/21/22 12:57	JY	02/19/22 08:00	OP38200	EZ7709
Run #2							

	Initial Weight	Final Volume
Run #1	31.3 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	72	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	22	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	31	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	64	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	180	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	180	38	ug/kg	
95-48-7	2-Methylphenol	ND	72	23	ug/kg	
	3&4-Methylphenol	ND	72	30	ug/kg	
88-75-5	2-Nitrophenol	ND	180	24	ug/kg	
100-02-7	4-Nitrophenol	ND	360	96	ug/kg	
87-86-5	Pentachlorophenol	ND	140	34	ug/kg	
108-95-2	Phenol	ND	72	19	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	24	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	27	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	21	ug/kg	
83-32-9	Acenaphthene	ND	36	12	ug/kg	
208-96-8	Acenaphthylene	ND	36	18	ug/kg	
98-86-2	Acetophenone	ND	180	7.7	ug/kg	
120-12-7	Anthracene	ND	36	22	ug/kg	
1912-24-9	Atrazine	ND	72	15	ug/kg	
56-55-3	Benzo(a)anthracene	ND	36	10	ug/kg	
50-32-8	Benzo(a)pyrene	ND	36	16	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	36	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	36	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	36	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	72	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	72	8.8	ug/kg	
92-52-4	1,1'-Biphenyl	ND	72	4.9	ug/kg	
100-52-7	Benzaldehyde	ND	180	8.9	ug/kg	
91-58-7	2-Chloronaphthalene	ND	72	8.6	ug/kg	
106-47-8	4-Chloroaniline	ND	180	13	ug/kg	
86-74-8	Carbazole	ND	72	5.2	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB7 (14.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-3	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	88.8
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	72	14	ug/kg	
218-01-9	Chrysene	ND	36	11	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	72	7.7	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	72	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	72	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	72	12	ug/kg	
121-14-2	2,4-Dinitrotoluene ^a	ND	36	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	36	18	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	72	30	ug/kg	
123-91-1	1,4-Dioxane	ND	36	24	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	36	16	ug/kg	
132-64-9	Dibenzofuran	ND	72	15	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	72	5.9	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	72	9.0	ug/kg	
84-66-2	Diethyl phthalate	ND	72	7.7	ug/kg	
131-11-3	Dimethyl phthalate	ND	72	6.4	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	72	8.4	ug/kg	
206-44-0	Fluoranthene	ND	36	16	ug/kg	
86-73-7	Fluorene	ND	36	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	72	9.1	ug/kg	
87-68-3	Hexachlorobutadiene	ND	36	14	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	360	14	ug/kg	
67-72-1	Hexachloroethane	ND	180	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	36	17	ug/kg	
78-59-1	Isophorone	ND	72	7.7	ug/kg	
91-57-6	2-Methylnaphthalene	ND	36	8.1	ug/kg	
88-74-4	2-Nitroaniline	ND	180	8.5	ug/kg	
99-09-2	3-Nitroaniline	ND	180	9.0	ug/kg	
100-01-6	4-Nitroaniline ^a	ND	180	9.3	ug/kg	
91-20-3	Naphthalene	ND	36	10	ug/kg	
98-95-3	Nitrobenzene	ND	72	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	72	10	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	13	ug/kg	
85-01-8	Phenanthrene	ND	36	12	ug/kg	
129-00-0	Pyrene	ND	36	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	9.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	48%		10-109%

ND = Not detected MDL = Method Detection Limit

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	RI-SB7 (14.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-3	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	88.8
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	47%		10-105%
118-79-6	2,4,6-Tribromophenol	48%		10-135%
4165-60-0	Nitrobenzene-d5	51%		10-119%
321-60-8	2-Fluorobiphenyl	56%		18-112%
1718-51-0	Terphenyl-d14	59%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.33	170	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB7 (14.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-3	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	88.8
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174481.D	1	02/23/22 10:18	CP	02/19/22 10:05	OP38204	G1G6028
Run #2							

	Initial Weight	Final Volume
Run #1	16.0 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.70	0.58	ug/kg	
319-84-6	alpha-BHC	ND	0.70	0.57	ug/kg	
319-85-7	beta-BHC	ND	0.70	0.64	ug/kg	
319-86-8	delta-BHC	ND	0.70	0.68	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.70	0.52	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.70	0.57	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.70	0.32	ug/kg	
60-57-1	Dieldrin	ND	0.70	0.48	ug/kg	
72-54-8	4,4' -DDD	ND	0.70	0.65	ug/kg	
72-55-9	4,4' -DDE	ND	0.70	0.62	ug/kg	
50-29-3	4,4' -DDT	ND	0.70	0.62	ug/kg	
72-20-8	Endrin	ND	0.70	0.55	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.70	0.55	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.70	0.40	ug/kg	
959-98-8	Endosulfan-I	ND	0.70	0.41	ug/kg	
33213-65-9	Endosulfan-II	ND	0.70	0.44	ug/kg	
76-44-8	Heptachlor	ND	0.70	0.61	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.70	0.49	ug/kg	
72-43-5	Methoxychlor	ND	1.4	0.56	ug/kg	
53494-70-5	Endrin ketone	ND	0.70	0.51	ug/kg	
8001-35-2	Toxaphene	ND	18	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	64%		14-145%
877-09-8	Tetrachloro-m-xylene	64%		14-145%
2051-24-3	Decachlorobiphenyl	65%		10-197%
2051-24-3	Decachlorobiphenyl	65%		10-197%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB7 (14.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-3	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	88.8
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK8163.D	1	02/22/22 19:40	TL	02/19/22 10:05	OP38205	GRK212
Run #2							

	Initial Weight	Final Volume
Run #1	16.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	16	ug/kg	
11104-28-2	Aroclor 1221	ND	35	22	ug/kg	
11141-16-5	Aroclor 1232	ND	35	22	ug/kg	
53469-21-9	Aroclor 1242	ND	35	14	ug/kg	
12672-29-6	Aroclor 1248	ND	35	31	ug/kg	
11097-69-1	Aroclor 1254	ND	35	19	ug/kg	
11096-82-5	Aroclor 1260 ^a	ND	35	15	ug/kg	
11100-14-4	Aroclor 1268	ND	35	15	ug/kg	
37324-23-5	Aroclor 1262	ND	35	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	75%		10-163%
877-09-8	Tetrachloro-m-xylene	96%		10-163%
2051-24-3	Decachlorobiphenyl	79%		10-215%
2051-24-3	Decachlorobiphenyl	82%		10-215%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB7 (14.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-3	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	88.8
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method	
Aluminum	11600	59	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ³
Antimony	< 2.4	2.4	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ³
Arsenic	2.7	2.4	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ³
Barium	55.5	24	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ³
Beryllium	0.44	0.24	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ³
Cadmium	< 0.59	0.59	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ³
Calcium	1410	590	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ³
Chromium	22.2	1.2	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ³
Cobalt	9.4	5.9	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ³
Copper	26.3	3.0	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ³
Iron	17300	59	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ³
Lead	5.6	2.4	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ³
Magnesium	3330	590	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ³
Manganese	326	1.8	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ³
Mercury	< 0.034	0.034	mg/kg	1	02/22/22	02/22/22	LM	SW846 7471B ²	SW846 7471B ⁴
Nickel	20.1	4.7	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ³
Potassium	2400	1200	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ³
Selenium	< 2.4	2.4	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ³
Silver	0.63	0.59	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ³
Sodium	< 1200	1200	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ³
Thallium	< 1.2	1.2	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ³
Vanadium	29.8	5.9	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ³
Zinc	38.4	5.9	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ³

(1) Instrument QC Batch: MA51933

(2) Instrument QC Batch: MA51938

(3) Prep QC Batch: MP31357

(4) Prep QC Batch: MP31420

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB7 (14.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-3	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	88.8
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.24	0.24	mg/kg	1	02/18/22 15:29	MM	SW846 9012B/LACHAT
Solids, Percent	88.8		%	1	02/17/22 16:06	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.5
4

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB7 (14.5-15')		
Lab Sample ID:	JD39846-3A	Date Sampled:	02/16/22
Matrix:	SO - Soil	Date Received:	02/16/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids:	88.8
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55509.D	1	03/01/22 18:38	AFL	02/22/22 12:00	F:OP89889	F:S3Q766
Run #2 ^b	3Q55621.D	5	03/03/22 02:36	AFL	02/22/22 12:00	F:OP89889	F:S3Q767

	Initial Weight	Final Volume
Run #1	2.03 g	1.0 ml
Run #2	1.98 g	1.0 ml

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
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PERFLUOROALKYLCARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	ND	1.1	0.42	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.28	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.55	0.28	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.55	0.28	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.55	0.28	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.55	0.28	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.55	0.28	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.55	0.28	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.55	0.28	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.55	0.29	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.55	0.28	ug/kg	

PERFLUOROALKYLSULFONIC ACIDS

375-73-5	Perfluorobutanesulfonic acid	ND	0.55	0.28	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.55	0.28	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.55	0.28	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.55	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.55	0.28	ug/kg	

PERFLUOROCTANESULFONAMIDES

754-91-6	PFOSA	ND	0.55	0.28	ug/kg	
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PERFLUOROCTANESULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA ^c	ND ^d	5.7	2.8	ug/kg	
2991-50-6	EtFOSAA	ND ^d	5.7	2.8	ug/kg	

FLUOROTELOMER SULFONATES

27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB7 (14.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-3A	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	88.8
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	73%	82%	40-140%
	13C5-PFPeA	73%	82%	50-150%
	13C5-PFHxA	74%	83%	50-150%
	13C4-PFHpA	76%	87%	50-150%
	13C8-PFOA	78%	86%	50-150%
	13C9-PFNA	76%	85%	50-150%
	13C6-PFDA	80%	95%	50-150%
	13C7-PFUnDA	79%	98%	40-140%
	13C2-PFDoDA	76%	87%	40-140%
	13C2-PFTeDA	73%	82%	30-130%
	13C3-PFBS	76%	90%	50-150%
	13C3-PFHxS	76%	92%	50-150%
	13C8-PFOS	78%	93%	50-150%
	13C8-FOSA	78%	92%	30-130%
	d3-MeFOSAA	32% ^e	39% ^e	40-140%
	d5-EtFOSAA	36% ^e	40%	40-140%
	13C2-6:2FTS	78%	92%	50-150%
	13C2-8:2FTS	83%	99%	50-150%

(a) Analysis performed at SGS Orlando, FL.

(b) Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.

(c) Associated ID Standard outside control limits, Confirmed by re-analysis.

(d) Result is from Run# 2

(e) Outside control limits.

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Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB8 (4.5-5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-5	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	85.0
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173667.D	1	02/17/22 21:27	PS	02/16/22 21:00	n/a	V3C7643
Run #2							

	Initial Weight
Run #1	5.6 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	4.3	ug/kg	
71-43-2	Benzene	ND	0.53	0.48	ug/kg	
74-97-5	Bromochloromethane	ND	5.3	0.59	ug/kg	
75-27-4	Bromodichloromethane	ND	2.1	0.45	ug/kg	
75-25-2	Bromoform	ND	5.3	1.4	ug/kg	
74-83-9	Bromomethane ^a	ND	5.3	0.80	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.6	ug/kg	
75-15-0	Carbon disulfide	ND	2.1	0.56	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.1	0.65	ug/kg	
108-90-7	Chlorobenzene	ND	2.1	0.48	ug/kg	
75-00-3	Chloroethane	ND	5.3	0.62	ug/kg	
67-66-3	Chloroform	ND	2.1	0.55	ug/kg	
74-87-3	Chloromethane	ND	5.3	2.1	ug/kg	
110-82-7	Cyclohexane	ND	2.1	0.69	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	0.73	ug/kg	
124-48-1	Dibromochloromethane	ND	2.1	0.59	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.44	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.1	0.57	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.1	0.52	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.1	0.52	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.3	0.76	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.1	0.52	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.49	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.1	0.69	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.1	0.88	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.1	0.64	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.1	0.50	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	0.48	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.48	ug/kg	
76-13-1	Freon 113	ND	5.3	2.8	ug/kg	
591-78-6	2-Hexanone	ND	5.3	2.2	ug/kg	

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Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB8 (4.5-5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-5	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	85.0
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.1	1.5	ug/kg	
79-20-9	Methyl Acetate	ND	5.3	1.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.1	0.92	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.49	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.3	2.4	ug/kg	
75-09-2	Methylene chloride	ND	5.3	2.7	ug/kg	
100-42-5	Styrene	ND	2.1	0.42	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.63	ug/kg	
127-18-4	Tetrachloroethene	ND	2.1	0.61	ug/kg	
108-88-3	Toluene	ND	1.1	0.55	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.3	2.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.3	2.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.1	0.51	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.58	ug/kg	
79-01-6	Trichloroethene	ND	1.1	0.80	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.3	0.72	ug/kg	
75-01-4	Vinyl chloride	ND	2.1	0.51	ug/kg	
	m,p-Xylene	ND	1.1	0.94	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.48	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.48	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		80-124%
17060-07-0	1,2-Dichloroethane-D4	99%		75-133%
2037-26-5	Toluene-D8	98%		79-125%
460-00-4	4-Bromofluorobenzene	99%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	unknown	11.19	5.4	ug/kg	J
	Total TIC, Volatile		5.4	ug/kg	J

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

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 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	RI-SB8 (4.5-5')	
Lab Sample ID:	JD39846-5	Date Sampled: 02/16/22
Matrix:	SO - Soil	Date Received: 02/16/22
Method:	SW846 8270E SW846 3546	Percent Solids: 85.0
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155169.D	1	02/21/22 16:57	JY	02/19/22 11:30	OP38200	EZ7709
Run #2							

	Initial Weight	Final Volume
Run #1	30.7 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	77	19	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	33	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	68	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	190	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	190	41	ug/kg	
95-48-7	2-Methylphenol	ND	77	24	ug/kg	
	3&4-Methylphenol	ND	77	32	ug/kg	
88-75-5	2-Nitrophenol	ND	190	25	ug/kg	
100-02-7	4-Nitrophenol	ND	380	100	ug/kg	
87-86-5	Pentachlorophenol	ND	150	36	ug/kg	
108-95-2	Phenol	ND	77	20	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	190	25	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	29	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	23	ug/kg	
83-32-9	Acenaphthene	ND	38	13	ug/kg	
208-96-8	Acenaphthylene	ND	38	19	ug/kg	
98-86-2	Acetophenone	ND	190	8.2	ug/kg	
120-12-7	Anthracene	ND	38	23	ug/kg	
1912-24-9	Atrazine	ND	77	16	ug/kg	
56-55-3	Benzo(a)anthracene	75.6	38	11	ug/kg	
50-32-8	Benzo(a)pyrene	78.2	38	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	97.2	38	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	55.7	38	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	36.5	38	18	ug/kg	J
101-55-3	4-Bromophenyl phenyl ether	ND	77	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	77	9.4	ug/kg	
92-52-4	1,1'-Biphenyl	ND	77	5.3	ug/kg	
100-52-7	Benzaldehyde	ND	190	9.5	ug/kg	
91-58-7	2-Chloronaphthalene	ND	77	9.1	ug/kg	
106-47-8	4-Chloroaniline	ND	190	14	ug/kg	
86-74-8	Carbazole	ND	77	5.6	ug/kg	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	RI-SB8 (4.5-5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-5	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	85.0
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	77	15	ug/kg	
218-01-9	Chrysene	87.2	38	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	77	8.2	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	77	17	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	77	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	77	12	ug/kg	
121-14-2	2,4-Dinitrotoluene ^a	ND	38	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	38	19	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	77	32	ug/kg	
123-91-1	1,4-Dioxane	ND	38	25	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	38	17	ug/kg	
132-64-9	Dibenzofuran	ND	77	16	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	77	6.2	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	77	9.5	ug/kg	
84-66-2	Diethyl phthalate	ND	77	8.2	ug/kg	
131-11-3	Dimethyl phthalate	ND	77	6.8	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	77	9.0	ug/kg	
206-44-0	Fluoranthene	135	38	17	ug/kg	
86-73-7	Fluorene	ND	38	18	ug/kg	
118-74-1	Hexachlorobenzene	ND	77	9.7	ug/kg	
87-68-3	Hexachlorobutadiene	ND	38	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	380	15	ug/kg	
67-72-1	Hexachloroethane	ND	190	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	65.5	38	18	ug/kg	
78-59-1	Isophorone	ND	77	8.2	ug/kg	
91-57-6	2-Methylnaphthalene	ND	38	8.7	ug/kg	
88-74-4	2-Nitroaniline	ND	190	9.0	ug/kg	
99-09-2	3-Nitroaniline	ND	190	9.6	ug/kg	
100-01-6	4-Nitroaniline ^a	ND	190	9.9	ug/kg	
91-20-3	Naphthalene	ND	38	11	ug/kg	
98-95-3	Nitrobenzene	ND	77	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	77	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	14	ug/kg	
85-01-8	Phenanthrene	71.8	38	13	ug/kg	
129-00-0	Pyrene	130	38	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	190	9.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	53%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	RI-SB8 (4.5-5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-5	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	85.0
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	53%		10-105%
118-79-6	2,4,6-Tribromophenol	57%		10-135%
4165-60-0	Nitrobenzene-d5	53%		10-119%
321-60-8	2-Fluorobiphenyl	64%		18-112%
1718-51-0	Terphenyl-d14	63%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.33	490	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	RI-SB8 (4.5-5')	
Lab Sample ID:	JD39846-5	Date Sampled: 02/16/22
Matrix:	SO - Soil	Date Received: 02/16/22
Method:	SW846 8081B SW846 3546	Percent Solids: 85.0
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174482.D	1	02/23/22 10:36	CP	02/19/22 10:05	OP38204	G1G6028
Run #2							

	Initial Weight	Final Volume
Run #1	16.3 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.72	0.59	ug/kg	
319-84-6	alpha-BHC	ND	0.72	0.59	ug/kg	
319-85-7	beta-BHC	ND	0.72	0.65	ug/kg	
319-86-8	delta-BHC	ND	0.72	0.69	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.72	0.53	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.72	0.58	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.72	0.33	ug/kg	
60-57-1	Dieldrin	ND	0.72	0.50	ug/kg	
72-54-8	4,4' -DDD	ND	0.72	0.66	ug/kg	
72-55-9	4,4' -DDE	ND	0.72	0.63	ug/kg	
50-29-3	4,4' -DDT	ND	0.72	0.64	ug/kg	
72-20-8	Endrin	ND	0.72	0.56	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.72	0.56	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.72	0.41	ug/kg	
959-98-8	Endosulfan-I	ND	0.72	0.42	ug/kg	
33213-65-9	Endosulfan-II	ND	0.72	0.45	ug/kg	
76-44-8	Heptachlor	ND	0.72	0.62	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.72	0.51	ug/kg	
72-43-5	Methoxychlor	ND	1.4	0.57	ug/kg	
53494-70-5	Endrin ketone	ND	0.72	0.52	ug/kg	
8001-35-2	Toxaphene	ND	18	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	67%		14-145%
877-09-8	Tetrachloro-m-xylene	66%		14-145%
2051-24-3	Decachlorobiphenyl	62%		10-197%
2051-24-3	Decachlorobiphenyl	77%		10-197%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	RI-SB8 (4.5-5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-5	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	85.0
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK8164.D	1	02/22/22 19:56	TL	02/19/22 10:05	OP38205	GRK212
Run #2							

	Initial Weight	Final Volume
Run #1	16.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	17	ug/kg	
11104-28-2	Aroclor 1221	ND	36	22	ug/kg	
11141-16-5	Aroclor 1232	ND	36	23	ug/kg	
53469-21-9	Aroclor 1242	ND	36	15	ug/kg	
12672-29-6	Aroclor 1248	ND	36	32	ug/kg	
11097-69-1	Aroclor 1254	ND	36	19	ug/kg	
11096-82-5	Aroclor 1260 ^a	ND	36	15	ug/kg	
11100-14-4	Aroclor 1268	ND	36	15	ug/kg	
37324-23-5	Aroclor 1262	ND	36	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	69%		10-163%
877-09-8	Tetrachloro-m-xylene	87%		10-163%
2051-24-3	Decachlorobiphenyl	84%		10-215%
2051-24-3	Decachlorobiphenyl	84%		10-215%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	RI-SB8 (4.5-5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-5	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	85.0
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method	
Aluminum	23300	60	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Antimony	3.0	2.4	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Arsenic ^a	< 4.8	4.8	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Barium	107	24	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Beryllium ^a	0.70	0.48	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cadmium	0.60	0.60	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Calcium	1910	600	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Chromium	37.0	1.2	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Cobalt	19.6	6.0	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Copper ^a	78.0	6.0	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Iron	37800	120	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Lead	25.5	2.4	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Magnesium	7870	600	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Manganese ^a	558	3.6	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	0.10	0.033	mg/kg	1	02/22/22	02/22/22	LM	SW846 7471B ³	SW846 7471B ⁵
Nickel	41.1	4.8	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Potassium	4680	1200	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Selenium ^a	< 4.8	4.8	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Silver ^a	< 1.2	1.2	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Sodium	< 1200	1200	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Thallium ^a	< 2.4	2.4	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Vanadium	54.2	6.0	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Zinc	424	6.0	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴

(1) Instrument QC Batch: MA51933

(2) Instrument QC Batch: MA51936

(3) Instrument QC Batch: MA51938

(4) Prep QC Batch: MP31357

(5) Prep QC Batch: MP31420

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB8 (4.5-5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-5	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	85.0
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.26	0.26	mg/kg	1	02/18/22 15:31	MM	SW846 9012B/LACHAT
Solids, Percent	85		%	1	02/17/22 16:06	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.7
4

Report of Analysis

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Client Sample ID:	RI-SB8 (4.5-5')	
Lab Sample ID:	JD39846-5A	
Matrix:	SO - Soil	Date Sampled: 02/16/22
Method:	EPA 537M BY ID IN HOUSE	Date Received: 02/16/22
Project:	1001 Whitlock Avenue, Bronx, NY	Percent Solids: 85.0

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55510.D	1	03/01/22 18:55	AFL	02/22/22 12:00	F:OP89889	F:S3Q766
Run #2 ^b	3Q55622.D	5	03/03/22 02:53	AFL	02/22/22 12:00	F:OP89889	F:S3Q767

	Initial Weight	Final Volume
Run #1	1.99 g	1.0 ml
Run #2	2.02 g	1.0 ml

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.45	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.59	0.30	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.59	0.30	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.59	0.30	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.59	0.30	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.59	0.30	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.59	0.30	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.59	0.30	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.59	0.30	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.59	0.31	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.59	0.30	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.59	0.30	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.59	0.30	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.59	0.30	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.29	0.59	0.24	ug/kg	J
335-77-3	Perfluorodecanesulfonic acid	ND	0.59	0.30	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.59	0.30	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND ^c	5.8	2.9	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.59	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	

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RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB8 (4.5-5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-5A	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	85.0
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	65%	69%	40-140%
	13C5-PFPeA	67%	70%	50-150%
	13C5-PFHxA	68%	73%	50-150%
	13C4-PFHpA	71%	77%	50-150%
	13C8-PFOA	73%	77%	50-150%
	13C9-PFNA	74%	78%	50-150%
	13C6-PFDA	77%	88%	50-150%
	13C7-PFUnDA	77%	89%	40-140%
	13C2-PFDoDA	74%	80%	40-140%
	13C2-PFTeDA	72%	76%	30-130%
	13C3-PFBS	75%	84%	50-150%
	13C3-PFHxS	76%	87%	50-150%
	13C8-PFOS	77%	83%	50-150%
	13C8-FOSA	63%	69%	30-130%
	d3-MeFOSAA	34% ^d	41%	40-140%
	d5-EtFOSAA	40%	44%	40-140%
	13C2-6:2FTS	75%	78%	50-150%
	13C2-8:2FTS	79%	90%	50-150%

(a) Analysis performed at SGS Orlando, FL.

(b) Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.

(c) Result is from Run# 2

(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB8 (9.5-10')	
Lab Sample ID:	JD39846-6	Date Sampled: 02/16/22
Matrix:	SO - Soil	Date Received: 02/16/22
Method:	SW846 8260D SW846 5035	Percent Solids: 84.3
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173668.D	1	02/17/22 21:54	PS	02/16/22 21:00	n/a	V3C7643
Run #2							

	Initial Weight
Run #1	5.9 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	44.3	10	4.2	ug/kg	
71-43-2	Benzene	ND	0.50	0.46	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.56	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.43	ug/kg	
75-25-2	Bromoform	ND	5.0	1.4	ug/kg	
74-83-9	Bromomethane ^a	ND	5.0	0.77	ug/kg	
78-93-3	2-Butanone (MEK)	9.7	10	2.4	ug/kg	J
75-15-0	Carbon disulfide	ND	2.0	0.54	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.62	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.46	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.59	ug/kg	
67-66-3	Chloroform	ND	2.0	0.52	ug/kg	
74-87-3	Chloromethane	ND	5.0	2.0	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.66	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.70	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.56	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.42	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.55	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.73	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.47	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.66	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.61	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.48	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.48	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.46	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.46	ug/kg	
76-13-1	Freon 113	ND	5.0	2.7	ug/kg	
591-78-6	2-Hexanone	ND	5.0	2.1	ug/kg	

ND = Not detected MDL = Method Detection Limit

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RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB8 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-6	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	1.4	ug/kg	
79-20-9	Methyl Acetate	ND	5.0	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.88	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.47	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	2.3	ug/kg	
75-09-2	Methylene chloride	ND	5.0	2.6	ug/kg	
100-42-5	Styrene	ND	2.0	0.40	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.60	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.58	ug/kg	
108-88-3	Toluene	ND	1.0	0.53	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.49	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.56	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.77	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.69	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.48	ug/kg	
	m,p-Xylene	ND	1.0	0.90	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.46	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.46	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		80-124%
17060-07-0	1,2-Dichloroethane-D4	100%		75-133%
2037-26-5	Toluene-D8	98%		79-125%
460-00-4	4-Bromofluorobenzene	103%		58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	RI-SB8 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-6	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155160.D	1	02/21/22 13:21	JY	02/19/22 08:00	OP38200	EZ7709
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	78	19	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	200	24	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	200	33	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	200	69	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	200	150	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	200	42	ug/kg	
95-48-7	2-Methylphenol	ND	78	25	ug/kg	
	3&4-Methylphenol	ND	78	32	ug/kg	
88-75-5	2-Nitrophenol	ND	200	26	ug/kg	
100-02-7	4-Nitrophenol	ND	390	100	ug/kg	
87-86-5	Pentachlorophenol	ND	160	37	ug/kg	
108-95-2	Phenol	ND	78	20	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	200	26	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	200	29	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	200	23	ug/kg	
83-32-9	Acenaphthene	ND	39	13	ug/kg	
208-96-8	Acenaphthylene	ND	39	20	ug/kg	
98-86-2	Acetophenone	ND	200	8.4	ug/kg	
120-12-7	Anthracene	ND	39	24	ug/kg	
1912-24-9	Atrazine	ND	78	17	ug/kg	
56-55-3	Benzo(a)anthracene	26.8	39	11	ug/kg	J
50-32-8	Benzo(a)pyrene	19.0	39	18	ug/kg	J
205-99-2	Benzo(b)fluoranthene	23.4	39	17	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	ND	39	20	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	39	18	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	78	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	78	9.5	ug/kg	
92-52-4	1,1'-Biphenyl	ND	78	5.3	ug/kg	
100-52-7	Benzaldehyde	ND	200	9.7	ug/kg	
91-58-7	2-Chloronaphthalene	ND	78	9.3	ug/kg	
106-47-8	4-Chloroaniline	ND	200	14	ug/kg	
86-74-8	Carbazole	ND	78	5.7	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB8 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-6	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	78	15	ug/kg	
218-01-9	Chrysene	23.1	39	12	ug/kg	J
111-91-1	bis(2-Chloroethoxy)methane	ND	78	8.4	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	78	17	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	78	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	78	13	ug/kg	
121-14-2	2,4-Dinitrotoluene ^a	ND	39	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	39	20	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	78	33	ug/kg	
123-91-1	1,4-Dioxane	ND	39	26	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	39	17	ug/kg	
132-64-9	Dibenzofuran	ND	78	16	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	78	6.4	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	78	9.7	ug/kg	
84-66-2	Diethyl phthalate	ND	78	8.3	ug/kg	
131-11-3	Dimethyl phthalate	ND	78	6.9	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	78	9.1	ug/kg	
206-44-0	Fluoranthene	49.8	39	17	ug/kg	
86-73-7	Fluorene	ND	39	18	ug/kg	
118-74-1	Hexachlorobenzene	ND	78	9.9	ug/kg	
87-68-3	Hexachlorobutadiene	ND	39	16	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	390	16	ug/kg	
67-72-1	Hexachloroethane	ND	200	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	39	18	ug/kg	
78-59-1	Isophorone	ND	78	8.4	ug/kg	
91-57-6	2-Methylnaphthalene	ND	39	8.8	ug/kg	
88-74-4	2-Nitroaniline	ND	200	9.2	ug/kg	
99-09-2	3-Nitroaniline	ND	200	9.8	ug/kg	
100-01-6	4-Nitroaniline ^a	ND	200	10	ug/kg	
91-20-3	Naphthalene	ND	39	11	ug/kg	
98-95-3	Nitrobenzene	ND	78	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	78	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	200	14	ug/kg	
85-01-8	Phenanthrene	38.5	39	13	ug/kg	J
129-00-0	Pyrene	41.2	39	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	200	9.9	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	50%		10-109%

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Report of Analysis

Client Sample ID:	RI-SB8 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-6	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	49%		10-105%
118-79-6	2,4,6-Tribromophenol	54%		10-135%
4165-60-0	Nitrobenzene-d5	50%		10-119%
321-60-8	2-Fluorobiphenyl	59%		18-112%
1718-51-0	Terphenyl-d14	58%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
13798-23-7	Sulfur	7.11	190	ug/kg	JN
10544-50-0	Cyclic octaatomic sulfur	10.11	2700	ug/kg	JN
	unknown	13.44	250	ug/kg	J
	unknown alcohols	14.33	220	ug/kg	J
	Total TIC, Semi-Volatile		3360	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
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 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	RI-SB8 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-6	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1G174612.D	1	02/25/22 18:37	KLS	02/19/22 10:05	OP38204	G1G6034
Run #2							

	Initial Weight	Final Volume
Run #1	16.5 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.72	0.59	ug/kg	
319-84-6	alpha-BHC	ND	0.72	0.58	ug/kg	
319-85-7	beta-BHC	ND	0.72	0.65	ug/kg	
319-86-8	delta-BHC	ND	0.72	0.69	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.72	0.53	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.72	0.58	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.72	0.33	ug/kg	
60-57-1	Dieldrin	ND	0.72	0.49	ug/kg	
72-54-8	4,4' -DDD	ND	0.72	0.66	ug/kg	
72-55-9	4,4' -DDE	ND	0.72	0.63	ug/kg	
50-29-3	4,4' -DDT	ND	0.72	0.64	ug/kg	
72-20-8	Endrin	ND	0.72	0.56	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.72	0.56	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.72	0.41	ug/kg	
959-98-8	Endosulfan-I	ND	0.72	0.41	ug/kg	
33213-65-9	Endosulfan-II	ND	0.72	0.45	ug/kg	
76-44-8	Heptachlor	ND	0.72	0.62	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.72	0.50	ug/kg	
72-43-5	Methoxychlor	ND	1.4	0.57	ug/kg	
53494-70-5	Endrin ketone	ND	0.72	0.52	ug/kg	
8001-35-2	Toxaphene	ND	18	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	70%		14-145%
877-09-8	Tetrachloro-m-xylene	69%		14-145%
2051-24-3	Decachlorobiphenyl	42%		10-197%
2051-24-3	Decachlorobiphenyl	50%		10-197%

(a) Had TBA cleanup.

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB8 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-6	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK8165.D	1	02/22/22 20:13	TL	02/19/22 10:05	OP38205	GRK212
Run #2							

	Initial Weight	Final Volume
Run #1	16.5 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	17	ug/kg	
11104-28-2	Aroclor 1221	ND	36	22	ug/kg	
11141-16-5	Aroclor 1232	ND	36	23	ug/kg	
53469-21-9	Aroclor 1242	ND	36	15	ug/kg	
12672-29-6	Aroclor 1248	ND	36	32	ug/kg	
11097-69-1	Aroclor 1254	ND	36	19	ug/kg	
11096-82-5	Aroclor 1260 ^a	ND	36	15	ug/kg	
11100-14-4	Aroclor 1268	ND	36	15	ug/kg	
37324-23-5	Aroclor 1262	ND	36	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	75%		10-163%
877-09-8	Tetrachloro-m-xylene	96%		10-163%
2051-24-3	Decachlorobiphenyl	81%		10-215%
2051-24-3	Decachlorobiphenyl	88%		10-215%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
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 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB8 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-6	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	17700	57	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Antimony	< 2.3	2.3	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Arsenic ^a	< 4.6	4.6	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Barium	117	23	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Beryllium ^a	0.62	0.46	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cadmium	< 0.57	0.57	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Calcium	1380	570	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Chromium	28.1	1.1	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Cobalt	13.4	5.7	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Copper ^a	24.6	5.7	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Iron	28400	110	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Lead	33.6	2.3	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Magnesium	5440	570	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Manganese ^a	269	3.4	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	0.12	0.035	mg/kg	1	02/22/22	02/22/22	LM	SW846 7471B ³	SW846 7471B ⁵
Nickel	24.6	4.6	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Potassium	2290	1100	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Selenium ^a	< 4.6	4.6	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Silver ^a	< 1.1	1.1	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Sodium	< 1100	1100	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Thallium ^a	< 2.3	2.3	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Vanadium	39.0	5.7	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Zinc	80.1	5.7	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴

(1) Instrument QC Batch: MA51933

(2) Instrument QC Batch: MA51936

(3) Instrument QC Batch: MA51938

(4) Prep QC Batch: MP31357

(5) Prep QC Batch: MP31420

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB8 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-6	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.25	0.25	mg/kg	1	02/18/22 15:32	MM	SW846 9012B/LACHAT
Solids, Percent	84.3		%	1	02/17/22 16:06	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.9
4

Report of Analysis

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Client Sample ID:	RI-SB8 (9.5-10')	
Lab Sample ID:	JD39846-6A	Date Sampled: 02/16/22
Matrix:	SO - Soil	Date Received: 02/16/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 84.3
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55511.D	1	03/01/22 19:12	AFL	02/22/22 12:00	F:OP89889	F:S3Q766
Run #2							

	Initial Weight	Final Volume
Run #1	1.98 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.46	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.60	0.30	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.60	0.30	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.60	0.30	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.60	0.30	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.60	0.30	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.60	0.30	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.60	0.30	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.60	0.30	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.60	0.32	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.60	0.30	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.60	0.30	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.60	0.30	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.60	0.30	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.60	0.24	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.60	0.30	ug/kg	
PERFLUOROOCETANESULFONAMIDES						
754-91-6	PFOSA	ND	0.60	0.30	ug/kg	
PERFLUOROOCETANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.60	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.60	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB8 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-6A	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	70%		40-140%
	13C5-PFPeA	71%		50-150%
	13C5-PFHxA	72%		50-150%
	13C4-PFHpA	74%		50-150%
	13C8-PFOA	76%		50-150%
	13C9-PFNA	75%		50-150%
	13C6-PFDA	79%		50-150%
	13C7-PFUnDA	77%		40-140%
	13C2-PFDoDA	73%		40-140%
	13C2-PFTeDA	72%		30-130%
	13C3-PFBS	75%		50-150%
	13C3-PFHxS	76%		50-150%
	13C8-PFOS	76%		50-150%
	13C8-FOSA	49%		30-130%
	d3-MeFOSAA	46%		40-140%
	d5-EtFOSAA	54%		40-140%
	13C2-6:2FTS	75%		50-150%
	13C2-8:2FTS	92%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB8 (12.5-13')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-7	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.8
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173669.D	1	02/17/22 22:23	PS	02/16/22 21:00	n/a	V3C7643
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	11	4.6	ug/kg	
71-43-2	Benzene	ND	0.55	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.5	0.62	ug/kg	
75-27-4	Bromodichloromethane	ND	2.2	0.47	ug/kg	
75-25-2	Bromoform	ND	5.5	1.5	ug/kg	
74-83-9	Bromomethane ^a	ND	5.5	0.84	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.7	ug/kg	
75-15-0	Carbon disulfide	ND	2.2	0.59	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.2	0.68	ug/kg	
108-90-7	Chlorobenzene	ND	2.2	0.51	ug/kg	
75-00-3	Chloroethane	ND	5.5	0.65	ug/kg	
67-66-3	Chloroform	ND	2.2	0.57	ug/kg	
74-87-3	Chloromethane	ND	5.5	2.2	ug/kg	
110-82-7	Cyclohexane	ND	2.2	0.72	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.2	0.76	ug/kg	
124-48-1	Dibromochloromethane	ND	2.2	0.62	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.46	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.1	0.60	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.1	0.55	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.1	0.54	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.5	0.80	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.1	0.55	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.52	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.1	0.72	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.1	0.93	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.1	0.67	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.2	0.52	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.2	0.52	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.50	ug/kg	
76-13-1	Freon 113	ND	5.5	2.9	ug/kg	
591-78-6	2-Hexanone	ND	5.5	2.3	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	RI-SB8 (12.5-13')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-7	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.8
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.2	1.6	ug/kg	
79-20-9	Methyl Acetate	ND	5.5	1.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.2	0.96	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.52	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.5	2.5	ug/kg	
75-09-2	Methylene chloride	ND	5.5	2.9	ug/kg	
100-42-5	Styrene	ND	2.2	0.44	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.2	0.66	ug/kg	
127-18-4	Tetrachloroethene	ND	2.2	0.64	ug/kg	
108-88-3	Toluene	ND	1.1	0.58	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.5	2.8	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.5	2.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.2	0.53	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.2	0.61	ug/kg	
79-01-6	Trichloroethene	ND	1.1	0.84	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.5	0.75	ug/kg	
75-01-4	Vinyl chloride	ND	2.2	0.53	ug/kg	
	m,p-Xylene	ND	1.1	0.99	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.50	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		80-124%
17060-07-0	1,2-Dichloroethane-D4	97%		75-133%
2037-26-5	Toluene-D8	98%		79-125%
460-00-4	4-Bromofluorobenzene	101%		58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	RI-SB8 (12.5-13')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-7	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.8
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155161.D	1	02/21/22 13:45	JY	02/19/22 08:00	OP38200	EZ7709
Run #2							

	Initial Weight	Final Volume
Run #1	30.9 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	71	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	22	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	30	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	63	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	180	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	180	38	ug/kg	
95-48-7	2-Methylphenol	ND	71	23	ug/kg	
	3&4-Methylphenol	ND	71	29	ug/kg	
88-75-5	2-Nitrophenol	ND	180	24	ug/kg	
100-02-7	4-Nitrophenol	ND	360	95	ug/kg	
87-86-5	Pentachlorophenol	ND	140	33	ug/kg	
108-95-2	Phenol	ND	71	19	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	24	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	27	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	21	ug/kg	
83-32-9	Acenaphthene	ND	36	12	ug/kg	
208-96-8	Acenaphthylene	ND	36	18	ug/kg	
98-86-2	Acetophenone	ND	180	7.7	ug/kg	
120-12-7	Anthracene	ND	36	22	ug/kg	
1912-24-9	Atrazine	ND	71	15	ug/kg	
56-55-3	Benzo(a)anthracene	ND	36	10	ug/kg	
50-32-8	Benzo(a)pyrene	ND	36	16	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	36	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	36	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	36	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	71	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	71	8.7	ug/kg	
92-52-4	1,1'-Biphenyl	ND	71	4.9	ug/kg	
100-52-7	Benzaldehyde	ND	180	8.8	ug/kg	
91-58-7	2-Chloronaphthalene	ND	71	8.5	ug/kg	
106-47-8	4-Chloroaniline	ND	180	13	ug/kg	
86-74-8	Carbazole	ND	71	5.2	ug/kg	

ND = Not detected MDL = Method Detection Limit

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B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	RI-SB8 (12.5-13')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-7	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.8
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	71	14	ug/kg	
218-01-9	Chrysene	ND	36	11	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	71	7.6	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	71	15	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	71	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	71	12	ug/kg	
121-14-2	2,4-Dinitrotoluene ^a	ND	36	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	36	18	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	71	30	ug/kg	
123-91-1	1,4-Dioxane	ND	36	24	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	36	16	ug/kg	
132-64-9	Dibenzofuran	ND	71	15	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	71	5.8	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	71	8.9	ug/kg	
84-66-2	Diethyl phthalate	ND	71	7.6	ug/kg	
131-11-3	Dimethyl phthalate	ND	71	6.3	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	71	8.3	ug/kg	
206-44-0	Fluoranthene	ND	36	16	ug/kg	
86-73-7	Fluorene	ND	36	16	ug/kg	
118-74-1	Hexachlorobenzene	ND	71	9.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	36	14	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	360	14	ug/kg	
67-72-1	Hexachloroethane	ND	180	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	36	17	ug/kg	
78-59-1	Isophorone	ND	71	7.6	ug/kg	
91-57-6	2-Methylnaphthalene	ND	36	8.1	ug/kg	
88-74-4	2-Nitroaniline	ND	180	8.4	ug/kg	
99-09-2	3-Nitroaniline	ND	180	8.9	ug/kg	
100-01-6	4-Nitroaniline ^a	ND	180	9.2	ug/kg	
91-20-3	Naphthalene	ND	36	10	ug/kg	
98-95-3	Nitrobenzene	ND	71	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	71	10	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	13	ug/kg	
85-01-8	Phenanthrene	ND	36	12	ug/kg	
129-00-0	Pyrene	ND	36	11	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	9.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	42%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	RI-SB8 (12.5-13')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-7	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.8
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	41%		10-105%
118-79-6	2,4,6-Tribromophenol	43%		10-135%
4165-60-0	Nitrobenzene-d5	44%		10-119%
321-60-8	2-Fluorobiphenyl	51%		18-112%
1718-51-0	Terphenyl-d14	57%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.33	210	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND.

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 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB8 (12.5-13')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-7	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.8
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174489.D	1	02/23/22 14:08	TL	02/19/22 10:05	OP38204	G1G6029
Run #2							

	Initial Weight	Final Volume
Run #1	16.4 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.67	0.55	ug/kg	
319-84-6	alpha-BHC	ND	0.67	0.55	ug/kg	
319-85-7	beta-BHC	ND	0.67	0.61	ug/kg	
319-86-8	delta-BHC	ND	0.67	0.64	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.67	0.49	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.67	0.54	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.67	0.30	ug/kg	
60-57-1	Dieldrin	ND	0.67	0.46	ug/kg	
72-54-8	4,4' -DDD	ND	0.67	0.62	ug/kg	
72-55-9	4,4' -DDE	ND	0.67	0.59	ug/kg	
50-29-3	4,4' -DDT	ND	0.67	0.59	ug/kg	
72-20-8	Endrin	ND	0.67	0.52	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.67	0.52	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.67	0.38	ug/kg	
959-98-8	Endosulfan-I	ND	0.67	0.39	ug/kg	
33213-65-9	Endosulfan-II	ND	0.67	0.42	ug/kg	
76-44-8	Heptachlor	ND	0.67	0.58	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.67	0.47	ug/kg	
72-43-5	Methoxychlor	ND	1.3	0.53	ug/kg	
53494-70-5	Endrin ketone	ND	0.67	0.49	ug/kg	
8001-35-2	Toxaphene	ND	17	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	100%		14-145%
877-09-8	Tetrachloro-m-xylene	90%		14-145%
2051-24-3	Decachlorobiphenyl	108%		10-197%
2051-24-3	Decachlorobiphenyl	109%		10-197%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB8 (12.5-13')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-7	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.8
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK8166.D	1	02/22/22 20:29	TL	02/19/22 10:05	OP38205	GRK212
Run #2							

	Initial Weight	Final Volume
Run #1	16.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	34	16	ug/kg	
11104-28-2	Aroclor 1221	ND	34	21	ug/kg	
11141-16-5	Aroclor 1232	ND	34	21	ug/kg	
53469-21-9	Aroclor 1242	ND	34	14	ug/kg	
12672-29-6	Aroclor 1248	ND	34	30	ug/kg	
11097-69-1	Aroclor 1254	ND	34	18	ug/kg	
11096-82-5	Aroclor 1260 ^a	ND	34	14	ug/kg	
11100-14-4	Aroclor 1268	ND	34	14	ug/kg	
37324-23-5	Aroclor 1262	ND	34	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	58%		10-163%
877-09-8	Tetrachloro-m-xylene	73%		10-163%
2051-24-3	Decachlorobiphenyl	57%		10-215%
2051-24-3	Decachlorobiphenyl	68%		10-215%

(a) Associated CCV outside of control limits high, sample was ND.

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 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	RI-SB8 (12.5-13')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-7	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.8
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	24400	56	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Antimony	3.7	2.2	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Arsenic ^a	< 11	11	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Barium	160	22	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Beryllium ^a	< 1.1	1.1	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cadmium	< 0.56	0.56	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Calcium	1570	560	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Chromium	36.7	1.1	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Cobalt	24.4	5.6	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Copper ^a	21.9	14	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Iron	48000	280	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Lead	6.5	2.2	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Magnesium	11100	560	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Manganese ^a	286	8.4	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	< 0.033	0.033	mg/kg	1	02/22/22	02/22/22	LM	SW846 7471B ³	SW846 7471B ⁵
Nickel	46.1	4.5	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Potassium	11600	1100	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Selenium ^a	< 11	11	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Silver ^a	< 2.8	2.8	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Sodium	< 1100	1100	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Thallium ^a	< 5.6	5.6	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Vanadium	48.4	5.6	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Zinc	117	5.6	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴

(1) Instrument QC Batch: MA51933

(2) Instrument QC Batch: MA51936

(3) Instrument QC Batch: MA51938

(4) Prep QC Batch: MP31357

(5) Prep QC Batch: MP31420

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB8 (12.5-13')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-7	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.8
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.24	0.24	mg/kg	1	02/18/22 15:33	MM	SW846 9012B/LACHAT
Solids, Percent	90.8		%	1	02/17/22 16:06	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.11
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Report of Analysis

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Client Sample ID:	RI-SB8 (12.5-13')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-7A	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.8
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55512.D	1	03/01/22 19:29	AFL	02/22/22 12:00	F:OP89889	F:S3Q766
Run #2 ^b	3Q55623.D	5	03/03/22 03:10	AFL	02/22/22 12:00	F:OP89889	F:S3Q767

	Initial Weight	Final Volume
Run #1	1.99 g	1.0 ml
Run #2	2.05 g	1.0 ml

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.42	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.28	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.55	0.28	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.55	0.28	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.55	0.28	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.55	0.28	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.55	0.28	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.55	0.28	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.55	0.28	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.55	0.29	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.55	0.28	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.55	0.28	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.55	0.28	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.55	0.28	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.55	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.55	0.28	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.55	0.28	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA ^c	ND ^d	5.4	2.7	ug/kg	
2991-50-6	EtFOSAA	ND ^d	5.4	2.7	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB8 (12.5-13')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-7A	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.8
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	76%	80%	40-140%
	13C5-PFPeA	78%	81%	50-150%
	13C5-PFHxA	80%	83%	50-150%
	13C4-PFHpA	82%	88%	50-150%
	13C8-PFOA	85%	88%	50-150%
	13C9-PFNA	84%	87%	50-150%
	13C6-PFDA	87%	93%	50-150%
	13C7-PFUnDA	88%	98%	40-140%
	13C2-PFDoDA	83%	88%	40-140%
	13C2-PFTeDA	82%	82%	30-130%
	13C3-PFBS	83%	93%	50-150%
	13C3-PFHxS	86%	91%	50-150%
	13C8-PFOS	84%	90%	50-150%
	13C8-FOSA	64%	71%	30-130%
	d3-MeFOSAA	29% ^e	32% ^e	40-140%
	d5-EtFOSAA	32% ^e	40%	40-140%
	13C2-6:2FTS	87%	91%	50-150%
	13C2-8:2FTS	95%	105%	50-150%

(a) Analysis performed at SGS Orlando, FL.

(b) Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.

(c) Associated ID Standard outside control limits, Confirmed by re-analysis.

(d) Result is from Run# 2

(e) Outside control limits.

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B = Indicates analyte found in associated method blank

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Report of Analysis

Page 1 of 2

Client Sample ID:	DUP-2	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-8	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173670.D	1	02/17/22 22:50	PS	02/16/22 21:00	n/a	V3C7643
Run #2							

	Initial Weight
Run #1	5.9 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	4.2	ug/kg	
71-43-2	Benzene	ND	0.50	0.46	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.56	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.43	ug/kg	
75-25-2	Bromoform	ND	5.0	1.4	ug/kg	
74-83-9	Bromomethane ^a	ND	5.0	0.77	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	2.4	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.54	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.62	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.46	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.59	ug/kg	
67-66-3	Chloroform	ND	2.0	0.52	ug/kg	
74-87-3	Chloromethane	ND	5.0	2.0	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.66	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.70	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.56	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.42	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.55	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.73	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.47	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.66	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.61	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.48	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.48	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.46	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.46	ug/kg	
76-13-1	Freon 113	ND	5.0	2.7	ug/kg	
591-78-6	2-Hexanone	ND	5.0	2.1	ug/kg	

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	DUP-2	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-8	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	1.4	ug/kg	
79-20-9	Methyl Acetate	ND	5.0	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.88	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.47	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	2.3	ug/kg	
75-09-2	Methylene chloride	ND	5.0	2.6	ug/kg	
100-42-5	Styrene	ND	2.0	0.40	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.60	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.58	ug/kg	
108-88-3	Toluene	ND	1.0	0.53	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	2.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.49	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.56	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.77	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.69	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.48	ug/kg	
	m,p-Xylene	ND	1.0	0.90	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.46	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.46	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		80-124%
17060-07-0	1,2-Dichloroethane-D4	100%		75-133%
2037-26-5	Toluene-D8	98%		79-125%
460-00-4	4-Bromofluorobenzene	101%		58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

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 B = Indicates analyte found in associated method blank
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Report of Analysis

Page 1 of 3

Client Sample ID:	DUP-2	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-8	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155162.D	1	02/21/22 14:09	JY	02/19/22 08:00	OP38200	EZ7709
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	79	19	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	200	24	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	200	34	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	200	70	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	200	150	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	200	42	ug/kg	
95-48-7	2-Methylphenol	ND	79	25	ug/kg	
	3&4-Methylphenol	ND	79	32	ug/kg	
88-75-5	2-Nitrophenol	ND	200	26	ug/kg	
100-02-7	4-Nitrophenol	ND	390	100	ug/kg	
87-86-5	Pentachlorophenol	ND	160	37	ug/kg	
108-95-2	Phenol	ND	79	21	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	200	26	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	200	29	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	200	23	ug/kg	
83-32-9	Acenaphthene	ND	39	14	ug/kg	
208-96-8	Acenaphthylene	ND	39	20	ug/kg	
98-86-2	Acetophenone	ND	200	8.4	ug/kg	
120-12-7	Anthracene	ND	39	24	ug/kg	
1912-24-9	Atrazine	ND	79	17	ug/kg	
56-55-3	Benzo(a)anthracene	49.7	39	11	ug/kg	
50-32-8	Benzo(a)pyrene	63.6	39	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	81.1	39	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	55.9	39	20	ug/kg	
207-08-9	Benzo(k)fluoranthene	30.4	39	18	ug/kg	J
101-55-3	4-Bromophenyl phenyl ether	ND	79	15	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	79	9.6	ug/kg	
92-52-4	1,1'-Biphenyl	ND	79	5.4	ug/kg	
100-52-7	Benzaldehyde	ND	200	9.7	ug/kg	
91-58-7	2-Chloronaphthalene	ND	79	9.3	ug/kg	
106-47-8	4-Chloroaniline	ND	200	14	ug/kg	
86-74-8	Carbazole	ND	79	5.7	ug/kg	

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Report of Analysis

Client Sample ID:	DUP-2	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-8	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	79	16	ug/kg	
218-01-9	Chrysene	59.6	39	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	79	8.4	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	79	17	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	79	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	79	13	ug/kg	
121-14-2	2,4-Dinitrotoluene ^a	ND	39	12	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	39	20	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	79	33	ug/kg	
123-91-1	1,4-Dioxane	ND	39	26	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	39	17	ug/kg	
132-64-9	Dibenzofuran	ND	79	16	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	79	6.4	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	79	9.8	ug/kg	
84-66-2	Diethyl phthalate	ND	79	8.4	ug/kg	
131-11-3	Dimethyl phthalate	ND	79	7.0	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	79	9.2	ug/kg	
206-44-0	Fluoranthene	74.2	39	18	ug/kg	
86-73-7	Fluorene	ND	39	18	ug/kg	
118-74-1	Hexachlorobenzene	ND	79	9.9	ug/kg	
87-68-3	Hexachlorobutadiene	ND	39	16	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	390	16	ug/kg	
67-72-1	Hexachloroethane	ND	200	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	66.1	39	18	ug/kg	
78-59-1	Isophorone	ND	79	8.4	ug/kg	
91-57-6	2-Methylnaphthalene	ND	39	8.9	ug/kg	
88-74-4	2-Nitroaniline	ND	200	9.3	ug/kg	
99-09-2	3-Nitroaniline	ND	200	9.8	ug/kg	
100-01-6	4-Nitroaniline ^a	ND	200	10	ug/kg	
91-20-3	Naphthalene	ND	39	11	ug/kg	
98-95-3	Nitrobenzene	ND	79	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	79	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	200	14	ug/kg	
85-01-8	Phenanthrene	37.8	39	13	ug/kg	J
129-00-0	Pyrene	69.9	39	13	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	200	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	58%		10-109%

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Report of Analysis

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Client Sample ID:	DUP-2	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-8	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	58%		10-105%
118-79-6	2,4,6-Tribromophenol	63%		10-135%
4165-60-0	Nitrobenzene-d5	62%		10-119%
321-60-8	2-Fluorobiphenyl	72%		18-112%
1718-51-0	Terphenyl-d14	71%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.33	980	ug/kg	J
	unknown	13.44	210	ug/kg	J
	Total TIC, Semi-Volatile		210	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
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 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	DUP-2		
Lab Sample ID:	JD39846-8	Date Sampled:	02/16/22
Matrix:	SO - Soil	Date Received:	02/16/22
Method:	SW846 8081B SW846 3546	Percent Solids:	84.3
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174490.D	1	02/23/22 14:26	TL	02/19/22 10:05	OP38204	G1G6029
Run #2							

	Initial Weight	Final Volume
Run #1	16.2 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.73	0.60	ug/kg	
319-84-6	alpha-BHC	ND	0.73	0.60	ug/kg	
319-85-7	beta-BHC	ND	0.73	0.66	ug/kg	
319-86-8	delta-BHC	ND	0.73	0.70	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.73	0.54	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.73	0.59	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.73	0.33	ug/kg	
60-57-1	Dieldrin	ND	0.73	0.50	ug/kg	
72-54-8	4,4' -DDD	ND	0.73	0.67	ug/kg	
72-55-9	4,4' -DDE	ND	0.73	0.64	ug/kg	
50-29-3	4,4' -DDT	ND	0.73	0.65	ug/kg	
72-20-8	Endrin	ND	0.73	0.57	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.73	0.57	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.73	0.42	ug/kg	
959-98-8	Endosulfan-I	ND	0.73	0.42	ug/kg	
33213-65-9	Endosulfan-II	ND	0.73	0.46	ug/kg	
76-44-8	Heptachlor	ND	0.73	0.63	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.73	0.51	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.58	ug/kg	
53494-70-5	Endrin ketone	ND	0.73	0.53	ug/kg	
8001-35-2	Toxaphene	ND	18	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	48%		14-145%
877-09-8	Tetrachloro-m-xylene	47%		14-145%
2051-24-3	Decachlorobiphenyl	41%		10-197%
2051-24-3	Decachlorobiphenyl	67%		10-197%

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Report of Analysis

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Client Sample ID:	DUP-2		
Lab Sample ID:	JD39846-8	Date Sampled:	02/16/22
Matrix:	SO - Soil	Date Received:	02/16/22
Method:	SW846 8082A SW846 3546	Percent Solids:	84.3
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK8167.D	1	02/22/22 20:46	TL	02/19/22 10:05	OP38205	GRK212
Run #2							

	Initial Weight	Final Volume
Run #1	16.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	17	ug/kg	
11104-28-2	Aroclor 1221	ND	37	23	ug/kg	
11141-16-5	Aroclor 1232	ND	37	23	ug/kg	
53469-21-9	Aroclor 1242	ND	37	15	ug/kg	
12672-29-6	Aroclor 1248	ND	37	33	ug/kg	
11097-69-1	Aroclor 1254	ND	37	20	ug/kg	
11096-82-5	Aroclor 1260 ^a	ND	37	16	ug/kg	
11100-14-4	Aroclor 1268	ND	37	15	ug/kg	
37324-23-5	Aroclor 1262	ND	37	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	50%		10-163%
877-09-8	Tetrachloro-m-xylene	63%		10-163%
2051-24-3	Decachlorobiphenyl	61%		10-215%
2051-24-3	Decachlorobiphenyl	65%		10-215%

(a) Associated CCV outside of control limits high, sample was ND.

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Report of Analysis

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Client Sample ID:	DUP-2	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-8	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	17200	60	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Antimony	< 2.4	2.4	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Arsenic ^a	< 4.8	4.8	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Barium	78.8	24	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Beryllium ^a	0.61	0.48	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cadmium	< 0.60	0.60	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Calcium	1360	600	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Chromium	29.6	1.2	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Cobalt	11.9	6.0	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Copper ^a	21.0	6.0	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Iron	27400	120	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Lead	15.0	2.4	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Magnesium	5190	600	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Manganese ^a	572	3.6	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	0.061	0.036	mg/kg	1	02/22/22	02/22/22	LM	SW846 7471B ³	SW846 7471B ⁵
Nickel	22.9	4.8	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Potassium	2320	1200	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Selenium ^a	< 4.8	4.8	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Silver ^a	< 1.2	1.2	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Sodium	< 1200	1200	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Thallium ^a	< 2.4	2.4	mg/kg	2	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Vanadium	41.9	6.0	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Zinc	65.0	6.0	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴

(1) Instrument QC Batch: MA51933

(2) Instrument QC Batch: MA51936

(3) Instrument QC Batch: MA51938

(4) Prep QC Batch: MP31357

(5) Prep QC Batch: MP31420

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DUP-2	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-8	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.28	0.28	mg/kg	1	02/18/22 15:37	MM	SW846 9012B/LACHAT
Solids, Percent	84.3		%	1	02/17/22 16:06	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	DUP-2	
Lab Sample ID:	JD39846-8A	Date Sampled: 02/16/22
Matrix:	SO - Soil	Date Received: 02/16/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 84.3
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55513.D	1	03/01/22 19:46	AFL	02/22/22 12:00	F:OP89889	F:S3Q766
Run #2							

	Initial Weight	Final Volume
Run #1	1.99 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
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PERFLUOROALKYLCARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	ND	1.2	0.45	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.60	0.30	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.60	0.30	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.60	0.30	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.60	0.30	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.60	0.30	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.60	0.30	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.60	0.30	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.60	0.30	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.60	0.32	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.60	0.30	ug/kg	

PERFLUOROALKYLSULFONIC ACIDS

375-73-5	Perfluorobutanesulfonic acid	ND	0.60	0.30	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.60	0.30	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.60	0.30	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.55	0.60	0.24	ug/kg	J
335-77-3	Perfluorodecanesulfonic acid	ND	0.60	0.30	ug/kg	

PERFLUOROCTANESULFONAMIDES

754-91-6	PFOSA	ND	0.60	0.30	ug/kg	
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PERFLUOROCTANESULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	ND	1.2	0.60	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.60	ug/kg	

FLUOROTELOMER SULFONATES

27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-2	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-8A	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	93%		40-140%
	13C5-PFPeA	93%		50-150%
	13C5-PFHxA	94%		50-150%
	13C4-PFHpA	96%		50-150%
	13C8-PFOA	98%		50-150%
	13C9-PFNA	96%		50-150%
	13C6-PFDA	103%		50-150%
	13C7-PFUnDA	100%		40-140%
	13C2-PFDoDA	96%		40-140%
	13C2-PFTeDA	94%		30-130%
	13C3-PFBS	96%		50-150%
	13C3-PFHxS	96%		50-150%
	13C8-PFOS	95%		50-150%
	13C8-FOSA	70%		30-130%
	d3-MeFOSAA	79%		40-140%
	d5-EtFOSAA	85%		40-140%
	13C2-6:2FTS	97%		50-150%
	13C2-8:2FTS	115%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB9 (4.5-5')	
Lab Sample ID:	JD39846-9	Date Sampled: 02/16/22
Matrix:	SO - Soil	Date Received: 02/16/22
Method:	SW846 8260D SW846 5035	Percent Solids: 87.2
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173671.D	1	02/17/22 23:17	PS	02/16/22 21:00	n/a	V3C7643
Run #2							

	Initial Weight
Run #1	6.4 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	9.0	3.7	ug/kg	
71-43-2	Benzene	ND	0.45	0.41	ug/kg	
74-97-5	Bromochloromethane	ND	4.5	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	1.8	0.38	ug/kg	
75-25-2	Bromoform	ND	4.5	1.2	ug/kg	
74-83-9	Bromomethane ^a	ND	4.5	0.68	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.0	2.2	ug/kg	
75-15-0	Carbon disulfide	ND	1.8	0.48	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.8	0.55	ug/kg	
108-90-7	Chlorobenzene	ND	1.8	0.41	ug/kg	
75-00-3	Chloroethane	ND	4.5	0.53	ug/kg	
67-66-3	Chloroform	ND	1.8	0.46	ug/kg	
74-87-3	Chloromethane	ND	4.5	1.8	ug/kg	
110-82-7	Cyclohexane	ND	1.8	0.59	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.8	0.62	ug/kg	
124-48-1	Dibromochloromethane	ND	1.8	0.50	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.90	0.38	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.90	0.49	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.90	0.44	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.90	0.44	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.5	0.65	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.90	0.44	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.90	0.42	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.90	0.59	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.90	0.75	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.90	0.55	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.8	0.42	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.8	0.43	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.8	0.41	ug/kg	
100-41-4	Ethylbenzene	ND	0.90	0.41	ug/kg	
76-13-1	Freon 113	ND	4.5	2.4	ug/kg	
591-78-6	2-Hexanone	ND	4.5	1.9	ug/kg	

ND = Not detected MDL = Method Detection Limit

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RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB9 (4.5-5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-9	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	87.2
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.8	1.3	ug/kg	
79-20-9	Methyl Acetate	ND	4.5	1.2	ug/kg	
108-87-2	Methylcyclohexane	ND	1.8	0.78	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.90	0.42	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.5	2.0	ug/kg	
75-09-2	Methylene chloride	ND	4.5	2.3	ug/kg	
100-42-5	Styrene	ND	1.8	0.36	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.8	0.54	ug/kg	
127-18-4	Tetrachloroethene	ND	1.8	0.52	ug/kg	
108-88-3	Toluene	ND	0.90	0.47	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.5	2.2	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.5	2.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.8	0.43	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.8	0.50	ug/kg	
79-01-6	Trichloroethene	ND	0.90	0.68	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.5	0.61	ug/kg	
75-01-4	Vinyl chloride	ND	1.8	0.43	ug/kg	
	m,p-Xylene	ND	0.90	0.80	ug/kg	
95-47-6	o-Xylene	ND	0.90	0.41	ug/kg	
1330-20-7	Xylene (total)	ND	0.90	0.41	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		80-124%
17060-07-0	1,2-Dichloroethane-D4	99%		75-133%
2037-26-5	Toluene-D8	97%		79-125%
460-00-4	4-Bromofluorobenzene	101%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	RI-SB9 (4.5-5')	
Lab Sample ID:	JD39846-9	Date Sampled: 02/16/22
Matrix:	SO - Soil	Date Received: 02/16/22
Method:	SW846 8270E SW846 3546	Percent Solids: 87.2
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155172.D	1	02/21/22 18:08	JY	02/19/22 11:30	OP38200	EZ7709
Run #2							

	Initial Weight	Final Volume
Run #1	31.6 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	73	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	22	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	31	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	65	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	180	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	180	39	ug/kg	
95-48-7	2-Methylphenol	ND	73	23	ug/kg	
	3&4-Methylphenol	ND	73	30	ug/kg	
88-75-5	2-Nitrophenol	ND	180	24	ug/kg	
100-02-7	4-Nitrophenol	ND	360	97	ug/kg	
87-86-5	Pentachlorophenol	ND	150	34	ug/kg	
108-95-2	Phenol	ND	73	19	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	24	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	27	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	22	ug/kg	
83-32-9	Acenaphthene	ND	36	13	ug/kg	
208-96-8	Acenaphthylene	ND	36	18	ug/kg	
98-86-2	Acetophenone	ND	180	7.8	ug/kg	
120-12-7	Anthracene	ND	36	22	ug/kg	
1912-24-9	Atrazine	ND	73	16	ug/kg	
56-55-3	Benzo(a)anthracene	15.5	36	10	ug/kg	J
50-32-8	Benzo(a)pyrene	24.6	36	17	ug/kg	J
205-99-2	Benzo(b)fluoranthene	43.1	36	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	36.8	36	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	36	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	73	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	73	8.9	ug/kg	
92-52-4	1,1'-Biphenyl	ND	73	5.0	ug/kg	
100-52-7	Benzaldehyde	ND	180	9.0	ug/kg	
91-58-7	2-Chloronaphthalene	ND	73	8.6	ug/kg	
106-47-8	4-Chloroaniline	ND	180	13	ug/kg	
86-74-8	Carbazole	ND	73	5.3	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RI-SB9 (4.5-5')
Lab Sample ID: JD39846-9
Matrix: SO - Soil
Method: SW846 8270E SW846 3546
Project: 1001 Whitlock Avenue, Bronx, NY

Date Sampled: 02/16/22

Date Received: 02/16/22

Percent Solids: 87.2

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	73	14	ug/kg	J
218-01-9	Chrysene	19.7	36	11	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	73	7.8	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	73	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	73	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	73	12	ug/kg	
121-14-2	2,4-Dinitrotoluene ^a	ND	36	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	36	18	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	73	30	ug/kg	
123-91-1	1,4-Dioxane	ND	36	24	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	36	16	ug/kg	J
132-64-9	Dibenzofuran	ND	73	15	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	73	5.9	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	73	9.0	ug/kg	
84-66-2	Diethyl phthalate	ND	73	7.7	ug/kg	
131-11-3	Dimethyl phthalate	ND	73	6.5	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	73	8.5	ug/kg	
206-44-0	Fluoranthene	ND	36	16	ug/kg	
86-73-7	Fluorene	ND	36	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	73	9.2	ug/kg	
87-68-3	Hexachlorobutadiene	ND	36	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	360	14	ug/kg	
67-72-1	Hexachloroethane	ND	180	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	44.0	36	17	ug/kg	
78-59-1	Isophorone	ND	73	7.8	ug/kg	
91-57-6	2-Methylnaphthalene	ND	36	8.2	ug/kg	
88-74-4	2-Nitroaniline	ND	180	8.6	ug/kg	
99-09-2	3-Nitroaniline	ND	180	9.1	ug/kg	
100-01-6	4-Nitroaniline ^a	ND	180	9.4	ug/kg	
91-20-3	Naphthalene	ND	36	10	ug/kg	
98-95-3	Nitrobenzene	ND	73	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	73	10	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	13	ug/kg	
85-01-8	Phenanthrene	ND	36	12	ug/kg	
129-00-0	Pyrene	17.0	36	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	9.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	64%		10-109%

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J = Indicates an estimated value

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB9 (4.5-5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-9	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	87.2
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	62%		10-105%
118-79-6	2,4,6-Tribromophenol	67%		10-135%
4165-60-0	Nitrobenzene-d5	64%		10-119%
321-60-8	2-Fluorobiphenyl	74%		18-112%
1718-51-0	Terphenyl-d14	71%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	-Dibenzopyrene	11.54	150	ug/kg	J
	-Dibenzopyrene	11.64	310	ug/kg	J
	unknown phthalate	13.44	370	ug/kg	J
	-Dibenzopyrene	13.94	290	ug/kg	J
	Total TIC, Semi-Volatile		1120	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB9 (4.5-5')	
Lab Sample ID:	JD39846-9	Date Sampled: 02/16/22
Matrix:	SO - Soil	Date Received: 02/16/22
Method:	SW846 8081B SW846 3546	Percent Solids: 87.2
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174491.D	1	02/23/22 14:45	TL	02/19/22 10:05	OP38204	G1G6029
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.75	0.62	ug/kg	
319-84-6	alpha-BHC	ND	0.75	0.61	ug/kg	
319-85-7	beta-BHC	ND	0.75	0.68	ug/kg	
319-86-8	delta-BHC	ND	0.75	0.72	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.75	0.55	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.75	0.60	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.75	0.34	ug/kg	
60-57-1	Dieldrin	ND	0.75	0.51	ug/kg	
72-54-8	4,4' -DDD	ND	0.75	0.69	ug/kg	
72-55-9	4,4' -DDE	ND	0.75	0.66	ug/kg	
50-29-3	4,4' -DDT	ND	0.75	0.66	ug/kg	
72-20-8	Endrin	ND	0.75	0.58	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.75	0.59	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.75	0.42	ug/kg	
959-98-8	Endosulfan-I	ND	0.75	0.43	ug/kg	
33213-65-9	Endosulfan-II	ND	0.75	0.47	ug/kg	
76-44-8	Heptachlor	ND	0.75	0.65	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.75	0.53	ug/kg	
72-43-5	Methoxychlor	ND	1.5	0.60	ug/kg	
53494-70-5	Endrin ketone	ND	0.75	0.54	ug/kg	
8001-35-2	Toxaphene	ND	19	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	80%		14-145%
877-09-8	Tetrachloro-m-xylene	83%		14-145%
2051-24-3	Decachlorobiphenyl	89%		10-197%
2051-24-3	Decachlorobiphenyl	104%		10-197%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB9 (4.5-5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-9	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	87.2
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK8168.D	1	02/22/22 21:02	TL	02/19/22 10:05	OP38205	GRK212
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	17	ug/kg	
11104-28-2	Aroclor 1221	ND	37	23	ug/kg	
11141-16-5	Aroclor 1232	ND	37	24	ug/kg	
53469-21-9	Aroclor 1242	ND	37	15	ug/kg	
12672-29-6	Aroclor 1248	ND	37	33	ug/kg	
11097-69-1	Aroclor 1254	ND	37	20	ug/kg	
11096-82-5	Aroclor 1260 ^a	ND	37	16	ug/kg	
11100-14-4	Aroclor 1268	ND	37	16	ug/kg	
37324-23-5	Aroclor 1262	ND	37	25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	85%		10-163%
877-09-8	Tetrachloro-m-xylene	107%		10-163%
2051-24-3	Decachlorobiphenyl	105%		10-215%
2051-24-3	Decachlorobiphenyl	107%		10-215%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB9 (4.5-5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-9	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	87.2
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	16300	55	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Antimony	2.8	2.2	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Arsenic ^a	< 11	11	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Barium	211	22	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Beryllium ^a	< 1.1	1.1	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cadmium	< 0.55	0.55	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Calcium	2750	550	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Chromium	28.3	1.1	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Cobalt	14.1	5.5	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Copper ^a	46.6	14	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Iron	29600	270	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Lead	101	2.2	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Magnesium	6470	550	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Manganese ^a	297	8.2	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	0.24	0.036	mg/kg	1	02/22/22	02/22/22	LM	SW846 7471B ³	SW846 7471B ⁵
Nickel	24.7	4.4	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Potassium	6480	1100	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Selenium ^a	< 11	11	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Silver ^a	< 2.7	2.7	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Sodium	< 1100	1100	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Thallium ^a	< 5.5	5.5	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Vanadium	47.6	5.5	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Zinc	125	5.5	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴

(1) Instrument QC Batch: MA51933

(2) Instrument QC Batch: MA51936

(3) Instrument QC Batch: MA51938

(4) Prep QC Batch: MP31357

(5) Prep QC Batch: MP31420

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB9 (4.5-5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-9	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	87.2
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.26	0.26	mg/kg	1	02/18/22 15:39	MM	SW846 9012B/LACHAT
Solids, Percent	87.2		%	1	02/17/22 16:06	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.15
4

Report of Analysis

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Client Sample ID:	RI-SB9 (4.5-5')	
Lab Sample ID:	JD39846-9A	Date Sampled: 02/16/22
Matrix:	SO - Soil	Date Received: 02/16/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 87.2
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55514.D	1	03/01/22 20:03	AFL	02/22/22 12:00	F:OP89889	F:S3Q766
Run #2							

	Initial Weight	Final Volume
Run #1	2.00 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.44	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.57	0.29	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.57	0.29	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.57	0.29	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.57	0.29	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.57	0.29	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.57	0.29	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.57	0.29	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.57	0.29	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.57	0.30	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.57	0.29	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.57	0.29	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.57	0.29	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.57	0.29	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.27	0.57	0.23	ug/kg	J
335-77-3	Perfluorodecanesulfonic acid	ND	0.57	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.57	0.29	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.1	0.57	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.57	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.29	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.29	ug/kg	

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB9 (4.5-5')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-9A	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	87.2
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	74%		40-140%
	13C5-PFPeA	74%		50-150%
	13C5-PFHxA	76%		50-150%
	13C4-PFHpA	78%		50-150%
	13C8-PFOA	79%		50-150%
	13C9-PFNA	77%		50-150%
	13C6-PFDA	81%		50-150%
	13C7-PFUnDA	81%		40-140%
	13C2-PFDoDA	78%		40-140%
	13C2-PFTeDA	75%		30-130%
	13C3-PFBS	79%		50-150%
	13C3-PFHxS	79%		50-150%
	13C8-PFOS	80%		50-150%
	13C8-FOSA	58%		30-130%
	d3-MeFOSAA	48%		40-140%
	d5-EtFOSAA	55%		40-140%
	13C2-6:2FTS	75%		50-150%
	13C2-8:2FTS	85%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB9 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-10	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.7
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173672.D	1	02/17/22 23:45	PS	02/16/22 21:00	n/a	V3C7643
Run #2							

	Initial Weight
Run #1	5.4 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	4.2	ug/kg	
71-43-2	Benzene	ND	0.51	0.46	ug/kg	
74-97-5	Bromochloromethane	ND	5.1	0.57	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.44	ug/kg	
75-25-2	Bromoform	ND	5.1	1.4	ug/kg	
74-83-9	Bromomethane ^a	ND	5.1	0.78	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.55	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.63	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.47	ug/kg	
75-00-3	Chloroethane	ND	5.1	0.60	ug/kg	
67-66-3	Chloroform	ND	2.0	0.53	ug/kg	
74-87-3	Chloromethane	ND	5.1	2.0	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.67	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.71	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.57	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.0	0.43	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.56	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.51	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.1	0.74	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.0	0.51	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.0	0.48	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.0	0.67	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.86	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.62	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.48	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.48	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.47	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.46	ug/kg	
76-13-1	Freon 113	ND	5.1	2.7	ug/kg	
591-78-6	2-Hexanone	ND	5.1	2.2	ug/kg	

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Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB9 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-10	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.7
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	1.4	ug/kg	
79-20-9	Methyl Acetate	ND	5.1	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.89	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.48	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.1	2.3	ug/kg	
75-09-2	Methylene chloride	ND	5.1	2.7	ug/kg	
100-42-5	Styrene	ND	2.0	0.41	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.61	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.59	ug/kg	
108-88-3	Toluene	ND	1.0	0.54	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.1	2.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	2.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.49	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.57	ug/kg	
79-01-6	Trichloroethene	ND	1.0	0.78	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.1	0.70	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.49	ug/kg	
	m,p-Xylene	ND	1.0	0.91	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.47	ug/kg	
1330-20-7	Xylene (total)	ND	1.0	0.47	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		80-124%
17060-07-0	1,2-Dichloroethane-D4	98%		75-133%
2037-26-5	Toluene-D8	99%		79-125%
460-00-4	4-Bromofluorobenzene	101%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	RI-SB9 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-10	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.7
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155163.D	1	02/21/22 14:33	JY	02/19/22 08:00	OP38200	EZ7709
Run #2							

	Initial Weight	Final Volume
Run #1	31.1 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	71	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	22	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	30	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	63	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	180	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	180	38	ug/kg	
95-48-7	2-Methylphenol	ND	71	23	ug/kg	
	3&4-Methylphenol	ND	71	29	ug/kg	
88-75-5	2-Nitrophenol	ND	180	23	ug/kg	
100-02-7	4-Nitrophenol	ND	350	95	ug/kg	
87-86-5	Pentachlorophenol	ND	140	33	ug/kg	
108-95-2	Phenol	ND	71	19	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	23	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	27	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	21	ug/kg	
83-32-9	Acenaphthene	ND	35	12	ug/kg	
208-96-8	Acenaphthylene	ND	35	18	ug/kg	
98-86-2	Acetophenone	ND	180	7.6	ug/kg	
120-12-7	Anthracene	ND	35	22	ug/kg	
1912-24-9	Atrazine	ND	71	15	ug/kg	
56-55-3	Benzo(a)anthracene	15.2	35	10	ug/kg	J
50-32-8	Benzo(a)pyrene	ND	35	16	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	35	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	35	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	35	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	71	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	71	8.7	ug/kg	
92-52-4	1,1'-Biphenyl	ND	71	4.9	ug/kg	
100-52-7	Benzaldehyde	ND	180	8.8	ug/kg	
91-58-7	2-Chloronaphthalene	ND	71	8.4	ug/kg	
106-47-8	4-Chloroaniline	ND	180	13	ug/kg	
86-74-8	Carbazole	ND	71	5.1	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB9 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-10	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.7
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	71	14	ug/kg	
218-01-9	Chrysene	14.2	35	11	ug/kg	J
111-91-1	bis(2-Chloroethoxy)methane	ND	71	7.6	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	71	15	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	71	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	71	11	ug/kg	
121-14-2	2,4-Dinitrotoluene ^a	ND	35	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	35	18	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	71	30	ug/kg	
123-91-1	1,4-Dioxane	ND	35	23	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	35	16	ug/kg	
132-64-9	Dibenzofuran	ND	71	14	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	71	5.8	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	71	8.8	ug/kg	
84-66-2	Diethyl phthalate	ND	71	7.6	ug/kg	
131-11-3	Dimethyl phthalate	ND	71	6.3	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	71	8.3	ug/kg	
206-44-0	Fluoranthene	16.2	35	16	ug/kg	J
86-73-7	Fluorene	ND	35	16	ug/kg	
118-74-1	Hexachlorobenzene	ND	71	9.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	35	14	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	350	14	ug/kg	
67-72-1	Hexachloroethane	ND	180	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	35	17	ug/kg	
78-59-1	Isophorone	ND	71	7.6	ug/kg	
91-57-6	2-Methylnaphthalene	ND	35	8.0	ug/kg	
88-74-4	2-Nitroaniline	ND	180	8.4	ug/kg	
99-09-2	3-Nitroaniline	ND	180	8.9	ug/kg	
100-01-6	4-Nitroaniline ^a	ND	180	9.2	ug/kg	
91-20-3	Naphthalene	ND	35	10	ug/kg	
98-95-3	Nitrobenzene	ND	71	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	71	10	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	13	ug/kg	
85-01-8	Phenanthrene	12.1	35	12	ug/kg	J
129-00-0	Pyrene	18.3	35	11	ug/kg	J
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	9.0	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	50%		10-109%

ND = Not detected MDL = Method Detection Limit

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J = Indicates an estimated value

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	RI-SB9 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-10	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.7
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	50%		10-105%
118-79-6	2,4,6-Tribromophenol	51%		10-135%
4165-60-0	Nitrobenzene-d5	54%		10-119%
321-60-8	2-Fluorobiphenyl	62%		18-112%
1718-51-0	Terphenyl-d14	64%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	13.44	140	ug/kg	J
	Total TIC, Semi-Volatile		140	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB9 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-10	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.7
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174492.D	1	02/23/22 15:03	TL	02/19/22 10:05	OP38204	G1G6029
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.72	0.59	ug/kg	
319-84-6	alpha-BHC	ND	0.72	0.58	ug/kg	
319-85-7	beta-BHC	ND	0.72	0.65	ug/kg	
319-86-8	delta-BHC	ND	0.72	0.69	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.72	0.53	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.72	0.58	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.72	0.32	ug/kg	
60-57-1	Dieldrin	ND	0.72	0.49	ug/kg	
72-54-8	4,4' -DDD	ND	0.72	0.66	ug/kg	
72-55-9	4,4' -DDE	ND	0.72	0.63	ug/kg	
50-29-3	4,4' -DDT	ND	0.72	0.63	ug/kg	
72-20-8	Endrin	ND	0.72	0.56	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.72	0.56	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.72	0.41	ug/kg	
959-98-8	Endosulfan-I	ND	0.72	0.41	ug/kg	
33213-65-9	Endosulfan-II	ND	0.72	0.45	ug/kg	
76-44-8	Heptachlor	ND	0.72	0.62	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.72	0.50	ug/kg	
72-43-5	Methoxychlor	ND	1.4	0.57	ug/kg	
53494-70-5	Endrin ketone	ND	0.72	0.52	ug/kg	
8001-35-2	Toxaphene	ND	18	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	49%		14-145%
877-09-8	Tetrachloro-m-xylene	50%		14-145%
2051-24-3	Decachlorobiphenyl	57%		10-197%
2051-24-3	Decachlorobiphenyl	59%		10-197%

ND = Not detected MDL = Method Detection Limit

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Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB9 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-10	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.7
Method:	SW846 8082A SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK8169.D	1	02/22/22 21:19	TL	02/19/22 10:05	OP38205	GRK212
Run #2							

	Initial Weight	Final Volume
Run #1	15.9 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	16	ug/kg	
11104-28-2	Aroclor 1221	ND	35	21	ug/kg	
11141-16-5	Aroclor 1232	ND	35	22	ug/kg	
53469-21-9	Aroclor 1242	ND	35	14	ug/kg	
12672-29-6	Aroclor 1248	ND	35	31	ug/kg	
11097-69-1	Aroclor 1254	ND	35	19	ug/kg	
11096-82-5	Aroclor 1260 ^a	ND	35	15	ug/kg	
11100-14-4	Aroclor 1268	ND	35	15	ug/kg	
37324-23-5	Aroclor 1262	ND	35	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	61%		10-163%
877-09-8	Tetrachloro-m-xylene	78%		10-163%
2051-24-3	Decachlorobiphenyl	71%		10-215%
2051-24-3	Decachlorobiphenyl	72%		10-215%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
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 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB9 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-10	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.7
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	21300	56	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Antimony	3.4	2.2	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Arsenic ^a	< 11	11	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Barium	195	22	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Beryllium ^a	< 1.1	1.1	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cadmium	< 0.56	0.56	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Calcium	642	560	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Chromium	34.1	1.1	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Cobalt	19.9	5.6	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Copper ^a	35.4	14	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Iron	41200	280	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Lead	16.5	2.2	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Magnesium	7530	560	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Manganese ^a	1320	8.4	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	< 0.036	0.036	mg/kg	1	02/22/22	02/22/22	LM	SW846 7471B ³	SW846 7471B ⁵
Nickel	38.3	4.5	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Potassium	9040	1100	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Selenium ^a	< 11	11	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Silver ^a	< 2.8	2.8	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Sodium	< 1100	1100	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Thallium ^a	< 5.6	5.6	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Vanadium	41.9	5.6	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Zinc	103	5.6	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴

(1) Instrument QC Batch: MA51933

(2) Instrument QC Batch: MA51936

(3) Instrument QC Batch: MA51938

(4) Prep QC Batch: MP31357

(5) Prep QC Batch: MP31420

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB9 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-10	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.7
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.25	0.25	mg/kg	1	02/18/22 15:40	MM	SW846 9012B/LACHAT
Solids, Percent	90.7		%	1	02/17/22 16:06	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB9 (9.5-10')	
Lab Sample ID:	JD39846-10A	Date Sampled: 02/16/22
Matrix:	SO - Soil	Date Received: 02/16/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 90.7
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55518.D	1	03/01/22 21:12	AFL	02/22/22 12:00	F:OP89889	F:S3Q766
Run #2							

	Initial Weight	Final Volume
Run #1	2.00 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.42	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.55	0.28	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.55	0.28	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.55	0.28	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.55	0.28	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.55	0.28	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.55	0.28	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.55	0.28	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.55	0.28	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.55	0.29	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.55	0.28	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.55	0.28	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.55	0.28	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.55	0.28	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.55	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.55	0.28	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.55	0.28	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.1	0.55	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.55	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB9 (9.5-10')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-10A	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	90.7
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	84%		40-140%
	13C5-PFPeA	83%		50-150%
	13C5-PFHxA	86%		50-150%
	13C4-PFHpA	90%		50-150%
	13C8-PFOA	86%		50-150%
	13C9-PFNA	84%		50-150%
	13C6-PFDA	90%		50-150%
	13C7-PFUnDA	94%		40-140%
	13C2-PFDoDA	86%		40-140%
	13C2-PFTeDA	86%		30-130%
	13C3-PFBS	84%		50-150%
	13C3-PFHxS	91%		50-150%
	13C8-PFOS	87%		50-150%
	13C8-FOSA	83%		30-130%
	d3-MeFOSAA	73%		40-140%
	d5-EtFOSAA	77%		40-140%
	13C2-6:2FTS	87%		50-150%
	13C2-8:2FTS	98%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.18
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Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB9 (14.5-15')	
Lab Sample ID:	JD39846-11	Date Sampled: 02/16/22
Matrix:	SO - Soil	Date Received: 02/16/22
Method:	SW846 8260D SW846 5035	Percent Solids: 76.6
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C173686.D	1	02/18/22 13:24	TDN	02/16/22 21:00	n/a	V3C7644
Run #2							

	Initial Weight
Run #1	5.9 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	19.1	11	4.6	ug/kg	
71-43-2	Benzene	ND	0.55	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.5	0.62	ug/kg	
75-27-4	Bromodichloromethane	ND	2.2	0.47	ug/kg	
75-25-2	Bromoform	ND	5.5	1.5	ug/kg	
74-83-9	Bromomethane ^a	ND	5.5	0.85	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	2.7	ug/kg	
75-15-0	Carbon disulfide	ND	2.2	0.59	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.2	0.68	ug/kg	
108-90-7	Chlorobenzene	ND	2.2	0.51	ug/kg	
75-00-3	Chloroethane	ND	5.5	0.65	ug/kg	
67-66-3	Chloroform	ND	2.2	0.57	ug/kg	
74-87-3	Chloromethane	ND	5.5	2.2	ug/kg	
110-82-7	Cyclohexane	ND	2.2	0.73	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.2	0.77	ug/kg	
124-48-1	Dibromochloromethane	ND	2.2	0.62	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1.1	0.47	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1.1	0.60	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1.1	0.55	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1.1	0.55	ug/kg	
75-71-8	Dichlorodifluoromethane ^a	ND	5.5	0.80	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.1	0.55	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.1	0.52	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.1	0.72	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.1	0.93	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.1	0.68	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.2	0.52	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.2	0.53	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	0.51	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.50	ug/kg	
76-13-1	Freon 113	ND	5.5	3.0	ug/kg	
591-78-6	2-Hexanone	ND	5.5	2.3	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	RI-SB9 (14.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-11	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	76.6
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.2	1.6	ug/kg	
79-20-9	Methyl Acetate	ND	5.5	1.5	ug/kg	
108-87-2	Methylcyclohexane	ND	2.2	0.97	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1.1	0.52	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.5	2.5	ug/kg	
75-09-2	Methylene chloride	ND	5.5	2.9	ug/kg	
100-42-5	Styrene	ND	2.2	0.44	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.2	0.66	ug/kg	
127-18-4	Tetrachloroethene	ND	2.2	0.64	ug/kg	
108-88-3	Toluene	ND	1.1	0.58	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.5	2.8	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.5	2.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.2	0.53	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.2	0.61	ug/kg	
79-01-6	Trichloroethene	ND	1.1	0.84	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.5	0.76	ug/kg	
75-01-4	Vinyl chloride	ND	2.2	0.53	ug/kg	
	m,p-Xylene	ND	1.1	0.99	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.51	ug/kg	
1330-20-7	Xylene (total)	ND	1.1	0.51	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		80-124%
17060-07-0	1,2-Dichloroethane-D4	95%		75-133%
2037-26-5	Toluene-D8	100%		79-125%
460-00-4	4-Bromofluorobenzene	103%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	RI-SB9 (14.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-11	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	76.6
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155164.D	1	02/21/22 14:57	JY	02/19/22 08:00	OP38200	EZ7709
Run #2							

	Initial Weight	Final Volume
Run #1	31.3 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	83	21	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	210	26	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	210	36	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	210	74	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	210	160	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	210	45	ug/kg	
95-48-7	2-Methylphenol	ND	83	27	ug/kg	
	3&4-Methylphenol	ND	83	34	ug/kg	
88-75-5	2-Nitrophenol	ND	210	28	ug/kg	
100-02-7	4-Nitrophenol	ND	420	110	ug/kg	
87-86-5	Pentachlorophenol	ND	170	39	ug/kg	
108-95-2	Phenol	ND	83	22	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	210	28	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	210	31	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	210	25	ug/kg	
83-32-9	Acenaphthene	ND	42	14	ug/kg	
208-96-8	Acenaphthylene	ND	42	21	ug/kg	
98-86-2	Acetophenone	ND	210	9.0	ug/kg	
120-12-7	Anthracene	ND	42	26	ug/kg	
1912-24-9	Atrazine	ND	83	18	ug/kg	
56-55-3	Benzo(a)anthracene	60.2	42	12	ug/kg	
50-32-8	Benzo(a)pyrene	51.3	42	19	ug/kg	
205-99-2	Benzo(b)fluoranthene	57.4	42	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	28.8	42	21	ug/kg	J
207-08-9	Benzo(k)fluoranthene	24.8	42	19	ug/kg	J
101-55-3	4-Bromophenyl phenyl ether	ND	83	16	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	83	10	ug/kg	
92-52-4	1,1'-Biphenyl	ND	83	5.7	ug/kg	
100-52-7	Benzaldehyde	ND	210	10	ug/kg	
91-58-7	2-Chloronaphthalene	ND	83	9.9	ug/kg	
106-47-8	4-Chloroaniline	ND	210	15	ug/kg	
86-74-8	Carbazole	ND	83	6.0	ug/kg	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB9 (14.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-11	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	76.6
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	83	16	ug/kg	
218-01-9	Chrysene	50.6	42	13	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	83	8.9	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	83	18	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	83	15	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	83	14	ug/kg	
121-14-2	2,4-Dinitrotoluene ^a	ND	42	13	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	42	21	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	83	35	ug/kg	
123-91-1	1,4-Dioxane	ND	42	28	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	42	18	ug/kg	
132-64-9	Dibenzofuran	ND	83	17	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	83	6.8	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	83	10	ug/kg	
84-66-2	Diethyl phthalate	ND	83	8.9	ug/kg	
131-11-3	Dimethyl phthalate	ND	83	7.4	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	83	9.8	ug/kg	
206-44-0	Fluoranthene	87.9	42	19	ug/kg	
86-73-7	Fluorene	ND	42	19	ug/kg	
118-74-1	Hexachlorobenzene	ND	83	11	ug/kg	
87-68-3	Hexachlorobutadiene	ND	42	17	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	420	17	ug/kg	
67-72-1	Hexachloroethane	ND	210	21	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	35.4	42	20	ug/kg	J
78-59-1	Isophorone	ND	83	8.9	ug/kg	
91-57-6	2-Methylnaphthalene	ND	42	9.4	ug/kg	
88-74-4	2-Nitroaniline	ND	210	9.8	ug/kg	
99-09-2	3-Nitroaniline	ND	210	10	ug/kg	
100-01-6	4-Nitroaniline ^a	ND	210	11	ug/kg	
91-20-3	Naphthalene	ND	42	12	ug/kg	
98-95-3	Nitrobenzene	ND	83	16	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	83	12	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	210	15	ug/kg	
85-01-8	Phenanthrene	26.3	42	14	ug/kg	J
129-00-0	Pyrene	78.9	42	13	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	210	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	68%		10-109%

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Report of Analysis

Page 3 of 3

Client Sample ID:	RI-SB9 (14.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-11	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	76.6
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	66%		10-105%
118-79-6	2,4,6-Tribromophenol	65%		10-135%
4165-60-0	Nitrobenzene-d5	68%		10-119%
321-60-8	2-Fluorobiphenyl	76%		18-112%
1718-51-0	Terphenyl-d14	72%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.28	180	ug/kg	J
	system artifact/aldol-condensation	3.33	190	ug/kg	J
10544-50-0	Cyclic octaatomic sulfur	10.10	1200	ug/kg	JN
	unknown	13.44	470	ug/kg	J
	Total TIC, Semi-Volatile		1670	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

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Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB9 (14.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-11	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	76.6
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174493.D	1	02/23/22 15:21	TL	02/19/22 10:05	OP38204	G1G6029
Run #2							

	Initial Weight	Final Volume
Run #1	16.2 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.81	0.66	ug/kg	
319-84-6	alpha-BHC	ND	0.81	0.66	ug/kg	
319-85-7	beta-BHC	ND	0.81	0.73	ug/kg	
319-86-8	delta-BHC	ND	0.81	0.77	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.81	0.59	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.81	0.65	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.81	0.37	ug/kg	
60-57-1	Dieldrin	ND	0.81	0.55	ug/kg	
72-54-8	4,4' -DDD	ND	0.81	0.74	ug/kg	
72-55-9	4,4' -DDE	ND	0.81	0.71	ug/kg	
50-29-3	4,4' -DDT	ND	0.81	0.71	ug/kg	
72-20-8	Endrin	ND	0.81	0.63	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.81	0.63	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.81	0.46	ug/kg	
959-98-8	Endosulfan-I	ND	0.81	0.46	ug/kg	
33213-65-9	Endosulfan-II	ND	0.81	0.50	ug/kg	
76-44-8	Heptachlor	ND	0.81	0.69	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.81	0.56	ug/kg	
72-43-5	Methoxychlor	ND	1.6	0.64	ug/kg	
53494-70-5	Endrin ketone	ND	0.81	0.58	ug/kg	
8001-35-2	Toxaphene	ND	20	19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	70%		14-145%
877-09-8	Tetrachloro-m-xylene	68%		14-145%
2051-24-3	Decachlorobiphenyl	63%		10-197%
2051-24-3	Decachlorobiphenyl	95%		10-197%

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Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB9 (14.5-15')		
Lab Sample ID:	JD39846-11	Date Sampled:	02/16/22
Matrix:	SO - Soil	Date Received:	02/16/22
Method:	SW846 8082A SW846 3546	Percent Solids:	76.6
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK8174.D	1	02/22/22 22:41	TL	02/19/22 10:05	OP38205	GRK212
Run #2							

	Initial Weight	Final Volume
Run #1	16.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	40	19	ug/kg	
11104-28-2	Aroclor 1221	ND	40	25	ug/kg	
11141-16-5	Aroclor 1232	ND	40	26	ug/kg	
53469-21-9	Aroclor 1242	ND	40	17	ug/kg	
12672-29-6	Aroclor 1248	ND	40	36	ug/kg	
11097-69-1	Aroclor 1254	ND	40	22	ug/kg	
11096-82-5	Aroclor 1260 ^a	ND	40	17	ug/kg	
11100-14-4	Aroclor 1268	ND	40	17	ug/kg	
37324-23-5	Aroclor 1262	ND	40	26	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	78%		10-163%
877-09-8	Tetrachloro-m-xylene	100%		10-163%
2051-24-3	Decachlorobiphenyl	70%		10-215%
2051-24-3	Decachlorobiphenyl	94%		10-215%

(a) Associated CCV outside of control limits high, sample was ND.

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 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	RI-SB9 (14.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-11	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	76.6
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	14900	67	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Antimony	< 2.7	2.7	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Arsenic	3.6	2.7	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Barium	71.1	27	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Beryllium	0.57	0.27	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Cadmium	< 0.67	0.67	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Calcium	1080	670	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Chromium	27.7	1.3	mg/kg	1	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cobalt	11.3	6.7	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Copper	18.1	3.4	mg/kg	1	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Iron	20300	67	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Lead	25.1	2.7	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Magnesium	3180	670	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Manganese	243	2.0	mg/kg	1	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Mercury	0.059	0.041	mg/kg	1	02/22/22	02/22/22	LM	SW846 7471B ³	SW846 7471B ⁵
Nickel	18.4	5.4	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Potassium	< 1300	1300	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Selenium	< 2.7	2.7	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Silver	< 0.67	0.67	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Sodium	< 1300	1300	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Thallium	< 1.3	1.3	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Vanadium	39.1	6.7	mg/kg	1	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Zinc	52.2	6.7	mg/kg	1	02/18/22	02/18/22	ND	SW846 6010D ¹	SW846 3050B ⁴

(1) Instrument QC Batch: MA51933

(2) Instrument QC Batch: MA51936

(3) Instrument QC Batch: MA51938

(4) Prep QC Batch: MP31357

(5) Prep QC Batch: MP31420

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RI-SB9 (14.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-11	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	76.6
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.33	0.33	mg/kg	1	02/18/22 15:48	MM	SW846 9012B/LACHAT
Solids, Percent	76.6		%	1	02/17/22 16:06	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	RI-SB9 (14.5-15')	
Lab Sample ID:	JD39846-11A	Date Sampled: 02/16/22
Matrix:	SO - Soil	Date Received: 02/16/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 76.6
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55519.D	1	03/01/22 21:29	AFL	02/22/22 12:00	F:OP89889	F:S3Q766
Run #2							

	Initial Weight	Final Volume
Run #1	2.00 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.50	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.65	0.33	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.65	0.33	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.65	0.33	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.65	0.33	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.65	0.33	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.65	0.33	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.65	0.33	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.65	0.33	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.65	0.35	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.65	0.33	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.65	0.33	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.65	0.33	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.65	0.33	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.65	0.26	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.65	0.33	ug/kg	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.65	0.33	ug/kg	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.3	0.65	ug/kg	
2991-50-6	EtFOSAA	ND	1.3	0.65	ug/kg	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.33	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.33	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RI-SB9 (14.5-15')	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-11A	Date Received:	02/16/22
Matrix:	SO - Soil	Percent Solids:	76.6
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	75%		40-140%
	13C5-PFPeA	75%		50-150%
	13C5-PFHxA	76%		50-150%
	13C4-PFHpA	77%		50-150%
	13C8-PFOA	80%		50-150%
	13C9-PFNA	77%		50-150%
	13C6-PFDA	83%		50-150%
	13C7-PFUnDA	85%		40-140%
	13C2-PFDoDA	77%		40-140%
	13C2-PFTeDA	75%		30-130%
	13C3-PFBS	77%		50-150%
	13C3-PFHxS	77%		50-150%
	13C8-PFOS	79%		50-150%
	13C8-FOSA	68%		30-130%
	d3-MeFOSAA	55%		40-140%
	d5-EtFOSAA	57%		40-140%
	13C2-6:2FTS	78%		50-150%
	13C2-8:2FTS	91%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	FIELD BLANK	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-13	Date Received:	02/16/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A268847.D	1	02/18/22 17:20	TDN	n/a	n/a	VA10562
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane ^a	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane ^a	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane ^b	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	0.58	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	FIELD BLANK	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-13	Date Received:	02/16/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		80-120%
17060-07-0	1,2-Dichloroethane-D4	100%		80-120%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	100%		82-114%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Associated CCV outside of control limits high, sample was ND.

(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

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E = Indicates value exceeds calibration range

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	FIELD BLANK	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-13	Date Received:	02/16/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P147642.D	1	02/19/22 12:17	CS	02/18/22 10:45	OP38217	EP6813
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.1	0.84	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.1	0.91	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.1	2.5	ug/l	
51-28-5	2,4-Dinitrophenol	ND	5.1	1.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.1	1.3	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.91	ug/l	
	3&4-Methylphenol	ND	2.0	0.90	ug/l	
88-75-5	2-Nitrophenol	ND	5.1	0.98	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	4.1	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.40	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.1	1.5	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.1	1.4	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.1	0.94	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
98-86-2	Acetophenone	ND	2.0	0.21	ug/l	
120-12-7	Anthracene	ND	1.0	0.22	ug/l	
1912-24-9	Atrazine	ND	2.0	0.46	ug/l	
100-52-7	Benzaldehyde	ND	5.1	0.29	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.21	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.22	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.35	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.41	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.47	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.22	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.1	0.35	ug/l	
86-74-8	Carbazole	ND	1.0	0.23	ug/l	

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Report of Analysis

Client Sample ID:	FIELD BLANK	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-13	Date Received:	02/16/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	2.0	0.66	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	2.0	0.41	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.56	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.49	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.52	ug/l	
123-91-1	1,4-Dioxane	ND	1.0	0.67	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.34	ug/l	
132-64-9	Dibenzofuran	ND	5.1	0.22	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.51	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.24	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.27	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.50	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.40	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.34	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.21	ug/l	
88-74-4	2-Nitroaniline	ND	5.1	0.28	ug/l	
99-09-2	3-Nitroaniline	ND	5.1	0.39	ug/l	
100-01-6	4-Nitroaniline	ND	5.1	0.45	ug/l	
91-20-3	Naphthalene	ND	1.0	0.24	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.66	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.49	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	0.23	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.38	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	22%		10-90%

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Report of Analysis

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Client Sample ID:	FIELD BLANK	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-13	Date Received:	02/16/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	17%		10-101%
118-79-6	2,4,6-Tribromophenol	71%		23-155%
4165-60-0	Nitrobenzene-d5	58%		25-141%
321-60-8	2-Fluorobiphenyl	61%		35-126%
1718-51-0	Terphenyl-d14	81%		15-139%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
57-10-3	n-Hexadecanoic acid	9.45	6.8	ug/l	JN
	Unknown	20.29	20	ug/l	J
	Total TIC, Semi-Volatile		26.8	ug/l	J

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Report of Analysis

Page 1 of 1

Client Sample ID:	FIELD BLANK	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-13	Date Received:	02/16/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8081B SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174588.D	1	02/25/22 08:43	CP	02/18/22 16:00	OP38208A	G1G6033
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0080	0.0041	ug/l	
319-84-6	alpha-BHC	ND	0.0080	0.0042	ug/l	
319-85-7	beta-BHC	ND	0.0080	0.0064	ug/l	
319-86-8	delta-BHC	ND	0.0080	0.0053	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0080	0.0048	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0080	0.0039	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0080	0.0034	ug/l	
60-57-1	Dieldrin	ND	0.0080	0.0061	ug/l	
72-54-8	4,4' -DDD	ND	0.0080	0.0046	ug/l	
72-55-9	4,4' -DDE	ND	0.0080	0.0040	ug/l	
50-29-3	4,4' -DDT	ND	0.0080	0.0055	ug/l	
72-20-8	Endrin	ND	0.0080	0.0048	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0080	0.0044	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0080	0.0054	ug/l	
53494-70-5	Endrin ketone	ND	0.0080	0.0050	ug/l	
959-98-8	Endosulfan-I	ND	0.0080	0.0042	ug/l	
33213-65-9	Endosulfan-II	ND	0.0080	0.0039	ug/l	
76-44-8	Heptachlor	ND	0.0080	0.0036	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0080	0.0048	ug/l	
72-43-5	Methoxychlor	ND	0.016	0.0054	ug/l	
8001-35-2	Toxaphene	ND	0.20	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	75%		10-190%
877-09-8	Tetrachloro-m-xylene	73%		10-190%
2051-24-3	Decachlorobiphenyl	46%		10-156%
2051-24-3	Decachlorobiphenyl	39%		10-156%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK	
Lab Sample ID:	JD39846-13	Date Sampled: 02/16/22
Matrix:	AQ - Field Blank Soil	Date Received: 02/16/22
Method:	SW846 8082A SW846 3510C	Percent Solids: n/a
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX2478326.D	1	02/23/22 21:47	CL	02/18/22 16:00	OP38209	GXX7736
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	2.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.40	0.16	ug/l	
11104-28-2	Aroclor 1221	ND	0.40	0.34	ug/l	
11141-16-5	Aroclor 1232	ND	0.40	0.21	ug/l	
53469-21-9	Aroclor 1242	ND	0.40	0.18	ug/l	
12672-29-6	Aroclor 1248	ND	0.40	0.10	ug/l	
11097-69-1	Aroclor 1254	ND	0.40	0.33	ug/l	
11096-82-5	Aroclor 1260	ND	0.40	0.12	ug/l	
11100-14-4	Aroclor 1268	ND	0.40	0.14	ug/l	
37324-23-5	Aroclor 1262	ND	0.40	0.15	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	78%		10-174%
877-09-8	Tetrachloro-m-xylene	76%		10-174%
2051-24-3	Decachlorobiphenyl	40%		10-151%
2051-24-3	Decachlorobiphenyl	40%		10-151%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

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Report of Analysis

Page 1 of 1

Client Sample ID: FIELD BLANK**Lab Sample ID:** JD39846-13**Matrix:** AQ - Field Blank Soil**Project:** 1001 Whitlock Avenue, Bronx, NY**Date Sampled:** 02/16/22**Date Received:** 02/16/22**Percent Solids:** n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	< 200	200	ug/l	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3010A ³
Antimony	< 6.0	6.0	ug/l	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3010A ³
Arsenic	< 3.0	3.0	ug/l	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3010A ³
Barium	< 200	200	ug/l	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3010A ³
Beryllium	< 1.0	1.0	ug/l	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3010A ³
Cadmium	< 3.0	3.0	ug/l	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3010A ³
Calcium	< 5000	5000	ug/l	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3010A ³
Chromium	< 10	10	ug/l	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3010A ³
Cobalt	< 50	50	ug/l	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3010A ³
Copper	< 10	10	ug/l	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3010A ³
Iron	< 100	100	ug/l	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3010A ³
Lead	< 3.0	3.0	ug/l	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3010A ³
Magnesium	< 5000	5000	ug/l	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3010A ³
Manganese	< 15	15	ug/l	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	02/22/22	02/22/22	LM	SW846 7470A ² SW846 7470A ⁴
Nickel	< 10	10	ug/l	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3010A ³
Potassium	< 10000	10000	ug/l	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3010A ³
Selenium	< 10	10	ug/l	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3010A ³
Silver	< 10	10	ug/l	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3010A ³
Sodium	< 10000	10000	ug/l	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3010A ³
Thallium	< 10	10	ug/l	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3010A ³
Vanadium	< 50	50	ug/l	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3010A ³
Zinc	< 20	20	ug/l	1	02/18/22	02/19/22	ND	SW846 6010D ¹ SW846 3010A ³

(1) Instrument QC Batch: MA51933

(2) Instrument QC Batch: MA51940

(3) Prep QC Batch: MP31363

(4) Prep QC Batch: MP31427

RL = Reporting Limit

Report of Analysis

Client Sample ID:	FIELD BLANK	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-13	Date Received:	02/16/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.010	0.010	mg/l	1	02/18/22 14:58	MM	EPA 335.4/LACHAT

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	FIELD BLANK	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-13A	Date Received:	02/16/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55215.D	1	02/26/22 04:23	AFL	02/22/22 09:00	F:OP89877	F:S3Q762
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
---------	----------	--------	----	-----	-------	---

PERFLUOROALKYLCARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	ND	3.7	1.9	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	1.9	0.93	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.9	0.93	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	1.9	0.93	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.9	0.93	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.93	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.93	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.93	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.93	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.93	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.93	ng/l	

PERFLUOROALKYLSULFONIC ACIDS

375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.93	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.93	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.93	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.93	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.93	ng/l	

PERFLUOROCTANESULFONAMIDES

754-91-6	PFOSA	ND	3.7	1.9	ng/l	
----------	-------	----	-----	-----	------	--

PERFLUOROCTANESULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	ND	3.7	1.9	ng/l	
2991-50-6	EtFOSAA	ND	3.7	1.9	ng/l	

FLUOROTELOMER SULFONATES

27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.4	1.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.4	1.9	ng/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK	Date Sampled:	02/16/22
Lab Sample ID:	JD39846-13A	Date Received:	02/16/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	89%		35-135%
	13C5-PFPeA	88%		50-150%
	13C5-PFHxA	89%		50-150%
	13C4-PFHpA	90%		50-150%
	13C8-PFOA	90%		50-150%
	13C9-PFNA	90%		50-150%
	13C6-PFDA	88%		50-150%
	13C7-PFUnDA	90%		40-140%
	13C2-PFDoDA	86%		40-140%
	13C2-PFTeDA	81%		30-130%
	13C3-PFBS	90%		50-150%
	13C3-PFHxS	88%		50-150%
	13C8-PFOS	86%		50-150%
	13C8-FOSA	89%		30-130%
	d3-MeFOSAA	91%		40-140%
	d5-EtFOSAA	88%		40-140%
	13C2-6:2FTS	92%		50-150%
	13C2-8:2FTS	90%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Chain of Custody (SGS Orlando, FL)



SO
SLL
WFB

CHAIN OF CUSTODY

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PAGE 1 OF 2

Client / Reporting Information				Requested Analysis (see TEST CODE sheet)				Matrix Codes											
Company Name SESI				Project Name 11819				Matrix Codes											
Street Address 12A MAPLE AVE				Street 1001 WHITLOCK AVE				DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank											
City PINE BROOK NJ				City BRONX NY															
State NJ				State NY															
Zip 07068				Zip 10469															
Project Contact JAMES SESI				Project # 11819															
Phone # 908 551 0000				Client Purchase Order #															
Fax #				City BRONX															
Sampler(s) Name(s) CHRIS MARYCINI				Project Manager SESSIE MAUSNER															
Phone #				Attention:															
MEOH/DI Vial #				Number of preserved bottles															
Field ID / Point of Collection				Date															
Time				Sampled by															
Matrix				# of bottles															
HCl				NaOH															
HNO3				H2SO4															
HNO2				H2O2															
H2O				DI Water															
MEOH				ENCORE															
LAB USE ONLY																			
1 R1-SB7 (4.5-5')				2/16/22 11:30 am				SO 3				X X				D13			
2 R1-SB7 (9.5-10')				2/16/22 11:41 am				SO 3				X X				SUB			
3 R1-SB7 (14.5-15')				2/16/22 11:53 am				SO 3				X X				P88			
4 R1-SB7 (16.5-17')				2/16/22 12:00 am				SO 3				X X				ENCORE			
5 R1-SB8 (4.5-5')				2/16/22 9:53 am				SO 3				X X				14T3			
6 R1-SB8 (9.5-10')				2/16/22 10:05 am				SO 3				X X				4081			
7 R1-SB8 (12.5-13')				2/16/22 10:12 am				SO 3				X X							
8 R1-SB8 DUB-2				2/16/22 9:57 am				SO 3				X X							
9 R1-SB9 (4.5-5')				2/16/22 13:01 am				SO 3				X X							
10 R1-SB9 (9.5-10')				2/16/22 13:15 am				SO 3				X X							
11 R1-SB9 (14.5-15')				2/16/22 13:27 am				SO 3				X X							
Turnaround Time (Business days)				Data Deliverable Information				Comments / Special Instructions											
☒ Std. 10 Business Days SESI				Approved by (SGS Project Manager)/Date:				☐ Commercial "A" (Level 1)				☒ NYASP Category A							
☐ 5 Day RUSH								☐ Commercial "B" (Level 2)				☒ NYASP Category B							
☐ 3 Day RUSH								☐ FULLT1 (Level 3+4)				☐ State Forms							
☐ 2 Day RUSH								☐ NJ Reduced				☐ EDD Format							
☐ 1 Day RUSH								☐ Commercial "C"				☐ Other							
☐ other								☐ NJ Data of Known Quality Protocol Reporting											
Emergency & Rush T/A data available via LabLink				Commercial "A" = Results Only; Commercial "B" = Results + QC Summary				Sample inventory is verified upon receipt in the Laboratory											
Relinquished by Sampler: 1 CHRIS MARYCINI				Date/Time: 2/16/22				Received By: 2 CIP				Date/Time: 2/16/22				Received By: 2 CIP			
Relinquished by Sampler: 3				Date/Time:				Received By: 3				Date/Time:				Received By: 3			
Relinquished by: 5				Date/Time:				Received By: 5				Date/Time:				Received By: 5			
Custody Seal #				☐ Intact				Preserved where applicable				☐ On Ice				Cooler Temp.			
☐ Not Intact																			

Form:SM088-03C (revised 2/12/18)

CIP 2.8/2.3/30/21

http://www.sgs.com/en/terms-and-conditions.

JD39846: Chain of Custody

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[illegible]

Form:SM088-03C (revised 2/12/18)

<http://www.sgs.com/en/terms-and-conditions>.

☐ Not intact ☐ 28/23/30/2.1

JD39846: Chain of Custody

Page 2 of 3

SGS Sample Receipt Summary

Job Number: JD39846

Client: SESI CONSULTING ENGINEERS

Project: 1001 WHITLOCK AVENUE, BRONX, NY

Date / Time Received: 2/16/2022 5:32:00 PM

Delivery Method:
Airbill #s:
Cooler Temps (Raw Measured) °C: Cooler 1: (2.8); Cooler 2: (2.3); Cooler 3: (3.0); Cooler 4: (2.1);

Cooler Temps (Corrected) °C: Cooler 1: (1.2); Cooler 2: (0.7); Cooler 3: (1.4); Cooler 4: (0.5);

Cooler Security
Y or N
Y or N

- | | |
|--|---|
| 1. Custody Seals Present: ☒ ☐ | 3. COC Present: ☒ ☐ |
| 2. Custody Seals Intact: ☒ ☐ | 4. Smpl Dates/Time OK: ☒ ☐ |

Cooler Temperature
Y or N

- | | |
|---|-----------|
| 1. Temp criteria achieved: ☒ ☐ | IR Gun |
| 2. Cooler temp verification: | |
| 3. Cooler media: | Ice (Bag) |
| 4. No. Coolers: | 4 |

Quality Control Preservation
Y or N
N/A

- | | |
|---|---|
| 1. Trip Blank present / cooler: ☐ ☐ | N/A ☒ |
| 2. Trip Blank listed on COC: ☐ ☐ | N/A ☒ |
| 3. Samples preserved properly: ☒ ☐ | |
| 4. VOCs headspace free: ☐ ☐ | N/A ☒ |

Sample Integrity - Documentation
Y or N

- | | |
|---|--|
| 1. Sample labels present on bottles: ☒ ☐ | |
| 2. Container labeling complete: ☒ ☐ | |
| 3. Sample container label / COC agree: ☒ ☐ | |

Sample Integrity - Condition
Y or N

- | | |
|---|--------|
| 1. Sample recvd within HT: ☒ ☐ | |
| 2. All containers accounted for: ☒ ☐ | |
| 3. Condition of sample: | Intact |

Sample Integrity - Instructions
Y or N
N/A

- | | |
|---|---|
| 1. Analysis requested is clear: ☒ ☐ | |
| 2. Bottles received for unspecified tests: ☐ ☒ | |
| 3. Sufficient volume recvd for analysis: ☒ ☐ | |
| 4. Compositing instructions clear: ☐ ☐ | N/A ☒ |
| 5. Filtering instructions clear: ☐ ☐ | N/A ☒ |

Test Strip Lot #s:

pH 1-12: 231619

pH 12+: 203117A

Other: (Specify)

Comments

 SM089-03
Rev. Date 12/7/17

JD39846: Chain of Custody

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[illegible]

jd39846.xls
Rev. Date: 4/10/18

JD39846: Chain of Custody

Page 2 of 3

SGS Sample Receipt Summary

Job Number: JD39846

Client: SGS NA

Project: 1001 WHITLOCK AVENUE

Date / Time Received: 2/21/2022 9:00:00 AM

Delivery Method: FEDEX

Airbill #s: 527206391073

Therm ID: IR 1;

Therm CF: 0.4;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 1: (4.6);

Cooler Temps (Corrected) °C: Cooler 1: (5.0);

Cooler Information

Y or N

- | | | |
|-----------------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present | ☒ | ☐ |
| 2. Custody Seals Intact | ☒ | ☐ |
| 3. Temp criteria achieved | ☒ | ☐ |
| 4. Cooler temp verification | <u>IR Gun</u> | |
| 5. Cooler media | <u>Ice (Bag)</u> | |

Trip Blank Information

Y or N N/A

- | | | | |
|--------------------------------|--------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler | ☐ | ☐ | ☒ |
| 2. Trip Blank listed on COC | ☐ | ☐ | ☒ |
| | <u>W or S</u> | <u>N/A</u> | |
| 3. Type Of TB Received | ☐ | ☐ | ☒ |

Sample Information

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Sample labels present on bottles | ☒ | ☐ | |
| 2. Samples preserved properly | ☒ | ☐ | |
| 3. Sufficient volume/containers recvd for analysis: | ☒ | ☐ | |
| 4. Condition of sample | <u>Intact</u> | | |
| 5. Sample recvd within HT | ☒ | ☐ | |
| 6. Dates/Times/IDs on COC match Sample Label | ☒ | ☐ | |
| 7. VOCs have headspace | ☐ | ☐ | ☒ |
| 8. Bottles received for unspecified tests | ☐ | ☒ | |
| 9. Compositing instructions clear | ☐ | ☐ | ☒ |
| 10. Voa Soil Kits/Jars received past 48hrs? | ☐ | ☐ | ☒ |
| 11. % Solids Jar received? | ☐ | ☐ | ☒ |
| 12. Residual Chlorine Present? | ☐ | ☐ | ☒ |

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____
 Test Strip Lot #s: pH 0-3 230315
 Residual Chlorine Test Strip Lot #: _____

Number of 5035 Field Kits: _____
 pH 10-12 219813A

Number of Lab Filtered Metals: _____
 Other: (Specify) _____

Comments

SM001
Rev. Date 05/24/17

Technician: DEVANO

Date: 2/21/2022 9:00:00 AM

Reviewer: _____

Date: _____

JD39846: Chain of Custody

Page 3 of 3

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

SESI Consulting Engineers

1001 Whitlock Avenue, Bronx, NY

11819

SGS Job Number: JD39915

Sampling Date: 02/17/22

Report to:

SESI Consulting Engineers

jam@sesi.org

ATTN: Jesse Mausner

Total number of pages in report: 43



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A handwritten signature in black ink, appearing to read 'Mike Earp'.

Mike Earp
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

This report shall not be reproduced, except in its entirety, without the written approval of SGS.
Test results relate only to samples analyzed.

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Sample Summary

SESI Consulting Engineers

Job No: JD39915

1001 Whitlock Avenue, Bronx, NY
Project No: 11819

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
---------------	----------------	---------	----------	-------------	------	------------------

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

JD39915-1	02/17/22	09:25	CM	02/17/22	SO	Soil	R1-SB10(2-2.5')
JD39915-1A	02/17/22	09:25	CM	02/17/22	SO	Soil	R1-SB10(2-2.5')
JD39915-2	02/17/22	08:15	CM	02/17/22	AQ	Field Blank Soil	FIELD BLANK
JD39915-2A	02/17/22	08:15	CM	02/17/22	AQ	Field Blank Soil	FIELD BLANK
JD39915-3	02/17/22	09:25	CM	02/17/22	AQ	Trip Blank Soil	TB

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: SESI Consulting Engineers

Job No JD39915

Site: 1001 Whitlock Avenue, Bronx, NY

Report Date 3/4/2022 11:59:15 AM

On 02/17/2022, 2 Sample(s), 1 Trip Blank(s) and 1 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 2.4 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD39915 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260D

Matrix: AQ

Batch ID: V1X8420

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD39928-7MS, JD39928-7MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JD39915-3 for Chloromethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD39915-3 for Vinyl chloride: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD39915-3 for Dichlorodifluoromethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

Matrix: AQ

Batch ID: VL10183

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39824-8MS, JD39824-8MSD were used as the QC samples indicated.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for Tetrachloroethene are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- JD39824-8MSD for 4-Bromofluorobenzene: Outside of in house control limits, but within reasonable method recovery limits.
- JD39915-2 for Vinyl chloride: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- VL10183-BS for 4-Bromofluorobenzene: Outside of in house control limits, but within reasonable method recovery limits.
- JD39915-2 for 1,2-Dibromo-3-chloropropane: Associated CCV outside of control limits high, sample was ND.
- JD39915-2 for Bromomethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD39824-8MS for 4-Bromofluorobenzene: Outside of in house control limits, but within reasonable method recovery limits.
- JD39915-2 for Chloroethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD39915-2 for 4-Bromofluorobenzene: Outside of in house control limits, but within reasonable method recovery limits.

Matrix: SO

Batch ID: VY8531

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39912-1MS, JD39912-2DUP, JD39912-1MS were used as the QC samples indicated.
- Matrix Spike Recovery(s) for 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Chlorobenzene, Cyclohexane, Ethylbenzene, Isopropylbenzene, m,p-Xylene, Methylcyclohexane, o-Xylene, Styrene, Toluene, Xylene (total) are outside control limits. Outside control limits due to matrix interference.

Friday, March 04, 2022

Page 1 of 6

MS Volatiles By Method SW846 8260D**Matrix:** SO**Batch ID:** VY8531

- VY8531-BS for 1,2,4-Trichlorobenzene: High percent recoveries and no associated positive found in the QC batch.
- JD39915-1 for 1,2,3-Trichlorobenzene: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- JD39915-1 for 1,2,4-Trichlorobenzene: Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
- VY8531-BS for 1,2,3-Trichlorobenzene: High percent recoveries and no associated positive found in the QC batch.

MS Semi-volatiles By Method EPA 537M BY ID**Matrix:** AQ**Batch ID:** F:OP89877

- The data for EPA 537M BY ID meets quality control requirements.
- JD39915-2A: Analysis performed at SGS Orlando, FL.

Matrix: SO**Batch ID:** F:OP89888

- The data for EPA 537M BY ID meets quality control requirements.
- JD39915-1A: Analysis performed at SGS Orlando, FL.

MS Semi-volatiles By Method SW846 8270E

Matrix: AQ

Batch ID: OP38240

- All samples were extracted within the recommended method holding time.
- Sample(s) JD39926-3MS, JD39926-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- RPD(s) for MSD for 2,3,4,6-Tetrachlorophenol, 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 2,4-Dichlorophenol, 2,4-Dinitrophenol, 2-Chlorophenol, 2-Nitrophenol, 4,6-Dinitro-o-cresol, 4-Chloro-3-methyl phenol, Hexachlorocyclopentadiene are outside control limits for sample OP38240-MSD.
- JD39915-2 for 4-Chloroaniline: Associated CCV outside of control limits high, sample was ND.
- JD39915-2 for 2-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD39915-2 for Caprolactam: Associated CCV outside of control limits high, sample was ND.

Matrix: SO

Batch ID: OP38251

- All samples were extracted within the recommended method holding time.
- Sample(s) JD39912-1MS, JD39912-1MSD were used as the QC samples indicated.
- Sample(s) JD39915-1 have compound(s) reported with a "B" qualifier, indicating analyte is found in the associated method blank.
- Matrix Spike Recovery(s) for 2,4-Dinitrophenol, 4,6-Dinitro-o-cresol, 4-Nitrophenol, Hexachlorocyclopentadiene are outside control limits. Dilution required due to viscosity of the extract matrix.
- Matrix Spike Duplicate Recovery(s) for 2,4-Dinitrophenol, 4,6-Dinitro-o-cresol, 4-Nitrophenol, Hexachlorocyclopentadiene are outside control limits. Dilution required due to viscosity of the extract matrix.
- RPD(s) for MSD for Hexachlorocyclopentadiene are outside control limits for sample OP38251-MSD.
- JD39915-1 for Hexachlorocyclopentadiene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD39915-1 for Isophorone: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD39915-1 for Di-n-octyl phthalate: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD39915-1 for 2-Nitroaniline: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD39915-1 for 4-Nitrophenol: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD39915-1 for bis(2-Chloroethyl)ether: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD39915-1 for Nitrobenzene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

GC/LC Semi-volatiles By Method SW846 8081B

Matrix: AQ

Batch ID: OP38246

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- RPD of OP38246-BSD for all compounds: Analytical precision exceeds in-house control limits.

Matrix: SO

Batch ID: OP38256

- All samples were extracted within the recommended method holding time.
- Sample(s) JD39836-1MS, JD39836-1MSD, OP38256-MSMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Dieldrin, Endrin ketone are outside control limits.
- Matrix Spike Duplicate Recovery(s) for Aldrin, alpha-BHC, delta-BHC, Dieldrin, Endrin, Endrin aldehyde, Endrin ketone, gamma-BHC (Lindane), Heptachlor epoxide, Methoxychlor are outside control limits.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for 4,4'-DDE, 4,4'-DDT are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- OP38256-BS1: Had TBA cleanup.
- OP38256-MB1: Had TBA cleanup.
- JD39915-1 for 4,4'-DDT: More than 40 % RPD for detected concentrations between the two GC columns.
- JD39915-1 for Endrin ketone: Associated CCV outside of control limits high, sample was ND.

GC/LC Semi-volatiles By Method SW846 8082A

Matrix: AQ

Batch ID: OP38247

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Matrix: SO

Batch ID: OP38257

- All samples were extracted within the recommended method holding time.
- Sample(s) JD39837-1MS, JD39837-1MSD, OP38257-MSMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- OP38257-MB1 for Tetrachloro-m-xylene: Outside of in house control limits.

Metals Analysis By Method SW846 6010D

Matrix: AQ

Batch ID: MP31382

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39921-1MS, JD39921-1MSD, JD39921-1SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Antimony, Beryllium, Cadmium, Chromium, Copper, Lead, Nickel, Vanadium are outside control limits for sample MP31382-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Matrix: SO

Batch ID: MP31373

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39909-4PS, JD39909-4SDL, JD39909-4MS, JD39909-4MSD were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Manganese, Aluminum, Antimony, Calcium, Potassium are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- Matrix Spike Duplicate Recovery(s) for Manganese, Aluminum, Antimony, Calcium are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for Iron are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for MSD for Manganese are outside control limits for sample MP31373-S2. High rpd due to possible sample nonhomogeneity.
- RPD(s) for Serial Dilution for Antimony, Arsenic, Silver, Sodium, Thallium are outside control limits for sample MP31373-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- JD39915-1 for Beryllium: Elevated detection limit due to dilution required for high interfering element.
- JD39915-1 for Silver: Elevated detection limit due to dilution required for high interfering element.
- JD39915-1 for Thallium: Elevated detection limit due to dilution required for high interfering element.

Metals Analysis By Method SW846 7470A

Matrix: AQ

Batch ID: MP31427

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39921-2MS, JD39921-2MSD were used as the QC samples for metals.

Metals Analysis By Method SW846 7471B

Matrix: SO

Batch ID: MP31421

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39831-1MS, JD39831-1MSD were used as the QC samples for metals.

General Chemistry By Method EPA 335.4/LACHAT

Matrix: AQ

Batch ID: GP38621

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39864-4DUP, JD39864-4MS were used as the QC samples for Cyanide.
- Matrix Spike Recovery(s) for Cyanide are outside control limits. Spike recovery indicates possible matrix interference.

General Chemistry By Method SM2540 G 18TH ED MOD

Matrix: SO

Batch ID: GN26564

- Sample(s) JD39893-1DUP were used as the QC samples for Solids, Percent.

General Chemistry By Method SW846 9012B/LACHAT

Matrix: SO

Batch ID: GP38618

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39909-1DUP, JD39909-1MS were used as the QC samples for Cyanide.
- Matrix Spike Recovery(s) for Cyanide are outside control limits. Spike recovery indicates possible matrix interference.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Friday, March 04, 2022

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SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: SGS Dayton, NJ

Job No: JD39915

Site: SESINJPB: 1001 Whitlock Avenue, Bronx, NY

Report Date 3/4/2022 9:56:50 AM

On 02/17/2022, 1 Sample(s), 0 Trip Blank(s) and 1 Field Blank(s) were received at SGS North America Inc - Orlando, at a maximum corrected temperature of 1.8 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. - Orlando Job Number of JD39915 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section. Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

MS Semi-volatiles By Method EPA 537M BY ID

Matrix: AQ

Batch ID: OP89877

Sample(s) JD39818-4MS, JD39818-5DUP were used as the QC samples indicated.

RPD(s) for Duplicate for Perfluorohexanesulfonic acid are outside control limits for sample OP89877-DUP. Probable cause is due to sample non-homogeneity.

Matrix: SO

Batch ID: OP89888

Sample(s) FA92695-3RMS, FA92695-3RMSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for Perfluorooctanesulfonic acid are outside control limits. Probable cause is due to matrix interference.

Matrix Spike Duplicate Recovery(s) for Perfluorooctanesulfonic acid are outside control limits. Probable cause is due to matrix interference.

SGS North America Inc. - Orlando certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted. Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria. SGS North America Inc.- Orlando is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety.

Narrative prepared by:

Ariel Hartney, Client Services (signature on file)

Summary of Hits

Job Number: JD39915
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/17/22



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JD39915-1 R1-SB10(2-2.5')

Acenaphthylene	18.0 J	36	18	ug/kg	SW846 8270E
Benzo(a)anthracene	62.3	36	10	ug/kg	SW846 8270E
Benzo(a)pyrene	81.2	36	16	ug/kg	SW846 8270E
Benzo(b)fluoranthene	98.7	36	16	ug/kg	SW846 8270E
Benzo(g,h,i)perylene	68.3	36	18	ug/kg	SW846 8270E
Benzo(k)fluoranthene	51.0	36	17	ug/kg	SW846 8270E
Carbazole	5.8 J	72	5.2	ug/kg	SW846 8270E
Chrysene	76.2	36	11	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene	20.9 J	36	16	ug/kg	SW846 8270E
Di-n-butyl phthalate	35.8 JB	72	5.9	ug/kg	SW846 8270E
Fluoranthene	103	36	16	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	77.6	36	17	ug/kg	SW846 8270E
Naphthalene	10.8 J	36	10	ug/kg	SW846 8270E
Phenanthrene	38.8	36	12	ug/kg	SW846 8270E
Pyrene	108	36	12	ug/kg	SW846 8270E
4,4'-DDT ^a	0.92	0.71	0.63	ug/kg	SW846 8081B
Aluminum	16300	59		mg/kg	SW846 6010D
Antimony	2.5	2.3		mg/kg	SW846 6010D
Arsenic	3.1	2.3		mg/kg	SW846 6010D
Barium	152	23		mg/kg	SW846 6010D
Cadmium	3.2	0.59		mg/kg	SW846 6010D
Calcium	9050	590		mg/kg	SW846 6010D
Chromium	31.5	1.2		mg/kg	SW846 6010D
Cobalt	13.4	5.9		mg/kg	SW846 6010D
Copper	39.6	2.9		mg/kg	SW846 6010D
Iron	22900	59		mg/kg	SW846 6010D
Lead	209	2.3		mg/kg	SW846 6010D
Magnesium	9700	590		mg/kg	SW846 6010D
Manganese	386	1.8		mg/kg	SW846 6010D
Mercury	0.33	0.033		mg/kg	SW846 7471B
Nickel	28.9	4.7		mg/kg	SW846 6010D
Potassium	3030	1200		mg/kg	SW846 6010D
Vanadium	39.1	5.9		mg/kg	SW846 6010D
Zinc	2270	29		mg/kg	SW846 6010D

JD39915-1A R1-SB10(2-2.5')

Perfluorooctanesulfonic acid ^b	8.5	0.56	0.22	ug/kg	EPA 537M BY ID
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JD39915-2 FIELD BLANK

No hits reported in this sample.

Summary of Hits

Page 2 of 2

Job Number: JD39915
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/17/22



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JD39915-2A FIELD BLANK

No hits reported in this sample.

JD39915-3 TB

No hits reported in this sample.

- (a) More than 40 % RPD for detected concentrations between the two GC columns.
- (b) Analysis performed at SGS Orlando, FL.

Sample Results

Report of Analysis

Report of Analysis

Page 1 of 2

Client Sample ID:	R1-SB10(2-2.5')	Date Sampled:	02/17/22
Lab Sample ID:	JD39915-1	Date Received:	02/17/22
Matrix:	SO - Soil	Percent Solids:	86.9
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y194732.D	1	02/22/22 17:25	PS	02/18/22 07:43	n/a	VY8531
Run #2							

	Initial Weight
Run #1	5.9 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	9.8	4.0	ug/kg	
71-43-2	Benzene	ND	0.49	0.44	ug/kg	
74-97-5	Bromochloromethane	ND	4.9	0.55	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.42	ug/kg	
75-25-2	Bromoform	ND	4.9	1.3	ug/kg	
74-83-9	Bromomethane	ND	4.9	0.75	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.8	2.4	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.52	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.60	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.45	ug/kg	
75-00-3	Chloroethane	ND	4.9	0.58	ug/kg	
67-66-3	Chloroform	ND	2.0	0.51	ug/kg	
74-87-3	Chloromethane	ND	4.9	1.9	ug/kg	
110-82-7	Cyclohexane	ND	2.0	0.64	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.68	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.55	ug/kg	
106-93-4	1,2-Dibromoethane	ND	0.98	0.41	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.98	0.53	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.98	0.48	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.98	0.48	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.9	0.71	ug/kg	
75-34-3	1,1-Dichloroethane	ND	0.98	0.48	ug/kg	
107-06-2	1,2-Dichloroethane	ND	0.98	0.46	ug/kg	
75-35-4	1,1-Dichloroethene	ND	0.98	0.64	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.98	0.82	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.98	0.60	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.46	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.46	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.45	ug/kg	
100-41-4	Ethylbenzene	ND	0.98	0.44	ug/kg	
76-13-1	Freon 113	ND	4.9	2.6	ug/kg	
591-78-6	2-Hexanone	ND	4.9	2.1	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	R1-SB10(2-2.5')	Date Sampled:	02/17/22
Lab Sample ID:	JD39915-1	Date Received:	02/17/22
Matrix:	SO - Soil	Percent Solids:	86.9
Method:	SW846 8260D SW846 5035		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	2.0	1.4	ug/kg	
79-20-9	Methyl Acetate	ND	4.9	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	2.0	0.85	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.98	0.46	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.9	2.2	ug/kg	
75-09-2	Methylene chloride	ND	4.9	2.5	ug/kg	
100-42-5	Styrene	ND	2.0	0.39	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.58	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.57	ug/kg	
108-88-3	Toluene	ND	0.98	0.51	ug/kg	
87-61-6	1,2,3-Trichlorobenzene ^a	ND	4.9	2.4	ug/kg	
120-82-1	1,2,4-Trichlorobenzene ^a	ND	4.9	2.4	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.47	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.54	ug/kg	
79-01-6	Trichloroethene	ND	0.98	0.74	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.9	0.67	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.47	ug/kg	
	m,p-Xylene	ND	0.98	0.87	ug/kg	
95-47-6	o-Xylene	ND	0.98	0.45	ug/kg	
1330-20-7	Xylene (total)	ND	0.98	0.45	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		80-124%
17060-07-0	1,2-Dichloroethane-D4	88%		75-133%
2037-26-5	Toluene-D8	103%		79-125%
460-00-4	4-Bromofluorobenzene	110%		58-148%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

(a) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	R1-SB10(2-2.5')	Date Sampled:	02/17/22
Lab Sample ID:	JD39915-1	Date Received:	02/17/22
Matrix:	SO - Soil	Percent Solids:	86.9
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M178382.D	1	02/22/22 06:10	CS	02/21/22 08:00	OP38251	EM7687
Run #2							

Run #	Initial Weight	Final Volume
Run #1	31.9 g	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	72	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	22	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	31	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	64	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	180	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	180	39	ug/kg	
95-48-7	2-Methylphenol	ND	72	23	ug/kg	
	3&4-Methylphenol	ND	72	30	ug/kg	
88-75-5	2-Nitrophenol	ND	180	24	ug/kg	
100-02-7	4-Nitrophenol ^a	ND	360	96	ug/kg	
87-86-5	Pentachlorophenol	ND	140	34	ug/kg	
108-95-2	Phenol	ND	72	19	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	24	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	27	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	21	ug/kg	
83-32-9	Acenaphthene	ND	36	12	ug/kg	
208-96-8	Acenaphthylene	18.0	36	18	ug/kg	J
98-86-2	Acetophenone	ND	180	7.8	ug/kg	
120-12-7	Anthracene	ND	36	22	ug/kg	
1912-24-9	Atrazine	ND	72	15	ug/kg	
56-55-3	Benzo(a)anthracene	62.3	36	10	ug/kg	
50-32-8	Benzo(a)pyrene	81.2	36	16	ug/kg	
205-99-2	Benzo(b)fluoranthene	98.7	36	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	68.3	36	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	51.0	36	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	72	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	72	8.8	ug/kg	
92-52-4	1,1'-Biphenyl	ND	72	4.9	ug/kg	
100-52-7	Benzaldehyde	ND	180	8.9	ug/kg	
91-58-7	2-Chloronaphthalene	ND	72	8.6	ug/kg	
106-47-8	4-Chloroaniline	ND	180	13	ug/kg	
86-74-8	Carbazole	5.8	72	5.2	ug/kg	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	R1-SB10(2-2.5')	Date Sampled:	02/17/22
Lab Sample ID:	JD39915-1	Date Received:	02/17/22
Matrix:	SO - Soil	Percent Solids:	86.9
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	72	14	ug/kg	
218-01-9	Chrysene	76.2	36	11	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	72	7.7	ug/kg	
111-44-4	bis(2-Chloroethyl)ether ^a	ND	72	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	72	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	72	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	36	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	36	18	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	72	30	ug/kg	
123-91-1	1,4-Dioxane	ND	36	24	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	20.9	36	16	ug/kg	J
132-64-9	Dibenzofuran	ND	72	15	ug/kg	
84-74-2	Di-n-butyl phthalate	35.8	72	5.9	ug/kg	JB
117-84-0	Di-n-octyl phthalate ^a	ND	72	9.0	ug/kg	
84-66-2	Diethyl phthalate	ND	72	7.7	ug/kg	
131-11-3	Dimethyl phthalate	ND	72	6.4	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	72	8.4	ug/kg	
206-44-0	Fluoranthene	103	36	16	ug/kg	
86-73-7	Fluorene	ND	36	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	72	9.1	ug/kg	
87-68-3	Hexachlorobutadiene	ND	36	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene ^a	ND	360	14	ug/kg	
67-72-1	Hexachloroethane	ND	180	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	77.6	36	17	ug/kg	
78-59-1	Isophorone ^a	ND	72	7.7	ug/kg	
91-57-6	2-Methylnaphthalene	ND	36	8.2	ug/kg	
88-74-4	2-Nitroaniline ^a	ND	180	8.5	ug/kg	
99-09-2	3-Nitroaniline	ND	180	9.0	ug/kg	
100-01-6	4-Nitroaniline	ND	180	9.3	ug/kg	
91-20-3	Naphthalene	10.8	36	10	ug/kg	J
98-95-3	Nitrobenzene ^a	ND	72	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	72	10	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	13	ug/kg	
85-01-8	Phenanthrene	38.8	36	12	ug/kg	
129-00-0	Pyrene	108	36	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	9.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	34%		10-109%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

Client Sample ID:	R1-SB10(2-2.5')	Date Sampled:	02/17/22
Lab Sample ID:	JD39915-1	Date Received:	02/17/22
Matrix:	SO - Soil	Percent Solids:	86.9
Method:	SW846 8270E SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	35%		10-105%
118-79-6	2,4,6-Tribromophenol	57%		10-135%
4165-60-0	Nitrobenzene-d5	34%		10-119%
321-60-8	2-Fluorobiphenyl	53%		18-112%
1718-51-0	Terphenyl-d14	53%		18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.37	230	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	R1-SB10(2-2.5')	Date Sampled:	02/17/22
Lab Sample ID:	JD39915-1	Date Received:	02/17/22
Matrix:	SO - Soil	Percent Solids:	86.9
Method:	SW846 8081B SW846 3546		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G41484.D	1	02/23/22 05:21	CP	02/21/22 09:30	OP38256	G8G1772
Run #2							

	Initial Weight	Final Volume
Run #1	16.2 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.71	0.59	ug/kg	
319-84-6	alpha-BHC	ND	0.71	0.58	ug/kg	
319-85-7	beta-BHC	ND	0.71	0.64	ug/kg	
319-86-8	delta-BHC	ND	0.71	0.68	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.71	0.52	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.71	0.57	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.71	0.32	ug/kg	
60-57-1	Dieldrin	ND	0.71	0.49	ug/kg	
72-54-8	4,4' -DDD	ND	0.71	0.65	ug/kg	
72-55-9	4,4' -DDE	ND	0.71	0.62	ug/kg	
50-29-3	4,4' -DDT ^a	0.92	0.71	0.63	ug/kg	
72-20-8	Endrin	ND	0.71	0.55	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.71	0.55	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.71	0.40	ug/kg	
959-98-8	Endosulfan-I	ND	0.71	0.41	ug/kg	
33213-65-9	Endosulfan-II	ND	0.71	0.44	ug/kg	
76-44-8	Heptachlor	ND	0.71	0.61	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.71	0.50	ug/kg	
72-43-5	Methoxychlor	ND	1.4	0.56	ug/kg	
53494-70-5	Endrin ketone ^b	ND	0.71	0.51	ug/kg	
8001-35-2	Toxaphene	ND	18	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	92%		14-145%
877-09-8	Tetrachloro-m-xylene	85%		14-145%
2051-24-3	Decachlorobiphenyl	81%		10-197%
2051-24-3	Decachlorobiphenyl	70%		10-197%

(a) More than 40 % RPD for detected concentrations between the two GC columns.

(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	R1-SB10(2-2.5')		
Lab Sample ID:	JD39915-1	Date Sampled:	02/17/22
Matrix:	SO - Soil	Date Received:	02/17/22
Method:	SW846 8082A SW846 3546	Percent Solids:	86.9
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK8190.D	1	02/23/22 03:08	TL	02/21/22 09:30	OP38257	GRK212
Run #2							

	Initial Weight	Final Volume
Run #1	16.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	17	ug/kg	
11104-28-2	Aroclor 1221	ND	36	22	ug/kg	
11141-16-5	Aroclor 1232	ND	36	23	ug/kg	
53469-21-9	Aroclor 1242	ND	36	15	ug/kg	
12672-29-6	Aroclor 1248	ND	36	32	ug/kg	
11097-69-1	Aroclor 1254	ND	36	19	ug/kg	
11096-82-5	Aroclor 1260	ND	36	15	ug/kg	
11100-14-4	Aroclor 1268	ND	36	15	ug/kg	
37324-23-5	Aroclor 1262	ND	36	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	99%		10-163%
877-09-8	Tetrachloro-m-xylene	125%		10-163%
2051-24-3	Decachlorobiphenyl	95%		10-215%
2051-24-3	Decachlorobiphenyl	110%		10-215%

ND = Not detected MDL = Method Detection Limit

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	R1-SB10(2-2.5')	Date Sampled:	02/17/22
Lab Sample ID:	JD39915-1	Date Received:	02/17/22
Matrix:	SO - Soil	Percent Solids:	86.9
Project:	1001 Whitlock Avenue, Bronx, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	16300	59	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Antimony	2.5	2.3	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Arsenic	3.1	2.3	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Barium	152	23	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Beryllium ^a	< 1.2	1.2	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Cadmium	3.2	0.59	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Calcium	9050	590	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Chromium	31.5	1.2	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Cobalt	13.4	5.9	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Copper	39.6	2.9	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Iron	22900	59	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Lead	209	2.3	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Magnesium	9700	590	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Manganese	386	1.8	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Mercury	0.33	0.033	mg/kg	1	02/22/22	02/22/22	LM	SW846 7471B ³	SW846 7471B ⁵
Nickel	28.9	4.7	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Potassium	3030	1200	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Selenium	< 2.3	2.3	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Silver ^a	< 2.9	2.9	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Sodium	< 1200	1200	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Thallium ^a	< 5.9	5.9	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴
Vanadium	39.1	5.9	mg/kg	1	02/18/22	02/19/22	ND	SW846 6010D ¹	SW846 3050B ⁴
Zinc	2270	29	mg/kg	5	02/18/22	02/21/22	ND	SW846 6010D ²	SW846 3050B ⁴

(1) Instrument QC Batch: MA51933

(2) Instrument QC Batch: MA51937

(3) Instrument QC Batch: MA51945

(4) Prep QC Batch: MP31373

(5) Prep QC Batch: MP31421

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	R1-SB10(2-2.5')	Date Sampled:	02/17/22
Lab Sample ID:	JD39915-1	Date Received:	02/17/22
Matrix:	SO - Soil	Percent Solids:	86.9
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.28	0.28	mg/kg	1	02/21/22 09:46	MM	SW846 9012B/LACHAT
Solids, Percent	86.9		%	1	02/20/22 16:38	BG	SM2540 G 18TH ED MOD

RL = Reporting Limit

4.1
4

Report of Analysis

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Client Sample ID:	R1-SB10(2-2.5')	
Lab Sample ID:	JD39915-1A	Date Sampled: 02/17/22
Matrix:	SO - Soil	Date Received: 02/17/22
Method:	EPA 537M BY ID IN HOUSE	Percent Solids: 86.9
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55481.D	1	03/01/22 09:33	AFL	02/21/22 07:10	F:OP89888	F:S3Q765
Run #2							

	Initial Weight	Final Volume
Run #1	2.06 g	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
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PERFLUOROALKYLCARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	ND	1.1	0.42	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.56	0.28	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.56	0.28	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.56	0.28	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.56	0.28	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.56	0.28	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.56	0.28	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.56	0.28	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.56	0.28	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.56	0.30	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.56	0.28	ug/kg	

PERFLUOROALKYLSULFONIC ACIDS

375-73-5	Perfluorobutanesulfonic acid	ND	0.56	0.28	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.56	0.28	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.56	0.28	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	8.5	0.56	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.56	0.28	ug/kg	

PERFLUOROCTANESULFONAMIDES

754-91-6	PFOSA	ND	0.56	0.28	ug/kg	
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PERFLUOROCTANESULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	ND	1.1	0.56	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.56	ug/kg	

FLUOROTELOMER SULFONATES

27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	R1-SB10(2-2.5')	Date Sampled:	02/17/22
Lab Sample ID:	JD39915-1A	Date Received:	02/17/22
Matrix:	SO - Soil	Percent Solids:	86.9
Method:	EPA 537M BY ID IN HOUSE		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	95%		40-140%
	13C5-PFPeA	94%		50-150%
	13C5-PFHxA	94%		50-150%
	13C4-PFHpA	95%		50-150%
	13C8-PFOA	94%		50-150%
	13C9-PFNA	89%		50-150%
	13C6-PFDA	89%		50-150%
	13C7-PFUnDA	81%		40-140%
	13C2-PFDoDA	84%		40-140%
	13C2-PFTeDA	91%		30-130%
	13C3-PFBS	96%		50-150%
	13C3-PFHxS	96%		50-150%
	13C8-PFOS	90%		50-150%
	13C8-FOSA	79%		30-130%
	d3-MeFOSAA	93%		40-140%
	d5-EtFOSAA	96%		40-140%
	13C2-6:2FTS	100%		50-150%
	13C2-8:2FTS	101%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	FIELD BLANK	Date Sampled:	02/17/22
Lab Sample ID:	JD39915-2	Date Received:	02/17/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L338037.D	1	02/18/22 16:07	NH	n/a	n/a	VL10183
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane ^a	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane ^a	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropan ^b	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	0.58	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	FIELD BLANK	Date Sampled:	02/17/22
Lab Sample ID:	JD39915-2	Date Received:	02/17/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride ^a	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%		80-120%
17060-07-0	1,2-Dichloroethane-D4	110%		80-120%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	115% ^c		82-114%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

(b) Associated CCV outside of control limits high, sample was ND.

(c) Outside of in house control limits, but within reasonable method recovery limits.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID:	FIELD BLANK	Date Sampled:	02/17/22
Lab Sample ID:	JD39915-2	Date Received:	02/17/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z155188.D	1	02/22/22 04:54	CS	02/21/22 10:00	OP38240	EZ7710
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.4	0.89	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.4	0.97	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.2	1.4	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.4	2.7	ug/l	
51-28-5	2,4-Dinitrophenol	ND	5.4	1.7	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.4	1.4	ug/l	
95-48-7	2-Methylphenol	ND	2.2	0.97	ug/l	
	3&4-Methylphenol	ND	2.2	0.96	ug/l	
88-75-5	2-Nitrophenol ^a	ND	5.4	1.0	ug/l	
100-02-7	4-Nitrophenol	ND	11	1.3	ug/l	
87-86-5	Pentachlorophenol	ND	4.3	1.5	ug/l	
108-95-2	Phenol	ND	2.2	0.43	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.4	1.6	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.4	1.4	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.4	1.0	ug/l	
83-32-9	Acenaphthene	ND	1.1	0.21	ug/l	
208-96-8	Acenaphthylene	ND	1.1	0.15	ug/l	
98-86-2	Acetophenone	ND	2.2	0.23	ug/l	
120-12-7	Anthracene	ND	1.1	0.23	ug/l	
1912-24-9	Atrazine	ND	2.2	0.49	ug/l	
100-52-7	Benzaldehyde	ND	5.4	0.31	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.1	0.22	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.1	0.23	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.1	0.22	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.1	0.37	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.1	0.22	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.2	0.44	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.2	0.50	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.1	0.23	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.2	0.26	ug/l	
106-47-8	4-Chloroaniline ^a	ND	5.4	0.37	ug/l	
86-74-8	Carbazole	ND	1.1	0.25	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK	Date Sampled:	02/17/22
Lab Sample ID:	JD39915-2	Date Received:	02/17/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam ^a	ND	2.2	0.71	ug/l	
218-01-9	Chrysene	ND	1.1	0.19	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.2	0.30	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.2	0.27	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	2.2	0.44	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.2	0.40	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.1	0.60	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.1	0.52	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.2	0.55	ug/l	
123-91-1	1,4-Dioxane	ND	1.1	0.71	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.1	0.36	ug/l	
132-64-9	Dibenzofuran	ND	5.4	0.24	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.2	0.54	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.2	0.25	ug/l	
84-66-2	Diethyl phthalate	ND	2.2	0.28	ug/l	
131-11-3	Dimethyl phthalate	ND	2.2	0.24	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	1.8	ug/l	
206-44-0	Fluoranthene	ND	1.1	0.18	ug/l	
86-73-7	Fluorene	ND	1.1	0.19	ug/l	
118-74-1	Hexachlorobenzene	ND	1.1	0.35	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.1	0.53	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	3.0	ug/l	
67-72-1	Hexachloroethane	ND	2.2	0.42	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.1	0.36	ug/l	
78-59-1	Isophorone	ND	2.2	0.30	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.1	0.23	ug/l	
88-74-4	2-Nitroaniline	ND	5.4	0.30	ug/l	
99-09-2	3-Nitroaniline	ND	5.4	0.42	ug/l	
100-01-6	4-Nitroaniline	ND	5.4	0.48	ug/l	
91-20-3	Naphthalene	ND	1.1	0.25	ug/l	
98-95-3	Nitrobenzene	ND	2.2	0.70	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.2	0.52	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	0.24	ug/l	
85-01-8	Phenanthrene	ND	1.1	0.19	ug/l	
129-00-0	Pyrene	ND	1.1	0.24	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.2	0.40	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	32%		10-90%

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Report of Analysis

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Client Sample ID:	FIELD BLANK	Date Sampled:	02/17/22
Lab Sample ID:	JD39915-2	Date Received:	02/17/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	20%		10-101%
118-79-6	2,4,6-Tribromophenol	74%		23-155%
4165-60-0	Nitrobenzene-d5	70%		25-141%
321-60-8	2-Fluorobiphenyl	79%		35-126%
1718-51-0	Terphenyl-d14	90%		15-139%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
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Report of Analysis

Page 1 of 1

Client Sample ID:	FIELD BLANK	Date Sampled:	02/17/22
Lab Sample ID:	JD39915-2	Date Received:	02/17/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8081B SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G174586.D	1	02/25/22 08:07	CP	02/21/22 10:15	OP38246	G1G6033
Run #2							

	Initial Volume	Final Volume
Run #1	240 ml	2.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0083	0.0043	ug/l	
319-84-6	alpha-BHC	ND	0.0083	0.0043	ug/l	
319-85-7	beta-BHC	ND	0.0083	0.0067	ug/l	
319-86-8	delta-BHC	ND	0.0083	0.0055	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0083	0.0050	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0083	0.0041	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0083	0.0035	ug/l	
60-57-1	Dieldrin	ND	0.0083	0.0064	ug/l	
72-54-8	4,4' -DDD	ND	0.0083	0.0048	ug/l	
72-55-9	4,4' -DDE	ND	0.0083	0.0042	ug/l	
50-29-3	4,4' -DDT	ND	0.0083	0.0057	ug/l	
72-20-8	Endrin	ND	0.0083	0.0050	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0083	0.0045	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0083	0.0056	ug/l	
53494-70-5	Endrin ketone	ND	0.0083	0.0052	ug/l	
959-98-8	Endosulfan-I	ND	0.0083	0.0044	ug/l	
33213-65-9	Endosulfan-II	ND	0.0083	0.0041	ug/l	
76-44-8	Heptachlor	ND	0.0083	0.0037	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0083	0.0050	ug/l	
72-43-5	Methoxychlor	ND	0.017	0.0056	ug/l	
8001-35-2	Toxaphene	ND	0.21	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	126%		10-190%
877-09-8	Tetrachloro-m-xylene	82%		10-190%
2051-24-3	Decachlorobiphenyl	36%		10-156%
2051-24-3	Decachlorobiphenyl	31%		10-156%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	FIELD BLANK	Date Sampled:	02/17/22
Lab Sample ID:	JD39915-2	Date Received:	02/17/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	SW846 8082A SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX2478305.D	1	02/23/22 14:32	CL	02/21/22 10:15	OP38247	GXX7736
Run #2							

	Initial Volume	Final Volume
Run #1	240 ml	2.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.42	0.16	ug/l	
11104-28-2	Aroclor 1221	ND	0.42	0.35	ug/l	
11141-16-5	Aroclor 1232	ND	0.42	0.22	ug/l	
53469-21-9	Aroclor 1242	ND	0.42	0.19	ug/l	
12672-29-6	Aroclor 1248	ND	0.42	0.10	ug/l	
11097-69-1	Aroclor 1254	ND	0.42	0.34	ug/l	
11096-82-5	Aroclor 1260	ND	0.42	0.13	ug/l	
11100-14-4	Aroclor 1268	ND	0.42	0.14	ug/l	
37324-23-5	Aroclor 1262	ND	0.42	0.16	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	75%		10-174%
877-09-8	Tetrachloro-m-xylene	66%		10-174%
2051-24-3	Decachlorobiphenyl	28%		10-151%
2051-24-3	Decachlorobiphenyl	29%		10-151%

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B = Indicates analyte found in associated method blank

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Report of Analysis

Page 1 of 1

Client Sample ID:	FIELD BLANK	Date Sampled:	02/17/22
Lab Sample ID:	JD39915-2	Date Received:	02/17/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Project:	1001 Whitlock Avenue, Bronx, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	< 200	200	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Antimony	< 6.0	6.0	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Arsenic	< 3.0	3.0	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Barium	< 200	200	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Beryllium	< 1.0	1.0	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Cadmium	< 3.0	3.0	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Calcium	< 5000	5000	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Chromium	< 10	10	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Cobalt	< 50	50	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Copper	< 10	10	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Iron	< 100	100	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Lead	< 3.0	3.0	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Magnesium	< 5000	5000	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Manganese	< 15	15	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	02/22/22	02/22/22	LM	SW846 7470A ² SW846 7470A ⁴
Nickel	< 10	10	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Potassium	< 10000	10000	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Selenium	< 10	10	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Silver	< 10	10	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Sodium	< 10000	10000	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Thallium	< 10	10	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Vanadium	< 50	50	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Zinc	< 20	20	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³

(1) Instrument QC Batch: MA51936

(2) Instrument QC Batch: MA51940

(3) Prep QC Batch: MP31382

(4) Prep QC Batch: MP31427

RL = Reporting Limit

Report of Analysis

Client Sample ID:	FIELD BLANK	Date Sampled:	02/17/22
Lab Sample ID:	JD39915-2	Date Received:	02/17/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.010	0.010	mg/l	1	02/21/22 11:37	MM	EPA 335.4/LACHAT

RL = Reporting Limit

4.3
4

Report of Analysis

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Client Sample ID:	FIELD BLANK	Date Sampled:	02/17/22
Lab Sample ID:	JD39915-2A	Date Received:	02/17/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55235.D	1	02/26/22 09:55	AFL	02/22/22 09:00	F:OP89877	F:S3Q762
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
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PERFLUOROALKYLCARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	ND	3.7	1.9	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	1.9	0.93	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.9	0.93	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	1.9	0.93	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.9	0.93	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.93	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.93	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.93	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.93	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.93	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.93	ng/l	

PERFLUOROALKYLSULFONIC ACIDS

375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.93	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.93	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.93	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.93	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.93	ng/l	

PERFLUOROCTANESULFONAMIDES

754-91-6	PFOSA	ND	3.7	1.9	ng/l	
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PERFLUOROCTANESULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	ND	3.7	1.9	ng/l	
2991-50-6	EtFOSAA	ND	3.7	1.9	ng/l	

FLUOROTELOMER SULFONATES

27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.4	1.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.4	1.9	ng/l	

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Report of Analysis

Client Sample ID:	FIELD BLANK	Date Sampled:	02/17/22
Lab Sample ID:	JD39915-2A	Date Received:	02/17/22
Matrix:	AQ - Field Blank Soil	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	101%		35-135%
	13C5-PFPeA	101%		50-150%
	13C5-PFHxA	101%		50-150%
	13C4-PFHpA	103%		50-150%
	13C8-PFOA	103%		50-150%
	13C9-PFNA	105%		50-150%
	13C6-PFDA	103%		50-150%
	13C7-PFUnDA	102%		40-140%
	13C2-PFDoDA	98%		40-140%
	13C2-PFTeDA	90%		30-130%
	13C3-PFBS	102%		50-150%
	13C3-PFHxS	102%		50-150%
	13C8-PFOS	99%		50-150%
	13C8-FOSA	97%		30-130%
	d3-MeFOSAA	102%		40-140%
	d5-EtFOSAA	99%		40-140%
	13C2-6:2FTS	94%		50-150%
	13C2-8:2FTS	106%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	TB	Date Sampled:	02/17/22
Lab Sample ID:	JD39915-3	Date Received:	02/17/22
Matrix:	AQ - Trip Blank Soil	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X194522.D	1	02/21/22 17:14	NW	n/a	n/a	V1X8420
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane ^a	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane ^a	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	0.58	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	TB	Date Sampled:	02/17/22
Lab Sample ID:	JD39915-3	Date Received:	02/17/22
Matrix:	AQ - Trip Blank Soil	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride ^a	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		80-120%
17060-07-0	1,2-Dichloroethane-D4	108%		80-120%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	102%		82-114%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	1.14	9.1	ug/l	J
	Total TIC, Volatile		0	ug/l	

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Chain of Custody (SGS Orlando, FL)



CHAIN OF CUSTODY

SGS North America Inc. - Dayton

2235 Route 130, Dayton, NJ 08810

TEL 732-329-0200 FAX: 732-329-3499/3480

www.sgs.com/ehsusa

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PH

EHSQA-QAC-0023-04-FORM-Standard COC

Client / Reporting Information		Project Information		Requested Analysis												Matrix Codes				
Company Name: SESI		Project Name: 11819		TEC+30/TAL PFAS												DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SCL - Other Solid WIP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank				
Street Address: 12 A MAPLE AVE		Street: 1001 WHITE OAK AVE																		
City: PINE BROOK, NJ		City: BRONX NY																		
Project Contact: John@sesi.com		Project # 11819																		
Phone #		Client Purchase Order #																		
Sample(s) Name(s): CHRIS MANNICH		Project Manager: JESSE MANNICH		pH Check (Lab Use Only)												LAB USE ONLY				
SGS Sample #	Field ID / Point of Collection	MECH/DI Val #	Date	Time	Sampled By	Env (G) Comp (G)	Source Characterized (Y/N)	Matrix	# of bottles	TOC	NaOH	HNO3	H2SO4	NONE	DI Water	MEDH	ENCORE			
1	R1-SB10(2-25')		2/17/22	9:25	CM	G	N	SO	3									X	X	D1
2	FIELD BLANK		2/17/22	8:15	CM		N	WW	9									X	X	PS1
3	TB																			MTY
																				4082
																				E41
																				A1
																				G772
																				V269
Turn Around Time (Business Days)		Approved By (SGS PM): / Date:		Deliverable												Comments / Special Instructions				
☐ 10 Business Days ☒ 5 Business Days ☐ 3 Business Days ☐ 2 Business Days ☐ 1 Business Day ☐ Other		☐ Commercial "A" (Level 1) ☐ Commercial "B" (Level 2) ☐ NJ Reduced (Level 3) ☐ Full Tier 1 (Level 4) ☐ Commercial "C" ☐ NJ DKQP		☒ NYASP Category A ☒ NYASP Category B ☐ MA MCP Criteria ☐ CT RCP Criteria ☐ State Forms ☐ EDD Format ☐ DOD-QSMS												3X5gram encl Initial Assessment AP2A Label Verification				
All data available via Lablink		* Approval needed for 1-3 Business Day TA		Commercial "A" = Results only; Commercial "B" = Results + QC Summary Commercial "C" = Results + QC Summary + Initial Field data												http://www.sgs.com/en/terms-and-conditions				
Relinquished by: CHRIS MANNICH		Date / Time: 2/17/22 14:27		Received By: [Signature]												Date / Time: 2/17/22 16:30		Received By: [Signature]		
Relinquished by:		Date / Time:		Relinquished By:												Date / Time:		Received By:		
Relinquished by:		Date / Time:		Relinquished By:												Date / Time:		Received By:		
Relinquished by:		Date / Time:		Relinquished By:												Date / Time:		Received By:		
Custody Seal #		Therm ID		On Ice												Cooler Temp. °C				
				☐ Intact ☐ Next Intact ☐ Absent												See Sample Receipt Summary A 3.8, 4.0 cP				

JD39915: Chain of Custody

Page 1 of 3



SGS Sample Receipt Summary

Job Number: JD39915

Client: SESI CONSULTING ENGINEERS

Project: 1001 WHITLOCK AVENUE, BRONX, NY

Date / Time Received: 2/17/2022 4:30:00 PM

Delivery Method:

Airbill #'s:

Cooler Temps (Raw Measured) °C: Cooler 1: (3.8); Cooler 2: (4.0);

Cooler Temps (Corrected) °C: Cooler 1: (2.2); Cooler 2: (2.4);

Cooler Security

Y or N

- | | |
|--|---|
| 1. Custody Seals Present: ☒ ☐ | 3. COC Present: ☒ ☐ |
| 2. Custody Seals Intact: ☒ ☐ | 4. Smpl Dates/Time OK: ☒ ☐ |

Cooler Temperature

Y or N

- | | |
|---|-----------|
| 1. Temp criteria achieved: ☒ ☐ | IR Gun |
| 2. Cooler temp verification: | |
| 3. Cooler media: | Ice (Bag) |
| 4. No. Coolers: | 2 |

Quality Control Preservation

Y or N N/A

- | | |
|---|--|
| 1. Trip Blank present / cooler: ☐ ☐ ☒ | |
| 2. Trip Blank listed on COC: ☐ ☐ ☒ | |
| 3. Samples preserved properly: ☒ ☐ | |
| 4. VOCs headspace free: ☐ ☐ ☒ | |

Sample Integrity - Documentation

Y or N

- | | |
|---|--|
| 1. Sample labels present on bottles: ☒ ☐ | |
| 2. Container labeling complete: ☒ ☐ | |
| 3. Sample container label / COC agree: ☒ ☐ | |

Sample Integrity - Condition

Y or N

- | | |
|---|--------|
| 1. Sample recvd within HT: ☒ ☐ | |
| 2. All containers accounted for: ☒ ☐ | |
| 3. Condition of sample: | Intact |

Sample Integrity - Instructions

Y or N N/A

- | | |
|--|--|
| 1. Analysis requested is clear: ☒ ☐ | |
| 2. Bottles received for unspecified tests: ☐ ☒ | |
| 3. Sufficient volume recvd for analysis: ☒ ☐ | |
| 4. Compositing instructions clear: ☐ ☐ ☒ | |
| 5. Filtering instructions clear: ☐ ☐ ☒ | |

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments

- 1). Sample -1 Received without no ID, Collection Date and time written on bottleware. Setup according to ID written on ziplock bag they were received in.
 2). Sample -3 Received 2 x 40mL HCL vials for Trip Blank not originally written on COC. Added to COC in lab. Please confirm analysis is needed.

SM089-02 Rev. Date 12/1/16

JD39915: Chain of Custody

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Sample -1: Please proceed
Sample -3: Please run for V8260TCL20+

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

[illegible]

jcd39915.xls
Rev. Date: 4/10/15

JD39915: Chain of Custody

Page 1 of 2

SGS Orlando, FL

SGS Sample Receipt Summary

Job Number: JD39915

Client: SGS NJ

Project: 1001 WHITLOCK AVENUE

Date / Time Received: 2/19/2022 9:20:00 AM

Delivery Method: FEDEX

Airbill #s: 5272 0639 1420

Therm ID: IR 1;

Therm CF: 0.4;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 1: (1.4);

Cooler Temps (Corrected) °C: Cooler 1: (1.8);

Cooler Information

Y or N

- | | | |
|-----------------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present | ☒ | ☐ |
| 2. Custody Seals Intact | ☒ | ☐ |
| 3. Temp criteria achieved | ☒ | ☐ |
| 4. Cooler temp verification | <u>IR Gun</u> | |
| 5. Cooler media | <u>Ice (Bag)</u> | |

Trip Blank Information

Y or N N/A

- | | | | |
|--------------------------------|--------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler | ☐ | ☐ | ☒ |
| 2. Trip Blank listed on COC | ☐ | ☐ | ☒ |
| | <u>W or S</u> | | <u>N/A</u> |
| 3. Type Of TB Received | ☐ | ☐ | ☒ |

Sample Information

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Sample labels present on bottles | ☒ | ☐ | |
| 2. Samples preserved properly | ☒ | ☐ | |
| 3. Sufficient volume/containers recvd for analysis: | ☒ | ☐ | |
| 4. Condition of sample | <u>Intact</u> | | |
| 5. Sample recvd within HT | ☒ | ☐ | |
| 6. Dates/Times/IDs on COC match Sample Label | ☒ | ☐ | |
| 7. VOCs have headspace | ☐ | ☐ | ☒ |
| 8. Bottles received for unspecified tests | ☐ | ☒ | |
| 9. Compositing instructions clear | ☐ | ☐ | ☒ |
| 10. Voa Soil Kits/Jars received past 48hrs? | ☐ | ☐ | ☒ |
| 11. % Solids Jar received? | ☐ | ☐ | ☒ |
| 12. Residual Chlorine Present? | ☐ | ☐ | ☒ |

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____
 Test Strip Lot #s: pH 0-3 _____ 230315 _____
 Residual Chlorine Test Strip Lot #: _____

Number of 5035 Field Kits: _____
 pH 10-12 _____ 219813A _____

Number of Lab Filtered Metals: _____
 Other: (Specify) _____

Comments

SM001
Rev. Date 05/24/17

Technician: SAMUELM

Date: 2/19/2022 9:20:00 AM

Reviewer: _____

Date: _____

JD39915: Chain of Custody

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The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

SESI Consulting Engineers

1001 Whitlock Avenue, Bronx, NY

11819

SGS Job Number: JD40006

Sampling Date: 02/18/22

Report to:

SESI Consulting Engineers

jam@sesi.org

ATTN: Jesse Mausner

Total number of pages in report: 50



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A handwritten signature in black ink, appearing to read 'Mike Earp'.

Mike Earp
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

This report shall not be reproduced, except in its entirety, without the written approval of SGS.
Test results relate only to samples analyzed.

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Sample Summary

SESI Consulting Engineers

Job No: JD40006

1001 Whitlock Avenue, Bronx, NY
Project No: 11819

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
---------------	----------------	---------	----------	------------------	------------------

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

JD40006-1	02/18/22	15:45	CM	02/18/22	AQ	Ground Water	MW-3R
JD40006-1A	02/18/22	15:45	CM	02/18/22	AQ	Ground Water	MW-3R
JD40006-2	02/18/22	15:55	CM	02/18/22	AQ	Ground Water	R1-MW-4
JD40006-2A	02/18/22	15:55	CM	02/18/22	AQ	Ground Water	R1-MW-4
JD40006-3	02/18/22	15:50	CM	02/18/22	AQ	Ground Water	MW-2R
JD40006-3A	02/18/22	15:50	CM	02/18/22	AQ	Ground Water	MW-2R
JD40006-4	02/18/22	16:00	CM	02/18/22	AQ	Ground Water	DUP
JD40006-4A	02/18/22	16:00	CM	02/18/22	AQ	Ground Water	DUP
JD40006-5	02/18/22	10:00	CM	02/18/22	AQ	Field Blank Water	FIELD BLANK
JD40006-5A	02/18/22	10:00	CM	02/18/22	AQ	Field Blank Water	FIELD BLANK
JD40006-6	02/18/22	16:00	CM	02/18/22	AQ	Trip Blank Water	TRIP BLANK

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: SESI Consulting Engineers

Job No JD40006

Site: 1001 Whitlock Avenue, Bronx, NY

Report Date 3/4/2022 11:25:29 AM

On 02/18/2022, 4 Sample(s), 1 Trip Blank(s) and 1 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 2 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD40006 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260D

Matrix: AQ

Batch ID: V3D7372

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39952-4MS, JD39952-4MSD were used as the QC samples indicated.
- Matrix Spike Duplicate Recovery(s) for Bromochloromethane are outside control limits. Outside control limits due to matrix interference.
- JD40006-1 for Dichlorodifluoromethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD40006-5 for Dichlorodifluoromethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD40006-2 for Dichlorodifluoromethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD40006-3 for Dichlorodifluoromethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD40006-6 for Dichlorodifluoromethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

Matrix: AQ

Batch ID: VL10187

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39614-36MS, JD39614-36MSD were used as the QC samples indicated.
- Matrix Spike Duplicate Recovery(s) for 1,2-Dibromo-3-chloropropane are outside control limits. Outside control limits due to matrix interference.
- VL10187-MB for 4-Bromofluorobenzene: Outside of in house control limits, but within reasonable method recovery limits.
- JD40006-4 for Bromomethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- VL10187-BS for 4-Bromofluorobenzene: Outside of in house control limits, but within reasonable method recovery limits.
- JD40006-4 for Chloroethane: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD40006-4 for Vinyl chloride: Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
- JD40006-4 for 4-Bromofluorobenzene: Outside of in house control limits, but within reasonable method recovery limits.

Friday, March 04, 2022

Page 1 of 4

MS Semi-volatiles By Method EPA 537M BY ID

Matrix: AQ

Batch ID: F:OP89908

- The data for EPA 537M BY ID meets quality control requirements.
- JD40006-4A: Analysis performed at SGS Orlando, FL.
- JD40006-2A: Analysis performed at SGS Orlando, FL.
- JD40006-5A: Analysis performed at SGS Orlando, FL.
- JD40006-1A: Analysis performed at SGS Orlando, FL.
- JD40006-3A: Analysis performed at SGS Orlando, FL.

MS Semi-volatiles By Method SW846 8270E BY SIM

Matrix: AQ

Batch ID: OP38283

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- OP38283-BSD: Recovery indicates possible low bias. Since blank spike recoveries are within control limits, data are qualified and reported.
- RPD of OP38283-BSD for 1,4-Dioxane: Analytical precision exceeds in-house control limits.
- JD40006-4 for 1,4-Dioxane: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD40006-3 for 1,4-Dioxane: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD40006-2 for 1,4-Dioxane: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD40006-1 for 1,4-Dioxane: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

Matrix: AQ

Batch ID: OP38284A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Metals Analysis By Method SW846 6010D

Matrix: AQ

Batch ID: MP31392

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39926-3MS, JD39926-3MSD, JD39926-3SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Antimony, Arsenic, Barium, Cadmium, Chromium, Copper, Lead, Potassium, Vanadium, Zinc are outside control limits for sample MP31392-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- JD40006-3 for Aluminum: Elevated sample detection limit due to limited volume.
- JD40006-2 for Thallium: Elevated sample detection limit due to limited volume.
- JD40006-2 for Sodium: Elevated sample detection limit due to limited volume.
- JD40006-4 for Barium: Elevated sample detection limit due to limited volume.
- JD40006-2 for Iron: Elevated sample detection limit due to limited volume.
- JD40006-2 for Lead: Elevated sample detection limit due to limited volume.
- JD40006-2 for Magnesium: Elevated sample detection limit due to limited volume.
- JD40006-2 for Manganese: Elevated sample detection limit due to limited volume.
- JD40006-4 for Chromium: Elevated sample detection limit due to limited volume.
- JD40006-2 for Silver: Elevated sample detection limit due to limited volume.
- JD40006-2 for Nickel: Elevated sample detection limit due to limited volume.
- JD40006-4 for Beryllium: Elevated sample detection limit due to limited volume.
- JD40006-4 for Zinc: Elevated sample detection limit due to limited volume.
- JD40006-4 for Vanadium: Elevated sample detection limit due to limited volume.
- JD40006-4 for Sodium: Elevated sample detection limit due to limited volume.
- JD40006-4 for Selenium: Elevated sample detection limit due to limited volume.
- JD40006-2 for Calcium: Elevated sample detection limit due to limited volume.
- JD40006-4 for Nickel: Elevated sample detection limit due to limited volume.
- JD40006-2 for Cadmium: Elevated sample detection limit due to limited volume.
- JD40006-4 for Cadmium: Elevated sample detection limit due to limited volume.
- JD40006-4 for Magnesium: Elevated sample detection limit due to limited volume.
- JD40006-4 for Lead: Elevated sample detection limit due to limited volume.
- JD40006-4 for Iron: Elevated sample detection limit due to limited volume.
- JD40006-4 for Calcium: Elevated sample detection limit due to limited volume.
- JD40006-4 for Copper: Elevated sample detection limit due to limited volume.
- JD40006-4 for Cobalt: Elevated sample detection limit due to limited volume.
- JD40006-4 for Manganese: Elevated sample detection limit due to limited volume.
- JD40006-4 for Potassium: Elevated sample detection limit due to limited volume.
- JD40006-2 for Copper: Elevated sample detection limit due to limited volume.
- JD40006-4 for Aluminum: Elevated sample detection limit due to limited volume.
- JD40006-4 for Antimony: Elevated sample detection limit due to limited volume.
- JD40006-4 for Arsenic: Elevated sample detection limit due to limited volume.
- JD40006-2 for Potassium: Elevated sample detection limit due to limited volume.
- JD40006-4 for Silver: Elevated sample detection limit due to limited volume.
- JD40006-2 for Vanadium: Elevated sample detection limit due to limited volume.
- JD40006-2 for Zinc: Elevated sample detection limit due to limited volume.

Friday, March 04, 2022

Page 3 of 4

Metals Analysis By Method SW846 6010D

Matrix: AQ

Batch ID: MP31392

- JD40006-4 for Thallium: Elevated sample detection limit due to limited volume.
- JD40006-2 for Aluminum: Elevated sample detection limit due to limited volume.
- MP31392-MB1 for Aluminum: All reported results <RL or >10x MB value.
- JD40006-2 for Selenium: Elevated sample detection limit due to limited volume.
- JD40006-2 for Chromium: Elevated sample detection limit due to limited volume.
- JD40006-2 for Antimony: Elevated sample detection limit due to limited volume.
- JD40006-2 for Arsenic: Elevated sample detection limit due to limited volume.
- JD40006-2 for Barium: Elevated sample detection limit due to limited volume.
- JD40006-2 for Beryllium: Elevated sample detection limit due to limited volume.
- JD40006-2 for Cobalt: Elevated sample detection limit due to limited volume.

Metals Analysis By Method SW846 7470A

Matrix: AQ

Batch ID: MP31428

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD39768-2FMS, JD39768-2FMSD were used as the QC samples for metals.
- JD40006-3 for Mercury: Elevated sample detection limit due to difficult sample matrix.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: SGS Dayton, NJ

Job No: JD40006

Site: SESINJPB: 1001 Whitlock Avenue, Bronx, NY

Report Date 3/4/2022 10:15:32 AM

On 02/18/2022, 4 Sample(s), 0 Trip Blank(s) and 1 Field Blank(s) were received at SGS North America Inc - Orlando. at a maximum corrected temperature of 1 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. - Orlando Job Number of JD40006 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section. Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

MS Semi-volatiles By Method EPA 537M BY ID

Matrix: AQ

Batch ID: OP89908

Sample(s) FA93265-3MS, FA93265-5DUP were used as the QC samples indicated.

RPD(s) for Duplicate for Perfluoroheptanesulfonic acid are outside control limits for sample OP89908-DUP. Probable cause is due to sample non-homogeneity.

SGS North America Inc. - Orlando certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted. Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria. SGS North America Inc.- Orlando is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety.

Narrative prepared by:

Ariel Hartney, Client Services (signature on file)

Summary of Hits

Job Number: JD40006
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/18/22



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JD40006-1 MW-3R

Acetone	44.2	10	3.1	ug/l	SW846 8260D
2-Butanone (MEK)	8.3 J	10	6.9	ug/l	SW846 8260D
Carbon disulfide	0.48 J	2.0	0.46	ug/l	SW846 8260D
Toluene	0.73 J	1.0	0.53	ug/l	SW846 8260D

JD40006-1A MW-3R

Perfluorobutanoic acid ^a	24.1	3.9	2.0	ng/l	EPA 537M BY ID
Perfluoropentanoic acid ^a	13.9	2.0	0.98	ng/l	EPA 537M BY ID
Perfluorohexanoic acid ^a	12.5	2.0	0.98	ng/l	EPA 537M BY ID
Perfluoroheptanoic acid ^a	11.2	2.0	0.98	ng/l	EPA 537M BY ID
Perfluorooctanoic acid ^a	23.3	2.0	0.98	ng/l	EPA 537M BY ID
Perfluorononanoic acid ^a	2.1	2.0	0.98	ng/l	EPA 537M BY ID
Perfluorobutanesulfonic acid ^a	5.1	2.0	0.98	ng/l	EPA 537M BY ID
Perfluorohexanesulfonic acid ^a	12.5	2.0	0.98	ng/l	EPA 537M BY ID
Perfluorooctanesulfonic acid ^a	15.0	2.0	0.98	ng/l	EPA 537M BY ID

JD40006-2 R1-MW-4

Acetone	18.8	10	3.1	ug/l	SW846 8260D
Toluene	0.53 J	1.0	0.53	ug/l	SW846 8260D
Total TIC, Volatile	93 J			ug/l	
Aluminum ^b	2280	670		ug/l	SW846 6010D
Calcium ^b	227000	17000		ug/l	SW846 6010D
Iron ^b	4490	330		ug/l	SW846 6010D
Magnesium ^b	20500	17000		ug/l	SW846 6010D
Manganese ^b	2720	50		ug/l	SW846 6010D
Sodium ^b	45300	33000		ug/l	SW846 6010D

JD40006-2A R1-MW-4

Perfluorobutanoic acid ^a	9.3	3.7	1.9	ng/l	EPA 537M BY ID
Perfluoropentanoic acid ^a	17.2	1.9	0.93	ng/l	EPA 537M BY ID
Perfluorohexanoic acid ^a	16.9	1.9	0.93	ng/l	EPA 537M BY ID
Perfluoroheptanoic acid ^a	18.4	1.9	0.93	ng/l	EPA 537M BY ID
Perfluorooctanoic acid ^a	46.7	1.9	0.93	ng/l	EPA 537M BY ID
Perfluorononanoic acid ^a	1.2 J	1.9	0.93	ng/l	EPA 537M BY ID
Perfluorobutanesulfonic acid ^a	6.2	1.9	0.93	ng/l	EPA 537M BY ID
Perfluorohexanesulfonic acid ^a	11.1	1.9	0.93	ng/l	EPA 537M BY ID
Perfluorooctanesulfonic acid ^a	12.1	1.9	0.93	ng/l	EPA 537M BY ID

Summary of Hits

Job Number: JD40006
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/18/22

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JD40006-3 MW-2R

Acetone	61.0	10	3.1	ug/l	SW846 8260D
2-Butanone (MEK)	7.4 J	10	6.9	ug/l	SW846 8260D
4-Methyl-2-pentanone(MIBK)	10.7	5.0	1.9	ug/l	SW846 8260D
Toluene	0.71 J	1.0	0.53	ug/l	SW846 8260D
Total TIC, Volatile	60 J			ug/l	
Aluminum ^b	58400	670		ug/l	SW846 6010D
Arsenic ^b	11.0	10		ug/l	SW846 6010D
Barium ^b	751	670		ug/l	SW846 6010D
Calcium ^b	53700	17000		ug/l	SW846 6010D
Chromium ^b	211	33		ug/l	SW846 6010D
Copper ^b	116	33		ug/l	SW846 6010D
Iron ^b	98200	330		ug/l	SW846 6010D
Lead	216	20		ug/l	SW846 6010D
Magnesium ^b	38200	17000		ug/l	SW846 6010D
Manganese ^b	3890	50		ug/l	SW846 6010D
Nickel ^b	94.0	33		ug/l	SW846 6010D
Potassium ^b	45200	33000		ug/l	SW846 6010D
Zinc ^b	407	67		ug/l	SW846 6010D

JD40006-3A MW-2R

Perfluorobutanoic acid ^a	17.7	3.7	1.9	ng/l	EPA 537M BY ID
Perfluoropentanoic acid ^a	15.1	1.9	0.93	ng/l	EPA 537M BY ID
Perfluorohexanoic acid ^a	13.7	1.9	0.93	ng/l	EPA 537M BY ID
Perfluoroheptanoic acid ^a	15.6	1.9	0.93	ng/l	EPA 537M BY ID
Perfluorooctanoic acid ^a	30.1	1.9	0.93	ng/l	EPA 537M BY ID
Perfluorononanoic acid ^a	6.9	1.9	0.93	ng/l	EPA 537M BY ID
Perfluorodecanoic acid ^a	1.4 J	1.9	0.93	ng/l	EPA 537M BY ID
Perfluorobutanesulfonic acid ^a	6.6	1.9	0.93	ng/l	EPA 537M BY ID
Perfluorohexanesulfonic acid ^a	4.5	1.9	0.93	ng/l	EPA 537M BY ID
Perfluorooctanesulfonic acid ^a	52.8	1.9	0.93	ng/l	EPA 537M BY ID

JD40006-4 DUP

Acetone	17.5	10	3.1	ug/l	SW846 8260D
Aluminum ^b	5760	670		ug/l	SW846 6010D
Arsenic ^b	10.3	10		ug/l	SW846 6010D
Calcium ^b	210000	17000		ug/l	SW846 6010D
Chromium ^b	33.0	33		ug/l	SW846 6010D
Iron ^b	11000	330		ug/l	SW846 6010D
Lead ^b	16.7	10		ug/l	SW846 6010D
Magnesium ^b	19600	17000		ug/l	SW846 6010D
Manganese ^b	2570	50		ug/l	SW846 6010D

Summary of Hits

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Job Number: JD40006
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/18/22



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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Sodium ^b		41900	33000		ug/l	SW846 6010D
Zinc ^b		73.3	67		ug/l	SW846 6010D

JD40006-4A DUP

Perfluorobutanoic acid ^a	9.7	3.7	1.9	ng/l	EPA 537M BY ID
Perfluoropentanoic acid ^a	17.4	1.9	0.93	ng/l	EPA 537M BY ID
Perfluorohexanoic acid ^a	17.3	1.9	0.93	ng/l	EPA 537M BY ID
Perfluoroheptanoic acid ^a	18.2	1.9	0.93	ng/l	EPA 537M BY ID
Perfluorooctanoic acid ^a	47.2	1.9	0.93	ng/l	EPA 537M BY ID
Perfluorobutanesulfonic acid ^a	6.6	1.9	0.93	ng/l	EPA 537M BY ID
Perfluorohexanesulfonic acid ^a	11.2	1.9	0.93	ng/l	EPA 537M BY ID
Perfluorooctanesulfonic acid ^a	12.3	1.9	0.93	ng/l	EPA 537M BY ID

JD40006-5 FIELD BLANK

Bromodichloromethane	1.4	1.0	0.45	ug/l	SW846 8260D
Chloroform	6.0	1.0	0.50	ug/l	SW846 8260D

JD40006-5A FIELD BLANK

No hits reported in this sample.

JD40006-6 TRIP BLANK

Chloroform	0.51 J	1.0	0.50	ug/l	SW846 8260D
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(a) Analysis performed at SGS Orlando, FL.

(b) Elevated sample detection limit due to limited volume.

Sample Results

Report of Analysis

Report of Analysis

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Client Sample ID:	MW-3R	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-1	Date Received:	02/18/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D173836.D	1	02/21/22 16:52	NW	n/a	n/a	V3D7372
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	44.2	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	8.3	10	6.9	ug/l	J
75-15-0	Carbon disulfide	0.48	2.0	0.46	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane ^a	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	0.58	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

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B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	MW-3R	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-1	Date Received:	02/18/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	0.73	1.0	0.53	ug/l	J
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		80-120%
17060-07-0	1,2-Dichloroethane-D4	102%		80-120%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	95%		82-114%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
7446-09-5	Sulfur dioxide	1.66	15	ug/l	JB
	Total TIC, Volatile		0	ug/l	

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-3R	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-1	Date Received:	02/18/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E BY SIM SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P51946.D	1	02/23/22 05:06	CS	02/22/22 10:15	OP38283	E4P2708
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane ^a	ND	0.29	0.19	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
4165-60-0	Nitrobenzene-d5	71%		29-124%		
321-60-8	2-Fluorobiphenyl	77%		23-122%		
1718-51-0	Terphenyl-d14	66%		22-130%		

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

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J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	MW-3R	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-1A	Date Received:	02/18/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55633.D	1	03/03/22 06:00	AFL	02/23/22 09:00	F:OP89908	F:S3Q767
Run #2							

	Initial Volume	Final Volume
Run #1	255 ml	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
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PERFLUOROALKYLCARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	24.1	3.9	2.0	ng/l	
2706-90-3	Perfluoropentanoic acid	13.9	2.0	0.98	ng/l	
307-24-4	Perfluorohexanoic acid	12.5	2.0	0.98	ng/l	
375-85-9	Perfluoroheptanoic acid	11.2	2.0	0.98	ng/l	
335-67-1	Perfluorooctanoic acid	23.3	2.0	0.98	ng/l	
375-95-1	Perfluorononanoic acid	2.1	2.0	0.98	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.98	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.98	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.98	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.98	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.98	ng/l	

PERFLUOROALKYLSULFONIC ACIDS

375-73-5	Perfluorobutanesulfonic acid	5.1	2.0	0.98	ng/l	
355-46-4	Perfluorohexanesulfonic acid	12.5	2.0	0.98	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	0.98	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	15.0	2.0	0.98	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	0.98	ng/l	

PERFLUOROCTANESULFONAMIDES

754-91-6	PFOSA	ND	3.9	2.0	ng/l	
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PERFLUOROCTANESULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	ND	3.9	2.0	ng/l	
2991-50-6	EtFOSAA	ND	3.9	2.0	ng/l	

FLUOROTELOMER SULFONATES

27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.8	2.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.8	2.0	ng/l	

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RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3R	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-1A	Date Received:	02/18/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	59%		35-135%
	13C5-PFPeA	57%		50-150%
	13C5-PFHxA	58%		50-150%
	13C4-PFHpA	63%		50-150%
	13C8-PFOA	66%		50-150%
	13C9-PFNA	70%		50-150%
	13C6-PFDA	86%		50-150%
	13C7-PFUnDA	80%		40-140%
	13C2-PFDoDA	66%		40-140%
	13C2-PFTeDA	52%		30-130%
	13C3-PFBS	62%		50-150%
	13C3-PFHxS	68%		50-150%
	13C8-PFOS	70%		50-150%
	13C8-FOSA	45%		30-130%
	d3-MeFOSAA	111%		40-140%
	d5-EtFOSAA	95%		40-140%
	13C2-6:2FTS	81%		50-150%
	13C2-8:2FTS	87%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	R1-MW-4	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-2	Date Received:	02/18/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D173844.D	1	02/21/22 20:00	NW	n/a	n/a	V3D7372
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	18.8	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane ^a	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	0.58	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	R1-MW-4	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-2	Date Received:	02/18/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	0.53	1.0	0.53	ug/l	J
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		80-120%
17060-07-0	1,2-Dichloroethane-D4	104%		80-120%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	95%		82-114%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
7446-09-5	Sulfur dioxide	1.65	29	ug/l	JN
7446-09-5	Sulfur dioxide	1.91	64	ug/l	JN
	Total TIC, Volatile		93	ug/l	J

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	R1-MW-4	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-2	Date Received:	02/18/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E BY SIM SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P51947.D	1	02/23/22 05:30	CS	02/22/22 10:15	OP38283	E4P2708
Run #2							

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane ^a	ND	0.27	0.18	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
4165-60-0	Nitrobenzene-d5	62%		29-124%		
321-60-8	2-Fluorobiphenyl	74%		23-122%		
1718-51-0	Terphenyl-d14	66%		22-130%		

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	R1-MW-4	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-2	Date Received:	02/18/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	1001 Whitlock Avenue, Bronx, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum ^a	2280	670	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Antimony ^a	< 20	20	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Arsenic ^a	< 10	10	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Barium ^a	< 670	670	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Beryllium ^a	< 3.3	3.3	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Cadmium ^a	< 10	10	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Calcium ^a	227000	17000	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Chromium ^a	< 33	33	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Cobalt ^a	< 170	170	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Copper ^a	< 33	33	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Iron ^a	4490	330	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Lead ^a	< 10	10	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Magnesium ^a	20500	17000	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Manganese ^a	2720	50	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	02/22/22	02/22/22	LM	SW846 7470A ²	SW846 7470A ⁴
Nickel ^a	< 33	33	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Potassium ^a	< 33000	33000	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Selenium ^a	< 33	33	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Silver ^a	< 33	33	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Sodium ^a	45300	33000	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Thallium ^a	< 33	33	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Vanadium ^a	< 170	170	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Zinc ^a	< 67	67	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³

(1) Instrument QC Batch: MA51936

(2) Instrument QC Batch: MA51940

(3) Prep QC Batch: MP31392

(4) Prep QC Batch: MP31428

(a) Elevated sample detection limit due to limited volume.

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	R1-MW-4	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-2A	Date Received:	02/18/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55634.D	1	03/03/22 06:17	AFL	02/23/22 09:00	F:OP89908	F:S3Q767
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	9.3	3.7	1.9	ng/l	
2706-90-3	Perfluoropentanoic acid	17.2	1.9	0.93	ng/l	
307-24-4	Perfluorohexanoic acid	16.9	1.9	0.93	ng/l	
375-85-9	Perfluoroheptanoic acid	18.4	1.9	0.93	ng/l	
335-67-1	Perfluorooctanoic acid	46.7	1.9	0.93	ng/l	
375-95-1	Perfluorononanoic acid	1.2	1.9	0.93	ng/l	J
335-76-2	Perfluorodecanoic acid	ND	1.9	0.93	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.93	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.93	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.93	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.93	ng/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	6.2	1.9	0.93	ng/l	
355-46-4	Perfluorohexanesulfonic acid	11.1	1.9	0.93	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.93	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	12.1	1.9	0.93	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.93	ng/l	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	3.7	1.9	ng/l	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	3.7	1.9	ng/l	
2991-50-6	EtFOSAA	ND	3.7	1.9	ng/l	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.4	1.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.4	1.9	ng/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	R1-MW-4	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-2A	Date Received:	02/18/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	61%		35-135%
	13C5-PFPeA	56%		50-150%
	13C5-PFHxA	56%		50-150%
	13C4-PFHpA	61%		50-150%
	13C8-PFOA	65%		50-150%
	13C9-PFNA	64%		50-150%
	13C6-PFDA	76%		50-150%
	13C7-PFUnDA	75%		40-140%
	13C2-PFDoDA	66%		40-140%
	13C2-PFTeDA	58%		30-130%
	13C3-PFBS	61%		50-150%
	13C3-PFHxS	65%		50-150%
	13C8-PFOS	67%		50-150%
	13C8-FOSA	46%		30-130%
	d3-MeFOSAA	99%		40-140%
	d5-EtFOSAA	84%		40-140%
	13C2-6:2FTS	74%		50-150%
	13C2-8:2FTS	85%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-2R	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-3	Date Received:	02/18/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D173845.D	1	02/21/22 20:23	NW	n/a	n/a	V3D7372
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	61.0	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	7.4	10	6.9	ug/l	J
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane ^a	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	0.58	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	MW-2R	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-3	Date Received:	02/18/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	10.7	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	0.71	1.0	0.53	ug/l	J
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		80-120%
17060-07-0	1,2-Dichloroethane-D4	101%		80-120%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	96%		82-114%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
7446-09-5	Sulfur dioxide	1.65	28	ug/l	JN
	Hepten-one, methyl-isomer	8.91	32	ug/l	J
	Total TIC, Volatile		60	ug/l	J

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-2R	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-3	Date Received:	02/18/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E BY SIM SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P51948.D	1	02/23/22 05:55	CS	02/22/22 10:15	OP38283	E4P2708
Run #2							

	Initial Volume	Final Volume
Run #1	260 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane ^a	ND	0.29	0.19	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
4165-60-0	Nitrobenzene-d5	75%		29-124%		
321-60-8	2-Fluorobiphenyl	78%		23-122%		
1718-51-0	Terphenyl-d14	71%		22-130%		

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-2R	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-3	Date Received:	02/18/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	1001 Whitlock Avenue, Bronx, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum ^a	58400	670	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Antimony	< 40	40	ug/l	2	02/21/22	02/22/22	ND	SW846 6010D ³ SW846 3010A ⁴
Arsenic ^a	11.0	10	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Barium ^a	751	670	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Beryllium ^a	< 3.3	3.3	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Cadmium	< 20	20	ug/l	2	02/21/22	02/22/22	ND	SW846 6010D ³ SW846 3010A ⁴
Calcium ^a	53700	17000	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Chromium ^a	211	33	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Cobalt ^a	< 170	170	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Copper ^a	116	33	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Iron ^a	98200	330	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Lead	216	20	ug/l	2	02/21/22	02/22/22	ND	SW846 6010D ³ SW846 3010A ⁴
Magnesium ^a	38200	17000	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Manganese ^a	3890	50	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Mercury ^b	< 0.60	0.60	ug/l	1	02/22/22	02/22/22	LM	SW846 7470A ² SW846 7470A ⁵
Nickel ^a	94.0	33	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Potassium ^a	45200	33000	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Selenium ^a	< 33	33	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Silver ^a	< 33	33	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Sodium ^a	< 33000	33000	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Thallium ^a	< 33	33	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Vanadium ^a	< 170	170	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Zinc ^a	407	67	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ⁴

(1) Instrument QC Batch: MA51936

(2) Instrument QC Batch: MA51940

(3) Instrument QC Batch: MA51944

(4) Prep QC Batch: MP31392

(5) Prep QC Batch: MP31428

(a) Elevated sample detection limit due to limited volume.

(b) Elevated sample detection limit due to difficult sample matrix.

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	MW-2R	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-3A	Date Received:	02/18/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55635.D	1	03/03/22 06:34	AFL	02/23/22 09:00	F:OP89908	F:S3Q767
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
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PERFLUOROALKYLCARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	17.7	3.7	1.9	ng/l	
2706-90-3	Perfluoropentanoic acid	15.1	1.9	0.93	ng/l	
307-24-4	Perfluorohexanoic acid	13.7	1.9	0.93	ng/l	
375-85-9	Perfluoroheptanoic acid	15.6	1.9	0.93	ng/l	
335-67-1	Perfluorooctanoic acid	30.1	1.9	0.93	ng/l	
375-95-1	Perfluorononanoic acid	6.9	1.9	0.93	ng/l	
335-76-2	Perfluorodecanoic acid	1.4	1.9	0.93	ng/l	J
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.93	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.93	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.93	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.93	ng/l	

PERFLUOROALKYLSULFONIC ACIDS

375-73-5	Perfluorobutanesulfonic acid	6.6	1.9	0.93	ng/l	
355-46-4	Perfluorohexanesulfonic acid	4.5	1.9	0.93	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.93	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	52.8	1.9	0.93	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.93	ng/l	

PERFLUOROCTANESULFONAMIDES

754-91-6	PFOSA	ND	3.7	1.9	ng/l	
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PERFLUOROCTANESULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	ND	3.7	1.9	ng/l	
2991-50-6	EtFOSAA	ND	3.7	1.9	ng/l	

FLUOROTELOMER SULFONATES

27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.4	1.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.4	1.9	ng/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-3A	Date Received:	02/18/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	69%		35-135%
	13C5-PFPeA	65%		50-150%
	13C5-PFHxA	67%		50-150%
	13C4-PFHpA	71%		50-150%
	13C8-PFOA	73%		50-150%
	13C9-PFNA	77%		50-150%
	13C6-PFDA	86%		50-150%
	13C7-PFUnDA	86%		40-140%
	13C2-PFDoDA	70%		40-140%
	13C2-PFTeDA	67%		30-130%
	13C3-PFBS	69%		50-150%
	13C3-PFHxS	74%		50-150%
	13C8-PFOS	77%		50-150%
	13C8-FOSA	65%		30-130%
	d3-MeFOSAA	102%		40-140%
	d5-EtFOSAA	98%		40-140%
	13C2-6:2FTS	86%		50-150%
	13C2-8:2FTS	104%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	DUP	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-4	Date Received:	02/18/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L338161.D	1	02/22/22 16:52	NH	n/a	n/a	VL10187
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	17.5	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane ^a	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane ^a	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	0.58	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	DUP	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-4	Date Received:	02/18/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride ^a	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	88%		80-120%
17060-07-0	1,2-Dichloroethane-D4	117%		80-120%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	117% ^b		82-114%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	system artifact	1.54	38	ug/l	J
	Total TIC, Volatile		0	ug/l	

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

(b) Outside of in house control limits, but within reasonable method recovery limits.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	DUP	
Lab Sample ID:	JD40006-4	Date Sampled: 02/18/22
Matrix:	AQ - Ground Water	Date Received: 02/18/22
Method:	SW846 8270E BY SIM SW846 3510C	Percent Solids: n/a
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P51949.D	1	02/23/22 06:18	CS	02/22/22 10:15	OP38283	E4P2708
Run #2							

	Initial Volume	Final Volume
Run #1	280 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane ^a	ND	0.27	0.18	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
4165-60-0	Nitrobenzene-d5	63%		29-124%		
321-60-8	2-Fluorobiphenyl	75%		23-122%		
1718-51-0	Terphenyl-d14	65%		22-130%		

(a) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	DUP	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-4	Date Received:	02/18/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	1001 Whitlock Avenue, Bronx, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum ^a	5760	670	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Antimony ^a	< 20	20	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Arsenic ^a	10.3	10	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Barium ^a	< 670	670	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Beryllium ^a	< 3.3	3.3	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Cadmium ^a	< 10	10	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Calcium ^a	210000	17000	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Chromium ^a	33.0	33	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Cobalt ^a	< 170	170	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Copper ^a	< 33	33	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Iron ^a	11000	330	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Lead ^a	16.7	10	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Magnesium ^a	19600	17000	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Manganese ^a	2570	50	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	02/22/22	02/22/22	LM	SW846 7470A ²	SW846 7470A ⁴
Nickel ^a	< 33	33	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Potassium ^a	< 33000	33000	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Selenium ^a	< 33	33	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Silver ^a	< 33	33	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Sodium ^a	41900	33000	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Thallium ^a	< 33	33	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Vanadium ^a	< 170	170	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³
Zinc ^a	73.3	67	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹	SW846 3010A ³

(1) Instrument QC Batch: MA51936

(2) Instrument QC Batch: MA51940

(3) Prep QC Batch: MP31392

(4) Prep QC Batch: MP31428

(a) Elevated sample detection limit due to limited volume.

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	DUP	
Lab Sample ID:	JD40006-4A	Date Sampled: 02/18/22
Matrix:	AQ - Ground Water	Date Received: 02/18/22
Method:	EPA 537M BY ID EPA 537 MOD	Percent Solids: n/a
Project:	1001 Whitlock Avenue, Bronx, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55636.D	1	03/03/22 06:51	AFL	02/23/22 09:00	F:OP89908	F:S3Q767
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	9.7	3.7	1.9	ng/l	
2706-90-3	Perfluoropentanoic acid	17.4	1.9	0.93	ng/l	
307-24-4	Perfluorohexanoic acid	17.3	1.9	0.93	ng/l	
375-85-9	Perfluoroheptanoic acid	18.2	1.9	0.93	ng/l	
335-67-1	Perfluorooctanoic acid	47.2	1.9	0.93	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.93	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.93	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.93	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.93	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.93	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.93	ng/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	6.6	1.9	0.93	ng/l	
355-46-4	Perfluorohexanesulfonic acid	11.2	1.9	0.93	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.93	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	12.3	1.9	0.93	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.93	ng/l	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	3.7	1.9	ng/l	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	3.7	1.9	ng/l	
2991-50-6	EtFOSAA	ND	3.7	1.9	ng/l	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.4	1.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.4	1.9	ng/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-4A	Date Received:	02/18/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	62%		35-135%
	13C5-PFPeA	57%		50-150%
	13C5-PFHxA	58%		50-150%
	13C4-PFHpA	63%		50-150%
	13C8-PFOA	66%		50-150%
	13C9-PFNA	65%		50-150%
	13C6-PFDA	79%		50-150%
	13C7-PFUnDA	80%		40-140%
	13C2-PFDoDA	66%		40-140%
	13C2-PFTeDA	56%		30-130%
	13C3-PFBS	63%		50-150%
	13C3-PFHxS	68%		50-150%
	13C8-PFOS	68%		50-150%
	13C8-FOSA	39%		30-130%
	d3-MeFOSAA	102%		40-140%
	d5-EtFOSAA	87%		40-140%
	13C2-6:2FTS	80%		50-150%
	13C2-8:2FTS	92%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	FIELD BLANK	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-5	Date Received:	02/18/22
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D173830.D	1	02/21/22 14:27	NW	n/a	n/a	V3D7372
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	1.4	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	6.0	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane ^a	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	0.58	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	FIELD BLANK	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-5	Date Received:	02/18/22
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		80-120%
17060-07-0	1,2-Dichloroethane-D4	103%		80-120%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	96%		82-114%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
7446-09-5	Sulfur dioxide	1.65	17	ug/l	JB
	Total TIC, Volatile		0	ug/l	

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	FIELD BLANK	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-5	Date Received:	02/18/22
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	SW846 8270E BY SIM SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M106838.D	1	02/25/22 05:38	CS	02/22/22 10:15	OP38284A	E4M4961
Run #2							

	Initial Volume	Final Volume
Run #1	1020 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.098	0.049	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	53%		21-121%
321-60-8	2-Fluorobiphenyl	55%		27-107%
1718-51-0	Terphenyl-d14	54%		25-118%

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 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	FIELD BLANK	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-5	Date Received:	02/18/22
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Project:	1001 Whitlock Avenue, Bronx, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	< 200	200	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Antimony	< 6.0	6.0	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Arsenic	< 3.0	3.0	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Barium	< 200	200	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Beryllium	< 1.0	1.0	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Cadmium	< 3.0	3.0	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Calcium	< 5000	5000	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Chromium	< 10	10	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Cobalt	< 50	50	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Copper	< 10	10	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Iron	< 100	100	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Lead	< 3.0	3.0	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Magnesium	< 5000	5000	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Manganese	< 15	15	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	02/22/22	02/22/22	LM	SW846 7470A ² SW846 7470A ⁴
Nickel	< 10	10	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Potassium	< 10000	10000	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Selenium	< 10	10	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Silver	< 10	10	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Sodium	< 10000	10000	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Thallium	< 10	10	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Vanadium	< 50	50	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³
Zinc	< 20	20	ug/l	1	02/21/22	02/21/22	ND	SW846 6010D ¹ SW846 3010A ³

(1) Instrument QC Batch: MA51936

(2) Instrument QC Batch: MA51940

(3) Prep QC Batch: MP31392

(4) Prep QC Batch: MP31428

RL = Reporting Limit

Report of Analysis

Page 1 of 2

Client Sample ID:	FIELD BLANK	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-5A	Date Received:	02/18/22
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Q55637.D	1	03/03/22 07:08	AFL	02/23/22 09:00	F:OP89908	F:S3Q767
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	1.0 ml
Run #2		

PFAS List

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	3.7	1.9	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	1.9	0.93	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.9	0.93	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	1.9	0.93	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.9	0.93	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.93	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.93	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.93	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.93	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.93	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.93	ng/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.93	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.93	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.93	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.93	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.93	ng/l	
PERFLUOROCTANESULFONAMIDES						
754-91-6	PFOSA	ND	3.7	1.9	ng/l	
PERFLUOROCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	3.7	1.9	ng/l	
2991-50-6	EtFOSAA	ND	3.7	1.9	ng/l	
FLUOROTELOMER SULFONATES						
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.4	1.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.4	1.9	ng/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-5A	Date Received:	02/18/22
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	EPA 537M BY ID EPA 537 MOD		
Project:	1001 Whitlock Avenue, Bronx, NY		

PFAS List

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	78%		35-135%
	13C5-PFPeA	77%		50-150%
	13C5-PFHxA	76%		50-150%
	13C4-PFHpA	77%		50-150%
	13C8-PFOA	73%		50-150%
	13C9-PFNA	68%		50-150%
	13C6-PFDA	78%		50-150%
	13C7-PFUnDA	76%		40-140%
	13C2-PFDoDA	67%		40-140%
	13C2-PFTeDA	62%		30-130%
	13C3-PFBS	76%		50-150%
	13C3-PFHxS	77%		50-150%
	13C8-PFOS	72%		50-150%
	13C8-FOSA	67%		30-130%
	d3-MeFOSAA	78%		40-140%
	d5-EtFOSAA	77%		40-140%
	13C2-6:2FTS	68%		50-150%
	13C2-8:2FTS	72%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	TRIP BLANK	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-6	Date Received:	02/18/22
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D173835.D	1	02/21/22 16:29	NW	n/a	n/a	V3D7372
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	0.51	1.0	0.50	ug/l	J
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane ^a	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	0.58	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	TRIP BLANK	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-6	Date Received:	02/18/22
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	1001 Whitlock Avenue, Bronx, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		80-120%
17060-07-0	1,2-Dichloroethane-D4	101%		80-120%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	96%		82-114%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
7446-09-5	Sulfur dioxide	1.66	15	ug/l	JB
	Total TIC, Volatile		0	ug/l	

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Chain of Custody (SGS Orlando, FL)

GW
FB
TB

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

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EHSA-QAC-0023-04-FORM-Standard COC

Client / Reporting Information				Project Information				Requested Analysis												Matrix Codes																																																																																																																	
Company Name: SES1				Project Name: 11819				VOC's TAL METALS PFAS 1,4-DIOXANE													DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment CI - Oil LIQ - Other Liquids AIR - Air SOL - Other Solid WIP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank																																																																																																																
Street Address: 12A MARF AVE				Street: 1001 WHITLOCK AVE																																																																																																																																	
City: PINE BROOK, NJ State: NJ Zip: 07068				City: BRONX State: NY Zip: 10451																																																																																																																																	
Project Contact: John@ses1.org E-mail: John@ses1.org				Project #: 11819 Billing Information (if different from Report to):																																																																																																																																	
Phone #: 908-233-0000				Client Purchase Order #: Street Address: 																																																																																																																																	
Sampler(s) Name(s): CHRIS MAJICINI Phone #: 				Project Manager: SEAN HANSLER Attention: 				pH Check (Lab Use Only)																																																																																																																													
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>SGS Sample #</th> <th>Field ID / Point of Collection</th> <th>MECHDI Val#</th> <th>Date</th> <th>Time</th> <th>Collected by</th> <th>Grab (C)</th> <th>Swirl Combined (YN)</th> <th>Matrix</th> <th># of bottles</th> <th>PC</th> <th>PbCH</th> <th>INO₃</th> <th>HSO₄</th> <th>NO₃</th> <th>DI WASH</th> <th>MEOH</th> <th>ENGLOR</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>MW-3R</td> <td></td> <td>2/18/22</td> <td>15:45</td> <td>CM</td> <td>G</td> <td>N</td> <td>SW</td> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>D1-MW-4</td> <td></td> <td>2/18/22</td> <td>15:55</td> <td>CM</td> <td>G</td> <td>N</td> <td>SW</td> <td>7</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>MW-2R</td> <td></td> <td>2/18/22</td> <td>15:50</td> <td>CM</td> <td>G</td> <td>N</td> <td>SW</td> <td>7</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td>DUP</td> <td></td> <td>2/18/22</td> <td>16:00</td> <td>CM</td> <td>G</td> <td>N</td> <td>SW</td> <td>7</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>FIELD BLANK</td> <td></td> <td>2/18/22</td> <td>10:00</td> <td>CM</td> <td>G</td> <td>H</td> <td>WW</td> <td>6R</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>6</td> <td>TRIP BLANK</td> <td></td> <td>2/18/22</td> <td>-</td> <td>CM</td> <td>G</td> <td>H</td> <td>TB</td> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				SGS Sample #	Field ID / Point of Collection	MECHDI Val#	Date	Time	Collected by	Grab (C)	Swirl Combined (YN)	Matrix	# of bottles	PC	PbCH	INO ₃	HSO ₄	NO ₃	DI WASH	MEOH	ENGLOR	1	MW-3R		2/18/22	15:45	CM	G	N	SW	5									2	D1-MW-4		2/18/22	15:55	CM	G	N	SW	7									3	MW-2R		2/18/22	15:50	CM	G	N	SW	7									4	DUP		2/18/22	16:00	CM	G	N	SW	7									5	FIELD BLANK		2/18/22	10:00	CM	G	H	WW	6R									6	TRIP BLANK		2/18/22	-	CM	G	H	TB	2									LAB USE ONLY			
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6	TRIP BLANK		2/18/22	-	CM	G	H	TB	2																																																																																																																												
Turn Around Time (Business Days)				Deliverable				Comments / Special Instructions																																																																																																																													
Approved By (SGS PM): / Date: Initial Assessment A/C ☐ 10 Business Days ☒ 5 Business Days ☐ 3 Business Days ☐ 2 Business Days ☐ 1 Business Day ☐ Other All data available via Lablink				☐ Commercial "A" (Level 1) ☐ Commercial "B" (Level 2) ☐ NJ Reduced (Level 3) ☐ Full Tier I (Level 4) ☐ Commercial "C" ☐ NJ DKQP				☒ NYASP Category A ☒ NYASP Category B ☐ MA MCP Criteria ☐ CT CRP Criteria ☐ State Forms ☐ EDD Format				☐ DOD-QSM5				Commercial "A" = Results only; Commercial "B" = Results + QC Summary Commercial "C" = Results + QC Summary + Partial Raw data Sample Custody must be documented below each time samples change possession, including courier delivery.																																																																																																																					
Relinquished by: CHRIS MAJICINI Date / Time: 02/18/22 Relinquished by: Date / Time: Relinquished by: Date / Time: 				Received By: Sean Hansler Date / Time: 2/18/22 Received By: Date / Time: Received By: Date / Time: 				Relinquished by: Date / Time: Relinquished by: Date / Time: Relinquished by: Date / Time: 				Received By: Jeemint Patel Date / Time: 2/18/22 Received By: Date / Time: Received By: Date / Time: 																																																																																																																									
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JD40006: Chain of Custody

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SGS

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JD40006

SGS Sample Receipt Summary

Job Number: JD40006

Client: SESI CONSULTING ENGINEERS

Project: 1001 WHITLOCK AVENUE, BRONX, NY

Date / Time Received: 2/18/2022 7:13:00 PM

Delivery Method:

Airbill #'s:

Cooler Temps (Raw Measured) °C: Cooler 1: (3.6);

Cooler Temps (Corrected) °C: Cooler 1: (2.0);

Cooler Security

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | ☒ | ☐ | 3. COC Present: | ☒ | ☐ |
| 2. Custody Seals Intact: | ☒ | ☐ | 4. Smpl Dates/Time OK | ☒ | ☐ |

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | ☒ | ☐ |
| 2. Cooler temp verification: | IR Gun | |
| 3. Cooler media: | Ice (Bag) | |
| 4. No. Coolers: | 1 | |

Quality Control Preservation

Y or N N/A

- | | | | |
|---------------------------------|-------------------------------------|--------------------------|--------------------------|
| 1. Trip Blank present / cooler: | ☒ | ☐ | ☐ |
| 2. Trip Blank listed on COC: | ☒ | ☐ | ☐ |
| 3. Samples preserved properly: | ☒ | ☐ | |
| 4. VOCs headspace free: | ☒ | ☐ | ☐ |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles: | ☒ | ☐ |
| 2. Container labeling complete: | ☒ | ☐ |
| 3. Sample container label / COC agree: | ☒ | ☐ |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | ☒ | ☐ |
| 2. All containers accounted for: | ☒ | ☐ |
| 3. Condition of sample: | Intact | |

Sample Integrity - Instructions

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | ☒ | ☐ | |
| 2. Bottles received for unspecified tests | ☐ | ☒ | |
| 3. Sufficient volume recvd for analysis: | ☒ | ☐ | |
| 4. Compositing instructions clear: | ☐ | ☐ | ☒ |
| 5. Filtering instructions clear: | ☐ | ☐ | ☒ |

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments

- 1). Sample -1 thru -4 Only Received 1 x250mL amber N/P Volume for 8270 anlysis. Limited Volume
2). Sample -1 thru -4 Only Received 1 x250ml N/P volume for PFAS anlysis. Limited Volume

SM089-02 Rev. Date 12/1/16

JD40006: Chain of Custody

Page 2 of 4

- 1) Please proceed and log in BLV8270SIM14DIOX for sample -1 through -4
- 2) Please proceed with limited volume

Job Change Order: JD40006

Requested Date:	2/25/2022	Received Date:	2/18/2022
Account Name:	SESI Consulting Engineers	Due Date:	2/25/2022
Project Description:	1001 Whitlock Avenue, Bronx, NY	Deliverable:	NYASPB
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	4

Sample #: JD40006-2, -3, -4, -5, -6
Change: Please relog for CN
Dept:
TAT: 4

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

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[illegible]

jd40006.xls
Rev. Date: 4/10/18

JD40006: Chain of Custody

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SGS Orlando, FL



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JD40006

SGS Sample Receipt Summary

Job Number: JD40006

Client: SGS NJ

Project: 1001 WHITLOCK AVENUE

Date / Time Received: 2/22/2022 9:40:00 AM

Delivery Method: FEDEX

Airbill #s: 5272 0639 2117

Therm ID: IR 1;

Therm CF: 0.4;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 1: (0.6);

Cooler Temps (Corrected) °C: Cooler 1: (1.0);

Cooler Information

Y or N

1. Custody Seals Present ☒ ☐
2. Custody Seals Intact ☒ ☐
3. Temp criteria achieved ☒ ☐
4. Cooler temp verification IR Gun
5. Cooler media Ice (Bag)

Trip Blank Information

Y or N N/A

1. Trip Blank present / cooler ☐ ☐ ☒
 2. Trip Blank listed on COC ☐ ☐ ☒
- W or S N/A
3. Type Of TB Received ☐ ☐ ☒

Sample Information

Y or N N/A

1. Sample labels present on bottles ☒ ☐
2. Samples preserved properly ☒ ☐
3. Sufficient volume/containers recvd for analysis: ☒ ☐
4. Condition of sample Intact
5. Sample recvd within HT ☒ ☐
6. Dates/Times/IDs on COC match Sample Label ☒ ☐
7. VOCs have headspace ☐ ☐ ☒
8. Bottles received for unspecified tests ☐ ☒ ☐
9. Compositing instructions clear ☐ ☐ ☒
10. Voa Soil Kits/Jars received past 48hrs? ☐ ☐ ☒
11. % Solids Jar received? ☐ ☐ ☒
12. Residual Chlorine Present? ☐ ☐ ☒

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____
Test Strip Lot #s: pH 0-3 230315
Residual Chlorine Test Strip Lot #: _____

Number of 5035 Field Kits: _____
pH 10-12 219813A

Number of Lab Filtered Metals: _____
Other: (Specify) _____

Comments

SM001
Rev. Date 05/24/17

Technician: SAMUELM

Date: 2/22/2022 9:40:00 AM

Reviewer: _____

Date: _____

JD40006: Chain of Custody

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The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

SESI Consulting Engineers

1001 Whitlock Avenue, Bronx, NY

11819

SGS Job Number: JD40006R

Sampling Date: 02/18/22

Report to:

SESI Consulting Engineers

jam@sesi.org

ATTN: Jesse Mausner

Total number of pages in report: 15



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A handwritten signature in black ink, appearing to read "Mike Earp".

Mike Earp
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

This report shall not be reproduced, except in its entirety, without the written approval of SGS.
Test results relate only to samples analyzed.

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Section 4: Sample Results 6

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4.2: JD40006-3R: MW-2R 8

4.3: JD40006-4R: DUP 9

4.4: JD40006-5R: FIELD BLANK 10

Section 5: Misc. Forms 11

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Sample Summary

SESI Consulting Engineers

Job No: JD40006R

1001 Whitlock Avenue, Bronx, NY
Project No: 11819

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JD40006-2R	02/18/22	15:55 CM	02/18/22	AQ	Ground Water	R1-MW-4
JD40006-3R	02/18/22	15:50 CM	02/18/22	AQ	Ground Water	MW-2R
JD40006-4R	02/18/22	16:00 CM	02/18/22	AQ	Ground Water	DUP
JD40006-5R	02/18/22	10:00 CM	02/18/22	AQ	Field Blank Water	FIELD BLANK

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: SESI Consulting Engineers

Job No JD40006R

Site: 1001 Whitlock Avenue, Bronx, NY

Report Date 2/28/2022 5:28:21 PM

On 02/18/2022, 3 Sample(s), 0 Trip Blank(s) and 1 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 2 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD40006R was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

General Chemistry By Method EPA 335.4/LACHAT

Matrix: AQ

Batch ID: GP38747

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD40098-1ADUP, JD40006-2RMS were used as the QC samples for Cyanide.
- Matrix Spike Recovery(s) for Cyanide are outside control limits. Spike recovery indicates possible matrix interference.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Monday, February 28, 2022

Page 1 of 1

Summary of Hits

Job Number: JD40006R
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/18/22



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

JD40006-2R R1-MW-4

No hits reported in this sample.

JD40006-3R MW-2R

No hits reported in this sample.

JD40006-4R DUP

No hits reported in this sample.

JD40006-5R FIELD BLANK

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	R1-MW-4	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-2R	Date Received:	02/18/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.010	0.010	mg/l	1	02/28/22 14:55	MM	EPA 335.4/LACHAT

RL = Reporting Limit

4.1
4

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-3R	Date Received:	02/18/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.010	0.010	mg/l	1	02/28/22 14:56	MM	EPA 335.4/LACHAT

RL = Reporting Limit

4.2
4

Report of Analysis

Client Sample ID:	DUP	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-4R	Date Received:	02/18/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.010	0.010	mg/l	1	02/28/22 14:58	MM	EPA 335.4/LACHAT

RL = Reporting Limit

Report of Analysis

Client Sample ID:	FIELD BLANK	Date Sampled:	02/18/22
Lab Sample ID:	JD40006-5R	Date Received:	02/18/22
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.010	0.010	mg/l	1	02/28/22 14:59	MM	EPA 335.4/LACHAT

RL = Reporting Limit

4.4
4

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

GW
FB
TB

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

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EHSA-QAC-0023-04-FORM-Standard COC

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JD40006R: Chain of Custody

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SGS

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JD40006R

SGS Sample Receipt Summary

Job Number: JD40006

Client: SESI CONSULTING ENGINEERS

Project: 1001 WHITLOCK AVENUE, BRONX, NY

Date / Time Received: 2/18/2022 7:13:00 PM

Delivery Method:

Airbill #'s:

Cooler Temps (Raw Measured) °C: Cooler 1: (3.6);

Cooler Temps (Corrected) °C: Cooler 1: (2.0);

Cooler Security

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | ☒ | ☐ | 3. COC Present: | ☒ | ☐ |
| 2. Custody Seals Intact: | ☒ | ☐ | 4. Smpl Dates/Time OK | ☒ | ☐ |

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | ☒ | ☐ |
| 2. Cooler temp verification: | IR Gun | |
| 3. Cooler media: | Ice (Bag) | |
| 4. No. Coolers: | 1 | |

Quality Control Preservation

Y or N N/A

- | | | | |
|---------------------------------|-------------------------------------|--------------------------|--------------------------|
| 1. Trip Blank present / cooler: | ☒ | ☐ | ☐ |
| 2. Trip Blank listed on COC: | ☒ | ☐ | ☐ |
| 3. Samples preserved properly: | ☒ | ☐ | |
| 4. VOCs headspace free: | ☒ | ☐ | ☐ |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles: | ☒ | ☐ |
| 2. Container labeling complete: | ☒ | ☐ |
| 3. Sample container label / COC agree: | ☒ | ☐ |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | ☒ | ☐ |
| 2. All containers accounted for: | ☒ | ☐ |
| 3. Condition of sample: | Intact | |

Sample Integrity - Instructions

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | ☒ | ☐ | |
| 2. Bottles received for unspecified tests | ☐ | ☒ | |
| 3. Sufficient volume recvd for analysis: | ☒ | ☐ | |
| 4. Compositing instructions clear: | ☐ | ☐ | ☒ |
| 5. Filtering instructions clear: | ☐ | ☐ | ☒ |

Test Strip Lot #s:

pH 1-12: 231619

pH 12+: 203117A

Other: (Specify)

Comments

- 1). Sample -1 thru -4 Only Received 1 x250mL amber N/P Volume for 8270 anlysis. Limited Volume
2). Sample -1 thru -4 Only Received 1 x250ml N/P volume for PFAS anlysis. Limited Volume

SM089-02 Rev. Date 12/1/16

JD40006R: Chain of Custody

Page 2 of 4

- 1) Please proceed and log in BLV8270SIM14DIOX for sample -1 through -4
- 2) Please proceed with limited volume

Job Change Order: JD40006

Requested Date:	2/25/2022	Received Date:	2/18/2022
Account Name:	SESI Consulting Engineers	Due Date:	2/25/2022
Project Description:	1001 Whitlock Avenue, Bronx, NY	Deliverable:	NYASPB
C/O Initiated By:	KELLY.RAM	PM:	KR
		TAT (Days):	4

=====

Sample #: JD40006-2, -3, -4, -5, -6 **Change:**

Dept: Please relog for CN

TAT: 4

=====

Above Changes Per: Jesse Mausner **Date/Time:** 2/25/2022

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

SESI Consulting Engineers

1001 Whitlock Avenue, Bronx, NY

11819

SGS Job Number: JD40098

Sampling Date: 02/22/22

Report to:

SESI Consulting Engineers

jam@sesi.org

ATTN: Jesse Mausner

Total number of pages in report: 32



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.



Mike Earp
General Manager

Client Service contact: Kelly Ramos 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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Test results relate only to samples analyzed.

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Sample Summary

SESI Consulting Engineers

Job No: JD40098

1001 Whitlock Avenue, Bronx, NY
Project No: 11819

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
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This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

JD40098-1	02/22/22	13:40	CM	02/22/22	AQ	Ground Water	MW-3R
JD40098-1A	02/22/22	13:40	CM	02/22/22	AQ	Ground Water	MW-3R
JD40098-2	02/22/22	13:50	CM	02/22/22	AQ	Ground Water	R1-MW-4
JD40098-3	02/22/22	14:05	CM	02/22/22	AQ	Ground Water	DUP
JD40098-4	02/22/22	14:20	CM	02/22/22	AQ	Ground Water	MW-2R

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: SESI Consulting Engineers

Job No: JD40098

Site: 1001 Whitlock Avenue, Bronx, NY

Report Date 3/3/2022 2:12:43 PM

On 02/22/2022, 4 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 2.3 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD40098 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Semi-volatiles By Method SW846 8270E

Matrix: AQ

Batch ID: OP38312

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD40096-3MS, JD40096-3MSD were used as the QC samples indicated.

GC/LC Semi-volatiles By Method SW846 8081B

Matrix: AQ

Batch ID: OP38316A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- OP38316A-BSD for beta-BHC: Analytical precision exceeds in-house control limits.
- OP38316A-BS1 for alpha-Chlordane: Reported from the 1st signal. The %D of the CCV on the 2nd signal exceeds the method criteria of 20%, so it being used for confirmation only.
- OP38316A-BSD for alpha-BHC: Analytical precision exceeds in-house control limits.
- OP38316A-BSD for gamma-BHC (Lindane): Reported from 1st signal. 2nd signal used for confirmation.
- OP38316A-BSD for alpha-Chlordane: Reported from the 1st signal. The %D of the CCV on the 2nd signal exceeds the method criteria of 20%, so it being used for confirmation only.
- JD40098-1 for gamma-Chlordane: More than 40 % RPD for detected concentrations between the two GC columns.
- JD40098-3 for gamma-Chlordane: More than 40 % RPD for detected concentrations between the two GC columns.
- JD40098-2 for 4,4'-DDE: More than 40 % RPD for detected concentrations between the two GC columns.

GC/LC Semi-volatiles By Method SW846 8082A

Matrix: AQ

Batch ID: OP38317A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Metals Analysis By Method SW846 6010D

Matrix: AQ

Batch ID: MP31431

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD40056-1MS, JD40056-1MSD, JD40056-1SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Cadmium, Chromium, Copper, Iron, Lead, Nickel, Vanadium are outside control limits. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- Samples(s) JD40098-1: New York does not offer 3010A certification for antimony and silver. The laboratory is certified for method 3010A (Acid Digestion for Total Metals) for all other metals and is certified for the associated analytical methods of 6010C (ICP Analysis) and 6020A (ICP-MS Analysis). New York does certify for method 3005A (Acid Digestion for Total Recoverable or Dissolved Metals) for antimony and silver and the laboratory holds that certification, but that provides total recoverable rather than total metals results.
- MP31431-SD1 for Zinc: Serial dilution indicates possible matrix interference.

Metals Analysis By Method SW846 7470A

Matrix: AQ

Batch ID: MP31471

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD40056-1MS, JD40056-1MSD were used as the QC samples for metals.

General Chemistry By Method EPA 335.4/LACHAT

Matrix: AQ

Batch ID: GP38747

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD40098-1ADUP, JD40098-1AMS were used as the QC samples for Cyanide.
- Matrix Spike Recovery(s) for Cyanide are outside control limits. Spike recovery indicates possible matrix interference.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Summary of Hits

Page 1 of 1

Job Number: JD40098
Account: SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY
Collected: 02/22/22

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JD40098-1 MW-3R

Benzo(a)pyrene	0.67 J	0.95	0.20	ug/l	SW846 8270E
Diethyl phthalate	0.58 J	1.9	0.25	ug/l	SW846 8270E
Total TIC, Semi-Volatile	73.8 J			ug/l	
gamma-Chlordane ^a	0.0067	0.0050	0.0021	ug/l	SW846 8081B
Aluminum	1070	200		ug/l	SW846 6010D
Calcium	63100	5000		ug/l	SW846 6010D
Iron	3440	100		ug/l	SW846 6010D
Lead	4.4	3.0		ug/l	SW846 6010D
Magnesium	17600	5000		ug/l	SW846 6010D
Manganese	2030	15		ug/l	SW846 6010D
Sodium	31800	10000		ug/l	SW846 6010D
Zinc	22.3	20		ug/l	SW846 6010D

JD40098-1A MW-3R

No hits reported in this sample.

JD40098-2 R1-MW-4

1,4-Dioxane	1.1	1.0	0.66	ug/l	SW846 8270E
4,4'-DDE ^a	0.0056	0.0050	0.0025	ug/l	SW846 8081B

JD40098-3 DUP

Total TIC, Semi-Volatile	12.9 J			ug/l	
gamma-Chlordane ^a	0.0053	0.0050	0.0021	ug/l	SW846 8081B
4,4'-DDE	0.0062	0.0050	0.0025	ug/l	SW846 8081B

JD40098-4 MW-2R

Benzo(a)pyrene	1.2 J	2.0	0.43	ug/l	SW846 8270E
1,1'-Biphenyl	0.48 J	2.0	0.42	ug/l	SW846 8270E
bis(2-Ethylhexyl)phthalate	3.4 J	4.0	3.3	ug/l	SW846 8270E
Total TIC, Semi-Volatile	183.4 J			ug/l	
gamma-Chlordane	0.0068	0.0050	0.0021	ug/l	SW846 8081B

(a) More than 40 % RPD for detected concentrations between the two GC columns.



Dayton, NJ

Section 4

4

Sample Results

Report of Analysis

Report of Analysis

Page 1 of 3

Client Sample ID:	MW-3R	Date Sampled:	02/22/22
Lab Sample ID:	JD40098-1	Date Received:	02/22/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P147709.D	1	02/25/22 14:21	KLS	02/24/22 10:00	OP38312	EP6818
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	4.8	0.78	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.8	0.85	ug/l	
120-83-2	2,4-Dichlorophenol	ND	1.9	1.2	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.8	2.3	ug/l	
51-28-5	2,4-Dinitrophenol	ND	4.8	1.5	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	4.8	1.2	ug/l	
95-48-7	2-Methylphenol	ND	1.9	0.85	ug/l	
	3&4-Methylphenol	ND	1.9	0.84	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.91	ug/l	
100-02-7	4-Nitrophenol	ND	9.5	1.1	ug/l	
87-86-5	Pentachlorophenol	ND	3.8	1.3	ug/l	
108-95-2	Phenol	ND	1.9	0.37	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	4.8	1.4	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.8	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.88	ug/l	
83-32-9	Acenaphthene	ND	0.95	0.18	ug/l	
208-96-8	Acenaphthylene	ND	0.95	0.13	ug/l	
98-86-2	Acetophenone	ND	1.9	0.20	ug/l	
120-12-7	Anthracene	ND	0.95	0.20	ug/l	
1912-24-9	Atrazine	ND	1.9	0.43	ug/l	
100-52-7	Benzaldehyde	ND	4.8	0.28	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.95	0.19	ug/l	
50-32-8	Benzo(a)pyrene	0.67	0.95	0.20	ug/l	J
205-99-2	Benzo(b)fluoranthene	ND	0.95	0.20	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.95	0.32	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.95	0.20	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	1.9	0.38	ug/l	
85-68-7	Butyl benzyl phthalate	ND	1.9	0.44	ug/l	
92-52-4	1,1'-Biphenyl	ND	0.95	0.20	ug/l	
91-58-7	2-Chloronaphthalene	ND	1.9	0.22	ug/l	
106-47-8	4-Chloroaniline	ND	4.8	0.32	ug/l	
86-74-8	Carbazole	ND	0.95	0.22	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3R	Date Sampled:	02/22/22
Lab Sample ID:	JD40098-1	Date Received:	02/22/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	1.9	0.62	ug/l	
218-01-9	Chrysene	ND	0.95	0.17	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	1.9	0.26	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	1.9	0.24	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	1.9	0.38	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1.9	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.95	0.53	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.95	0.45	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	1.9	0.48	ug/l	
123-91-1	1,4-Dioxane	ND	0.95	0.63	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.95	0.32	ug/l	
132-64-9	Dibenzofuran	ND	4.8	0.21	ug/l	
84-74-2	Di-n-butyl phthalate	ND	1.9	0.47	ug/l	
117-84-0	Di-n-octyl phthalate	ND	1.9	0.22	ug/l	
84-66-2	Diethyl phthalate	0.58	1.9	0.25	ug/l	J
131-11-3	Dimethyl phthalate	ND	1.9	0.21	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1.9	1.6	ug/l	
206-44-0	Fluoranthene	ND	0.95	0.16	ug/l	
86-73-7	Fluorene	ND	0.95	0.16	ug/l	
118-74-1	Hexachlorobenzene	ND	0.95	0.31	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.95	0.47	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	9.5	2.6	ug/l	
67-72-1	Hexachloroethane	ND	1.9	0.37	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.95	0.32	ug/l	
78-59-1	Isophorone	ND	1.9	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.95	0.20	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	0.26	ug/l	
99-09-2	3-Nitroaniline	ND	4.8	0.37	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	0.42	ug/l	
91-20-3	Naphthalene	ND	0.95	0.22	ug/l	
98-95-3	Nitrobenzene	ND	1.9	0.61	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	1.9	0.46	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.21	ug/l	
85-01-8	Phenanthrene	ND	0.95	0.17	ug/l	
129-00-0	Pyrene	ND	0.95	0.21	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1.9	0.35	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	27%		10-90%

ND = Not detected MDL = Method Detection Limit

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N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-3R	Date Sampled:	02/22/22
Lab Sample ID:	JD40098-1	Date Received:	02/22/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
4165-62-2	Phenol-d5	18%		10-101%		
118-79-6	2,4,6-Tribromophenol	92%		23-155%		
4165-60-0	Nitrobenzene-d5	66%		25-141%		
321-60-8	2-Fluorobiphenyl	79%		35-126%		
1718-51-0	Terphenyl-d14	57%		15-139%		
CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q	
	unknown	5.70	6.8	ug/l	J	
	Benzoic acid, -dichloro-	6.78	67	ug/l	J	
	Total TIC, Semi-Volatile		73.8	ug/l	J	

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 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-3R	Date Sampled:	02/22/22
Lab Sample ID:	JD40098-1	Date Received:	02/22/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8081B SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G41755.D	1	03/03/22 04:16	CP	02/24/22 10:00	OP38316A	G8G1784
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0050	0.0026	ug/l	
319-84-6	alpha-BHC	ND	0.0050	0.0026	ug/l	
319-85-7	beta-BHC	ND	0.0050	0.0040	ug/l	
319-86-8	delta-BHC	ND	0.0050	0.0033	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0050	0.0030	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0050	0.0025	ug/l	
5103-74-2	gamma-Chlordane ^a	0.0067	0.0050	0.0021	ug/l	
60-57-1	Dieldrin	ND	0.0050	0.0038	ug/l	
72-54-8	4,4' -DDD	ND	0.0050	0.0029	ug/l	
72-55-9	4,4' -DDE	ND	0.0050	0.0025	ug/l	
50-29-3	4,4' -DDT	ND	0.0050	0.0034	ug/l	
72-20-8	Endrin	ND	0.0050	0.0030	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0050	0.0027	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0050	0.0034	ug/l	
53494-70-5	Endrin ketone	ND	0.0050	0.0031	ug/l	
959-98-8	Endosulfan-I	ND	0.0050	0.0026	ug/l	
33213-65-9	Endosulfan-II	ND	0.0050	0.0024	ug/l	
76-44-8	Heptachlor	ND	0.0050	0.0022	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0050	0.0030	ug/l	
72-43-5	Methoxychlor	ND	0.010	0.0034	ug/l	
8001-35-2	Toxaphene	ND	0.13	0.082	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	153%		10-190%
877-09-8	Tetrachloro-m-xylene	84%		10-190%
2051-24-3	Decachlorobiphenyl	38%		10-156%
2051-24-3	Decachlorobiphenyl	42%		10-156%

(a) More than 40 % RPD for detected concentrations between the two GC columns.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-3R	Date Sampled:	02/22/22
Lab Sample ID:	JD40098-1	Date Received:	02/22/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8082A SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G213619.D	1	02/28/22 02:42	CP	02/24/22 10:00	OP38317A	G2G5605
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	0.098	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	0.21	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	0.13	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	0.11	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	0.063	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	0.21	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	0.076	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	0.087	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	0.097	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%		10-174%
877-09-8	Tetrachloro-m-xylene	76%		10-174%
2051-24-3	Decachlorobiphenyl	42%		10-151%
2051-24-3	Decachlorobiphenyl	49%		10-151%

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Report of Analysis

Page 1 of 1

Client Sample ID:	MW-3R	Date Sampled:	02/22/22
Lab Sample ID:	JD40098-1	Date Received:	02/22/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	1001 Whitlock Avenue, Bronx, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	1070	200	ug/l	1	02/23/22	02/23/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Antimony	< 6.0	6.0	ug/l	1	02/23/22	02/23/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Arsenic	< 3.0	3.0	ug/l	1	02/23/22	02/23/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Barium	< 200	200	ug/l	1	02/23/22	02/23/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Beryllium	< 1.0	1.0	ug/l	1	02/23/22	02/23/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Cadmium	< 3.0	3.0	ug/l	1	02/23/22	02/23/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Calcium	63100	5000	ug/l	1	02/23/22	02/23/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Chromium	< 10	10	ug/l	1	02/23/22	02/23/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Cobalt	< 50	50	ug/l	1	02/23/22	02/23/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Copper	< 10	10	ug/l	1	02/23/22	02/23/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Iron	3440	100	ug/l	1	02/23/22	02/23/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Lead	4.4	3.0	ug/l	1	02/23/22	02/24/22	ND	SW846 6010D ³ SW846 3010A ⁴
Magnesium	17600	5000	ug/l	1	02/23/22	02/23/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Manganese	2030	15	ug/l	1	02/23/22	02/23/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Mercury	< 0.20	0.20	ug/l	1	02/25/22	02/25/22	LM	SW846 7470A ² SW846 7470A ⁵
Nickel	< 10	10	ug/l	1	02/23/22	02/23/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Potassium	< 10000	10000	ug/l	1	02/23/22	02/23/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Selenium	< 10	10	ug/l	1	02/23/22	02/23/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Silver	< 10	10	ug/l	1	02/23/22	02/23/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Sodium	31800	10000	ug/l	1	02/23/22	02/23/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Thallium	< 10	10	ug/l	1	02/23/22	02/23/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Vanadium	< 50	50	ug/l	1	02/23/22	02/23/22	ND	SW846 6010D ¹ SW846 3010A ⁴
Zinc	22.3	20	ug/l	1	02/23/22	02/23/22	ND	SW846 6010D ¹ SW846 3010A ⁴

(1) Instrument QC Batch: MA51952

(2) Instrument QC Batch: MA51954

(3) Instrument QC Batch: MA51956

(4) Prep QC Batch: MP31431

(5) Prep QC Batch: MP31471

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-3R	Date Sampled:	02/22/22
Lab Sample ID:	JD40098-1A	Date Received:	02/22/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	1001 Whitlock Avenue, Bronx, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.010	0.010	mg/l	1	02/28/22 14:54	MM	EPA 335.4/LACHAT

RL = Reporting Limit

Report of Analysis

Page 1 of 3

Client Sample ID:	R1-MW-4	Date Sampled:	02/22/22
Lab Sample ID:	JD40098-2	Date Received:	02/22/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P147710.D	1	02/25/22 14:46	KLS	02/24/22 10:00	OP38312	EP6818
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	5.0	1.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.0	1.3	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.96	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	1.5	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
98-86-2	Acetophenone	ND	2.0	0.21	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
1912-24-9	Atrazine	ND	2.0	0.45	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.29	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.21	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.40	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.21	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
86-74-8	Carbazole	ND	1.0	0.23	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	R1-MW-4	Date Sampled:	02/22/22
Lab Sample ID:	JD40098-2	Date Received:	02/22/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	2.0	0.65	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
123-91-1	1,4-Dioxane	1.1	1.0	0.66	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.22	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.21	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.28	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.39	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.44	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.37	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	31%		10-90%

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	R1-MW-4	Date Sampled:	02/22/22
Lab Sample ID:	JD40098-2	Date Received:	02/22/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	21%		10-101%
118-79-6	2,4,6-Tribromophenol	84%		23-155%
4165-60-0	Nitrobenzene-d5	58%		25-141%
321-60-8	2-Fluorobiphenyl	62%		35-126%
1718-51-0	Terphenyl-d14	61%		15-139%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

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Report of Analysis

Page 1 of 1

Client Sample ID:	R1-MW-4	Date Sampled:	02/22/22
Lab Sample ID:	JD40098-2	Date Received:	02/22/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8081B SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G41756.D	1	03/03/22 04:32	CP	02/24/22 10:00	OP38316A	G8G1784
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0050	0.0026	ug/l	
319-84-6	alpha-BHC	ND	0.0050	0.0026	ug/l	
319-85-7	beta-BHC	ND	0.0050	0.0040	ug/l	
319-86-8	delta-BHC	ND	0.0050	0.0033	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0050	0.0030	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0050	0.0025	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0050	0.0021	ug/l	
60-57-1	Dieldrin	ND	0.0050	0.0038	ug/l	
72-54-8	4,4'-DDD	ND	0.0050	0.0029	ug/l	
72-55-9	4,4'-DDE ^a	0.0056	0.0050	0.0025	ug/l	
50-29-3	4,4'-DDT	ND	0.0050	0.0034	ug/l	
72-20-8	Endrin	ND	0.0050	0.0030	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0050	0.0027	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0050	0.0034	ug/l	
53494-70-5	Endrin ketone	ND	0.0050	0.0031	ug/l	
959-98-8	Endosulfan-I	ND	0.0050	0.0026	ug/l	
33213-65-9	Endosulfan-II	ND	0.0050	0.0024	ug/l	
76-44-8	Heptachlor	ND	0.0050	0.0022	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0050	0.0030	ug/l	
72-43-5	Methoxychlor	ND	0.010	0.0034	ug/l	
8001-35-2	Toxaphene	ND	0.13	0.082	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	101%		10-190%
877-09-8	Tetrachloro-m-xylene	85%		10-190%
2051-24-3	Decachlorobiphenyl	47%		10-156%
2051-24-3	Decachlorobiphenyl	47%		10-156%

(a) More than 40 % RPD for detected concentrations between the two GC columns.

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	R1-MW-4	Date Sampled:	02/22/22
Lab Sample ID:	JD40098-2	Date Received:	02/22/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8082A SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G213620.D	1	02/28/22 02:59	CP	02/24/22 10:00	OP38317A	G2G5605
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	0.098	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	0.21	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	0.13	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	0.11	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	0.063	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	0.21	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	0.076	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	0.087	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	0.097	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	70%		10-174%
877-09-8	Tetrachloro-m-xylene	75%		10-174%
2051-24-3	Decachlorobiphenyl	49%		10-151%
2051-24-3	Decachlorobiphenyl	62%		10-151%

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Report of Analysis

Page 1 of 3

Client Sample ID:	DUP	Date Sampled:	02/22/22
Lab Sample ID:	JD40098-3	Date Received:	02/22/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P147711.D	1	02/25/22 15:11	KLS	02/24/22 10:00	OP38312	EP6818
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	5.0	1.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.0	1.3	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.96	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	1.5	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
98-86-2	Acetophenone	ND	2.0	0.21	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
1912-24-9	Atrazine	ND	2.0	0.45	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.29	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.21	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.40	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.21	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
86-74-8	Carbazole	ND	1.0	0.23	ug/l	

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J = Indicates an estimated value

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Report of Analysis

Page 2 of 3

Client Sample ID:	DUP	Date Sampled:	02/22/22
Lab Sample ID:	JD40098-3	Date Received:	02/22/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	2.0	0.65	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
123-91-1	1,4-Dioxane	ND	1.0	0.66	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.22	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.21	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.28	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.39	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.44	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.37	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	43%		10-90%

ND = Not detected MDL = Method Detection Limit

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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: DUP	Date Sampled: 02/22/22
Lab Sample ID: JD40098-3	Date Received: 02/22/22
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8270E SW846 3510C	
Project: 1001 Whitlock Avenue, Bronx, NY	

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	33%		10-101%
118-79-6	2,4,6-Tribromophenol	94%		23-155%
4165-60-0	Nitrobenzene-d5	67%		25-141%
321-60-8	2-Fluorobiphenyl	69%		35-126%
1718-51-0	Terphenyl-d14	78%		15-139%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
57-10-3	n-Hexadecanoic acid	9.54	7.3	ug/l	JN
57-11-4	Octadecanoic acid	11.14	5.6	ug/l	JN
	Total TIC, Semi-Volatile		12.9	ug/l	J

ND = Not detected MDL = Method Detection Limit
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 E = Indicates value exceeds calibration range

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 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	DUP	Date Sampled:	02/22/22
Lab Sample ID:	JD40098-3	Date Received:	02/22/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8081B SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G41757.D	1	03/03/22 04:50	CP	02/24/22 10:00	OP38316A	G8G1784
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0050	0.0026	ug/l	
319-84-6	alpha-BHC	ND	0.0050	0.0026	ug/l	
319-85-7	beta-BHC	ND	0.0050	0.0040	ug/l	
319-86-8	delta-BHC	ND	0.0050	0.0033	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0050	0.0030	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0050	0.0025	ug/l	
5103-74-2	gamma-Chlordane ^a	0.0053	0.0050	0.0021	ug/l	
60-57-1	Dieldrin	ND	0.0050	0.0038	ug/l	
72-54-8	4,4' -DDD	ND	0.0050	0.0029	ug/l	
72-55-9	4,4' -DDE	0.0062	0.0050	0.0025	ug/l	
50-29-3	4,4' -DDT	ND	0.0050	0.0034	ug/l	
72-20-8	Endrin	ND	0.0050	0.0030	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0050	0.0027	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0050	0.0034	ug/l	
53494-70-5	Endrin ketone	ND	0.0050	0.0031	ug/l	
959-98-8	Endosulfan-I	ND	0.0050	0.0026	ug/l	
33213-65-9	Endosulfan-II	ND	0.0050	0.0024	ug/l	
76-44-8	Heptachlor	ND	0.0050	0.0022	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0050	0.0030	ug/l	
72-43-5	Methoxychlor	ND	0.010	0.0034	ug/l	
8001-35-2	Toxaphene	ND	0.13	0.082	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	96%		10-190%
877-09-8	Tetrachloro-m-xylene	94%		10-190%
2051-24-3	Decachlorobiphenyl	37%		10-156%
2051-24-3	Decachlorobiphenyl	40%		10-156%

(a) More than 40 % RPD for detected concentrations between the two GC columns.

ND = Not detected MDL = Method Detection Limit

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N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	DUP	Date Sampled:	02/22/22
Lab Sample ID:	JD40098-3	Date Received:	02/22/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8082A SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G213621.D	1	02/28/22 03:15	CP	02/24/22 10:00	OP38317A	G2G5605
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	0.098	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	0.21	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	0.13	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	0.11	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	0.063	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	0.21	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	0.076	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	0.087	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	0.097	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	70%		10-174%
877-09-8	Tetrachloro-m-xylene	76%		10-174%
2051-24-3	Decachlorobiphenyl	37%		10-151%
2051-24-3	Decachlorobiphenyl	47%		10-151%

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Report of Analysis

Page 1 of 3

Client Sample ID:	MW-2R	Date Sampled:	02/22/22
Lab Sample ID:	JD40098-4	Date Received:	02/22/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P147720.D	1	02/25/22 18:56	KLS	02/24/22 10:00	OP38312	EP6818
Run #2							

Run #	Initial Volume	Final Volume
Run #1	250 ml	0.50 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	10	1.6	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	1.8	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.0	2.5	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	4.9	ug/l	
51-28-5	2,4-Dinitrophenol	ND	10	3.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	2.6	ug/l	
95-48-7	2-Methylphenol	ND	4.0	1.8	ug/l	
	3&4-Methylphenol	ND	4.0	1.8	ug/l	
88-75-5	2-Nitrophenol	ND	10	1.9	ug/l	
100-02-7	4-Nitrophenol	ND	20	2.3	ug/l	
87-86-5	Pentachlorophenol	ND	8.0	2.8	ug/l	
108-95-2	Phenol	ND	4.0	0.78	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	10	2.9	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	2.7	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	1.8	ug/l	
83-32-9	Acenaphthene	ND	2.0	0.38	ug/l	
208-96-8	Acenaphthylene	ND	2.0	0.27	ug/l	
98-86-2	Acetophenone	ND	4.0	0.42	ug/l	
120-12-7	Anthracene	ND	2.0	0.42	ug/l	
1912-24-9	Atrazine	ND	4.0	0.89	ug/l	
100-52-7	Benzaldehyde	ND	10	0.58	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.0	0.41	ug/l	
50-32-8	Benzo(a)pyrene	1.2	2.0	0.43	ug/l	J
205-99-2	Benzo(b)fluoranthene	ND	2.0	0.41	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.0	0.68	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.0	0.41	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.0	0.81	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.0	0.91	ug/l	
92-52-4	1,1'-Biphenyl	0.48	2.0	0.42	ug/l	J
91-58-7	2-Chloronaphthalene	ND	4.0	0.47	ug/l	
106-47-8	4-Chloroaniline	ND	10	0.68	ug/l	
86-74-8	Carbazole	ND	2.0	0.46	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	02/22/22
Lab Sample ID:	JD40098-4	Date Received:	02/22/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	4.0	1.3	ug/l	
218-01-9	Chrysene	ND	2.0	0.35	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	4.0	0.56	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.0	0.50	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	4.0	0.81	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.0	0.73	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	1.1	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.95	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.0	1.0	ug/l	
123-91-1	1,4-Dioxane	ND	2.0	1.3	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.0	0.66	ug/l	
132-64-9	Dibenzofuran	ND	10	0.44	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.0	0.99	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.0	0.47	ug/l	
84-66-2	Diethyl phthalate	ND	4.0	0.52	ug/l	
131-11-3	Dimethyl phthalate	ND	4.0	0.44	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	3.4	4.0	3.3	ug/l	J
206-44-0	Fluoranthene	ND	2.0	0.34	ug/l	
86-73-7	Fluorene	ND	2.0	0.34	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	0.65	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.98	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	5.6	ug/l	
67-72-1	Hexachloroethane	ND	4.0	0.78	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.0	0.66	ug/l	
78-59-1	Isophorone	ND	4.0	0.55	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.42	ug/l	
88-74-4	2-Nitroaniline	ND	10	0.55	ug/l	
99-09-2	3-Nitroaniline	ND	10	0.77	ug/l	
100-01-6	4-Nitroaniline	ND	10	0.88	ug/l	
91-20-3	Naphthalene	ND	2.0	0.46	ug/l	
98-95-3	Nitrobenzene	ND	4.0	1.3	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.0	0.96	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	10	0.44	ug/l	
85-01-8	Phenanthrene	ND	2.0	0.35	ug/l	
129-00-0	Pyrene	ND	2.0	0.44	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	4.0	0.74	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	56%		10-90%

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Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	02/22/22
Lab Sample ID:	JD40098-4	Date Received:	02/22/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270E SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	50%		10-101%
118-79-6	2,4,6-Tribromophenol	83%		23-155%
4165-60-0	Nitrobenzene-d5	66%		25-141%
321-60-8	2-Fluorobiphenyl	67%		35-126%
1718-51-0	Terphenyl-d14	82%		15-139%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown acid	2.63	9.9	ug/l	J
	unknown	4.22	18	ug/l	J
	unknown	5.85	12	ug/l	J
	unknown	5.90	10	ug/l	J
	unknown	6.41	8.3	ug/l	J
	Benzoic acid dichloro -	6.75	37	ug/l	J
	system artifact	7.21	11	ug/l	J
	system artifact	8.56	8.7	ug/l	J
	unknown acid	9.54	25	ug/l	J
	unknown	9.69	12	ug/l	J
	system artifact	10.87	12	ug/l	J
	unknown acid	11.14	21	ug/l	J
	unknown	12.03	8.6	ug/l	J
	system artifact	13.52	8.5	ug/l	J
	system artifact	14.54	11	ug/l	J
	system artifact	15.49	9	ug/l	J
	unknown	15.61	9.6	ug/l	J
	system artifact	16.29	9	ug/l	J
	Total TIC, Semi-Volatile		183.4	ug/l	J

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Report of Analysis

Page 1 of 1

Client Sample ID:	MW-2R	Date Sampled:	02/22/22
Lab Sample ID:	JD40098-4	Date Received:	02/22/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8081B SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G41758.D	1	03/03/22 05:06	CP	02/24/22 10:00	OP38316A	G8G1784
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0050	0.0026	ug/l	
319-84-6	alpha-BHC	ND	0.0050	0.0026	ug/l	
319-85-7	beta-BHC	ND	0.0050	0.0040	ug/l	
319-86-8	delta-BHC	ND	0.0050	0.0033	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0050	0.0030	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0050	0.0025	ug/l	
5103-74-2	gamma-Chlordane	0.0068	0.0050	0.0021	ug/l	
60-57-1	Dieldrin	ND	0.0050	0.0038	ug/l	
72-54-8	4,4'-DDD	ND	0.0050	0.0029	ug/l	
72-55-9	4,4'-DDE	ND	0.0050	0.0025	ug/l	
50-29-3	4,4'-DDT	ND	0.0050	0.0034	ug/l	
72-20-8	Endrin	ND	0.0050	0.0030	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0050	0.0027	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0050	0.0034	ug/l	
53494-70-5	Endrin ketone	ND	0.0050	0.0031	ug/l	
959-98-8	Endosulfan-I	ND	0.0050	0.0026	ug/l	
33213-65-9	Endosulfan-II	ND	0.0050	0.0024	ug/l	
76-44-8	Heptachlor	ND	0.0050	0.0022	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0050	0.0030	ug/l	
72-43-5	Methoxychlor	ND	0.010	0.0034	ug/l	
8001-35-2	Toxaphene	ND	0.13	0.082	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	150%		10-190%
877-09-8	Tetrachloro-m-xylene	114%		10-190%
2051-24-3	Decachlorobiphenyl	42%		10-156%
2051-24-3	Decachlorobiphenyl	47%		10-156%

ND = Not detected MDL = Method Detection Limit

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Report of Analysis

Page 1 of 1

Client Sample ID:	MW-2R	Date Sampled:	02/22/22
Lab Sample ID:	JD40098-4	Date Received:	02/22/22
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8082A SW846 3510C		
Project:	1001 Whitlock Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G213622.D	1	02/28/22 03:32	CP	02/24/22 10:00	OP38317A	G2G5605
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	0.098	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	0.21	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	0.13	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	0.11	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	0.063	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	0.21	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	0.076	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	0.087	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	0.097	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		10-174%
877-09-8	Tetrachloro-m-xylene	85%		10-174%
2051-24-3	Decachlorobiphenyl	46%		10-151%
2051-24-3	Decachlorobiphenyl	55%		10-151%

ND = Not detected MDL = Method Detection Limit

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Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Page 1 of 1

FED-EX Tracking #	Bottle Order Control # Pocm KR- 021722-73
SGS Quote #	SGS Job # JD 40018

www.sgs.com/ehsusa

5.1

Page 1 of 2

SGS Sample Receipt Summary

Job Number: JD40098

Client: SESI CONSULTING ENGINEERS

Project: 1001 WHITLOCK AVENUE, BRONX, NY

Date / Time Received: 2/22/2022 5:56:00 PM

Delivery Method:
Airbill #s:
Cooler Temps (Raw Measured) °C: Cooler 1: (3.9);

Cooler Temps (Corrected) °C: Cooler 1: (2.3);

Cooler Security
Y or N
Y or N

- | | |
|--|---|
| 1. Custody Seals Present: ☒ ☐ | 3. COC Present: ☒ ☐ |
| 2. Custody Seals Intact: ☒ ☐ | 4. Smpl Dates/Time OK: ☒ ☐ |

Cooler Temperature
Y or N

- | | |
|---|-----------|
| 1. Temp criteria achieved: ☒ ☐ | IR Gun |
| 2. Cooler temp verification: | |
| 3. Cooler media: | Ice (Bag) |
| 4. No. Coolers: | 1 |

Quality Control Preservation
Y or N
N/A

- | | |
|---|---|
| 1. Trip Blank present / cooler: ☐ ☐ | N/A ☒ |
| 2. Trip Blank listed on COC: ☐ ☐ | N/A ☒ |
| 3. Samples preserved properly: ☒ ☐ | |
| 4. VOCs headspace free: ☐ ☐ | N/A ☒ |

Sample Integrity - Documentation
Y or N

- | | |
|---|--|
| 1. Sample labels present on bottles: ☒ ☐ | |
| 2. Container labeling complete: ☒ ☐ | |
| 3. Sample container label / COC agree: ☒ ☐ | |

Sample Integrity - Condition
Y or N

- | | |
|---|--------|
| 1. Sample recvd within HT: ☒ ☐ | |
| 2. All containers accounted for: ☒ ☐ | |
| 3. Condition of sample: | Intact |

Sample Integrity - Instructions
Y or N
N/A

- | | |
|---|---|
| 1. Analysis requested is clear: ☒ ☐ | |
| 2. Bottles received for unspecified tests: ☐ ☒ | |
| 3. Sufficient volume recvd for analysis: ☒ ☐ | |
| 4. Compositing instructions clear: ☐ ☐ | N/A ☒ |
| 5. Filtering instructions clear: ☐ ☐ | N/A ☒ |

Test Strip Lot #s:

pH 1-12: 231619

pH 12+: 203117A

Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JD40098: Chain of Custody

Page 2 of 2

Appendix E: Data Usability Summary Report

HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

March 17th, 2022

Mr. Jesse Mausner, PG, LSRP, Project Manager
SESI Consulting Engineers
12A Maple Avenue
Pine Brook NJ, 07058

Re: Data Usability Summary Reports and Quality Assurance Validation Analyses for
SGS North America Inc. Project **(SDG) No.: JD39687**

Client Project ID: 11819–1001 Whitlock Avenue, Bronx, NY

Dear Mr. Mausner,

I thank you for your confidence in our data validation services and look forward to the growth of our business relationship. I Have enclosed with this letter the data usability summary reports (DUSRs) and data validation summaries for the above referenced laboratory (SDG) numbers issued by SGS North America Inc.

The overall evaluation of the SDG# JD39687 displays good degree of confidence and acceptance in accordance with the guidelines in the USEPA National Functional Guidelines and the method and QC Criteria specified in NYSDEC ASP Documents except for some qualified results that are identified in the validation summaries based solely on the stated above validation guidance criteria. However, the qualified data (Bias low, Bias High, Unreliable or unusable) may be subject to the user's reconsideration or determination in the circumstances of obtaining additional information that is not contained in the data validation criteria.

If you have any questions or comments regarding any of the attached data usability summary reports and or the data validation summaries, please do not hesitate to contact me at (413) 875-5049 or via email at hanibaltayeh@gmail.com.

Sincerely,



Hanibal C. Tayeh, Ph.D.

Data Validation and Forensic Geochemistry Expert

Files: DUSR-SESI-11819–1001 Whitlock Avenue, Bronx, NY - JD39687

DATA USABILITY SUMMARY REPORT (DUSR)

Site Location: 1001 Whitlock Avenue, Bronx, NY

SGS North America Inc.

Laboratory (SDG) # JD39687

Project No. 11819

Prepared for:

Mr. Jesse Mausner, PG, LSRP, Project Manager

SESI Consulting Engineers

12A Maple Avenue

Pine Brook NJ, 07058

Prepared by:

Hanibal Tayeh, Ph.D.

Data Validation and Forensic Geochemistry Expert

On

March 17th, 2022

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1. GLOSSARY OF ACRONYMS & TERMS

The following acronyms and terms may have been used in the descriptive process of the Organic and Inorganic Data Validation.

Acronyms:

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene (volatile instrument performance check)
BNA	Base/Neutral/Acid
CARD	CLP Analytical Results Database
CCB	Continuing Calibration Blank
CCCs	Calibration Check Compounds
CCS	Contract Compliance Screening
CCV	Continuing Calibration Verification
CF	Calibration Factor
CLP	Contract Laboratory Program
CN	Cyanide
COC	Chain of Custody
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
CSF	Complete SDG File
CV	Cold Vapor
%D	Percent Difference
DAS	Delivery of Analytical Services
DCAA	2,4-Dichlorophenylacetic acid
DCB	Decachlorobiphenyl (Pesticide/PCB/ surrogate compound)
DFTPP	Decafluorotriphenylphosphine (semivolatile instrument performance check)
DSF	Data Summary Form
DVA	Data Validation Assessment
ECD	Electron-Capture Detector
EICP	Extended Ion Current Profile
EPA	United States Environmental Protection Agency
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas Chromatography
GC/EC	Gas Chromatography/Electron Capture
GC/MS	Gas Chromatography/Mass Spectra
GPC	Gel Permeation Chromatography (Clean Up)
ICAL	Initial Calibration
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit

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IRDA	Inorganic Regional Data Assessment
IS	Internal Standard
LCS	Laboratory Control Sample
LCL	Lower Control Limit
MCL	Maximum Contamination Level
MDL	Method Detection Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
m/z	The ratio of mass (m) to charge (z) of ions measured by GC/MS
OADS	Organic Analysis Data Sheet (Form 1)
ORDA	Organic Regional Data Assessment
PB	Preparation Blank
PCB	Poly Chlorinated Biphenyl
PEM	Performance Evaluation Mixture
PFAS	Polyfluorinated Alkyl Substances (PFAS analytes are listed below)
PRP	Potential Responsible Party
QA/QC	Quality Assurance/Quality Control
QAPjP	Quality Assurance Project Plan
QC	Quality Control
%R	Percent Recovery of spiked amount
RAS	Routine Analytical Services
RF	Response Factor
RIC	Reconstructed Ion Chromatogram
RPD	Relative Percent Difference
RRF	Relative Response Factor
RSD	Relative Standard Deviation
RT	Retention Time
RTW	Retention Time Window
SDG	Sample Delivery Group
SMC	System Monitoring Compound
SMO	Sample Management Office
SOP	Standard Operation Procedures
SOW	Statement of Work
SPCCs	System Performance Check Compounds
SSL	Samples Shipping Log
SVOA	Semivolatile Organic Analyte
TAL	Target Analyte List
TCL	Target Compound List
TCX	Tetrachloro-m-Xylene (Pesticide/PCB surrogate compound)
TIC	Tentatively Identified Compound
TPH	Total Petroleum Hydrocarbons
TR	Traffic Report
UCL	Upper Control Limit
VOA	Volatile Organic Analyte
VTSR	Validated Time of Sample Receipt

Polyfluorinated Alkyl Substances (PFAS) Acronyms

PFBA	Perfluorobutanoic acid
PFPeA	Perfluoropentanoic acid
PFHxA	Perfluorohexanoic acid
PFHpA	Perfluoroheptanoic acid
PFOA	Perfluorooctanoic acid
PFNA	Perfluorononanoic acid
PFDA	Perfluorodecanoic acid
PFUnA	Perfluoroundecanoic acid
PFDoA	Perfluorododecanoic acid
PFTriA or PFTriDA	Perfluorotridecanoic acid
PFTeA or PFTA	Perfluorotetradecanoic acid
PFBS	Perfluorobutanesulfonic acid
PFPeS	Perfluoropentanesulfonic acid
PFHxS	Perfluorohexanesulfonic acid
PFHpS	Perfluoroheptanesulfonic acid
PFOS	Perfluorooctanesulfonic acid
PFNS	Perfluorononanesulfonic acid
PFDS	Perfluorodecanesulfonic acid
FOSA	Perfluorooctane Sulfonamide
NMeFOSAA	N-methyl perfluorooctane sulfonamidoacetic acid
NEtFOSAA	N-ethyl perfluorooctane sulfonamidoacetic acid
4:2 FTS or 4:2	1H, 1H, 2H, 2H-perfluorohexanesulfonic acid
6:2 FTS or 6:2	1H, 1H, 2H, 2H-perfluorooctanesulfonic acid or 6:2 Fluorotelomersulfonate
8:2 FTS or 8:2	1H, 1H, 2H, 2H-perfluorodecanesulfonic acid or 8:2 Fluorotelomersulfonate

Terms:

Associated Samples: Any sample related to a particular QC analysis.

Case: A finite, usually predetermined number of samples collected over a given time period for a particular site. A Case consists of one or more Sample Delivery Group(s).

Continuing Calibration Blank (CCB): A deionized water sample run every ten (10) samples designed to detect any carryover contamination.

Continuing Calibration Verification (CCV): A deionized water sample run every ten (10) samples designed to detect any carryover contamination.

Contract Compliance Screening (CCS): A process in which the SMO inspects the data for contractual compliance and provides EMSL-LV laboratories and the Regions with their findings.

Contractual Holding Time: The time from VTSR (validated time of sample receipt) to laboratory extraction and /or analysis.

Data Validation Qualifier (DVQ): This refers to the column on the data summary form in which EPA Region III and other qualifiers have been placed by the data validator.

Data Validation Result (DVR): This refers to the column on the data summary form used to report results that have been modified by the data validator. A result in the DVR column that is qualified "U" indicates a modification of the reporting limit.

Field Blank Field blanks are intended to identify contaminants that may have been introduced in the field. Examples are rinsate blank (RB), field blanks (FB) and trip blank (TB).

Field Duplicate: A duplicate sample generated in the field; not in the laboratory.

Initial Calibration (ICAL): The establishment of a calibration curve with the appropriate number of standards and concentration ranges. The calibration curve plots absorbances and/or emissions versus concentration of the standards.

Initial Calibration Blank (ICB): First blank run after the calibration curve.

Initial Calibration Verification (ICV): First standard run after the calibration curve.

Matrix Spike/Matrix Spike Duplicate (MS/MSD): Introduction of a known concentration of a compound into a sample to provide information about the effect of sample matrix on the extraction and/or measurement methodology.

Post Digestion Spike: The addition of known amount of standard after digestion. (Also identified as analytical spike, or spike, for furnace analyses).

Preparation Blank (PB): Blank taken through the digestion process to detect internal laboratory contamination.

Performance Evaluation Mixture: A standard used to verify that the ICAL sequence is stable throughout the GC or GC/MS analyses.

Sample Delivery Group (SDG): Defined by one of the following, whichever occurs first:

- case of sample
- each twenty field samples in a case or
- each 14-day calendar period during which field samples in a case are received, beginning with the receipt of the first sample in the SDG.

Serial Dilution: A sample run at a specific dilution to determine whether any significant chemical or physical interferences exist due to sample matrix effect, for ICP only.

Technical Holding Time: The time from sample collection to laboratory extraction and /or analysis.

2. GLOSSARY OF DATA VALIDATION QUALIFIERS

(Used in the QA/QC Reviews for USEPA Region II)

The qualifiers listed below are used for data usability summary report (DUSR) purposes. However, it is important to note that the data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+	=	Analyte is present. Reported value may be biased high and associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

3. NYS DEC DATA USABILITY SUMMARY PARAMETERS

The parameters listed below are used for data usability summary report (DUSR) evaluation.

<i>Samples Handling and Management</i>
<i>Data Validation References</i>
<i>Laboratory Data Packages</i>
<i>Laboratory Analytical Methods</i>
<i>DATA Usability Assessment Summary</i>

4. DATA VALIDATION SUMMARY PARAMETERS

The parameters listed below are used for data validation evaluation.

	<i>Organic Data</i>	<i>Inorganic Data</i>
<i>Data Completeness</i>	X	X
<i>Holding Time</i>	X	X
<i>Chromatographic Behavior</i>	X	
<i>Compound Identification</i>	X	X
<i>GC/MS Tuning and Mass Calibration</i>	X	
<i>Initial Calibration Verification</i>	X	X
<i>Continuing Calibration</i>	X	X
<i>Method Blank Verification</i>	X	X
<i>Internal Standard Area Summary</i>	X	
<i>Surrogate Recoveries</i>	X	
<i>Matrix Spike/Matrix Spike Duplicate</i>	X	X
<i>Laboratory Control Sample (LCS)</i>	X	X
<i>Laboratory and Field Duplicates</i>	X	X
<i>ICP Interference Check Sample results</i>		X
<i>ICP Serial Dilution results</i>		X
<i>ICP CRDL Standard</i>		X
<i>Post Digestion Spike Analysis</i>		X
<i>Analyte Quantitation</i>		X

5. DATA VALIDATION ACTIVE STANDARD OPERATING PROCEDURES (SOPs)

Region 2 Quality Assurance Guidance and Standard Operating Procedures

<https://www.epa.gov/quality/region-2-quality-assurance-guidance-and-standard-operating-procedures>

Inorganic Validation SOPs

SOP #	Description	Date
SOP HW-3a ICP-AES Rev1 w/CRF	CLP ISM02.2 ICP-AES	September 2016
SOP HW-3b ICP-MS Rev1 w/CRF	CLP ISM02.2 ICP-MS	September 2016
SOP HW-3c Hg & CN Rev1 w/CRF	CLP ISM02.2 Mercury and Cyanide	September 2016

Organic Validation SOPs - CLP

SOP #	Description	Date
SOP HW-33A Low Medium VOA Rev 1 w/CRF	EPA CLP Method SOM02.2 for Low/Medium VOA	September 2016
SOP HW-34A Trace VOA Rev1 w/CRF	EPA CLP Method SOM02.2 for Trace VOA	September 2016
SOP HW-35A Rev1 w/CRF	EPA CLP Method SOM02.2 for Semi-Volatiles	September 2016
SOP HW-36A Rev 1 w/CRF	EPA CLP Method SOM02.2 for Pesticides	October 2016
SOP HW-37A Rev 0 w/CRF	EPA CLP Method SOM02.2 for PCBs Aroclor	June 2015

Organic Validation SOPs – Other

SOP #	Description	Date
SOP HW-11 Rev 3	SW-846 Method 8280 for Polychlorinated Dibenzodioxins/Polychlorinated Dibenzofurans	December 2010
SOP HW-16 Rev. 2.1	SW-846 Method 8330A Nitroaromatics and Nitroamines by HPLC	December 2010
SOP HW-17 Rev.3.1	SW-846 Method 8151A for Chlorinated Herbicides by GC	December 2010
SOP HW-19 Rev. 1.1	SW-846 Method 8290 for Polychlorinated dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by HRMS	December 2010
SOP HW-22 Rev. 5	SW-846 Method 8270D for Semivolatile Organic Compounds by GC/MS	December 2010
SOP HW-25 Rev. 3	EPA Method 1613, Revision B Tetra-through Octa-chlorinated Dioxins and Furans by Isotope Dilution by HRGC/HRMS	December 2010
SOP HWSS 24 Rev. 4	SW-846 Methods 8260B & 8260C for VOCs by GC/MS	October 2014
SOP HW-29 Rev. 2	EPA Method 524.2 for Purgeable Organic Compounds in Water by GC/MS	November 2010
SOP HW-31 Rev. 6	TO-15 Air Analysis for VOCs	September 2016
SOP HW-44 Rev. 1.1	SW-846 Method 8081B for Pesticide Compounds Organochlorine Pesticides by GC	December 2010
SOP HW-46 Rev. 1	EPA Method 1668 A for Chlorinated Biphenyl Congeners and EPA Non-RAS CBC01.0	September 2008

SOP HW-55 Rev. 2 w/CRF	EPA Non-RAS DLM02.0 for Tetra -through Octa-Chlorinated Dioxins and Furans by Isotope Dilution	December 2008
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6. DATA VALIDATION REPORT NARRATIVE

NYS DEC Data Usability Summary Report	SDG # JD39687
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NYS DEC Data Usability Summary Report

SDG # JD39687

Site Location	1001 Whitlock Avenue, Bronx, NY
Data Validation for Analytical Methods	Volatile Organic (EPA 8260D); Semi-Volatile (SW846 8270E), Pesticides (SW846 8081B), PCBs (SW846 8082A), TAL Metals (SW846 6010D, 7471B), PFAS (EPA 537M), Cyanide (SW846 9012B)
Number of Samples & Matrix	12 Soil Samples, 1 Field Blank
Sampled On	02/14/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39687 (-1-2-3-4-5-6-7-8-9-10-11-12-13)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 17 th , 2022

• SAMPLE HANDLING AND MANAGEMENT

As per the chain of custody (COC) record included in this specific SDG, samples associated with this data set were collected on February 14th, 2022, using the proper containers in accordance with the Sample Integrity and Preservation section of the stated above USEPA method and received by the laboratory on February 14th, 2022. The attached chain of custody (COC) displays a satisfactory record in terms of client and project information, site location, field sampling details (sampler, collection date and time), sample identification and matrix, preservation, required analysis, deliverable type and date, data management process and comparison.

Client Sample Identification	Laboratory Sample Identification
RI-SB1 (4.5-5')	JD39687-1
RI-SB1 (9.5-10')	JD39687-2
RI-SB1 (14.5-15')	JD39687-3
RI-SB1 (17.5-18')	JD39687-4
RI-SB2 (3.5-4')	JD39687-5
RI-SB2 (9.5-10')	JD39687-6
RI-SB2 (14.5-15')	JD39687-7
RI-SB2 (19.5-20')	JD39687-8
FIELD BLANK	JD39687-9
WC-B1 (0-7.5')	JD39687-10
WC-B1 (7.5-15')	JD39687-11
WC-A1 (0-7.5')	JD39687-12
WC-A1 (7.5-15')	JD39687-13

• DATA VALIDATION REFERENCES

The organic data validation is conducted in accordance with the guidelines in the USEPA National Functional Guidelines for Organic Data Review and the USEPA Region II SOP

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HW-6-CLP Organic Data Review Preliminary review and the method and QC Criteria specified in NYSDEC ASP Documents.

The inorganic data validation is conducted in accordance with the guidelines in the USEPA National Functional Guidelines for Inorganic Data Review and the USEPA Region II SOP HW-2, Evaluation of Metals Data for the Contract Laboratory Program based on ILM05.3 and the method and QC Criteria specified in NYSDEC ASP Documents.

- **LABORATORY DATA PACKAGES**

The laboratory data packages for the stated SDG above is considered satisfactory in terms of pagination, quality control narration and completeness. Each package contained the laboratory quality assurance summary report, quality control summary data, sample nonconformance summaries, the required data package forms and tables in accordance with NYSDEC ASP documents, instrument tuning information, sample preparation and analysis batch and all associated standard, quality control and sample raw data.

- **LABORATORY ANALYTICAL METHODS**

A peer review of the quality assurance criteria listed in the laboratory data package shows with good degree of certainty the laboratory's compliance with the procedures set forth in the required USEPA analytical methods as indicated in the chain of custody. No deviations from the said methods have been noticed.

- **DATA USABILITY ASSESSMENT SUMMARY**

The overall data package assessment provided by the laboratory for the stated above sample delivery group (SDG) suggests acceptable laboratory performances of the required methods. All samples were successfully analyzed for all target compounds in accordance with the Quality Assurance/Quality Control (QA/QC) requirements for the USEPA analytical methods used for the analyses. In view of the data usability and completeness, the minor issues listed below regarding biases identified during data validation should be taken into high degree of consideration. They are as follows:

✓ **Volatile Organic Compounds – SW846 8260D Method**

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detected results of iodomethane, isobutyl alcohol, n-butyl alcohol, 3-methyl-1-butanol, in the associated samples, RI-SB1 (4.5-5'), RI-SB1 (9.5-10'), RI-SB1 (14.5-15'), RI-SB1 (17.5-18'), RI-SB2 (3.5-4'), RI-SB2 (9.5-10'), RI-SB2	ICV

	(14.5-15'), WC-B1 (0-7.5'), WC-B1 (7.5-15'), WC-A1 (0-7.5'), WC-A1 (7.5-15'), should be qualified estimated (J). Associated sample (s): JD39687-1, JD39687-2, JD39687-3, JD39687-4, JD39687-5, JD39687-6, JD39687-7, JD39687-10, JD39687-11, JD39687-12, JD39687-13 -Detected results of iodomethane, n-butyl alcohol, in the associated sample FIELD BLANK, should be qualified estimated (J). Associated sample (s): JD39687-9	
2	-Detected results of isobutyl alcohol, n-butyl alcohol, 3-methyl-1-butanol, bromomethane, Iodomethane, acrylonitrile, di-isopropyl ether, chloroprene, propionitrile, 2-nitropropane, in the associated samples, RI-SB1 (4.5-5'), RI-SB1 (9.5-10'), RI-SB1 (14.5-15'), RI-SB1 (17.5-18'), RI-SB2 (3.5-4'), RI-SB2 (9.5-10'), RI-SB2 (14.5-15'), WC-B1 (0-7.5'), WC-B1 (7.5-15'), WC-A1 (0-7.5'), WC-A1 (7.5-15'), should be qualified estimated (J). Associated sample (s): JD39687-1, JD39687-2, JD39687-3, JD39687-4, JD39687-5, JD39687-6, JD39687-7, JD39687-10, JD39687-11, JD39687-12, JD39687-13 -Detected results of trichlorofluoromethane, acrolein, Acetone, Iodomethane, di-isopropyl ether, 2-butanone, acrylonitrile, hexane, ethyl tert-butyl ether, ethyl acetate, 2,2-dichloropropane, propionitrile, tetrahydrofuran, chloroform, iso-butyl-alcohol, 2,2,4-trimethylpentane, heptane, 4-methyl-2-pentanone, 2-hexanone, benzyl chloride, in the associated sample FIELD BLANK, should be qualified estimated (J). Associated sample (s): JD39687-9	CCV
3	-Detected results of Chloroethane, in samples RI-SB1 (4.5-5'), RI-SB1 (9.5-10'), RI-SB1 (14.5-15'), RI-SB1 (17.5-18'), RI-SB2 (3.5-4'), RI-SB2 (9.5-10'), RI-SB2 (14.5-15'), WC-B1 (0-7.5'), WC-B1 (7.5-15'), WC-A1 (0-7.5'), WC-A1 (7.5-15'), must be qualified estimated-Bias High (J+). Associated sample (s): JD39687-1, JD39687-2, JD39687-3, JD39687-4, JD39687-5, JD39687-6, JD39687-7, JD39687-10, JD39687-11, JD39687-12, JD39687-13	LCS
4	-Detected results of Chloromethane, in samples RI-SB1 (4.5-5'), must be qualified estimated-Bias High (J+). Associated sample (s): JD39687-1	MS/MSD

✓ **Semi-Volatile Organic Compounds – SW846 8270E Method**

	Data Assessment Judgement (Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)	DVA Reference
1	-Detected results of Pentachloronitrobenzene, in samples RI-SB1 (4.5-5'), RI-SB1 (9.5-10'), RI-SB1 (14.5-15'), RI-SB1 (17.5-18'), RI-SB2 (3.5-4'), RI-SB2	ICV

	(9.5-10'), RI-SB2 (14.5-15'), FIELD BLANK, WC-B1 (0-7.5'), WC-B1 (7.5-15'), WC-A1 (0-7.5'), WC-A1 (7.5-15'), should be considered Estimated (J). Associated sample (s): JD39687-1, JD39687-2, JD39687-3, JD39687-4, JD39687-5, JD39687-6, JD39687-7, JD39687-9, JD39687-10, JD39687-11, JD39687-12, JD39687-13	
2	-Detected results of Pentachloronitrobenzene, Acetophenone, 3&4-Methylphenol, n-Nitroso-di-n-propylamine, 4-Chloroaniline, 2,3-Dichloroaniline, Pentachlorophenol, Benzidine, Caprolactam, in samples RI-SB1 (4.5-5'), RI-SB1 (9.5-10'), RI-SB1 (14.5-15'), RI-SB1 (17.5-18'), RI-SB2 (3.5-4'), RI-SB2 (9.5-10'), RI-SB2 (14.5-15'), WC-B1 (0-7.5'), WC-B1 (7.5-15'), WC-A1 (0-7.5'), WC-A1 (7.5-15'), should be considered Estimated (J) Associated sample (s): JD39687-1, JD39687-2, JD39687-3, JD39687-4, JD39687-5, JD39687-6, JD39687-7, JD39687-10, JD39687-11, JD39687-12, JD39687-13 -Detected results of Pentachloronitrobenzene, Caprolactam, in sample FIELD BLANK, should be considered Estimated (J) Associated sample (s): JD39687-9	CCV
3	-Detected results of bis(2-Ethylhexyl) phthalate, in samples RI-SB1 (4.5-5'), RI-SB1 (9.5-10'), RI-SB1 (14.5-15'), RI-SB1 (17.5-18'), RI-SB2 (3.5-4'), RI-SB2 (9.5-10'), RI-SB2 (14.5-15'), WC-B1 (0-7.5'), WC-B1 (7.5-15'), WC-A1 (0-7.5'), WC-A1 (7.5-15'), should be considered Estimated Bias-Low (J-). -Non-Detected results of bis(2-Ethylhexyl) phthalate, in samples RI-SB1 (4.5-5'), RI-SB1 (9.5-10'), RI-SB1 (14.5-15'), RI-SB1 (17.5-18'), RI-SB2 (3.5-4'), RI-SB2 (9.5-10'), RI-SB2 (14.5-15'), WC-B1 (0-7.5'), WC-B1 (7.5-15'), WC-A1 (0-7.5'), WC-A1 (7.5-15'), should be considered Estimated (UJ). Associated sample (s): JD39687-1, JD39687-2, JD39687-3, JD39687-4, JD39687-5, JD39687-6, JD39687-7, JD39687-10, JD39687-11, JD39687-12, JD39687-13	LCS

✓ **Pesticides - SW846 8081B Method**

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detected results of Endosulfan-II, Heptachlor epoxide, in sample FIELD BLANK, should be considered Estimated (J) Associated sample (s): JD39687-9	LCS

✓ **Polychlorinated Biphenyls (PCBs) – SW846 8082A Method**

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	<u>-Detected results of Aroclor 1016, Aroclor 1260 in samples RI-SB1 (4.5-5'), RI-SB1 (9.5-10'), RI-SB1 (14.5-15'), RI-SB1 (17.5-18'), RI-SB2 (3.5-4'), RI-</u>	LCS

	SB2 (9.5-10'), RI-SB2 (14.5-15'), WC-B1 (0-7.5'), WC-B1 (7.5-15'), WC-A1 (0-7.5'), WC-A1 (7.5-15'), should be considered Estimated Bias-Low (J-). -Non-Detected results of Aroclor 1016, Aroclor 1260 in samples RI-SB1 (4.5-5'), RI-SB1 (9.5-10'), RI-SB1 (14.5-15'), RI-SB1 (17.5-18'), RI-SB2 (3.5-4'), RI-SB2 (9.5-10'), RI-SB2 (14.5-15'), WC-B1 (0-7.5'), WC-B1 (7.5-15'), WC-A1 (0-7.5'), WC-A1 (7.5-15'), should be considered Estimated (UJ). Associated sample (s): JD39687-1, JD39687-2, JD39687-3, JD39687-4, JD39687-5, JD39687-6, JD39687-7, JD39687-10, JD39687-11, JD39687-12, JD39687-13	
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✓ **PFAS-NYSDEC Target List - EPA 537M Method**

	Data Assessment Judgement (Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)	DVA Reference
1	-Detected results of MeFOSAA, in sample RI-SB1 (17.5-18')/JD39687-4A, should be qualified estimated Bias Low (J-). -Non-Detected results of MeFOSAA, in sample RI-SB1 (17.5-18')/JD39687-4A, should be qualified estimated (UJ).	SR

✓ **TAL Metals - SW846 6010D, 7471B Methods**

	Data Assessment Judgement (Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)	DVA Reference
1	-Detected results of Antimony in sample JD39687-1/RI-SB1 (4.5-5'), should be qualified Estimated Bias-Low (J-). -Non-Detected results of Antimony in sample JD39687-1/RI-SB1 (4.5-5'), should be qualified Estimated (UJ). -Detected results of Lead in sample JD39687-1/ RI-SB1 (4.5-5'), should be qualified Estimated (J).	SSR

✓ **Cyanide - SW846 9012B Method**

	Data Assessment Judgement (Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)	DVA Reference
1	-Detected results of Cyanide in sample WC-A1 (0-7.5')/JD39687-12, should be qualified Estimated Bias-Low (J-). -Non-Detected results of Cyanide in sample WC-A1 (0-7.5')/JD39687-12, should be qualified Estimated (UJ).	MS/MSD

Data Validation Assessment

SDG # JD39687

Data Validation for Analytical Method	Volatile Organic Compounds (SW846 8260D Method)
Number of Samples & Matrix	12 Soil Samples, 1 Field Blank
Sampled On	02/14/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39687 (1-2-3-4-5-6-7-8-9-10-11-12-13)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 17 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time (HOLDT):** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms), display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph/mass spectrometry (GCMS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **GC/MS Tuning and Mass Calibration:** The standard tuning criteria were within control limits as outlined in the EPA and SW846 methods.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs) and Percent Relative Standard Deviation (%RSDs) and in some cases the coefficient of determination COD: (Average RRFs must be greater than the required values and at least greater than 0.01 for all target compounds and >0.001 for 1,4 Dioxane, %RSD must be less than 20%, and the coefficient of determination (COD) must be greater than 0.995). This evaluation displays the following:
-In the initial calibration reference sample: VI9812-ICC9812 analyzed on 01/20/2022, both the average RRFs and %RSDs for all target compounds were in compliance with

the method calibration criteria EXCEPT for iodomethane, where %RSDs was above the allowable maximum. the Mean RRFs for isobutyl alcohol, n-butyl alcohol, 3-methyl-1-butanol, were less than the allowable minimum.

-In the initial calibration reference sample: V3D7354-ICC7354 analyzed on 02/03/2022, both the average RRFs and %RSDs for all target compounds were in compliance with the method calibration criteria EXCEPT for iodomethane, where %RSDs was above the allowable maximum. the Mean RRFs for n-butyl alcohol, was less than the allowable minimum.

No action is required when less than 20% of the continuing calibration target compounds are outside the method control limits provide no Average Relative Response Factor (RRFs) is less than 0.01 for all target compounds.

Quality Judgement:

-Detected results of iodomethane, isobutyl alcohol, n-butyl alcohol, 3-methyl-1-butanol, in the associated samples, RI-SB1 (4.5-5'), RI-SB1 (9.5-10'), RI-SB1 (14.5-15'), RI-SB1 (17.5-18'), RI-SB2 (3.5-4'), RI-SB2 (9.5-10'), RI-SB2 (14.5-15'), RI-SB2 (19.5-20'), WC-B1 (0-7.5'), WC-B1 (7.5-15'), WC-A1 (0-7.5'), WC-A1 (7.5-15'), should be qualified estimated (J).

-Detected results of iodomethane, n-butyl alcohol, in the associated sample FIELD BLANK, should be qualified estimated (J).

• **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for the required frequency, Relative Response Factor (RRFs) and Percent Difference (%Ds). This evaluation displays the following:

-The continuing calibration reference sample: VI9838-CC9812 analyzed on 02/15/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT for isobutyl alcohol, n-butyl alcohol, 3-methyl-1-butanol, where RRFs were below the allowable minimums. %Ds for bromomethane, Iodomethane, acrylonitrile, di-isopropyl ether, chloroprene, propionitrile, 2-nitropropane, were above the method allowable maximums.

-The continuing calibration reference sample: V3D7368-CC7354 analyzed on 02/15/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT for trichlorofluoromethane, acrolein, Acetone, Iodomethane, di-isopropyl ether, 2-butanone, acrylonitrile, hexane, ethyl tert-butyl ether, ethyl acetate, 2,2-dichloropropane, propionitrile, tetrahydrofuran, chloroform, iso-butyl-alcohol, 2,2,4-trimethylpentane, heptane, 4-methyl-2-pentanone, 2-hexanone, benzyl chloride, where %Ds were above the method allowable maximums.

No action is required when less than 20% of the continuing calibration target compounds are outside the method control limits provide no Average Relative Response Factor (RRFs) is less than 0.01 for all target compounds.

Quality Judgement:

-Detected results of isobutyl alcohol, n-butyl alcohol, 3-methyl-1-butanol, bromomethane, Iodomethane, acrylonitrile, di-isopropyl ether, chloroprene, propionitrile, 2-nitropropane, in the associated samples, RI-SB1 (4.5-5'), RI-SB1 (9.5-10'), RI-SB1 (14.5-15'), RI-SB1 (17.5-18'), RI-SB2 (3.5-4'), RI-SB2 (9.5-10'), RI-SB2 (14.5-15'), RI-

SB2 (19.5-20'), WC-B1 (0-7.5'), WC-B1 (7.5-15'), WC-A1 (0-7.5'), WC-A1 (7.5-15'), should be qualified estimated (J).

-Detected results of trichlorofluoromethane, acrolein, Acetone, Iodomethane, di-isopropyl ether, 2-butanone, acrylonitrile, hexane, ethyl tert-butyl ether, ethyl acetate, 2,2-dichloropropane, propionitrile, tetrahydrofuran, chloroform, iso-butyl-alcohol, 2,2,4-trimethylpentane, heptane, 4-methyl-2-pentanone, 2-hexanone, benzyl chloride, in the associated sample FIELD BLANK, should be qualified estimated (J).

• **Method Blank Verification (BLK):** Method blank analyses included in this data set of laboratory data package concluded no detection for the target compounds in lab sample reference: V3D7368-MB, VI9838-MB, on 02/15/2022.

Quality Judgement: No actions are required.

• **Internal Standard Area Summary (IS):** As indicated in the method internal standard criteria, the laboratory data package for the stated SDG confirmed the following:

-The internal standard retention times were within method control limits.

-The internal standard areas were within method control limits.

Quality Judgement: No actions are required.

• **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries were within method control limits for all samples.

Quality Judgement: No actions are required.

• **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes (Percent Recoveries: %Rs and Relative Percent Difference: %RPDs). The following summarizes this evaluation:

-In LCS ID# V3D7368-BS on 02/15/2022, %Rs for all target volatile compounds were within the method control limits.

-In LCS ID# VI9838-BS on 02/15/2022, %Rs for Chloroethane, was above the method control limits.

Quality Judgement:

-Detected results of Chloroethane, in samples RI-SB1 (4.5-5'), RI-SB1 (9.5-10'), RI-SB1 (14.5-15'), RI-SB1 (17.5-18'), RI-SB2 (3.5-4'), RI-SB2 (9.5-10'), RI-SB2 (14.5-15'), RI-SB2 (19.5-20'), WC-B1 (0-7.5'), WC-B1 (7.5-15'), WC-A1 (0-7.5'), WC-A1 (7.5-15'), must be qualified estimated-Bias High (J+).

• **Laboratory and Field Duplicates (DUP):** According to both the chain of custody record, and the data set provided by the laboratory, a laboratory duplicate sample (JD39687-2DUP) was analyzed from sample RI-SB1 (9.5-10'). The following summarizes this evaluation:

-%RPDs were not calculated. Both sample and its duplicate analysis reported no detection.

Quality Judgement: No actions are required.

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** As required by the method quality assurance/quality control criteria, the matrix spike and matrix spike duplicate in a designated sample listed in this data set has been evaluated for method compliance purposes. The following summarizes this evaluation:

A matrix spike ID# JD39687-1MS was analyzed in this data set using sample JD39687-1/ RI-SB1 (4.5-5'). %Rs for Chloromethane, Vinyl Chloride, were above the method control limits.

Quality Judgement:

-Detected results of Chloromethane, in samples RI-SB1 (4.5-5'), must be qualified estimated-Bias High (J+).

- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD39687

Data Validation for Analytical Method	Semi-Volatile Organic Compounds (SW846 8270E Method)
Number of Samples & Matrix	12 Soil Samples, 1 Field Blank
Sampled On	02/14/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39687 (1-2-3-4-5-6-7-8-9-10-11-12-13)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 17 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph/mass spectrometry (GCMS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **GC/MS Tuning and Mass Calibration:** The DFTPP tuning criteria were within control limits as outlined in the EPA and SW846 methods.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs) and Percent Relative Standard Deviation (%RSDs) and in some cases the coefficient of determination COD: (In general, Average RRFs must be greater than the required values as defined by EPA/SW846 Method. %RSD must be less than 20%, and the coefficient of determination (COD) must be greater than 0.995). This evaluation displays the following:
-In the initial calibration of EZ7699-ICC7699 on 02/10/2022, Average RRFs were above the allowable minimum as required by the method, EXCEPT for Pentachloro-

nitrobenzene, where Average RRF was below the allowable minimum. %RSDs were below the method allowable maximum (20%).

-In the initial calibration of EZ7700-ICC7700 on 02/10/2022, Average RRFs were above the allowable minimum as required by the method. %RSDs were below the method allowable maximum (20%).

Quality Judgement:

-Detected results of Pentachloronitrobenzene, in samples RI-SB1 (4.5-5'), RI-SB1 (9.5-10'), RI-SB1 (14.5-15'), RI-SB1 (17.5-18'), RI-SB2 (3.5-4'), RI-SB2 (9.5-10'), RI-SB2 (14.5-15'), RI-SB2 (19.5-20'), FIELD BLANK, WC-B1 (0-7.5'), WC-B1 (7.5-15'), WC-A1 (0-7.5'), WC-A1 (7.5-15'), should be considered Estimated (J).

- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds) and confirmed the following:

-The continuing calibration (EZ7704-CC7699 on 02/16/2022), The RRFs for target compounds were above the minimum values set by the method, EXCEPT for Pentachloronitrobenzene, where RRF was below the allowable minimum. %Ds of Acetophenone, 3&4-Methylphenol, n-Nitroso-di-n-propylamine, 4-Chloroaniline, 2,3-Dichloroaniline, Pentachlorophenol, Benzidine, were above the allowable maximums.

-The continuing calibration (EZ7704-CC7700 on 02/16/2022), The RRFs for target compounds were above the minimum values set by the method. %Ds of Caprolactam, was above the allowable maximums.

-The continuing calibration (EZ7705-CC7699 on 02/17/2022), The RRFs for target compounds were above the minimum values set by the method, EXCEPT for Pentachloronitrobenzene, where RRF was below the allowable minimum. %Ds were below the allowable maximums.

-The continuing calibration (EZ7705-CC7700 on 02/17/2022), The RRFs for target compounds were above the minimum values set by the method. %Ds of Caprolactam, was above the allowable maximums.

No action is required when less than 20% of the target compounds do not meet the method control limits provide no Relative Response Factor (RRFs) is less than 0.01 for all target compounds as the allowable minimum.

Quality Judgement:

-Detected results of Pentachloronitrobenzene, Acetophenone, 3&4-Methylphenol, n-Nitroso-di-n-propylamine, 4-Chloroaniline, 2,3-Dichloroaniline, Pentachlorophenol, Benzidine, Caprolactam, in samples RI-SB1 (4.5-5'), RI-SB1 (9.5-10'), RI-SB1 (14.5-15'), RI-SB1 (17.5-18'), RI-SB2 (3.5-4'), RI-SB2 (9.5-10'), RI-SB2 (14.5-15'), RI-SB2 (19.5-20'), WC-B1 (0-7.5'), WC-B1 (7.5-15'), WC-A1 (0-7.5'), WC-A1 (7.5-15'), should be considered Estimated (J)

-Detected results of Pentachloronitrobenzene, Caprolactam, in sample FIELD BLANK, should be considered Estimated (J)

- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target compounds in OP38141-MB1, on 02/16/2022, OP38145-MB1 on 02/17/2022, and OP38145-MB1 on 02/23/2022.

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- **Internal Standard Area Summary (IS):** As indicated in the method internal standard criteria, the laboratory data package for the stated SDG confirmed the following:
 - The internal standard retention times were within method control limits.
 - The internal standard areas were within method control limits.
- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries were within method control limits.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:
 - In OP38141-BS1, Percent recoveries (%Rs) for all target compounds were within method control limits, EXCEPT for bis(2-Ethylhexyl) phthalate, where %Rs was below the method control limit.
 - In OP38145-BS1, Percent recoveries (%Rs) for all target compounds were within method control limits.
 - In OP38145-BS1, Percent recoveries (%Rs) for all target compounds were within method control limits. %RPDs were below the allowable maximum.

Quality Judgement:

 - Detected results of bis(2-Ethylhexyl) phthalate, in samples RI-SB1 (4.5-5'), RI-SB1 (9.5-10'), RI-SB1 (14.5-15'), RI-SB1 (17.5-18'), RI-SB2 (3.5-4'), RI-SB2 (9.5-10'), RI-SB2 (14.5-15'), RI-SB2 (19.5-20'), WC-B1 (0-7.5'), WC-B1 (7.5-15'), WC-A1 (0-7.5'), WC-A1 (7.5-15'), should be considered Estimated Bias-Low (J-).
 - Non-Detected results of bis(2-Ethylhexyl) phthalate, in samples RI-SB1 (4.5-5'), RI-SB1 (9.5-10'), RI-SB1 (14.5-15'), RI-SB1 (17.5-18'), RI-SB2 (3.5-4'), RI-SB2 (9.5-10'), RI-SB2 (14.5-15'), RI-SB2 (19.5-20'), WC-B1 (0-7.5'), WC-B1 (7.5-15'), WC-A1 (0-7.5'), WC-A1 (7.5-15'), should be considered Estimated (UJ).
- **Laboratory and Field Duplicates (DUP):** No Field duplicate sample was provided in this samples set. Laboratory duplicate from the samples set wasn't analyzed.
- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** No Matrix spike/Matrix spike duplicate were performed in this samples set. However, laboratory provided a selected matrix spike and matrix spike duplicate data from unrelated samples (OP38141-MS/OP38141-MSD).
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD39687

Data Validation for Analytical Method	Pesticides (SW846 8081B Method)
Number of Samples & Matrix	12 Soil Samples, 1 Field Blank
Sampled On	02/14/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39687 (1-2-3-4-5-6-7-8-9-10-11-12-13)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 17 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph (GC) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards used in this data set has been evaluated for compliance with method criteria for Percent Relative Standard Deviation %RSDs (<20%):
 - In the initial calibration sample reference: G1G5985-ICC5985 on 01/24/2022, G8G1762-ICC1762 on 02/18/2022, %RSDs for pesticides target compounds, were below the allowable maximum.Quality Judgement: No actions are required as long a valid column is used for quantitation.
- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Percent Difference (%Ds <20%):

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-In continuing calibration (G1G6018-CC5985 on 02/17/2022, G1G6021-CC5985 on 02/18/2022), %Ds for all pesticides target compounds were below the allowable maximums.

-In continuing calibration (G1G6020-CC5985 on 02/18/2022), %Ds for Heptachlor Epoxide, was above the allowable maximum.

-In continuing calibration (G8G1768-CC1762 on 02/21/2022), %Ds for Endrin Ketone, was above the allowable maximum.

Quality Judgement: No actions are required as long a valid column is used for quantitation.

- **DDT/Endrin Breakdown Check (DDT/Endrin Check):** Per method requirements, the percent breakdowns were below the allowable maximum (20% for DDT & Endrin)
- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target compounds in OP38151-MB1 analyzed on 02/17/2022, OP38151-MB1(a) analyzed on 02/18/2022, OP38165-MB1 on 02/21/2022.
- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries of all samples were within method control limits.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:
 - In LCS (OP38151-BS1), %Rs were within the method control limits.
 - In LCS (OP38165-BS1), %Rs were within the method control limits.
 - In LCSDUP (OP38165-BSD), %Rs were within the method control limits. %RPDs were below the allowable maximum, EXCEPT for Endosulfan-II, Heptachlor epoxide, where %RPDs were above the allowable maximum.

Quality Judgement:
-Detected results of Endosulfan-II, Heptachlor epoxide, in sample FIELD BLANK, should be considered Estimated (J).
- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** Sample RI-SB1 (4.5-5')/ JD39687-1 was used for Matrix Spiking process (OP38151-MS). %Rs of pesticides target compounds were within the method control limits. In matrix spike duplicate (OP38151-MSD), %Rs of pesticides target compounds were within the method control limits. %RPDs were below the allowable maximum.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD39687

Data Validation for Analytical Method	Polychlorinated Biphenyls (PCBs) – SW846 8082A Method
Number of Samples & Matrix	12 Soil Samples, 1 Field Blank
Sampled On	02/14/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39687 (1-2-3-4-5-6-7-8-9-10-11-12-13)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 17 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph (GC) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards used in this data set has been evaluated for compliance with method criteria for Average Relative Standard Deviation %RSDs (<20%):
-In the initial calibration of G5G2883-ICC2883 on 02/01/2022, GRK194-ICC194 on 02/03/2022, %RSDs all Aroclor target compounds were below the allowable maximum.
Quality Judgement: No actions are required as long a valid column is used for quantitation.
- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Percent Difference (%Ds <20%):
-In the continuing calibration reference ID: GRK194-ICC194 on 02/03/2022, GRK207-CC194 on 02/15/2022, GRK209-CC194 on 02/17/2022, G5G2906-CC2883 on

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02/20/2022, The overall %Ds for all Aroclor target compounds were below the allowable maximums.

Quality Judgement: No actions are required as long a valid column is used for quantitation.

- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target compounds in OP38152-MB1 analyzed on 02/15/2022, OP38166-MB1 on 02/20/2022.
- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries of all samples were within method control limits.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:
 - In LCS (OP38152-BS1), %Rs for Aroclor 1016, Aroclor 1260 were 0% suggesting spiking and or extraction problem.
 - In LCSDUP (OP38152-BS1D), %Rs for Aroclor 1016, Aroclor 1260 were within method control limits. %RPDs were above the allowable maximum due to the issues stated above.
 - In LCS (OP38166-BS1), %Rs for Aroclor 1016, Aroclor 1260 were within method control limits.
 - In LCSDUP (OP38166-BSD), %Rs for Aroclor 1016, Aroclor 1260 were within method control limits. %RPDs were below the allowable maximum.

Quality Judgement:

 - Detected results of Aroclor 1016, Aroclor 1260 in samples RI-SB1 (4.5-5'), RI-SB1 (9.5-10'), RI-SB1 (14.5-15'), RI-SB1 (17.5-18'), RI-SB2 (3.5-4'), RI-SB2 (9.5-10'), RI-SB2 (14.5-15'), RI-SB2 (19.5-20'), WC-B1 (0-7.5'), WC-B1 (7.5-15'), WC-A1 (0-7.5'), WC-A1 (7.5-15'), should be considered Estimated Bias-Low (J-).
 - Non-Detected results of Aroclor 1016, Aroclor 1260 in samples RI-SB1 (4.5-5'), RI-SB1 (9.5-10'), RI-SB1 (14.5-15'), RI-SB1 (17.5-18'), RI-SB2 (3.5-4'), RI-SB2 (9.5-10'), RI-SB2 (14.5-15'), RI-SB2 (19.5-20'), WC-B1 (0-7.5'), WC-B1 (7.5-15'), WC-A1 (0-7.5'), WC-A1 (7.5-15'), should be considered Estimated (UJ).
- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** Sample RI-SB1 (14.5-15')/ JD39687-3 was used for Matrix Spiking process (OP38152-MS). %Rs of Aroclor 1016, Aroclor 1260 were within the method control limits. In matrix spike duplicate (OP38152-MSD), %RPDs were below the allowable maximum.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD39687

Data Validation for Analytical Method	PFAS-NYSDEC Target List (EPA 537M Method)
Number of Samples & Matrix	12 Soil Samples, 1 Field Blank
Sampled On	02/14/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39687 (1-2-3-4-5-6-7-8-9-10-11-12-13)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 17 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time (HOLDT):** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the LC/TANDEM Mass Spectrometer (LC/MS/MS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs), Percent Relative Standard Deviation for both internal standard and external standard criteria (%RSDs <50%), and in some cases the coefficient of determination COD (>0.995). This evaluation displays the following:
-The initial calibration methods used in this data set, sample reference ID: S2Q1197-ICC1197 on 02/11/2022, S3Q759-ICC759, on 02/21/2022, display an acceptable performance and compliance with the method criteria listed above.
Quality Judgement: No actions are required.
- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for

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compliance with method criteria for all target PFAS compounds: Required frequency (one per ten field samples), Percent Difference (%Ds < 50%), and or for Percent Recovery (70<%Rs<130). This evaluation displays the following:

-In continuing calibration laboratory reference ID: Lab FileID: 2Q85741.D, Lab FileID: 2Q85742.D, Lab FileID: 2Q85753.D, Lab FileID: 2Q85765.D, Lab FileID: 2Q85774.D, Lab FileID: 2Q85776.D, Lab FileID: 2Q85789.D, Lab FileID: 2Q85790.D, Lab FileID: 2Q85852.D, Lab FileID: 2Q85853.D, Lab FileID: 2Q85864.D, on 02/25/2022, Lab FileID: 2Q85956.D, Lab FileID: 2Q85969.D, Lab FileID: 2Q85981.D, on 03/01/2022, %Ds for target PFAS compounds below the allowable maximum.

-In continuing calibration laboratory reference ID: Lab FileID: 3Q55063.D, Lab FileID: 3Q55064.D, Lab FileID: 3Q55075.D, Lab FileID: 3Q55087.D, Lab FileID: 3Q55089.D, on 02/23/2022, %Ds for target PFAS compounds below the allowable maximum.

Quality Judgement: No actions are required.

- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target compounds above both the MDL and the RL in S3Q760-IBLK, OP89856-MB on 02/23/2022, OP89835-MB, S2Q1211-IBLK, on 02/25/2022, S2Q1211-IBLK, on 02/26/2022, S2Q1212-IBLK, on 02/27/2022, S2Q1214-IBLK, on 03/01/2022.

Quality Judgement: No actions are required.

- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior (Isotope Dilution Analyte (IDA) Recovery must be > 10% for Data acceptance, 50<%Rs<150; 25<%Rs<150 for poor response analytes), in the SDG data set displays the following:
-In sample JD39687-4A, Lab file ID: 2Q85760.D, %R for d3-MeFOSAA, was below the control limit.

Quality Judgement:

-Detected results of MeFOSAA, in sample RI-SB1 (17.5-18')/JD39687-4A, should be qualified estimated Bias Low (J-).

-Non-Detected results of MeFOSAA, in sample RI-SB1 (17.5-18')/JD39687-4A, should be qualified estimated (UJ).

- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:

-In LCS OP89835-BS/2Q85746.D, OP89856-BS 3Q55071.D, %Rs were within the method control limits.

Quality Judgement: No actions are required.

- **Secondary Ion Transition Monitoring (SITM):** Quantifier and qualifier ions have been monitored for all target PFAS analytes (PFBA and PFPeA are exceptions). The laboratory derived criteria have been used to determine if the ratios are acceptable. (If the ratios fall outside of the laboratory criteria, results will be qualified as an estimated maximum concentration).

-No forms or data were provided.

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- **Laboratory and Field Duplicates (DUP):** No Field duplicate sample was provided in this samples set. Laboratory duplicate from the samples set wasn't analyzed.

Quality Judgement: No actions are required.

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** No Matrix spike/Matrix spike duplicate were performed in this samples set. However, laboratory provided a selected matrix spike and matrix spike duplicate data from unrelated samples (OP89856-MS/ 3Q55079.D, OP89835-MS/ 2Q85749.D & OP89835-MSD 2Q85749.D).

Quality Judgement: No actions are required.

- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD39687

Data Validation for Analytical Method	TAL Metals (SW846 6010D, 7471B Methods)
Number of Samples & Matrix	12 Soil Samples, 1 Field Blank
Sampled On	02/14/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39687 (1-2-3-4-5-6-7-8-9-10-11-12-13)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 17 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were digested and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Initial and Continuing Calibration Verification (ICCV):** As indicated in the method calibration criteria, the initial calibration standards used in this data set has been evaluated for compliance with method criteria for Percent Recoveries (%Rs):
 - In File ID: SD021622M1.ICP, analyzed on 02/16/2022, %Rs for Total metals (EPA 6010D) in all ICVs and CCVs were within method control limits.
 - In File ID: SC021822M1.ICP, analyzed on 02/18/2022, %Rs for Total metals (EPA 6010D) in all ICVs and CCVs were within method control limits.
 - In File ID: SF021822M1.ICP, analyzed on 02/18/2022, %Rs for Total metals (EPA 6010D) in all ICVs and CCVs were within method control limits.Quality Judgement: No actions are required.
- **CRDL Standard (CRDL):** As indicated in the method calibration criteria, the CRDL standards of this data set have been evaluated for compliance with method criteria for Percent Recoveries (%Rs) for target metals elements:
 - In File ID: SD021622M1.ICP (LOW CALIBRATION CHECK STANDARDS-EPA 6010D), %Rs for total target metals were within method control limits (70-130%).
 - In File ID: SC021822M1.ICP (LOW CALIBRATION CHECK STANDARDS-EPA 6010D), %Rs for total target metals were within method control limits (70-130%).
 - In File ID: SF021822M1.ICP (LOW CALIBRATION CHECK STANDARDS-EPA 6010D), %Rs for total target metals were within method control limits (70-130%).Quality Judgement: No actions are required.
- **Method Blank Verification:** Method blank analyses included in this data set has been evaluated to ensure target metals were reported below CRDL:

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-In File ID: SD021622M1.ICP, all quality control blanks (ICBs, CCBs) were below RL as required by EPA 6010D, 7473 Methods.

-In File ID: SC021822M1.ICP, all quality control blanks (ICBs, CCBs) were below RL as required by EPA 6010D, 7473 Methods.

-In File ID: SF021822M1.ICP, all quality control blanks (ICBs, CCBs) were below RL as required by EPA 6010D, 7473 Methods.

Quality Judgement: No actions are required.

- **ICP Interference Check Sample (ICPINTERF):** An evaluation of the Interference Check Sample has been evaluated for percent recoveries (%Rs) compliance with methods criteria (80-120%):

-In File ID: SD021622M1.ICP, %Rs for target metals (EPA 6010D), were within the method control limits.

-In File ID: SC021822M1.ICP, %Rs for target metals (EPA 6010D), were within the method control limits.

-In File ID: SF021822M1.ICP, %Rs for target metals (EPA 6010D), were within the method control limits.

Quality Judgement: No actions are required.

- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes (%Rs within control limits). The following summarizes this evaluation:

-In LCS QC Batch ID: MP31310, on 02/16/2022, (EPA 6010D) for total metals, %Rs were within the method control limits.

-In LCS QC Batch ID: MP31312, on 02/16/2022, (EPA 6010D) for total metals, %Rs were within the method control limits.

Quality Judgement: No actions are required.

- **Spike Sample Recovery (SSR):** Spike samples in this data set have been evaluated for method compliance purposes (%Rs within control limits). The out-of-control spike recoveries for analytes whose unspiked concentrations are $\geq 4x$ the spike added have been disregarded:

-In sample JD39687-1/RI-SB1 (4.5-5'), %Rs for matrix spike (EPA 6010D), were within control limits, EXCEPT for Antimony, where %Rs was below control limit.

-In sample JD39687-1/RI-SB1 (4.5-5'), %Rs for matrix spike duplicate (EPA 6010D), were within control limits, EXCEPT for Antimony, where %Rs was below control limit. %RPDs for lead was above the allowable maximum.

-In sample JD39687-8/RI-SB2 (19.5-20'), %Rs for matrix spike (EPA 6010D), were within control limits.

-In sample JD39687-8/RI-SB2 (19.5-20'), %Rs for matrix spike duplicate (EPA 6010D), were within control limits. %RPDs were below the allowable maximum.

Quality Judgement:

-Detected results of Antimony in sample JD39687-1/RI-SB1 (4.5-5'), should be qualified Estimated Bias-Low (J-).

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-Non-Detected results of Antimony in sample JD39687-1/RI-SB1 (4.5-5'), should be qualified Estimated (UJ).

-Detected results of Lead in sample JD39687-1/ RI-SB1 (4.5-5'), should be qualified Estimated (J).

- **Laboratory Duplicate (DUP):** Target metals Duplicate analysis has been evaluated for relative percent differences compliance with the method criteria (%RPDs <20% for aqueous and <35% for soil matrices):
- No Field duplicate sample was provided in this samples set. Laboratory duplicate from the samples set wasn't analyzed.
Quality Judgement: No actions are required.
- **ICP Serial Dilution (ISDil):** ICP serial dilution for target metals has been evaluated to ensure compliance with method criteria (Concentration in the original sample is > 50x the MDL that is calculated for the sample and %Ds must be below the allowable maximums 10%):
-In QC Batch ID: MP31310/sample JD39687-1, on 02/16/2022, %Ds of target metals (EPA 6010D) were below the allowable maximum.
-In QC Batch ID: MP31312 on 02/16/2022, %Ds of target metals (EPA 6010D) were below the allowable maximum.
Quality Judgement: No actions are required.
- **Mercury Overall Evaluation (Hg):** All initial and continuing calibration checks, Blank results summaries, low calibration check standards, laboratory control sample summaries, Matrix spike and duplicate summaries, were in compliance with method quality control criteria.
- **Standard Reference Material Recovery (Hg):** Forms were not provided.
- **Total & Soluble Metals Comparison (T&S-Comp):** Not applicable.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD39687

Data Validation for Analytical Method	Cyanide (SW846 9012B Method)
Number of Samples & Matrix	12 Soil Samples, 1 Field Blank
Sampled On	02/14/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39687 (1-2-3-4-5-6-7-8-9-10-11-12-13)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 17 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Initial Calibration Verification (ICCV):** As indicated in the method calibration criteria, the initial calibration standards (ICV, CCV) used in this data set have been evaluated for compliance with method criteria (90%<%Rs<110%):
 - In File ID: E021622W1.CN, %Rs for Cyanide standards (ICV, CCV) were within method control limits.
 - In File ID: E021722W1.CN, %Rs for Cyanide standards (ICV, CCV) were within method control limits.Quality Judgement: No actions are required.
- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection of Cyanide above the RL.
Quality Judgement: No actions are required.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes (%Rs within control limits-80-120%). The following summarizes this evaluation:
 - In Batch IDs (GP38543/GN26465, GP38545/GN26465, GP38571/GN26478), for Cyanide LCS evaluation, %Rs were within the method control limits.
- **Matrix Spike/Matrix Spike Duplicate (MS/MSD):**
 - In batch ID: GP38545/GN26465, the Sample WC-A1 (0-7.5')/JD39687-12 was spiked with Cyanide standard for matrix spike evaluation, %Rs was below the method control limits (75-125%).Quality Judgement:

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-Detected results of Cyanide in sample WC-A1 (0-7.5')/JD39687-12, should be qualified Estimated Bias-Low (J-).

-Non-Detected results of Cyanide in sample WC-A1 (0-7.5')/JD39687-12, should be qualified Estimated (UJ).

- **Laboratory Duplicate (DUP):** Cyanide Duplicate analysis has been evaluated for relative percent differences compliance with the method criteria (%RPDs <20% for aqueous and <35% for soil matrices):
-%RPDs for laboratory duplicate were below the allowable maximums.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Validated QA Data

Initial Calibration Summary

Page 1 of 5

Job Number: JD39687
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V3D7354-ICC7354
Lab FileID: 3D173436.D

Response Factor Report MS3D

Method : C:\msdchem\1\METHODS\M3D7354.M (RTE Integrator)
Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xThu Feb 03 16:08:26 2022
Last Update : Thu Feb 03 16:08:26 2022
Response via : Initial Calibration

Calibration Files

1 =3D173431.D 0.5 =3D173430.D 100 =3D173437.D 50 =3D173436.D
20 =3D173435.D 200 =3D173438.D 4 =3D173433.D 2 =3D173432.D
8 =3D173434.D 0.2 =3D173429.D = =

Compound	1	0.5	100	50	20	200	4	2	8	0.2	Avg	%RSD
1) tert butyl alcohol-d9 -----ISTD-----												
2) tertiary butyl alcohol	1.399	1.297	1.318	1.278	1.251	1.356	1.408	1.313		1.327	4.22	
3) ethanol	0.170	0.155	0.161	0.161	0.138	0.163	0.166	0.166		0.160	6.20	
4) 1,4-dioxane	0.123	0.156	0.160	0.157	0.151	0.171	0.170	0.156		0.155	9.53	
5) I pentafluorobenzene -----ISTD-----												
6) chlorodifluoromethane *This compound fails Initial Calibration criteria*	0.594	0.612	0.609	0.538	0.538		0.578		0.578	5.76		
7) dichlorodifluoromethane	0.645	0.658	0.651	0.593	0.570	0.533	0.572		0.603	8.04		
8) chloromethane	0.645	0.572	0.569	0.591	0.614	0.520	0.567	0.535	0.576	0.577	6.53	
9) vinyl chloride	0.505	0.406	0.609	0.624	0.633	0.556	0.583	0.535	0.577	0.550	0.558	11.97
10) 1,3-butadiene	0.461	0.446	0.465	0.493	0.491	0.422	0.462	0.464	0.456	0.489	0.465	4.72
11) bromomethane	0.194	0.203	0.299	0.273	0.253	0.275	0.190	0.186	0.220	0.258	0.235	17.53
12) chloroethane	0.437	0.371	0.375	0.373	0.341	0.354	0.362	0.344		0.369	8.15	
13) trichlorofluoromethane	0.621	0.722	0.737	0.732	0.671	0.632	0.574	0.679		0.671	8.75	
14) ethyl ether	0.281	0.293	0.296	0.293	0.275	0.267	0.285	0.271		0.283	3.95	
15) acrolein	0.088	0.089	0.088	0.087	0.095	0.097	0.078		0.089	6.91		
16) freon 113	0.289	0.186	0.325	0.339	0.333	0.306	0.300	0.341	0.316	0.304	15.64	
17) 1,1-dichloroethene	0.335	0.302	0.377	0.395	0.395	0.354	0.374	0.386	0.370	0.310	0.360	9.37
18) acetone	0.041	0.041	0.043	0.042	0.038	0.039	0.046	0.040		0.041	5.66	
19) acetonitrile	0.074	0.070	0.061	0.064	0.066	0.056	0.065	0.076	0.061	0.066	9.66	
20) iodomethane *This compound fails Initial Calibration criteria*	0.511	0.478	0.377	0.498	0.214	0.179	0.260		0.360	39.41		
21) carbon disulfide	1.243	1.087	1.194	1.248	1.250	1.083	1.179	1.264	1.146	1.188	5.91	
22) methylene chloride	0.562	0.525	0.468	0.480	0.510	0.441	0.506	0.560	0.463	0.502	8.49	
23) methyl acetate												

Initial Calibration Summary

Job Number: JD39687
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V3D7354-ICC7354
Lab FileID: 3D173436.D

	0.389	0.318	0.336	0.353	0.354	0.317	0.327	0.372	0.324	0.343	7.39
24)	methyl tert butyl ether										
	1.211	1.276	1.338	1.341	1.181	1.247	1.320	1.211		1.266	4.94
25)	trans-1,2-dichloroethene										
	0.420	0.265	0.417	0.426	0.437	0.393	0.416	0.435	0.394	0.400	13.22
26)	di-isopropyl ether										
	1.304	1.003	1.331	1.407	1.452	1.209	1.366	1.501	1.336	1.297	1.321
27)	2-butanone										
	0.046	0.055	0.055	0.054	0.055	0.051	0.047	0.047		0.051	7.81
28)	1,1-dichloroethane										
	0.755	0.618	0.747	0.777	0.803	0.699	0.791	0.821	0.761	0.887	0.766
29)	chloroprene										
	0.604	0.471	0.694	0.709	0.713	0.655	0.660	0.673	0.652	0.665	0.650
30)	acrylonitrile										
	0.164	0.165	0.161	0.171	0.153	0.141	0.141			0.157	7.70
31)	hexane										
	0.288	0.361	0.364	0.362	0.340	0.326	0.360	0.328		0.341	7.79
32)	vinyl acetate										
	0.119	0.118	0.117	0.119	0.099	0.116	0.103			0.113	7.32
33)	ethyl tert-butyl ether										
	1.277	1.472	1.505	1.531	1.376	1.414	1.490	1.403		1.433	5.80
34)	ethyl acetate										
	0.057	0.067	0.075	0.069	0.071	0.060	0.064	0.070		0.067	8.92
35)	2,2-dichloropropane										
	0.577	0.590	0.599	0.617	0.555	0.582	0.613	0.560		0.587	3.87
36)	cis-1,2-dichloroethene										
	0.466	0.372	0.459	0.467	0.481	0.438	0.459	0.470	0.470	0.454	7.19
37)	methyl acrylate										
	0.074	0.073	0.076	0.073	0.069	0.072	0.068			0.072	3.85
38)	propionitrile										
	0.062	0.066	0.068	0.070	0.061	0.065	0.073	0.065		0.066	5.85
39)	bromochloromethane										
	0.179	0.225	0.228	0.226	0.219	0.210	0.234	0.209		0.216	8.01
40)	tetrahydrofuran										
	0.131	0.129	0.137	0.128	0.147	0.131				0.134	5.21
41)	chloroform										
	0.536	0.481	0.505	0.509	0.522	0.479	0.522	0.531	0.495	0.509	4.07
42)	t-butyl formate										
	0.392	0.460	0.450	0.436	0.451	0.387	0.376	0.386		0.417	8.42
43)	dibromofluoromethane (s)										
	0.404	0.396	0.406	0.404	0.400	0.415	0.397	0.406	0.399	0.405	0.403
44)	methacrylonitrile										
	0.145	0.198	0.195	0.193	0.198	0.191	0.194	0.176		0.186	9.66
45)	1,1,1-trichloroethane										
	0.570	0.553	0.689	0.697	0.682	0.668	0.651	0.681	0.635	0.732	0.656
46)	cyclohexane										
	0.627	0.704	0.706	0.691	0.665	0.649	0.592	0.623		0.657	6.33
47)	1,1-dichloropropene										
	0.529	0.582	0.589	0.577	0.555	0.551	0.577	0.526		0.561	4.34
48)	iso-butyl alcohol										
	0.019	0.019	0.018	0.018	0.017	0.018	0.020	0.017		0.018	5.23
49)	carbon tetrachloride										
	0.507	0.559	0.564	0.556	0.539	0.532	0.533	0.488		0.535	4.95
50)	tert amyl alcohol										
	0.021	0.018	0.017	0.017	0.016	0.017	0.019	0.016		0.018	9.21
51)	I 1,4-difluorobenzene -----ISTD-----										
52)	1,2-dichloroethane-d4 (s)										
	0.349	0.350	0.327	0.334	0.353	0.333	0.351	0.351	0.349	0.347	0.344
53)	n-butyl alcohol										

Initial Calibration Summary

Job Number: JD39687
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V3D7354-ICC7354
Lab FileID: 3D173436.D

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	0.008	0.009	0.009	0.009	0.009	0.008	0.009	0.008	0.009#	5.80
54) 2,2,4-trimethylpentane	0.799	0.674	0.840	0.885	0.912	0.766	0.908	0.868	0.871	0.836 9.31
55) benzene	1.176	0.929	1.101	1.160	1.205	0.989	1.172	1.177	1.152	1.222 1.129 8.49
56) tert-amyl methyl ether	0.206	0.223	0.226	0.231	0.217	0.210	0.246	0.219		0.222 5.59
57) heptane	0.196	0.152	0.212	0.214	0.217	0.201	0.202	0.194	0.208	0.200 9.75
58) isopropyl acetate	0.062	0.074	0.072	0.071	0.072	0.076	0.061	0.065		0.069 8.39
59) 1,2-dichloroethane	0.441	0.412	0.399	0.417	0.435	0.372	0.425	0.450	0.420	0.419 5.60
60) trichloroethene	0.258	0.184	0.307	0.311	0.309	0.290	0.286	0.301	0.280	0.281 14.26
61) ethyl acrylate	0.367	0.344	0.381	0.396	0.398	0.355	0.386	0.404	0.369	0.348 0.375 5.76
62) 2-nitropropane	0.095	0.091	0.089	0.094	0.090	0.111	0.085			0.093 8.98
63) 2-chloroethyl vinyl ether	0.179	0.193	0.203	0.204	0.173	0.189	0.189	0.186		0.189 5.71
64) methyl methacrylate	0.081	0.087	0.093	0.091	0.085	0.084	0.087	0.083		0.086 4.47
65) 1,2-dichloropropane	0.265	0.235	0.310	0.315	0.320	0.289	0.304	0.308	0.298	0.281 0.292 9.00
66) dibromomethane	0.185	0.136	0.174	0.176	0.182	0.169	0.186	0.189	0.171	0.174 9.13
67) methylcyclohexane	0.425	0.495	0.513	0.517	0.460	0.494	0.477	0.474		0.482 6.24
68) bromodichloromethane	0.395	0.322	0.421	0.426	0.424	0.399	0.393	0.417	0.392	0.399 8.04
69) epichlorohydrin	0.033	0.035	0.035	0.035	0.032	0.034	0.035	0.031		0.034 4.41
70) cis-1,3-dichloropropene	0.491	0.360	0.513	0.523	0.511	0.482	0.487	0.504	0.474	0.455 0.480 9.76
71) 4-methyl-2-pentanone	0.106	0.080	0.111	0.114	0.116	0.102	0.110	0.114	0.107	0.107 10.20
72) 3-methyl-1-butanol	0.012	0.013	0.013	0.013	0.012	0.013	0.013	0.012		0.013 4.58
73) I chlorobenzene-d5	-----ISTD-----									
74) toluene-d8 (s)	1.283	1.279	1.214	1.219	1.248	1.207	1.270	1.286	1.254	1.292 1.255 2.55
75) toluene	0.811	0.595	0.781	0.812	0.843	0.724	0.816	0.850	0.808	0.870 0.791 10.09
76) trans-1,3-dichloropropene	0.431	0.314	0.513	0.515	0.506	0.491	0.465	0.475	0.461	0.464 13.53
77) ethyl methacrylate	0.414	0.427	0.452	0.464	0.400	0.436	0.468	0.420		0.435 5.58
78) 1,1,2-trichloroethane	0.240	0.248	0.254	0.257	0.238	0.245	0.244	0.258		0.248 3.02
79) tetrachloroethene	0.247	0.187	0.250	0.262	0.267	0.237	0.256	0.277	0.250	0.248 10.38
80) 1,3-dichloropropane	0.489	0.390	0.502	0.524	0.532	0.473	0.496	0.549	0.500	0.512 0.497 8.73
81) 2-hexanone	0.107	0.112	0.118	0.122	0.101	0.122	0.121	0.115		0.115 6.66
82) butyl acetate	0.236	0.209	0.215	0.218	0.199	0.210	0.227	0.205		0.215 5.63
83) dibromochloromethane										

6.9.1
6

Initial Calibration Summary

Job Number: JD39687
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V3D7354-ICC7354
Lab FileID: 3D173436.D

	0.290	0.243	0.333	0.337	0.329	0.324	0.314	0.340	0.299	0.312	9.87
84)	1,2-dibromoethane										
	0.281	0.209	0.306	0.311	0.315	0.294	0.285	0.302	0.286	0.275	10.57
85)	n-butyl ether										
	1.372	1.338	1.467	1.563	1.134	1.457	1.527	1.476	1.417	9.60	
86)	chlorobenzene										
	0.875	0.669	0.850	0.886	0.918	0.772	0.869	0.955	0.865	0.851	9.91
87)	1,1,1,2-tetrachloroethane										
	0.257	0.293	0.300	0.302	0.277	0.270	0.292	0.285	0.285	5.51	
88)	ethylbenzene										
	1.572	1.194	1.377	1.504	1.611	1.179	1.609	1.699	1.561	1.478	12.66
89)	m,p-xylene										
	0.622	0.481	0.572	0.609	0.642	0.510	0.628	0.678	0.604	0.680	10.89
90)	o-xylene										
	0.631	0.463	0.605	0.639	0.665	0.548	0.644	0.648	0.618	0.660	10.18
91)	styrene										
	1.019	0.990	1.060	1.098	0.875	1.055	1.058	1.044	1.025	6.66	
92)	bromoform										
	0.178	0.173	0.216	0.217	0.209	0.208	0.184	0.198	0.176	0.195	9.10
93)	butyl acrylate										
	0.540	0.653	0.684	0.683	0.599	0.634	0.630	0.620	0.630	7.45	
94)	n-amyl acetate										
	0.257	0.243	0.252	0.254	0.228	0.243	0.249	0.235	0.245	4.11	
95)	isopropylbenzene										
	1.515	1.467	1.588	1.658	1.260	1.633	1.661	1.575	1.545	8.64	
96)	cis-1,4-dichloro-2-butene										
	0.158	0.158	0.151	0.151	0.126	0.135	0.130	0.144	9.34		
97) I	1,4-dichlorobenzene-d -----ISTD-----										
98)	4-bromofluorobenzene (s)										
	1.065	1.069	1.106	1.089	1.074	1.140	1.077	1.083	1.079	1.074	1.086
99)	bromobenzene										
	0.664	0.776	0.779	0.785	0.734	0.731	0.839	0.728	0.755	6.94	
100)	1,1,2,2-tetrachloroethane										
	0.713	0.549	0.828	0.832	0.817	0.804	0.743	0.783	0.751	0.758	11.68
101)	trans-1,4-dichloro-2-butene										
	0.264	0.267	0.259	0.252	0.242	0.226	0.224	0.248	7.09		
102)	1,2,3-trichloropropane										
	0.213	0.248	0.258	0.250	0.242	0.247	0.237	0.240	0.242	5.57	
103)	n-propylbenzene										
	3.374	3.526	3.791	3.888	3.096	3.782	3.971	3.688	3.640	8.01	
104)	2-chlorotoluene										
	0.748	0.751	0.759	0.752	0.714	0.723	0.806	0.733	0.748	3.74	
105)	4-chlorotoluene										
	0.757	0.750	0.779	0.783	0.720	0.733	0.784	0.746	0.757	3.15	
106)	1,3,5-trimethylbenzene										
	2.422	1.935	2.581	2.707	2.734	2.291	2.646	2.646	2.585	2.598	2.515
107)	tert-butylbenzene										
	0.528	0.580	0.598	0.595	0.550	0.558	0.532	0.542	0.561	4.90	
108)	1,2,4-trimethylbenzene										
	2.382	2.667	2.786	2.816	2.364	2.729	2.797	2.652	2.649	6.82	
109)	sec-butylbenzene										
	2.926	3.171	3.382	3.397	2.783	3.189	3.291	3.163	3.163	6.76	
110)	1,3-dichlorobenzene										
	1.425	1.475	1.511	1.521	1.356	1.444	1.524	1.428	1.461	4.00	
111)	p-isopropyltoluene										
	2.573	2.590	2.759	2.820	2.267	2.699	2.657	2.652	2.627	6.35	
112)	1,4-dichlorobenzene										
	1.436	1.116	1.415	1.462	1.468	1.325	1.376	1.509	1.382	1.498	1.399
113)	1,2,3-trimethylbenzene										

Initial Calibration Summary

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Job Number: JD39687
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V3D7354-ICC7354
Lab FileID: 3D173436.D

	2.475	2.520	2.629	2.636	2.249	2.590	2.739	2.541	2.547	5.71
114)	benzyl chloride									
	1.437	1.418	1.334	1.368	1.142	1.164	1.158		1.289	10.07
115)	1,2-dichlorobenzene									
	1.347	1.361	1.417	1.414	1.261	1.343	1.473	1.362	1.372	4.60
116)	n-butylbenzene									
	1.120	1.396	1.433	1.372	1.266	1.276	1.232	1.267	1.295	7.82
117)	1,2-dibromo-3-chloropropane									
	0.161	0.187	0.186	0.170	0.188	0.151	0.165	0.157	0.171	8.56
118)	1,3,5-trichlorobenzene									
	0.935	0.995	1.029	1.004	0.928	0.954	1.005	0.929	0.972	4.15
119)	1,2,4-trichlorobenzene									
	0.722	0.675	0.855	0.874	0.853	0.793	0.778	0.869	0.761	0.876
120)	hexachlorobutadiene									
	0.298	0.346	0.363	0.354	0.322	0.308	0.330	0.317	0.330	6.94
121)	naphthalene									
	1.895	1.521	2.234	2.337	2.300	1.989	2.128	2.146	2.072	
122)	1,2,3-trichlorobenzene									
	0.627	0.703	0.731	0.699	0.659	0.664	0.685	0.649	0.677	4.95
123)	hexachloroethane									
	0.391	0.380	0.343	0.386	0.289	0.309	0.293		0.342	13.11
124)	2-methylnaphthalene									
									0.000#	-1.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

M3D7354.M Fri Feb 04 15:36:37 2022 3D

Initial Calibration Summary

Job Number: JD39687

Account: SESINJPB SESI Consulting Engineers

Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VI9812-ICC9812

Lab FileID: I241545.D

Page 1 of 5

Response Factor Report GCMSI												
Method : C:\MSDCHEM\1\METHODS\MI9812.M (RTE Integrator)												
Title : Method SW846 8260C/D, Rxi-624 60m x 0.25mm x 1.4umWed Feb 03 18:57:01 2021												
Last Update : Thu Jan 20 09:03:53 2022												
Response via : Initial Calibration												
Calibration Files												
0.2 =I241538.D 0.5 =I241539.D 1 =I241540.D 2 =I241541.D												
8 =I241543.D 4 =I241542.D 20 =I241544.D 50 =I241545.D												
100 =I241546.D 200 =I241547.D = =												
Compound	0.2	0.5	1	2	8	4	20	50	100	200	Avg	%RSD

1) I tert butyl alcohol-d9 -----ISTD-----												
2) ethanol												
	0.164	0.182	0.158	0.165	0.152	0.161	0.165	0.165	0.164		5.19	
3) tertiary butyl alcohol												
	1.229	1.262	1.165	1.260	1.144	1.208	1.255	1.217	1.217		3.62	
4) 1,4-dioxane												
	0.142	0.118	0.103	0.122	0.130	0.138	0.132	0.126		10.50		
5) I pentafluorobenzene -----ISTD-----												
6) dichlorodifluoromethane												
	0.421	0.450	0.451	0.431	0.421	0.422	0.434	0.425	0.432		2.88	
7) chlorodifluoromethane												
	0.467	0.447	0.414	0.450	0.430	0.448	0.397	0.404	0.409	0.404	0.427	5.74
8) chloromethane												
	0.806	0.701	0.693	0.640	0.612	0.606	0.570	0.661		11.98		
9) vinyl chloride												
	0.569	0.602	0.512	0.651	0.568	0.529	0.550	0.532	0.542	0.519	0.557	7.63
10) 1,3-butadiene												
	0.611	0.535	0.487	0.509	0.506	0.536	0.492	0.488	0.481	0.463	0.511	8.21
11) bromomethane												
	0.289	0.309	0.235	0.221	0.243	0.241	0.256		13.47			
12) chloroethane												
	0.209	0.190	0.165	0.201	0.198	0.179	0.185	0.194	0.199	0.199	0.192	6.65
13) trichlorofluoromethane												
	0.431	0.550	0.469	0.549	0.525	0.498	0.518	0.516	0.542	0.543	0.514	7.53
14) ethyl ether												
	0.105	0.103	0.127	0.110	0.112	0.121	0.122	0.127	0.130	0.117		8.71
15) acrolein												
	0.037		0.034	0.039	0.043	0.042	0.039		9.39			
16) freon 113												
	0.266	0.245	0.263	0.228	0.257	0.234	0.239	0.251	0.257	0.249		5.23
17) 1,1-dichloroethene												
	0.382	0.416	0.467	0.451	0.447	0.450	0.453	0.458	0.472	0.473	0.447	6.29
18) acetone												
	0.031	0.024	0.024	0.023	0.024	0.023	0.023	0.025	0.025	0.025		10.22
19) iodomethane *This compound fails Initial Calibration criteria*												
	0.079	0.175	0.101	0.321	0.412	0.439	0.435	0.280		56.86		
20) carbon disulfide												
	1.046	0.879	0.948	0.867	0.897	0.839	0.839	0.857	0.859	0.892		7.47
21) acetonitrile												
	0.029	0.034	0.033	0.032	0.035	0.030	0.032	0.033	0.032	0.032		5.42
22) methyl acetate												
	0.257	0.206	0.221	0.185	0.187	0.191	0.192	0.206		12.72		
23) methylene chloride												

Initial Calibration Summary

Job Number: JD39687
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VI9812-ICC9812
Lab FileID: I241545.D

		0.284	0.337	0.267	0.264	0.263	0.266	0.280	10.29
24)	acrylonitrile								
		0.064	0.058	0.068	0.071	0.075	0.073	0.068	9.16
25)	methyl tert butyl ether								
		0.557	0.518	0.555	0.601	0.591	0.588	0.588	7.76
26)	trans-1,2-dichloroethene								
		0.380	0.429	0.404	0.428	0.431	0.449	0.423	5.26
27)	hexane								
		0.667	0.593	0.552	0.523	0.538	0.508	0.525	8.67
28)	1,1-dichloroethane								
		0.538	0.469	0.494	0.572	0.560	0.561	0.520	6.11
29)	vinyl acetate								
		0.032	0.033	0.034	0.037	0.038	0.036	0.038	6.86
30)	di-isopropyl ether								
		0.837	0.957	0.960	1.026	0.997	1.056	0.996	8.01
31)	chloroprene								
		0.075	0.081	0.071	0.076	0.081	0.081	0.078	5.36
32)	ethyl tert-butyl ether								
		0.749	0.781	0.723	0.782	0.830	0.830	0.827	9.10
33)	2-butanone								
		0.019	0.021	0.022	0.022	0.024	0.023	0.023	7.15
34)	2,2-dichloropropane								
		0.296	0.387	0.364	0.429	0.393	0.401	0.392	10.18
35)	ethyl acetate								
		0.035	0.034	0.037	0.037	0.040	0.040	0.037	6.53
36)	cis-1,2-dichloroethene								
		0.284	0.285	0.323	0.298	0.301	0.293	0.303	4.55
37)	propionitrile								
		0.027	0.035	0.033	0.034	0.032	0.034	0.035	8.17
38)	methyl acrylate								
		0.188	0.207	0.247	0.214	0.228	0.239	0.237	9.35
39)	methacrylonitrile								
		0.068	0.082	0.078	0.071	0.080	0.085	0.087	8.78
40)	bromochloromethane								
		0.146	0.136	0.158	0.158	0.142	0.153	0.140	5.01
41)	tetrahydrofuran								
		0.100	0.089	0.100	0.089	0.092	0.094	0.094	4.86
42)	chloroform								
		0.596	0.609	0.517	0.549	0.500	0.500	0.524	7.64
43)	carbon tetrachloride								
		0.406	0.450	0.447	0.497	0.436	0.468	0.424	5.85
44)	1,1-dichloropropene								
		0.359	0.366	0.347	0.383	0.374	0.397	0.364	5.95
45)	isobutyl alcohol								
		0.003	0.003	0.003	0.003	0.003	0.003	0.003	8.75
46)	dibromofluoromethane (s)								
		0.365	0.372	0.378	0.374	0.370	0.373	0.377	1.15
47)	1,1,1-trichloroethane								
		0.409	0.509	0.455	0.514	0.465	0.473	0.453	6.46
48)	cyclohexane								
		0.349	0.409	0.417	0.454	0.394	0.405	0.436	8.62
49)	tert-amyl alcohol								
		0.048	0.046	0.054	0.053	0.052	0.051	0.052	6.59
50)	I 1,4-difluorobenzene	-----ISTD-----							
51)	1,2-dichloroethane-d4 (s)								
		0.286	0.283	0.290	0.286	0.289	0.288	0.283	1.92
52)	isopropyl acetate								
		0.036	0.034	0.034	0.034	0.039	0.041	0.043	10.07
53)	1,2-dichloroethane								

Initial Calibration Summary

Job Number: JD39687
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VI9812-ICC9812
Lab FileID: I241545.D

	0.351	0.369	0.337	0.351	0.299	0.304	0.292	0.304	0.321	0.329	0.326	7.98
54)	benzene											
	0.952	0.895	0.823	0.917	0.825	0.876	0.826	0.849	0.900	0.941	0.880	5.50
55)	2,2,4-trimethylpentane											
	1.114	0.961	0.986	1.019	0.998	1.013	0.961	0.995	1.059	1.074	1.018	4.92
56)	tert-amyl methyl ether											
	0.117	0.117	0.117	0.121	0.132	0.145	0.152	0.129				11.43
57)	heptane											
	0.197	0.197	0.193	0.216	0.213	0.206	0.211	0.222	0.243	0.245	0.214	8.41
58)	n-butyl alcohol											
	0.005	0.005	0.005	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005	6.39
59)	trichloroethene											
	0.253	0.210	0.254	0.245	0.247	0.228	0.235	0.251	0.255	0.242		6.25
60)	ethyl acrylate											
	0.198	0.245	0.228	0.242	0.226	0.245	0.261	0.259	0.238			8.59
61)	methylcyclohexane											
	0.355	0.333	0.352	0.361	0.348	0.353	0.337	0.357	0.377	0.380	0.355	4.17
62)	1,2-dichloropropane											
	0.287	0.262	0.225	0.242	0.232	0.232	0.219	0.233	0.245	0.247	0.242	8.19
63)	methyl methacrylate											
	0.040	0.032	0.029	0.038	0.042	0.046	0.045	0.039				16.60
64)	dibromomethane											
	0.138	0.128	0.125	0.149	0.126	0.140	0.126	0.135	0.139	0.137	0.134	5.84
65)	bromodichloromethane											
	0.260	0.335	0.293	0.310	0.294	0.302	0.281	0.292	0.306	0.307	0.298	6.56
66)	2-nitropropane											
	0.051			0.049	0.055	0.061	0.053	0.054				8.19
67)	2-chloroethyl vinyl ether											
	0.102	0.118	0.117	0.116	0.118	0.131	0.140	0.148	0.124			11.90
68)	epichlorohydrin											
	0.014	0.021	0.020	0.021	0.018	0.019	0.020	0.020	0.019			12.25
69)	cis-1,3-dichloropropene											
	0.276	0.286	0.279	0.333	0.314	0.332	0.321	0.340	0.363	0.369	0.321	10.25
70)	4-methyl-2-pentanone											
	0.059	0.060	0.072	0.070	0.071	0.070	0.075	0.077	0.077	0.070		9.57
71)	3-methyl-1-butanol											
	0.003	0.003	0.004	0.004	0.004	0.005	0.005	0.004	0.004	0.004	0.004	16.20
72)	I chlorobenzene-d5 -----ISTD-----											
73)	toluene-d8 (s)											
	1.296	1.295	1.285	1.302	1.293	1.289	1.289	1.291	1.282	1.297	1.292	0.47
74)	toluene											
	0.669	0.741	0.698	0.743	0.664	0.677	0.645	0.668	0.703	0.733	0.694	5.08
75)	trans-1,3-dichloropropene											
	0.339	0.321	0.319	0.353	0.346	0.349	0.346	0.380	0.398	0.410	0.356	8.56
76)	ethyl methacrylate											
	0.271	0.215	0.275	0.259	0.261	0.254	0.273	0.287	0.291	0.265		8.42
77)	1,1,2-trichloroethane											
	0.165	0.155	0.164	0.180	0.183	0.186	0.174	0.186	0.193	0.195	0.178	7.53
78)	1,3-dichloropropane											
	0.309	0.314	0.323	0.352	0.331	0.347	0.334	0.353	0.366	0.379	0.341	6.65
79)	tetrachloroethene											
	0.286	0.384	0.331	0.373	0.343	0.363	0.335	0.356	0.381	0.398	0.355	9.24
80)	2-hexanone											
	0.070	0.091	0.088	0.087	0.087	0.096	0.099	0.100	0.090			10.74
81)	butyl acetate											
	0.135	0.132	0.155	0.155	0.149	0.161	0.166	0.171	0.153			9.06
82)	n-butyl ether											
	1.124	1.218	1.048	1.183	1.213	1.159	1.171	1.255	1.305	1.342	1.202	7.15
83)	dibromochloromethane											

Initial Calibration Summary

Job Number: JD39687
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VI9812-ICC9812
Lab FileID: I241545.D

	0.284	0.315	0.296	0.312	0.285	0.300	0.290	0.308	0.330	0.340	0.306	6.12
84)	1,2-dibromoethane											
	0.183	0.205	0.219	0.218	0.210	0.227	0.218	0.231	0.241	0.246	0.220	8.31
85)	chlorobenzene											
	0.926	0.789	0.762	0.849	0.769	0.858	0.741	0.777	0.810	0.835	0.812	6.87
86)	1,1,1,2-tetrachloroethane											
	0.282	0.287	0.286	0.286	0.287	0.303	0.332	0.356	0.302			8.92
87)	ethylbenzene											
	1.246	1.326	1.188	1.350	1.233	1.263	1.211	1.257	1.343	1.433	1.285	5.88
88)	m,p-xylene											
	0.570	0.490	0.455	0.493	0.469	0.492	0.475	0.494	0.531	0.566	0.503	7.81
89)	o-xylene											
	0.402	0.480	0.451	0.488	0.471	0.498	0.526	0.570	0.486			10.21
90)	styrene											
	0.707	0.783	0.758	0.761	0.769	0.816	0.880	0.965	0.805			10.16
91)	butyl acrylate											
	0.388	0.461	0.448	0.452	0.451	0.510	0.526	0.536	0.472			10.47
92)	cis-1,4-dichloro-2-butene											
	0.091	0.085	0.073	0.088	0.101	0.109	0.117	0.095				16.01
93)	bromoform											
	0.191	0.180	0.212	0.193	0.206	0.184	0.211	0.235	0.241	0.206		10.44
94)	isopropylbenzene											
	1.115	1.190	1.132	1.286	1.182	1.183	1.174	1.257	1.347	1.412	1.228	7.80
95)	I 1,4-dichlorobenzene-d -----ISTD-----											
96)	4-bromofluorobenzene (s)											
	0.867	0.852	0.856	0.867	0.860	0.844	0.857	0.895	0.945	1.032	0.888	6.62
97)	1,1,1,2-tetrachloroethane											
	0.597	0.616	0.578	0.634	0.525	0.543	0.497	0.513	0.510	0.477	0.549	9.84
98)	trans-1,4-dichloro-2-butene											
	0.158	0.187	0.194	0.182	0.169	0.181	0.183	0.171	0.178			6.35
99)	1,2,3-trichloropropane											
	0.110	0.158	0.135	0.140	0.136	0.137	0.140	0.130	0.136			9.83
100)	bromobenzene											
	0.695	0.680	0.708	0.736	0.681	0.709	0.652	0.695	0.717	0.724	0.700	3.51
101)	n-propylbenzene											
	3.060	3.034	2.877	3.195	2.925	2.980	2.828	2.880	2.948	2.907	2.963	3.66
102)	2-chlorotoluene											
	0.669	0.608	0.670	0.651	0.629	0.643	0.605	0.636	0.659	0.667	0.644	3.74
103)	4-chlorotoluene											
	1.646	1.573	1.860	1.653	1.738	1.624	1.629	1.634	1.584	1.660		5.33
104)	1,3,5-trimethylbenzene											
	2.270	1.823	1.895	2.029	1.930	1.963	1.908	1.943	2.050	2.101	1.991	6.39
105)	tert-butylbenzene											
	1.427	1.761	1.626	2.082	1.789	1.802	1.755	1.803	1.833	1.798	1.768	9.29
106)	1,2,4-trimethylbenzene											
	2.086	1.922	1.840	2.017	1.912	2.017	1.895	1.975	2.025	2.008	1.970	3.80
107)	sec-butylbenzene											
	2.940	2.632	2.450	2.751	2.646	2.648	2.566	2.628	2.734	2.687	2.668	4.80
108)	p-isopropyltoluene											
	2.136	2.262	2.073	2.391	2.250	2.228	2.183	2.274	2.370	2.381	2.255	4.70
109)	benzyl chloride											
	0.955	0.838	0.732	0.990	0.858	0.922	0.894	0.989	1.014	0.992	0.918	9.70
110)	1,3-dichlorobenzene											
	1.215	1.418	1.182	1.392	1.231	1.266	1.163	1.244	1.268	1.264	1.264	6.50
111)	1,4-dichlorobenzene											
	1.502	1.306	1.449	1.285	1.401	1.248	1.276	1.322	1.365	1.350		6.34
112)	1,2-dichlorobenzene											
	1.122	1.111	1.149	1.225	1.132	1.171	1.070	1.147	1.198	1.189	1.151	3.99
113)	1,2,3-trimethylbenzene											

Initial Calibration Summary

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Job Number: JD39687
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VI9812-ICC9812
Lab FileID: I241545.D

	2.288	2.184	2.020	2.281	2.037	2.086	1.954	2.015	2.117	2.163	2.114	5.38
114)	n-butylbenzene											
	0.971	1.211	1.083	1.208	1.120	1.097	1.093	1.143	1.179	1.196	1.130	6.56
115)	hexachloroethane											
	0.362	0.384	0.448	0.403	0.406	0.393	0.410	0.459	0.459	0.414		8.28
116)	1,2-dibromo-3-chloropropane											
	0.117	0.128	0.136	0.123	0.117	0.124	0.138	0.135	0.127			6.59
117)	1,3,5-trichlorobenzene											
	1.008	1.070	0.995	1.116	0.986	1.030	0.952	1.009	1.084	1.142	1.039	5.91
118)	1,2,4-trichlorobenzene											
	1.025	0.969	0.904	1.000	0.866	0.889	0.827	0.892	0.950	1.007	0.933	7.16
119)	hexachlorobutadiene											
	0.540	0.643	0.553	0.608	0.535	0.551	0.495	0.514	0.570	0.603	0.561	8.13
120)	naphthalene											
	2.083	1.796	1.816	1.896	1.713	1.809	1.665	1.803	1.942	1.991	1.851	6.87
121)	1,2,3-trichlorobenzene											
	0.889	0.817	0.876	0.827	0.827	0.784	0.826	0.891	0.949	0.854		5.93
122)	2-methylnaphthalene											
		1.139	0.936	0.976	1.015	1.138	1.232	1.265	1.100			11.56

(#) = Out of Range ### Number of calibration levels exceeded format ###

MI9812.M

Thu Jan 20 09:06:27 2022

Continuing Calibration Summary

Job Number: JD39687
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VI9838-CC9812
 Lab FileID: I242240.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ni...838-halfway\i242240.d Vial: 1
 Acq On : 15 Feb 2022 9:47 am Operator: PrashanS
 Sample : cc9812-50 Inst : GCMSI
 Misc : MS56757,VI9838,5.0,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MI9812.M (RTE Integrator)
 Title : Method SW846 8260C/D, Rxi-624 60m x 0.25mm x 1.4umWed Feb 03 18:57:01 2021
 Last Update : Thu Jan 20 09:03:53 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	74	-0.02	4.65
2	ethanol	0.164	0.180	-9.8	83	-0.03	4.09
3	tertiary butyl alcohol	1.217	1.229	-1.0	76	-0.02	4.71
4	1,4-dioxane	0.126	0.130	-3.2	74	-0.02	6.67
5 I	pentafluorobenzene	1.000	1.000	0.0	74	-0.02	5.76
6	dichlorodifluoromethane	0.432	0.369	14.6	64	-0.02	3.18
7	chlorodifluoromethane	0.427	0.446	-4.4	81	-0.02	3.19
8	chloromethane	0.661	0.758	-14.7	91	-0.02	3.38
9	vinyl chloride	0.557	0.634	-13.8	88	-0.02	3.49
10	1,3-butadiene	0.511	0.495	3.1	75	-0.02	3.54
11	bromomethane	0.256	0.360	-40.6#	120	-0.02	3.80
12	chloroethane	0.192	0.213	-10.9	81	-0.03	3.88
13	trichlorofluoromethane	0.514	0.497	3.3	71	-0.02	4.08
14	ethyl ether	0.117	0.130	-11.1	78	-0.03	4.24
15	acrolein	0.039	0.046	-17.9	88	-0.03	4.34
16	freon 113	0.249	0.232	6.8	72	-0.02	4.43
17	1,1-dichloroethene	0.447	0.488	-9.2	78	-0.02	4.46
18	acetone	0.025	0.027	-8.0	85	-0.03	4.41
19	iodomethane	0.280	0.372	-32.9#	67	-0.02	4.59
20	carbon disulfide	0.892	0.926	-3.8	81	-0.02	4.69
21	acetonitrile	0.032	0.038	-18.7	87	-0.02	4.58
22	methyl acetate	0.206	0.218	-5.8	86	-0.02	4.61
23	methylene chloride	0.280	0.284	-1.4	79	-0.02	4.74
24	acrylonitrile	0.068	0.087	-27.9#	91	-0.03	4.84
25	methyl tert butyl ether	0.595	0.653	-9.7	77	-0.02	4.90
26	trans-1,2-dichloroethene	0.428	0.484	-13.1	82	-0.02	4.94
27	hexane	0.556	0.514	7.6	72	-0.02	5.10
28	1,1-dichloroethane	0.535	0.621	-16.1	86	-0.02	5.20
29	vinyl acetate	0.035	0.038	-8.6	74	-0.02	5.13
30	di-isopropyl ether	1.010	1.251	-23.9#	88	-0.02	5.16
31	chloroprene	0.078	0.096	-23.1#	92	-0.02	4.84
32	ethyl tert-butyl ether	0.828	0.945	-14.1	80	-0.02	5.39
33	2-butanone	0.022	0.026	-18.2	80	-0.02	5.48
34	2,2-dichloropropane	0.392	0.467	-19.1	86	-0.03	5.56
35	ethyl acetate	0.037	0.044	-18.9	88	-0.02	5.47
36	cis-1,2-dichloroethene	0.302	0.322	-6.6	78	-0.03	5.54
37	propionitrile	0.033	0.040	-21.2#	86	-0.02	5.50
38	methyl acrylate	0.223	0.267	-19.7	86	-0.03	5.53
39	methacrylonitrile	0.079	0.092	-16.5	80	-0.02	5.61
40	bromochloromethane	0.149	0.156	-4.7	78	-0.02	5.70
41	tetrahydrofuran	0.094	0.109	-16.0	87	-0.02	5.72

Continuing Calibration Summary

Job Number: JD39687
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VI9838-CC9812
Lab FileID: I242240.D

Page 2 of 3

42	chloroform	0.541	0.566	-4.6	83	-0.02	5.72
43	carbon tetrachloride	0.452	0.469	-3.8	77	-0.02	6.01
44	1,1-dichloropropene	0.379	0.432	-14.0	84	-0.02	5.98
45	isobutyl alcohol	0.003	0.003#	0.0	84	-0.02	5.98
46 S	dibromofluoromethane (s)	0.373	0.396	-6.2	77	-0.03	5.82
47	1,1,1-trichloroethane	0.472	0.491	-4.0	77	-0.02	5.89
48	cyclohexane	0.416	0.411	1.2	75	-0.02	5.98
49	tert-amyl alcohol	0.052	0.058	-11.5	83	-0.02	5.98
50 I	1,4-difluorobenzene	1.000	1.000	0.0	76	-0.02	6.30
51 S	1,2-dichloroethane-d4 (s)	0.283	0.305	-7.8	83	-0.02	6.05
52	isopropyl acetate	0.037	0.039	-5.4	74	-0.02	5.98
53	1,2-dichloroethane	0.326	0.351	-7.7	87	-0.03	6.10
54	benzene	0.880	0.924	-5.0	82	-0.02	6.12
55	2,2,4-trimethylpentane	1.018	0.992	2.6	75	-0.03	6.15
56	tert-amyl methyl ether	0.129	0.138	-7.0	79	-0.02	6.12
57	heptane	0.214	0.236	-10.3	80	-0.02	6.22
58	n-butyl alcohol	0.005	0.005#	0.0	85	-0.02	6.25
59	trichloroethene	0.242	0.242	0.0	78	-0.02	6.50
60	ethyl acrylate	0.238	0.260	-9.2	80	-0.02	6.43
61	methylcyclohexane	0.355	0.330	7.0	70	-0.03	6.69
62	1,2-dichloropropane	0.242	0.265	-9.5	86	-0.03	6.65
63	methyl methacrylate	0.039	0.041	-5.1	73	-0.02	6.58
64	dibromomethane	0.134	0.144	-7.5	81	-0.03	6.72
65	bromodichloromethane	0.298	0.323	-8.4	84	-0.03	6.78
66	2-nitropropane	0.054	0.069	-27.8#	95	-0.02	6.87
67	2-chloroethyl vinyl ether	0.124	0.141	-13.7	82	-0.02	6.89
68	epichlorohydrin	0.019	0.021	-10.5	82	-0.02	6.95
69	cis-1,3-dichloropropene	0.321	0.368	-14.6	82	-0.02	7.05
70	4-methyl-2-pentanone	0.070	0.082	-17.1	83	-0.02	7.08
71	3-methyl-1-butanol	0.004	0.004#	0.0	73	-0.02	7.05
72 I	chlorobenzene-d5	1.000	1.000	0.0	79	-0.02	8.21
73 S	toluene-d8 (s)	1.292	1.289	0.2	78	-0.02	7.26
74	toluene	0.694	0.687	1.0	81	-0.02	7.31
75	trans-1,3-dichloropropene	0.356	0.412	-15.7	85	-0.02	7.38
76	ethyl methacrylate	0.265	0.271	-2.3	78	-0.02	7.35
77	1,1,2-trichloroethane	0.178	0.196	-10.1	83	-0.02	7.53
78	1,3-dichloropropane	0.341	0.371	-8.8	83	-0.02	7.64
79	tetrachloroethene	0.355	0.345	2.8	76	-0.02	7.66
80	2-hexanone	0.090	0.095	-5.6	78	-0.02	7.60
81	butyl acetate	0.153	0.171	-11.8	83	-0.02	7.65
82	n-butyl ether	1.202	1.332	-10.8	83	-0.02	8.16
83	dibromochloromethane	0.306	0.313	-2.3	80	-0.02	7.81
84	1,2-dibromoethane	0.220	0.227	-3.2	77	-0.02	7.92
85	chlorobenzene	0.812	0.780	3.9	79	-0.02	8.23
86	1,1,1,2-tetrachloroethane	0.302	0.308	-2.0	80	-0.02	8.26
87	ethylbenzene	1.285	1.298	-1.0	81	-0.02	8.26
88	m,p-xylene	0.503	0.501	0.4	80	-0.02	8.33
89	o-xylene	0.486	0.507	-4.3	80	-0.02	8.59
90	styrene	0.805	0.842	-4.6	81	-0.02	8.60
91	butyl acrylate	0.472	0.525	-11.2	81	-0.02	8.44
92	cis-1,4-dichloro-2-butene	0.095	0.113	-18.9	87	-0.02	8.81
93	bromoform	0.206	0.212	-2.9	79	-0.02	8.75
94	isopropylbenzene	1.228	1.262	-2.8	79	-0.02	8.82
95 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	83	-0.03	9.75
96 S	4-bromofluorobenzene (s)	0.888	0.804	9.5	74	-0.02	8.95
97	1,1,2,2-tetrachloroethane	0.549	0.533	2.9	86	-0.02	8.97
98	trans-1,4-dichloro-2-bute	0.178	0.193	-8.4	88	-0.02	8.99

Continuing Calibration Summary

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Job Number: JD39687
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VI9838-CC9812
Lab FileID: I242240.D

99	1,2,3-trichloropropane	0.136	0.130	4.4	79	-0.02	9.04
100	bromobenzene	0.700	0.667	4.7	79	-0.02	9.08
101	n-propylbenzene	2.963	2.878	2.9	83	-0.02	9.09
102	2-chlorotoluene	0.644	0.621	3.6	81	-0.02	9.19
103	4-chlorotoluene	1.660	1.553	6.4	79	-0.02	9.26
104	1,3,5-trimethylbenzene	1.991	1.896	4.8	81	-0.02	9.18
105	tert-butylbenzene	1.768	1.665	5.8	76	-0.02	9.42
106	1,2,4-trimethylbenzene	1.970	1.951	1.0	82	-0.02	9.46
107	sec-butylbenzene	2.668	2.560	4.0	81	-0.02	9.58
108	p-isopropyltoluene	2.255	2.161	4.2	79	-0.02	9.66
109	benzyl chloride	0.918	1.054	-14.8	88	-0.03	9.82
110	1,3-dichlorobenzene	1.264	1.231	2.6	82	-0.03	9.70
111	1,4-dichlorobenzene	1.350	1.302	3.6	84	-0.02	9.77
112	1,2-dichlorobenzene	1.151	1.145	0.5	83	-0.02	10.04
113	1,2,3-trimethylbenzene	2.114	1.965	7.0	81	-0.02	9.76
114	n-butylbenzene	1.130	1.132	-0.2	82	-0.02	9.95
115	hexachloroethane	0.414	0.430	-3.9	87	-0.02	10.29
116	1,2-dibromo-3-chloropropa	0.127	0.118	7.1	78	-0.03	10.61
117	1,3,5-trichlorobenzene	1.039	1.036	0.3	85	-0.03	10.78
118	1,2,4-trichlorobenzene	0.933	0.878	5.9	81	-0.03	11.33
119	hexachlorobutadiene	0.561	0.520	7.3	84	-0.03	11.44
120	naphthalene	1.851	1.707	7.8	78	-0.03	11.61
121	1,2,3-trichlorobenzene	0.854	0.827	3.2	83	-0.03	11.82
122	2-methylnaphthalene	1.100	15.196	-1281.5# 1106#	-0.04	12.83	

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

I241545.D MI9812.M

Tue Feb 15 23:10:01 2022

Continuing Calibration Summary

Job Number: JD39687
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V3D7368-CC7354
 Lab FileID: 3D173720.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\lo...68-halfway\3d173720.d Vial: 3
 Acq On : 15 Feb 2022 9:31 am Operator: nicoleh
 Sample : cc7354-20 Inst : MS3D
 Misc : MS56675,V3D7368,5,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\M3D7354.M (RTE Integrator)
 Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xThu Feb 03 16:08:26 2022
 Last Update : Thu Feb 03 16:08:26 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	tert butyl alcohol-d9	1.000	1.000	0.0	117	0.00	2.92
2 M	tertiary butyl alcohol	1.327	1.358	-2.3	124	0.00	2.98
3	ethanol	0.160	0.167	-4.4	122	0.00	2.37
4 M	1,4-dioxane	0.155	0.149	3.9	111	0.00	5.11
5 I	pentafluorobenzene	1.000	1.000	0.0	98	0.00	4.12
6	chlorodifluoromethane	0.578	0.508	12.1	82	0.00	1.58
7 M	dichlorodifluoromethane	0.603	0.648	-7.5	97	0.00	1.56
8 M	chloromethane	0.577	0.577	0.0	92	0.00	1.71
9 M	vinyl chloride	0.558	0.661	-18.5	102	0.00	1.79
10	1,3-butadiene	0.465	0.445	4.3	89	0.00	1.82
11 M	bromomethane	0.235	0.238	-1.3	92	0.00	2.03
12 M	chloroethane	0.369	0.400	-8.4	105	0.00	2.11
13 M	trichlorofluoromethane	0.671	0.824	-22.8#	110	0.00	2.29
14 M	ethyl ether	0.283	0.326	-15.2	109	0.00	2.47
15 M	acrolein	0.089	0.115	-29.2#	128	0.00	2.55
16	freon 113	0.304	0.341	-12.2	100	0.00	2.64
17 M	1,1-dichloroethene	0.360	0.404	-12.2	100	0.00	2.64
18 M	acetone	0.041	0.076	-85.4#	176	0.00	2.64
19 M	acetonitrile	0.066	0.076	-15.2	112	0.00	2.81
20 M	iodomethane	0.360	0.210	41.7#	54	0.00	2.75
21 M	carbon disulfide	1.188	1.189	-0.1	93	0.00	2.81
22 M	methylene chloride	0.502	0.525	-4.6	100	0.00	2.95
23 M	methyl acetate	0.343	0.406	-18.4	112	0.00	2.84
24 M	methyl tert butyl ether	1.266	1.498	-18.3	109	0.00	3.12
25 M	trans-1,2-dichloroethene	0.400	0.455	-13.7	102	0.00	3.14
26 M	di-isopropyl ether	1.321	1.693	-28.2#	114	0.00	3.42
27 M	2-butanone	0.051	0.077	-51.0#	139	0.00	3.76
28 M	1,1-dichloroethane	0.766	0.881	-15.0	107	0.01	3.42
29 M	chloroprene	0.650	0.770	-18.5	105	0.00	3.47
30 M	acrylonitrile	0.157	0.221	-40.8#	134	0.00	3.08
31	hexane	0.341	0.418	-22.6#	113	0.00	3.32
32 M	vinyl acetate	0.113	0.126	-11.5	105	0.00	3.39
33 M	ethyl tert-butyl ether	1.433	1.749	-22.1#	112	0.00	3.67
34 M	ethyl acetate	0.067	0.084	-25.4#	119	0.00	3.78
35 M	2,2-dichloropropane	0.587	0.768	-30.8#	122	0.00	3.81
36 M	cis-1,2-dichloroethene	0.454	0.515	-13.4	105	0.00	3.80
37	methyl acrylate	0.072	0.080	-11.1	102	0.00	3.82
38 M	propionitrile	0.066	0.082	-24.2#	115	0.00	3.80
39 M	bromochloromethane	0.216	0.249	-15.3	108	0.00	3.96
40 M	tetrahydrofuran	0.134	0.171	-27.6#	122	0.00	3.98
41 M	chloroform	0.509	0.641	-25.9#	120	0.00	4.01

Continuing Calibration Summary

Job Number: JD39687
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V3D7368-CC7354
Lab FileID: 3D173720.D

42	M	t-butyl formate	0.417	0.489	-17.3	110	0.00	4.04
43	S	dibromofluoromethane (s)	0.403	0.442	-9.7	108	0.00	4.12
44	M	methacrylonitrile	0.186	0.221	-18.8	112	0.00	3.92
45	M	1,1,1-trichloroethane	0.656	0.726	-10.7	104	0.00	4.16
46		cyclohexane	0.657	0.744	-13.2	105	0.01	4.23
47		1,1-dichloropropene	0.561	0.632	-12.7	107	0.00	4.26
48		iso-butyl alcohol	0.018	0.022	-22.2#	123	0.00	4.26
49		carbon tetrachloride	0.535	0.590	-10.3	104	0.00	4.28
50		tert amyl alcohol	0.018	0.021	-16.7	119	0.00	4.36
51	I	1,4-difluorobenzene	1.000	1.000	0.0	103	0.00	4.68
52	S	1,2-dichloroethane-d4 (s)	0.344	0.358	-4.1	105	0.00	4.37
53	M	n-butyl alcohol	0.009	0.010	-11.1	118	0.00	4.73
54		2,2,4-trimethylpentane	0.836	1.079	-29.1#	122	0.00	4.48
55	M	benzene	1.129	1.223	-8.3	105	0.00	4.41
56	M	tert-amyl methyl ether	0.222	0.242	-9.0	108	0.00	4.48
57	M	heptane	0.200	0.261	-30.5#	124	0.00	4.59
58	M	isopropyl acetate	0.069	0.080	-15.9	117	0.01	4.39
59	M	1,2-dichloroethane	0.419	0.456	-8.8	108	0.00	4.43
60	M	trichloroethene	0.281	0.318	-13.2	106	0.00	4.88
61		ethyl acrylate	0.375	0.432	-15.2	112	0.00	4.89
62	M	2-nitropropane	0.093	0.097	-4.3	113	0.00	5.40
63	M	2-chloroethyl vinyl ether	0.189	0.223	-18.0	113	0.00	5.45
64	M	methyl methacrylate	0.086	0.093	-8.1	106	0.00	5.07
65	M	1,2-dichloropropane	0.292	0.338	-15.8	109	0.00	5.06
66	M	dibromomethane	0.174	0.193	-10.9	109	0.00	5.14
67	M	methylcyclohexane	0.482	0.531	-10.2	106	0.00	5.07
68	M	bromodichloromethane	0.399	0.438	-9.8	106	0.00	5.25
69		epichlorohydrin	0.034	0.040	-17.6	116	0.01	5.50
70	M	cis-1,3-dichloropropene	0.480	0.554	-15.4	112	0.00	5.59
71	M	4-methyl-2-pentanone	0.107	0.131	-22.4#	116	0.01	5.69
72	M	3-methyl-1-butanol	0.013	0.015	-15.4	117	0.00	5.71
73	I	chlorobenzene-d5	1.000	1.000	0.0	106	0.00	7.06
74	S	toluene-d8 (s)	1.255	1.237	1.4	105	0.00	5.82
75		toluene	0.791	0.829	-4.8	104	0.00	5.88
76		trans-1,3-dichloropropene	0.464	0.539	-16.2	113	0.00	6.04
77		ethyl methacrylate	0.435	0.480	-10.3	110	0.00	6.07
78		1,1,2-trichloroethane	0.248	0.266	-7.3	110	0.00	6.21
79	M	tetrachloroethene	0.248	0.271	-9.3	108	0.00	6.32
80	M	1,3-dichloropropane	0.497	0.555	-11.7	111	0.00	6.35
81		2-hexanone	0.115	0.150	-30.4#	131	0.00	6.37
82	M	butyl acetate	0.215	0.236	-9.8	115	0.00	6.46
83	M	dibromochloromethane	0.312	0.341	-9.3	110	0.00	6.54
84	M	1,2-dibromoethane	0.286	0.313	-9.4	106	0.00	6.66
85		n-butyl ether	1.417	1.616	-14.0	110	0.00	7.15
86	M	chlorobenzene	0.851	0.927	-8.9	107	0.00	7.09
87	M	1,1,1,2-tetrachloroethane	0.285	0.309	-8.4	109	0.00	7.16
88	M	ethylbenzene	1.478	1.610	-8.9	106	0.00	7.17
89	M	m,p-xylene	0.603	0.643	-6.6	106	0.00	7.28
90	M	o-xylene	0.612	0.667	-9.0	106	0.00	7.64
91	M	styrene	1.025	1.114	-8.7	108	0.00	7.65
92	M	bromoform	0.195	0.217	-11.3	110	0.00	7.82
93		butyl acrylate	0.630	0.712	-13.0	111	0.00	7.56
94		n-amyl acetate	0.245	0.262	-6.9	109	0.00	7.76
95		isopropylbenzene	1.545	1.683	-8.9	108	0.00	7.98
96		cis-1,4-dichloro-2-butene	0.144	0.154	-6.9	108	0.00	8.01
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	109	0.00	9.25
98	S	4-bromofluorobenzene (s)	1.086	1.061	2.3	108	0.00	8.14

6.9.4

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Continuing Calibration Summary

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Job Number: JD39687
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V3D7368-CC7354
Lab FileID: 3D173720.D

99 M	bromobenzene	0.755	0.775	-2.6	108	0.00	8.28
100 M	1,1,2,2-tetrachloroethane	0.758	0.830	-9.5	111	0.00	8.25
101 M	trans-1,4-dichloro-2-bute	0.248	0.255	-2.8	108	0.00	8.28
102 M	1,2,3-trichloropropane	0.242	0.248	-2.5	108	0.00	8.31
103 M	n-propylbenzene	3.640	3.856	-5.9	108	0.00	8.37
104 M	2-chlorotoluene	0.748	0.740	1.1	107	0.00	8.46
105 M	4-chlorotoluene	0.757	0.772	-2.0	108	0.00	8.57
106 M	1,3,5-trimethylbenzene	2.515	2.705	-7.6	108	0.00	8.54
107 M	tert-butylbenzene	0.561	0.587	-4.6	107	0.00	8.84
108 M	1,2,4-trimethylbenzene	2.649	2.824	-6.6	109	0.00	8.90
109 M	sec-butylbenzene	3.163	3.446	-8.9	111	0.00	9.06
110 M	1,3-dichlorobenzene	1.461	1.535	-5.1	110	0.00	9.18
111 M	p-isopropyltoluene	2.627	2.852	-8.6	110	0.00	9.21
112 M	1,4-dichlorobenzene	1.399	1.452	-3.8	108	0.00	9.28
113	1,2,3-trimethylbenzene	2.547	2.624	-3.0	109	0.00	9.30
114	benzyl chloride	1.289	1.644	-27.5#	134	0.00	9.38
115 M	1,2-dichlorobenzene	1.372	1.438	-4.8	111	0.00	9.63
116 M	n-butylbenzene	1.295	1.455	-12.4	116	0.00	9.60
117 M	1,2-dibromo-3-chloropropa	0.171	0.171	0.0	110	0.00	10.39
118	1,3,5-trichlorobenzene	0.972	1.090	-12.1	118	0.00	10.59
119 M	1,2,4-trichlorobenzene	0.806	0.899	-11.5	115	0.00	11.21
120 M	hexachlorobutadiene	0.330	0.387	-17.3	119	0.00	11.37
121 M	naphthalene	2.069	2.363	-14.2	112	0.00	11.47
122 M	1,2,3-trichlorobenzene	0.677	0.744	-9.9	116	0.00	11.70
123 m	hexachloroethane	0.342	0.340	0.6	108	0.00	9.90
124	2-methylnaphthalene	-----NA-----					

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 3D173435.D M3D7354.M Wed Feb 16 03:41:56 2022

6.9.4
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Blank Spike Summary**Job Number:** JD39687**Account:** SESINJPB SESI Consulting Engineers**Project:** 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI9838-BS	I242241.D	1	02/15/22	PS	n/a	n/a	VI9838

The QC reported here applies to the following samples:**Method:** SW846 8260D

JD39687-1, JD39687-2, JD39687-3, JD39687-4, JD39687-5, JD39687-6, JD39687-7, JD39687-10, JD39687-11, JD39687-12, JD39687-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	200	232	116	52-156
71-43-2	Benzene	50	53.3	107	82-119
74-97-5	Bromochloromethane	50	52.4	105	82-123
75-27-4	Bromodichloromethane	50	55.1	110	83-121
75-25-2	Bromoform	50	53.9	108	74-138
74-83-9	Bromomethane	50	68.5	137	56-150
78-93-3	2-Butanone (MEK)	200	215	108	72-138
75-15-0	Carbon disulfide	50	53.5	107	67-131
56-23-5	Carbon tetrachloride	50	50.5	101	72-130
108-90-7	Chlorobenzene	50	49.2	98	83-114
75-00-3	Chloroethane	50	76.0	152* a	67-141
67-66-3	Chloroform	50	51.6	103	76-115
74-87-3	Chloromethane	50	53.5	107	57-141
110-82-7	Cyclohexane	50	47.4	95	69-130
96-12-8	1,2-Dibromo-3-chloropropane	50	48.2	96	72-131
124-48-1	Dibromochloromethane	50	51.2	102	80-128
106-93-4	1,2-Dibromoethane	50	52.9	106	58-145
95-50-1	1,2-Dichlorobenzene	50	50.5	101	83-117
541-73-1	1,3-Dichlorobenzene	50	49.8	100	82-114
106-46-7	1,4-Dichlorobenzene	50	48.7	97	79-114
75-71-8	Dichlorodifluoromethane	50	45.7	91	49-146
75-34-3	1,1-Dichloroethane	50	60.5	121	76-126
107-06-2	1,2-Dichloroethane	50	54.2	108	76-118
75-35-4	1,1-Dichloroethene	50	57.9	116	72-125
156-59-2	cis-1,2-Dichloroethene	50	53.5	107	80-118
156-60-5	trans-1,2-Dichloroethene	50	59.4	119	76-122
78-87-5	1,2-Dichloropropane	50	54.6	109	82-123
10061-01-5	cis-1,3-Dichloropropene	50	57.6	115	83-123
10061-02-6	trans-1,3-Dichloropropene	50	56.7	113	83-123
100-41-4	Ethylbenzene	50	50.9	102	83-115
76-13-1	Freon 113	50	46.5	93	65-132
591-78-6	2-Hexanone	200	216	108	73-138
98-82-8	Isopropylbenzene	50	52.2	104	81-122
79-20-9	Methyl Acetate	50	56.9	114	63-142
108-87-2	Methylcyclohexane	50	47.3	95	73-126
1634-04-4	Methyl Tert Butyl Ether	50	59.1	118	75-126

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: JD39687
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI9838-BS	I242241.D	1	02/15/22	PS	n/a	n/a	VI9838

The QC reported here applies to the following samples:

Method: SW846 8260D

JD39687-1, JD39687-2, JD39687-3, JD39687-4, JD39687-5, JD39687-6, JD39687-7, JD39687-10, JD39687-11, JD39687-12, JD39687-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	200	239	120	71-138
75-09-2	Methylene chloride	50	52.7	105	73-122
100-42-5	Styrene	50	52.4	105	84-122
79-34-5	1,1,2,2-Tetrachloroethane	50	50.0	100	75-127
127-18-4	Tetrachloroethene	50	47.2	94	73-125
108-88-3	Toluene	50	47.8	96	82-118
87-61-6	1,2,3-Trichlorobenzene	50	51.0	102	68-132
120-82-1	1,2,4-Trichlorobenzene	50	50.8	102	72-133
71-55-6	1,1,1-Trichloroethane	50	52.3	105	77-124
79-00-5	1,1,2-Trichloroethane	50	54.8	110	83-122
79-01-6	Trichloroethene	50	51.2	102	80-122
75-69-4	Trichlorofluoromethane	50	50.9	102	69-132
75-01-4	Vinyl chloride	50	53.6	107	60-144
	m,p-Xylene	100	102	102	82-119
95-47-6	o-Xylene	50	53.4	107	84-120
1330-20-7	Xylene (total)	150	155	103	83-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	105%	80-124%
17060-07-0	1,2-Dichloroethane-D4	107%	75-133%
2037-26-5	Toluene-D8	98%	79-125%
460-00-4	4-Bromofluorobenzene	93%	58-148%

(a) High percent recovery and no associated positive reported in the QC batch.

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JD39687
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD39687-1MS	I242253.D	1	02/15/22	PS	n/a	n/a	VI9838
JD39687-1	I242244.D	1	02/15/22	PS	n/a	n/a	VI9838

The QC reported here applies to the following samples:

Method: SW846 8260D

JD39687-1, JD39687-2, JD39687-3, JD39687-4, JD39687-5, JD39687-6, JD39687-7, JD39687-10, JD39687-11, JD39687-12, JD39687-13

CAS No.	Compound	JD39687-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
67-64-1	Acetone	ND		250	220	88	10-170
71-43-2	Benzene	ND		62.6	71.7	115	61-132
74-97-5	Bromochloromethane	ND		62.6	69.6	111	68-126
75-27-4	Bromodichloromethane	ND		62.6	70.5	113	65-129
75-25-2	Bromoform	ND		62.6	69.4	111	52-136
74-83-9	Bromomethane	ND		62.6	65.8	105	23-158
78-93-3	2-Butanone (MEK)	ND		250	294	117	45-142
75-15-0	Carbon disulfide	ND		62.6	71.4	114	50-140
56-23-5	Carbon tetrachloride	ND		62.6	73.6	118	54-139
108-90-7	Chlorobenzene	ND		62.6	65.0	104	57-127
75-00-3	Chloroethane	ND		62.6	84.6	135	30-157
67-66-3	Chloroform	ND		62.6	71.5	114	59-127
74-87-3	Chloromethane	ND		62.6	96.4	154* a	49-145
110-82-7	Cyclohexane	ND		62.6	72.4	116	39-147
96-12-8	1,2-Dibromo-3-chloropropane	ND		62.6	59.3	95	35-140
124-48-1	Dibromochloromethane	ND		62.6	66.7	107	63-129
106-93-4	1,2-Dibromoethane	ND		62.6	67.4	108	45-141
95-50-1	1,2-Dichlorobenzene	ND		62.6	66.7	107	38-136
541-73-1	1,3-Dichlorobenzene	ND		62.6	66.3	106	37-135
106-46-7	1,4-Dichlorobenzene	ND		62.6	65.0	104	36-134
75-71-8	Dichlorodifluoromethane	ND		62.6	80.6	129	33-152
75-34-3	1,1-Dichloroethane	ND		62.6	80.0	128	68-131
107-06-2	1,2-Dichloroethane	ND		62.6	69.5	111	64-119
75-35-4	1,1-Dichloroethene	ND		62.6	77.4	124	60-133
156-59-2	cis-1,2-Dichloroethene	ND		62.6	73.3	117	58-133
156-60-5	trans-1,2-Dichloroethene	ND		62.6	77.9	124	62-130
78-87-5	1,2-Dichloropropane	ND		62.6	73.0	117	70-127
10061-01-5	cis-1,3-Dichloropropene	ND		62.6	76.2	122	64-126
10061-02-6	trans-1,3-Dichloropropene	ND		62.6	76.2	122	61-127
100-41-4	Ethylbenzene	ND		62.6	68.5	109	51-133
76-13-1	Freon 113	ND		62.6	69.2	111	46-138
591-78-6	2-Hexanone	ND		250	269	107	45-144
98-82-8	Isopropylbenzene	ND		62.6	68.1	109	44-142
79-20-9	Methyl Acetate	ND		62.6	69.7	111	14-192
108-87-2	Methylcyclohexane	ND		62.6	66.5	106	27-149
1634-04-4	Methyl Tert Butyl Ether	ND		62.6	72.7	116	62-125

* = Outside of Control Limits.

Matrix Spike Summary

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Job Number: JD39687
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD39687-1MS	I242253.D	1	02/15/22	PS	n/a	n/a	VI9838
JD39687-1	I242244.D	1	02/15/22	PS	n/a	n/a	VI9838

The QC reported here applies to the following samples:

Method: SW846 8260D

JD39687-1, JD39687-2, JD39687-3, JD39687-4, JD39687-5, JD39687-6, JD39687-7, JD39687-10, JD39687-11, JD39687-12, JD39687-13

CAS No.	Compound	JD39687-1 ug/kg	Spike Q	MS ug/kg	MS %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	250	294	117	50-138
75-09-2	Methylene chloride	ND	62.6	69.5	111	63-127
100-42-5	Styrene	ND	62.6	68.8	110	48-143
79-34-5	1,1,2,2-Tetrachloroethane	ND	62.6	64.5	103	44-135
127-18-4	Tetrachloroethene	ND	62.6	65.7	105	38-146
108-88-3	Toluene	ND	62.6	66.9	107	56-135
87-61-6	1,2,3-Trichlorobenzene	ND	62.6	61.5	98	10-153
120-82-1	1,2,4-Trichlorobenzene	ND	62.6	62.8	100	10-158
71-55-6	1,1,1-Trichloroethane	ND	62.6	73.3	117	61-134
79-00-5	1,1,2-Trichloroethane	ND	62.6	73.1	117	62-133
79-01-6	Trichloroethene	ND	62.6	69.9	112	52-144
75-69-4	Trichlorofluoromethane	ND	62.6	76.0	121	50-141
75-01-4	Vinyl chloride	ND	62.6	99.6	159* a	48-151
	m,p-Xylene	ND	125	134	107	51-135
95-47-6	o-Xylene	ND	62.6	68.9	110	52-137
1330-20-7	Xylene (total)	ND	188	203	108	50-138

CAS No.	Surrogate Recoveries	MS	JD39687-1	Limits
1868-53-7	Dibromofluoromethane	107%	110%	80-124%
17060-07-0	1,2-Dichloroethane-D4	104%	115%	75-133%
2037-26-5	Toluene-D8	100%	100%	79-125%
460-00-4	4-Bromofluorobenzene	94%	89%	58-148%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: JD39687

Account: SESINJPB SESI Consulting Engineers

Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD39533-1MS	3D173733.D	25	02/15/22	NH	n/a	n/a	V3D7368
JD39533-1MSD	3D173734.D	25	02/15/22	NH	n/a	n/a	V3D7368
JD39533-1 ^a	3D173732.D	25	02/15/22	NH	n/a	n/a	V3D7368

The QC reported here applies to the following samples:

Method: SW846 8260D

JD39687-9

CAS No.	Compound	JD39533-1 ug/l	Spike Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		5000	6070	121	5000	6130	123	1	22-134/19
71-43-2	Benzene	30.6		1250	1330	104	1250	1350	106	1	49-137/12
74-97-5	Bromochloromethane	ND		1250	1410	113	1250	1410	113	0	78-122/12
75-27-4	Bromodichloromethane	ND		1250	1440	115	1250	1450	116	1	76-121/12
75-25-2	Bromoform	ND		1250	1520	122	1250	1550	124	2	70-133/13
74-83-9	Bromomethane	ND		1250	604	48	1250	1260	101	70* ^b	27-164/38
78-93-3	2-Butanone (MEK)	ND		5000	6470	129	5000	6380	128	1	52-137/17
75-15-0	Carbon disulfide	ND		1250	871	70	1250	883	71	1	54-136/16
56-23-5	Carbon tetrachloride	ND		1250	1310	105	1250	1340	107	2	70-132/13
108-90-7	Chlorobenzene	ND		1250	1380	110	1250	1400	112	1	68-123/12
75-00-3	Chloroethane	ND		1250	1320	106	1250	1350	108	2	48-152/17
67-66-3	Chloroform	ND		1250	1360	109	1250	1380	110	1	68-120/13
74-87-3	Chloromethane	ND		1250	1240	99	1250	1290	103	4	35-156/18
110-82-7	Cyclohexane	495		1250	1760	101	1250	1760	101	0	53-146/14
96-12-8	1,2-Dibromo-3-chloropropane	ND		1250	1510	121	1250	1550	124	3	63-134/16
124-48-1	Dibromochloromethane	ND		1250	1450	116	1250	1480	118	2	75-122/12
106-93-4	1,2-Dibromoethane	ND		1250	1460	117	1250	1480	118	1	63-134/12
95-50-1	1,2-Dichlorobenzene	ND		1250	1300	104	1250	1310	105	1	74-119/12
541-73-1	1,3-Dichlorobenzene	ND		1250	1350	108	1250	1370	110	1	75-117/12
106-46-7	1,4-Dichlorobenzene	ND		1250	1350	108	1250	1370	110	1	72-117/12
75-71-8	Dichlorodifluoromethane	ND		1250	1140	91	1250	1190	95	4	34-163/16
75-34-3	1,1-Dichloroethane	ND		1250	1290	103	1250	1300	104	1	68-129/13
107-06-2	1,2-Dichloroethane	ND		1250	1300	104	1250	1300	104	0	66-120/13
75-35-4	1,1-Dichloroethene	ND		1250	1140	91	1250	1150	92	1	59-133/15
156-59-2	cis-1,2-Dichloroethene	ND		1250	1310	105	1250	1330	106	2	52-140/12
156-60-5	trans-1,2-Dichloroethene	ND		1250	1270	102	1250	1300	104	2	70-125/13
78-87-5	1,2-Dichloropropane	ND		1250	1480	118	1250	1480	118	0	73-124/12
10061-01-5	cis-1,3-Dichloropropene	ND		1250	1530	122	1250	1540	123	1	75-125/13
10061-02-6	trans-1,3-Dichloropropene	ND		1250	1510	121	1250	1510	121	0	75-122/12
100-41-4	Ethylbenzene	6170	E	1250	5400	-62* ^c	1250	5450	-58* ^c	1	37-144/12
76-13-1	Freon 113	ND		1250	1270	102	1250	1270	102	0	61-142/14
591-78-6	2-Hexanone	ND		5000	6450	129	5000	6410	128	1	56-132/16
98-82-8	Isopropylbenzene	435		1250	1560	90	1250	1590	92	2	71-126/13
79-20-9	Methyl Acetate	ND		1250	1490	119	1250	1450	116	3	51-139/18
108-87-2	Methylcyclohexane	1030		1250	1850	66	1250	1850	66	0	59-137/16
1634-04-4	Methyl Tert Butyl Ether	ND		1250	1440	115	1250	1440	115	0	66-124/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: JD39687

Account: SESINJPB SESI Consulting Engineers

Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD39533-1MS	3D173733.D	25	02/15/22	NH	n/a	n/a	V3D7368
JD39533-1MSD	3D173734.D	25	02/15/22	NH	n/a	n/a	V3D7368
JD39533-1 ^a	3D173732.D	25	02/15/22	NH	n/a	n/a	V3D7368

The QC reported here applies to the following samples:

Method: SW846 8260D

JD39687-9

CAS No.	Compound	JD39533-1 ug/l	Spike Q	ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		5000	6980	140* ^b	5000	6760	135	3	65-135/14
75-09-2	Methylene chloride	ND		1250	1160	93	1250	1190	95	3	66-125/14
100-42-5	Styrene	ND		1250	1470	118	1250	1470	118	0	71-133/12
79-34-5	1,1,2,2-Tetrachloroethane	ND		1250	1590	127	1250	1560	125	2	68-127/14
127-18-4	Tetrachloroethene	ND		1250	1390	111	1250	1430	114	3	58-132/13
108-88-3	Toluene	8540	E	1250	7970	-46* ^c	1250	8000	-43* ^c	0	46-139/12
87-61-6	1,2,3-Trichlorobenzene	ND		1250	1620	130	1250	1650	132	2	57-136/17
120-82-1	1,2,4-Trichlorobenzene	ND		1250	1530	122	1250	1590	127	4	61-137/16
71-55-6	1,1,1-Trichloroethane	ND		1250	1340	107	1250	1370	110	2	67-132/13
79-00-5	1,1,2-Trichloroethane	ND		1250	1440	115	1250	1430	114	1	75-120/12
79-01-6	Trichloroethene	ND		1250	1460	117	1250	1490	119	2	56-136/12
75-69-4	Trichlorofluoromethane	ND		1250	1490	119	1250	1500	120	1	61-145/16
75-01-4	Vinyl chloride	ND		1250	1450	116	1250	1500	120	3	41-156/16
	m,p-Xylene	20000	E	2500	17300	-108* ^c	2500	17400	-104* ^c	1	32-151/12
95-47-6	o-Xylene	9820	E	1250	8480	-107* ^c	1250	8540	-102* ^c	1	50-139/12
1330-20-7	Xylene (total)	29800	E	3750	25800	-107* ^c	3750	26000	-101* ^c	1	38-147/12

CAS No.	Surrogate Recoveries	MS	MSD	JD39533-1	Limits
1868-53-7	Dibromofluoromethane	104%	104%	101%	80-120%
17060-07-0	1,2-Dichloroethane-D4	96%	96%	100%	80-120%
2037-26-5	Toluene-D8	96%	97%	100%	80-120%
460-00-4	4-Bromofluorobenzene	98%	99%	95%	82-114%

(a) Dilution required due to high concentrations of target and non-target compounds.

(b) Outside control limits due to matrix interference.

(c) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Initial Calibration Summary

Page 1 of 3

Job Number: JD39687
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EZ7699-ICC7699
 Lab FileID: Z154918.D

Response Factor Report GCMSZ

Method : C:\MSDCHEM\1\METHODS\MZ7699.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
 Last Update : Thu Feb 10 09:30:17 2022
 Response via : Initial Calibration

Calibration Files

100 =z154914.D 80 =z154916.D 50 =z154918.D 25 =z154920.D
 10 =z154921.D 5 =z154919.D 2 =z154917.D 1 =z154915.D

Compound	100	80	50	25	10	5	2	1	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	-----ISTD-----									
2) 1,4-Dioxane	0.631	0.610	0.577	0.562	0.531	0.553	0.649	0.735	0.606	10.87
3) Pyridine	1.683	1.632	1.533	1.486	1.348	1.312	1.309	1.370	1.459	10.05
4) N-Nitrosodim	0.942	0.915	0.858	0.832	0.740	0.745	0.659	0.661	0.794	13.75
5) 2-Fluorophen	1.447	1.403	1.335	1.266	1.157	1.148	1.130	1.108	1.249	10.63
6) Indene	2.345	2.357	2.334	2.306	2.168	2.167	2.118	2.151	2.243	4.49
7) Cumene	3.358	3.282	3.149	3.052	2.859	2.887	2.813	2.752	3.019	7.51
8) Phenol-d5	1.836	1.802	1.727	1.654	1.534	1.504	1.445	1.496	1.625	9.28
9) Phenol	2.004	1.951	1.883	1.816	1.706	1.641	1.607	1.568	1.772	9.31
10) Aniline	2.189	2.174	2.126	2.030	1.912	1.875	1.765	1.715	1.973	9.31
11) bis(2-Chloro	1.366	1.350	1.286	1.296	1.261	1.284	1.259	1.297	1.300	2.99
12) 2-Chlorophen	1.446	1.429	1.406	1.387	1.278	1.249	1.189	1.226	1.326	7.66
13) Decane	1.458	1.447	1.375	1.328	1.273	1.310	1.287	1.573	1.381	7.53
14) 1,3-Dichloro	1.575	1.564	1.523	1.529	1.441	1.422	1.456	1.382	1.486	4.76
15) 1,4-Dichloro	1.582	1.578	1.561	1.555	1.465	1.454	1.418	1.375	1.498	5.37
16) Benzyl alcoh	0.945	0.931	0.895	0.863	0.796	0.777	0.704	0.752	0.833	10.59
17) 1,2-Dichloro	1.506	1.502	1.468	1.449	1.419	1.396	1.393	1.403	1.442	3.20
18) Acetophenone	1.804	1.836	1.830	1.771	1.628	1.651	1.586	1.606	1.714	6.19
19) 2-Methylphen	1.289	1.292	1.256	1.233	1.139	1.120	1.081	1.147	1.195	6.89
20) 2,2'-oxybis(	0.378	0.379	0.382	0.374	0.365	0.366	0.333	0.359	0.367	4.27
21) 3&4-Methylph	1.284	1.306	1.302	1.283	1.193	1.169	1.130	1.115	1.223	6.53
22) n-Nitroso-di	0.937	0.941	0.938	0.907	0.810	0.827	0.808	0.821	0.873	7.13
23) Hexachloroet	0.507	0.508	0.484	0.497	0.468	0.456	0.463	0.425	0.476	6.06
24) I Naphthalene-d8	-----ISTD-----									
25) Nitrobenzene	0.375	0.369	0.360	0.342	0.318	0.315	0.307	0.311	0.337	8.23
26) Nitrobenzene	0.379	0.374	0.364	0.347	0.326	0.322	0.317	0.319	0.344	7.56
27) Quinoline	0.695	0.695	0.686	0.658	0.618	0.612	0.594	0.530	0.636	9.16
28) Isophorone	0.701	0.679	0.660	0.624	0.566	0.558	0.525	0.532	0.606	11.42
29) 2-Nitropheno	0.200	0.202	0.194	0.178	0.161	0.152	0.152	0.157	0.174	12.47
30) 2,4-Dimethyl	0.363	0.364	0.366	0.340	0.319	0.316	0.293	0.290	0.331	9.49
31) Benzoic Acid	0.265	0.252	0.240	0.200	0.145	0.114			0.202	30.45
---- Quadratic regression ---- Coefficient = 0.9993										
Response Ratio = -0.01514 + 0.21578 *A + 0.02242 *A^2										
32) bis(2-Chloro	0.431	0.428	0.416	0.406	0.369	0.383	0.352	0.385	0.396	7.25
33) 2,4-Dichloro	0.297	0.298	0.292	0.276	0.256	0.247	0.225	0.229	0.265	11.29
34) 2,6-Dichloro	0.294	0.295	0.291	0.280	0.258	0.255	0.238	0.249	0.270	8.35
35) 1,3,5-Trichl	0.342	0.341	0.343	0.326	0.308	0.315	0.298	0.294	0.321	6.24
36) 1,2,4-Trichl	0.325	0.328	0.320	0.312	0.292	0.289	0.282	0.280	0.303	6.57
37) 1,2,3-Trichl	0.306	0.306	0.303	0.292	0.286	0.292	0.265	0.276	0.291	5.00
38) Naphthalene	1.046	1.049	1.033	1.018	0.995	0.996	1.000	0.984	1.015	2.49
39) 4-Chloroanil	0.444	0.446	0.445	0.426	0.397	0.381	0.352	0.330	0.402	11.26
40) 2,3-Dichloro	0.345	0.344	0.356	0.342	0.320	0.317	0.297	0.291	0.327	7.41
41) Hydroquinone	0.341	0.335	0.329	0.304	0.252	0.226			0.298	16.06
42) Hexachlorobu	0.184	0.182	0.179	0.172	0.163	0.164	0.154	0.153	0.169	7.25

Initial Calibration Summary

Job Number: JD39687
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EZ7699-ICC7699
 Lab FileID: Z154918.D

43)	4-Chloro-3-m	0.304	0.297	0.287	0.270	0.247	0.239	0.226	0.227	0.262	12.04
44)	2-Methylnaph	0.627	0.627	0.615	0.598	0.563	0.552	0.552	0.527	0.583	6.68
45)	1-Methylnaph	0.587	0.592	0.580	0.564	0.536	0.538	0.507	0.493	0.550	6.75
46)	I Acenaphthene-d10	-----ISTD-----									
47)	Hexachlorocy	0.417	0.411	0.398	0.383	0.340	0.334	0.311	0.298	0.362	12.86
48)	1,2,4,5-tetr	0.591	0.602	0.585	0.574	0.524	0.536	0.522	0.484	0.552	7.56
49)	2,4,6-Trichl	0.390	0.391	0.382	0.376	0.341	0.336	0.306	0.310	0.354	9.91
50)	2,4,5-Trichl	0.410	0.410	0.406	0.388	0.345	0.346	0.324	0.316	0.368	10.78
51)	2-Fluorobiph	1.331	1.357	1.338	1.319	1.252	1.218	1.199	1.147	1.270	6.06
52)	2-Chloronaph	1.153	1.171	1.166	1.154	1.089	1.101	1.048	1.069	1.119	4.28
53)	Biphenyl	1.520	1.538	1.523	1.525	1.402	1.413	1.353	1.345	1.452	5.67
54)	2-Nitroanili	0.346	0.343	0.324	0.306	0.270	0.258	0.230	0.259	0.292	14.91
55)	Dimethylphth	1.277	1.287	1.254	1.246	1.160	1.142	1.138	1.077	1.197	6.50
56)	Acenaphthyle	1.715	1.714	1.659	1.647	1.511	1.484	1.393	1.350	1.559	9.25
57)	2,6-Dinitrot	0.291	0.293	0.280	0.272	0.240	0.227	0.210	0.191	0.251	15.49
58)	3-Nitroanili	0.344	0.344	0.332	0.318	0.272	0.266	0.230		0.301	14.86
59)	Acenaphthene	1.235	1.221	1.203	1.204	1.106	1.118	1.059	1.063	1.151	6.30
60)	2,4-Dinitrop	0.202	0.197	0.184	0.168	0.138	0.116	0.099		0.158	25.74
---- Quadratic regression ---- Coefficient = 0.9994											
Response Ratio = -0.00878 + 0.16354 *A + 0.00839 *A^2											
61)	4-Nitropheno	0.167	0.168	0.156	0.147	0.121	0.118	0.110		0.141	17.33
62)	Dibenzofuran	1.645	1.649	1.613	1.611	1.525	1.511	1.482	1.462	1.562	4.83
63)	2,4-Dinitrot	0.388	0.392	0.374	0.362	0.313	0.294	0.251	0.250	0.328	18.01
64)	2,3,4,6-Tetr	0.341	0.346	0.334	0.317	0.288	0.266	0.249		0.306	12.66
65)	Diethylphtha	1.302	1.316	1.283	1.267	1.184	1.161	1.073	1.329	1.239	7.29
66)	Fluorene	1.357	1.367	1.349	1.331	1.230	1.193	1.149	1.140	1.264	7.67
67)	4-Chlorophen	0.615	0.617	0.607	0.601	0.568	0.545	0.566	0.549	0.583	5.10
68)	4-Nitroanili	0.346	0.342	0.337	0.323	0.273	0.246			0.311	13.37
69)	I Phenanthrene-d10	-----ISTD-----									
70)	4,6-Dinitro-	0.133	0.129	0.121	0.115	0.094	0.085			0.113	17.19
71)	n-Nitrosodip	0.674	0.668	0.637	0.615	0.578	0.570	0.557	0.640	0.617	7.29
72)	Pentachloron	0.057	0.056	0.052	0.047	0.043	0.042			0.049#	13.08
73)	1,2-Diphenyl	0.851	0.844	0.791	0.763	0.708	0.687	0.649	0.726	0.752	9.70
74)	2,4,6-Tribo	0.180	0.176	0.163	0.152	0.134	0.129			0.156	13.53
75)	4-Bromopheny	0.248	0.243	0.229	0.221	0.207	0.204	0.187	0.213	0.219	9.38
76)	Hexachlorobe	0.312	0.310	0.295	0.286	0.271	0.270	0.248	0.320	0.289	8.59
77)	Pentachlorop	0.207	0.205	0.191	0.175	0.153	0.144	0.125		0.171	18.60
78)	Phenanthrene	1.143	1.132	1.099	1.056	1.034	1.044	1.035	1.493	1.130	13.55
79)	Anthracene	1.164	1.165	1.112	1.069	1.005	0.990	0.932	1.206	1.080	9.05
80)	Carbazole	1.088	1.080	1.032	1.005	0.935	0.920	0.881	1.166	1.013	9.58
81)	Di-n-butylph	1.461	1.422	1.337	1.239	1.111	1.071	0.985		1.232	14.87
82)	Fluoranthene	1.284	1.265	1.195	1.127	1.048	1.023	0.997	1.351	1.161	11.44
83)	Octadecane	0.538	0.519	0.475	0.440	0.408	0.399	0.392	0.438	0.451	12.22
84)	I Chrysene-d12	-----ISTD-----									
85)	Benzidine	0.603	0.573	0.571	0.523	0.474	0.444	0.429	0.462	0.510	13.05
86)	Pyrene	1.222	1.233	1.221	1.196	1.171	1.150	1.133	1.488	1.227	9.08
87)	Terphenyl-d1	0.975	0.986	0.966	0.951	0.889	0.887	0.877	1.127	0.957	8.47
88)	Butylbenzylp	0.607	0.599	0.569	0.522	0.460	0.431	0.376	0.477	0.505	16.45
89)	Benzo[a]anth	1.219	1.208	1.201	1.162	1.091	1.089	1.145	1.396	1.189	8.19
90)	3,3'-Dichlor	0.505	0.513	0.502	0.476	0.423	0.414	0.399	0.579	0.476	12.79
91)	Chrysene	1.106	1.114	1.120	1.120	1.080	1.085	1.044	1.201	1.109	4.09
92)	bis(2-Ethylh	0.858	0.841	0.814	0.759	0.651	0.596	0.516	0.684	0.715	17.29
93)	I Perylene-d12	-----ISTD-----									
94)	Di-n-octylph	1.488	1.452	1.375	1.231	1.005	0.899	0.793		1.178	23.74
---- Quadratic regression ---- Coefficient = 0.9993											

Initial Calibration Summary

Page 3 of 3

Job Number: JD39687
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EZ7699-ICC7699
Lab FileID: Z154918.D

$$\text{Response Ratio} = -0.02927 + 1.20387 *A + 0.12484 *A^2$$

95)	Benzo[b]fluo	1.390	1.389	1.316	1.267	1.126	1.096	1.048	1.119	1.219	11.29
96)	Benzo[k]fluo	1.134	1.122	1.148	1.129	1.084	1.049	0.961	1.044	1.084	5.85
97)	Benzo[a]pyre	1.206	1.207	1.168	1.108	0.983	0.953	0.905	0.990	1.065	11.40
98)	Indeno[1,2,3	1.205	1.172	1.109	1.020	0.898	0.862	0.839	0.861	0.996	15.11
99)	Dibenz(a,h)a	1.106	1.084	1.038	0.965	0.836	0.804	0.756	0.816	0.926	15.02
100)	Dibenz[a,h]a	1.281	1.263	1.209	1.131	1.013	0.957	0.899	0.900	1.082	14.73
101)	7,12-Dimethy	0.610	0.606	0.575	0.529	0.440	0.421			0.530	15.62
102)	Benzo[g,h,i]	1.280	1.262	1.218	1.149	1.030	1.011	0.972	0.981	1.113	11.61

(#) = Out of Range ### Number of calibration levels exceeded format ###

MZ7699.M

Thu Feb 10 10:03:28 2022 YING

8.8.16

8

Initial Calibration Summary

Page 1 of 1

Job Number: JD39687**Sample:** EZ7700-ICC7700**Account:** SESINJPB SESI Consulting Engineers**Lab FileID:** Z154933.D**Project:** 1001 Whitlock Avenue, Bronx, NY**Response Factor Report GCMSZ**

Method : C:\MSDCHEM\1\METHODS\MZ7700.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
 Last Update : Thu Feb 10 16:26:46 2022
 Response via : Initial Calibration

Calibration Files

100 =z154931.D 80 =z154932.D 50 =z154933.D 25 =z154934.D
 10 =z154935.D 5 =z154936.D 2 =z154937.D 1 =z154938.D

Compound	100	80	50	25	10	5	2	1	Avg %RSD
103) 1,4-Dichlorobenzene-d	-----	ISTD-----							
104) Benzaldehyde	1.111	1.014	1.060	1.008	0.941	0.868	0.839	0.851	0.962 10.64
105) Phenanthrene-d10a	-----	ISTD-----							
106) Atrazine	0.108	0.099	0.101	0.092	0.075	0.074	0.059	0.087	20.63
---- Quadratic regression ---- Coefficient = 0.9987									
Response Ratio = -0.00184 + 0.08891 *A + 0.00750 *A^2									
107) I Naphthalene-d8a	-----	ISTD-----							
108) Caprolactam	0.124	0.119	0.120	0.106	0.080	0.071	0.073	0.099	23.67
---- Quadratic regression ---- Coefficient = 0.9979									
Response Ratio = -0.00272 + 0.10447 *A + 0.00866 *A^2									
109) Phenanthrene-d10b	-----	ISTD-----							
110) 1-chloroocta	0.317	0.295	0.303	0.283	0.249	0.224	0.204	0.223	0.262 16.28
111) o-terphenyl	0.636	0.583	0.598	0.552	0.513	0.492	0.499	0.501	0.547 9.92

 (#) = Out of Range ### Number of calibration levels exceeded format ###

MZ7699.M

Thu Feb 10 16:30:52 2022 YING

Initial Calibration Verification

Page 1 of 1

Job Number: JD39687
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EZ7700-ICV7700
 Lab FileID: Z154939.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EZ7699\z154939.D Vial: 23
 Acq On : 10 Feb 2022 3:47 pm Operator: chriss2
 Sample : icv7700-50 Inst : GCMSZ
 Misc : op36604,eZ7700,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MZ7699.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
 Last Update : Thu Feb 10 16:26:46 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
-	-	-	-	-	-	-	-
103	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	102	0.00	4.66
104	Benzaldehyde	0.962	1.016	-5.6	97	0.00	4.34
105	Phenanthrene-d10a	1.000	1.000	0.0	102	0.00	8.54
	----- True Calc. % Drift -----						
106	Atrazine	50.000	49.424	1.2	96	0.00	8.23
	----- AvgRF CCRF % Dev -----						
107 I	Naphthalene-d8a	1.000	1.000	0.0	102	0.00	5.58
	----- True Calc. % Drift -----						
108 t	Caprolactam	50.000	50.346	-0.7	97	0.00	5.91

(#) = Out of Range
 z154933a.D MZ7699.M

SPCC's out = 0 CCC's out = 0
 Thu Feb 10 16:31:05 2022 YING

8.8.23

8

Continuing Calibration Summary

Page 1 of 3

Job Number: JD39687
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EZ7704-CC7699
 Lab FileID: Z155035.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EZ7704\z155035.D Vial: 2
 Acq On : 16 Feb 2022 2:47 pm Operator: kristis
 Sample : cc7699-50 Inst : GCMSZ
 Misc : op36604,eZ7704,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MZ7699.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
 Last Update : Thu Feb 10 16:26:46 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	55	-0.02	4.64
2	1,4-Dioxane	0.606	0.497	18.0	47#	-0.05	2.18
3 t	Pyridine	1.459	1.442	1.2	51	-0.08	2.53
4 t	N-Nitrosodimethylamine	0.794	0.786	1.0	50#	-0.04	2.47
5 S	2-Fluorophenol	1.249	1.257	-0.6	51	-0.03	3.65
6 t	Indene	2.243	2.523	-12.5	59	-0.02	4.83
7 t	Cumene	3.019	2.948	2.4	51	-0.02	4.05
8 S	Phenol-d5	1.625	1.675	-3.1	53	-0.03	4.37
9 t	Phenol	1.772	1.894	-6.9	55	-0.03	4.38
10 t	Aniline	1.973	2.086	-5.7	54	-0.03	4.40
11 t	bis(2-Chloroethyl)ether	1.300	1.276	1.8	54	-0.03	4.45
12 t	2-Chlorophenol	1.326	1.378	-3.9	53	-0.03	4.49
13 t	Decane	1.381	1.364	1.2	54	-0.02	4.52
14 t	1,3-Dichlorobenzene	1.486	1.575	-6.0	56	-0.02	4.60
15 t	1,4-Dichlorobenzene	1.498	1.596	-6.5	56	-0.02	4.65
16 t	Benzyl alcohol	0.833	0.879	-5.5	54	-0.03	4.75
17 t	1,2-Dichlorobenzene	1.442	1.511	-4.8	56	-0.02	4.76
18 t	Acetophenone	1.714	2.233	-30.3#	67	-0.03	4.94
19 t	2-Methylphenol	1.195	1.356	-13.5	59	-0.03	4.82
20 t	2,2'-oxybis(1-Chloropropa	0.367	0.376	-2.5	54	-0.02	4.84
21 t	3&4-Methylphenol	1.223	1.567	-28.1#	66	-0.03	4.94
22 t	n-Nitroso-di-n-propylamin	0.873	1.080	-23.7#	63	-0.03	4.94
23 t	Hexachloroethane	0.476	0.539	-13.2	61	-0.02	5.01
24 I	Naphthalene-d8	1.000	1.000	0.0	56	-0.02	5.56
25 S	Nitrobenzene-d5	0.337	0.349	-3.6	55	-0.02	5.05
26 t	Nitrobenzene	0.344	0.356	-3.5	55	-0.03	5.06
27 t	Quinoline	0.636	0.697	-9.6	57	-0.04	5.82
28 t	Isophorone	0.606	0.689	-13.7	59	-0.03	5.24
29 t	2-Nitrophenol	0.174	0.206	-18.4	60	-0.02	5.29
30 t	2,4-Dimethylphenol	0.331	0.360	-8.8	55	-0.03	5.31
31	----- True	50.000	Calc.	% Drift	-----		
	Benzoic Acid		52.758	-5.5	58	-0.03	5.41
	----- AvgRF	CCRF	% Dev	-----			
32 t	bis(2-Chloroethoxy)methan	0.396	0.414	-4.5	56	-0.02	5.39
33 t	2,4-Dichlorophenol	0.265	0.302	-14.0	58	-0.02	5.46
34	2,6-Dichlorophenol	0.270	0.318	-17.8	62	-0.03	5.62
35 t	1,3,5-Trichlorobenzene	0.321	0.377	-17.4	62	-0.02	5.29
36 t	1,2,4-Trichlorobenzene	0.303	0.338	-11.6	60	-0.02	5.52
37 t	1,2,3-Trichlorobenzene	0.291	0.322	-10.7	60	-0.02	5.68

Continuing Calibration Summary

Job Number: JD39687
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EZ7704-CC7699
Lab FileID: Z155035.D

38 t	Naphthalene	1.015	1.073	-5.7	59	-0.02	5.58
39 t	4-Chloroaniline	0.402	0.487	-21.1#	62	-0.03	5.61
40 t	2,3-Dichloroaniline	0.327	0.399	-22.0#	63	-0.03	6.28
41 t	Hydroquinone	0.298	0.292	2.0	50	-0.03	5.84
42 t	Hexachlorobutadiene	0.169	0.193	-14.2	61	-0.02	5.66
43 t	4-Chloro-3-methylphenol	0.262	0.288	-9.9	57	-0.03	5.95
44 t	2-Methylnaphthalene	0.583	0.655	-12.3	60	-0.02	6.07
45 t	1-Methylnaphthalene	0.550	0.616	-12.0	60	-0.02	6.15
46 I	Acenaphthene-d10	1.000	1.000	0.0	61	-0.03	6.92
47 t	Hexachlorocyclopentadiene	0.362	0.434	-19.9	66	-0.02	6.19
48 t	1,2,4,5-tetrachlorobenzen	0.552	0.643	-16.5	67	-0.02	6.20
49 t	2,4,6-Trichlorophenol	0.354	0.424	-19.8	67	-0.03	6.28
50 t	2,4,5-Trichlorophenol	0.368	0.395	-7.3	59	-0.03	6.31
51 S	2-Fluorobiphenyl	1.270	1.303	-2.6	59	-0.02	6.35
52 t	2-Chloronaphthalene	1.119	1.146	-2.4	60	-0.03	6.45
53 t	Biphenyl	1.452	1.484	-2.2	59	-0.02	6.43
54 t	2-Nitroaniline	0.292	0.309	-5.8	58	-0.03	6.53
55 t	Dimethylphthalate	1.197	1.243	-3.8	60	-0.03	6.68
56 t	Acenaphthylene	1.559	1.607	-3.1	59	-0.03	6.79
57 t	2,6-Dinitrotoluene	0.251	0.272	-8.4	59	-0.03	6.73
58 t	3-Nitroaniline	0.301	0.335	-11.3	61	-0.03	6.88
59 t	Acenaphthene	1.151	1.227	-6.6	62	-0.03	6.95
----- True Calc. % Drift -----							
60 t	2,4-Dinitrophenol	100.000	106.866	-6.9	64	-0.03	6.97
----- AvgRF CCRF % Dev -----							
61 t	4-Nitrophenol	0.141	0.160	-13.5	62	-0.03	7.02
62 t	Dibenzofuran	1.562	1.593	-2.0	60	-0.03	7.11
63 t	2,4-Dinitrotoluene	0.328	0.374	-14.0	61	-0.03	7.09
64	2,3,4,6-Tetrachlorophenol	0.306	0.331	-8.2	60	-0.03	7.22
65 t	Diethylphthalate	1.239	1.238	0.1	58	-0.04	7.33
66 t	Fluorene	1.264	1.485	-17.5	67	-0.03	7.45
67 t	4-Chlorophenyl-phenylethe	0.583	0.672	-15.3	67	-0.03	7.45
68 t	4-Nitroaniline	0.311	0.362	-16.4	65	-0.04	7.47
69 I	Phenanthrene-d10	1.000	1.000	0.0	62	-0.04	8.50
70 t	4,6-Dinitro-2-methylpheno	0.113	0.121	-7.1	62	-0.03	7.49
71 t	n-Nitrosodiphenylamine	0.617	0.611	1.0	60	-0.03	7.57
72 t	Pentachloronitrobenzene	0.049	0.049#	0.0	58	-0.03	8.29
73 t	1,2-Diphenylhydrazine	0.752	0.749	0.4	59	-0.03	7.62
74 S	2,4,6-Tribromophenol	0.156	0.149	4.5	57	-0.03	7.70
75 t	4-Bromophenyl-phenylether	0.219	0.218	0.5	59	-0.03	7.98
76 t	Hexachlorobenzene	0.289	0.278	3.8	59	-0.03	8.04
77 t	Pentachlorophenol	0.171	0.210	-22.8#	68	-0.03	8.27
78 t	Phenanthrene	1.130	1.118	1.1	63	-0.04	8.54
79 t	Anthracene	1.080	1.148	-6.3	64	-0.03	8.60
80 t	Carbazole	1.013	1.087	-7.3	66	-0.04	8.81
81 t	Di-n-butylphthalate	1.232	1.336	-8.4	62	-0.04	9.33
82 t	Fluoranthene	1.161	1.289	-11.0	67	-0.04	10.14
83 t	Octadecane	0.451	0.427	5.3	56	-0.03	8.41
84 I	Chrysene-d12	1.000	1.000	0.0	75	-0.04	12.30
85 t	Benzidine	0.510	0.627	-22.9#	83	-0.04	10.37
86 t	Pyrene	1.227	1.120	8.7	69	-0.04	10.46
87 S	Terphenyl-d14	0.957	0.864	9.7	67	-0.04	10.75
88 t	Butylbenzylphthalate	0.505	0.499	1.2	66	-0.05	11.55
89 t	Benzo[a]anthracene	1.189	1.201	-1.0	75	-0.04	12.29
90 t	3,3'-Dichlorobenzidine	0.476	0.528	-10.9	79	-0.04	12.30

Continuing Calibration Summary

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Job Number: JD39687
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EZ7704-CC7699
Lab FileID: Z155035.D

91 t	Chrysene	1.109	0.993	10.5	67	-0.04	12.34
92 t	bis(2-Ethylhexyl)phthalat	0.715	0.727	-1.7	67	-0.05	12.49
93 I	Perylene-d12	1.000	1.000	0.0	67	-0.04	14.38
		----- True	Calc.	% Drift	-----		
94 t	Di-n-octylphthalate	50.000	51.288	-2.6	67	-0.04	13.48
		----- AvgRF	CCRF	% Dev	-----		
95 t	Benzo[b]fluoranthene	1.219	1.439	-18.0	73	-0.04	13.87
96 t	Benzo[k]fluoranthene	1.084	1.131	-4.3	66	-0.04	13.91
97 t	Benzo[a]pyrene	1.065	1.188	-11.5	68	-0.04	14.31
98 t	Indeno[1,2,3-cd]pyrene	0.996	1.130	-13.5	68	-0.04	15.73
99 t	Dibenz(a,h)acridine	0.926	1.035	-11.8	66	-0.04	15.45
100 t	Dibenz[a,h]anthracene	1.082	1.216	-12.4	67	-0.04	15.76
101 t	7,12-Dimethylbenz(a)anthr	0.530	0.535	-0.9	62	-0.04	13.88
102 t	Benzo[g,h,i]perylene	1.113	1.215	-9.2	66	-0.04	16.08

(#) = Out of Range
z154933a.D MZ7699.M

SPCC's out = 0 CCC's out = 0
Wed Feb 16 16:18:17 2022 YING

8.8.24
8

Continuing Calibration Summary

Page 1 of 1

Job Number: JD39687
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EZ7704-CC7700
 Lab FileID: Z155036.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EZ7704\z155036.D Vial: 3
 Acq On : 16 Feb 2022 3:12 pm Operator: kristis
 Sample : cc7700-50 Inst : GCMSZ
 Misc : op36604,eZ7704,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MZ7699.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
 Last Update : Thu Feb 10 16:26:46 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	56	-0.02	4.64
104	Benzaldehyde	0.962	1.067	-10.9	57	-0.03	4.32
105	Phenanthrene-d10a	1.000	1.000	0.0	65	-0.03	8.50
	----- True	Calc.	% Drift	-----			
106	Atrazine	50.000	50.919	-1.8	64	-0.04	8.18
	----- AvgRF	CCRF	% Dev	-----			
107 I	Naphthalene-d8a	1.000	1.000	0.0	56	-0.02	5.56
	----- True	Calc.	% Drift	-----			
108 t	Caprolactam	50.000	60.720	-21.4#	66	-0.05	5.86
	----- AvgRF	CCRF	% Dev	-----			
109	Phenanthrene-d10b	1.000	1.000	0.0	65	-0.03	8.50
110 s	1-chlorooctadecane	0.262	0.292	-11.5	62	-0.04	10.07
111 s	o-terphenyl	0.547	0.590	-7.9	64	-0.04	9.02
112	Chrysene-d12a	1.000	1.000	0.0	61	-0.05	12.30
113	2,3,7,8-TCDD			-----NA-----			

(#) = Out of Range
 z154933a.D MZ7699.M

SPCC's out = 0 CCC's out = 0
 Wed Feb 16 16:18:20 2022 YING

8.8.25

8

Continuing Calibration Summary

Page 1 of 3

Job Number: JD39687
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EZ7705-CC7699
 Lab FileID: Z155068.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EZ7705\z155068.D Vial: 2
 Acq On : 17 Feb 2022 2:21 pm Operator: kristis
 Sample : cc7699-25 Inst : GCMSZ
 Misc : op36604,eZ7705,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MZ7699.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
 Last Update : Thu Feb 17 16:59:24 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	70	0.00	4.63
2	1,4-Dioxane	0.606	0.498	17.8	62	0.00	2.16
3 t	Pyridine	1.459	1.426	2.3	67	0.00	2.51
4 t	N-Nitrosodimethylamine	0.794	0.788	0.8	66	0.00	2.46
5 S	2-Fluorophenol	1.249	1.237	1.0	68	0.00	3.64
6 t	Indene	2.243	2.228	0.7	67	0.00	4.82
7 t	Cumene	3.019	2.850	5.6	65	0.00	4.04
8 S	Phenol-d5	1.625	1.580	2.8	67	0.00	4.36
9 t	Phenol	1.772	1.770	0.1	68	0.00	4.37
10 t	Aniline	1.973	1.969	0.2	68	0.00	4.39
11 t	bis(2-Chloroethyl)ether	1.300	1.236	4.9	67	0.00	4.44
12 t	2-Chlorophenol	1.326	1.317	0.7	66	0.00	4.48
13 t	Decane	1.381	1.369	0.9	72	0.00	4.51
14 t	1,3-Dichlorobenzene	1.486	1.494	-0.5	68	0.00	4.59
15 t	1,4-Dichlorobenzene	1.498	1.503	-0.3	67	0.00	4.65
16 t	Benzyl alcohol	0.833	0.834	-0.1	68	0.00	4.74
17 t	1,2-Dichlorobenzene	1.442	1.460	-1.2	70	0.00	4.75
18 t	Acetophenone	1.714	1.805	-5.3	71	0.00	4.93
19 t	2-Methylphenol	1.195	1.200	-0.4	68	0.00	4.81
20 t	2,2'-oxybis(1-Chloropropa	0.367	0.360	1.9	67	0.00	4.83
21 t	3&4-Methylphenol	1.223	1.267	-3.6	69	0.00	4.93
22 t	n-Nitroso-di-n-propylamin	0.873	0.951	-8.9	73	0.00	4.93
23 t	Hexachloroethane	0.476	0.525	-10.3	74	0.00	5.00
24 I	Naphthalene-d8	1.000	1.000	0.0	69	0.00	5.55
25 S	Nitrobenzene-d5	0.337	0.336	0.3	68	0.00	5.04
26 t	Nitrobenzene	0.344	0.351	-2.0	70	0.00	5.05
27 t	Quinoline	0.636	0.686	-7.9	72	0.00	5.81
28 t	Isophorone	0.606	0.649	-7.1	72	0.00	5.22
29 t	2-Nitrophenol	0.174	0.189	-8.6	74	0.00	5.28
30 t	2,4-Dimethylphenol	0.331	0.339	-2.4	69	0.00	5.31
31	----- True	Calc.	% Drift	-----			
	Benzoic Acid	25.000	28.513	-14.1	83	0.00	5.37
	----- AvgRF	CCRF	% Dev	-----			
32 t	bis(2-Chloroethoxy)methan	0.396	0.397	-0.3	68	0.00	5.38
33 t	2,4-Dichlorophenol	0.265	0.296	-11.7	74	0.00	5.45
34	2,6-Dichlorophenol	0.270	0.295	-9.3	73	0.00	5.61
35 t	1,3,5-Trichlorobenzene	0.321	0.351	-9.3	75	0.00	5.28
36 t	1,2,4-Trichlorobenzene	0.303	0.334	-10.2	74	0.00	5.51
37 t	1,2,3-Trichlorobenzene	0.291	0.316	-8.6	75	0.00	5.67

Continuing Calibration Summary

Job Number: JD39687
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EZ7705-CC7699
Lab FileID: Z155068.D

38 t	Naphthalene	1.015	1.009	0.6	69	0.00	5.57
39 t	4-Chloroaniline	0.402	0.445	-10.7	72	0.00	5.60
40 t	2,3-Dichloroaniline	0.327	0.370	-13.1	75	0.00	6.28
41 t	Hydroquinone	0.298	0.266	10.7	61	0.00	5.83
42 t	Hexachlorobutadiene	0.169	0.190	-12.4	76	0.00	5.65
43 t	4-Chloro-3-methylphenol	0.262	0.273	-4.2	70	0.00	5.94
44 t	2-Methylnaphthalene	0.583	0.608	-4.3	70	0.00	6.06
45 t	1-Methylnaphthalene	0.550	0.569	-3.5	70	0.00	6.14
46 I	Acenaphthene-d10	1.000	1.000	0.0	76	0.00	6.91
47 t	Hexachlorocyclopentadiene	0.362	0.378	-4.4	75	0.00	6.18
48 t	1,2,4,5-tetrachlorobenzen	0.552	0.591	-7.1	78	0.00	6.19
49 t	2,4,6-Trichlorophenol	0.354	0.389	-9.9	78	0.00	6.27
50 t	2,4,5-Trichlorophenol	0.368	0.403	-9.5	79	0.00	6.30
51 S	2-Fluorobiphenyl	1.270	1.279	-0.7	74	0.00	6.34
52 t	2-Chloronaphthalene	1.119	1.124	-0.4	74	0.00	6.44
53 t	Biphenyl	1.452	1.434	1.2	71	0.00	6.42
54 t	2-Nitroaniline	0.292	0.308	-5.5	76	0.00	6.52
55 t	Dimethylphthalate	1.197	1.249	-4.3	76	0.00	6.67
56 t	Acenaphthylene	1.559	1.620	-3.9	75	0.00	6.78
57 t	2,6-Dinitrotoluene	0.251	0.284	-13.1	79	0.00	6.72
58 t	3-Nitroaniline	0.301	0.329	-9.3	78	0.00	6.87
59 t	Acenaphthene	1.151	1.146	0.4	72	0.00	6.94
----- True Calc. % Drift -----							
60 t	2,4-Dinitrophenol	50.000	51.047	-2.1	77	0.00	6.96
----- AvgRF CCRF % Dev -----							
61 t	4-Nitrophenol	0.141	0.151	-7.1	78	0.00	7.01
62 t	Dibenzofuran	1.562	1.591	-1.9	75	0.00	7.10
63 t	2,4-Dinitrotoluene	0.328	0.381	-16.2	80	0.00	7.08
64	2,3,4,6-Tetrachlorophenol	0.306	0.341	-11.4	82	0.00	7.21
65 t	Diethylphthalate	1.239	1.236	0.2	74	0.00	7.32
66 t	Fluorene	1.264	1.315	-4.0	75	0.00	7.44
67 t	4-Chlorophenyl-phenylethe	0.583	0.625	-7.2	79	0.00	7.44
68 t	4-Nitroaniline	0.311	0.347	-11.6	81	0.00	7.45
69 I	Phenanthrene-d10	1.000	1.000	0.0	79	0.00	8.49
70 t	4,6-Dinitro-2-methylpheno	0.113	0.112	0.9	78	0.00	7.48
71 t	n-Nitrosodiphenylamine	0.617	0.586	5.0	76	0.00	7.56
72 t	Pentachloronitrobenzene	0.049	0.048#	2.0	80	0.00	8.27
73 t	1,2-Diphenylhydrazine	0.752	0.700	6.9	73	0.00	7.60
74 S	2,4,6-Tribromophenol	0.156	0.142	9.0	74	0.00	7.69
75 t	4-Bromophenyl-phenylether	0.219	0.219	0.0	79	0.00	7.97
76 t	Hexachlorobenzene	0.289	0.270	6.6	75	0.00	8.03
77 t	Pentachlorophenol	0.171	0.182	-6.4	83	0.00	8.26
78 t	Phenanthrene	1.130	1.036	8.3	78	0.00	8.52
79 t	Anthracene	1.080	1.053	2.5	78	0.00	8.58
80 t	Carbazole	1.013	1.001	1.2	79	0.00	8.80
81 t	Di-n-butylphthalate	1.232	1.234	-0.2	79	0.00	9.32
82 t	Fluoranthene	1.161	1.187	-2.2	84	0.00	10.12
83 t	Octadecane	0.451	0.406	10.0	73	0.00	8.40
84 I	Chrysene-d12	1.000	1.000	0.0	86	0.00	12.29
85 t	Benzidine	0.510	0.573	-12.4	95	0.00	10.36
86 t	Pyrene	1.227	1.163	5.2	84	0.00	10.44
87 S	Terphenyl-d14	0.957	0.904	5.5	82	0.00	10.73
88 t	Butylbenzylphthalate	0.505	0.518	-2.6	86	0.00	11.54
89 t	Benzo[a]anthracene	1.189	1.185	0.3	88	0.00	12.28
90 t	3,3'-Dichlorobenzidine	0.476	0.485	-1.9	88	0.00	12.29

8.8.26

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Continuing Calibration Summary

Page 3 of 3

Job Number: JD39687
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EZ7705-CC7699
Lab FileID: Z155068.D

91 t	Chrysene	1.109	1.069	3.6	82	0.00	12.33
92 t	bis(2-Ethylhexyl)phthalat	0.715	0.756	-5.7	86	0.00	12.48
93 I	Perylene-d12	1.000	1.000	0.0	85	0.00	14.36
----- True Calc. % Drift -----							
94 t	Di-n-octylphthalate	25.000	25.843	-3.4	89	0.00	13.47
----- AvgRF CCRF % Dev -----							
95 t	Benzo[b]fluoranthene	1.219	1.234	-1.2	83	0.00	13.85
96 t	Benzo[k]fluoranthene	1.084	1.130	-4.2	85	0.00	13.89
97 t	Benzo[a]pyrene	1.065	1.097	-3.0	85	0.00	14.28
98 t	Indeno[1,2,3-cd]pyrene	0.996	0.968	2.8	81	0.00	15.70
99 t	Dibenz(a,h)acridine	0.926	0.956	-3.2	85	0.00	15.43
100 t	Dibenz[a,h]anthracene	1.082	1.106	-2.2	83	0.00	15.74
101 t	7,12-Dimethylbenz(a)anthr	0.530	0.479	9.6	77	0.00	13.86
102 t	Benzo[g,h,i]perylene	1.113	1.125	-1.1	84	0.00	16.05

(#) = Out of Range
 z155068.D MZ7699.M

SPCC's out = 0 CCC's out = 0
 Thu Feb 17 17:01:48 2022 YING

8.8.26
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Continuing Calibration Summary

Page 1 of 1

Job Number: JD39687
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EZ7705-CC7700
 Lab FileID: Z155069.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EZ7705\z155069.D Vial: 3
 Acq On : 17 Feb 2022 2:54 pm Operator: kristis
 Sample : cc7700-25 Inst : GCMSZ
 Misc : op36604,eZ7705,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MZ7699.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
 Last Update : Thu Feb 17 16:59:24 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	74	0.00	4.63
104	Benzaldehyde	0.962	1.021	-6.1	75	-0.04	4.31
105	Phenanthrene-d10a	1.000	1.000	0.0	84	0.00	8.49
	----- True	Calc.	% Drift	-----			
106	Atrazine	25.000	27.312	-9.2	91	-0.05	8.17
	----- AvgRF	CCRF	% Dev	-----			
107 I	Naphthalene-d8a	1.000	1.000	0.0	72	0.00	5.55
	----- True	Calc.	% Drift	-----			
108 t	Caprolactam	25.000	31.666	-26.7#	93	-0.07	5.85
	----- AvgRF	CCRF	% Dev	-----			
109	Phenanthrene-d10b	1.000	1.000	0.0	84	0.00	8.49
110 s	1-chlorooctadecane	0.262	0.287	-9.5	85	-0.05	10.06
111 s	o-terphenyl	0.547	0.561	-2.6	86	-0.05	9.01

(#) = Out of Range
 z155068.D MZ7699.M

SPCC's out = 0 CCC's out = 0
 Thu Feb 17 17:01:50 2022 YING

8.8.27

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Blank Spike Summary

Page 1 of 3

Job Number: JD39687**Account:** SESINJPB SESI Consulting Engineers**Project:** 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38141-BS1	Z155038.D	1	02/16/22	KLS	02/15/22	OP38141	EZ7704

The QC reported here applies to the following samples:**Method:** SW846 8270E

JD39687-1, JD39687-2, JD39687-3, JD39687-4, JD39687-5, JD39687-6, JD39687-7, JD39687-10, JD39687-11, JD39687-12, JD39687-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
95-57-8	2-Chlorophenol	1670	687	41	16-146
59-50-7	4-Chloro-3-methyl phenol	1670	727	44	21-149
120-83-2	2,4-Dichlorophenol	1670	777	47	18-152
105-67-9	2,4-Dimethylphenol	1670	737	44	21-153
51-28-5	2,4-Dinitrophenol	3330	1500	45	12-141
534-52-1	4,6-Dinitro-o-cresol	1670	682	41	10-167
95-48-7	2-Methylphenol	1670	736	44	18-145
	3&4-Methylphenol	3330	1600	48	10-197
88-75-5	2-Nitrophenol	1670	733	44	19-154
100-02-7	4-Nitrophenol	1670	778	47	10-160
87-86-5	Pentachlorophenol	3330	1500	45	10-187
108-95-2	Phenol	1670	689	41	36-117
58-90-2	2,3,4,6-Tetrachlorophenol	1670	761	46	18-154
95-95-4	2,4,5-Trichlorophenol	1670	776	47	20-153
88-06-2	2,4,6-Trichlorophenol	1670	775	47	19-153
83-32-9	Acenaphthene	1670	765	46	15-150
208-96-8	Acenaphthylene	1670	604	36	14-146
98-86-2	Acetophenone	1670	783	47	38-114
120-12-7	Anthracene	1670	747	45	17-157
1912-24-9	Atrazine	1670	752	45	10-176
56-55-3	Benzo(a)anthracene	1670	713	43	16-156
50-32-8	Benzo(a)pyrene	1670	745	45	17-160
205-99-2	Benzo(b)fluoranthene	1670	759	46	17-159
191-24-2	Benzo(g,h,i)perylene	1670	747	45	12-158
207-08-9	Benzo(k)fluoranthene	1670	740	44	19-150
101-55-3	4-Bromophenyl phenyl ether	1670	715	43	14-159
85-68-7	Butyl benzyl phthalate	1670	735	44	14-165
92-52-4	1,1'-Biphenyl	1670	744	45	14-150
100-52-7	Benzaldehyde	1670	708	42	10-153
91-58-7	2-Chloronaphthalene	1670	740	44	16-147
106-47-8	4-Chloroaniline	1670	348	21	10-113
86-74-8	Carbazole	1670	738	44	14-159
105-60-2	Caprolactam	1670	895	54	10-186
218-01-9	Chrysene	1670	717	43	18-152
111-91-1	bis(2-Chloroethoxy)methane	1670	711	43	19-139
111-44-4	bis(2-Chloroethyl)ether	1670	655	39	18-135

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 3

Job Number: JD39687
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38141-BS1	Z155038.D	1	02/16/22	KLS	02/15/22	OP38141	EZ7704

The QC reported here applies to the following samples:

Method: SW846 8270E

JD39687-1, JD39687-2, JD39687-3, JD39687-4, JD39687-5, JD39687-6, JD39687-7, JD39687-10, JD39687-11, JD39687-12, JD39687-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-60-1	2,2'-Oxybis(1-chloropropane)	1670	712	43	14-143
7005-72-3	4-Chlorophenyl phenyl ether	1670	758	45	17-146
121-14-2	2,4-Dinitrotoluene	1670	816	49	19-159
606-20-2	2,6-Dinitrotoluene	1670	762	46	17-161
91-94-1	3,3'-Dichlorobenzidine	1670	402	24	10-114
123-91-1	1,4-Dioxane	1670	333	20	10-104
53-70-3	Dibenzo(a,h)anthracene	1670	770	46	15-153
132-64-9	Dibenzofuran	1670	753	45	16-150
84-74-2	Di-n-butyl phthalate	1670	714	43	19-156
117-84-0	Di-n-octyl phthalate	1670	718	43	14-167
84-66-2	Diethyl phthalate	1670	718	43	17-149
131-11-3	Dimethyl phthalate	1670	752	45	18-148
117-81-7	bis(2-Ethylhexyl)phthalate	1670	762	46* a	50-124
206-44-0	Fluoranthene	1670	705	42	20-152
86-73-7	Fluorene	1670	779	47	17-149
118-74-1	Hexachlorobenzene	1670	704	42	12-162
87-68-3	Hexachlorobutadiene	1670	717	43	15-148
77-47-4	Hexachlorocyclopentadiene	3330	1160	35	19-144
67-72-1	Hexachloroethane	1670	696	42	13-142
193-39-5	Indeno(1,2,3-cd)pyrene	1670	762	46	10-160
78-59-1	Isophorone	1670	761	46	21-141
91-57-6	2-Methylnaphthalene	1670	753	45	17-149
88-74-4	2-Nitroaniline	1670	754	45	14-165
99-09-2	3-Nitroaniline	1670	495	30	10-133
100-01-6	4-Nitroaniline	1670	751	45	13-154
91-20-3	Naphthalene	1670	710	43	15-149
98-95-3	Nitrobenzene	1670	703	42	17-146
621-64-7	N-Nitroso-di-n-propylamine	1670	782	47	14-143
86-30-6	N-Nitrosodiphenylamine	1670	716	43	12-169
85-01-8	Phenanthrene	1670	695	42	16-155
129-00-0	Pyrene	1670	682	41	20-156
95-94-3	1,2,4,5-Tetrachlorobenzene	1670	755	45	13-149

* = Outside of Control Limits.

Blank Spike Summary

Page 3 of 3

Job Number: JD39687

Account: SESINJPB SESI Consulting Engineers

Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38141-BS1	Z155038.D	1	02/16/22	KLS	02/15/22	OP38141	EZ7704

The QC reported here applies to the following samples:

Method: SW846 8270E

JD39687-1, JD39687-2, JD39687-3, JD39687-4, JD39687-5, JD39687-6, JD39687-7, JD39687-10, JD39687-11, JD39687-12, JD39687-13

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	41%	10-109%
4165-62-2	Phenol-d5	39%	10-105%
118-79-6	2,4,6-Tribromophenol	41%	10-135%
4165-60-0	Nitrobenzene-d5	42%	10-119%
321-60-8	2-Fluorobiphenyl	45%	18-112%
1718-51-0	Terphenyl-d14	42%	18-125%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Continuing Calibration Summary

Page 1 of 2

Job Number: JD39687
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: G1G6020-CC5985
 Lab FileID: 1G174258.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\1g6020\1g174258.d\ECD1A.CH Vial: 2
 Signal #2 : C:\msdchem\1\data\1g6020\1g174258.d\ECD2B.CH
 Acq On : 18 Feb 2022 12:02 am Operator: christp
 Sample : cc5985-25 Inst : HP G1530A
 Misc : op38133,g1g6020,15.8,,,10,1 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\methods\1pst5985.m (ChemStation Integrator)
 Title : PEST/PCB
 Last Update : Mon Feb 14 11:39:43 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	92	0.00	1.69-	1.75
2 SAB	Tetrachloro-m-xylene	0.968	0.887	8.4	87	0.00	2.22-	2.28
3	Hexachlorobenzene	1.475	1.357	8.0	87	0.00	2.54-	2.60
4 A	alpha-BHC	1.409	1.326	5.9	86	0.00	2.67-	2.73
5 MA	gamma-BHC	1.290	1.073	16.8	77	0.00	2.97-	3.03
6 MA	Heptachlor	1.274	1.109	13.0	82	-0.01	3.47-	3.53
7 B	beta-BHC	0.564	0.463	17.9	76	-0.01	3.04-	3.10
8 B	delta-BHC	1.218	1.077	11.6	81	-0.01	3.23-	3.29
9 MB	Aldrin	1.189	1.084	8.8	85	-0.01	3.82-	3.88
10	Alachlor	0.137	0.133	2.9	84	-0.01	3.96-	4.02
11 B	Heptachlor Epoxide	1.166	0.929	20.3#	77	-0.01	4.58-	4.64
12 B	gamma-Chlordane	1.143	0.929	18.7	76	-0.01	4.75-	4.81
13 B	alpha-Chlordane	1.097	0.939	14.4	80	-0.01	4.93-	4.99
14 A	Endosulfan I	1.077	0.961	10.8	83	-0.01	5.13-	5.19
15 B	4,4'-DDE	1.143	1.010	11.6	82	-0.01	5.04-	5.10
16 MA	Dieldrin	1.153	1.038	10.0	83	-0.01	5.47-	5.53
17 MA	Endrin	1.079	1.054	2.3	91	-0.01	5.82-	5.88
18 A	4,4'-DDD	0.925	0.853	7.8	85	-0.01	5.93-	6.00
19 B	Endosulfan II	0.996	0.919	7.7	86	-0.01	6.17-	6.23
20 MA	4,4'-DDT	0.931	0.868	6.8	85	-0.01	6.39-	6.45
21 B	Endrin Aldehyde	0.806	0.692	14.1	81	-0.02	6.85-	6.91
22 B	Endosulfan Sulfate	0.920	0.872	5.2	89	-0.02	7.60-	7.66
23 A	Methoxychlor	0.504	0.521	-3.4	93	-0.01	7.23-	7.29
24	Mirex	0.811	0.742	8.5	85	-0.01	7.42-	7.48
25 B	Endrin Ketone	1.004	0.846	15.7	79	-0.01	8.08-	8.14
26 SA	Decachlorobiphenyl	0.891	0.826	7.3	90	-0.01	9.91-	9.97
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	92	0.00	1.62-	1.82
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	92	0.00	1.62-	1.82
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

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Continuing Calibration Summary

Page 2 of 2

Job Number: JD39687
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: G1G6020-CC5985
Lab FileID: 1G174258.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.93-	1.99
2	SAB	Tetrachloro-m-xylene	0.651	0.621	4.6	97	0.00	2.71-	2.77
3		Hexachlorobenzene	1.366	1.281	6.2	94	0.00	3.22-	3.28
4	A	alpha-BHC	1.356	1.357	-0.1	97	0.00	3.38-	3.44
5	MA	gamma-BHC	1.247	1.230	1.4	96	0.00	3.82-	3.88
6	MA	Heptachlor	1.264	1.186	6.2	94	0.00	4.43-	4.49
7	B	beta-BHC	0.509	0.476	6.5	94	0.00	3.90-	3.96
8	B	delta-BHC	1.213	1.207	0.5	97	0.00	4.32-	4.38
9	MB	Aldrin	1.203	1.125	6.5	93	0.00	4.91-	4.97
10		Alachlor	0.130	0.137	-5.4	99	0.00	4.69-	4.75
11	B	Heptachlor Epoxide	1.098	1.040	5.3	93	0.00	5.79-	5.85
12	B	gamma-Chlordane	1.095	1.027	6.2	94	0.00	6.10-	6.16
13	B	alpha-Chlordane	1.094	1.051	3.9	97	0.00	6.34-	6.40
14	A	Endosulfan I	1.089	1.052	3.4	97	-0.01	6.45-	6.51
15	B	4,4'-DDE	1.074	1.013	5.7	94	-0.01	6.62-	6.68
16	MA	Dieldrin	1.138	1.083	4.8	94	-0.01	6.92-	6.98
17	MA	Endrin	1.020	1.074	-5.3	102	-0.01	7.47-	7.53
18	A	4,4'-DDD	0.804	0.805	-0.1	96	-0.01	7.65-	7.71
19	B	Endosulfan II	0.989	0.935	5.5	96	-0.01	7.85-	7.91
20	MA	4,4'-DDT	0.758	0.706	6.9	88	-0.01	8.23-	8.29
21	B	Endrin Aldehyde	0.770	0.707	8.2	95	-0.01	8.47-	8.53
22	B	Endosulfan Sulfate	0.855	0.873	-2.1	101	-0.01	8.98-	9.04
23	A	Methoxychlor	0.396	0.395	0.3	93	-0.01	9.54-	9.60
24		Mirex	0.669	0.624	6.7	94	-0.01	9.88-	9.94
25	B	Endrin Ketone	0.928	0.833	10.2	88	-0.01	9.93-	9.99
26	SA	Decachlorobiphenyl	0.840	0.834	0.7	105	-0.02	11.81-	11.87
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.86-	2.06
28	L8	Toxaphene{A}			-----NA-----				
29	L8	Toxaphene{B}			-----NA-----				
30	L8	Toxaphene{C}			-----NA-----				
31	L8	Toxaphene{D}			-----NA-----				
32	L8	Toxaphene{E}			-----NA-----				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.86-	2.06
34		Chlordane {A}			-----NA-----				
35		Chlordane {B}			-----NA-----				
36		Chlordane {C}			-----NA-----				
37		Chlordane {D}			-----NA-----				
38		Chlordane {E}			-----NA-----				

(#) = Out of Range
 1g173273.d 1pst5985.m

SPCC's out = 0 CCC's out = 0
 Fri Feb 18 07:16:05 2022

10.10.9
 10

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: JD39687

Account: SESINJPB SESI Consulting Engineers

Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38152-BS1 ^a	RK7903.D	1	02/15/22	RK	02/15/22	OP38152	GRK207
OP38152-BSD	RK7904.D	1	02/15/22	RK	02/15/22	OP38152	GRK207

The QC reported here applies to the following samples:

Method: SW846 8082A

JD39687-1, JD39687-2, JD39687-3, JD39687-4, JD39687-5, JD39687-6, JD39687-7, JD39687-10, JD39687-11, JD39687-12, JD39687-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	133	ND	0* ^b	87.9	66	200* ^c	53-157/32
11104-28-2	Aroclor 1221		ND		ND		nc	50-150/30
11141-16-5	Aroclor 1232		ND		ND		nc	50-150/30
53469-21-9	Aroclor 1242		ND		ND		nc	50-150/30
12672-29-6	Aroclor 1248		ND		ND		nc	50-150/30
11097-69-1	Aroclor 1254		ND		ND		nc	50-150/30
11096-82-5	Aroclor 1260	133	ND	0* ^b	104	78	200* ^c	53-159/45
11100-14-4	Aroclor 1268		ND		ND		nc	50-150/30
37324-23-5	Aroclor 1262		ND		ND		nc	50-150/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	5%* ^b	62%	10-163%
877-09-8	Tetrachloro-m-xylene	5%* ^b	72%	10-163%
2051-24-3	Decachlorobiphenyl	1%* ^b	80%	10-215%
2051-24-3	Decachlorobiphenyl	8%* ^b	74%	10-215%

(a) BS1 and BSD both prepped and analyzed. Since BSD is within method limits data are qualified and reported.

(b) Outside of in house control limits.

(c) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD39687
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38166-BS1	5G114259.D	1	02/20/22	TL	02/17/22	OP38166	G5G2906
OP38166-BSD	5G114260.D	1	02/20/22	TL	02/17/22	OP38166	G5G2906

The QC reported here applies to the following samples: Method: SW846 8082A

JD39687-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	1.6	1.0	63	0.84	53	17	44-153/57
11104-28-2	Aroclor 1221		ND		ND		nc	50-150/30
11141-16-5	Aroclor 1232		ND		ND		nc	50-150/30
53469-21-9	Aroclor 1242		ND		ND		nc	50-150/30
12672-29-6	Aroclor 1248		ND		ND		nc	50-150/30
11097-69-1	Aroclor 1254		ND		ND		nc	50-150/30
11096-82-5	Aroclor 1260	1.6	0.98	61	0.96	60	2	44-153/58
11100-14-4	Aroclor 1268		ND		ND		nc	50-150/30
37324-23-5	Aroclor 1262		ND		ND		nc	50-150/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	45%	36%	10-174%
877-09-8	Tetrachloro-m-xylene	60%	33%	10-174%
2051-24-3	Decachlorobiphenyl	50%	44%	10-151%
2051-24-3	Decachlorobiphenyl	50%	45%	10-151%

* = Outside of Control Limits.

Isotope Dilution Standard Recovery Summary

Job Number: JD39687
Account: ALNJ SGS Dayton, NJ
Project: SESINJPB: 1001 Whitlock Avenue, Bronx, NY

Method: EPA 537M BY ID	Matrix: SO
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S9	S10	S11	S12	S13	S14	S15	S16
JD39687-1A	2Q85757.D	73	75	76	81	77	56	74	77
JD39687-2A	2Q85979.D	92	87	88	93	92	84	55	60
JD39687-3A	2Q85759.D	72	73	68	72	72	53	74	75
JD39687-4A	2Q85855.D	82	83	79	85	83	68	47	51
JD39687-4A	2Q85760.D	67	68	65	68	66	52	34* a	40
JD39687-5A	2Q85761.D	81	85	81	85	84	64	41	48
JD39687-6A	2Q85762.D	72	74	71	75	74	62	46	51
JD39687-7A	2Q85763.D	83	87	80	85	84	66	71	77
JD39687-10A	2Q85764.D	75	80	78	84	81	51	66	73
JD39687-11A	2Q85767.D	75	77	73	78	76	43	62	67
JD39687-12A	2Q85768.D	81	84	82	86	84	80	81	85
JD39687-13A	2Q85769.D	80	84	79	83	82	54	66	71
OP89835-BS	2Q85746.D	68	73	67	71	69	57	76	75
OP89835-MB	2Q85747.D	82	86	80	82	82	62	89	89
OP89835-MS	2Q85749.D	83	90	82	86	84	85	92	94
OP89835-MSD	2Q85750.D	89	96	87	92	89	92	97	99

Isotope Dilution Standards	Recovery Limits
S9 = 13C2-PFDoDA	40-140%
S10 = 13C2-PFTeDA	30-130%
S11 = 13C3-PFBS	50-150%
S12 = 13C3-PFHxS	50-150%
S13 = 13C8-PFOS	50-150%
S14 = 13C8-FOSA	30-130%
S15 = d3-MeFOSAA	40-140%
S16 = d5-EtFOSAA	40-140%

(a) Outside control limits.

Isotope Dilution Standard Recovery Summary

Job Number: JD39687
Account: ALNJ SGS Dayton, NJ
Project: SESINJPB: 1001 Whitlock Avenue, Bronx, NY

Method: EPA 537M BY ID	Matrix: SO
------------------------	------------

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S17	S18
JD39687-1A	2Q85757.D	76	76
JD39687-2A	2Q85979.D	87	85
JD39687-3A	2Q85759.D	70	71
JD39687-4A	2Q85855.D	78	75
JD39687-4A	2Q85760.D	63	61
JD39687-5A	2Q85761.D	80	79
JD39687-6A	2Q85762.D	69	68
JD39687-7A	2Q85763.D	81	80
JD39687-10A	2Q85764.D	79	77
JD39687-11A	2Q85767.D	73	71
JD39687-12A	2Q85768.D	83	83
JD39687-13A	2Q85769.D	79	80
OP89835-BS	2Q85746.D	71	70
OP89835-MB	2Q85747.D	81	80
OP89835-MS	2Q85749.D	86	85
OP89835-MSD	2Q85750.D	91	91

Isotope Dilution Standards	Recovery Limits
S17 = 13C2-6:2FTS	50-150%
S18 = 13C2-8:2FTS	50-150%

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD39687
Account: SESINJPB - SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

QC Batch ID: MP31310
Matrix Type: SOLID

Methods: SW846 6010D
Units: mg/kg

Prep Date: 02/16/22

Metal	JD39687-1 Original MS		SpikeLot MPSPK2	% Rec	QC Limits
Aluminum	11400	17500	2700	226.0(a)	75-125
Antimony	0.94	77.0	216	35.2N(b)	75-125
Arsenic	2.3	196	216	89.7	75-125
Barium	86.2	285	216	92.1	75-125
Beryllium	0.85	204	216	94.1	75-125
Bismuth					
Boron					
Cadmium	0.077	193	216	89.4	75-125
Calcium	1260	3960	2700	100.0	75-125
Chromium	25.2	218	216	89.7	75-125
Cobalt	9.1	210	216	93.0	75-125
Copper	22.7	219	216	90.5	75-125
Iron	20300	24500	2700	155.6(a)	75-125
Lead	16.0	214	216	92.2	75-125
Lithium					
Magnesium	3280	5680	2700	88.9	75-125
Manganese	169	355	216	86.1	75-125
Molybdenum					
Nickel	17.6	224	216	95.6	75-125
Phosphorus					
Potassium	3540	6040	2700	92.6	75-125
Selenium	0.0	193	216	89.4	75-125
Silicon					
Silver	0.69	25.7	27	92.7	75-125
Sodium	115	2830	2700	100.6	75-125
Strontium					
Sulfur	anr				
Thallium	0.76	211	216	97.4	75-125
Tin					
Titanium					
Tungsten					
Vanadium	30.5	224	216	90.7	75-125
Zinc	62.2	244	216	87.0	75-125

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD39687
 Account: SESINJPB - SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

QC Batch ID: MP31310
 Matrix Type: SOLID

Methods: SW846 6010D
 Units: mg/kg

Prep Date: 02/16/22

Metal	JD39687-1 Original MS	Spike lot MPSPK2	% Rec	QC Limits
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Zirconium

Associated samples MP31310: JD39687-1, JD39687-2, JD39687-3, JD39687-4, JD39687-5, JD39687-6, JD39687-7, JD39687-10, JD39687-11, JD39687-12, JD39687-13

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

(b) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

12.6.2
12

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD39687
Account: SESINJPB - SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

QC Batch ID: MP31310
Matrix Type: SOLID

Methods: SW846 6010D
Units: mg/kg

Prep Date: 02/16/22

Metal	JD39687-1 Original	MSD	Spikelet MPSPK2	% Rec	MSD RPD	QC Limit
Aluminum	11400	19900	2730	311.8(a)	12.8	20
Antimony	0.94	67.6	218	30.6N(b)	13.0	20
Arsenic	2.3	197	218	89.2	0.5	20
Barium	86.2	308	218	101.7	7.8	20
Beryllium	0.85	208	218	95.0	1.9	20
Bismuth						
Boron						
Cadmium	0.077	195	218	89.4	1.0	20
Calcium	1260	4100	2730	104.2	3.5	20
Chromium	25.2	226	218	92.4	3.6	20
Cobalt	9.1	213	218	93.5	1.4	20
Copper	22.7	223	218	91.4	1.8	20
Iron	20300	30700	2730	381.5(a)	22.5 (c)	20
Lead	16.0	262	218	113.3	20.2 (c)	20
Lithium						
Magnesium	3280	6490	2730	117.8	13.3	20
Manganese	169	409	218	110.0	14.1	20
Molybdenum						
Nickel	17.6	227	218	96.1	1.3	20
Phosphorus						
Potassium	3540	6750	2730	117.8	11.1	20
Selenium	0.0	196	218	89.9	1.5	20
Silicon						
Silver	0.69	26.2	27.3	93.6	1.9	20
Sodium	115	2840	2730	100.0	0.4	20
Strontium						
Sulfur	anr					
Thallium	0.76	211	218	96.4	0.0	20
Tin						
Titanium						
Tungsten						
Vanadium	30.5	230	218	92.5	2.6	20
Zinc	62.2	253	218	90.2	3.6	20

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD39687
 Account: SESINJPB - SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

QC Batch ID: MP31310
 Matrix Type: SOLID

Methods: SW846 6010D
 Units: mg/kg

Prep Date: 02/16/22

Metal	JD39687-1 Original MSD	Spike lot MPSPK2	% Rec	MSD RPD	QC Limit
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Zirconium

Associated samples MP31310: JD39687-1, JD39687-2, JD39687-3, JD39687-4, JD39687-5, JD39687-6, JD39687-7, JD39687-10, JD39687-11, JD39687-12, JD39687-13

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

(b) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

(c) High rpd due to possible sample nonhomogeneity.

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD39687
Account: SESINJPB - SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Cyanide	GP38543/GN26465	JD39633-7	mg/kg	0.15 U	2.47	0.78	31.6N(a)	75-125%
Cyanide	GP38545/GN26465	JD39687-12	mg/kg	0.0	2.3	0.86	37.3N(a)	75-125%

Associated Samples:

Batch GP38543: JD39687-1, JD39687-2, JD39687-3, JD39687-4, JD39687-5, JD39687-6, JD39687-7, JD39687-10, JD39687-11

Batch GP38545: JD39687-12, JD39687-13

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(a) Spike recovery indicates possible matrix interference.

HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

March 17th, 2022

Mr. Jesse Mausner, PG, LSRP, Project Manager
SESI Consulting Engineers
12A Maple Avenue
Pine Brook NJ, 07058

Re: Data Usability Summary Reports and Quality Assurance Validation Analyses for
SGS North America Inc. Project **(SDG) No.: JD39775**

Client Project ID: 11819–1001 Whitlock Avenue, Bronx, NY

Dear Mr. Mausner,

I thank you for your confidence in our data validation services and look forward to the growth of our business relationship. I Have enclosed with this letter the data usability summary reports (DUSRs) and data validation summaries for the above referenced laboratory (SDG) numbers issued by SGS North America Inc.

The overall evaluation of the SDG# JD39775 displays good degree of confidence and acceptance in accordance with the guidelines in the USEPA National Functional Guidelines and the method and QC Criteria specified in NYSDEC ASP Documents except for some qualified results that are identified in the validation summaries based solely on the stated above validation guidance criteria. However, the qualified data (Bias low, Bias High, Unreliable or unusable) may be subject to the user's reconsideration or determination in the circumstances of obtaining additional information that is not contained in the data validation criteria.

If you have any questions or comments regarding any of the attached data usability summary reports and or the data validation summaries, please do not hesitate to contact me at (413) 875-5049 or via email at hanibaltayeh@gmail.com.

Sincerely,



Hanibal C. Tayeh, Ph.D.

Data Validation and Forensic Geochemistry Expert

Files: DUSR-SESI-11819–1001 Whitlock Avenue, Bronx, NY - JD39775

DATA USABILITY SUMMARY REPORT (DUSR)

Site Location: 1001 Whitlock Avenue, Bronx, NY

SGS North America Inc.

Laboratory (SDG) # JD39775

Project No. 11819

Prepared for:

Mr. Jesse Mausner, PG, LSRP, Project Manager

SESI Consulting Engineers

12A Maple Avenue

Pine Brook NJ, 07058

Prepared by:

Hanibal Tayeh, Ph.D.

Data Validation and Forensic Geochemistry Expert

On

March 17th, 2022

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- SUPPORT DOCUMENTATION (Refer to the electronic Data Package PDF file)

1. GLOSSARY OF ACRONYMS & TERMS

The following acronyms and terms may have been used in the descriptive process of the Organic and Inorganic Data Validation.

Acronyms:

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene (volatile instrument performance check)
BNA	Base/Neutral/Acid
CARD	CLP Analytical Results Database
CCB	Continuing Calibration Blank
CCCs	Calibration Check Compounds
CCS	Contract Compliance Screening
CCV	Continuing Calibration Verification
CF	Calibration Factor
CLP	Contract Laboratory Program
CN	Cyanide
COC	Chain of Custody
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
CSF	Complete SDG File
CV	Cold Vapor
%D	Percent Difference
DAS	Delivery of Analytical Services
DCAA	2,4-Dichlorophenylacetic acid
DCB	Decachlorobiphenyl (Pesticide/PCB/ surrogate compound)
DFTPP	Decafluorotriphenylphosphine (semivolatile instrument performance check)
DSF	Data Summary Form
DVA	Data Validation Assessment
ECD	Electron-Capture Detector
EICP	Extended Ion Current Profile
EPA	United States Environmental Protection Agency
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas Chromatography
GC/EC	Gas Chromatography/Electron Capture
GC/MS	Gas Chromatography/Mass Spectra
GPC	Gel Permeation Chromatography (Clean Up)
ICAL	Initial Calibration
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit

HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

IRDA	Inorganic Regional Data Assessment
IS	Internal Standard
LCS	Laboratory Control Sample
LCL	Lower Control Limit
MCL	Maximum Contamination Level
MDL	Method Detection Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
m/z	The ratio of mass (m) to charge (z) of ions measured by GC/MS
OADS	Organic Analysis Data Sheet (Form 1)
ORDA	Organic Regional Data Assessment
PB	Preparation Blank
PCB	Poly Chlorinated Biphenyl
PEM	Performance Evaluation Mixture
PFAS	Polyfluorinated Alkyl Substances (PFAS analytes are listed below)
PRP	Potential Responsible Party
QA/QC	Quality Assurance/Quality Control
QAPjP	Quality Assurance Project Plan
QC	Quality Control
%R	Percent Recovery of spiked amount
RAS	Routine Analytical Services
RF	Response Factor
RIC	Reconstructed Ion Chromatogram
RPD	Relative Percent Difference
RRF	Relative Response Factor
RSD	Relative Standard Deviation
RT	Retention Time
RTW	Retention Time Window
SDG	Sample Delivery Group
SMC	System Monitoring Compound
SMO	Sample Management Office
SOP	Standard Operation Procedures
SOW	Statement of Work
SPCCs	System Performance Check Compounds
SSL	Samples Shipping Log
SVOA	Semivolatile Organic Analyte
TAL	Target Analyte List
TCL	Target Compound List
TCX	Tetrachloro-m-Xylene (Pesticide/PCB surrogate compound)
TIC	Tentatively Identified Compound
TPH	Total Petroleum Hydrocarbons
TR	Traffic Report
UCL	Upper Control Limit
VOA	Volatile Organic Analyte
VTSR	Validated Time of Sample Receipt

Polyfluorinated Alkyl Substances (PFAS) Acronyms

PFBA	Perfluorobutanoic acid
PFPeA	Perfluoropentanoic acid
PFHxA	Perfluorohexanoic acid
PFHpA	Perfluoroheptanoic acid
PFOA	Perfluorooctanoic acid
PFNA	Perfluorononanoic acid
PFDA	Perfluorodecanoic acid
PFUnA	Perfluoroundecanoic acid
PFDoA	Perfluorododecanoic acid
PFTriA or PFTriDA	Perfluorotridecanoic acid
PFTeA or PFTA	Perfluorotetradecanoic acid
PFBS	Perfluorobutanesulfonic acid
PFPeS	Perfluoropentanesulfonic acid
PFHxS	Perfluorohexanesulfonic acid
PFHpS	Perfluoroheptanesulfonic acid
PFOS	Perfluorooctanesulfonic acid
PFNS	Perfluorononanesulfonic acid
PFDS	Perfluorodecanesulfonic acid
FOSA	Perfluorooctane Sulfonamide
NMeFOSAA	N-methyl perfluorooctane sulfonamidoacetic acid
NEtFOSAA	N-ethyl perfluorooctane sulfonamidoacetic acid
4:2 FTS or 4:2	1H, 1H, 2H, 2H-perfluorohexanesulfonic acid
6:2 FTS or 6:2	1H, 1H, 2H, 2H-perfluorooctanesulfonic acid or 6:2 Fluorotelomersulfonate
8:2 FTS or 8:2	1H, 1H, 2H, 2H-perfluorodecanesulfonic acid or 8:2 Fluorotelomersulfonate

Terms:

Associated Samples: Any sample related to a particular QC analysis.

Case: A finite, usually predetermined number of samples collected over a given time period for a particular site. A Case consists of one or more Sample Delivery Group(s).

Continuing Calibration Blank (CCB): A deionized water sample run every ten (10) samples designed to detect any carryover contamination.

Continuing Calibration Verification (CCV): A deionized water sample run every ten (10) samples designed to detect any carryover contamination.

Contract Compliance Screening (CCS): A process in which the SMO inspects the data for contractual compliance and provides EMSL-LV laboratories and the Regions with their findings.

Contractual Holding Time: The time from VTSR (validated time of sample receipt) to laboratory extraction and /or analysis.

Data Validation Qualifier (DVQ): This refers to the column on the data summary form in which EPA Region III and other qualifiers have been placed by the data validator.

Data Validation Result (DVR): This refers to the column on the data summary form used to report results that have been modified by the data validator. A result in the DVR column that is qualified "U" indicates a modification of the reporting limit.

Field Blank Field blanks are intended to identify contaminants that may have been introduced in the field. Examples are rinsate blank (RB), field blanks (FB) and trip blank (TB).

Field Duplicate: A duplicate sample generated in the field; not in the laboratory.

Initial Calibration (ICAL): The establishment of a calibration curve with the appropriate number of standards and concentration ranges. The calibration curve plots absorbances and/or emissions versus concentration of the standards.

Initial Calibration Blank (ICB): First blank run after the calibration curve.

Initial Calibration Verification (ICV): First standard run after the calibration curve.

Matrix Spike/Matrix Spike Duplicate (MS/MSD): Introduction of a known concentration of a compound into a sample to provide information about the effect of sample matrix on the extraction and/or measurement methodology.

Post Digestion Spike: The addition of known amount of standard after digestion. (Also identified as analytical spike, or spike, for furnace analyses).

Preparation Blank (PB): Blank taken through the digestion process to detect internal laboratory contamination.

Performance Evaluation Mixture: A standard used to verify that the ICAL sequence is stable throughout the GC or GC/MS analyses.

Sample Delivery Group (SDG): Defined by one of the following, whichever occurs first:

- case of sample
- each twenty field samples in a case or
- each 14-day calendar period during which field samples in a case are received, beginning with the receipt of the first sample in the SDG.

Serial Dilution: A sample run at a specific dilution to determine whether any significant chemical or physical interferences exist due to sample matrix effect, for ICP only.

Technical Holding Time: The time from sample collection to laboratory extraction and /or analysis.

2. GLOSSARY OF DATA VALIDATION QUALIFIERS

(Used in the QA/QC Reviews for USEPA Region II)

The qualifiers listed below are used for data usability summary report (DUSR) purposes. However, it is important to note that the data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+	=	Analyte is present. Reported value may be biased high and associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

3. NYS DEC DATA USABILITY SUMMARY PARAMETERS

The parameters listed below are used for data usability summary report (DUSR) evaluation.

<i>Samples Handling and Management</i>
<i>Data Validation References</i>
<i>Laboratory Data Packages</i>
<i>Laboratory Analytical Methods</i>
<i>DATA Usability Assessment Summary</i>

4. DATA VALIDATION SUMMARY PARAMETERS

The parameters listed below are used for data validation evaluation.

	<i>Organic Data</i>	<i>Inorganic Data</i>
<i>Data Completeness</i>	X	X
<i>Holding Time</i>	X	X
<i>Chromatographic Behavior</i>	X	
<i>Compound Identification</i>	X	X
<i>GC/MS Tuning and Mass Calibration</i>	X	
<i>Initial Calibration Verification</i>	X	X
<i>Continuing Calibration</i>	X	X
<i>Method Blank Verification</i>	X	X
<i>Internal Standard Area Summary</i>	X	
<i>Surrogate Recoveries</i>	X	
<i>Matrix Spike/Matrix Spike Duplicate</i>	X	X
<i>Laboratory Control Sample (LCS)</i>	X	X
<i>Laboratory and Field Duplicates</i>	X	X
<i>ICP Interference Check Sample results</i>		X
<i>ICP Serial Dilution results</i>		X
<i>ICP CRDL Standard</i>		X
<i>Post Digestion Spike Analysis</i>		X
<i>Analyte Quantitation</i>		X

5. DATA VALIDATION ACTIVE STANDARD OPERATING PROCEDURES (SOPs)

Region 2 Quality Assurance Guidance and Standard Operating Procedures

<https://www.epa.gov/quality/region-2-quality-assurance-guidance-and-standard-operating-procedures>

Inorganic Validation SOPs

SOP #	Description	Date
SOP HW-3a ICP-AES Rev1 w/CRF	CLP ISM02.2 ICP-AES	September 2016
SOP HW-3b ICP-MS Rev1 w/CRF	CLP ISM02.2 ICP-MS	September 2016
SOP HW-3c Hg & CN Rev1 w/CRF	CLP ISM02.2 Mercury and Cyanide	September 2016

Organic Validation SOPs - CLP

SOP #	Description	Date
SOP HW-33A Low Medium VOA Rev 1 w/CRF	EPA CLP Method SOM02.2 for Low/Medium VOA	September 2016
SOP HW-34A Trace VOA Rev1 w/CRF	EPA CLP Method SOM02.2 for Trace VOA	September 2016
SOP HW-35A Rev1 w/CRF	EPA CLP Method SOM02.2 for Semi-Volatiles	September 2016
SOP HW-36A Rev 1 w/CRF	EPA CLP Method SOM02.2 for Pesticides	October 2016
SOP HW-37A Rev 0 w/CRF	EPA CLP Method SOM02.2 for PCBs Aroclor	June 2015

Organic Validation SOPs – Other

SOP #	Description	Date
SOP HW-11 Rev 3	SW-846 Method 8280 for Polychlorinated Dibenzodioxins/Polychlorinated Dibenzofurans	December 2010
SOP HW-16 Rev. 2.1	SW-846 Method 8330A Nitroaromatics and Nitroamines by HPLC	December 2010
SOP HW-17 Rev.3.1	SW-846 Method 8151A for Chlorinated Herbicides by GC	December 2010
SOP HW-19 Rev. 1.1	SW-846 Method 8290 for Polychlorinated dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by HRMS	December 2010
SOP HW-22 Rev. 5	SW-846 Method 8270D for Semivolatile Organic Compounds by GC/MS	December 2010
SOP HW-25 Rev. 3	EPA Method 1613, Revision B Tetra-through Octa-chlorinated Dioxins and Furans by Isotope Dilution by HRGC/HRMS	December 2010
SOP HWSS 24 Rev. 4	SW-846 Methods 8260B & 8260C for VOCs by GC/MS	October 2014
SOP HW-29 Rev. 2	EPA Method 524.2 for Purgeable Organic Compounds in Water by GC/MS	November 2010
SOP HW-31 Rev. 6	TO-15 Air Analysis for VOCs	September 2016
SOP HW-44 Rev. 1.1	SW-846 Method 8081B for Pesticide Compounds Organochlorine Pesticides by GC	December 2010
SOP HW-46 Rev. 1	EPA Method 1668 A for Chlorinated Biphenyl Congeners and EPA Non-RAS CBC01.0	September 2008

SOP HW-55 Rev. 2 w/CRF	EPA Non-RAS DLM02.0 for Tetra -through Octa-Chlorinated Dioxins and Furans by Isotope Dilution	December 2008
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6. DATA VALIDATION REPORT NARRATIVE

NYS DEC Data Usability Summary Report	SDG # JD39775
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NYS DEC Data Usability Summary Report

SDG # JD39775

Site Location	1001 Whitlock Avenue, Bronx, NY
Data Validation for Analytical Methods	Volatile Organic (EPA 8260D); Semi-Volatile (SW846 8270E), Pesticides (SW846 8081B), PCBs (SW846 8082A), TAL Metals (SW846 6010D, 7471B), PFAS (EPA 537M), Cyanide (SW846 9012B)
Number of Samples & Matrix	15 Soil Samples, 1 Duplicate Soil Sample, 1 Field Blank
Sampled On	02/14 & 15/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39775 (1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 17 th , 2022

• SAMPLE HANDLING AND MANAGEMENT

As per the chain of custody (COC) record included in this specific SDG, samples associated with this data set were collected on February 14th & 15th, 2022, using the proper containers in accordance with the Sample Integrity and Preservation section of the stated above USEPA method and received by the laboratory on February 15th, 2022. The attached chain of custody (COC) displays a satisfactory record in terms of client and project information, site location, field sampling details (sampler, collection date and time), sample identification and matrix, preservation, required analysis, deliverable type and date, data management process and comparison.

Client Sample Identification	Laboratory Sample Identification
RI-SB3 (4.5-5')	JD39775-1
RI-SB3 (9.5-10')	JD39775-2
RI-SB3 (14.5-15')	JD39775-3
RI-SB3 (19.5-20')	JD39775-4
RI-SB4 (4.5-5')	JD39775-5
DUP-1	JD39775-6
RI-SB4 (9.5-10')	JD39775-7
RI-SB4 (14.5-15')	JD39775-8
RI-SB4 (19.5-20')	JD39775-9
RI-SB5 (4.5-5')	JD39775-10
RI-SB5 (9.5-10')	JD39775-11
RI-SB5 (14.5-15')	JD39775-12
RI-SB5 (19.5-20')	JD39775-13
RI-SB6 (4.5-5')	JD39775-14
RI-SB6 (9.5-10')	JD39775-15
RI-SB6 (12.5-13')	JD39775-16
FIELD BLANK	JD39775-17

- **DATA VALIDATION REFERENCES**

The organic data validation is conducted in accordance with the guidelines in the USEPA National Functional Guidelines for Organic Data Review and the USEPA Region II SOP HW-6-CLP Organic Data Review Preliminary review and the method and QC Criteria specified in NYSDEC ASP Documents.

The inorganic data validation is conducted in accordance with the guidelines in the USEPA National Functional Guidelines for Inorganic Data Review and the USEPA Region II SOP HW-2, Evaluation of Metals Data for the Contract Laboratory Program based on ILM05.3 and the method and QC Criteria specified in NYSDEC ASP Documents.

- **LABORATORY DATA PACKAGES**

The laboratory data packages for the stated SDG above is considered satisfactory in terms of pagination, quality control narration and completeness. Each package contained the laboratory quality assurance summary report, quality control summary data, sample nonconformance summaries, the required data package forms and tables in accordance with NYSDEC ASP documents, instrument tuning information, sample preparation and analysis batch and all associated standard, quality control and sample raw data.

- **LABORATORY ANALYTICAL METHODS**

A peer review of the quality assurance criteria listed in the laboratory data package shows with good degree of certainty the laboratory's compliance with the procedures set forth in the required USEPA analytical methods as indicated in the chain of custody. No deviations from the said methods have been noticed.

- **DATA USABILITY ASSESSMENT SUMMARY**

The overall data package assessment provided by the laboratory for the stated above sample delivery group (SDG) suggests acceptable laboratory performances of the required methods. All samples were successfully analyzed for all target compounds in accordance with the Quality Assurance/Quality Control (QA/QC) requirements for the USEPA analytical methods used for the analyses. In view of the data usability and completeness, the minor issues listed below regarding biases identified during data validation should be taken into high degree of consideration. They are as follows:

✓ **Volatile Organic Compounds – SW846 8260D Method**

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
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1	-Detected results of iodomethane, n-butyl alcohol, in the associated samples, JD39775-17 , should be qualified estimated (J). -Detected results of iodomethane, iso-butyl alcohol, n-butyl alcohol, 3-methyl-1-butanol, in the associated samples, JD39775 (-1, -2, -3, -5, 14, 15, 16) , should be qualified estimated (J).	ICV
2	-Detected results of Iodomethane, 3-Methyl-1-Butanol, cis-1,4-Dichloro-2-Butene, Benzyl Chloride, 2-Methylnaphthalene, iso-butyl alcohol, n-butyl alcohol, 3-methyl-1-butanol, in the associated samples, JD39775 (-1, -2, -3, -5, 14) , should be qualified estimated (J). -Detected results of Ethanol, 1,4-Dioxane, 1,3-butadiene, Vinyl Chloride, Acrolein, Acrylonitrile, 2-Nitropropane, in the associated samples, JD39775 (-6, -7, -8, 10, 11, 12, 13) , should be qualified estimated (J). -Detected results of Ethanol, Chlorodifluoromethane, Dichlorodifluoromethane, Acrolein, Acetone, Iodomethane, Methyl Acetate, Di-Isopropyl Ether, 2-Butanone, Acrylonitrile, Ethyl Acetate, Methyl Acrylate, Propionitrile, t-Butyl Formate, Methacrylonitrile, tert-Amyl-Alcohol, Ethyl Acrylate, 2-Nitropropane, Epichlorohydrin, 4-Methyl-2-Pentanone, 2-Hexanone, Butyl Acetate, Butyl Acrylate, cis-2,4-Dichloro-2-Butene, 1,1,2,2-Tetrachloroethane, trans-1,4-Dichloro-2-Butene, Benzyl Chloride, 1,2-Dibromo-2-Chloropropane, 2-Methylnaphthalene, in the associated samples, JD39775-17 , should be qualified estimated (J). -Detected results of Bromomethane, Chloroethane, Acrolein, Iodomethane, Acetonitrile, Acrylonitrile, Vinyl Acetate, Chloroprene, Ethyl Acetate, Propionitrile, Methyl Acrylate, Methacrylonitrile, Tetrahydrofuran, Isobutyl Alcohol, 2-Nitropropane, 3-Methyl-1-Butanol, 2-methylnaphthalene, iso-butyl alcohol, n-butyl alcohol, 3-methyl-1-butanol, in the associated samples, JD39775 (15, 16) , should be qualified estimated (J).	CCV
3	-Detected results of Acetone, 2-Butanone (MEK), 1,2-Dibromo-3-chloropropane, 2-Hexanone, Methyl Acetate, 4-Methyl-2-pentanone (MIBK), 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, in sample JD39775-17 , must be qualified estimated-Bias High (J+). -Detected results of Chloroethane, in samples JD39775 (15, 16) , must be qualified estimated-Bias High (J+).	LCS

✓ **Semi-Volatile Organic Compounds – SW846 8270E Method**

	Data Assessment Judgement (Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)	DVA Reference
1	-Detected results of Pentachloronitrobenzene, N-Nitrosopyrrolidine, in sample JD39775-17/FIELD BLANK , should be considered Estimated (J).	ICV
2	-Detected results of Pentachloronitrobenzene, 4,4-Methylene-bis-(2-chloroaniline), N-Nitrosopyrrolidine, Aramite, Kepone, in sample JD39775-17/FIELD BLANK , should be considered Estimated (J).	CCV

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	-Detected results of Hydroquinone, 2,4-Dinitrophenol, in sample JD39775-08/RI-SB4 (14.5-15') , should be considered Estimated (J). -Detected results of Caprolactam, in samples JD39775 (-1, -2, -3, -5, -6, -7, 10, 11, 12, 13, 14, 15, 16) , should be considered Estimated (J).	
3	-Detected results for Di-n-butyl phthalate in samples JD39775 (-1, -2, -3, -5, -6, -7, -8, 10, 11, 12, 13, 14, 15, 16) , that are less than five times the highest blank concentration should be reported as Not Detected (U).	BLK
4	-Detected results of Hexachlorocyclopentadiene, in sample JD39775-17/FIELD BLANK , should be qualified Estimated Bias-Low (J-). -Non-Detected results of Hexachlorocyclopentadiene, in sample JD39775-17/FIELD BLANK , should be qualified Estimated (UJ).	LCS

✓ Pesticides - SW846 8081B Method

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detected results of Endrin Ketone, in samples JD39775 (-1, -3, -5, -6, -7, 11, 12, 13, 16) , should be qualified Estimated (J).	CCV
2	-Detected results of beta-BHC, Endrin Ketone, in samples JD39775 (-1, -2, -3, -5, -6, -7, -8, 10, 11, 12, 13, 14, 15, 16) , should be considered Estimated Bias-High (J+).	LCS
3	-Detected results of target pesticide compounds, in samples JD39775 (-1, -3) , should be considered Estimated Bias-High (J+).	SR

✓ Polychlorinated Biphenyls (PCBs) – SW846 8082A Method

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detected results of target PCBs compounds, in samples JD39775 (12, 16) , should be considered Estimated Bias-High (J+).	SR

✓ PFAS-NYSDEC Target List - EPA 537M Method

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	Data set was in compliance with the method quality control requirements.	ALL

✓ TAL Metals - SW846 6010D, 7471B Methods

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference

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1	-Detected results of Antimony, Iron, Magnesium, in sample JD39775-3 , should be qualified Estimated Bias-Low (J-). -Non-Detected results of Antimony, Iron, Magnesium, in sample JD39775-3 , should be qualified Estimated (UJ). -Detected results of Potassium in sample JD39775-3 , should be qualified Estimated (J).	SSR
2	-Detected results of Cobalt, Nickel, Sodium, Zinc, in sample JD39775-3 , should be qualified Estimated (J).	ISDil
3	-Detected results of Barium, Lead, Manganese, Zinc, in samples RI-SB4 (4.5-5')/JD39775-5, DUP-1/JD39775-6, should be qualified Estimated (J).	DUP

✓ Cyanide - SW846 9012B Method

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detected results of Cyanide in sample JD39775-10 , should be qualified Estimated Bias-Low (J-). -Non-Detected results of Cyanide in sample JD39775-10 , should be qualified Estimated (UJ).	MS/MSD

Data Validation Assessment

SDG # JD39775

Data Validation for Analytical Method	Volatile Organic Compounds (SW846 8260D Method)
Number of Samples & Matrix	15 Soil Samples, 1 Duplicate Soil Sample, 1 Field Blank
Sampled On	02/14 & 15/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39775 (1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 17 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time (HOLDT):** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms), display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph/mass spectrometry (GCMS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **GC/MS Tuning and Mass Calibration:** The standard tuning criteria were within control limits as outlined in the EPA and SW846 methods.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs) and Percent Relative Standard Deviation (%RSDs) and in some cases the coefficient of determination COD: (Average RRFs must be greater than the required values and at least greater than 0.01 for all target compounds and >0.001 for 1,4 Dioxane, %RSD must be less than 20%, and the coefficient of determination (COD) must be greater than 0.995). This evaluation displays the following:

-In the initial calibration reference sample: V3C7629-ICC7629 analyzed on 02/04/2022, both the average RRFs, %RSDs and the coefficient of determination (COD), for all target compounds were in compliance with the method calibration criteria.

-In the initial calibration reference sample: V4D5098-ICC5098 analyzed on 01/17/2022, both the average RRFs and %RSDs for all target compounds were in compliance with the method calibration criteria EXCEPT for iodomethane, where %RSDs was above the allowable maximum. the Mean RRFs for n-butyl alcohol, was less than the allowable minimum.

-In the initial calibration reference Sample: VI9812-ICC9812 analyzed on 01/20/2022, both the average RRFs and %RSDs for all target compounds were in compliance with the method calibration criteria EXCEPT for iodomethane, where %RSDs was above the allowable maximum. the Mean RRFs for iso-butyl alcohol, n-butyl alcohol, 3-methyl-1-butanol, were less than the allowable minimum.

No action is required when less than 20% of the continuing calibration target compounds are outside the method control limits provide no Average Relative Response Factor (RRFs) is less than 0.01 for all target compounds.

Quality Judgement:

-Detected results of iodomethane, n-butyl alcohol, in the associated samples, JD39775-17, should be qualified estimated (J).

-Detected results of iodomethane, iso-butyl alcohol, n-butyl alcohol, 3-methyl-1-butanol, in the associated samples, JD39775-(01, 02, 03, 05, 14, 15, 16), should be qualified estimated (J).

• **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for the required frequency, Relative Response Factor (RRFs) and Percent Difference (%Ds). This evaluation displays the following:

-The continuing calibration reference sample: V3C7641-CC7629, analyzed on 02/16/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT for Ethanol, 1,4-Dioxane, 1,3-butadiene, Vinyl Chloride, Acrolein, Acrylonitrile, 2-Nitropropane, Where %Ds were above the method allowable maximums.

-The continuing calibration reference Sample: V4D5144-CC5098 analyzed on 02/17/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT for Ethanol, Chlorodifluoromethane, Dichlorodifluoromethane, Acrolein, Acetone, Iodomethane, Methyl Acetate, Di-Isopropyl Ether, 2-Butanone, Acrylonitrile, Ethyl Acetate, Methyl Acrylate, Propionitrile, t-Butyl Formate, Methacrylonitrile, tert-Amyl-Alcohol, Ethyl Acrylate, 2-Nitropropane, Epichlorohydrin, 4-Methyl-2-Pentanone, 2-Hexanone, Butyl Acetate, Butyl Acrylate, cis-2,4-Dichloro-2-Butene, 1,1,2,2-Tetrachloroethane, trans-1,4-Dichloro-2-Butene, Benzyl Chloride, 1,2-Dibromo-2-Chloropropane, 2-Methylnaphthalene, where %Ds were above the method allowable maximums.

-The continuing calibration reference Sample: VI9839-CC9812 analyzed on 02/16/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT for Iodomethane, 3-Methyl-1-Butanol, cis-1,4-Dichloro-2-Butene, Benzyl Chloride, 2-Methylnaphthalene, where %Ds were above the method

allowable maximums. the Mean RRFs for iso-butyl alcohol, n-butyl alcohol, 3-methyl-1-butanol, were less than the allowable minimum.

-The continuing calibration reference Sample: VI9840-CC9812 analyzed on 02/17/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT for Bromomethane, Chloroethane, Acrolein, Iodomethane, Acetonitrile, Acrylonitrile, Vinyl Acetate, Chloroprene, Ethyl Acetate, Propionitrile, Methyl Acrylate, Methacrylonitrile, Tetrahydrofuran, Isobutyl Alcohol, 2-Nitropropane, 3-Methyl-1-Butanol, 2-methylnaphthalene, where %Ds were above the method allowable maximums. the Mean RRFs for iso-butyl alcohol, n-butyl alcohol, 3-methyl-1-butanol, were less than the allowable minimum.

No action is required when less than 20% of the continuing calibration target compounds are outside the method control limits provide no Average Relative Response Factor (RRFs) is less than 0.01 for all target compounds.

Quality Judgement:

-Detected results of Iodomethane, 3-Methyl-1-Butanol, cis-1,4-Dichloro-2-Butene, Benzyl Chloride, 2-Methylnaphthalene, iso-butyl alcohol, n-butyl alcohol, 3-methyl-1-butanol, in the associated samples, JD39775-(01, 02, 03, 05, 14), should be qualified estimated (J).

-Detected results of Ethanol, 1,4-Dioxane, 1,3-butadiene, Vinyl Chloride, Acrolein, Acrylonitrile, 2-Nitropropane, in the associated samples, JD39775-(06, 07, 08, 10, 11, 12, 13), should be qualified estimated (J).

-Detected results of Ethanol, Chlorodifluoromethane, Dichlorodifluoromethane, Acrolein, Acetone, Iodomethane, Methyl Acetate, Di-Isopropyl Ether, 2-Butanone, Acrylonitrile, Ethyl Acetate, Methyl Acrylate, Propionitrile, t-Butyl Formate, Methacrylonitrile, tert-Amyl-Alcohol, Ethyl Acrylate, 2-Nitropropane, Epichlorohydrin, 4-Methyl-2-Pentanone, 2-Heaxanone, Butyl Acetate, Butyl Acrylate, cis-2,4-Dichloro-2-Butene, 1,1,2,2-Tetrachloroethane, trans-1,4-Dichloro-2-Butene, Benzyl Chloride, 1,2-Dibromo-2-Chloropropane, 2-Methylnaphthalene, in the associated samples, JD39775-17, should be qualified estimated (J).

-Detected results of Bromomethane, Chloroethane, Acrolein, Iodomethane, Acetonitrile, Acrylonitrile, Vinyl Acetate, Chloroprene, Ethyl Acetate, Propionitrile, Methyl Acrylate, Methacrylonitrile, Tetrahydrofuran, Isobutyl Alcohol, 2-Nitropropane, 3-Methyl-1-Butanol, 2-methylnaphthalene, iso-butyl alcohol, n-butyl alcohol, 3-methyl-1-butanol, in the associated samples, JD39775-(15, 16), should be qualified estimated (J).

• **Method Blank Verification (BLK):** Method blank analyses included in this data set of laboratory data package concluded no detection for the target compounds in lab sample reference: VI9839-MB, V3C7641-MB, on 02/16/2022, and V4D5144-MB, VI9840-MB, on 02/17/2022.

Quality Judgement: No actions are required.

• **Internal Standard Area Summary (IS):** As indicated in the method internal standard criteria, the laboratory data package for the stated SDG confirmed the following:

-The internal standard retention times were within method control limits.

-The internal standard areas were within method control limits.

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- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries were within method control limits for all samples.

Quality Judgement: No actions are required.

- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes (Percent Recoveries: %Rs and Relative Percent Difference: %RPDs). The following summarizes this evaluation:

-In LCS ID# VI9839-BS, V3C7641-BS, on 02/16/2022, %Rs for all target volatile compounds were within the method control limits.

-In LCS ID# V4D5144-BS, on 02/17/2022, %Rs for Acetone, 2-Butanone (MEK), 1,2-Dibromo-3-chloropropane, 2-Hexanone, Methyl Acetate, 4-Methyl-2-pentanone (MIBK), 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, were above the method control limits.

-In LCS ID# VI9840-BS, on 02/17/2022, %Rs for Chloroethane, was above the method control limits.

Quality Judgement:

-Detected results of Acetone, 2-Butanone (MEK), 1,2-Dibromo-3-chloropropane, 2-Hexanone, Methyl Acetate, 4-Methyl-2-pentanone (MIBK), 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, in sample JD39775-17, must be qualified estimated-Bias High (J+).

-Detected results of Chloroethane, in samples JD39775-(15, 16), must be qualified estimated-Bias High (J+).

- **Laboratory and Field Duplicates (DUP):** According to both the chain of custody record, and the data set provided by the laboratory, a laboratory duplicate sample was analyzed from unrelated sample.

-A field duplicate sample (DUP-1/JD39775-6), included in this samples set, was originated from RI-SB4 (4.5-5')/JD39775-5. The following summarizes this evaluation:

	Detected Compounds	DUP-1 JD39775-6 ug/kg	RI-SB4(4.5-5') JD39775-5 ug/kg	%RPDs
1	Target VOCs	ND	ND	NC

NC = Value is not calculated due to low initial sample concentration.

%RPDs was below the allowable maximum.

Quality Judgement: No actions are required.

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** As required by the method quality assurance/quality control criteria, the matrix spike and matrix spike duplicate in a designated sample listed in this data set has been evaluated for method compliance purposes. The following summarizes this evaluation:

-Few matrix spike processes were analyzed in this data set using unrelated samples.

Quality Judgement: No Actions are required.

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- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD39775

Data Validation for Analytical Method	Semi-Volatile Organic Compounds (SW846 8270E Method)
Number of Samples & Matrix	15 Soil Samples, 1 Duplicate Soil Sample, 1 Field Blank
Sampled On	02/14 & 15/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39775 (1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 17 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph/mass spectrometry (GCMS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **GC/MS Tuning and Mass Calibration:** The DFTPP tuning criteria were within control limits as outlined in the EPA and SW846 methods.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs) and Percent Relative Standard Deviation (%RSDs) and in some cases the coefficient of determination COD: (In general, Average RRFs must be greater than the required values as defined by EPA/SW846 Method. %RSD must be less than 20%, and the coefficient of determination (COD) must be greater than 0.995). This evaluation displays the following:
-In the initial calibration of EM7636-ICC7636 on 01/12/2022, Average RRFs were above the allowable minimum as required by the method, EXCEPT for Pentachloro-nitrobenzene, where Average RRF was below the allowable minimum. %RSDs were

below the method allowable maximum (20%). The coefficient of determination (COD) was greater than 0.995.

-In the initial calibration of EM7637-ICC7637 on 01/12/2022, Average RRFs were above the allowable minimum as required by the method. %RSDs were below the method allowable maximum (20%).

-In the initial calibration of Sample: EP6741-ICC6741 on 12/03/2021, Average RRFs were above the allowable minimum as required by the method. %RSDs were below the method allowable maximum (20%). The coefficient of determination (COD) was greater than 0.995.

-In the initial calibration of Sample: EP6785-ICC6785 on 01/20/2022, Average RRFs were above the allowable minimum as required by the method, EXCEPT for Pentachloronitrobenzene, where Average RRF was below the allowable minimum. %RSDs for N-Nitrosopyrrolidine was above the method allowable maximum (20%). The coefficient of determination (COD) was greater than 0.995.

Quality Judgement:

-Detected results of Pentachloronitrobenzene, N-Nitrosopyrrolidine, in sample JD39775-17/FIELD BLANK, should be considered Estimated (J).

- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds) and confirmed the following:
 - The continuing calibration (Sample: EM7684-CC7636 on 02/18/2022), The RRFs for target compounds were above the minimum values set by the method, EXCEPT for N-Nitrosodimethylamine, Nitrobenzene, Hexachlorocyclopentadiene, 2-Nitroaniline, 4-Nitrophenol, 1,2-Diphenylhydrazine, where %Ds were above the allowable maximums. RRFs for Pentachloronitrobenzene, was below the allowable minimum.
 - The continuing calibration (Sample: EM7684-CC7637 on 02/18/2022), The RRFs for target compounds were above the minimum values set by the method. %Ds were below the allowable maximums.
 - The continuing calibration (Sample: EP6812-CC6741, Sample: EP6812-CC6742, on 02/18/2022), The RRFs for target compounds were above the minimum values set by the method. %Ds were below the allowable maximums.
 - The continuing calibration (Sample: EP6812-CC6742, on 02/18/2022), The RRFs for target compounds were above the minimum values set by the method. %Ds for Caprolactam was above the allowable maximums.
 - The continuing calibration (Sample: EP6813-CC6741, Sample: EP6813-CC6742, on 02/19/2022), The RRFs for target compounds were above the minimum values set by the method. %Ds were below the allowable maximums.
 - The continuing calibration (Sample: EP6813-CC6785 on 02/19/2022), The RRFs for target compounds were above the minimum values set by the method, EXCEPT for Pentachloronitrobenzene, 4,4-Methylene-bis-(2-chloroaniline), where RRFs were below the allowable minimum. %Ds for N-Nitrosopyrrolidine, Aramite, Kepone, 4,4-Methylene-bis-(2-chloroaniline), were above the allowable maximums.

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-The continuing calibration (Sample: EP6814-CC6741, on 02/21/2022), The RRFs for target compounds were above the minimum values set by the method. %Ds for Hydroquinone, 2,4-Dinitrophenol, were above the allowable maximums.

No action is required when less than 20% of the target compounds do not meet the method control limits provide no Relative Response Factor (RRFs) is less than 0.01 for all target compounds as the allowable minimum.

Quality Judgement:

-Detected results of Pentachloronitrobenzene, 4,4-Methylene-bis-(2-chloroaniline), N-Nitrosopyrrolidine, Aramite, Kepone, in sample JD39775-17/FIELD BLANK, should be considered Estimated (J).

-Detected results of Hydroquinone, 2,4-Dinitrophenol, in sample JD39775-08/ RI-SB4 (14.5-15'), should be considered Estimated (J).

-Detected results of Caprolactam, in samples JD39775-(01, 02, 03, 05, 06, 07, 10, 11, 12, 13, 14, 15, 16), should be considered Estimated (J).

- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target compounds at the method reporting limits, EXCEPT in:

-OP38180-MB1, on 02/18/2022, shows a detection of Di-n-butyl phthalate (62.2 & 65.2 ug/kg J).

Quality Judgement:

-Detected results for Di-n-butyl phthalate in samples JD39775-(01, 02, 03, 05, 06, 07, 08, 10, 11, 12, 13, 14, 15, 16), that are less than five times the highest blank concentration should be reported as Not Detected (U).

- **Internal Standard Area Summary (IS):** As indicated in the method internal standard criteria, the laboratory data package for the stated SDG confirmed the following:
 - The internal standard retention times were within method control limits.
 - The internal standard areas were within method control limits.
- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries were within method control limits.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:
 - In OP38180-BS1, Percent recoveries (%Rs) for all target compounds were within method control limits.
 - In OP38217-BS1, Percent recoveries (%Rs) for all target compounds were within method control limits, EXCEPT for Hexachlorocyclopentadiene, where %Rs below method control limits.
 - In OP38217-BSD, Percent recoveries (%Rs) for all target compounds were within method control limits, EXCEPT for Hexachlorocyclopentadiene, where %Rs below method control limits. %RPDs were below the allowable maximum.

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Quality Judgement:

-Detected results of Hexachlorocyclopentadiene, in sample JD39775-17/FIELD BLANK, should be qualified Estimated Bias-Low (J-).

-Non-Detected results of Hexachlorocyclopentadiene, in sample JD39775-17/FIELD BLANK, should be qualified Estimated (UJ).

- **Laboratory and Field Duplicates (DUP):** According to both the chain of custody record, and the data set provided by the laboratory, a laboratory duplicate sample was analyzed from unrelated sample.
-A field duplicate sample (DUP-1/JD39775-6), included in this samples set, was originated from RI-SB4 (4.5-5')/JD39775-5. The following summarizes this evaluation:

	Detected Compounds	DUP-1 JD39775-6 ug/kg	RI-SB4(4.5-5') JD39775-5 ug/kg	%RPDs
1	Benzo(a)anthracene	17.9	14.7	20
2	Benzo(a)pyrene	37.5	32.4	15
3	Benzo(b)fluoranthene	23.1	ND @ 39	NC
4	Chrysene	18.7	ND @ 39	NC
5	Di-n-butyl phthalate	74.1	102	32
6	Fluoranthene	28.8	ND @ 39	NC
8	Indeno(1,2,3-cd)pyrene	38.9	33.2	16
9	Phenanthrene	18.6	ND @ 39	NC
10	Pyrene	29.0	ND @ 39	NC

NC = Value is not calculated due to low initial sample concentration.

%RPDs of detected SVOC compounds were below the allowable maximum.

Quality Judgement: No actions are required.

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** No Matrix spike/Matrix spike duplicate were performed in this samples set. However, laboratory provided a selected matrix spike and matrix spike duplicate data from unrelated samples.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD39775

Data Validation for Analytical Method	Pesticides (SW846 8081B Method)
Number of Samples & Matrix	15 Soil Samples, 1 Duplicate Soil Sample, 1 Field Blank
Sampled On	02/14 & 15/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39775 (1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 17 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph (GC) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards used in this data set has been evaluated for compliance with method criteria for Percent Relative Standard Deviation %RSDs (<20%):
 - In the initial calibration sample reference: G1G5985-ICC5985 on 01/24/2022, G8G1762-ICC1762 on 02/18/2022, %RSDs for pesticides target compounds, were below the allowable maximum.
Quality Judgement: No actions are required as long a valid column is used for quantitation.
- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Percent Difference (%Ds <20%):

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-In continuing calibration (G1G6033-CC5985 on 02/25/2022), %Ds for all pesticides target compounds were below the allowable maximums.

-In continuing calibration (G8G1769-CC1762 on 02/21/2022), %Ds for all pesticides target compounds were below the allowable maximums, EXCEPT for delta-BHC, alachlor, Endosulfan Sulfate (1st, column only), Endrin Ketone (both columns), where %Ds were above the allowable maximum.

-In continuing calibration (G8G1771-CC1762 on 02/22/2022), %Ds were below the allowable maximum.

-In continuing calibration (G8G1775-CC1762 on 02/24/2022), %Ds for all pesticides target compounds were below the allowable maximums, EXCEPT for delta-BHC (1st, column only), Endrin Ketone (both columns), where %Ds were above the allowable maximum.

-In continuing calibration (G8G1781-CC1762 on 02/28/2022), %Ds for all pesticides target compounds were below the allowable maximums, EXCEPT for Endrin Ketone (1st, column), Mirex (2nd, column), where %Ds were above the allowable maximum.

Quality Judgement:

-Detected results of Endrin Ketone, in samples JD39775-(01, 03, 05, 06, 07, 11, 12, 13, 16), should be qualified Estimated (J).

- **DDT/Endrin Breakdown Check (DDT/Endrin Check):** Per method requirements, the percent breakdowns were below the allowable maximum (20% for DDT & Endrin).
- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target pesticide compounds in OP38182-MB1 analyzed on 02/21/2022, OP38182-MB1(a) analyzed on 02/22/2022, OP38208A-MB1 on 02/24/2022, OP38208A-MB1 a on 03/01/2022.
- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries of all samples were within method control limits, EXCEPT in:
 - Sample JD39775-3, %Rs of SURR Tetrachloro-m-xylene, were above control limits.
 - Sample JD39775-16, %Rs of SURR Tetrachloro-m-xylene, Decachlorobiphenyl, were above control limits.

Quality Judgement:

-Detected results of target pesticide compounds, in samples JD39775 (1, 3), should be considered Estimated Bias-High (J+).
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:
 - In LCS (OP38182-BS1), %Rs were within the method control limits, EXCEPT for beta-BHC, Endrin Ketone, where %Rs is above control limits.
 - In LCS (OP38208A-BS1), %Rs were within the method control limits.
 - In LCSDUP (OP38208A-BSD), %Rs were within the method control limits. %RPDs were below the allowable maximum.

Quality Judgement:

-Detected results of beta-BHC, Endrin Ketone, in samples JD39775 (1, 2, 3, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16), should be considered Estimated Bias-High (J+).

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** No Matrix spike/Matrix spike duplicate were performed in this samples set. However, laboratory provided a selected matrix spike and matrix spike duplicate data from unrelated samples.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD39775

Data Validation for Analytical Method	Polychlorinated Biphenyls (PCBs) – SW846 8082A Method
Number of Samples & Matrix	15 Soil Samples, 1 Duplicate Soil Sample, 1 Field Blank
Sampled On	02/14 & 15/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39775 (1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 17 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph (GC) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards used in this data set has been evaluated for compliance with method criteria for Average Relative Standard Deviation %RSDs (<20%):
-In the initial calibration of G5G2883-ICC2883 on 02/01/2022, GXX7733-ICC7733 on 02/21/2022, %RSDs all Aroclor target compounds were below the allowable maximum.
Quality Judgement: No actions are required as long a valid column is used for quantitation.
- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Percent Difference (%Ds <20%):

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-In the continuing calibration reference ID: G5G2905-CC2883 on 02/17/2022, G5G2906-CC2883 on 02/20/2022, GXX7736-CC7733 on 02/23/2022, The overall %Ds for all Aroclor target compounds were below the allowable maximums.

Quality Judgement: No actions are required as long a valid column is used for quantitation.

- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target Aroclor compounds in OP38183-MB1 analyzed on 02/17/2022, OP38183-MB1 a on 02/20/2022, OP38183-MB1 on 02/23/2022, OP38209-MB1 on 03/01/2022.
- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries of all samples were within method control limits, EXCEPT in:
 - Sample JD39775-12, %Rs of SURR Tetrachloro-m-xylene, were above control limits.
 - Sample JD39775-16, %Rs of SURR Tetrachloro-m-xylene, Decachlorobiphenyl, were above control limits.

Quality Judgement:
-Detected results of target PCBs compounds, in samples JD39775 (12, 16), should be considered Estimated Bias-High (J+).
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:
 - In LCS (OP38183-BS1), %Rs for Aroclor 1016, Aroclor 1260 were within method control limits.
 - In LCSDUP (OP38183-BSD), %Rs for Aroclor 1016, Aroclor 1260 were within method control limits. %RPDs were below the allowable maximum.
 - In LCS (OP38209-BS1), %Rs for Aroclor 1016, Aroclor 1260 were within method control limits.
 - In LCSDUP (OP38209-BSD), %Rs for Aroclor 1016, Aroclor 1260 were within method control limits. %RPDs were below the allowable maximum.

Quality Judgement: No actions are required as long a valid column is used for quantitation.
- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** No Matrix spike/Matrix spike duplicate were performed in this samples set. However, laboratory provided a selected matrix spike and matrix spike duplicate data from unrelated samples.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD39775

Data Validation for Analytical Method	PFAS-NYSDEC Target List (EPA 537M Method)
Number of Samples & Matrix	15 Soil Samples, 1 Duplicate Soil Sample, 1 Field Blank
Sampled On	02/14 & 15/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39775 (1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 17 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time (HOLDT):** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the LC/TANDEM Mass Spectrometer (LC/MS/MS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs), Percent Relative Standard Deviation for both internal standard and external standard criteria (%RSDs <50%), and in some cases the coefficient of determination COD (>0.995). This evaluation displays the following:
-The initial calibration methods used in this data set, sample reference ID: S2Q1197-ICC1197 on 02/11/2022, S3Q762-ICC762, on 02/25/2022, S3Q765-ICC765 on 02/28/2022, display an acceptable performance and compliance with the method criteria listed above.
Quality Judgement: No actions are required.

- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for all target PFAS compounds: Required frequency (one per ten field samples), Percent Difference (%Ds < 50%), and or for Percent Recovery (70<%Rs<130). This evaluation displays the following:

-In continuing calibration laboratory reference ID: Lab FileID: 2Q85741.D, Lab FileID: 2Q85742.D, Lab FileID: 2Q85753.D, Lab FileID: 2Q85765.D, Lab FileID: 2Q85774.D, Lab FileID: 2Q85776.D, Lab FileID: 2Q85789.D, Lab FileID: 2Q85790.D, Lab FileID: 3Q55183.D, Lab FileID: 3Q55194.D, Lab FileID: 3Q55206.D, Lab FileID: 3Q55218.D, Lab FileID: 3Q55220.D, Lab FileID: 3Q55231.D, Lab FileID: 3Q55424.D, Lab FileID: 3Q55425.D, Lab FileID: 3Q55431.D, Lab FileID: 3Q55464.D, Lab FileID: 3Q55474.D, Lab FileID: 3Q55485.D, %Ds for target PFAS compounds below the allowable maximum.

Quality Judgement: No actions are required.

- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target compounds above both the MDL and the RL in OP89835-MB, OP89836-MB, S2Q1211-IBLK, S3Q762-IBLK, S3Q762-IBLK, on 02/25/2022, OP89877-MB, S2Q1211-IBLK, on 02/26/2022, S3Q765-IBLK, S3Q765-IBLK, on 02/28/2022.

Quality Judgement: No actions are required.

- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior (Isotope Dilution Analyte (IDA) Recovery must be > 10% for Data acceptance, 50<%Rs<150; 25<%Rs<150 for poor response analytes), in the SDG data set displays the following:
- Isotope Dilution Standard Recoveries (%Rs) of 18 spiked surrogate standards in all samples of this set, were within the method control limits.

Quality Judgement: No actions are required.

- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:

-In LCS OP89835-BB/2Q85746.D, OP89836-BB 3Q55184.D, OP89877-BB 3Q55212.D, %Rs were within the method control limits.

Quality Judgement: No actions are required.

- **Secondary Ion Transition Monitoring (SITM):** Quantifier and qualifier ions have been monitored for all target PFAS analytes (PFBA and PFPeA are exceptions). The laboratory derived criteria have been used to determine if the ratios are acceptable. (If the ratios fall outside of the laboratory criteria, results will be qualified as an estimated maximum concentration).

-No forms or data were provided.

- **Laboratory and Field Duplicates (DUP):** Laboratory duplicate from the samples set wasn't analyzed.

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-A field duplicate sample (DUP-1/JD39775-6A), included in this samples set, was originated from RI-SB4 (4.5-5')/JD39775-5A. The following summarizes this evaluation:

	Detected Compounds	DUP-1 JD39775-6A ug/kg	RI-SB4(4.5-5') JD39775-5A ug/kg	%RPDs
1	Perfluorooctanesulfonic acid	ND @ 0.58	0.56J	NC

NC = Value is not calculated due to low initial sample concentration.

%RPDs are not calculated.

Quality Judgement: No actions are required.

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** No Matrix spike/Matrix spike duplicate were performed in this samples set. However, laboratory provided a selected matrix spike and matrix spike duplicate data from unrelated samples.

Quality Judgement: No actions are required.

- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD39775

Data Validation for Analytical Method	TAL Metals (SW846 6010D, 7471B Methods)
Number of Samples & Matrix	15 Soil Samples, 1 Duplicate Soil Sample, 1 Field Blank
Sampled On	02/14 & 15/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39775 (1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 17 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were digested and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Initial and Continuing Calibration Verification (ICCV):** As indicated in the method calibration criteria, the initial calibration standards used in this data set has been evaluated for compliance with method criteria for Percent Recoveries (%Rs):
 - In File ID: SD021722M1.ICP, analyzed on 02/17/2022, %Rs for Total metals (EPA 6010D) in all ICVs and CCVs were within method control limits.
 - In File ID: SC021822M1.ICP, analyzed on 02/18/2022, %Rs for Total metals (EPA 6010D) in all ICVs and CCVs were within method control limits.Quality Judgement: No actions are required.
- **CRDL Standard (CRDL):** As indicated in the method calibration criteria, the CRDL standards of this data set have been evaluated for compliance with method criteria for Percent Recoveries (%Rs) for target metals elements:
 - In File ID: SD021722M1.ICP (LOW CALIBRATION CHECK STANDARDS-EPA 6010D), %Rs for total target metals were within method control limits (70-130%).
 - In File ID: SD021822M1.ICP (LOW CALIBRATION CHECK STANDARDS-EPA 6010D), %Rs for total target metals were within method control limits (70-130%).Quality Judgement: No actions are required.
- **Method Blank Verification:** Method blank analyses included in this data set has been evaluated to ensure target metals were reported below CRDL:
 - In File ID: SD021722M1.ICP, SD021722M1.ICP, H9022122S1.CSV, File ID: SD021822M1.ICP, File ID: H9022222W2.CSV, all quality control blanks (ICBs, CCBs) were below RL as required by EPA 6010D, 7473 Methods.Quality Judgement: No actions are required.

- **ICP Interference Check Sample (ICPINTERF):** An evaluation of the Interference Check Sample has been evaluated for percent recoveries (%Rs) compliance with methods criteria (80-120%):
 - In File ID: SD021722M1.ICP, %Rs for target metals (EPA 6010D), were within the method control limits.
 - File ID: SD021822M1.ICP, %Rs for target metals (EPA 6010D), were within the method control limits.Quality Judgement: No actions are required.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes (%Rs within control limits). The following summarizes this evaluation:
 - In LCS QC Batch ID: MP31335, on 02/17/2022, (EPA 6010D) for total metals, %Rs were within the method control limits.Quality Judgement: No actions are required.
- **Spike Sample Recovery (SSR):** Spike samples in this data set have been evaluated for method compliance purposes (%Rs within control limits). The out-of-control spike recoveries for analytes whose unspiked concentrations are $\geq 4x$ the spike added have been disregarded:
 - In batch ID: MP32335, laboratory used unrelated sample (JD39688-1) for matrix spike and duplicate processes. %Rs were within method control limits. %RPDs were below the allowable maximum.
 - In batch ID: MP31339, laboratory used sample (JD39775-3) for matrix spike and duplicate processes. %Rs were within method control limits, EXCEPT for Antimony, Iron, Magnesium, Where %Rs were below method control limits. %Rs for Potassium was above control limit. %RPDs were below the allowable maximum.Quality Judgement:
 - Detected results of Antimony, Iron, Magnesium, in sample JD39775-3, should be qualified Estimated Bias-Low (J-).
 - Non-Detected results of Antimony, Iron, Magnesium, in sample JD39775-3, should be qualified Estimated (UJ).
 - Detected results of Potassium in sample JD39775-3, should be qualified Estimated (J).
- **Laboratory Duplicate (DUP):** Target metals Duplicate analysis has been evaluated for relative percent differences compliance with the method criteria (%RPDs <20% for aqueous and <35% for soil matrices):
 - A field duplicate sample (DUP-1/JD39775-6), included in this samples set, was originated from RI-SB4 (4.5-5')/JD39775-5. The following summarizes this evaluation:

	Detected Compounds	DUP-1 JD39775-6 ug/kg	RI-SB4(4.5-5') JD39775-5 ug/kg	%RPDs
1	Aluminum	22700	22100	2.7
2	Barium	202	404	67

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3	Beryllium	1.6	1.3	21
4	Cadmium	0.61	0.83	31
5	Calcium	1780	1940	8.6
6	Chromium	39.5	39.7	0.5
7	Cobalt	18.8	18.4	2.2
8	Copper	63.4	52.2	19
9	Iron	38300	35900	6.5
10	Lead	40.2	63.8	45
11	Magnesium	8420	9560	13
12	Manganese	1450	751	64
13	Nickel	33.2	34.1	2.7
14	Potassium	9610	11000	14
15	Vanadium	51.0	50.1	1.8
16	Zinc	154	285	60

NC = Value is not calculated due to low initial sample concentration.

%RPDs of Barium, Lead, Manganese, Zinc, were above the allowable maximum.

Quality Judgement:

-Detected results of Barium, Lead, Manganese, Zinc, in samples RI-SB4 (4.5-5')/JD39775-5, DUP-1/JD39775-6, should be qualified Estimated (J).

- **ICP Serial Dilution (ISDil):** ICP serial dilution for target metals has been evaluated to ensure compliance with method criteria (Concentration in the original sample is > 50x the MDL that is calculated for the sample and %Ds must be below the allowable maximums 10%):

-In QC Batch ID: MP31335 /unrelated sample JD39688-1, on 02/17/2022, %Ds of target metals (EPA 6010D) were below the allowable maximum, EXCEPT for Aluminum, Arsenic, Chromium, Nickel, Selenium, Vanadium, Zinc where %Ds were above the allowable maximum due to low initial sample concentration (< 50 times IDL).

-In QC Batch ID: MP31339/sample JD39775-3, on 02/17/2022, %Ds of target metals (EPA 6010D) were below the allowable maximum, EXCEPT for Cobalt, Nickel, Sodium, Zinc, where %Ds were above the allowable maximum.

Note: Other elements with low initial sample concentration (< 50 times IDL), displayed anticipated high value of %Ds above the allowable maximum.

Quality Judgement:

-Detected results of Cobalt, Nickel, Sodium, Zinc, in sample JD39775-3, should be qualified Estimated (J).

- **Mercury Overall Evaluation (Hg):** All initial and continuing calibration checks, Blank results summaries, low calibration check standards, laboratory control sample summaries, Matrix spike and duplicate summaries, were in compliance with method quality control criteria.

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- **Standard Reference Material Recovery (Hg):** Forms were not provided.
- **Total & Soluble Metals Comparison (T&S-Comp):** Not applicable.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD39775

Data Validation for Analytical Method	Cyanide (SW846 9012B Method)
Number of Samples & Matrix	15 Soil Samples, 1 Duplicate Soil Sample, 1 Field Blank
Sampled On	02/14 & 15/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39775 (1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 17 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Initial Calibration Verification (ICCV):** As indicated in the method calibration criteria, the initial calibration standards (ICV, CCV) used in this data set have been evaluated for compliance with method criteria ($90\% < \%Rs < 110\%$):
 -In File ID: E021722W1.CN, E021722W2.CN, %Rs for Cyanide standards (ICV, CCV) were within method control limits.
Quality Judgement: No actions are required.
- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection of Cyanide above the RL.
Quality Judgement: No actions are required.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes ($\%Rs$ within control limits-80-120%). The following summarizes this evaluation:
 -In Batch IDs (GP38568/GN26478, GP38569/GN26478, GP38590/GN26579), for Cyanide LCS evaluation, %Rs were within the method control limits.
- **Matrix Spike/Matrix Spike Duplicate (MS/MSD):**
 -In batch ID: GP38569/GN26478, the Sample JD39775-10 was spiked with Cyanide standard for matrix spike evaluation, %Rs was below the method control limits (75-125%).
-Quality Judgement:
-Detected results of Cyanide in sample JD39775-10, should be qualified Estimated Bias-Low (J-).

-Non-Detected results of Cyanide in sample JD39775-10, should be qualified Estimated (UJ).

- **Laboratory Duplicate (DUP):** Cyanide Duplicate analysis has been evaluated for relative percent differences compliance with the method criteria (%RPDs <20% for aqueous and <35% for soil matrices):
- %RPDs for laboratory duplicate were below the allowable maximums.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Validated QA Data

Initial Calibration Summary

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Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V4D5098-ICC5098
Lab FileID: 4D114635.D

Response Factor Report MS4D

Method : C:\msdchem\1\methods\M4D5098.M (RTE Integrator)
Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Mon Jan 17 15:07:58 2022
Response via : Initial Calibration

Calibration Files

1 =4D114630.D 0.5 =4D114629.D 100 =4D114636.D 50 =4D114635.D
20 =4D114634.D 200 =4D114637.D 4 =4D114632.D 2 =4D114631.D
8 =4D114633.D 0.2 =4D114628.D = =

Compound

	1	0.5	100	50	20	200	4	2	8	0.2	Avg	%RSD
1) tert butyl alcohol-d9 -----ISTD-----												
2) tertiary butyl alcohol	1.296	1.243	1.379	1.374	1.304	1.312	1.330	1.416	1.369	1.336	4.00	
3) ethanol	0.133	0.125	0.158	0.156	0.142	0.150	0.149	0.154	0.148	0.146	7.45	
4) 1,4-dioxane	0.125	0.151	0.148	0.135	0.142	0.145	0.144	0.137		0.141	5.84	
5) I pentafluorobenzene -----ISTD-----												
6) chlorodifluoromethane	0.421	0.469	0.524	0.480	0.444	0.516	0.484	0.474	0.469	0.476	6.69	
7) dichlorodifluoromethane	0.461	0.500	0.616	0.555	0.510	0.595	0.517	0.537	0.543	0.537	8.89	
8) chloromethane	0.470	0.629	0.539	0.507	0.496	0.518	0.510	0.556	0.534	0.529	8.53	
9) vinyl chloride	0.455	0.513	0.561	0.511	0.492	0.545	0.497	0.516	0.515	0.460	0.506	6.51
10) 1,3-butadiene	0.415	0.440	0.442	0.411	0.390	0.432	0.430	0.434	0.413	0.476	0.428	5.41
11) bromomethane	0.238	0.294	0.291	0.238	0.222	0.309	0.230	0.227	0.237	0.254	13.21	
12) chloroethane	0.177	0.212	0.262	0.239	0.230	0.259	0.225	0.236	0.238	0.231	11.00	
13) trichlorofluoromethane	0.530	0.585	0.691	0.622	0.590	0.670	0.585	0.598	0.627	0.400	0.590	13.73
14) vinyl bromide										0.000	-1.00	
15) ethyl ether	0.130	0.135	0.188	0.173	0.162	0.185	0.166	0.155	0.165	0.162	12.23	
16) acrolein	0.070	0.064	0.057	0.066	0.049	0.055				0.060	13.09	
17) freon 113	0.227	0.225	0.296	0.270	0.252	0.277	0.275	0.258	0.257	0.172	0.251	14.05
18) 1,1-dichloroethene	0.315	0.360	0.330	0.302	0.286	0.315	0.331	0.334	0.300	0.304	0.318	6.74
19) acetone	0.102	0.132	0.144	0.138	0.142	0.137	0.147	0.144	0.135	0.136	9.97	
20) acetonitrile	0.044	0.042	0.047	0.044	0.041	0.045	0.046	0.051	0.044	0.045	6.56	
21) iodomethane *This compound fails initial calibration criteria.	0.084	0.464	0.352	0.222	0.463	0.109	0.082	0.140		0.239	68.76	
22) carbon disulfide	0.857	0.990	0.972	0.887	0.833	0.943	0.890	0.878	0.877	0.903	5.91	
23) methylene chloride												

Initial Calibration Summary

Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V4D5098-ICC5098
Lab FileID: 4D114635.D

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	0.383	0.436	0.367	0.335	0.323	0.349	0.364	0.379	0.343	0.364	9.22
24)	methyl acetate										
	0.210		0.270	0.257	0.231	0.258	0.246	0.245	0.251	0.246	7.50
25)	methyl tert butyl ether										
	0.839	0.931	0.959	0.889	0.843	0.945	0.891	0.948	0.872	0.869	4.92
26)	trans-1,2-dichloroethene										
	0.354	0.446	0.341	0.329	0.315	0.336	0.342	0.364	0.342	0.352	10.76
27)	di-isopropyl ether										
	0.932	0.982	1.130	1.046	1.008	1.117	1.092	1.050	1.033	0.982	6.13
28)	2-butanone										
	0.028		0.044	0.041	0.040	0.043	0.044	0.044	0.041	0.041	13.20
29)	1,1-dichloroethane										
	0.567	0.625	0.651	0.603	0.573	0.649	0.617	0.618	0.606	0.543	5.81
30)	chloroprene										
	0.413	0.458	0.536	0.489	0.456	0.531	0.464	0.472	0.461	0.367	10.75
31)	acrylonitrile										
	0.090		0.130	0.121	0.114	0.125	0.129	0.122	0.119	0.119	10.55
32)	hexane										
	0.174	0.183	0.233	0.214	0.194	0.230	0.201	0.192	0.203	0.203	9.87
33)	vinyl acetate										
			0.067	0.059	0.055	0.065	0.053	0.047	0.058	0.058	11.72
34)	ethyl tert-butyl ether										
	0.924	1.035	1.137	1.043	0.959	1.134	1.055	1.084	1.012	0.963	6.98
35)	ethyl acetate										
			0.044	0.040	0.038	0.043	0.039	0.027	0.035	0.038	14.90
36)	2,2-dichloropropane										
	0.459	0.500	0.510	0.469	0.445	0.499	0.474	0.468	0.461	0.503	4.67
37)	cis-1,2-dichloroethene										
	0.379	0.476	0.398	0.373	0.356	0.384	0.383	0.391	0.365	0.431	9.03
38)	methyl acrylate										
	0.243		0.336	0.320	0.295	0.318	0.301	0.301	0.311	0.303	9.15
39)	propionitrile										
	0.044	0.039	0.055	0.052	0.048	0.053	0.053	0.054	0.051	0.050	10.35
40)	bromochloromethane										
	0.169	0.195	0.194	0.188	0.179	0.186	0.194	0.195	0.179	0.187	4.96
41)	tetrahydrofuran										
			0.049	0.046	0.042	0.046	0.048	0.057	0.049	0.048	9.23
42)	chloroform										
	0.457	0.498	0.446	0.413	0.405	0.427	0.442	0.458	0.412	0.440	6.69
43)	t-butyl formate										
	0.223	0.215	0.291	0.246	0.194	0.297	0.243	0.237	0.236	0.243	13.68
44)	dibromofluoromethane (s)										
	0.403	0.400	0.397	0.397	0.398	0.410	0.406	0.393	0.404	0.388	1.61
45)	methacrylonitrile										
	0.083		0.143	0.137	0.126	0.139	0.134	0.125	0.130	0.127	14.87
46)	1,1,1-trichloroethane										
	0.502	0.538	0.580	0.546	0.512	0.581	0.559	0.567	0.531	0.527	5.02
47)	cyclohexane										
	0.357	0.432	0.471	0.430	0.407	0.465	0.412	0.447	0.429	0.390	8.13
48)	1,1-dichloropropene										
	0.420	0.447	0.468	0.426	0.408	0.461	0.430	0.441	0.420	0.418	4.56
49)	isobutyl alcohol										
			0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	7.21
50)	carbon tetrachloride										
	0.445	0.472	0.542	0.509	0.483	0.532	0.503	0.517	0.487	0.441	6.87
51)	tert amyl alcohol										
	0.012		0.013	0.012	0.012	0.012	0.012	0.015	0.012	0.012	8.11
52)	I 1,4-difluorobenzene -----ISTD-----										
53)	1,2-dichloroethane-d4 (s)										

6.9.5

6

Initial Calibration Summary

Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V4D5098-ICC5098
Lab FileID: 4D114635.D

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	0.310	0.308	0.297	0.298	0.302	0.307	0.307	0.302	0.309	0.308	0.305	1.55
54)	n-butyl alcohol											
	0.007	0.008	0.008	0.007	0.008	0.007	0.008	0.007		0.008		9.16
55)	2,2,4-trimethylpentane											
	0.527	0.573	0.629	0.599	0.558	0.637	0.598	0.580	0.572	0.654	0.593	6.56
56)	benzene											
	0.908	1.016	1.009	0.983	0.942	0.994	0.994	1.054	0.980	0.955	0.983	4.18
57)	tert-amyl methyl ether											
	0.152	0.169	0.183	0.176	0.168	0.183	0.178	0.186	0.172		0.174	6.05
58)	heptane											
	0.104	0.108	0.125	0.119	0.108	0.125	0.117	0.107	0.107	0.143	0.116	10.29
59)	isopropyl acetate											
	0.048	0.056	0.055	0.051	0.055	0.056	0.057	0.053		0.054		5.78
60)	1,2-dichloroethane											
	0.386	0.429	0.401	0.387	0.370	0.399	0.402	0.410	0.385	0.527	0.410	10.83
61)	trichloroethene											
	0.267	0.268	0.307	0.294	0.278	0.314	0.282	0.300	0.284	0.281	0.287	5.50
62)	ethyl acrylate											
	0.272	0.376	0.351	0.330	0.379	0.329	0.350	0.336		0.340		9.87
63)	2-nitropropane											
	0.095	0.096	0.092	0.083	0.097	0.087	0.091	0.089		0.091		5.24
64)	2-chloroethyl vinyl ether											
										0.000		-1.00
65)	methyl methacrylate											
	0.043	0.070	0.069	0.063	0.071	0.063	0.062	0.061		0.063		14.16
66)	1,2-dichloropropane											
	0.229	0.282	0.300	0.282	0.268	0.306	0.273	0.274	0.275	0.286	0.278	7.48
67)	dibromomethane											
	0.173	0.194	0.199	0.191	0.186	0.195	0.194	0.209	0.188	0.195	0.193	4.83
68)	methylcyclohexane											
	0.290	0.314	0.355	0.339	0.312	0.360	0.338	0.329	0.317	0.279	0.323	8.09
69)	bromodichloromethane											
	0.345	0.369	0.396	0.380	0.359	0.390	0.374	0.393	0.362	0.374	0.374	4.31
70)	epichlorohydrin											
	0.016	0.023	0.021	0.018	0.022	0.018	0.019	0.018		0.019		12.24
71)	cis-1,3-dichloropropene											
	0.408	0.436	0.460	0.435	0.411	0.469	0.419	0.409	0.417	0.435	0.430	4.94
72)	4-methyl-2-pentanone											
	0.095	0.081	0.115	0.108	0.100	0.113	0.106	0.110	0.104		0.104	10.10
73)	3-methyl-1-butanol											
	0.005	0.007	0.006	0.006	0.007	0.006	0.005	0.006		0.006		14.00
74)	I chlorobenzene-d5 -----ISTD-----											
75)	toluene-d8 (s)											
	1.290	1.306	1.286	1.253	1.280	1.248	1.275	1.311	1.292	1.325	1.287	1.88
76)	toluene											
	0.716	0.756	0.807	0.752	0.720	0.792	0.774	0.806	0.760	0.764	0.765	4.11
77)	trans-1,3-dichloropropene											
	0.454	0.470	0.524	0.490	0.456	0.508	0.482	0.521	0.479	0.488	0.487	5.01
78)	ethyl methacrylate											
	0.330	0.355	0.432	0.407	0.375	0.411	0.401	0.400	0.387		0.389	8.02
79)	1,1,2-trichloroethane											
	0.243	0.215	0.269	0.258	0.248	0.257	0.262	0.273	0.266	0.183	0.247	11.37
80)	tetrachloroethene											
	0.307	0.300	0.313	0.302	0.296	0.297	0.325	0.328	0.308	0.276	0.305	4.95
81)	1,3-dichloropropane											
	0.448	0.443	0.524	0.486	0.462	0.506	0.484	0.517	0.479	0.463	0.481	5.81
82)	2-hexanone											
	0.116	0.106	0.145	0.135	0.127	0.138	0.136	0.145	0.136		0.132	9.87
83)	butyl acetate											

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Initial Calibration Summary

Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

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Sample: V4D5098-ICC5098
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	0.192	0.181	0.223	0.211	0.197	0.210	0.213	0.220	0.213		0.207	6.70
84)	dibromochloromethane											
	0.402	0.389	0.424	0.401	0.381	0.414	0.401	0.430	0.402	0.383	0.403	4.08
85)	1,2-dibromoethane											
	0.307	0.345	0.354	0.340	0.326	0.338	0.353	0.355	0.342	0.331	0.339	4.39
86)	n-butyl ether											
	1.288	1.376	1.559	1.429	1.323	1.559	1.371	1.460	1.393		1.417	6.70
87)	chlorobenzene											
	0.837	0.957	0.905	0.868	0.834	0.877	0.883	0.937	0.878	0.966	0.894	5.18
88)	1,1,1,2-tetrachloroethane											
	0.319	0.334	0.362	0.349	0.328	0.352	0.344	0.359	0.346	0.330	0.342	4.09
89)	ethylbenzene											
	1.354	1.457	1.491	1.430	1.359	1.451	1.435	1.541	1.427	1.467	1.441	3.89
90)	m,p-xylene											
	0.491	0.549	0.590	0.551	0.517	0.568	0.557	0.572	0.552	0.536	0.548	5.15
91)	o-xylene											
	0.469	0.482	0.619	0.572	0.524	0.585	0.562	0.583	0.531	0.479	0.541	9.55
92)	styrene											
	0.780	0.808	1.051	0.952	0.862	1.001	0.863	0.876	0.868	0.801	0.886	10.02
93)	bromoform											
	0.274	0.276	0.321	0.307	0.281	0.305	0.301	0.327	0.289	0.234	0.292	9.28
94)	butyl acrylate											
	0.529	0.540	0.740	0.674	0.604	0.714	0.607	0.650	0.616		0.631	11.40
95)	isopropylbenzene											
	1.225	1.302	1.467	1.353	1.257	1.417	1.339	1.370	1.309	1.288	1.333	5.47
96)	cis-1,4-dichloro-2-butene											
	0.110	0.099	0.161	0.148	0.131	0.151	0.126	0.127	0.131		0.132	14.89
97)	I 1,4-dichlorobenzene-d -----ISTD-----											
98)	4-bromofluorobenzene (s)											
	1.059	1.044	1.041	1.039	1.015	1.037	1.058	1.065	1.040	1.041	1.044	1.36
99)	bromobenzene											
	0.801	0.830	0.921	0.858	0.864	0.892	0.909	1.026	0.890	0.860	0.885	6.93
100)	1,1,2,2-tetrachloroethane											
	0.978	0.834	1.002	0.941	0.912	0.949	1.011	1.093	0.976	0.749	0.944	10.20
101)	trans-1,4-dichloro-2-butene											
	0.192	0.224	0.306	0.280	0.252	0.292	0.255	0.275	0.264		0.260	13.37
102)	1,2,3-trichloropropane											
	0.213		0.259	0.250	0.245	0.245	0.292	0.291	0.258		0.257	10.09
103)	n-propylbenzene											
	3.263	3.499	3.810	3.586	3.455	3.668	3.600	3.777	3.529	3.392	3.558	4.74
104)	2-chlorotoluene											
	0.738	0.766	0.830	0.768	0.744	0.784	0.762	0.806	0.749	0.635	0.758	6.83
105)	4-chlorotoluene											
	2.098	2.193	2.388	2.230	2.149	2.327	2.269	2.436	2.212	2.529	2.283	5.94
106)	1,3,5-trimethylbenzene											
	2.233	2.239	2.596	2.414	2.286	2.501	2.350	2.558	2.339	2.186	2.370	6.03
107)	tert-butylbenzene											
	0.366	0.399	0.496	0.463	0.438	0.479	0.463	0.460	0.438	0.392	0.439	9.46
108)	1,2,4-trimethylbenzene											
	2.279	2.119	2.718	2.546	2.359	2.589	2.464	2.558	2.392	2.197	2.422	7.77
109)	sec-butylbenzene											
	2.601	2.785	3.097	2.882	2.668	2.998	2.727	2.860	2.633	2.812	2.806	5.67
110)	1,3-dichlorobenzene											
	1.457	1.412	1.579	1.498	1.418	1.498	1.498	1.547	1.430	1.728	1.506	6.31
111)	p-isopropyltoluene											
	1.980	2.100	2.579	2.413	2.197	2.479	2.292	2.278	2.185	2.224	2.273	7.87
112)	1,4-dichlorobenzene											
	1.441	1.611	1.629	1.531	1.441	1.540	1.528	1.602	1.478	2.163	1.596	13.15
113)	1,2,3-trimethylbenzene											

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Initial Calibration Summary

Job Number: JD39775
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	2.220	2.562	2.661	2.533	2.387	2.536	2.527	2.637	2.408	2.283	2.475	5.90
114) benzyl chloride												
	1.156	1.189	1.511	1.370	1.193	1.493	1.254	1.332	1.192	1.358	1.305	9.87
115) 1,2-dichlorobenzene												
	1.233	1.278	1.536	1.444	1.359	1.468	1.407	1.483	1.367	1.381	1.396	6.66
116) n-butylbenzene												
	0.903	0.944	1.229	1.134	1.027	1.204	0.988	1.025	1.001	0.944	1.040	10.79
117) 1,2-dibromo-3-chloropropane												
	0.176	0.154	0.218	0.213	0.193	0.210	0.206	0.217	0.202		0.199	10.77
118) 1,3,5-trichlorobenzene												
	0.722	0.756	0.894	0.879	0.830	0.895	0.830	0.867	0.824	0.678	0.818	9.18
119) 1,2,4-trichlorobenzene												
	0.595	0.640	0.757	0.747	0.636	0.754	0.687	0.712	0.677	0.671	0.688	7.98
120) hexachlorobutadiene												
	0.330	0.298	0.341	0.318	0.296	0.325	0.317	0.323	0.318	0.333	0.320	4.43
121) naphthalene												
	1.811	1.814	1.979	1.864	1.662	1.915	1.804	2.052	1.787	2.311	1.900	9.51
122) 1,2,3-trichlorobenzene												
	0.493	0.621	0.639	0.629	0.543	0.618	0.618	0.608	0.606		0.597	7.98
123) hexachloroethane												
	0.336	0.301	0.448	0.408	0.370	0.440	0.367	0.393	0.358		0.380	12.55
124) 2-methylnaphthalene												
	0.554	0.513	0.698	0.641	0.565	0.600	0.611	0.632	0.569		0.598	9.21
125) pentafluorobenzene (a)	-----ISTD-----											
126) freon 142B												
											0.000	-1.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

M4D5098.M Tue Jan 18 09:23:59 2022

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Continuing Calibration Summary

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Job Number: JD39775
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V3C7641-CC7629
 Lab FileID: 3C173613.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\kr...41-halfway\3c173613.d Vial: 2
 Acq On : 16 Feb 2022 10:42 am Operator: PrashanS
 Sample : CC7629-50 Inst : MS3C
 Misc : MS56777,V3C7641,5.0,,,,,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M3C7629.M (RTE Integrator)
 Title : Method SW846 8260C/D, Rxi624 20m x 0.18mm x 1.0um
 Last Update : Mon Sep 13 11:48:20 2010
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	78	0.00	2.51
2	ethanol	0.203	0.261	-28.6#	100	0.00	1.94
3	tertiary butyl alcohol	1.151	1.209	-5.0	79	0.00	2.57
4	1,4-dioxane	0.125	0.155	-24.0#	90	0.00	5.19
5 I	pentafluorobenzene	1.000	1.000	0.0	90	0.00	3.94
6	dichlorodifluoromethane	0.370	0.411	-11.1	94	0.00	1.05
7	chloromethane	0.489	0.579	-18.4	107	-0.01	1.20
8	1,3-butadiene	0.311	0.382	-22.8#	106	0.00	1.28
9	vinyl chloride	0.365	0.461	-26.3#	106	0.00	1.26
10	bromomethane	0.232	0.197	15.1	80	0.00	1.50
11	chloroethane	0.229	0.273	-19.2	103	0.00	1.57
12	trichlorofluoromethane	0.530	0.563	-6.2	90	0.00	1.73
13	ethyl ether	0.176	0.204	-15.9	96	0.00	1.94
14	acrolein	0.049	0.062	-26.5#	116	0.00	2.08
15	freon 113	0.276	0.292	-5.8	91	0.00	2.08
16	1,1-dichloroethene	0.296	0.325	-9.8	94	0.00	2.10
17	acetone	0.096	0.104	-8.3	112	0.00	2.19
18	acetonitrile	0.039	0.045	-15.4	104	0.00	2.44
----- True		Calc.	% Drift	-----			
19	iodomethane	50.000	57.476	-15.0	109	0.00	2.23
----- AvgRF		CCRF	% Dev	-----			
20	carbon disulfide	1.028	1.076	-4.7	95	0.00	2.25
21	methylene chloride	0.363	0.349	3.9	93	0.00	2.50
22	methyl acetate	0.245	0.256	-4.5	102	0.00	2.40
23	methyl tert butyl ether	0.878	0.933	-6.3	92	0.00	2.64
24	trans-1,2-dichloroethene	0.330	0.369	-11.8	94	0.00	2.66
25	hexane	0.673	0.727	-8.0	99	0.00	2.80
26	di-isopropyl ether	1.151	1.355	-17.7	102	0.00	3.00
27	ethyl tert-butyl ether	1.105	1.238	-12.0	93	0.00	3.28
28	2-butanone	0.031	0.036	-16.1	93	0.00	3.50
29	1,1-dichloroethane	0.618	0.702	-13.6	97	0.00	3.02
30	chloroprene	0.564	0.645	-14.4	95	0.00	3.06
31	acrylonitrile	0.094	0.127	-35.1#	120	0.00	2.73
32	vinyl acetate	0.074	0.076	-2.7	87	0.00	3.04
33	ethyl acetate	0.055	0.059	-7.3	97	0.00	3.52
34	2,2-dichloropropane	0.509	0.528	-3.7	87	0.00	3.46
35	cis-1,2-dichloroethene	0.356	0.394	-10.7	92	0.00	3.49
36	propionitrile	0.042	0.049	-16.7	98	0.00	3.62
37	bromochloromethane	0.218	0.225	-3.2	89	0.00	3.70

Continuing Calibration Summary

Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V3C7641-CC7629
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38	tetrahydrofuran	0.107	0.110	-2.8	97	0.00	3.69
39	chloroform	0.639	0.618	3.3	90	0.00	3.76
40	tert-butyl formate	0.303	0.250	17.5	68	0.00	3.76
41	isobutyl alcohol	0.059	0.056	5.1	86	0.00	4.17
42 S	dibromofluoromethane (s)	0.383	0.371	3.1	86	0.00	3.90
43	methacrylonitrile	0.118	0.131	-11.0	95	0.00	3.72
44	1,1,1-trichloroethane	0.540	0.573	-6.1	88	0.00	3.87
45	cyclohexane	0.532	0.597	-12.2	96	0.00	3.85
46	1,1-dichloropropene	0.174	0.189	-8.6	93	0.00	4.01
47	tert-amyl alcohol	0.033	0.028	15.2	77	0.00	4.24
48	carbon tetrachloride	0.472	0.481	-1.9	84	0.00	3.98
49 I	1,4-difluorobenzene	1.000	1.000	0.0	89	0.00	4.59
50 S	1,2-dichloroethane-d4 (s)	0.301	0.288	4.3	83	0.00	4.22
51	2,2,4-trimethylpentane	1.121	1.272	-13.5	97	0.00	4.17
52	tert-amyl methyl ether	0.241	0.244	-1.2	87	0.00	4.26
53	n-butyl alcohol	0.007	0.007	0.0	80	0.00	4.80
54	benzene	0.936	1.049	-12.1	95	0.00	4.19
55	heptane	0.232	0.266	-14.7	98	0.00	4.36
56	isopropyl acetate	0.241	0.244	-1.2	87	0.00	4.26
57	1,2-dichloroethane	0.339	0.333	1.8	84	0.00	4.28
58	trichloroethene	0.256	0.282	-10.2	93	0.00	4.81
59	ethyl acrylate	0.317	0.317	0.0	81	0.00	4.93
60	2-nitropropane	0.103	0.077	25.2#	68	0.02	5.66
61	2-chloroethyl vinyl ether	0.147	0.171	-16.3	94	0.00	5.67
62	methyl methacrylate	0.065	0.069	-6.2	90	0.00	5.17
63	1,2-dichloropropane	0.246	0.285	-15.9	97	0.00	5.06
64	methylcyclohexane	0.445	0.475	-6.7	93	0.00	4.91
65	dibromomethane	0.138	0.140	-1.4	86	0.00	5.19
66	bromodichloromethane	0.307	0.327	-6.5	88	0.00	5.35
67	epichlorohydrin	0.023	0.027	-17.4	99	0.00	5.75
68	cis-1,3-dichloropropene	0.383	0.439	-14.6	92	0.00	5.80
69	4-methyl-2-pentanone	0.038	0.041	-7.9	89	0.00	5.93
70	3-methyl-1-butanol	0.011	0.009	18.2	72	0.00	6.02
71 I	chlorobenzene-d5	1.000	1.000	0.0	89	0.00	7.31
72 S	toluene-d8 (s)	1.256	1.267	-0.9	89	0.00	5.99
73	toluene	0.799	0.814	-1.9	93	0.00	6.05
74	trans-1,3-dichloropropene	0.398	0.443	-11.3	88	0.00	6.35
75	ethyl methacrylate	0.344	0.369	-7.3	88	0.00	6.38
76	1,1,2-trichloroethane	0.196	0.211	-7.7	90	0.00	6.51
77	2-hexanone	0.100	0.114	-14.0	95	0.00	6.71
78	tetrachloroethene	0.334	0.359	-7.5	92	0.00	6.53
79	1,3-dichloropropane	0.404	0.435	-7.7	90	0.00	6.66
80	butyl acetate	0.183	0.199	-8.7	94	0.00	6.80
81	dibromochloromethane	0.281	0.297	-5.7	86	0.00	6.83
82	1,2-dibromoethane	0.242	0.254	-5.0	86	0.00	6.93
83	n-butyl ether	1.341	1.585	-18.2	99	0.00	7.39
84	chlorobenzene	0.831	0.872	-4.9	90	0.00	7.33
85	1,1,1,2-tetrachloroethane	0.285	0.307	-7.7	86	0.00	7.42
86	ethylbenzene	1.394	1.520	-9.0	93	0.00	7.40
87	m,p-xylene	0.554	0.593	-7.0	92	0.00	7.51
88	o-xylene	1.122	1.207	-7.6	93	0.00	7.85
89	styrene	0.896	0.998	-11.4	91	0.00	7.87
90	bromoform	0.180	0.183	-1.7	84	0.00	8.05
91	butyl acrylate	0.526	0.561	-6.7	86	0.00	7.84
92	isopropylbenzene	1.376	1.508	-9.6	91	0.00	8.14
93	cis-1,4-dichloro-2-butene	0.114	0.118	-3.5	86	0.00	8.28
94 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	87	0.00	9.25

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Continuing Calibration Summary

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95	S	4-bromofluorobenzene (s)	0.937	0.935	0.2	88	0.00	8.31
96		bromobenzene	0.705	0.744	-5.5	88	0.00	8.43
97		1,1,2,2-tetrachloroethane	0.586	0.624	-6.5	89	0.00	8.47
98		trans-1,4-dichloro-2-bute	0.101	0.101	0.0	78	0.00	8.53
99		1,2,3-trichloropropane	0.193	0.194	-0.5	85	0.00	8.51
100		n-propylbenzene	3.213	3.609	-12.3	93	0.00	8.48
101		2-chlorotoluene	0.692	0.747	-7.9	90	0.00	8.57
102		4-chlorotoluene	0.716	0.778	-8.7	89	0.00	8.67
103		1,3,5-trimethylbenzene	2.365	2.581	-9.1	91	0.00	8.64
104		tert-butylbenzene	2.082	2.288	-9.9	90	0.00	8.89
105		1,2,4-trimethylbenzene	2.413	2.641	-9.4	91	0.00	8.94
106		sec-butylbenzene	3.008	3.352	-11.4	91	0.00	9.06
107		1,3-dichlorobenzene	1.404	1.472	-4.8	90	0.00	9.19
108		p-isopropyltoluene	2.654	2.987	-12.5	91	0.00	9.18
109		1,4-dichlorobenzene	1.428	1.489	-4.3	90	0.00	9.26
110		1,2,3-trimethylbenzene	2.391	2.581	-7.9	90	0.00	9.28
111		1,2-dichlorobenzene	1.321	1.358	-2.8	87	0.00	9.56
112		n-butylbenzene	1.319	1.493	-13.2	93	0.00	9.50
113		1,2-dibromo-3-chloropropa	0.149	0.153	-2.7	85	0.00	10.19
114		1,3,5-trichlorobenzene	1.091	1.250	-14.6	93	0.00	10.31
115		1,2,4-trichlorobenzene	0.964	1.095	-13.6	94	0.00	10.81
116		hexachlorobutadiene	0.549	0.609	-10.9	92	0.00	10.90
117		naphthalene	2.262	2.500	-10.5	88	0.00	10.99
118		1,2,3-trichlorobenzene	0.930	1.037	-11.5	91	0.00	11.19
119		hexachloroethane	0.368	0.360	2.2	77	0.00	9.72
120		benzyl chloride	1.089	1.254	-15.2	91	0.00	9.38
121		2-methylnaphthalene			-----NA-----			
122		pentafluorobenzene (a)	1.000	1.000	0.0	99	0.00	3.94
123		vinyl bromide			-----NA-----			

(#) = Out of Range
3C173276.D M3C7629.M

SPCC's out = 0 CCC's out = 0
Wed Feb 16 22:42:32 2022

6.9.4
6

Initial Calibration Summary

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Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V4D5098-ICC5098
Lab FileID: 4D114635.D

Response Factor Report MS4D

Method : C:\msdchem\1\methods\M4D5098.M (RTE Integrator)
Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Mon Jan 17 15:07:58 2022
Response via : Initial Calibration

Calibration Files

1 =4D114630.D 0.5 =4D114629.D 100 =4D114636.D 50 =4D114635.D
20 =4D114634.D 200 =4D114637.D 4 =4D114632.D 2 =4D114631.D
8 =4D114633.D 0.2 =4D114628.D = =

Compound

	1	0.5	100	50	20	200	4	2	8	0.2	Avg	%RSD
1) tert butyl alcohol-d9 -----ISTD-----												
2) tertiary butyl alcohol	1.296	1.243	1.379	1.374	1.304	1.312	1.330	1.416	1.369	1.336	4.00	
3) ethanol	0.133	0.125	0.158	0.156	0.142	0.150	0.149	0.154	0.148	0.146	7.45	
4) 1,4-dioxane	0.125	0.151	0.148	0.135	0.142	0.145	0.144	0.137		0.141	5.84	
5) I pentafluorobenzene -----ISTD-----												
6) chlorodifluoromethane	0.421	0.469	0.524	0.480	0.444	0.516	0.484	0.474	0.469	0.476	6.69	
7) dichlorodifluoromethane	0.461	0.500	0.616	0.555	0.510	0.595	0.517	0.537	0.543	0.537	8.89	
8) chloromethane	0.470	0.629	0.539	0.507	0.496	0.518	0.510	0.556	0.534	0.529	8.53	
9) vinyl chloride	0.455	0.513	0.561	0.511	0.492	0.545	0.497	0.516	0.515	0.460	0.506	6.51
10) 1,3-butadiene	0.415	0.440	0.442	0.411	0.390	0.432	0.430	0.434	0.413	0.476	0.428	5.41
11) bromomethane	0.238	0.294	0.291	0.238	0.222	0.309	0.230	0.227	0.237	0.254	13.21	
12) chloroethane	0.177	0.212	0.262	0.239	0.230	0.259	0.225	0.236	0.238	0.231	11.00	
13) trichlorofluoromethane	0.530	0.585	0.691	0.622	0.590	0.670	0.585	0.598	0.627	0.400	0.590	13.73
14) vinyl bromide										0.000	-1.00	
15) ethyl ether	0.130	0.135	0.188	0.173	0.162	0.185	0.166	0.155	0.165	0.162	12.23	
16) acrolein	0.070	0.064	0.057	0.066	0.049	0.055				0.060	13.09	
17) freon 113	0.227	0.225	0.296	0.270	0.252	0.277	0.275	0.258	0.257	0.172	0.251	14.05
18) 1,1-dichloroethene	0.315	0.360	0.330	0.302	0.286	0.315	0.331	0.334	0.300	0.304	0.318	6.74
19) acetone	0.102	0.132	0.144	0.138	0.142	0.137	0.147	0.144	0.135	0.136	9.97	
20) acetonitrile	0.044	0.042	0.047	0.044	0.041	0.045	0.046	0.051	0.044	0.045	6.56	
21) iodomethane *This compound fails initial calibration criteria.	0.084	0.464	0.352	0.222	0.463	0.109	0.082	0.140		0.239	68.76	
22) carbon disulfide	0.857	0.990	0.972	0.887	0.833	0.943	0.890	0.878	0.877	0.903	5.91	
23) methylene chloride												

Initial Calibration Summary

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	0.383	0.436	0.367	0.335	0.323	0.349	0.364	0.379	0.343	0.364	9.22
24)	methyl acetate										
	0.210		0.270	0.257	0.231	0.258	0.246	0.245	0.251	0.246	7.50
25)	methyl tert butyl ether										
	0.839	0.931	0.959	0.889	0.843	0.945	0.891	0.948	0.872	0.869	4.92
26)	trans-1,2-dichloroethene										
	0.354	0.446	0.341	0.329	0.315	0.336	0.342	0.364	0.342	0.352	10.76
27)	di-isopropyl ether										
	0.932	0.982	1.130	1.046	1.008	1.117	1.092	1.050	1.033	0.982	6.13
28)	2-butanone										
	0.028		0.044	0.041	0.040	0.043	0.044	0.044	0.041	0.041	13.20
29)	1,1-dichloroethane										
	0.567	0.625	0.651	0.603	0.573	0.649	0.617	0.618	0.606	0.543	5.81
30)	chloroprene										
	0.413	0.458	0.536	0.489	0.456	0.531	0.464	0.472	0.461	0.367	10.75
31)	acrylonitrile										
	0.090		0.130	0.121	0.114	0.125	0.129	0.122	0.119	0.119	10.55
32)	hexane										
	0.174	0.183	0.233	0.214	0.194	0.230	0.201	0.192	0.203	0.203	9.87
33)	vinyl acetate										
			0.067	0.059	0.055	0.065	0.053	0.047	0.058	0.058	11.72
34)	ethyl tert-butyl ether										
	0.924	1.035	1.137	1.043	0.959	1.134	1.055	1.084	1.012	0.963	6.98
35)	ethyl acetate										
			0.044	0.040	0.038	0.043	0.039	0.027	0.035	0.038	14.90
36)	2,2-dichloropropane										
	0.459	0.500	0.510	0.469	0.445	0.499	0.474	0.468	0.461	0.503	4.67
37)	cis-1,2-dichloroethene										
	0.379	0.476	0.398	0.373	0.356	0.384	0.383	0.391	0.365	0.431	9.03
38)	methyl acrylate										
	0.243		0.336	0.320	0.295	0.318	0.301	0.301	0.311	0.303	9.15
39)	propionitrile										
	0.044	0.039	0.055	0.052	0.048	0.053	0.053	0.054	0.051	0.050	10.35
40)	bromochloromethane										
	0.169	0.195	0.194	0.188	0.179	0.186	0.194	0.195	0.179	0.187	4.96
41)	tetrahydrofuran										
			0.049	0.046	0.042	0.046	0.048	0.057	0.049	0.048	9.23
42)	chloroform										
	0.457	0.498	0.446	0.413	0.405	0.427	0.442	0.458	0.412	0.440	6.69
43)	t-butyl formate										
	0.223	0.215	0.291	0.246	0.194	0.297	0.243	0.237	0.236	0.243	13.68
44)	dibromofluoromethane (s)										
	0.403	0.400	0.397	0.397	0.398	0.410	0.406	0.393	0.404	0.388	1.61
45)	methacrylonitrile										
	0.083		0.143	0.137	0.126	0.139	0.134	0.125	0.130	0.127	14.87
46)	1,1,1-trichloroethane										
	0.502	0.538	0.580	0.546	0.512	0.581	0.559	0.567	0.531	0.527	5.02
47)	cyclohexane										
	0.357	0.432	0.471	0.430	0.407	0.465	0.412	0.447	0.429	0.390	8.13
48)	1,1-dichloropropene										
	0.420	0.447	0.468	0.426	0.408	0.461	0.430	0.441	0.420	0.418	4.56
49)	isobutyl alcohol										
			0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	7.21
50)	carbon tetrachloride										
	0.445	0.472	0.542	0.509	0.483	0.532	0.503	0.517	0.487	0.441	6.87
51)	tert amyl alcohol										
	0.012		0.013	0.012	0.012	0.012	0.012	0.015	0.012	0.012	8.11
52)	I 1,4-difluorobenzene -----ISTD-----										
53)	1,2-dichloroethane-d4 (s)										

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Initial Calibration Summary

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	0.310	0.308	0.297	0.298	0.302	0.307	0.307	0.302	0.309	0.308	0.305	1.55
54)	n-butyl alcohol											
	0.007	0.008	0.008	0.007	0.008	0.007	0.008	0.007	0.008	0.007	0.008	9.16
55)	2,2,4-trimethylpentane											
	0.527	0.573	0.629	0.599	0.558	0.637	0.598	0.580	0.572	0.654	0.593	6.56
56)	benzene											
	0.908	1.016	1.009	0.983	0.942	0.994	0.994	1.054	0.980	0.955	0.983	4.18
57)	tert-amyl methyl ether											
	0.152	0.169	0.183	0.176	0.168	0.183	0.178	0.186	0.172		0.174	6.05
58)	heptane											
	0.104	0.108	0.125	0.119	0.108	0.125	0.117	0.107	0.107	0.143	0.116	10.29
59)	isopropyl acetate											
	0.048	0.056	0.055	0.051	0.055	0.056	0.057	0.053		0.054	0.054	5.78
60)	1,2-dichloroethane											
	0.386	0.429	0.401	0.387	0.370	0.399	0.402	0.410	0.385	0.527	0.410	10.83
61)	trichloroethene											
	0.267	0.268	0.307	0.294	0.278	0.314	0.282	0.300	0.284	0.281	0.287	5.50
62)	ethyl acrylate											
	0.272	0.376	0.351	0.330	0.379	0.329	0.350	0.336		0.340	0.340	9.87
63)	2-nitropropane											
	0.095	0.096	0.092	0.083	0.097	0.087	0.091	0.089		0.091	0.091	5.24
64)	2-chloroethyl vinyl ether											
										0.000	0.000	-1.00
65)	methyl methacrylate											
	0.043	0.070	0.069	0.063	0.071	0.063	0.062	0.061		0.063	0.063	14.16
66)	1,2-dichloropropane											
	0.229	0.282	0.300	0.282	0.268	0.306	0.273	0.274	0.275	0.286	0.278	7.48
67)	dibromomethane											
	0.173	0.194	0.199	0.191	0.186	0.195	0.194	0.209	0.188	0.195	0.193	4.83
68)	methylcyclohexane											
	0.290	0.314	0.355	0.339	0.312	0.360	0.338	0.329	0.317	0.279	0.323	8.09
69)	bromodichloromethane											
	0.345	0.369	0.396	0.380	0.359	0.390	0.374	0.393	0.362	0.374	0.374	4.31
70)	epichlorohydrin											
	0.016	0.023	0.021	0.018	0.022	0.018	0.019	0.018		0.019	0.019	12.24
71)	cis-1,3-dichloropropene											
	0.408	0.436	0.460	0.435	0.411	0.469	0.419	0.409	0.417	0.435	0.430	4.94
72)	4-methyl-2-pentanone											
	0.095	0.081	0.115	0.108	0.100	0.113	0.106	0.110	0.104		0.104	10.10
73)	3-methyl-1-butanol											
	0.005	0.007	0.006	0.006	0.007	0.006	0.005	0.006		0.006	0.006	14.00
74)	I chlorobenzene-d5 -----ISTD-----											
75)	toluene-d8 (s)											
	1.290	1.306	1.286	1.253	1.280	1.248	1.275	1.311	1.292	1.325	1.287	1.88
76)	toluene											
	0.716	0.756	0.807	0.752	0.720	0.792	0.774	0.806	0.760	0.764	0.765	4.11
77)	trans-1,3-dichloropropene											
	0.454	0.470	0.524	0.490	0.456	0.508	0.482	0.521	0.479	0.488	0.487	5.01
78)	ethyl methacrylate											
	0.330	0.355	0.432	0.407	0.375	0.411	0.401	0.400	0.387		0.389	8.02
79)	1,1,2-trichloroethane											
	0.243	0.215	0.269	0.258	0.248	0.257	0.262	0.273	0.266	0.183	0.247	11.37
80)	tetrachloroethene											
	0.307	0.300	0.313	0.302	0.296	0.297	0.325	0.328	0.308	0.276	0.305	4.95
81)	1,3-dichloropropane											
	0.448	0.443	0.524	0.486	0.462	0.506	0.484	0.517	0.479	0.463	0.481	5.81
82)	2-hexanone											
	0.116	0.106	0.145	0.135	0.127	0.138	0.136	0.145	0.136		0.132	9.87
83)	butyl acetate											

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	0.192	0.181	0.223	0.211	0.197	0.210	0.213	0.220	0.213		0.207	6.70
84)	dibromochloromethane											
	0.402	0.389	0.424	0.401	0.381	0.414	0.401	0.430	0.402	0.383	0.403	4.08
85)	1,2-dibromoethane											
	0.307	0.345	0.354	0.340	0.326	0.338	0.353	0.355	0.342	0.331	0.339	4.39
86)	n-butyl ether											
	1.288	1.376	1.559	1.429	1.323	1.559	1.371	1.460	1.393		1.417	6.70
87)	chlorobenzene											
	0.837	0.957	0.905	0.868	0.834	0.877	0.883	0.937	0.878	0.966	0.894	5.18
88)	1,1,1,2-tetrachloroethane											
	0.319	0.334	0.362	0.349	0.328	0.352	0.344	0.359	0.346	0.330	0.342	4.09
89)	ethylbenzene											
	1.354	1.457	1.491	1.430	1.359	1.451	1.435	1.541	1.427	1.467	1.441	3.89
90)	m,p-xylene											
	0.491	0.549	0.590	0.551	0.517	0.568	0.557	0.572	0.552	0.536	0.548	5.15
91)	o-xylene											
	0.469	0.482	0.619	0.572	0.524	0.585	0.562	0.583	0.531	0.479	0.541	9.55
92)	styrene											
	0.780	0.808	1.051	0.952	0.862	1.001	0.863	0.876	0.868	0.801	0.886	10.02
93)	bromoform											
	0.274	0.276	0.321	0.307	0.281	0.305	0.301	0.327	0.289	0.234	0.292	9.28
94)	butyl acrylate											
	0.529	0.540	0.740	0.674	0.604	0.714	0.607	0.650	0.616		0.631	11.40
95)	isopropylbenzene											
	1.225	1.302	1.467	1.353	1.257	1.417	1.339	1.370	1.309	1.288	1.333	5.47
96)	cis-1,4-dichloro-2-butene											
	0.110	0.099	0.161	0.148	0.131	0.151	0.126	0.127	0.131		0.132	14.89
97)	I 1,4-dichlorobenzene-d -----ISTD-----											
98)	4-bromofluorobenzene (s)											
	1.059	1.044	1.041	1.039	1.015	1.037	1.058	1.065	1.040	1.041	1.044	1.36
99)	bromobenzene											
	0.801	0.830	0.921	0.858	0.864	0.892	0.909	1.026	0.890	0.860	0.885	6.93
100)	1,1,2,2-tetrachloroethane											
	0.978	0.834	1.002	0.941	0.912	0.949	1.011	1.093	0.976	0.749	0.944	10.20
101)	trans-1,4-dichloro-2-butene											
	0.192	0.224	0.306	0.280	0.252	0.292	0.255	0.275	0.264		0.260	13.37
102)	1,2,3-trichloropropane											
	0.213		0.259	0.250	0.245	0.245	0.292	0.291	0.258		0.257	10.09
103)	n-propylbenzene											
	3.263	3.499	3.810	3.586	3.455	3.668	3.600	3.777	3.529	3.392	3.558	4.74
104)	2-chlorotoluene											
	0.738	0.766	0.830	0.768	0.744	0.784	0.762	0.806	0.749	0.635	0.758	6.83
105)	4-chlorotoluene											
	2.098	2.193	2.388	2.230	2.149	2.327	2.269	2.436	2.212	2.529	2.283	5.94
106)	1,3,5-trimethylbenzene											
	2.233	2.239	2.596	2.414	2.286	2.501	2.350	2.558	2.339	2.186	2.370	6.03
107)	tert-butylbenzene											
	0.366	0.399	0.496	0.463	0.438	0.479	0.463	0.460	0.438	0.392	0.439	9.46
108)	1,2,4-trimethylbenzene											
	2.279	2.119	2.718	2.546	2.359	2.589	2.464	2.558	2.392	2.197	2.422	7.77
109)	sec-butylbenzene											
	2.601	2.785	3.097	2.882	2.668	2.998	2.727	2.860	2.633	2.812	2.806	5.67
110)	1,3-dichlorobenzene											
	1.457	1.412	1.579	1.498	1.418	1.498	1.498	1.547	1.430	1.728	1.506	6.31
111)	p-isopropyltoluene											
	1.980	2.100	2.579	2.413	2.197	2.479	2.292	2.278	2.185	2.224	2.273	7.87
112)	1,4-dichlorobenzene											
	1.441	1.611	1.629	1.531	1.441	1.540	1.528	1.602	1.478	2.163	1.596	13.15
113)	1,2,3-trimethylbenzene											

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	2.220	2.562	2.661	2.533	2.387	2.536	2.527	2.637	2.408	2.283	2.475	5.90
114) benzyl chloride												
	1.156	1.189	1.511	1.370	1.193	1.493	1.254	1.332	1.192	1.358	1.305	9.87
115) 1,2-dichlorobenzene												
	1.233	1.278	1.536	1.444	1.359	1.468	1.407	1.483	1.367	1.381	1.396	6.66
116) n-butylbenzene												
	0.903	0.944	1.229	1.134	1.027	1.204	0.988	1.025	1.001	0.944	1.040	10.79
117) 1,2-dibromo-3-chloropropane												
	0.176	0.154	0.218	0.213	0.193	0.210	0.206	0.217	0.202		0.199	10.77
118) 1,3,5-trichlorobenzene												
	0.722	0.756	0.894	0.879	0.830	0.895	0.830	0.867	0.824	0.678	0.818	9.18
119) 1,2,4-trichlorobenzene												
	0.595	0.640	0.757	0.747	0.636	0.754	0.687	0.712	0.677	0.671	0.688	7.98
120) hexachlorobutadiene												
	0.330	0.298	0.341	0.318	0.296	0.325	0.317	0.323	0.318	0.333	0.320	4.43
121) naphthalene												
	1.811	1.814	1.979	1.864	1.662	1.915	1.804	2.052	1.787	2.311	1.900	9.51
122) 1,2,3-trichlorobenzene												
	0.493	0.621	0.639	0.629	0.543	0.618	0.618	0.608	0.606		0.597	7.98
123) hexachloroethane												
	0.336	0.301	0.448	0.408	0.370	0.440	0.367	0.393	0.358		0.380	12.55
124) 2-methylnaphthalene												
	0.554	0.513	0.698	0.641	0.565	0.600	0.611	0.632	0.569		0.598	9.21
125) pentafluorobenzene (a)	-----ISTD-----											
126) freon 142B												
											0.000	-1.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

M4D5098.M Tue Jan 18 09:23:59 2022

6.9.5
6

Continuing Calibration Summary

Page 1 of 3

Job Number: JD39775
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V4D5144-CC5098
 Lab FileID: 4D115722.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\kr...44-halfway\4d115722.d Vial: 2
 Acq On : 17 Feb 2022 9:22 am Operator: BridgetK
 Sample : cc5098-20 Inst : MS4D
 Misc : MS56763,V4D5144,5,,,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4D5098.M (RTE Integrator)
 Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
 Last Update : Mon Jan 17 15:07:58 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
1	tert butyl alcohol-d9	1.000	1.000	0.0	188	0.00	8.58
2 M	tertiary butyl alcohol	1.336	1.323	1.0	190	0.00	8.72
3	ethanol	0.146	0.154	-5.5	203#	0.00	7.13
4 M	1,4-dioxane	0.141	0.116	17.7	161	0.00	12.62
5 I	pentafluorobenzene	1.000	1.000	0.0	116	0.00	11.06
6 M	chlorodifluoromethane	0.476	0.324	31.9#	84	0.00	4.61
7 M	dichlorodifluoromethane	0.537	0.393	26.8#	89	0.00	4.57
8 M	chloromethane	0.529	0.477	9.8	111	0.00	5.07
9 M	vinyl chloride	0.506	0.430	15.0	101	0.00	5.32
10	1,3-butadiene	0.428	0.367	14.3	109	-0.01	5.42
11 M	bromomethane	0.254	0.237	6.7	123	-0.01	6.09
12 M	chloroethane	0.231	0.248	-7.4	125	0.00	6.32
13 M	trichlorofluoromethane	0.590	0.587	0.5	115	-0.01	6.89
14	vinyl bromide			-----NA-----			
15 M	ethyl ether	0.162	0.155	4.3	111	0.00	7.42
16 M	acrolein	0.060	0.104	-73.3#	211#	0.00	7.63
17	freon 113	0.251	0.239	4.8	109	0.00	7.87
18 M	1,1-dichloroethene	0.318	0.257	19.2	104	0.00	7.87
19 M	acetone	0.136	0.251	-84.6#	204#	0.00	7.88
20 M	acetonitrile	0.045	0.068	-51.1#	191	0.00	8.32
21 M	iodomethane	0.239	0.066	72.4#	34#	0.01	8.17
22 M	carbon disulfide	0.903	0.753	16.6	105	0.00	8.33
23 M	methylene chloride	0.364	0.325	10.7	116	0.00	8.64
24 M	methyl acetate	0.246	0.350	-42.3#	175	0.00	8.45
25 M	methyl tert butyl ether	0.899	0.862	4.1	118	0.00	9.09
26 M	trans-1,2-dichloroethene	0.352	0.300	14.8	110	0.00	9.10
27 M	di-isopropyl ether	1.037	1.369	-32.0#	157	0.00	9.77
28 M	2-butanone	0.041	0.058	-41.5#	165	0.00	10.44
29 M	1,1-dichloroethane	0.605	0.643	-6.3	130	0.00	9.70
30 M	chloroprene	0.465	0.548	-17.8	139	0.00	9.85
31 M	acrylonitrile	0.119	0.181	-52.1#	184	0.00	8.97
32	hexane	0.203	0.225	-10.8	134	0.00	9.53
33 M	vinyl acetate	0.058	0.067	-15.5	143	0.00	9.72
34 M	ethyl tert-butyl ether	1.035	1.016	1.8	123	0.00	10.27
35 M	ethyl acetate	0.038	0.048	-26.3#	146	0.00	10.51
36 M	2,2-dichloropropane	0.479	0.506	-5.6	132	0.00	10.52
37 M	cis-1,2-dichloroethene	0.394	0.359	8.9	117	0.00	10.49
38	methyl acrylate	0.303	0.432	-42.6#	169	0.00	10.58
39 M	propionitrile	0.050	0.073	-46.0#	176	0.00	10.49
40 M	bromochloromethane	0.187	0.177	5.3	114	0.00	10.80
41 M	tetrahydrofuran	0.048	0.057	-18.8	154	0.00	10.88

Continuing Calibration Summary

Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V4D5144-CC5098
Lab FileID: 4D115722.D

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42	M	chloroform	0.440	0.479	-8.9	137	0.00	10.86
43	M	t-butyl formate	0.243	0.012	95.1#	7#	0.02	10.96
44	S	dibromofluoromethane (s)	0.400	0.415	-3.7	121	0.00	11.06
45	M	methacrylonitrile	0.127	0.161	-26.8#	147	0.00	10.72
46	M	1,1,1-trichloroethane	0.544	0.543	0.2	123	0.00	11.17
47		cyclohexane	0.424	0.424	0.0	120	0.00	11.29
48		1,1-dichloropropene	0.434	0.436	-0.5	124	0.00	11.36
49		isobutyl alcohol	0.003	0.003	0.0	129	0.00	11.36
50		carbon tetrachloride	0.493	0.472	4.3	113	0.00	11.39
51		tert amyl alcohol	0.012	0.019	-58.3#	194	0.00	11.44
52	I	1,4-difluorobenzene	1.000	1.000	0.0	121	0.00	11.96
53	S	1,2-dichloroethane-d4 (s)	0.305	0.338	-10.8	136	0.00	11.49
54	M	n-butyl alcohol	0.008	0.008	0.0	146	0.00	12.03
55		2,2,4-trimethylpentane	0.593	0.618	-4.2	135	0.00	11.69
56	M	benzene	0.983	0.971	1.2	125	0.00	11.61
57	M	tert-amyl methyl ether	0.174	0.156	10.3	113	-0.01	11.67
58	M	heptane	0.116	0.120	-3.4	135	0.00	11.85
59	M	isopropyl acetate	0.054	0.060	-11.1	142	0.00	11.54
60	M	1,2-dichloroethane	0.410	0.408	0.5	134	0.00	11.58
61	M	trichloroethene	0.287	0.269	6.3	117	0.00	12.29
62		ethyl acrylate	0.340	0.465	-36.8#	171	0.00	12.29
63	M	2-nitropropane	0.091	0.117	-28.6#	170	0.00	12.94
64	M	2-chloroethyl vinyl ether			-----NA-----			
65	M	methyl methacrylate	0.063	0.075	-19.0	145	0.00	12.53
66	M	1,2-dichloropropane	0.278	0.306	-10.1	139	0.00	12.52
67	M	dibromomethane	0.193	0.186	3.6	121	0.00	12.64
68	M	methylcyclohexane	0.323	0.307	5.0	120	0.00	12.55
69	M	bromodichloromethane	0.374	0.390	-4.3	132	0.00	12.76
70		epichlorohydrin	0.019	0.008	57.9#	54	0.00	13.08
71	M	cis-1,3-dichloropropene	0.430	0.447	-4.0	132	0.00	13.20
72	M	4-methyl-2-pentanone	0.104	0.146	-40.4#	178	0.00	13.29
73	M	3-methyl-1-butanol	0.006	0.006	0.0	129	0.00	13.29
74	I	chlorobenzene-d5	1.000	1.000	0.0	116	0.00	14.86
75	S	toluene-d8 (s)	1.287	1.314	-2.1	119	0.00	13.50
76		toluene	0.765	0.765	0.0	124	0.00	13.57
77		trans-1,3-dichloropropene	0.487	0.505	-3.7	129	0.00	13.70
78		ethyl methacrylate	0.389	0.462	-18.8	144	0.00	13.73
79		1,1,2-trichloroethane	0.247	0.286	-15.8	134	0.00	13.89
80	M	tetrachloroethene	0.305	0.304	0.3	120	0.00	14.11
81	M	1,3-dichloropropane	0.481	0.535	-11.2	135	0.00	14.06
82		2-hexanone	0.132	0.200	-51.5#	183	0.00	14.06
83	M	butyl acetate	0.207	0.294	-42.0#	174	0.00	14.15
84	M	dibromochloromethane	0.403	0.390	3.2	119	0.00	14.30
85	M	1,2-dibromoethane	0.339	0.352	-3.8	126	0.00	14.45
86		n-butyl ether	1.417	1.609	-13.5	141	0.00	14.84
87	M	chlorobenzene	0.894	0.856	4.3	119	0.00	14.89
88	M	1,1,1,2-tetrachloroethane	0.342	0.339	0.9	120	0.00	14.93
89	M	ethylbenzene	1.441	1.422	1.3	122	0.00	14.95
90	M	m,p-xylene	0.548	0.524	4.4	118	0.00	15.05
91	M	o-xylene	0.541	0.524	3.1	116	0.00	15.43
92	M	styrene	0.886	0.858	3.2	116	0.00	15.43
93	M	bromoform	0.292	0.279	4.5	115	0.00	15.63
94		butyl acrylate	0.631	0.783	-24.1#	151	0.00	15.25
95		isopropylbenzene	1.333	1.246	6.5	115	0.00	15.74
96		cis-1,4-dichloro-2-butene	0.132	0.089	32.6#	79	0.00	15.75
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	106	0.00	16.97
98	S	4-bromofluorobenzene (s)	1.044	1.103	-5.7	116	0.00	15.90

6.9.9
6

Continuing Calibration Summary

Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V4D5144-CC5098
Lab FileID: 4D115722.D

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99	M	bromobenzene	0.885	0.899	-1.6	111	0.00	16.08
100	M	1,1,2,2-tetrachloroethane	0.944	1.202	-27.3#	140	0.00	15.96
101	M	trans-1,4-dichloro-2-bute	0.260	0.163	37.3#	69	0.00	16.00
102	M	1,2,3-trichloropropane	0.257	0.300	-16.7	130	0.00	16.03
103	M	n-propylbenzene	3.558	3.784	-6.4	116	0.00	16.11
104	M	2-chlorotoluene	0.758	0.785	-3.6	112	0.00	16.23
105	M	4-chlorotoluene	2.283	2.354	-3.1	116	0.00	16.32
106	M	1,3,5-trimethylbenzene	2.370	2.442	-3.0	114	0.00	16.24
107	M	tert-butylbenzene	0.439	0.453	-3.2	110	0.00	16.57
108	M	1,2,4-trimethylbenzene	2.422	2.520	-4.0	114	0.00	16.61
109	M	sec-butylbenzene	2.806	2.771	1.2	110	0.00	16.77
110	M	1,3-dichlorobenzene	1.506	1.467	2.6	110	0.00	16.92
111	M	p-isopropyltoluene	2.273	2.281	-0.4	110	0.00	16.87
112	M	1,4-dichlorobenzene	1.596	1.485	7.0	110	0.00	16.99
113	M	1,2,3-trimethylbenzene	2.475	2.408	2.7	107	0.00	17.01
114	M	benzyl chloride	1.305	1.669	-27.9#	149	0.00	17.08
115	M	1,2-dichlorobenzene	1.396	1.446	-3.6	113	0.00	17.35
116	M	n-butylbenzene	1.040	1.050	-1.0	109	0.00	17.26
117	M	1,2-dibromo-3-chloropropa	0.199	0.248	-24.6#	137	0.00	18.05
118	M	1,3,5-trichlorobenzene	0.818	0.894	-9.3	114	0.00	18.27
119	M	1,2,4-trichlorobenzene	0.688	0.757	-10.0	126	0.00	18.86
120	M	hexachlorobutadiene	0.320	0.315	1.6	113	0.00	19.00
121	M	naphthalene	1.900	2.278	-19.9	146	0.00	19.12
122	M	1,2,3-trichlorobenzene	0.597	0.681	-14.1	133	0.00	19.35
123	m	hexachloroethane	0.380	0.342	10.0	98	0.00	17.62
124	M	2-methylnaphthalene	0.598	8.712	-1356.9#	1640#	0.00	20.21
125		pentafluorobenzene (a)	1.000	1.000	0.0	116	0.00	11.06
126		freon 142B			-----NA-----			

(#) = Out of Range
4D114634.D M4D5098.M

SPCC's out = 0 CCC's out = 0
Thu Feb 17 23:14:42 2022

6.9.9

9

Continuing Calibration Summary

Job Number: JD39775
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VI9839-CC9812
 Lab FileID: I242273.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ni...839-halfway\i242273.d Vial: 1
 Acq On : 16 Feb 2022 9:46 am Operator: PrashanS
 Sample : cc9812-50 Inst : GCMSI
 Misc : MS56671,VI9839,5.0,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MI9812.M (RTE Integrator)
 Title : Method SW846 8260C/D, Rxi-624 60m x 0.25mm x 1.4umWed Feb 03 18:57:01 2021
 Last Update : Thu Jan 20 09:03:53 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	114	-0.02	4.65
2	ethanol	0.164	0.162	1.2	115	-0.03	4.09
3	tertiary butyl alcohol	1.217	1.189	2.3	112	-0.02	4.71
4	1,4-dioxane	0.126	0.126	0.0	110	-0.02	6.67
5 I	pentafluorobenzene	1.000	1.000	0.0	108	-0.02	5.76
6	dichlorodifluoromethane	0.432	0.353	18.3	90	-0.02	3.18
7	chlorodifluoromethane	0.427	0.370	13.3	99	-0.02	3.19
8	chloromethane	0.661	0.611	7.6	108	-0.02	3.38
9	vinyl chloride	0.557	0.551	1.1	111	-0.02	3.49
10	1,3-butadiene	0.511	0.450	11.9	99	-0.02	3.53
11	bromomethane	0.256	0.212	17.2	103	-0.02	3.80
12	chloroethane	0.192	0.183	4.7	101	-0.03	3.88
13	trichlorofluoromethane	0.514	0.480	6.6	100	-0.02	4.08
14	ethyl ether	0.117	0.126	-7.7	111	-0.03	4.24
15	acrolein	0.039	0.045	-15.4	125	-0.03	4.34
16	freon 113	0.249	0.234	6.0	106	-0.03	4.43
17	1,1-dichloroethene	0.447	0.448	-0.2	105	-0.02	4.46
18	acetone	0.025	0.021	16.0	100	-0.02	4.41
19	iodomethane	0.280	0.359	-28.2#	94	-0.02	4.59
20	carbon disulfide	0.892	0.789	11.5	101	-0.02	4.69
21	acetonitrile	0.032	0.035	-9.4	116	-0.02	4.58
22	methyl acetate	0.206	0.212	-2.9	122	-0.02	4.61
23	methylene chloride	0.280	0.265	5.4	108	-0.03	4.74
24	acrylonitrile	0.068	0.081	-19.1	124	-0.03	4.84
25	methyl tert butyl ether	0.595	0.667	-12.1	115	-0.02	4.90
26	trans-1,2-dichloroethene	0.428	0.430	-0.5	107	-0.02	4.94
27	hexane	0.556	0.506	9.0	104	-0.02	5.10
28	1,1-dichloroethane	0.535	0.549	-2.6	111	-0.03	5.19
29	vinyl acetate	0.035	0.035	0.0	101	-0.03	5.13
30	di-isopropyl ether	1.010	1.121	-11.0	115	-0.02	5.16
31	chloroprene	0.078	0.088	-12.8	124	-0.02	4.84
32	ethyl tert-butyl ether	0.828	0.934	-12.8	115	-0.02	5.39
33	2-butanone	0.022	0.023	-4.5	102	-0.03	5.47
34	2,2-dichloropropane	0.392	0.429	-9.4	115	-0.03	5.56
35	ethyl acetate	0.037	0.043	-16.2	126	-0.02	5.47
36	cis-1,2-dichloroethene	0.302	0.296	2.0	105	-0.03	5.54
37	propionitrile	0.033	0.038	-15.2	119	-0.02	5.50
38	methyl acrylate	0.223	0.251	-12.6	119	-0.03	5.53
39	methacrylonitrile	0.079	0.090	-13.9	115	-0.02	5.61
40	bromochloromethane	0.149	0.147	1.3	107	-0.02	5.70
41	tetrahydrofuran	0.094	0.101	-7.4	118	-0.03	5.72

Continuing Calibration Summary

Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VI9839-CC9812
Lab FileID: I242273.D

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42	chloroform	0.541	0.519	4.1	112	-0.02	5.72
43	carbon tetrachloride	0.452	0.434	4.0	104	-0.02	6.01
44	1,1-dichloropropene	0.379	0.383	-1.1	109	-0.02	5.98
45	isobutyl alcohol	0.003	0.003#	0.0	113	-0.03	5.97
46 S	dibromofluoromethane (s)	0.373	0.378	-1.3	108	-0.03	5.82
47	1,1,1-trichloroethane	0.472	0.459	2.8	106	-0.03	5.89
48	cyclohexane	0.416	0.391	6.0	104	-0.02	5.98
49	tert-amyl alcohol	0.052	0.054	-3.8	112	-0.03	5.97
50 I	1,4-difluorobenzene	1.000	1.000	0.0	109	-0.03	6.29
51 S	1,2-dichloroethane-d4 (s)	0.283	0.297	-4.9	116	-0.02	6.05
52	isopropyl acetate	0.037	0.038	-2.7	104	-0.02	5.98
53	1,2-dichloroethane	0.326	0.333	-2.1	119	-0.03	6.10
54	benzene	0.880	0.845	4.0	108	-0.03	6.11
55	2,2,4-trimethylpentane	1.018	0.972	4.5	106	-0.03	6.15
56	tert-amyl methyl ether	0.129	0.136	-5.4	112	-0.03	6.12
57	heptane	0.214	0.225	-5.1	110	-0.02	6.22
58	n-butyl alcohol	0.005	0.005#	0.0	121	-0.03	6.25
59	trichloroethene	0.242	0.227	6.2	105	-0.02	6.50
60	ethyl acrylate	0.238	0.270	-13.4	120	-0.02	6.43
61	methylcyclohexane	0.355	0.335	5.6	102	-0.03	6.69
62	1,2-dichloropropane	0.242	0.243	-0.4	113	-0.03	6.65
63	methyl methacrylate	0.039	0.043	-10.3	111	-0.02	6.58
64	dibromomethane	0.134	0.140	-4.5	113	-0.03	6.72
65	bromodichloromethane	0.298	0.310	-4.0	115	-0.03	6.78
66	2-nitropropane	0.054	0.061	-13.0	119	-0.02	6.87
67	2-chloroethyl vinyl ether	0.124	0.141	-13.7	117	-0.03	6.89
68	epichlorohydrin	0.019	0.020	-5.3	112	-0.02	6.95
69	cis-1,3-dichloropropene	0.321	0.354	-10.3	113	-0.02	7.05
70	4-methyl-2-pentanone	0.070	0.081	-15.7	117	-0.02	7.08
71	3-methyl-1-butanol	0.004	0.005#	-25.0#	117	-0.02	7.05
72 I	chlorobenzene-d5	1.000	1.000	0.0	108	-0.02	8.21
73 S	toluene-d8 (s)	1.292	1.304	-0.9	109	-0.03	7.25
74	toluene	0.694	0.656	5.5	106	-0.03	7.30
75	trans-1,3-dichloropropene	0.356	0.415	-16.6	118	-0.02	7.38
76	ethyl methacrylate	0.265	0.291	-9.8	115	-0.02	7.35
77	1,1,2-trichloroethane	0.178	0.193	-8.4	112	-0.03	7.52
78	1,3-dichloropropane	0.341	0.369	-8.2	113	-0.02	7.64
79	tetrachloroethene	0.355	0.339	4.5	103	-0.02	7.66
80	2-hexanone	0.090	0.100	-11.1	113	-0.02	7.60
81	butyl acetate	0.153	0.172	-12.4	115	-0.02	7.65
82	n-butyl ether	1.202	1.307	-8.7	112	-0.02	8.16
83	dibromochloromethane	0.306	0.316	-3.3	110	-0.02	7.81
84	1,2-dibromoethane	0.220	0.234	-6.4	109	-0.02	7.92
85	chlorobenzene	0.812	0.781	3.8	108	-0.02	8.23
86	1,1,1,2-tetrachloroethane	0.302	0.308	-2.0	110	-0.02	8.26
87	ethylbenzene	1.285	1.260	1.9	108	-0.02	8.26
88	m,p-xylene	0.503	0.482	4.2	105	-0.02	8.33
89	o-xylene	0.486	0.481	1.0	104	-0.02	8.59
90	styrene	0.805	0.813	-1.0	108	-0.03	8.59
91	butyl acrylate	0.472	0.535	-13.3	113	-0.02	8.44
92	cis-1,4-dichloro-2-butene	0.095	0.118	-24.2#	125	-0.03	8.81
93	bromoform	0.206	0.221	-7.3	113	-0.02	8.75
94	isopropylbenzene	1.228	1.205	1.9	104	-0.03	8.81
95 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	109	-0.03	9.75
96 S	4-bromofluorobenzene (s)	0.888	0.853	3.9	104	-0.02	8.95
97	1,1,2,2-tetrachloroethane	0.549	0.553	-0.7	117	-0.02	8.97
98	trans-1,4-dichloro-2-bute	0.178	0.206	-15.7	124	-0.03	8.98

6.9.14

6

Continuing Calibration Summary

Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VI9839-CC9812
Lab FileID: I242273.D

Page 3 of 3

99	1,2,3-trichloropropane	0.136	0.136	0.0	108	-0.03	9.03
100	bromobenzene	0.700	0.680	2.9	106	-0.02	9.08
101	n-propylbenzene	2.963	2.830	4.5	107	-0.03	9.08
102	2-chlorotoluene	0.644	0.615	4.5	105	-0.03	9.18
103	4-chlorotoluene	1.660	1.614	2.8	108	-0.02	9.26
104	1,3,5-trimethylbenzene	1.991	1.886	5.3	106	-0.02	9.18
105	tert-butylbenzene	1.768	1.666	5.8	100	-0.02	9.42
106	1,2,4-trimethylbenzene	1.970	1.916	2.7	106	-0.03	9.45
107	sec-butylbenzene	2.668	2.516	5.7	104	-0.03	9.57
108	p-isopropyltoluene	2.255	2.133	5.4	102	-0.03	9.65
109	benzyl chloride	0.918	1.132	-23.3#	125	-0.03	9.82
110	1,3-dichlorobenzene	1.264	1.231	2.6	108	-0.03	9.70
111	1,4-dichlorobenzene	1.350	1.292	4.3	110	-0.03	9.76
112	1,2-dichlorobenzene	1.151	1.162	-1.0	110	-0.03	10.04
113	1,2,3-trimethylbenzene	2.114	1.938	8.3	105	-0.03	9.75
114	n-butylbenzene	1.130	1.082	4.2	103	-0.02	9.95
115	hexachloroethane	0.414	0.404	2.4	107	-0.03	10.28
116	1,2-dibromo-3-chloropropa	0.127	0.126	0.8	110	-0.03	10.61
117	1,3,5-trichlorobenzene	1.039	1.047	-0.8	113	-0.03	10.78
118	1,2,4-trichlorobenzene	0.933	0.925	0.9	113	-0.03	11.33
119	hexachlorobutadiene	0.561	0.501	10.7	106	-0.03	11.44
120	naphthalene	1.851	1.846	0.3	111	-0.03	11.61
121	1,2,3-trichlorobenzene	0.854	0.856	-0.2	113	-0.03	11.81
122	2-methylnaphthalene	1.100	15.845	-1340.5# 1515#		-0.04	12.82

(#) = Out of Range SPCC's out = 0 CCC's out = 0
I241545.D MI9812.M Thu Feb 17 01:02:14 2022

6.9.14
6

Continuing Calibration Summary

Job Number: JD39775
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VI9840-CC9812
 Lab FileID: I242306.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ke...840-halfway\i242306.d Vial: 2
 Acq On : 17 Feb 2022 10:38 am Operator: PrashanS
 Sample : CC9812-50 Inst : GCMSI
 Misc : MS56796,VI9840,5.0,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MI9812.M (RTE Integrator)
 Title : Method SW846 8260C/D, Rxi-624 60m x 0.25mm x 1.4umWed Feb 03 18:57:01 2021
 Last Update : Thu Jan 20 09:03:53 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	108	0.00	4.67
2	ethanol	0.164	0.157	4.3	105	-0.02	4.10
3	tertiary butyl alcohol	1.217	1.120	8.0	101	0.00	4.72
4	1,4-dioxane	0.126	0.106	15.9	88	-0.01	6.68
5 I	pentafluorobenzene	1.000	1.000	0.0	85	0.00	5.78
6	dichlorodifluoromethane	0.432	0.370	14.4	74	0.00	3.20
7	chlorodifluoromethane	0.427	0.400	6.3	84	0.00	3.20
8	chloromethane	0.661	0.696	-5.3	96	0.00	3.40
9	vinyl chloride	0.557	0.590	-5.9	94	0.00	3.51
10	1,3-butadiene	0.511	0.452	11.5	78	0.00	3.55
11	bromomethane	0.256	0.323	-26.2#	123	-0.01	3.81
12	chloroethane	0.192	0.294	-53.1#	128	-0.01	3.89
13	trichlorofluoromethane	0.514	0.474	7.8	78	-0.01	4.09
14	ethyl ether	0.117	0.119	-1.7	82	-0.01	4.26
15	acrolein	0.039	0.052	-33.3#	114	-0.01	4.35
16	freon 113	0.249	0.214	14.1	76	-0.01	4.45
17	1,1-dichloroethene	0.447	0.456	-2.0	84	0.00	4.47
18	acetone	0.025	0.021	16.0	78	-0.01	4.42
19	iodomethane	0.280	0.341	-21.8#	70	-0.01	4.60
20	carbon disulfide	0.892	0.818	8.3	82	-0.01	4.70
21	acetonitrile	0.032	0.040	-25.0#	105	-0.01	4.59
22	methyl acetate	0.206	0.230	-11.7	104	-0.01	4.62
23	methylene chloride	0.280	0.260	7.1	83	-0.01	4.75
24	acrylonitrile	0.068	0.101	-48.5#	120	-0.02	4.85
25	methyl tert butyl ether	0.595	0.630	-5.9	85	0.00	4.92
26	trans-1,2-dichloroethene	0.428	0.452	-5.6	88	0.00	4.95
27	hexane	0.556	0.496	10.8	80	-0.01	5.11
28	1,1-dichloroethane	0.535	0.566	-5.8	90	-0.01	5.21
29	vinyl acetate	0.035	0.044	-25.7#	99	-0.01	5.14
30	di-isopropyl ether	1.010	1.175	-16.3	95	0.00	5.18
31	chloroprene	0.078	0.106	-35.9#	118	0.00	4.86
32	ethyl tert-butyl ether	0.828	0.902	-8.9	87	0.00	5.40
33	2-butanone	0.022	0.025	-13.6	88	-0.01	5.49
34	2,2-dichloropropane	0.392	0.400	-2.0	84	-0.01	5.58
35	ethyl acetate	0.037	0.049	-32.4#	113	-0.01	5.48
36	cis-1,2-dichloroethene	0.302	0.289	4.3	81	-0.01	5.55
37	propionitrile	0.033	0.042	-27.3#	104	-0.01	5.51
38	methyl acrylate	0.223	0.276	-23.8#	103	-0.01	5.54
39	methacrylonitrile	0.079	0.097	-22.8#	96	0.00	5.63
40	bromochloromethane	0.149	0.132	11.4	76	0.00	5.71
41	tetrahydrofuran	0.094	0.115	-22.3#	106	-0.01	5.73

Continuing Calibration Summary

Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VI9840-CC9812
Lab FileID: I242306.D

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42	chloroform	0.541	0.519	4.1	88	0.00	5.73
43	carbon tetrachloride	0.452	0.440	2.7	83	-0.01	6.02
44	1,1-dichloropropene	0.379	0.394	-4.0	88	-0.01	5.99
45	isobutyl alcohol	0.003	0.004#	-33.3#	99	0.00	5.99
46 S	dibromofluoromethane (s)	0.373	0.386	-3.5	86	-0.01	5.83
47	1,1,1-trichloroethane	0.472	0.461	2.3	84	-0.01	5.90
48	cyclohexane	0.416	0.400	3.8	84	0.00	5.99
49	tert-amyl alcohol	0.052	0.059	-13.5	96	-0.01	5.99
50 I	1,4-difluorobenzene	1.000	1.000	0.0	87	-0.01	6.31
51 S	1,2-dichloroethane-d4 (s)	0.283	0.302	-6.7	94	0.00	6.07
52	isopropyl acetate	0.037	0.039	-5.4	85	0.00	6.00
53	1,2-dichloroethane	0.326	0.323	0.9	93	-0.01	6.11
54	benzene	0.880	0.848	3.6	87	-0.01	6.13
55	2,2,4-trimethylpentane	1.018	0.945	7.2	83	-0.01	6.17
56	tert-amyl methyl ether	0.129	0.129	0.0	85	-0.01	6.13
57	heptane	0.214	0.224	-4.7	88	0.00	6.23
58	n-butyl alcohol	0.005	0.006#	-20.0	113	-0.01	6.27
59	trichloroethene	0.242	0.223	7.9	82	0.00	6.51
60	ethyl acrylate	0.238	0.272	-14.3	97	0.00	6.44
61	methylcyclohexane	0.355	0.317	10.7	77	-0.01	6.70
62	1,2-dichloropropane	0.242	0.239	1.2	89	-0.01	6.66
63	methyl methacrylate	0.039	0.042	-7.7	87	-0.01	6.59
64	dibromomethane	0.134	0.130	3.0	84	-0.01	6.73
65	bromodichloromethane	0.298	0.295	1.0	88	-0.01	6.80
66	2-nitropropane	0.054	0.066	-22.2#	105	-0.01	6.88
67	2-chloroethyl vinyl ether	0.124	0.140	-12.9	93	-0.01	6.90
68	epichlorohydrin	0.019	0.021	-10.5	96	0.00	6.97
69	cis-1,3-dichloropropene	0.321	0.342	-6.5	88	0.00	7.07
70	4-methyl-2-pentanone	0.070	0.084	-20.0	98	-0.01	7.09
71	3-methyl-1-butanol	0.004	0.005#	-25.0#	99	0.00	7.07
72 I	chlorobenzene-d5	1.000	1.000	0.0	87	0.00	8.22
73 S	toluene-d8 (s)	1.292	1.328	-2.8	89	-0.01	7.27
74	toluene	0.694	0.655	5.6	85	-0.01	7.32
75	trans-1,3-dichloropropene	0.356	0.395	-11.0	90	-0.01	7.39
76	ethyl methacrylate	0.265	0.281	-6.0	89	0.00	7.37
77	1,1,2-trichloroethane	0.178	0.190	-6.7	89	-0.01	7.54
78	1,3-dichloropropane	0.341	0.361	-5.9	89	-0.01	7.65
79	tetrachloroethene	0.355	0.326	8.2	79	0.00	7.68
80	2-hexanone	0.090	0.106	-17.8	96	0.00	7.61
81	butyl acetate	0.153	0.181	-18.3	97	-0.01	7.66
82	n-butyl ether	1.202	1.277	-6.2	88	-0.01	8.17
83	dibromochloromethane	0.306	0.291	4.9	82	-0.01	7.82
84	1,2-dibromoethane	0.220	0.223	-1.4	83	0.00	7.94
85	chlorobenzene	0.812	0.742	8.6	83	0.00	8.24
86	1,1,1,2-tetrachloroethane	0.302	0.292	3.3	83	0.00	8.27
87	ethylbenzene	1.285	1.241	3.4	86	-0.01	8.27
88	m,p-xylene	0.503	0.466	7.4	82	0.00	8.35
89	o-xylene	0.486	0.465	4.3	81	0.00	8.61
90	styrene	0.805	0.778	3.4	83	-0.01	8.61
91	butyl acrylate	0.472	0.521	-10.4	89	-0.01	8.45
92	cis-1,4-dichloro-2-butene	0.095	0.112	-17.9	96	-0.01	8.82
93	bromoform	0.206	0.208	-1.0	85	-0.01	8.77
94	isopropylbenzene	1.228	1.179	4.0	81	-0.01	8.83
95 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	87	-0.01	9.76
96 S	4-bromofluorobenzene (s)	0.888	0.852	4.1	83	0.00	8.96
97	1,1,2,2-tetrachloroethane	0.549	0.538	2.0	92	0.00	8.99
98	trans-1,4-dichloro-2-bute	0.178	0.201	-12.9	97	-0.01	9.00

6.9.15

6

Continuing Calibration Summary

Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VI9840-CC9812
Lab FileID: I242306.D

Page 3 of 3

99	1,2,3-trichloropropane	0.136	0.135	0.7	86	-0.01	9.05
100	bromobenzene	0.700	0.659	5.9	83	-0.01	9.09
101	n-propylbenzene	2.963	2.802	5.4	85	-0.01	9.10
102	2-chlorotoluene	0.644	0.590	8.4	81	-0.01	9.20
103	4-chlorotoluene	1.660	1.556	6.3	84	-0.01	9.27
104	1,3,5-trimethylbenzene	1.991	1.812	9.0	82	0.00	9.20
105	tert-butylbenzene	1.768	1.672	5.4	81	-0.01	9.43
106	1,2,4-trimethylbenzene	1.970	1.871	5.0	83	-0.01	9.47
107	sec-butylbenzene	2.668	2.469	7.5	82	-0.01	9.59
108	p-isopropyltoluene	2.255	2.092	7.2	80	-0.01	9.67
109	benzyl chloride	0.918	0.981	-6.9	87	-0.01	9.83
110	1,3-dichlorobenzene	1.264	1.176	7.0	83	-0.01	9.72
111	1,4-dichlorobenzene	1.350	1.248	7.6	86	0.00	9.79
112	1,2-dichlorobenzene	1.151	1.082	6.0	83	-0.01	10.05
113	1,2,3-trimethylbenzene	2.114	1.848	12.6	80	-0.01	9.77
114	n-butylbenzene	1.130	1.081	4.3	83	-0.01	9.96
115	hexachloroethane	0.414	0.400	3.4	85	0.00	10.30
116	1,2-dibromo-3-chloropropa	0.127	0.126	0.8	89	-0.01	10.63
117	1,3,5-trichlorobenzene	1.039	0.967	6.9	84	-0.01	10.80
118	1,2,4-trichlorobenzene	0.933	0.867	7.1	85	-0.01	11.35
119	hexachlorobutadiene	0.561	0.484	13.7	82	-0.01	11.46
120	naphthalene	1.851	1.761	4.9	85	-0.01	11.63
121	1,2,3-trichlorobenzene	0.854	0.808	5.4	86	-0.01	11.84
122	2-methylnaphthalene	1.100	15.701	-1327.4# 1207#		-0.02	12.85

(#) = Out of Range SPCC's out = 0 CCC's out = 0
I241545.D MI9812.M Fri Feb 18 00:10:42 2022

6.9.15

6

Blank Spike Summary

Page 1 of 2

Job Number: JD39775
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4D5144-BS	4D115724.D	1	02/17/22	BK	n/a	n/a	V4D5144

The QC reported here applies to the following samples:

Method: SW846 8260D

JD39775-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	442	221* a	27-175
71-43-2	Benzene	50	50.4	101	80-115
74-97-5	Bromochloromethane	50	48.7	97	83-122
75-27-4	Bromodichloromethane	50	55.1	110	82-119
75-25-2	Bromoform	50	59.0	118	77-135
74-83-9	Bromomethane	50	37.6	75	40-162
78-93-3	2-Butanone (MEK)	200	351	176* a	61-150
75-15-0	Carbon disulfide	50	43.6	87	64-130
56-23-5	Carbon tetrachloride	50	53.5	107	75-127
108-90-7	Chlorobenzene	50	50.5	101	80-115
75-00-3	Chloroethane	50	57.6	115	56-144
67-66-3	Chloroform	50	55.1	110	75-116
74-87-3	Chloromethane	50	44.7	89	41-153
110-82-7	Cyclohexane	50	55.5	111	66-129
96-12-8	1,2-Dibromo-3-chloropropane	50	80.0	160* a	69-134
124-48-1	Dibromochloromethane	50	53.9	108	81-123
106-93-4	1,2-Dibromoethane	50	58.5	117	67-138
95-50-1	1,2-Dichlorobenzene	50	56.5	113	81-117
541-73-1	1,3-Dichlorobenzene	50	50.7	101	81-115
106-46-7	1,4-Dichlorobenzene	50	50.8	102	80-114
75-71-8	Dichlorodifluoromethane	50	40.2	80	43-152
75-34-3	1,1-Dichloroethane	50	56.1	112	75-125
107-06-2	1,2-Dichloroethane	50	51.6	103	73-117
75-35-4	1,1-Dichloroethene	50	45.1	90	70-124
156-59-2	cis-1,2-Dichloroethene	50	47.9	96	80-120
156-60-5	trans-1,2-Dichloroethene	50	46.3	93	77-121
78-87-5	1,2-Dichloropropane	50	57.1	114	79-121
10061-01-5	cis-1,3-Dichloropropene	50	54.5	109	83-123
10061-02-6	trans-1,3-Dichloropropene	50	56.0	112	83-122
100-41-4	Ethylbenzene	50	53.7	107	78-116
76-13-1	Freon 113	50	52.2	104	68-134
591-78-6	2-Hexanone	200	366	183* a	66-136
98-82-8	Isopropylbenzene	50	52.7	105	78-121
79-20-9	Methyl Acetate	50	86.7	173* a	60-143
108-87-2	Methylcyclohexane	50	48.2	96	71-123
1634-04-4	Methyl Tert Butyl Ether	50	56.2	112	76-123

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4D5144-BS	4D115724.D	1	02/17/22	BK	n/a	n/a	V4D5144

The QC reported here applies to the following samples:

Method: SW846 8260D

JD39775-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	200	326	163* a	73-134
75-09-2	Methylene chloride	50	47.3	95	73-123
100-42-5	Styrene	50	55.2	110	81-125
79-34-5	1,1,2,2-Tetrachloroethane	50	68.9	138* a	73-126
127-18-4	Tetrachloroethene	50	52.1	104	73-119
108-88-3	Toluene	50	54.8	110	79-116
87-61-6	1,2,3-Trichlorobenzene	50	62.4	125	63-137
120-82-1	1,2,4-Trichlorobenzene	50	62.7	125	68-135
71-55-6	1,1,1-Trichloroethane	50	55.1	110	76-124
79-00-5	1,1,2-Trichloroethane	50	61.4	123* a	83-117
79-01-6	Trichloroethene	50	50.8	102	80-118
75-69-4	Trichlorofluoromethane	50	54.7	109	67-134
75-01-4	Vinyl chloride	50	44.5	89	52-146
	m,p-Xylene	100	105	105	79-119
95-47-6	o-Xylene	50	53.2	106	81-119
1330-20-7	Xylene (total)	150	158	105	80-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	105%	80-120%
17060-07-0	1,2-Dichloroethane-D4	108%	80-120%
2037-26-5	Toluene-D8	102%	80-120%
460-00-4	4-Bromofluorobenzene	102%	82-114%

(a) High percent recovery and no associated positive reported in the QC batch.

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 2

Job Number: JD39775
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI9840-BS	I242307.D	1	02/17/22	PS	n/a	n/a	VI9840

The QC reported here applies to the following samples:

Method: SW846 8260D

JD39775-15, JD39775-16

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	200	191	96	52-156
71-43-2	Benzene	50	47.3	95	82-119
74-97-5	Bromochloromethane	50	45.2	90	82-123
75-27-4	Bromodichloromethane	50	49.5	99	83-121
75-25-2	Bromoform	50	50.6	101	74-138
74-83-9	Bromomethane	50	59.0	118	56-150
78-93-3	2-Butanone (MEK)	200	248	124	72-138
75-15-0	Carbon disulfide	50	44.9	90	67-131
56-23-5	Carbon tetrachloride	50	49.0	98	72-130
108-90-7	Chlorobenzene	50	45.0	90	83-114
75-00-3	Chloroethane	50	74.3	149* a	67-141
67-66-3	Chloroform	50	48.0	96	76-115
74-87-3	Chloromethane	50	50.6	101	57-141
110-82-7	Cyclohexane	50	46.8	94	69-130
96-12-8	1,2-Dibromo-3-chloropropane	50	50.1	100	72-131
124-48-1	Dibromochloromethane	50	47.8	96	80-128
106-93-4	1,2-Dibromoethane	50	50.7	101	58-145
95-50-1	1,2-Dichlorobenzene	50	48.4	97	83-117
541-73-1	1,3-Dichlorobenzene	50	47.6	95	82-114
106-46-7	1,4-Dichlorobenzene	50	46.3	93	79-114
75-71-8	Dichlorodifluoromethane	50	42.2	84	49-146
75-34-3	1,1-Dichloroethane	50	52.4	105	76-126
107-06-2	1,2-Dichloroethane	50	50.1	100	76-118
75-35-4	1,1-Dichloroethene	50	50.2	100	72-125
156-59-2	cis-1,2-Dichloroethene	50	48.7	97	80-118
156-60-5	trans-1,2-Dichloroethene	50	52.1	104	76-122
78-87-5	1,2-Dichloropropane	50	48.9	98	82-123
10061-01-5	cis-1,3-Dichloropropene	50	52.9	106	83-123
10061-02-6	trans-1,3-Dichloropropene	50	54.1	108	83-123
100-41-4	Ethylbenzene	50	47.1	94	83-115
76-13-1	Freon 113	50	42.8	86	65-132
591-78-6	2-Hexanone	200	235	118	73-138
98-82-8	Isopropylbenzene	50	47.7	95	81-122
79-20-9	Methyl Acetate	50	57.1	114	63-142
108-87-2	Methylcyclohexane	50	43.0	86	73-126
1634-04-4	Methyl Tert Butyl Ether	50	54.9	110	75-126

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI9840-BS	I242307.D	1	02/17/22	PS	n/a	n/a	VI9840

The QC reported here applies to the following samples:

Method: SW846 8260D

JD39775-15, JD39775-16

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	200	246	123	71-138
75-09-2	Methylene chloride	50	47.4	95	73-122
100-42-5	Styrene	50	48.4	97	84-122
79-34-5	1,1,2,2-Tetrachloroethane	50	51.8	104	75-127
127-18-4	Tetrachloroethene	50	44.6	89	73-125
108-88-3	Toluene	50	47.3	95	82-118
87-61-6	1,2,3-Trichlorobenzene	50	47.6	95	68-132
120-82-1	1,2,4-Trichlorobenzene	50	45.7	91	72-133
71-55-6	1,1,1-Trichloroethane	50	49.1	98	77-124
79-00-5	1,1,2-Trichloroethane	50	52.2	104	83-122
79-01-6	Trichloroethene	50	46.4	93	80-122
75-69-4	Trichlorofluoromethane	50	45.6	91	69-132
75-01-4	Vinyl chloride	50	51.3	103	60-144
	m,p-Xylene	100	93.7	94	82-119
95-47-6	o-Xylene	50	48.6	97	84-120
1330-20-7	Xylene (total)	150	142	95	83-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	104%	80-124%
17060-07-0	1,2-Dichloroethane-D4	108%	75-133%
2037-26-5	Toluene-D8	102%	79-125%
460-00-4	4-Bromofluorobenzene	99%	58-148%

(a) High percent recovery and no associated positive reported in the QC batch.

* = Outside of Control Limits.

Initial Calibration Summary

Page 1 of 3

Job Number: JD39775
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EM7636-ICC7636
 Lab FileID: M177497.D

Response Factor Report MSM

Method : C:\MSDCHEM\1\METHODS\MM7636.M (RTE Integrator)
 Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
 Last Update : Wed Jan 12 08:43:28 2022
 Response via : Initial Calibration

Calibration Files

2 =m177496.D 5 =m177498.D 100 =m177493.D 50 =m177497.D
 1 =m177494.D 10 =m177500.D 80 =m177495.D 25 =m177499.D

Compound	2	5	100	50	1	10	80	25	Avg	%RSD

1) I 1,4-Dichlorobenzene-d	-----ISTD-----									
2) 1,4-Dioxane	0.666	0.665	0.882	0.834	0.752	0.698	0.843	0.786	0.766	10.99
3) Pyridine	1.744	1.737	1.987	1.998	1.679	1.850	1.978	1.976	1.869	7.10
4) N-Nitrosodim	0.556	0.553	0.709	0.680	0.674	0.562	0.691	0.620	0.631	10.47
5) 2-Fluorophen	1.410	1.615	1.773	1.790	1.586	1.591	1.770	1.789	1.666	8.27
6) Indene	2.364	2.378	1.966	2.142	2.522	2.301	2.072	2.282	2.253	8.05
7) Cumene	3.633	3.828	3.443	3.780	3.491	3.786	3.613	3.916	3.686	4.55
8) Phenol-d5	1.918	2.039	2.094	2.168	2.043	2.095	2.137	2.175	2.084	4.04
9) Phenol	1.970	2.057	1.723	1.868	2.094	1.955	1.765	1.985	1.927	6.86
10) Aniline	2.517	2.628	2.166	2.330	2.696	2.501	2.225	2.521	2.448	7.72
11) bis(2-Chloro	1.659	1.597	1.376	1.486	1.644	1.497	1.431	1.560	1.531	6.62
12) 2-Chlorophen	1.561	1.567	1.347	1.428	1.471	1.514	1.379	1.499	1.471	5.50
13) Decane	1.013	1.046	0.817	0.868	1.069	0.940	0.855	0.946	0.944	9.86
14) 1,3-Dichloro	1.502	1.668	1.416	1.503	1.622	1.633	1.481	1.590	1.552	5.69
15) 1,4-Dichloro	1.356	1.414	1.305	1.386	1.305	1.371	1.358	1.431	1.366	3.34
16) Benzyl alcoh	0.834	0.938	0.954	0.963	0.947	0.926	0.966	0.966	0.937	4.69
17) 1,2-Dichloro	1.434	1.443	1.271	1.404	1.511	1.442	1.329	1.456	1.411	5.42
18) Acetophenone	1.996	2.072	1.498	1.691	1.972	1.854	1.574	1.778	1.804	11.46
19) 2-Methylphen	1.257	1.283	1.201	1.266	1.340	1.286	1.225	1.324	1.273	3.65
20) 2,2'-oxybis(	0.394	0.419	0.340	0.352	0.408	0.377	0.347	0.369	0.376	7.73
21) 3&4-Methylph	1.323	1.342	1.177	1.276	1.400	1.337	1.216	1.297	1.296	5.54
22) n-Nitroso-di	1.024	0.985	0.790	0.821	1.080	0.945	0.807	0.922	0.922	11.65
23) Hexachloroet	0.560	0.585	0.538	0.572	0.518	0.554	0.554	0.560	0.555	3.66
24) I Naphthalene-d8	-----ISTD-----									
25) Nitrobenzene	0.443	0.421	0.372	0.391	0.423	0.403	0.392	0.408	0.407	5.46
26) Nitrobenzene	0.440	0.422	0.354	0.378	0.443	0.404	0.368	0.396	0.400	8.25
27) Quinoline	0.760	0.766	0.733	0.773	0.778	0.762	0.773	0.793	0.767	2.24
28) Isophorone	0.827	0.838	0.775	0.815	0.836	0.848	0.806	0.848	0.824	3.01
29) 2-Nitrophen	0.232	0.213	0.202	0.217	0.210	0.229	0.210	0.229	0.218	4.93
30) 2,4-Dimethyl	0.437	0.420	0.324	0.342	0.422	0.390	0.338	0.374	0.381	11.35
31) Benzoic acid	0.222	0.177	0.335	0.334		0.245	0.335	0.316	0.281	23.26
---- Quadratic regression ---- Coefficient = 0.9975										
Response Ratio = -0.00901 + 0.31510 *A + 0.01134 *A^2										
32) bis(2-Chloro	0.524	0.514	0.417	0.442	0.497	0.475	0.434	0.474	0.472	8.22
33) 2,4-Dichloro	0.329	0.324	0.286	0.305	0.328	0.313	0.300	0.316	0.312	4.79
34) 2,6-Dichloro	0.273	0.274	0.249	0.264	0.274	0.277	0.258	0.278	0.269	3.90
35) 1,3,5-Trichl	0.384	0.386	0.305	0.337	0.388	0.374	0.319	0.364	0.357	9.08
36) 1,2,4-Trichl	0.391	0.379	0.324	0.354	0.371	0.375	0.339	0.363	0.362	6.11
37) 1,2,3-Trichl	0.329	0.332	0.282	0.300	0.342	0.330	0.295	0.316	0.316	6.71
38) Naphthalene	0.955	0.975	0.884	0.936	0.998	0.947	0.921	0.953	0.946	3.65
39) 4-Chloroanil	0.456	0.482	0.409	0.434	0.423	0.448	0.426	0.453	0.441	5.18
40) 2,3-Dichloro	0.416	0.407	0.333	0.361	0.408	0.390	0.351	0.373	0.380	7.97
41) Hydroquinone	0.348	0.383	0.381	0.405	0.322	0.399	0.392	0.419	0.381	8.32
42) Hexachlorobu	0.204	0.202	0.178	0.191	0.182	0.193	0.188	0.198	0.192	4.76

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Initial Calibration Summary

Page 2 of 3

Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EM7636-ICC7636
Lab FileID: M177497.D

43)	4-Chloro-3-m	0.357	0.358	0.337	0.361	0.358	0.367	0.353	0.370	0.358	2.78
44)	2-Methylnaph	0.673	0.692	0.590	0.641	0.642	0.691	0.614	0.683	0.653	5.80
45)	1-Methylnaph	0.739	0.773	0.649	0.700	0.770	0.752	0.669	0.729	0.722	6.36
46)	I Acenaphthene-d10	-----ISTD-----									
47)	Hexachlorocy	0.290	0.328	0.314	0.327	0.327	0.336	0.316	0.339	0.322	4.79
48)	1,2,4,5-Tetr	0.642	0.579	0.445	0.463		0.558	0.445	0.516	0.521	14.54
49)	2,4,6-Trichl	0.438	0.410	0.361	0.379	0.443	0.414	0.369	0.406	0.402	7.57
50)	2,4,5-Trichl	0.431	0.437	0.392	0.396	0.382	0.418	0.392	0.419	0.408	5.01
51)	2-Fluorobiph	1.376	1.364	1.171	1.206	1.452	1.290	1.197	1.275	1.292	7.70
52)	2-Chloronaph	1.261	1.242	0.954	1.010	1.255	1.165	0.966	1.087	1.117	11.69
53)	Biphenyl	1.652	1.592	1.369	1.415	1.662	1.544	1.384	1.484	1.513	7.76
54)	2-Nitroanili	0.350	0.363	0.366	0.361	0.347	0.378	0.361	0.362	0.361	2.64
55)	Dimethylphth	1.544	1.478	1.406	1.457	1.574	1.522	1.434	1.512	1.491	3.84
56)	Acenaphthyle	1.836	1.838	1.541	1.637	1.858	1.765	1.587	1.714	1.722	7.12
57)	2,6-Dinitrot	0.297	0.313	0.314	0.317	0.276	0.323	0.318	0.324	0.310	5.22
58)	3-Nitroanili	0.362	0.389	0.405	0.412	0.418	0.413	0.410	0.409	0.402	4.58
59)	Acenaphthene	1.018	1.056	1.015	1.026	1.082	1.076	1.013	1.063	1.044	2.73
60)	2,4-Dinitrop	0.106	0.144	0.220	0.207		0.168	0.217	0.195	0.180	23.70
---- Quadratic regression ---- Coefficient = 0.9998											
Response Ratio = -0.01053 + 0.19483*A + 0.00579 *A^2											
61)	4-Nitropheno	0.184	0.211	0.237	0.236	0.151	0.220	0.239	0.231	0.214	14.65
62)	Dibenzofuran	1.709	1.703	1.467	1.546	1.775	1.700	1.486	1.644	1.629	7.04
63)	2,4-Dinitrot	0.353	0.397	0.365	0.383	0.347	0.413	0.377	0.403	0.380	6.29
64)	2,3,4,6-Tetr	0.329	0.380	0.362	0.365	0.378	0.368	0.369	0.377	0.366	4.43
65)	Diethylphtha	1.574	1.558	1.437	1.481	1.485	1.545	1.464	1.542	1.511	3.32
66)	Fluorene	1.461	1.474	1.258	1.314	1.377	1.425	1.271	1.394	1.372	6.06
67)	4-Chlorophen	0.707	0.698	0.557	0.584	0.680	0.657	0.566	0.637	0.636	9.42
68)	4-Nitroanili	0.347	0.359	0.335	0.328	0.367	0.360	0.325	0.350	0.346	4.53
69)	I Phenanthrene-d10	-----ISTD-----									
70)	4,6-Dinitro-	0.096	0.137	0.132		0.111	0.136	0.126	0.123		13.13
71)	n-Nitrosodip	0.654	0.638	0.566	0.596	0.640	0.637	0.581	0.609	0.615	5.16
72)	Pentachloron	0.035	0.043	0.036	0.037	0.039	0.038	0.037	0.037	0.038#	6.79
73)	1,2-Diphenyl	0.815	0.829	0.701	0.735	0.893	0.798	0.714	0.754	0.780	8.40
74)	2,4,6-Tribro	0.114	0.125	0.114	0.117	0.121	0.124	0.116	0.119	0.119	3.72
75)	4-Bromopheny	0.221	0.232	0.228	0.227	0.255	0.234	0.227	0.237	0.233	4.45
76)	Hexachlorobe	0.263	0.259	0.208	0.221	0.268	0.246	0.215	0.231	0.239	9.72
77)	Pentachlorop	0.164	0.174	0.171	0.177	0.133	0.172	0.171	0.179	0.168	8.70
78)	Phenanthrene	1.014	1.018	0.909	0.930	0.984	0.967	0.920	0.960	0.963	4.30
79)	Anthracene	1.098	1.101	0.987	1.009	1.165	1.075	1.000	1.054	1.061	5.74
80)	Carbazole	1.125	1.107	0.994	1.028	1.098	1.060	1.012	1.060	1.060	4.44
81)	Di-n-butylph	1.435	1.528	1.385	1.449	1.478	1.474	1.411	1.489	1.456	3.14
82)	Fluoranthene	1.311	1.378	1.217	1.277	1.332	1.340	1.231	1.319	1.301	4.24
83)	Octadecane	0.323	0.342	0.335	0.332	0.337	0.330	0.334	0.323	0.332	1.93
84)	I Chrysene-d12	-----ISTD-----									
85)	Benzidine	0.906	0.961	1.223	1.144	0.907	1.014	1.148	1.099	1.050	11.43
86)	Pyrene	1.602	1.577	1.467	1.450	1.700	1.514	1.473	1.491	1.534	5.57
87)	Terphenyl-d1	1.119	1.196	1.199	1.173	1.201	1.130	1.203	1.165	1.173	2.81
88)	Butylbenzylp	0.737	0.796	0.880	0.857	0.779	0.797	0.883	0.838	0.821	6.33
89)	Benzo[a]anth	1.349	1.371	1.455	1.463	1.430	1.343	1.488	1.445	1.418	3.94
90)	3,3'-Dichlor	0.414	0.474	0.517	0.505	0.428	0.460	0.523	0.492	0.477	8.45
91)	Chrysene	1.104	1.115	1.197	1.149	1.162	1.121	1.183	1.148	1.147	2.86
92)	bis(2-Ethylh	0.959	0.971	1.075	1.036	0.997	0.979	1.077	1.016	1.014	4.49
93)	I Perylene-d12	-----ISTD-----									
94)	Di-n-octylph	1.768	1.874	1.603	1.738	1.878	1.790	1.672	1.842	1.771	5.50
95)	Benzo[b]fluo	1.412	1.378	1.168	1.251	1.402	1.380	1.219	1.340	1.319	7.06

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Initial Calibration Summary

Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EM7636-ICC7636
Lab FileID: M177497.D

96)	Benzo[k]fluo	1.289	1.258	0.952	1.028	1.348	1.157	0.974	1.073	1.135	13.29
97)	Benzo[a]pyre	1.279	1.265	1.111	1.208	1.314	1.247	1.164	1.254	1.230	5.39
98)	Indeno[1,2,3	0.925	0.934	0.898	0.952	1.022	0.959	0.937	0.975	0.950	3.90
99)	Dibenz(a,h)a	0.856	0.873	0.843	0.915	0.882	0.876	0.898	0.943	0.886	3.65
100)	Dibenz[a,h]a	0.921	1.001	0.936	0.963	1.089	1.008	0.959	0.991	0.983	5.35
101)	7,12-Dimethy	0.631	0.604	0.488	0.533	0.636	0.586	0.514	0.566	0.570	9.57
102)	Benzo[g,h,i]	1.071	1.063	0.975	1.066	1.182	1.088	1.049	1.098	1.074	5.36

(#) = Out of Range ### Number of calibration levels exceeded format ###

MM7636.M Wed Jan 12 08:59:57 2022

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Continuing Calibration Summary

Job Number: JD39775
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EM7684-CC7636
 Lab FileID: M178311.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\altheam\em7684\m178311.d Vial: 2
 Acq On : 18 Feb 2022 2:19 pm Operator: jackleey
 Sample : cc7636-25 Inst : MSM
 Misc : op37014,em7684,30.0,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MM7636.M (RTE Integrator)
 Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
 Last Update : Mon Feb 21 05:38:38 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	88	0.00	4.65
2 t	1,4-Dioxane	0.766	0.670	12.5	75	0.00	2.17
3 t	Pyridine	1.869	1.602	14.3	71	0.00	2.52
4 t	N-Nitrosodimethylamine	0.631	0.419	33.6#	59	0.00	2.47
5 S	2-Fluorophenol	1.666	1.518	8.9	74	0.00	3.66
6 t	Indene	2.253	2.275	-1.0	87	0.00	4.85
7 t	Cumene	3.686	3.219	12.7	72	0.00	4.05
8 S	Phenol-d5	2.084	1.904	8.6	77	0.00	4.38
9 t	Phenol	1.927	1.948	-1.1	86	0.00	4.39
10 t	Aniline	2.448	2.103	14.1	73	0.00	4.40
11 t	bis(2-Chloroethyl)ether	1.531	1.261	17.6	71	0.00	4.45
12 t	2-Chlorophenol	1.471	1.495	-1.6	87	0.00	4.50
13 t	Decane	0.944	0.766	18.9	71	0.00	4.53
14 t	1,3-Dichlorobenzene	1.552	1.525	1.7	84	0.00	4.61
15 t	1,4-Dichlorobenzene	1.366	1.410	-3.2	86	0.00	4.67
16 t	Benzyl alcohol	0.937	0.922	1.6	84	0.00	4.76
17 t	1,2-Dichlorobenzene	1.411	1.424	-0.9	86	0.00	4.78
18 t	Acetophenone	1.804	1.648	8.6	81	0.00	4.98
19 t	2-Methylphenol	1.273	1.188	6.7	79	0.00	4.85
20 t	2,2'-oxybis(1-Chloropropa	0.376	0.356	5.3	85	0.00	4.87
21 t	3&4-Methylphenol	1.296	1.243	4.1	84	0.00	4.98
22 t	n-Nitroso-di-n-propylamin	0.922	0.752	18.4	71	0.00	4.97
23 t	Hexachloroethane	0.555	0.455	18.0	71	0.00	5.06
----- True Calc. % Drift -----							
24 I	Naphthalene-d8	1.000	1.000	0.0	85	0.00	5.79
25 S	Nitrobenzene-d5	0.407	0.312	23.3#	65	0.00	5.10
26 t	Nitrobenzene	0.400	0.301	24.8#	65	0.00	5.12
27 t	Quinoline	0.767	0.815	-6.3	88	0.00	6.18
28 t	Isophorone	0.824	0.671	18.6	68	0.00	5.33
29 t	2-Nitrophenol	0.218	0.220	-0.9	82	0.00	5.41
30 t	2,4-Dimethylphenol	0.381	0.332	12.9	76	0.00	5.45
----- AvgRF CCRF % Dev -----							
31 t	Benzoic acid	25.000	21.273	14.9	70	0.00	5.54
32 t	bis(2-Chloroethoxy)methan	0.472	0.398	15.7	72	0.00	5.54
33 t	2,4-Dichlorophenol	0.312	0.318	-1.9	86	0.00	5.65
34 t	2,6-Dichlorophenol	0.269	0.283	-5.2	87	0.00	5.88
35 t	1,3,5-Trichlorobenzene	0.357	0.337	5.6	79	0.00	5.42
36 t	1,2,4-Trichlorobenzene	0.362	0.321	11.3	76	0.00	5.73
37 t	1,2,3-Trichlorobenzene	0.316	0.295	6.6	80	0.00	5.96

Continuing Calibration Summary

Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EM7684-CC7636
Lab FileID: M178311.D

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38 t	Naphthalene	0.946	1.016	-7.4	91	0.00	5.81
39 t	4-Chloroaniline	0.441	0.469	-6.3	88	0.00	5.87
40 t	2,3-Dichloroaniline	0.380	0.393	-3.4	90	0.00	7.00
41 t	Hydroquinone	0.381	0.363	4.7	74	0.00	6.25
42 t	Hexachlorobutadiene	0.192	0.158	17.7	68	0.00	5.94
43 t	4-Chloro-3-methylphenol	0.358	0.330	7.8	76	0.00	6.44
44 t	2-Methylnaphthalene	0.653	0.680	-4.1	85	0.00	6.62
45 t	1-Methylnaphthalene	0.722	0.762	-5.5	89	0.00	6.75
46 I	Acenaphthene-d10	1.000	1.000	0.0	88	0.00	8.14
47 t	Hexachlorocyclopentadiene	0.322	0.236	26.7#	62	0.00	6.82
48	1,2,4,5-Tetrachlorobenzen	0.521	0.505	3.1	87	0.00	6.85
49 t	2,4,6-Trichlorophenol	0.402	0.365	9.2	79	0.00	7.01
50 t	2,4,5-Trichlorophenol	0.408	0.393	3.7	83	0.00	7.06
51 S	2-Fluorobiphenyl	1.292	1.291	0.1	90	0.00	7.13
52 t	2-Chloronaphthalene	1.117	1.077	3.6	88	0.00	7.29
53 t	Biphenyl	1.513	1.459	3.6	87	0.00	7.27
54 t	2-Nitroaniline	0.361	0.279	22.7#	68	0.00	7.46
55 t	Dimethylphthalate	1.491	1.393	6.6	82	0.00	7.76
56 t	Acenaphthylene	1.722	1.746	-1.4	90	0.00	7.91
57 t	2,6-Dinitrotoluene	0.310	0.324	-4.5	88	0.00	7.85
58 t	3-Nitroaniline	0.402	0.385	4.2	83	0.00	8.10
59 t	Acenaphthene	1.044	1.090	-4.4	91	0.00	8.20
----- True Calc. % Drift -----							
60 t	2,4-Dinitrophenol	50.000	48.043	3.9	84	0.00	8.29
----- AvgRF CCRF % Dev -----							
61 t	4-Nitrophenol	0.214	0.143	33.2#	55	0.00	8.44
62 t	Dibenzofuran	1.629	1.693	-3.9	91	0.00	8.49
63 t	2,4-Dinitrotoluene	0.380	0.398	-4.7	87	0.00	8.51
64 t	2,3,4,6-Tetrachlorophenol	0.366	0.345	5.7	81	0.00	8.71
65 t	Diethylphthalate	1.511	1.356	10.3	78	0.00	8.96
66 t	Fluorene	1.372	1.434	-4.5	91	0.00	9.07
67 t	4-Chlorophenyl-phenylethe	0.636	0.615	3.3	85	0.00	9.11
68 t	4-Nitroaniline	0.346	0.359	-3.8	91	0.00	9.14
69 I	Phenanthrene-d10	1.000	1.000	0.0	84	0.00	10.78
70 t	4,6-Dinitro-2-methylpheno	0.123	0.127	-3.3	84	0.00	9.21
71 t	n-Nitrosodiphenylamine	0.615	0.674	-9.6	93	0.00	9.33
72	Pentachloronitrobenzene	0.038	0.041#	-7.9	93	0.00	10.47
73 t	1,2-Diphenylhydrazine	0.780	0.590	24.4#	66	0.00	9.39
74 S	2,4,6-Tribromophenol	0.119	0.115	3.4	81	0.00	9.50
75 t	4-Bromophenyl-phenylether	0.233	0.233	0.0	82	0.00	9.99
76 t	Hexachlorobenzene	0.239	0.246	-2.9	89	0.00	10.06
77 t	Pentachlorophenol	0.168	0.159	5.4	75	0.00	10.45
78 t	Phenanthrene	0.963	0.996	-3.4	87	0.00	10.82
79 t	Anthracene	1.061	1.086	-2.4	86	0.00	10.92
80 t	Carbazole	1.060	1.155	-9.0	91	0.00	11.27
81 t	Di-n-butylphthalate	1.456	1.397	4.1	79	0.00	12.09
82 t	Fluoranthene	1.301	1.289	0.9	82	0.00	13.12
83 t	Octadecane	0.332	0.306	7.8	79	0.00	10.79
84 I	Chrysene-d12	1.000	1.000	0.0	84	0.00	15.97
85	Benzidine	1.050	0.882	16.0	68	0.00	13.48
86 t	Pyrene	1.534	1.545	-0.7	87	0.00	13.55
87 S	Terphenyl-d14	1.173	1.204	-2.6	87	0.00	13.97
88 t	Butylbenzylphthalate	0.821	0.752	8.4	76	0.00	15.05
89 t	Benzo[a]anthracene	1.418	1.368	3.5	80	0.00	15.95
90 t	3,3'-Dichlorobenzidine	0.477	0.489	-2.5	84	0.00	15.98

8.89

Continuing Calibration Summary

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Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EM7684-CC7636
Lab FileID: M178311.D

91	t	Chrysene	1.147	1.189	-3.7	87	0.00	16.01
92	t	bis(2-Ethylhexyl)phthalat	1.014	0.961	5.2	80	0.00	16.27
93	I	Perylene-d12	1.000	1.000	0.0	81	0.00	18.59
94	t	Di-n-octylphthalate	1.771	1.604	9.4	70	0.00	17.51
95	t	Benzo[b]fluoranthene	1.319	1.230	6.7	74	0.00	17.95
96	t	Benzo[k]fluoranthene	1.135	1.143	-0.7	86	0.00	18.00
97	t	Benzo[a]pyrene	1.230	1.215	1.2	78	0.00	18.49
98	t	Indeno[1,2,3-cd]pyrene	0.950	1.115	-17.4	93	0.00	20.31
99	t	Dibenz(a,h)acridine	0.886	1.056	-19.2	91	0.00	19.95
100	t	Dibenz[a,h]anthracene	0.983	1.179	-19.9	96	0.00	20.37
101	t	7,12-Dimethylbenz(a)anthr	0.570	0.491	13.9	70	0.00	17.95
102	t	Benzo[g,h,i]perylene	1.074	1.269	-18.2	93	0.00	20.77

(#) = Out of Range
m178312.d MM7636.M

SPCC's out = 0 CCC's out = 0
Mon Feb 21 05:38:54 2022

8.8.9

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Continuing Calibration Summary

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Job Number: JD39775
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EP6813-CC6785
 Lab FileID: P147623.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\jo...2122\ep6813\p147623.d Vial: 4
 Acq On : 19 Feb 2022 4:21 am Operator: chriss2
 Sample : cc6785-50 Inst : MSVOAMSP
 Misc : op36737,ep6813,30.0,,,1,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP6741AP9.M (RTE Integrator)
 Title : Semi Volatile Extractables by GC/MS
 Last Update : Mon Feb 21 00:32:03 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
102 I	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	78	0.04	4.33
103 M	2-Picoline	1.314	1.275	3.0	74	0.03	2.77
104	Pentachloroethane	0.530	0.526	0.8	78	0.03	4.12
105 M	Methyl methanesulfonate	0.730	0.677	7.3	72	0.03	3.18
106 M	N-Nitrosodiethylamine	0.536	0.565	-5.4	81	0.03	3.50
107 M	N-Nitrosomethylethylamine	0.491	0.518	-5.5	79	0.03	2.90
108 M	Ethyl methanesulfonate	0.935	0.873	6.6	72	0.04	3.76
109 M	N-Nitrosopyrrolidine	0.372	0.832	-123.7#	140	0.05	4.65
110 M	N-Nitrosomorpholine	0.591	0.608	-2.9	83	0.04	4.67
111 M	o-Toluidine	1.839	1.823	0.9	81	0.04	4.67
112 I	Naphthalene-d8A	1.000	1.000	0.0	82	0.04	5.28
113 M	O,O,O-Triethyl phosphorot	0.148	0.159	-7.4	87	0.04	5.08
114 M	N-Nitrosopiperidine	0.171	0.178	-4.1	86	0.04	4.89
115 M	A,A-Dimethylphenethylamin	0.607	0.599	1.3	79	0.00	5.20
116 M	Hexachloropropene	0.213	0.218	-2.3	79	0.04	5.35
117 M	N-Nitrosodi-n-butylamine	0.205	0.217	-5.9	87	0.04	5.57
118	p-Phenylenediamine	0.191	0.148	22.5#	74	0.01	5.60
119 M	Safrole	0.242	0.264	-9.1	88	0.04	5.73
120	Isosafrole	0.100	0.110	-10.0	87	0.05	6.11
121	Acenaphthene-d10A	1.000	1.000	0.0	84	0.06	6.62
122 M	Thionazin	0.150	0.153	-2.0	85	0.07	7.16
123 M	Tetraethyl dithiopyrophos	0.208	0.228	-9.6	89	0.07	7.52
124 M	Phorate	0.869	0.944	-8.6	88	0.07	7.68
125 M	Phenacetin	0.541	0.599	-10.7	87	0.08	7.74
126 M	1,4-Naphthoquinone	0.241	0.264	-9.5	87	0.05	6.30
127 M	m-Dinitrobenzene	0.165	0.197	-19.4	90	0.05	6.42
128 M	Pentachlorobenzene	0.505	0.505	0.0	85	0.06	6.77
129 M	2-Naphthylamine	0.983	0.975	0.8	86	0.07	6.98
130 M	1-Naphthylamine	0.982	1.000	-1.8	89	0.06	6.90
131 M	5-Nitro-o-toluidine	0.312	0.349	-11.9	91	0.07	7.20
132 I	Phenanthrene-d10A	1.000	1.000	0.0	91	0.09	8.38
133 M	Disulfoton	0.278	0.268	3.6	85	0.09	8.44
	----- True		Calc.	% Drift			
134 M	Dinoseb	50.000	53.707	-7.4	97	0.09	8.42
	----- AvgRF		CCRF	% Dev			
135 M	Dimethoate	0.215	0.213	0.9	84	0.09	7.92

8.8.27
8

Continuing Calibration Summary

Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EP6813-CC6785
Lab FileID: P147623.D

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136 M	4-Aminobiphenyl	0.599	0.646	-7.8	93	0.09	8.14
137 M	Methyl parathion	0.155	0.171	-10.3	94	0.09	9.04
138 M	Parathion	0.120	0.130	-8.3	89	0.10	9.76
139 M	Diphenylamine	0.475	0.487	-2.5	90	0.07	7.32
140 M	Isodrin	0.109	0.111	-1.8	88	0.11	10.17
141 M	Diallate	0.064	0.059	7.8	88	0.08	7.79
142 M	Pentachloronitrobenzene	0.042	0.043#	-2.4	85	0.09	8.13
143 M	Pronamide	0.265	0.284	-7.2	90	0.08	8.25
----- True Calc. % Drift -----							
144 M	4-Nitroquinoline 1-oxide	200.000	198.740	0.6	87	0.11	9.77
145 M	Methapyriline	50.000	45.460	9.1	90	0.10	9.94
146 M	sym-Trinitrobenzene	50.000	55.618	-11.2	99	0.07	7.69
----- AvgRF CCRF % Dev -----							
147 I	Chrysene-d12A	1.000	1.000	0.0	97	0.12	13.53
148	Aramite	0.058	0.071	-22.4#	105	0.11	11.61
149 M	p- (Dimethylamine) azobenze	0.278	0.300	-7.9	95	0.11	11.68
150	Kepone	0.081	0.057	29.6#	84	0.11	12.33
----- True Calc. % Drift -----							
151 M	Famphur	300.000	243.846	18.7	90	0.12	12.39
----- AvgRF CCRF % Dev -----							
152 M	2-Acetylaminofluorene	0.410	0.482	-17.6	102	0.13	12.98
153 M	Chlorobenzilate	0.325	0.346	-6.5	96	0.11	11.82
154 I	Perylene-d12A	1.000	1.000	0.0	100	0.12	16.57
155 M	4,4-Methylene-bis- (2-chlo	0.018	0.022#	-22.2#	115	0.12	17.11
157	3-Methylcholanthrene	0.182	0.180	1.1	98	0.13	17.18

(#) = Out of Range SPCC's out = 0 CCC's out = 0
p147328.d MP6741AP9.M Mon Feb 21 00:54:41 2022

8.8.27
8

Continuing Calibration Summary

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Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EP6813-CC6741
Lab FileID: P147624.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\jo...2122\ep6813\p147624.d Vial: 5
Acq On : 19 Feb 2022 4:50 am Operator: chriss2
Sample : cc6741-5 Inst : MSVOAMSP
Misc : op36737,ep6813,30.0,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP6741AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Feb 21 00:32:03 2022
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
173 I	Chrysene-d12d	1.000	1.000	0.0	100	0.11	13.53
174	2,3,7,8-tcdd	0.163	0.163	0.0	100	0.12	12.71

(#) = Out of Range SPCC's out = 0 CCC's out = 0
p147384.d MP6741AP9.M Mon Feb 21 00:33:23 2022

8.8.28

8

Continuing Calibration Summary

Page 1 of 1

Job Number: JD39775
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EP6812-CC6742
 Lab FileID: P147600.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\maritavb\ep6812\p147600.d Vial: 3
 Acq On : 18 Feb 2022 4:21 pm Operator: kristis
 Sample : cc6742-25 Inst : MSVOAMSP
 Misc : op36737,ep6812,30.0,,,1,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP6741.M (RTE Integrator)
 Title : Semi Volatile Extractables by GC/MS
 Last Update : Fri Feb 18 01:48:09 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
102 I	1,4-Dichlorobenzene-d4b	1.000	1.000	0.0	77	0.09	4.35
103	Benzaldehyde	1.032	1.060	-2.7	77	0.09	4.02
104 I	Phenanthrene-d10b	1.000	1.000	0.0	84	0.18	8.40
	----- True Calc. % Drift -----						
105	Atrazine	25.000	28.700	-14.8	94	0.15	8.05
	----- AvgRF CCRF % Dev -----						
106	Naphthalene-d8b	1.000	1.000	0.0	74	0.10	5.29
	----- True Calc. % Drift -----						
107	Caprolactam	25.000	30.473	-21.9#	89	0.09	5.60

(#) = Out of Range
 p147472.d MP6741.M

SPCC's out = 0 CCC's out = 0
 Mon Feb 21 09:19:40 2022

8.8.24
8

Continuing Calibration Summary

Job Number: JD39775
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EP6814-CC6741
 Lab FileID: P147644.D

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Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\jo...2222\ep6814\p147644.d Vial: 2
 Acq On : 21 Feb 2022 4:49 pm Operator: kristis
 Sample : cc6741-25 Inst : MSVOAMSP
 Misc : op36737,ep6814,30.0,,,1,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP6741.M (RTE Integrator)
 Title : Semi Volatile Extractables by GC/MS
 Last Update : Mon Feb 21 00:19:56 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	95	-0.01	4.32
2 t	1,4-Dioxane	0.520	0.530	-1.9	97	0.02	1.74
3 t	Pyridine	1.336	1.296	3.0	89	0.02	2.07
4 t	N-Nitrosodimethylamine	0.521	0.508	2.5	90	0.02	2.05
5 S	2-Fluorophenol	1.266	1.264	0.2	92	0.00	3.33
6 t	Indene	2.247	2.288	-1.8	93	0.00	4.52
7 t	Cumene	3.119	3.043	2.4	90	0.00	3.71
8 S	Phenol-d5	1.644	1.592	3.2	89	0.00	4.09
9 t	Phenol	1.781	1.670	6.2	86	0.00	4.10
10 t	Aniline	2.024	2.007	0.8	91	0.00	4.08
11 t	bis(2-Chloroethyl)ether	1.190	1.136	4.5	89	0.00	4.14
12 t	2-Chlorophenol	1.338	1.328	0.7	92	0.00	4.18
13 t	Decane	0.876	0.972	-11.0	102	-0.01	4.21
14 t	1,3-Dichlorobenzene	1.514	1.526	-0.8	94	0.00	4.28
15 t	1,4-Dichlorobenzene	1.513	1.495	1.2	92	0.00	4.34
16 t	Benzyl alcohol	0.870	0.846	2.8	89	0.00	4.45
17 t	1,2-Dichlorobenzene	1.436	1.408	1.9	91	-0.01	4.45
18 t	Acetophenone	1.809	1.746	3.5	90	-0.01	4.63
19 t	2-Methylphenol	1.178	1.176	0.2	90	-0.01	4.54
20 t	2,2'-oxybis(1-Chloropropa	0.364	0.358	1.6	91	-0.01	4.54
21 t	3&4-Methylphenol	1.240	1.228	1.0	91	-0.01	4.66
22	n-Nitroso-di-n-propylamin	0.845	0.828	2.0	94	-0.01	4.64
23 t	Hexachloroethane	0.543	0.532	2.0	92	0.00	4.70
24 I	Naphthalene-d8	1.000	1.000	0.0	87	-0.01	5.26
25 S	Nitrobenzene-d5	0.345	0.360	-4.3	88	0.00	4.75
26 t	Nitrobenzene	0.351	0.365	-4.0	86	-0.01	4.76
27 t	Quinoline	0.665	0.672	-1.1	85	-0.01	5.53
28 t	Isophorone	0.643	0.645	-0.3	84	-0.01	4.94
29 t	2-Nitrophenol	0.181	0.200	-10.5	93	-0.01	4.99
30 t	2,4-Dimethylphenol	0.359	0.365	-1.7	86	0.00	5.04
----- True Calc. % Drift -----							
31 t	Benzoic acid	25.000	23.336	6.7	84	-0.03	5.14
----- AvgRF CCRF % Dev -----							
32 t	bis(2-Chloroethoxy)methan	0.372	0.383	-3.0	87	-0.01	5.10
33 t	2,4-Dichlorophenol	0.287	0.310	-8.0	92	-0.01	5.18
34	2,6-Dichlorophenol	0.278	0.300	-7.9	91	-0.01	5.33
35	1,3,5-Trichlorobenzene	0.332	0.352	-6.0	91	-0.01	4.99
36 t	1,2,4-Trichlorobenzene	0.325	0.336	-3.4	89	-0.01	5.22
37	1,2,3-Trichlorobenzene	0.310	0.319	-2.9	89	-0.01	5.38

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Continuing Calibration Summary

Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EP6814-CC6741
Lab FileID: P147644.D

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38 t	Naphthalene	0.974	1.011	-3.8	88	-0.01	5.28
39 t	4-Chloroaniline	0.403	0.417	-3.5	85	-0.01	5.33
40 t	2,3-Dichloroaniline	0.341	0.365	-7.0	89	0.00	5.99
41 t	Hydroquinone	0.305	0.243	20.3#	68	-0.01	5.59
42 t	Hexachlorobutadiene	0.196	0.198	-1.0	88	-0.01	5.37
43 t	4-Chloro-3-methylphenol	0.308	0.312	-1.3	84	-0.01	5.69
44 t	2-Methylnaphthalene	0.589	0.637	-8.1	91	0.00	5.78
45 t	1-Methylnaphthalene	0.645	0.668	-3.6	88	0.00	5.85
46 I	Acenaphthene-d10	1.000	1.000	0.0	85	-0.01	6.61
47 t	Hexachlorocyclopentadiene	0.321	0.299	6.9	74	-0.01	5.89
48	1,2,4,5-Tetrachlorobenzen	0.543	0.581	-7.0	90	-0.01	5.90
49 t	2,4,6-Trichlorophenol	0.363	0.399	-9.9	90	-0.01	5.99
50 t	2,4,5-Trichlorophenol	0.391	0.425	-8.7	88	-0.01	6.03
51 S	2-Fluorobiphenyl	1.302	1.306	-0.3	83	-0.01	6.05
52 t	2-Chloronaphthalene	1.108	1.155	-4.2	88	-0.01	6.14
53 t	Biphenyl	1.440	1.548	-7.5	90	-0.01	6.12
54 t	2-Nitroaniline	0.290	0.322	-11.0	87	-0.01	6.23
55 t	Dimethylphthalate	1.314	1.305	0.7	82	-0.01	6.38
56 t	Acenaphthylene	1.568	1.639	-4.5	86	-0.01	6.48
----- True Calc. % Drift -----							
57 t	2,6-Dinitrotoluene	25.000	25.645	-2.6	88	-0.01	6.43
----- AvgRF CCRF % Dev -----							
58 t	3-Nitroaniline	0.309	0.323	-4.5	81	-0.02	6.58
59 t	Acenaphthene	1.105	1.153	-4.3	86	-0.02	6.64
----- True Calc. % Drift -----							
60 t	2,4-Dinitrophenol	50.000	30.051	39.9#	47	-0.02	6.69
----- AvgRF CCRF % Dev -----							
61 t	4-Nitrophenol	0.201	0.171	14.9	69	-0.01	6.78
62 t	Dibenzofuran	1.629	1.644	-0.9	84	-0.02	6.80
63 t	2,4-Dinitrotoluene	0.368	0.399	-8.4	83	-0.02	6.80
64	2,3,4,6-Tetrachlorophenol	0.323	0.335	-3.7	83	-0.02	6.93
65 t	Diethylphthalate	1.319	1.324	-0.4	82	-0.02	7.05
66 t	Fluorene	1.258	1.353	-7.6	87	-0.01	7.16
67 t	4-Chlorophenyl-phenylethe	0.621	0.666	-7.2	89	-0.01	7.17
68 t	4-Nitroaniline	0.315	0.316	-0.3	77	-0.02	7.20
69 I	Phenanthrene-d10	1.000	1.000	0.0	86	-0.02	8.36
70 t	4,6-Dinitro-2-methylpheno	0.122	0.108	11.5	76	-0.02	7.24
71 t	n-Nitrosodiphenylamine	0.592	0.619	-4.6	87	-0.02	7.30
72 t	1,2-Diphenylhydrazine	0.677	0.688	-1.6	83	-0.02	7.35
73 S	2,4,6-Tribromophenol	0.114	0.133	-16.7	95	-0.02	7.44
74 t	4-Bromophenyl-phenylether	0.213	0.237	-11.3	92	-0.02	7.75
75 t	Hexachlorobenzene	0.243	0.251	-3.3	88	-0.02	7.81
76 t	Pentachlorophenol	0.153	0.147	3.9	79	-0.02	8.11
77 t	Phenanthrene	1.026	1.038	-1.2	85	-0.02	8.40
78 t	Anthracene	1.021	1.070	-4.8	86	-0.02	8.47
79 t	Carbazole	0.970	1.014	-4.5	87	-0.02	8.75
80 t	Di-n-butylphthalate	1.145	1.241	-8.4	84	-0.02	9.44
81 t	Fluoranthene	1.115	1.205	-8.1	87	-0.02	10.46
82 t	Octadecane	0.295	0.343	-16.3	92	-0.02	8.29
83 I	Chrysene-d12	1.000	1.000	0.0	86	-0.03	13.51
----- True Calc. % Drift -----							
84 t	Benzidine	25.000	20.207	19.2	70	-0.02	10.83

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Continuing Calibration Summary

Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EP6814-CC6741
Lab FileID: P147644.D

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		AvgRF	CCRF	% Dev			
85 t	Pyrene	1.228	1.264	-2.9	85	-0.02	10.89
86 S	Terphenyl-d14	0.947	1.030	-8.8	91	-0.02	11.33
87 t	Butylbenzylphthalate	0.527	0.563	-6.8	85	-0.02	12.52
88 t	Benzo[a]anthracene	1.153	1.226	-6.3	89	-0.03	13.49
89 t	3,3'-Dichlorobenzidine	0.427	0.456	-6.8	87	-0.03	13.56
90 t	Chrysene	1.138	1.138	0.0	85	-0.03	13.57
----- True Calc. % Drift -----							
91 t	bis(2-Ethylhexyl)phthalat	25.000	25.253	-1.0	87	-0.02	13.93
----- AvgRF CCRF % Dev -----							
92 I	Perylene-d12	1.000	1.000	0.0	87	-0.03	16.55
----- True Calc. % Drift -----							
93 t	Di-n-octylphthalate	25.000	26.255	-5.0	91	-0.02	15.39
----- AvgRF CCRF % Dev -----							
94 t	Benzo[b]fluoranthene	1.192	1.319	-10.7	89	-0.03	15.79
95 t	Benzo[k]fluoranthene	1.130	1.193	-5.6	84	-0.04	15.86
----- True Calc. % Drift -----							
96 t	Benzo[a]pyrene	25.000	25.516	-2.1	89	-0.04	16.42
97 t	Indeno[1,2,3-cd]pyrene	25.000	27.896	-11.6	98	-0.04	18.49
----- AvgRF CCRF % Dev -----							
98 t	Dibenz(a,h)acridine	0.910	1.034	-13.6	96	-0.03	18.14
----- True Calc. % Drift -----							
99 t	Dibenz[a,h]anthracene	25.000	25.600	-2.4	88	-0.04	18.56
100 t	7,12-Dimethylbenz(a)anthr	25.000	27.384	-9.5	106	-0.03	15.82
----- AvgRF CCRF % Dev -----							
101 t	Benzo[g,h,i]perylene	1.041	1.177	-13.1	90	-0.04	18.91

(#) = Out of Range
p147440.d MP6741.M

SPCC's out = 0 CCC's out = 0
Tue Feb 22 02:48:42 2022

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Job Number: JD39775
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38180-MB1	M178315.D	1	02/18/22	JY	02/16/22	OP38180	EM7684

The QC reported here applies to the following samples:

Method: SW846 8270E

JD39775-1, JD39775-2, JD39775-3, JD39775-5, JD39775-6, JD39775-7, JD39775-8, JD39775-10, JD39775-11,
 JD39775-12, JD39775-13, JD39775-14, JD39775-15, JD39775-16

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	67	16	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	20	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	28	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	59	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	170	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	170	36	ug/kg	
95-48-7	2-Methylphenol	ND	67	21	ug/kg	
	3&4-Methylphenol	ND	67	27	ug/kg	
88-75-5	2-Nitrophenol	ND	170	22	ug/kg	
100-02-7	4-Nitrophenol	ND	330	89	ug/kg	
87-86-5	Pentachlorophenol	ND	130	31	ug/kg	
108-95-2	Phenol	ND	67	17	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	170	22	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	25	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	20	ug/kg	
83-32-9	Acenaphthene	ND	33	11	ug/kg	
208-96-8	Acenaphthylene	ND	33	17	ug/kg	
98-86-2	Acetophenone	ND	170	7.2	ug/kg	
120-12-7	Anthracene	ND	33	20	ug/kg	
1912-24-9	Atrazine	ND	67	14	ug/kg	
56-55-3	Benzo(a)anthracene	ND	33	9.4	ug/kg	
50-32-8	Benzo(a)pyrene	ND	33	15	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	33	15	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	33	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	33	16	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	67	13	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	67	8.1	ug/kg	
92-52-4	1,1'-Biphenyl	ND	67	4.6	ug/kg	
100-52-7	Benzaldehyde	ND	170	8.3	ug/kg	
91-58-7	2-Chloronaphthalene	ND	67	7.9	ug/kg	
106-47-8	4-Chloroaniline	ND	170	12	ug/kg	
86-74-8	Carbazole	ND	67	4.8	ug/kg	
105-60-2	Caprolactam	ND	67	13	ug/kg	
218-01-9	Chrysene	ND	33	10	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	67	7.1	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	67	14	ug/kg	

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Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38180-MB1	M178315.D	1	02/18/22	JY	02/16/22	OP38180	EM7684

The QC reported here applies to the following samples:

Method: SW846 8270E

JD39775-1, JD39775-2, JD39775-3, JD39775-5, JD39775-6, JD39775-7, JD39775-8, JD39775-10, JD39775-11, JD39775-12, JD39775-13, JD39775-14, JD39775-15, JD39775-16

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	67	12	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	67	11	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	33	10	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	33	17	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	67	28	ug/kg	
123-91-1	1,4-Dioxane	ND	33	22	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	33	15	ug/kg	
132-64-9	Dibenzofuran	ND	67	14	ug/kg	
84-74-2	Di-n-butyl phthalate	62.2	67	5.4	ug/kg	J
117-84-0	Di-n-octyl phthalate	ND	67	8.3	ug/kg	
84-66-2	Diethyl phthalate	ND	67	7.1	ug/kg	
131-11-3	Dimethyl phthalate	ND	67	5.9	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	67	7.8	ug/kg	
206-44-0	Fluoranthene	ND	33	15	ug/kg	
86-73-7	Fluorene	ND	33	15	ug/kg	
118-74-1	Hexachlorobenzene	ND	67	8.4	ug/kg	
87-68-3	Hexachlorobutadiene	ND	33	13	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	330	13	ug/kg	
67-72-1	Hexachloroethane	ND	170	16	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	33	16	ug/kg	
78-59-1	Isophorone	ND	67	7.1	ug/kg	
91-57-6	2-Methylnaphthalene	ND	33	7.5	ug/kg	
88-74-4	2-Nitroaniline	ND	170	7.9	ug/kg	
99-09-2	3-Nitroaniline	ND	170	8.3	ug/kg	
100-01-6	4-Nitroaniline	ND	170	8.6	ug/kg	
91-20-3	Naphthalene	ND	33	9.4	ug/kg	
98-95-3	Nitrobenzene	ND	67	13	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	67	9.6	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	12	ug/kg	
85-01-8	Phenanthrene	ND	33	11	ug/kg	
129-00-0	Pyrene	ND	33	11	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	170	8.5	ug/kg	

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Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38180-MB1	M178315.D	1	02/18/22	JY	02/16/22	OP38180	EM7684

The QC reported here applies to the following samples:

Method: SW846 8270E

JD39775-1, JD39775-2, JD39775-3, JD39775-5, JD39775-6, JD39775-7, JD39775-8, JD39775-10, JD39775-11, JD39775-12, JD39775-13, JD39775-14, JD39775-15, JD39775-16

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	37% 10-109%
4165-62-2	Phenol-d5	38% 10-105%
118-79-6	2,4,6-Tribromophenol	54% 10-135%
4165-60-0	Nitrobenzene-d5	39% 10-119%
321-60-8	2-Fluorobiphenyl	56% 18-112%
1718-51-0	Terphenyl-d14	59% 18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/kg	

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Job Number: JD39775
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38180-MB1	P147602.D	1	02/18/22	KLS	02/16/22	OP38180	EP6812

The QC reported here applies to the following samples:

Method: SW846 8270E

JD39775-1, JD39775-2, JD39775-3, JD39775-5, JD39775-6, JD39775-7, JD39775-8, JD39775-10, JD39775-11,
 JD39775-12, JD39775-13, JD39775-14, JD39775-15, JD39775-16

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	67	16	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	20	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	28	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	59	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	170	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	170	36	ug/kg	
95-48-7	2-Methylphenol	ND	67	21	ug/kg	
	3&4-Methylphenol	ND	67	27	ug/kg	
88-75-5	2-Nitrophenol	ND	170	22	ug/kg	
100-02-7	4-Nitrophenol	ND	330	89	ug/kg	
87-86-5	Pentachlorophenol	ND	130	31	ug/kg	
108-95-2	Phenol	ND	67	17	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	170	22	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	25	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	20	ug/kg	
83-32-9	Acenaphthene	ND	33	11	ug/kg	
208-96-8	Acenaphthylene	ND	33	17	ug/kg	
98-86-2	Acetophenone	ND	170	7.2	ug/kg	
120-12-7	Anthracene	ND	33	20	ug/kg	
1912-24-9	Atrazine	ND	67	14	ug/kg	
56-55-3	Benzo(a)anthracene	ND	33	9.4	ug/kg	
50-32-8	Benzo(a)pyrene	ND	33	15	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	33	15	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	33	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	33	16	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	67	13	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	67	8.1	ug/kg	
92-52-4	1,1'-Biphenyl	ND	67	4.6	ug/kg	
100-52-7	Benzaldehyde	ND	170	8.3	ug/kg	
91-58-7	2-Chloronaphthalene	ND	67	7.9	ug/kg	
106-47-8	4-Chloroaniline	ND	170	12	ug/kg	
86-74-8	Carbazole	ND	67	4.8	ug/kg	
105-60-2	Caprolactam	ND	67	13	ug/kg	
218-01-9	Chrysene	ND	33	10	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	67	7.1	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	67	14	ug/kg	

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Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38180-MB1	P147602.D	1	02/18/22	KLS	02/16/22	OP38180	EP6812

The QC reported here applies to the following samples:

Method: SW846 8270E

JD39775-1, JD39775-2, JD39775-3, JD39775-5, JD39775-6, JD39775-7, JD39775-8, JD39775-10, JD39775-11, JD39775-12, JD39775-13, JD39775-14, JD39775-15, JD39775-16

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	67	12	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	67	11	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	33	10	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	33	17	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	67	28	ug/kg	
123-91-1	1,4-Dioxane	ND	33	22	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	33	15	ug/kg	
132-64-9	Dibenzofuran	ND	67	14	ug/kg	
84-74-2	Di-n-butyl phthalate	65.2	67	5.4	ug/kg	J
117-84-0	Di-n-octyl phthalate	ND	67	8.3	ug/kg	
84-66-2	Diethyl phthalate	ND	67	7.1	ug/kg	
131-11-3	Dimethyl phthalate	ND	67	5.9	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	67	7.8	ug/kg	
206-44-0	Fluoranthene	ND	33	15	ug/kg	
86-73-7	Fluorene	ND	33	15	ug/kg	
118-74-1	Hexachlorobenzene	ND	67	8.4	ug/kg	
87-68-3	Hexachlorobutadiene	ND	33	13	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	330	13	ug/kg	
67-72-1	Hexachloroethane	ND	170	16	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	33	16	ug/kg	
78-59-1	Isophorone	ND	67	7.1	ug/kg	
91-57-6	2-Methylnaphthalene	ND	33	7.5	ug/kg	
88-74-4	2-Nitroaniline	ND	170	7.9	ug/kg	
99-09-2	3-Nitroaniline	ND	170	8.3	ug/kg	
100-01-6	4-Nitroaniline	ND	170	8.6	ug/kg	
91-20-3	Naphthalene	ND	33	9.4	ug/kg	
98-95-3	Nitrobenzene	ND	67	13	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	67	9.6	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	12	ug/kg	
85-01-8	Phenanthrene	ND	33	11	ug/kg	
129-00-0	Pyrene	ND	33	11	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	170	8.5	ug/kg	

8.1.2
8

Method Blank Summary

Page 3 of 3

Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38180-MB1	P147602.D	1	02/18/22	KLS	02/16/22	OP38180	EP6812

The QC reported here applies to the following samples:

Method: SW846 8270E

JD39775-1, JD39775-2, JD39775-3, JD39775-5, JD39775-6, JD39775-7, JD39775-8, JD39775-10, JD39775-11, JD39775-12, JD39775-13, JD39775-14, JD39775-15, JD39775-16

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	45% 10-109%
4165-62-2	Phenol-d5	46% 10-105%
118-79-6	2,4,6-Tribromophenol	64% 10-135%
4165-60-0	Nitrobenzene-d5	52% 10-119%
321-60-8	2-Fluorobiphenyl	56% 18-112%
1718-51-0	Terphenyl-d14	66% 18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/kg	

8.1.2
8

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: JD39775

Account: SESINJPB SESI Consulting Engineers

Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38217-BS1	P147626.D	1	02/19/22	CS	02/18/22	OP38217	EP6813
OP38217-BSD	P147627.D	1	02/19/22	CS	02/18/22	OP38217	EP6813

The QC reported here applies to the following samples:

Method: SW846 8270E

JD39775-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	50	30.3	61	29.2	58	4	52-114/34
59-50-7	4-Chloro-3-methyl phenol	50	35.7	71	38.8	78	8	56-122/28
120-83-2	2,4-Dichlorophenol	50	34.7	69	38.2	76	10	58-121/31
105-67-9	2,4-Dimethylphenol	50	31.6	63	33.9	68	7	58-119/28
51-28-5	2,4-Dinitrophenol	100	83.4	83	87.9	88	5	33-151/38
534-52-1	4,6-Dinitro-o-cresol	50	46.7	93	48.5	97	4	37-152/37
95-48-7	2-Methylphenol	50	27.3	55	28.7	57	5	48-107/28
	3&4-Methylphenol	100	51.5	52	54.7	55	6	10-148/29
88-75-5	2-Nitrophenol	50	38.1	76	37.1	74	3	50-136/34
100-02-7	4-Nitrophenol	50	18.8	38	19.3	39	3	10-107/44
87-86-5	Pentachlorophenol	100	86.2	86	86.2	86	0	12-168/36
108-95-2	Phenol	50	14.3	29	14.8	30	3	10-94/32
58-90-2	2,3,4,6-Tetrachlorophenol	50	46.2	92	46.8	94	1	52-134/36
95-95-4	2,4,5-Trichlorophenol	50	44.0	88	44.5	89	1	56-128/35
88-06-2	2,4,6-Trichlorophenol	50	44.3	89	44.7	89	1	56-126/35
83-32-9	Acenaphthene	50	41.4	83	43.6	87	5	57-115/27
208-96-8	Acenaphthylene	50	33.1	66	36.5	73	10	51-114/26
98-86-2	Acetophenone	50	40.1	80	38.5	77	4	54-118/30
120-12-7	Anthracene	50	47.1	94	47.4	95	1	60-123/27
1912-24-9	Atrazine	50	52.1	104	50.8	102	3	66-134/30
100-52-7	Benzaldehyde	50	38.4	77	34.7	69	10	48-128/38
56-55-3	Benzo(a)anthracene	50	48.2	96	49.4	99	2	64-119/25
50-32-8	Benzo(a)pyrene	50	42.1	84	42.9	86	2	63-124/27
205-99-2	Benzo(b)fluoranthene	50	49.3	99	49.8	100	1	64-123/27
191-24-2	Benzo(g,h,i)perylene	50	52.5	105	52.9	106	1	59-124/30
207-08-9	Benzo(k)fluoranthene	50	46.9	94	46.4	93	1	58-122/28
101-55-3	4-Bromophenyl phenyl ether	50	48.4	97	47.6	95	2	56-126/28
85-68-7	Butyl benzyl phthalate	50	49.8	100	50.9	102	2	55-134/28
92-52-4	1,1'-Biphenyl	50	40.1	80	41.6	83	4	55-114/28
91-58-7	2-Chloronaphthalene	50	38.0	76	39.5	79	4	55-114/27
106-47-8	4-Chloroaniline	50	24.5	49	28.3	57	14	14-99/50
86-74-8	Carbazole	50	48.1	96	48.4	97	1	62-122/26
105-60-2	Caprolactam	50	16.5	33	17.4	35	5	10-106/27
218-01-9	Chrysene	50	46.1	92	46.4	93	1	60-120/25
111-91-1	bis(2-Chloroethoxy)methane	50	36.7	73	38.6	77	5	52-119/28
111-44-4	bis(2-Chloroethyl)ether	50	37.0	74	33.3	67	11	52-116/34

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38217-BS1	P147626.D	1	02/19/22	CS	02/18/22	OP38217	EP6813
OP38217-BSD	P147627.D	1	02/19/22	CS	02/18/22	OP38217	EP6813

The QC reported here applies to the following samples:

Method: SW846 8270E

JD39775-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
108-60-1	2,2'-Oxybis(1-chloropropane)	50	38.2	76	35.1	70	8	50-121/34
7005-72-3	4-Chlorophenyl phenyl ether	50	46.7	93	46.9	94	0	54-120/28
121-14-2	2,4-Dinitrotoluene	50	53.2	106	49.8	100	7	56-133/26
606-20-2	2,6-Dinitrotoluene	50	46.6	93	48.4	97	4	59-130/26
91-94-1	3,3'-Dichlorobenzidine	50	36.3	72	89.7	40	9	13-118/50
123-91-1	1,4-Dioxane	50	17.3	35	17.5	35	1	13-86/42
53-70-3	Dibenzo(a,h)anthracene	50	47.5	95	46.3	93	3	58-126/28
132-64-9	Dibenzofuran	50	43.6	87	42.0	84	4	60-116/26
84-74-2	Di-n-butyl phthalate	50	51.7	103	52.3	105	1	57-129/29
117-84-0	Di-n-octyl phthalate	50	45.1	90	46.4	93	3	53-136/29
84-66-2	Diethyl phthalate	50	49.7	99	48.4	97	3	56-121/28
131-11-3	Dimethyl phthalate	50	45.3	91	47.0	94	4	57-119/27
117-81-7	bis(2-Ethylhexyl)phthalate	50	44.9	90	46.1	92	3	57-133/26
206-44-0	Fluoranthene	50	51.1	102	51.4	103	1	64-123/28
86-73-7	Fluorene	50	48.0	96	47.2	94	2	62-117/29
118-74-1	Hexachlorobenzene	50	45.7	91	45.3	91	1	56-127/27
87-68-3	Hexachlorobutadiene	50	24.9	50	29.0	58	15	34-121/35
77-47-4	Hexachlorocyclopentadiene	100	26.2	26* a	28.4	28* a	8	29-116/36
67-72-1	Hexachloroethane	50	26.9	54	28.1	56	4	36-111/41
193-39-5	Indeno(1,2,3-cd)pyrene	50	48.8	98	47.5	95	3	55-128/30
78-59-1	Isophorone	50	41.3	83	38.6	77	7	55-123/28
91-57-6	2-Methylnaphthalene	50	35.9	72	37.7	75	5	56-118/30
88-74-4	2-Nitroaniline	50	53.0	106	48.1	96	10	52-137/27
99-09-2	3-Nitroaniline	50	35.2	70	38.5	77	9	31-112/44
100-01-6	4-Nitroaniline	50	45.6	91	44.8	90	2	52-124/28
91-20-3	Naphthalene	50	34.1	68	36.2	72	6	57-111/29
98-95-3	Nitrobenzene	50	36.2	72	38.6	77	6	53-123/30
621-64-7	N-Nitroso-di-n-propylamine	50	43.9	88	41.9	84	5	48-122/28
86-30-6	N-Nitrosodiphenylamine	50	44.3	89	45.6	91	3	56-133/30
85-01-8	Phenanthrene	50	46.2	92	46.7	93	1	62-120/27
129-00-0	Pyrene	50	48.8	98	48.0	96	2	59-126/29
95-94-3	1,2,4,5-Tetrachlorobenzene	50	37.2	74	37.4	75	1	49-119/29

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: JD39775

Account: SESINJPB SESI Consulting Engineers

Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38217-BS1	P147626.D	1	02/19/22	CS	02/18/22	OP38217	EP6813
OP38217-BSD	P147627.D	1	02/19/22	CS	02/18/22	OP38217	EP6813

The QC reported here applies to the following samples:

Method: SW846 8270E

JD39775-17

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	36%	38%	10-90%
4165-62-2	Phenol-d5	25%	25%	10-101%
118-79-6	2,4,6-Tribromophenol	92%	97%	23-155%
4165-60-0	Nitrobenzene-d5	72%	76%	25-141%
321-60-8	2-Fluorobiphenyl	80%	84%	35-126%
1718-51-0	Terphenyl-d14	99%	99%	15-139%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Continuing Calibration Summary

Page 1 of 2

Job Number: JD39775
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: G8G1769-CC1762
 Lab FileID: 8G41413.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\tr...69\8g41413.d\ECD1A.ch Vial: 2
 Signal #2 : C:\msdchem\1\data\trude\...8g1769\8g41413.d\ECD2B.ch
 Acq On : 21 Feb 2022 1:13 pm Operator: thomasl
 Sample : cc1762-25 Inst : GC8G
 Misc : op38165,g8g1769,245,,,2,1 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\8pst1762.m (ChemStation Integrator)
 Title : PEST/PCB
 Last Update : Tue Feb 22 01:19:45 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	90	0.00	1.24- 2.24
2 SAB	Tetrachloro-m-xylene	0.950	0.875	7.9	85	0.00	2.44- 2.50
3	hexachlorobenzene	1.567	1.614	-3.0	93	0.00	2.82- 2.88
4 A	alpha-BHC	1.253	1.380	-10.1	96	0.00	2.97- 3.03
5 MA	gamma-BHC	1.157	1.320	-14.1	100	0.00	3.30- 3.36
6 MA	Heptachlor	1.266	1.389	-9.7	97	0.00	3.82- 3.88
7 B	beta-BHC	0.505	0.574	-13.7	103	0.00	3.38- 3.44
8 B	delta-BHC	0.942	1.253	-33.0#	117	0.00	3.57- 3.63
9 MB	Aldrin	1.144	1.262	-10.3	97	0.00	4.17- 4.23
10	alachlor	0.144	0.175	-21.5#	101	0.00	4.33- 4.39
11 B	Heptachlor Epoxide	1.109	1.182	-6.6	94	0.00	4.91- 4.97
12 B	gamma-Chlordane	1.113	1.185	-6.5	95	0.00	5.07- 5.13
13 B	alpha-Chlordane	1.070	1.216	-13.6	99	0.00	5.25- 5.31
14 A	Endosulfan I	1.037	1.144	-10.3	96	0.00	5.43- 5.49
15 B	4,4'-DDE	1.092	1.239	-13.5	98	0.00	5.37- 5.43
16 MA	Dieldrin	1.117	1.198	-7.3	95	0.00	5.76- 5.82
17 MA	Endrin	1.018	1.128	-10.8	98	0.00	6.08- 6.14
18 A	4,4'-DDD	0.854	0.962	-12.6	100	0.00	6.21- 6.27
19 B	Endosulfan II	0.956	1.059	-10.8	97	0.00	6.41- 6.47
20 MA	4,4'-DDT	0.873	0.952	-9.0	96	0.00	6.63- 6.69
21 B	Endrin Aldehyde	0.761	0.877	-15.2	105	0.00	7.04- 7.10
22 B	Endosulfan Sulfate	0.814	0.989	-21.5#	110	0.00	7.73- 7.79
23 A	Methoxychlor	0.514	0.533	-3.7	93	0.00	7.42- 7.48
24	Mirex	0.911	0.928	-1.9	92	0.00	7.57- 7.63
25 B	Endrin Ketone	0.823	1.140	-38.5#	124	0.00	8.17- 8.23
26 SA	Decachlorobiphenyl	1.237	1.234	0.2	90	0.00	9.98-10.04
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	90	0.00	1.24- 2.24
28 L8	Toxaphene{A}			-----NA-----			
29 L8	Toxaphene{B}			-----NA-----			
30 L8	Toxaphene{C}			-----NA-----			
31 L8	Toxaphene{D}			-----NA-----			
32 L8	Toxaphene{E}			-----NA-----			
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	90	0.00	1.24- 2.24
34	Chlordane {A}			-----NA-----			
35	Chlordane {B}			-----NA-----			
36	Chlordane {C}			-----NA-----			
37	Chlordane {D}			-----NA-----			
38	Chlordane {E}			-----NA-----			

10.10.33 10

Continuing Calibration Summary

Page 2 of 2

Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: G8G1769-CC1762
Lab FileID: 8G41413.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	78	0.00	1.57- 2.57
2	SAB	Tetrachloro-m-xylene	1.078	0.965	10.5	75	0.00	2.99- 3.05
3		hexachlorobenzene	1.222	1.149	6.0	74	0.00	3.54- 3.60
4	A	alpha-BHC	1.348	1.278	5.2	75	0.00	3.71- 3.77
5	MA	gamma-BHC	1.189	1.140	4.1	75	0.00	4.17- 4.23
6	MA	Heptachlor	1.176	1.057	10.1	72	0.00	4.77- 4.83
7	B	beta-BHC	0.514	0.530	-3.1	82	0.00	4.26- 4.32
8	B	delta-BHC	1.045	1.079	-3.3	82	0.00	4.67- 4.73
9	MB	Aldrin	1.082	0.963	11.0	68	0.00	5.23- 5.29
10		alachlor	0.138	0.120	13.0	65	0.00	5.04- 5.10
11	B	Heptachlor Epoxide	1.015	1.021	-0.6	79	0.00	6.08- 6.14
12	B	gamma-Chlordane	1.007	0.970	3.7	74	0.00	6.37- 6.43
13	B	alpha-Chlordane	1.027	0.964	6.1	77	0.00	6.60- 6.66
14	A	Endosulfan I	0.944	0.954	-1.1	79	0.00	6.69- 6.75
15	B	4,4'-DDE	1.043	1.005	3.6	75	0.00	6.87- 6.93
16	MA	Dieldrin	1.020	0.991	2.8	77	0.00	7.14- 7.20
17	MA	Endrin	0.863	0.859	0.5	76	0.00	7.65- 7.71
18	A	4,4'-DDD	0.846	0.822	2.8	78	0.00	7.82- 7.88
19	B	Endosulfan II	0.834	0.844	-1.2	79	0.00	8.00- 8.06
20	MA	4,4'-DDT	0.710	0.703	1.0	78	0.00	8.36- 8.42
21	B	Endrin Aldehyde	0.639	0.682	-6.7	87	0.00	8.58- 8.64
22	B	Endosulfan Sulfate	0.660	0.784	-18.8	93	0.00	9.05- 9.11
23	A	Methoxychlor	0.334	0.369	-10.5	83	0.00	9.60- 9.66
24		Mirex	0.643	0.648	-0.8	80	0.00	9.94-10.00
25	B	Endrin Ketone	0.642	0.860	-34.0#	104	0.00	10.01-10.07
26	SA	Decachlorobiphenyl	0.672	0.661	1.6	81	0.00	12.10-12.16
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	78	0.00	1.57- 2.57
28	L8	Toxaphene{A}			-----NA-----			
29	L8	Toxaphene{B}			-----NA-----			
30	L8	Toxaphene{C}			-----NA-----			
31	L8	Toxaphene{D}			-----NA-----			
32	L8	Toxaphene{E}			-----NA-----			
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	78	0.00	1.57- 2.57
34		Chlordane {A}			-----NA-----			
35		Chlordane {B}			-----NA-----			
36		Chlordane {C}			-----NA-----			
37		Chlordane {D}			-----NA-----			
38		Chlordane {E}			-----NA-----			

(#) = Out of Range
8g41278.d 8pst1762.m

SPCC's out = 0 CCC's out = 0
Tue Feb 22 01:26:48 2022

10.10.33 10

Continuing Calibration Summary

Page 1 of 2

Job Number: JD39775
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: G8G1775-CC1762
 Lab FileID: 8G41557.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\tr...75\8g41557.d\ECD1A.ch Vial: 4
 Signal #2 : C:\msdchem\1\data\trude\...8g1775\8g41557.d\ECD2B.ch
 Acq On : 24 Feb 2022 3:48 pm Operator: chorngli
 Sample : cc1762-50 Inst : GC8G
 Misc : op38142,g8g1775,1000,,,1,1 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\8pst1762.m (ChemStation Integrator)
 Title : PEST/PCB
 Last Update : Thu Feb 24 22:54:01 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.01	1.23- 2.23
2 SAB	Tetrachloro-m-xylene	0.950	0.857	9.8	87	0.00	2.43- 2.49
3	hexachlorobenzene	1.567	1.480	5.6	91	0.00	2.81- 2.87
4 A	alpha-BHC	1.253	1.301	-3.8	89	0.00	2.96- 3.02
5 MA	gamma-BHC	1.157	1.197	-3.5	91	0.00	3.29- 3.35
6 MA	Heptachlor	1.266	1.276	-0.8	90	0.00	3.81- 3.87
7 B	beta-BHC	0.505	0.507	-0.4	95	0.00	3.37- 3.43
8 B	delta-BHC	0.942	1.152	-22.3#	102	0.00	3.57- 3.63
9 MB	Aldrin	1.144	1.175	-2.7	90	0.00	4.16- 4.22
10	alachlor	0.144	0.139	3.5	88	0.00	4.32- 4.38
11 B	Heptachlor Epoxide	1.109	1.104	0.5	90	0.00	4.89- 4.95
12 B	gamma-Chlordane	1.113	1.173	-5.4	95	0.00	5.06- 5.12
13 B	alpha-Chlordane	1.070	1.108	-3.6	91	0.00	5.24- 5.30
14 A	Endosulfan I	1.037	1.076	-3.8	92	0.00	5.42- 5.48
15 B	4,4'-DDE	1.092	1.138	-4.2	91	0.00	5.36- 5.42
16 MA	Dieldrin	1.117	1.135	-1.6	91	0.00	5.75- 5.81
17 MA	Endrin	1.018	1.079	-6.0	94	0.00	6.07- 6.13
18 A	4,4'-DDD	0.854	0.904	-5.9	92	0.00	6.20- 6.26
19 B	Endosulfan II	0.956	0.978	-2.3	92	0.00	6.40- 6.46
20 MA	4,4'-DDT	0.873	0.906	-3.8	91	0.00	6.63- 6.69
21 B	Endrin Aldehyde	0.761	0.806	-5.9	97	0.00	7.04- 7.10
22 B	Endosulfan Sulfate	0.814	0.925	-13.6	105	0.00	7.72- 7.78
23 A	Methoxychlor	0.514	0.496	3.5	88	0.00	7.42- 7.48
24	Mirex	0.911	0.844	7.4	89	0.00	7.57- 7.63
25 B	Endrin Ketone	0.823	1.061	-28.9#	118	0.00	8.17- 8.23
26 SA	Decachlorobiphenyl	1.237	1.167	5.7	94	0.00	9.98-10.04
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	85	0.01	1.23- 2.23
28 L8	Toxaphene{A}			-----NA-----			
29 L8	Toxaphene{B}			-----NA-----			
30 L8	Toxaphene{C}			-----NA-----			
31 L8	Toxaphene{D}			-----NA-----			
32 L8	Toxaphene{E}			-----NA-----			
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	94	0.01	1.23- 2.23
34	Chlordane {A}			-----NA-----			
35	Chlordane {B}			-----NA-----			
36	Chlordane {C}			-----NA-----			
37	Chlordane {D}			-----NA-----			
38	Chlordane {E}			-----NA-----			

10.10.36 10

Continuing Calibration Summary

Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: G8G1775-CC1762
Lab FileID: 8G41557.D

Page 2 of 2

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	78	0.00	1.58- 2.58
2	SAB	Tetrachloro-m-xylene	1.078	0.902	16.3	71	0.00	2.99- 3.05
3		hexachlorobenzene	1.222	1.115	8.8	72	0.00	3.54- 3.60
4	A	alpha-BHC	1.348	1.228	8.9	71	0.00	3.71- 3.77
5	MA	gamma-BHC	1.189	1.101	7.4	72	0.00	4.17- 4.23
6	MA	Heptachlor	1.176	1.035	12.0	71	0.00	4.77- 4.83
7	B	beta-BHC	0.514	0.503	2.1	77	0.00	4.26- 4.32
8	B	delta-BHC	1.045	1.059	-1.3	79	0.00	4.67- 4.73
9	MB	Aldrin	1.082	0.965	10.8	68	0.00	5.23- 5.29
10		alachlor	0.138	0.125	9.4	72	0.00	5.04- 5.10
11	B	Heptachlor Epoxide	1.015	0.930	8.4	73	0.00	6.08- 6.14
12	B	gamma-Chlordane	1.007	0.910	9.6	69	0.00	6.37- 6.43
13	B	alpha-Chlordane	1.027	0.888	13.5	71	0.00	6.60- 6.66
14	A	Endosulfan I	0.944	0.872	7.6	73	0.00	6.69- 6.75
15	B	4,4'-DDE	1.043	0.964	7.6	72	0.00	6.86- 6.92
16	MA	Dieldrin	1.020	0.957	6.2	73	0.00	7.13- 7.19
17	MA	Endrin	0.863	0.862	0.1	76	0.00	7.64- 7.70
18	A	4,4'-DDD	0.846	0.807	4.6	76	0.00	7.82- 7.88
19	B	Endosulfan II	0.834	0.807	3.2	75	0.00	8.00- 8.06
20	MA	4,4'-DDT	0.710	0.743	-4.6	78	0.00	8.36- 8.42
21	B	Endrin Aldehyde	0.639	0.646	-1.1	80	0.00	8.57- 8.63
22	B	Endosulfan Sulfate	0.660	0.734	-11.2	86	0.00	9.05- 9.11
23	A	Methoxychlor	0.334	0.348	-4.2	77	0.00	9.60- 9.66
24		Mirex	0.643	0.555	13.7	70	0.00	9.94-10.00
25	B	Endrin Ketone	0.642	0.776	-20.9#	92	0.00	10.01-10.07
26	SA	Decachlorobiphenyl	0.672	0.593	11.8	74	0.00	12.10-12.16
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	67	0.00	1.58- 2.58
28	L8	Toxaphene{A}			-----NA-----			
29	L8	Toxaphene{B}			-----NA-----			
30	L8	Toxaphene{C}			-----NA-----			
31	L8	Toxaphene{D}			-----NA-----			
32	L8	Toxaphene{E}			-----NA-----			
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	74	0.00	1.58- 2.58
34		Chlordane {A}			-----NA-----			
35		Chlordane {B}			-----NA-----			
36		Chlordane {C}			-----NA-----			
37		Chlordane {D}			-----NA-----			
38		Chlordane {E}			-----NA-----			

(#) = Out of Range
8g41548.d 8pst1762.m

SPCC's out = 0 CCC's out = 0
Thu Feb 24 23:08:30 2022

10.10.36 10

Blank Spike Summary

Page 1 of 1

Job Number: JD39775
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38182-BS1	8G41457.D	1	02/22/22	TL	02/16/22	OP38182	G8G1771

The QC reported here applies to the following samples:

Method: SW846 8081B

JD39775-1, JD39775-2, JD39775-3, JD39775-5, JD39775-6, JD39775-7, JD39775-8, JD39775-10, JD39775-11, JD39775-12, JD39775-13, JD39775-14, JD39775-15, JD39775-16

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
309-00-2	Aldrin	16.7	22.3	134	41-146
319-84-6	alpha-BHC	16.7	20.7	124	39-138
319-85-7	beta-BHC	16.7	23.5	141* a	44-134
319-86-8	delta-BHC	16.7	23.5	141	10-147
58-89-9	gamma-BHC (Lindane)	16.7	21.8	131	42-133
5103-71-9	alpha-Chlordane	16.7	17.2	103	43-140
5103-74-2	gamma-Chlordane	16.7	20.6	124	45-135
60-57-1	Dieldrin	16.7	20.7	124	40-151
72-54-8	4,4'-DDD	16.7	21.2	127	42-133
72-55-9	4,4'-DDE	16.7	22.0	132	43-139
50-29-3	4,4'-DDT	16.7	22.3	134	44-150
72-20-8	Endrin	16.7	24.0	144	43-145
1031-07-8	Endosulfan sulfate	16.7	21.5	129	27-131
7421-93-4	Endrin aldehyde	16.7	19.4	116	34-139
959-98-8	Endosulfan-I	16.7	15.8	95	41-137
33213-65-9	Endosulfan-II	16.7	22.5	135	35-143
76-44-8	Heptachlor	16.7	20.7	124	44-136
1024-57-3	Heptachlor epoxide	16.7	22.1	133	45-138
72-43-5	Methoxychlor	16.7	18.3	110	39-149
53494-70-5	Endrin ketone	16.7	25.8	155* a	41-153

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	126%	14-145%
877-09-8	Tetrachloro-m-xylene	110%	14-145%
2051-24-3	Decachlorobiphenyl	131%	10-197%
2051-24-3	Decachlorobiphenyl	103%	10-197%

(a) High percent recoveries and no associated positive found in the QC batch.

* = Outside of Control Limits.

Surrogate Recovery Summary

Page 1 of 1

Job Number: JD39775
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Method: SW846 8081B

Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b	S2 ^a	S2 ^b
JD39775-1	8G41417.D	116	115	128	121
JD39775-2	8G41465.D	78	74	79	72
JD39775-3	8G41419.D	148* ^c	148* ^c	180	154
JD39775-5	8G41421.D	113	118	146	137
JD39775-6	8G41422.D	114	110	128	122
JD39775-7	8G41423.D	135	132	150	135
JD39775-8	8G41695.D	142	129	157	137
JD39775-10	8G41466.D	130	117	137	109
JD39775-11	8G41427.D	115	109	121	116
JD39775-12	8G41565.D	110	102	117	112
JD39775-13	8G41566.D	123	109	139	135
JD39775-14	8G41454.D	104	93	92	100
JD39775-15	8G41455.D	99	92	121	99
JD39775-16	8G41567.D	249* ^c	182* ^c	247* ^c	216* ^c
OP38182-BS1	8G41457.D	126	110	131	103
OP38182-MB1	8G41415.D	120	106	122	117
OP38182-MB1	8G41463.D	125	116	128	111
OP38182-MS	8G41429.D	96	82	80	119
OP38182-MSD	8G41430.D	100	89	74	136

Surrogate
Compounds

Recovery
Limits

S1 = Tetrachloro-m-xylene

14-145%

S2 = Decachlorobiphenyl

10-197%

(a) Recovery from GC signal #1

(b) Recovery from GC signal #2

(c) High percent recoveries and no positive found in the sample.

10.8.2
10

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD39775
 Account: SESINJPB - SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

QC Batch ID: MP31339
 Matrix Type: SOLID

Methods: SW846 6010D
 Units: ug/l

Prep Date: 02/17/22

Metal	JD39775-3 Original	SDL 1:5	%DIF	QC Limits
Aluminum	136000	142000	4.6	0-10
Antimony	25.4	41.7	64.2 (a)	0-10
Arsenic	31.2	36.7	17.6 (a)	0-10
Barium	740	794	7.5	0-10
Beryllium	7.00	17.7	555.6 (a)	0-10
Bismuth				
Boron				
Cadmium	1.20	16.4	681.0 (a)	0-10
Calcium	13100	14300	7.5	0-10
Chromium	234	244	4.3	0-10
Cobalt	80.6	92.3	20.8* (b)	0-10
Copper	207	228	10.0	0-10
Iron	208000	217000	4.4	0-10
Lead	55.0	71.5	30.0 (a)	0-10
Lithium				
Magnesium	39700	41900	7.2	0-10
Manganese	10700	11700	9.1	0-10
Molybdenum				
Nickel	165	183	10.7* (b)	0-10
Phosphorus				
Potassium	20100	21900	6.6	0-10
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	8.00	0.00	100.0 (a)	0-10
Sodium	2050	2290	11.5* (b)	0-10
Strontium				
Sulfur				
Thallium	7.80	0.00	100.0 (a)	0-10
Tin				
Titanium				
Tungsten				
Vanadium	300	354	8.9	0-10
Zinc	462	476	11.1* (b)	0-10

12.6.4
12

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD39775
 Account: SESINJPB - SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

QC Batch ID: MP31339
 Matrix Type: SOLID

Methods: SW846 6010D
 Units: ug/l

Prep Date: 02/17/22

	JD39775-3	QC
Metal	Original SDL 1:5 %DIF	Limits

Zirconium

Associated samples MP31339: JD39775-1, JD39775-2, JD39775-3, JD39775-5, JD39775-6, JD39775-7, JD39775-8, JD39775-10, JD39775-11, JD39775-12, JD39775-13, JD39775-14, JD39775-15, JD39775-16

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

(b) Serial dilution indicates possible matrix interference.

12.6.4
12

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD39775
 Account: SESINJPB - SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

QC Batch ID: MP31339
 Matrix Type: SOLID

Methods: SW846 6010D
 Units: mg/kg

Prep Date: 02/17/22

Metal	JD39775-3 Original MS		SpikeLot MPSPK2	% Rec	QC Limits
Aluminum	15800	18500	2930	92.2	75-125
Antimony	2.9	114	234	47.4N(a)	75-125
Arsenic	3.6	212	234	88.9	75-125
Barium	85.8	323	234	101.3	75-125
Beryllium	0.81	237	234	101.0	75-125
Bismuth					
Boron					
Cadmium	0.14	211	234	89.9	75-125
Calcium	1520	4430	2930	98.7	75-125
Chromium	27.1	250	234	95.1	75-125
Cobalt	9.4	227	234	93.1	75-125
Copper	24.0	259	234	100.3	75-125
Iron	24100	25100	2930	34.1 (b)	75-125
Lead	6.4	227	234	94.1	75-125
Lithium					
Magnesium	4600	6620	2930	71.0N(a)	75-125
Manganese	1240	1550	234	132.3(b)	75-125
Molybdenum					
Nickel	19.2	242	234	95.1	75-125
Phosphorus					
Potassium	2330	6320	2930	134.5N(a)	75-125
Selenium	0.0	212	234	90.5	75-125
Silicon					
Silver	0.93	29.6	29.3	97.9	75-125
Sodium	238	3110	2930	98.0	75-125
Strontium					
Sulfur					
Thallium	0.90	239	234	101.6	75-125
Tin					
Titanium					
Tungsten					
Vanadium	34.8	260	234	94.9	75-125
Zinc	53.5	267	234	92.7	75-125

12.6.2
12

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD39775
 Account: SESINJPB - SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

QC Batch ID: MP31339
 Matrix Type: SOLID

Methods: SW846 6010D
 Units: mg/kg

Prep Date: 02/17/22

Metal	JD39775-3 Original MS	SpikeLot MPSPK2	% Rec	QC Limits
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Zirconium

Associated samples MP31339: JD39775-1, JD39775-2, JD39775-3, JD39775-5, JD39775-6, JD39775-7, JD39775-8, JD39775-10, JD39775-11, JD39775-12, JD39775-13, JD39775-14, JD39775-15, JD39775-16

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

(b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

12.6.2
12

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD39775
 Account: SESINJPB - SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

QC Batch ID: MP31339
 Matrix Type: SOLID

Methods: SW846 6010D
 Units: mg/kg

Prep Date: 02/17/22

Metal	JD39775-3 Original MSD		Spikelet MPSPK2	% Rec	MSD RPD	QC Limit
Aluminum	15800	18600	2960	94.6	0.5	20
Antimony	2.9	118	237	48.6N(a)	3.4	20
Arsenic	3.6	211	237	87.6	0.5	20
Barium	85.8	325	237	101.1	0.6	20
Beryllium	0.81	241	237	101.7	1.7	20
Bismuth						
Boron						
Cadmium	0.14	214	237	90.3	1.4	20
Calcium	1520	4590	2960	103.1	3.5	20
Chromium	27.1	247	237	92.9	1.2	20
Cobalt	9.4	231	237	93.8	1.7	20
Copper	24.0	257	237	98.4	0.8	20
Iron	24100	25200	2960	37.2 (b)	0.4	20
Lead	6.4	230	237	94.4	1.3	20
Lithium						
Magnesium	4600	6700	2960	73.0N(a)	1.2	20
Manganese	1240	1470	237	97.1	5.3	20
Molybdenum						
Nickel	19.2	245	237	95.4	1.2	20
Phosphorus						
Potassium	2330	6090	2960	125.4N(a)	3.7	20
Selenium	0.0	212	237	89.5	0.0	20
Silicon						
Silver	0.93	29.5	29.6	96.5	0.3	20
Sodium	238	3170	2960	99.1	1.9	20
Strontium						
Sulfur						
Thallium	0.90	239	237	100.6	0.0	20
Tin						
Titanium						
Tungsten						
Vanadium	34.8	262	237	94.7	0.8	20
Zinc	53.5	268	237	92.2	0.4	20

12.6.2
12

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD39775
 Account: SESINJPB - SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

QC Batch ID: MP31339
 Matrix Type: SOLID

Methods: SW846 6010D
 Units: mg/kg

Prep Date: 02/17/22

Metal	JD39775-3 Original MSD	SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
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Zirconium

Associated samples MP31339: JD39775-1, JD39775-2, JD39775-3, JD39775-5, JD39775-6, JD39775-7, JD39775-8, JD39775-10, JD39775-11, JD39775-12, JD39775-13, JD39775-14, JD39775-15, JD39775-16

Results < IDL are shown as zero for calculation purposes

- (*) Outside of QC limits
- (N) Matrix Spike Rec. outside of QC limits
- (anr) Analyte not requested
- (a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- (b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

12.6.2
12

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD39775
Account: SESINJPB - SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Cyanide	GP38568/GN26478	JD39715-2	mg/kg	0.18 U	2.46	1.6	65.0N(a)	75-125%
Cyanide	GP38569/GN26478	JD39775-10	mg/kg	0.0	2.55	1.5	58.8N(a)	75-125%
Cyanide	GP38590/GN26579	JD39783-12	mg/l	0.0	0.083	0.037	44.6N(a)	90-110%

Associated Samples:

Batch GP38568: JD39775-1, JD39775-2, JD39775-3, JD39775-5, JD39775-6, JD39775-7, JD39775-8

Batch GP38569: JD39775-10, JD39775-11, JD39775-12, JD39775-13, JD39775-14, JD39775-15, JD39775-16

Batch GP38590: JD39775-17

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(a) Spike recovery indicates possible matrix interference.

14.3
14

HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

March 17th, 2022

Mr. Jesse Mausner, PG, LSRP, Project Manager
SESI Consulting Engineers
12A Maple Avenue
Pine Brook NJ, 07058

Re: Data Usability Summary Reports and Quality Assurance Validation Analyses for
SGS North America Inc. Project **(SDG) No.: JD39846**

Client Project ID: 11819–1001 Whitlock Avenue, Bronx, NY

Dear Mr. Mausner,

I thank you for your confidence in our data validation services and look forward to the growth of our business relationship. I Have enclosed with this letter the data usability summary reports (DUSRs) and data validation summaries for the above referenced laboratory (SDG) numbers issued by SGS North America Inc.

The overall evaluation of the SDG# JD39846 displays good degree of confidence and acceptance in accordance with the guidelines in the USEPA National Functional Guidelines and the method and QC Criteria specified in NYSDEC ASP Documents except for some qualified results that are identified in the validation summaries based solely on the stated above validation guidance criteria. However, the qualified data (Bias low, Bias High, Unreliable or unusable) may be subject to the user's reconsideration or determination in the circumstances of obtaining additional information that is not contained in the data validation criteria.

If you have any questions or comments regarding any of the attached data usability summary reports and or the data validation summaries, please do not hesitate to contact me at (413) 875-5049 or via email at hanibaltayeh@gmail.com.

Sincerely,



Hanibal C. Tayeh, Ph.D.

Data Validation and Forensic Geochemistry Expert

Files: DUSR-SESI-11819–1001 Whitlock Avenue, Bronx, NY - JD39846

DATA USABILITY SUMMARY REPORT (DUSR)

Site Location: 1001 Whitlock Avenue, Bronx, NY

SGS North America Inc.

Laboratory (SDG) # JD39846

Project No. 11819

Prepared for:

Mr. Jesse Mausner, PG, LSRP, Project Manager

SESI Consulting Engineers

12A Maple Avenue

Pine Brook NJ, 07058

Prepared by:

Hanibal Tayeh, Ph.D.

Data Validation and Forensic Geochemistry Expert

On

March 17th, 2022

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1. GLOSSARY OF ACRONYMS & TERMS

The following acronyms and terms may have been used in the descriptive process of the Organic and Inorganic Data Validation.

Acronyms:

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene (volatile instrument performance check)
BNA	Base/Neutral/Acid
CARD	CLP Analytical Results Database
CCB	Continuing Calibration Blank
CCCs	Calibration Check Compounds
CCS	Contract Compliance Screening
CCV	Continuing Calibration Verification
CF	Calibration Factor
CLP	Contract Laboratory Program
CN	Cyanide
COC	Chain of Custody
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
CSF	Complete SDG File
CV	Cold Vapor
%D	Percent Difference
DAS	Delivery of Analytical Services
DCAA	2,4-Dichlorophenylacetic acid
DCB	Decachlorobiphenyl (Pesticide/PCB/ surrogate compound)
DFTPP	Decafluorotriphenylphosphine (semivolatile instrument performance check)
DSF	Data Summary Form
DVA	Data Validation Assessment
ECD	Electron-Capture Detector
EICP	Extended Ion Current Profile
EPA	United States Environmental Protection Agency
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas Chromatography
GC/EC	Gas Chromatography/Electron Capture
GC/MS	Gas Chromatography/Mass Spectra
GPC	Gel Permeation Chromatography (Clean Up)
ICAL	Initial Calibration
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit

HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

IRDA	Inorganic Regional Data Assessment
IS	Internal Standard
LCS	Laboratory Control Sample
LCL	Lower Control Limit
MCL	Maximum Contamination Level
MDL	Method Detection Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
m/z	The ratio of mass (m) to charge (z) of ions measured by GC/MS
OADS	Organic Analysis Data Sheet (Form 1)
ORDA	Organic Regional Data Assessment
PB	Preparation Blank
PCB	Poly Chlorinated Biphenyl
PEM	Performance Evaluation Mixture
PFAS	Polyfluorinated Alkyl Substances (PFAS analytes are listed below)
PRP	Potential Responsible Party
QA/QC	Quality Assurance/Quality Control
QAPjP	Quality Assurance Project Plan
QC	Quality Control
%R	Percent Recovery of spiked amount
RAS	Routine Analytical Services
RF	Response Factor
RIC	Reconstructed Ion Chromatogram
RPD	Relative Percent Difference
RRF	Relative Response Factor
RSD	Relative Standard Deviation
RT	Retention Time
RTW	Retention Time Window
SDG	Sample Delivery Group
SMC	System Monitoring Compound
SMO	Sample Management Office
SOP	Standard Operation Procedures
SOW	Statement of Work
SPCCs	System Performance Check Compounds
SSL	Samples Shipping Log
SVOA	Semivolatile Organic Analyte
TAL	Target Analyte List
TCL	Target Compound List
TCX	Tetrachloro-m-Xylene (Pesticide/PCB surrogate compound)
TIC	Tentatively Identified Compound
TPH	Total Petroleum Hydrocarbons
TR	Traffic Report
UCL	Upper Control Limit
VOA	Volatile Organic Analyte
VTSR	Validated Time of Sample Receipt

Polyfluorinated Alkyl Substances (PFAS) Acronyms

PFBA	Perfluorobutanoic acid
PFPeA	Perfluoropentanoic acid
PFHxA	Perfluorohexanoic acid
PFHpA	Perfluoroheptanoic acid
PFOA	Perfluorooctanoic acid
PFNA	Perfluorononanoic acid
PFDA	Perfluorodecanoic acid
PFUnA	Perfluoroundecanoic acid
PFDoA	Perfluorododecanoic acid
PFTriA or PFTriDA	Perfluorotridecanoic acid
PFTeA or PFTA	Perfluorotetradecanoic acid
PFBS	Perfluorobutanesulfonic acid
PFPeS	Perfluoropentanesulfonic acid
PFHxS	Perfluorohexanesulfonic acid
PFHpS	Perfluoroheptanesulfonic acid
PFOS	Perfluorooctanesulfonic acid
PFNS	Perfluorononanesulfonic acid
PFDS	Perfluorodecanesulfonic acid
FOSA	Perfluorooctane Sulfonamide
NMeFOSAA	N-methyl perfluorooctane sulfonamidoacetic acid
NEtFOSAA	N-ethyl perfluorooctane sulfonamidoacetic acid
4:2 FTS or 4:2	1H, 1H, 2H, 2H-perfluorohexanesulfonic acid
6:2 FTS or 6:2	1H, 1H, 2H, 2H-perfluorooctanesulfonic acid or 6:2 Fluorotelomersulfonate
8:2 FTS or 8:2	1H, 1H, 2H, 2H-perfluorodecanesulfonic acid or 8:2 Fluorotelomersulfonate

Terms:

Associated Samples: Any sample related to a particular QC analysis.

Case: A finite, usually predetermined number of samples collected over a given time period for a particular site. A Case consists of one or more Sample Delivery Group(s).

Continuing Calibration Blank (CCB): A deionized water sample run every ten (10) samples designed to detect any carryover contamination.

Continuing Calibration Verification (CCV): A deionized water sample run every ten (10) samples designed to detect any carryover contamination.

Contract Compliance Screening (CCS): A process in which the SMO inspects the data for contractual compliance and provides EMSL-LV laboratories and the Regions with their findings.

Contractual Holding Time: The time from VTSR (validated time of sample receipt) to laboratory extraction and /or analysis.

Data Validation Qualifier (DVQ): This refers to the column on the data summary form in which EPA Region III and other qualifiers have been placed by the data validator.

Data Validation Result (DVR): This refers to the column on the data summary form used to report results that have been modified by the data validator. A result in the DVR column that is qualified "U" indicates a modification of the reporting limit.

Field Blank Field blanks are intended to identify contaminants that may have been introduced in the field. Examples are rinsate blank (RB), field blanks (FB) and trip blank (TB).

Field Duplicate: A duplicate sample generated in the field; not in the laboratory.

Initial Calibration (ICAL): The establishment of a calibration curve with the appropriate number of standards and concentration ranges. The calibration curve plots absorbances and/or emissions versus concentration of the standards.

Initial Calibration Blank (ICB): First blank run after the calibration curve.

Initial Calibration Verification (ICV): First standard run after the calibration curve.

Matrix Spike/Matrix Spike Duplicate (MS/MSD): Introduction of a known concentration of a compound into a sample to provide information about the effect of sample matrix on the extraction and/or measurement methodology.

Post Digestion Spike: The addition of known amount of standard after digestion. (Also identified as analytical spike, or spike, for furnace analyses).

Preparation Blank (PB): Blank taken through the digestion process to detect internal laboratory contamination.

Performance Evaluation Mixture: A standard used to verify that the ICAL sequence is stable throughout the GC or GC/MS analyses.

Sample Delivery Group (SDG): Defined by one of the following, whichever occurs first:

- case of sample
- each twenty field samples in a case or
- each 14-day calendar period during which field samples in a case are received, beginning with the receipt of the first sample in the SDG.

Serial Dilution: A sample run at a specific dilution to determine whether any significant chemical or physical interferences exist due to sample matrix effect, for ICP only.

Technical Holding Time: The time from sample collection to laboratory extraction and /or analysis.

2. GLOSSARY OF DATA VALIDATION QUALIFIERS

(Used in the QA/QC Reviews for USEPA Region II)

The qualifiers listed below are used for data usability summary report (DUSR) purposes. However, it is important to note that the data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+	=	Analyte is present. Reported value may be biased high and associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

3. NYS DEC DATA USABILITY SUMMARY PARAMETERS

The parameters listed below are used for data usability summary report (DUSR) evaluation.

<i>Samples Handling and Management</i>
<i>Data Validation References</i>
<i>Laboratory Data Packages</i>
<i>Laboratory Analytical Methods</i>
<i>DATA Usability Assessment Summary</i>

4. DATA VALIDATION SUMMARY PARAMETERS

The parameters listed below are used for data validation evaluation.

	<i>Organic Data</i>	<i>Inorganic Data</i>
<i>Data Completeness</i>	X	X
<i>Holding Time</i>	X	X
<i>Chromatographic Behavior</i>	X	
<i>Compound Identification</i>	X	X
<i>GC/MS Tuning and Mass Calibration</i>	X	
<i>Initial Calibration Verification</i>	X	X
<i>Continuing Calibration</i>	X	X
<i>Method Blank Verification</i>	X	X
<i>Internal Standard Area Summary</i>	X	
<i>Surrogate Recoveries</i>	X	
<i>Matrix Spike/Matrix Spike Duplicate</i>	X	X
<i>Laboratory Control Sample (LCS)</i>	X	X
<i>Laboratory and Field Duplicates</i>	X	X
<i>ICP Interference Check Sample results</i>		X
<i>ICP Serial Dilution results</i>		X
<i>ICP CRDL Standard</i>		X
<i>Post Digestion Spike Analysis</i>		X
<i>Analyte Quantitation</i>		X

5. DATA VALIDATION ACTIVE STANDARD OPERATING PROCEDURES (SOPs)

Region 2 Quality Assurance Guidance and Standard Operating Procedures

<https://www.epa.gov/quality/region-2-quality-assurance-guidance-and-standard-operating-procedures>

Inorganic Validation SOPs

SOP #	Description	Date
SOP HW-3a ICP-AES Rev1 w/CRF	CLP ISM02.2 ICP-AES	September 2016
SOP HW-3b ICP-MS Rev1 w/CRF	CLP ISM02.2 ICP-MS	September 2016
SOP HW-3c Hg & CN Rev1 w/CRF	CLP ISM02.2 Mercury and Cyanide	September 2016

Organic Validation SOPs - CLP

SOP #	Description	Date
SOP HW-33A Low Medium VOA Rev 1 w/CRF	EPA CLP Method SOM02.2 for Low/Medium VOA	September 2016
SOP HW-34A Trace VOA Rev1 w/CRF	EPA CLP Method SOM02.2 for Trace VOA	September 2016
SOP HW-35A Rev1 w/CRF	EPA CLP Method SOM02.2 for Semi-Volatiles	September 2016
SOP HW-36A Rev 1 w/CRF	EPA CLP Method SOM02.2 for Pesticides	October 2016
SOP HW-37A Rev 0 w/CRF	EPA CLP Method SOM02.2 for PCBs Aroclor	June 2015

Organic Validation SOPs – Other

SOP #	Description	Date
SOP HW-11 Rev 3	SW-846 Method 8280 for Polychlorinated Dibenzodioxins/Polychlorinated Dibenzofurans	December 2010
SOP HW-16 Rev. 2.1	SW-846 Method 8330A Nitroaromatics and Nitroamines by HPLC	December 2010
SOP HW-17 Rev.3.1	SW-846 Method 8151A for Chlorinated Herbicides by GC	December 2010
SOP HW-19 Rev. 1.1	SW-846 Method 8290 for Polychlorinated dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by HRMS	December 2010
SOP HW-22 Rev. 5	SW-846 Method 8270D for Semivolatile Organic Compounds by GC/MS	December 2010
SOP HW-25 Rev. 3	EPA Method 1613, Revision B Tetra-through Octa-chlorinated Dioxins and Furans by Isotope Dilution by HRGC/HRMS	December 2010
SOP HWSS 24 Rev. 4	SW-846 Methods 8260B & 8260C for VOCs by GC/MS	October 2014
SOP HW-29 Rev. 2	EPA Method 524.2 for Purgeable Organic Compounds in Water by GC/MS	November 2010
SOP HW-31 Rev. 6	TO-15 Air Analysis for VOCs	September 2016
SOP HW-44 Rev. 1.1	SW-846 Method 8081B for Pesticide Compounds Organochlorine Pesticides by GC	December 2010
SOP HW-46 Rev. 1	EPA Method 1668 A for Chlorinated Biphenyl Congeners and EPA Non-RAS CBC01.0	September 2008

SOP HW-55 Rev. 2 w/CRF	EPA Non-RAS DLM02.0 for Tetra -through Octa-Chlorinated Dioxins and Furans by Isotope Dilution	December 2008
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6. DATA VALIDATION REPORT NARRATIVE

NYS DEC Data Usability Summary Report	SDG # JD39846
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NYS DEC Data Usability Summary Report

SDG # JD39846

Site Location	1001 Whitlock Avenue, Bronx, NY
Data Validation for Analytical Methods	Volatile Organic (EPA 8260D); Semi-Volatile (SW846 8270E), Pesticides (SW846 8081B), PCBs (SW846 8082A), TAL Metals (SW846 6010D, 7471B), PFAS (EPA 537M), Cyanide (SW846 9012B)
Number of Samples & Matrix	11 Soil Samples, 1 Duplicate Soil Sample, 1 Field Blank
Sampled On	02/16/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39846 (-1, -2, -3, -4, -5, -6, -7, -8, -9, -10, -11, -12, -13)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 17 th , 2022

• SAMPLE HANDLING AND MANAGEMENT

As per the chain of custody (COC) record included in this specific SDG, samples associated with this data set were collected on February 16th, 2022, using the proper containers in accordance with the Sample Integrity and Preservation section of the stated above USEPA method and received by the laboratory on February 16th, 2022. The attached chain of custody (COC) displays a satisfactory record in terms of client and project information, site location, field sampling details (sampler, collection date and time), sample identification and matrix, preservation, required analysis, deliverable type and date, data management process and comparison.

Client Sample Identification	Laboratory Sample Identification
RI-SB7 (4.5-5')	JD39846-1
RI-SB7 (9.5-10')	JD39846-2
RI-SB7 (14.5-15')	JD39846-3
RI-SB7 (16.5-17')	JD39846-4
RI-SB8 (4.5-5')	JD39846-5
RI-SB8 (9.5-10')	JD39846-6
RI-SB8 (12.5-13')	JD39846-7
DUP-2	JD39846-8
RI-SB9 (4.5-5')	JD39846-9
RI-SB9 (9.5-10')	JD39846-10
RI-SB9 (14.5-15')	JD39846-11
RI-SB9 (19.5-20')	JD39846-12
FIELD BLANK	JD39846-13

- **DATA VALIDATION REFERENCES**

The organic data validation is conducted in accordance with the guidelines in the USEPA National Functional Guidelines for Organic Data Review and the USEPA Region II SOP HW-6-CLP Organic Data Review Preliminary review and the method and QC Criteria specified in NYSDEC ASP Documents.

The inorganic data validation is conducted in accordance with the guidelines in the USEPA National Functional Guidelines for Inorganic Data Review and the USEPA Region II SOP HW-2, Evaluation of Metals Data for the Contract Laboratory Program based on ILM05.3 and the method and QC Criteria specified in NYSDEC ASP Documents.

- **LABORATORY DATA PACKAGES**

The laboratory data packages for the stated SDG above is considered satisfactory in terms of pagination, quality control narration and completeness. Each package contained the laboratory quality assurance summary report, quality control summary data, sample nonconformance summaries, the required data package forms and tables in accordance with NYSDEC ASP documents, instrument tuning information, sample preparation and analysis batch and all associated standard, quality control and sample raw data.

- **LABORATORY ANALYTICAL METHODS**

A peer review of the quality assurance criteria listed in the laboratory data package shows with good degree of certainty the laboratory's compliance with the procedures set forth in the required USEPA analytical methods as indicated in the chain of custody. No deviations from the said methods have been noticed.

- **DATA USABILITY ASSESSMENT SUMMARY**

The overall data package assessment provided by the laboratory for the stated above sample delivery group (SDG) suggests acceptable laboratory performances of the required methods. All samples were successfully analyzed for all target compounds in accordance with the Quality Assurance/Quality Control (QA/QC) requirements for the USEPA analytical methods used for the analyses. In view of the data usability and completeness, the minor issues listed below regarding biases identified during data validation should be taken into high degree of consideration. They are as follows:

✓ **Volatile Organic Compounds – SW846 8260D Method**

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
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1	-Detected results of Bromomethane, Acrolein, Acrylonitrile, 2,2-Dichloropropane, tert-Butyl Formate, Isobutyl Alcohol, 2-Nitropropane, in the associated samples, JD39846 (-1, -2, -3, -5, -6, -7, -8, -9, 10), should be qualified estimated (J). -Detected results of Ethanol, 1,4-Dioxane, Dichlorodifluoromethane, Bromomethane, Hexane, Acrylonitrile, tert-Butyl Formate, Isobutyl Alcohol, 2-Nitropropane, in the associated sample, JD39846-11, should be qualified estimated (J). -Detected results of 1,4-Dioxane, Dichlorodifluoromethane, Bromomethane, Chloroethane, Tetrahydrofuran, 2-Nitropropane, Epichlorohydrin, trans-1,4-dichloro-2-butene, 2-Methylnaphthalene, in the associated sample, JD39846-13, should be qualified estimated (J).	CCV
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✓ Semi-Volatile Organic Compounds – SW846 8270E Method

	Data Assessment Judgement (Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)	DVA Reference
1	-Detected results of Pentachloronitrobenzene, 4,4-Methylene-bis-(2-chloroaniline), N-Nitrosopyrrolidine, in sample, JD39846-13/FIELD BLANK, should be considered Estimated (J). -Detected results of Pentachloronitrobenzene, in samples JD39846 (-1, -2, -3, -5, -6, -7, -8, -9, 10, 11), should be considered Estimated (J).	ICV
2	-Detected results of N-Nitrosopyrrolidine, p-Phenylenediamine, Aramite, Kepone, 4,4-Methylene-bis-(2-chloroaniline), in sample JD39846-13/FIELD BLANK, should be considered Estimated (J). -Detected results of Benzoic Acid, 2,4-Dinitrotoluene, 4-Nitroaniline, Caprolactam, in samples JD39846 (-1, -2, -3, -5, -6, -7, -8, -9, 10, 11), should be considered Estimated (J).	CCV
3	-Detected results of Hexachlorocyclopentadiene, in sample JD39846-13/FIELD BLANK, should be qualified Estimated Bias-Low (J-). -Non-Detected results of Hexachlorocyclopentadiene, in sample JD39846-13/FIELD BLANK, should be qualified Estimated (UJ).	LCS
4	-Detected results of Benzo(a)anthracene, Chrysene, Fluoranthene, Phenanthrene, Pyrene, in samples DUP-2/JD39846-8, RI-SB8(4.5-5'')/JD39846-5, should be qualified Estimated (J).	DUP

✓ Pesticides - SW846 8081B Method

	Data Assessment Judgement (Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)	DVA Reference
1	Data set was in compliance with the method quality control requirements.	ALL

✓ **Polychlorinated Biphenyls (PCBs) – SW846 8082A Method**

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	Data set was in compliance with the method quality control requirements.	ALL

✓ **PFAS-NYSDEC Target List - EPA 537M Method**

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detected results of MeFOSAA, in samples JD39846 (-3A, -5A, -7A) , should be qualified Estimated Bias Low (J-). -Non-Detected results of MeFOSAA, in samples JD39846 (-3A, -5A, -7A) , should be qualified Estimated (UJ). -Detected results of EtFOSAA, in sample JD39846 (-3A, -7A) , should be qualified Estimated Bias Low (J-). -Non-Detected results of EtFOSAA, in sample JD39846 (-3A, -7A) , should be qualified Estimated (UJ).	SR

✓ **TAL Metals - SW846 6010D, 7471B Methods**

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detected results of Antimony, in sample JD39846-3 , should be qualified Estimated Bias-Low (J-). -Non-Detected results of Antimony, in sample JD39846-3 , should be qualified Estimated (UJ). -Detected results of Aluminum, Manganese, in sample JD39846-3 , should be qualified Estimated Bias High (J+).	SSR
2	-Detected results of Cobalt, Copper, Lead, Magnesium, Nickel, Potassium, Zinc, in samples RI-SB8 (4.5-5')/JD39846-5, DUP-2/JD39846-8, should be qualified Estimated (J).	DUP

✓ **Cyanide - SW846 9012B Method**

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detected results of Cyanide in sample JD39846-11 , should be qualified Estimated Bias-Low (J-). -Non-Detected results of Cyanide in sample JD39846-11 , should be qualified Estimated (UJ).	MS/MSD

Data Validation Assessment

SDG # JD39846

Data Validation for Analytical Method	Volatile Organic Compounds (SW846 8260D Method)
Number of Samples & Matrix	11 Soil Samples, 1 Duplicate Soil Sample, 1 Field Blank
Sampled On	02/16/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39846 (-1, -2, -3, -4, -5, -6, -7, -8, -9 -10-11-12-13)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 17 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time (HOLDT):** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms), display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph/mass spectrometry (GCMS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **GC/MS Tuning and Mass Calibration:** The standard tuning criteria were within control limits as outlined in the EPA and SW846 methods.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs) and Percent Relative Standard Deviation (%RSDs) and in some cases the coefficient of determination COD: (Average RRFs must be greater than the required values and at least greater than 0.01 for all target compounds and >0.001 for 1,4 Dioxane, %RSD must be less than 20%, and the coefficient of determination (COD) must be greater than 0.995). This evaluation displays the following:

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-In the initial calibration reference sample: V3C7629-ICC7629 analyzed on 02/04/2022, both the average RRFs, %RSDs and the coefficient of determination (COD), for all target compounds were in compliance with the method calibration criteria.

-In the initial calibration reference sample: VA10542-ICC10542 analyzed on 01/28/2022, both the average RRFs and %RSDs for all target compounds were in compliance with the method calibration criteria.

No action is required when less than 20% of the continuing calibration target compounds are outside the method control limits provide no Average Relative Response Factor (RRFs) is less than 0.01 for all target compounds.

Quality Judgement: No actions are required.

• **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for the required frequency, Relative Response Factor (RRFs) and Percent Difference (%Ds). This evaluation displays the following:

-The continuing calibration reference sample: V3C7643-CC7629, analyzed on 02/17/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT for Bromomethane, Acrolein, Acrylonitrile, 2,2-Dichloropropane, tert-Butyl Formate, Isobutyl Alcohol, 2-Nitropropane, Where %Ds were above the method allowable maximums.

-The continuing calibration reference sample: V3C7644-CC7629, analyzed on 02/18/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT for Ethanol, 1,4-Dioxane, Dichlorodifluoromethane, Bromomethane, Hexane, Acrylonitrile, tert-Butyl Formate, Isobutyl Alcohol, 2-Nitropropane, Where %Ds were above the method allowable maximums.

-The continuing calibration reference Sample: VA10562-CC10542 analyzed on 02/18/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT for 1,4-Dioxane, Dichlorodifluoromethane, Bromomethane, Chloroethane, Tetrahydrofuran, 2-Nitropropane, Epichlorohydrin, trans-1,4-dichloro-2-butene, 2-Methylnaphthalene, where %Ds were above the method allowable maximums.

No action is required when less than 20% of the continuing calibration target compounds are outside the method control limits provide no Average Relative Response Factor (RRFs) is less than 0.01 for all target compounds.

Quality Judgement:

-Detected results of Bromomethane, Acrolein, Acrylonitrile, 2,2-Dichloropropane, tert-Butyl Formate, Isobutyl Alcohol, 2-Nitropropane, in the associated samples, JD39846 (-1, -2, -3, -5, -6, -7, -8, -9, 10, 11), should be qualified estimated (J).

-Detected results of Ethanol, 1,4-Dioxane, Dichlorodifluoromethane, Bromomethane, Hexane, Acrylonitrile, tert-Butyl Formate, Isobutyl Alcohol, 2-Nitropropane, in the associated samples, JD39846-11, should be qualified estimated (J).

-Detected results of 1,4-Dioxane, Dichlorodifluoromethane, Bromomethane, Chloroethane, Tetrahydrofuran, 2-Nitropropane, Epichlorohydrin, trans-1,4-dichloro-2-butene, 2-Methylnaphthalene, in the associated samples, JD399846-13, should be qualified estimated (J).

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- **Method Blank Verification (BLK):** Method blank analyses included in this data set of laboratory data package concluded no detection for the target compounds in lab sample reference: V3C7643-MB, on 02/17/2022, and VA10562-MB, V3C7644-MB, on 02/18/2022.

Quality Judgement: No actions are required.

- **Internal Standard Area Summary (IS):** As indicated in the method internal standard criteria, the laboratory data package for the stated SDG confirmed the following:
 - The internal standard retention times were within method control limits.
 - The internal standard areas were within method control limits.

- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries were within method control limits for all samples.

Quality Judgement: No actions are required.

- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes (Percent Recoveries: %Rs and Relative Percent Difference: %RPDs). The following summarizes this evaluation:
 - In LCS ID# V3C7643-BS, on 02/17/2022, VA10562-BS, V3C7644-BS, on 02/18/2022, %Rs for all target volatile compounds were within the method control limits.

Quality Judgement: No actions are required.

- **Laboratory and Field Duplicates (DUP):** According to both the chain of custody record, and the data set provided by the laboratory, a laboratory duplicate sample was analyzed from unrelated sample. A field duplicate sample (DUP-2/JD39846-08) was collected and analyzed in this samples set. The following summarizes this evaluation:
 - Few laboratory duplicate samples were analyzed in this data set using unrelated samples.
 - A field duplicate sample (DUP-2/JD39846-8), included in this samples set, was originated from RI-SB8 (4.5-5')/JD39846-5. The following summarizes this evaluation:

	Detected Compounds	DUP-2 JD39846-8 ug/kg	RI-SB8(4.5-5') JD39846-5 ug/kg	%RPDs
1	Target VOCs	ND	ND	NC

NC = Value is not calculated due to low initial sample concentration.

%RPDs was below the allowable maximum.

Quality Judgement: No actions are required.

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** As required by the method quality assurance/quality control criteria, the matrix spike and matrix spike duplicate in a designated sample listed in this data set has been evaluated for method compliance purposes. The following summarizes this evaluation:

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-Few matrix spike processes were analyzed in this data set using unrelated samples.
Quality Judgement: No Actions are required.

- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD39846

Data Validation for Analytical Method	Semi-Volatile Organic Compounds (SW846 8270E Method)
Number of Samples & Matrix	11 Soil Samples, 1 Duplicate Soil Sample, 1 Field Blank
Sampled On	02/16/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39846 (-1, -2, -3, -4, -5, -6, -7, -8, -9 -10-11-12-13)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 17 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph/mass spectrometry (GCMS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **GC/MS Tuning and Mass Calibration:** The DFTPP tuning criteria were within control limits as outlined in the EPA and SW846 methods.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs) and Percent Relative Standard Deviation (%RSDs) and in some cases the coefficient of determination COD: (In general, Average RRFs must be greater than the required values as defined by EPA/SW846 Method. %RSD must be less than 20%, and the coefficient of determination (COD) must be greater than 0.995). This evaluation displays the following:
-In the initial calibration of EP6741-ICC6741 on 12/03/2021, Average RRFs were above the allowable minimum as required by the method. %RSDs were below the method

allowable maximum (20%). The coefficient of determination (COD) was greater than 0.995.

-In the initial calibration of EP6785-ICC6785 on 01/20/2022, Average RRFs were above the allowable minimum as required by the method, EXCEPT for Pentachloronitrobenzene, 4,4-Methylene-bis-(2-chloroaniline), where average RRFs were below the allowable minimum. %RSDs for N-Nitrosopyrrolidine, was above the method allowable maximum (20%). The coefficient of determination (COD) was greater than 0.995.

-In the initial calibration of EZ7699-ICC7699 on 02/10/2022, Average RRFs were above the allowable minimum as required by the method, EXCEPT for Pentachloronitrobenzene, where average RRFs was below the allowable minimum. %RSDs were below the method allowable maximum (20%). The coefficient of determination (COD) was greater than 0.995.

Quality Judgement:

-Detected results of Pentachloronitrobenzene, 4,4-Methylene-bis-(2-chloroaniline), N-Nitrosopyrrolidine, in sample JD39846-13/FIELD BLANK, should be considered Estimated (J).

-Detected results of Pentachloronitrobenzene, in samples JD39846 (-1, -2, -3, -5, -6, -7, -8, -9, 10, 11), should be considered Estimated (J).

- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds) and confirmed the following:

-The continuing calibration (Sample: EP6813-CC6741 on 02/19/2022), The RRFs for target compounds were above the minimum values set by the method. %Ds were below the allowable maximums.

-The continuing calibration (Sample: EP6813-CC6742 on 02/19/2022), The RRFs for target compounds were above the minimum values set by the method. %Ds were below the allowable maximums.

-The continuing calibration (Sample: EP6813-CC6785, on 02/19/2022), The RRFs for target compounds were above the minimum values set by the method. %Ds for N-Nitrosopyrrolidine, p-Phenylenediamine, Aramite, Kepone, 4,4-Methylene-bis-(2-chloroaniline), were above the allowable maximums.

-The continuing calibration (Sample: EZ7709-CC7699, on 02/21/2022), The RRFs for target compounds were above the minimum values set by the method. %Ds for Benzoic Acid, 2,4-Dinitrotoluene, 4-Nitroaniline, were above the allowable maximums.

-The continuing calibration (Sample: EZ7709-CC7700, on 02/21/2022), The RRFs for target compounds were above the minimum values set by the method. %Ds for Caprolactam, was above the allowable maximums.

No action is required when less than 20% of the target compounds do not meet the method control limits provide no Relative Response Factor (RRFs) is less than 0.01 for all target compounds as the allowable minimum.

Quality Judgement:

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-Detected results of N-Nitrosopyrrolidine, p-Phenylenediamine, Aramite, Kepone, 4,4-Methylene-bis-(2-chloroaniline), in sample JD39846-13/FIELD BLANK, should be considered Estimated (J).

-Detected results of Benzoic Acid, 2,4-Dinitrotoluene, 4-Nitroaniline, Caprolactam, in samples JD39846 (-1, -2, -3, -5, -6, -7, -8, -9, 10, 11), should be considered Estimated (J).

- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target compounds at the method reporting limits, in: OP38217-MB1, on 02/19/2022, OP38200-MB1 on 02/21/2022.
Quality Judgement: No actions are required.
- **Internal Standard Area Summary (IS):** As indicated in the method internal standard criteria, the laboratory data package for the stated SDG confirmed the following:
 - The internal standard retention times were within method control limits.
 - The internal standard areas were within method control limits.
- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries were within method control limits for all samples.
Quality Judgement: No actions are required.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:
 - In OP38200-BS1, Percent recoveries (%Rs) for all target compounds were within method control limits.
 - In OP38217-BS1, Percent recoveries (%Rs) for all target compounds were within method control limits, EXCEPT for Hexachlorocyclopentadiene, where %Rs below method control limits.
 - In OP38217-BSD, Percent recoveries (%Rs) for all target compounds were within method control limits, EXCEPT for Hexachlorocyclopentadiene, where %Rs below method control limits. %RPDs were below the allowable maximum.Quality Judgement:
 - Detected results of Hexachlorocyclopentadiene, in sample JD39846-13/FIELD BLANK, should be qualified Estimated Bias-Low (J-).
 - Non-Detected results of Hexachlorocyclopentadiene, in sample JD39846-13/FIELD BLANK, should be qualified Estimated (UJ).
- **Laboratory and Field Duplicates (DUP):** According to both the chain of custody record, and the data set provided by the laboratory, a laboratory duplicate sample wasn't analyzed from this samples set.
 - A field duplicate sample (DUP-2/JD39846-8), included in this samples set, was originated from RI-SB8 (4.5-5')/JD39846-5. The following summarizes this evaluation:

	Detected Compounds	DUP-2 JD39846-8 ug/kg	RI-SB8(4.5-5') JD39846-5 ug/kg	%RPDs
1	Benzo(a)anthracene	49.7	75.6	41
2	Benzo(a)pyrene	63.6	78.2	21
3	Benzo(b)fluoranthene	81.1	97.2	18
4	Benzo(g,h,i)perylene	55.9	55.7	0.4
5	Benzo(k)fluoranthene	30.4	36.5	18
6	Chrysene	59.6	87.2	38
7	Fluoranthene	74.2	135	58
8	Indeno(1,2,3-cd)pyrene	66.1	65.5	0.9
9	Phenanthrene	37.8	71.8	62
10	Pyrene	69.9	130	60

NC = Value is not calculated due to low initial sample concentration.

%RPDs of Benzo(a)anthracene, Chrysene, Fluoranthene, Phenanthrene, Pyrene, were above the allowable maximum.

Quality Judgement:

-Detected results of Benzo(a)anthracene, Chrysene, Fluoranthene, Phenanthrene, Pyrene, in samples DUP-2/JD39846-8, RI-SB8(4.5-5')/JD39846-5, should be qualified Estimated (J).

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** No Matrix spike/Matrix spike duplicate were performed from this samples set. However, laboratory provided a selected matrix spike and matrix spike duplicate data from unrelated samples.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD39846

Data Validation for Analytical Method	Pesticides (SW846 8081B Method)
Number of Samples & Matrix	11 Soil Samples, 1 Duplicate Soil Sample, 1 Field Blank
Sampled On	02/16/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39846 (-1, -2, -3, -4, -5, -6, -7, -8, -9 -10-11-12-13)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 17 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph (GC) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards used in this data set has been evaluated for compliance with method criteria for Percent Relative Standard Deviation %RSDs (<20%):
 - In the initial calibration sample reference: Sample:G1G5985-ICC5985 on 01/24/2022, %RSDs for pesticides target compounds, were below the allowable maximum.
Quality Judgement: No actions are required.
- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Percent Difference (%Ds <20%):

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-In continuing calibration (G1G6028-CC5985, G1G6029-CC5985, on 02/23/2022, G1G6033-CC5985 on 02/25/2022), %Ds for all pesticides target compounds were below the allowable maximums.

-In continuing calibration (G1G6034-CC5985 on 02/25/2022), %Ds for all pesticides target compounds were below the allowable maximums, EXCEPT for Heptachlor Epoxide, Decachlorobiphenyl (1st, column only), where %Ds were above the allowable maximum.

Quality Judgement: No actions are required as long a valid column is used for quantitation.

- **DDT/Endrin Breakdown Check (DDT/Endrin Check):** Per method requirements, the percent breakdowns were below the allowable maximum (20% for DDT & Endrin).
- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target pesticide compounds in OP38204-MB1 on 02/23/2022, OP38208A-MB1 analyzed on 02/24/2022.
- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries of all samples were within method control limits.
Quality Judgement: No actions are required as long a valid column is used for quantitation.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:
-In LCS (OP38204-BS1, OP38204-BS1 a, OP38208A-BS1, OP38208A-BSD), %Rs were within the method control limits. %RPDs were below the allowable maximum.
Quality Judgement: No actions are required as long a valid column is used for quantitation.
- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** No Matrix spike/Matrix spike duplicate were performed from this samples set. However, laboratory provided a selected matrix spike and matrix spike duplicate data from unrelated samples.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD39846

Data Validation for Analytical Method	Polychlorinated Biphenyls (PCBs) – SW846 8082A Method
Number of Samples & Matrix	11 Soil Samples, 1 Duplicate Soil Sample, 1 Field Blank
Sampled On	02/16/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39846 (-1, -2, -3, -4, -5, -6, -7, -8, -9 -10-11-12-13)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 17 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph (GC) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards used in this data set has been evaluated for compliance with method criteria for Average Relative Standard Deviation %RSDs (<20%):
-In the initial calibration of GRK194-ICC194 on 02/03/2022, GXX7733-ICC7733 on 02/21/2022, %RSDs all Aroclor target compounds were below the allowable maximum.
Quality Judgement: No actions are required as long a valid column is used for quantitation.
- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Percent Difference (%Ds <20%):

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-In the continuing calibration reference ID: GRK212-CC194 on 02/22/2022, GRK212-CC194, GXX7736-CC7733 on 02/23/2022, The overall %Ds for all Aroclor target compounds were below the allowable maximums.

Quality Judgement: No actions are required as long a valid column is used for quantitation.

- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target Aroclor compounds in OP38205-MB1 analyzed on 02/22/2022.
- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries of all samples were within method control limits.
Quality Judgement: No actions are required as long a valid column is used for quantitation.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:
 - In LCS (OP38205-BS1), %Rs for Aroclor 1016, Aroclor 1260 were within method control limits.
 - In LCS (OP38209-BS1), %Rs for Aroclor 1016, Aroclor 1260 were within method control limits.
 - In LCSDUP (OP38209-BSD), %Rs for Aroclor 1016, Aroclor 1260 were within method control limits. %RPDs were below the allowable maximum.Quality Judgement: No actions are required.
- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** No Matrix spike/Matrix spike duplicate were performed from this samples set. However, laboratory provided a selected matrix spike and matrix spike duplicate data from unrelated samples.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD39846

Data Validation for Analytical Method	PFAS-NYSDEC Target List (EPA 537M Method)
Number of Samples & Matrix	9 Soil Samples, 1 Duplicate Soil Sample, 1 Field Blank
Sampled On	02/16/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39846 (-1, -2, -3, -4, -5, -6, -7, -8, -9 -10-11-12-13)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 17 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time (HOLDT):** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the LC/TANDEM Mass Spectrometer (LC/MS/MS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs), Percent Relative Standard Deviation for both internal standard and external standard criteria (%RSDs <50%), and in some cases the coefficient of determination COD (>0.995). This evaluation displays the following:
-The initial calibration methods used in this data set, sample reference ID: S3Q762-ICC762, on 02/25/2022, S3Q765-ICC765 on 02/28/2022, display an acceptable performance and compliance with the method criteria listed above.
Quality Judgement: No actions are required.
- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for

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compliance with method criteria for all target PFAS compounds: Required frequency (one per ten field samples), Percent Difference (%Ds < 50%), and or for Percent Recovery (70<%Rs<130). This evaluation displays the following:

-In continuing calibration laboratory reference ID: Lab FileID: 3Q55182.D, Lab FileID: 3Q55183.D, Lab FileID: 3Q55194.D, Lab FileID: 3Q55206.D, Lab FileID: 3Q55218.D, Lab FileID: 3Q55220.D, Lab FileID: 3Q55231.D, Lab FileID: 3Q55424.D, Lab FileID: 3Q55425.D, Lab FileID: 3Q55431.D, Lab FileID: 3Q55491.D, Lab FileID: 3Q55492.D, Lab FileID: 3Q55503.D, Lab FileID: 3Q55515.D, Lab FileID: 3Q55517.D, Lab FileID: 3Q55528.D, %Ds for target PFAS compounds below the allowable maximum.

Quality Judgement: No actions are required.

- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target compounds above both the MDL and the RL in S3Q762-IBLK, on 02/25/2022, OP89877-MB, S3Q766-IBLK, on 02/26/2022, OP89889-MB, on 03/01/2022.

Quality Judgement: No actions are required.

- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior (Isotope Dilution Analyte (IDA) Recovery must be > 10% for Data acceptance, 50<%Rs<150; 25<%Rs<150 for poor response analytes), in the SDG data set displays the following:
 - Isotope Dilution Standard Recoveries (%Rs) in all samples of this set, were within the method control limits, EXCEPT in:
 - %Rs of d3-MeFOSAA, d5-EtFOSAA, in Sample JD39846-3A, JD39846-7A were below control limits.
 - %Rs of d3-MeFOSAA, in Sample JD39846-5A was below control limits.

Quality Judgement:

-Detected results of MeFOSAA, in samples JD39846 (-3A, -5A, -7A), should be qualified Estimated Bias Low (J-).

-Non-Detected results of MeFOSAA, in samples JD39846-(-3A, -5A, -7A), should be qualified Estimated (UJ).

-Detected results of EtFOSAA, in sample JD39846-(-3A, -7A), should be qualified Estimated Bias Low (J-).

-Non-Detected results of EtFOSAA, in sample JD39846-(-3A, -7A), should be qualified Estimated (UJ).

- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:

-In LCS OP89877-BS/3Q55212.D, OP89889-BS/3Q55493.D, %Rs were within the method control limits.

Quality Judgement: No actions are required.

- **Secondary Ion Transition Monitoring (SITM):** Quantifier and qualifier ions have been monitored for all target PFAS analytes (PFBA and PFPeA are exceptions). The

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laboratory derived criteria have been used to determine if the ratios are acceptable. (If the ratios fall outside of the laboratory criteria, results will be qualified as an estimated maximum concentration).

-No forms or data were provided.

- **Laboratory and Field Duplicates (DUP):** Laboratory duplicate from this samples set wasn't analyzed. However, laboratory provided a selected duplicate data from unrelated samples.

-A field duplicate sample (DUP-2/JD39846-8A), included in this samples set, was originated from RI-SB8 (4.5-5')/JD39846-5A. The following summarizes this evaluation:

	Detected Compounds	DUP-2 JD39846-8A ug/kg	RI-SB8(4.5-5') JD39846-5A ug/kg	%RPDs
1	Perfluorooctanesulfonic acid	0.55 J	0.29 J	NC

NC = Value is not calculated due to low initial sample concentration.

%RPDs is not calculated.

Quality Judgement: No actions are required.

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** No Matrix spike/Matrix spike duplicate were performed from this samples set. However, laboratory provided a selected matrix spike and matrix spike duplicate data from unrelated samples.

Quality Judgement: No actions are required.

- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD39846

Data Validation for Analytical Method	TAL Metals (SW846 6010D, 7471B Methods)
Number of Samples & Matrix	11 Soil Samples, 1 Duplicate Soil Sample, 1 Field Blank
Sampled On	02/16/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39846 (-1, -2, -3, -4, -5, -6, -7, -8, -9 -10-11-12-13)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 17 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were digested and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Initial and Continuing Calibration Verification (ICCV):** As indicated in the method calibration criteria, the initial calibration standards used in this data set has been evaluated for compliance with method criteria for Percent Recoveries (%Rs):
 - In File ID: SC021822M2.ICP, analyzed on 02/18/2022, %Rs for Total metals (EPA 6010D) in all ICVs and CCVs were within method control limits.
 - In File ID: SC022122M1.ICP, analyzed on 02/21/2022, %Rs for Total metals (EPA 6010D) in all ICVs and CCVs were within method control limits.Quality Judgement: No actions are required.
- **CRDL Standard (CRDL):** As indicated in the method calibration criteria, the CRDL standards of this data set have been evaluated for compliance with method criteria for Percent Recoveries (%Rs) for target metals elements:
 - In File ID: SD021722M2.ICP (LOW CALIBRATION CHECK STANDARDS-EPA 6010D), %Rs for total target metals were within method control limits (70-130%).
 - In File ID: SC021822M1.ICP (LOW CALIBRATION CHECK STANDARDS-EPA 6010D), %Rs for total target metals were within method control limits (70-130%).Quality Judgement: No actions are required.
- **Method Blank Verification:** Method blank analyses included in this data set has been evaluated to ensure target metals were reported below CRDL:
 - In File ID: SC021822M2.ICP, File ID: SC022122M1.ICP, all quality control blanks (ICBs, CCBs) were below RL as required by EPA 6010D, 7473 Methods.Quality Judgement: No actions are required.

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- **ICP Interference Check Sample (ICPINTERF):** An evaluation of the Interference Check Sample has been evaluated for percent recoveries (%Rs) compliance with methods criteria (80-120%):
 - File ID: SC021822M2.ICP, %Rs for target metals (EPA 6010D), were within the method control limits.
 - File ID: SD021822M1.ICP, %Rs for target metals (EPA 6010D), were within the method control limits.Quality Judgement: No actions are required.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes (%Rs within control limits). The following summarizes this evaluation:
 - In LCS QC Batch ID: MP31363, QC Batch ID: MP31357, on 02/18/2022, (EPA 6010D) for total metals, %Rs were within the method control limits.Quality Judgement: No actions are required.
- **Spike Sample Recovery (SSR):** Spike samples in this data set have been evaluated for method compliance purposes (%Rs within control limits). The out-of-control spike recoveries for analytes whose unspiked concentrations are $\geq 4x$ the spike added have been disregarded:
 - In QC Batch ID: MP31357, laboratory used sample (JD39846-3) for matrix spike and duplicate processes. %Rs were within method control limits, EXCEPT for: %Rs for Aluminum, Manganese, were above method control limits. %Rs for Antimony was below method control limits. %RPDS were below the allowable maximum.
 - In batch ID: MP31363, laboratory used unrelated sample (JD39833-1) for matrix spike and duplicate processes. %Rs were within method control limits. %RPDs were below the allowable maximum.Quality Judgement:
 - Detected results of Antimony, in sample JD39846-3, should be qualified Estimated Bias-Low (J-).
 - Non-Detected results of Antimony, in sample JD39846-3, should be qualified Estimated (UJ).
 - Detected results of Aluminum, Manganese, in sample JD39846-3, should be qualified Estimated Bias High (J+).
- **Laboratory Duplicate (DUP):** Target metals Duplicate analysis has been evaluated for relative percent differences compliance with the method criteria (%RPDs <20% for aqueous and <35% for soil matrices):
 - A field duplicate sample (DUP-2/JD39846-8), included in this samples set, was originated from RI-SB8 (4.5-5')/JD39846-5. The following summarizes this evaluation:

	Detected Compounds	DUP-2 JD39846-8 (mg/kg)	RI-SB8 (4.5-5') JD39846-5 (mg/kg)	%RPDs
1	Aluminum	17200	23300	30
2	Antimony	ND @ 2.4	3.0	NC

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3	Barium	78.8	107	30
4	Beryllium	0.61	0.7	14
5	Cadmium	ND @ 0.60	0.6	NC
6	Calcium	1360	1910	34
7	Chromium	29.6	37.0	22
8	Cobalt	11.9	19.6	49
9	Copper	21.0	78.0	115
10	Iron	27400	37800	32
11	Lead	15.0	25.5	52
12	Magnesium	5190	7870	41
13	Manganese	572	558	2.5
14	Mercury	0.061	0.10	NC
15	Nickel	22.9	41.1	57
16	Potassium	2320	4680	67
17	Vanadium	41.9	54.2	26
18	Zinc	65.0	424	147

NC = Value is not calculated due to low initial sample concentration.

%RPDs of Cobalt, Copper, Lead, Magnesium, Nickel, Potassium, Zinc, were above the allowable maximum.

Quality Judgement:

-Detected results of Cobalt, Copper, Lead, Magnesium, Nickel, Potassium, Zinc, in samples RI-SB8 (4.5-5')/JD39846-5, DUP-2/JD39846-8, should be qualified Estimated (J).

- **ICP Serial Dilution (ISDil):** ICP serial dilution for target metals has been evaluated to ensure compliance with method criteria (Concentration in the original sample is > 50x the MDL that is calculated for the sample and %Ds must be below the allowable maximums 10%):
 - In QC Batch ID: MP31357/sample JD39846-3, on 02/18/2022, %Ds of target metals (EPA 6010D) were below the allowable maximum.
 - In QC Batch ID: MP31363/unrelated sample JD39833-1, on 02/18/2022, %Ds of target metals (EPA 6010D) were below the allowable maximum.Note: Other elements with low initial sample concentration (< 50 times IDL), displayed anticipated high value of %Ds above the allowable maximum.
Quality Judgement: No actions are required.
- **Mercury Overall Evaluation (Hg):** All initial and continuing calibration checks, Blank results summaries, low calibration check standards, laboratory control sample summaries, Matrix spike and duplicate summaries, were in compliance with method quality control criteria.
- **Standard Reference Material Recovery (Hg):** Forms were not provided.

HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

- **Total & Soluble Metals Comparison (T&S-Comp):** Not applicable.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD39846

Data Validation for Analytical Method	Cyanide (SW846 9012B Method)
Number of Samples & Matrix	11 Soil Samples, 1 Duplicate Soil Sample, 1 Field Blank
Sampled On	02/16/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39846 (-1, -2, -3, -4, -5, -6, -7, -8, -9 -10-11-12-13)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 17 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Initial Calibration Verification (ICCV):** As indicated in the method calibration criteria, the initial calibration standards (ICV, CCV) used in this data set have been evaluated for compliance with method criteria ($90\% < \%Rs < 110\%$):
-In File ID: E021822W1.CN, %Rs for Cyanide standards (ICV, CCV) were within method control limits.
Quality Judgement: No actions are required.
- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection of Cyanide above the RL.
Quality Judgement: No actions are required.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes ($\%Rs$ within control limits-80-120%). The following summarizes this evaluation:
-In Batch IDs (GP38591/GN26579, GP38592/GN26579, GP38593/GN26579), for Cyanide LCS evaluation, %Rs were within the method control limits.
- **Matrix Spike/Matrix Spike Duplicate (MS/MSD):**
-In batch ID: GP38592/GN26579, GP38593/GN26579, the unrelated sample JD39843-1 and sample JD39846-11 were spiked with Cyanide standard for matrix spike evaluation, %Rs were below the method control limits (75-125%).
-Quality Judgement:
-Detected results of Cyanide in sample JD39846-11, should be qualified Estimated Bias-Low (J-).

-Non-Detected results of Cyanide in sample JD39846-11, should be qualified Estimated (UJ).

- **Laboratory Duplicate (DUP):** Cyanide Duplicate analysis has been evaluated for relative percent differences compliance with the method criteria (%RPDs <20% for aqueous and <35% for soil matrices):
- %RPDs for laboratory duplicate were below the allowable maximums.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Validated QA Data

Continuing Calibration Summary

Page 1 of 3

Job Number: JD39846
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V3C7643-CC7629
 Lab FileID: 3C173647.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V3...55\V3C7643\3C173647.D Vial: 4
 Acq On : 17 Feb 2022 11:53 am Operator: PrashanS
 Sample : CC7629-50 Inst : MS3C
 Misc : MS56796,V3C7643,5.0,,,,,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M3C7629.M (RTE Integrator)
 Title : Method SW846 8260C/D, Rxi624 20m x 0.18mm x 1.0um
 Last Update : Thu Feb 10 15:12:34 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	84	0.00	2.52
2	ethanol	0.203	0.230	-13.3	94	0.00	1.94
3	tertiary butyl alcohol	1.151	1.154	-0.3	82	0.00	2.57
4	1,4-dioxane	0.125	0.143	-14.4	89	0.00	5.19
5 I	pentafluorobenzene	1.000	1.000	0.0	85	0.00	3.94
6	dichlorodifluoromethane	0.370	0.351	5.1	76	0.00	1.05
7	chloromethane	0.489	0.517	-5.7	90	0.00	1.22
8	1,3-butadiene	0.311	0.300	3.5	78	0.00	1.28
9	vinyl chloride	0.365	0.392	-7.4	85	0.00	1.26
10	bromomethane	0.232	0.143	38.4#	55	0.00	1.50
11	chloroethane	0.229	0.219	4.4	78	0.00	1.57
12	trichlorofluoromethane	0.530	0.475	10.4	72	0.00	1.72
13	ethyl ether	0.176	0.187	-6.3	83	0.00	1.94
14	acrolein	0.049	0.069	-40.8#	121	0.00	2.08
15	freon 113	0.276	0.230	16.7	68	0.00	2.08
16	1,1-dichloroethene	0.296	0.268	9.5	73	0.00	2.10
17	acetone	0.096	0.088	8.3	90	0.00	2.19
18	acetonitrile	0.039	0.045	-15.4	99	0.00	2.44
----- True Calc. % Drift -----							
19	iodomethane	50.000	43.048	13.9	74	0.00	2.23
----- AvgRF CCRF % Dev -----							
20	carbon disulfide	1.028	0.916	10.9	76	0.00	2.25
21	methylene chloride	0.363	0.315	13.2	79	0.00	2.50
22	methyl acetate	0.245	0.255	-4.1	95	0.00	2.40
23	methyl tert butyl ether	0.878	0.874	0.5	81	0.00	2.64
24	trans-1,2-dichloroethene	0.330	0.318	3.6	76	0.00	2.66
25	hexane	0.673	0.574	14.7	74	0.00	2.80
26	di-isopropyl ether	1.151	1.219	-5.9	87	0.00	3.00
27	ethyl tert-butyl ether	1.105	1.127	-2.0	80	0.00	3.28
28	2-butanone	0.031	0.036	-16.1	89	0.00	3.51
29	1,1-dichloroethane	0.618	0.605	2.1	79	0.00	3.01
30	chloroprene	0.564	0.545	3.4	76	0.00	3.06
31	acrylonitrile	0.094	0.144	-53.2#	128	0.00	2.73
32	vinyl acetate	0.074	0.071	4.1	77	0.00	3.04
33	ethyl acetate	0.055	0.058	-5.5	90	0.00	3.53
34	2,2-dichloropropane	0.509	0.403	20.8#	63	0.00	3.46
35	cis-1,2-dichloroethene	0.356	0.343	3.7	76	0.00	3.49
36	propionitrile	0.042	0.049	-16.7	94	0.00	3.63
37	bromochloromethane	0.218	0.201	7.8	75	0.00	3.70

Continuing Calibration Summary

Job Number: JD39846
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V3C7643-CC7629
Lab FileID: 3C173647.D

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38		tetrahydrofuran	0.107	0.114	-6.5	95	0.00	3.69
39		chloroform	0.639	0.543	15.0	75	0.00	3.76
40		tert-butyl formate	0.303	0.219	27.7#	56	0.00	3.76
41		isobutyl alcohol	0.059	0.047	20.3#	68	0.00	4.17
42	S	dibromofluoromethane (s)	0.383	0.373	2.6	82	0.00	3.90
43		methacrylonitrile	0.118	0.127	-7.6	87	0.00	3.72
44		1,1,1-trichloroethane	0.540	0.489	9.4	71	0.00	3.87
45		cyclohexane	0.532	0.496	6.8	75	0.00	3.85
46		1,1-dichloropropene	0.174	0.157	9.8	73	0.00	4.01
47		tert-amyl alcohol	0.033	0.031	6.1	83	0.00	4.24
48		carbon tetrachloride	0.472	0.410	13.1	67	0.00	3.98
49	I	1,4-difluorobenzene	1.000	1.000	0.0	85	0.00	4.59
50	S	1,2-dichloroethane-d4 (s)	0.301	0.292	3.0	80	0.00	4.22
51		2,2,4-trimethylpentane	1.121	1.012	9.7	73	0.00	4.17
52		tert-amyl methyl ether	0.241	0.231	4.1	79	0.00	4.27
53		n-butyl alcohol	0.007	0.008	-14.3	83	0.00	4.81
54		benzene	0.936	0.914	2.4	79	0.00	4.19
55		heptane	0.232	0.208	10.3	73	0.00	4.36
56		isopropyl acetate	0.241	0.231	4.1	79	0.00	4.27
57		1,2-dichloroethane	0.339	0.300	11.5	72	0.00	4.28
58		trichloroethene	0.256	0.239	6.6	75	0.00	4.80
59		ethyl acrylate	0.317	0.363	-14.5	89	0.00	4.94
60		2-nitropropane	0.103	0.075	27.2#	63	0.02	5.67
61		2-chloroethyl vinyl ether	0.147	0.161	-9.5	85	0.00	5.67
62		methyl methacrylate	0.065	0.068	-4.6	85	0.00	5.17
63		1,2-dichloropropane	0.246	0.254	-3.3	82	0.00	5.07
64		methylcyclohexane	0.445	0.382	14.2	71	0.00	4.91
65		dibromomethane	0.138	0.128	7.2	74	0.00	5.19
66		bromodichloromethane	0.307	0.294	4.2	75	0.00	5.35
67		epichlorohydrin	0.023	0.025	-8.7	90	0.00	5.75
68		cis-1,3-dichloropropene	0.383	0.383	0.0	76	0.00	5.80
69		4-methyl-2-pentanone	0.038	0.042	-10.5	86	0.00	5.93
70		3-methyl-1-butanol	0.011	0.010	9.1	76	0.00	6.02
71	I	chlorobenzene-d5	1.000	1.000	0.0	84	0.00	7.31
72	S	toluene-d8 (s)	1.256	1.256	0.0	84	0.00	5.99
73		toluene	0.799	0.703	12.0	76	0.00	6.05
74		trans-1,3-dichloropropene	0.398	0.389	2.3	74	0.00	6.35
75		ethyl methacrylate	0.344	0.357	-3.8	81	0.00	6.38
76		1,1,2-trichloroethane	0.196	0.195	0.5	79	0.00	6.51
77		2-hexanone	0.100	0.115	-15.0	91	0.00	6.71
78		tetrachloroethene	0.334	0.301	9.9	73	0.00	6.53
79		1,3-dichloropropane	0.404	0.406	-0.5	80	0.00	6.66
80		butyl acetate	0.183	0.197	-7.7	89	0.00	6.81
81		dibromochloromethane	0.281	0.271	3.6	75	0.00	6.83
82		1,2-dibromoethane	0.242	0.239	1.2	77	0.00	6.93
83		n-butyl ether	1.341	1.389	-3.6	82	0.00	7.39
84		chlorobenzene	0.831	0.754	9.3	74	0.00	7.34
85		1,1,1,2-tetrachloroethane	0.285	0.271	4.9	72	0.00	7.42
86		ethylbenzene	1.394	1.317	5.5	77	0.00	7.41
87		m,p-xylene	0.554	0.518	6.5	76	0.00	7.51
88		o-xylene	1.122	1.053	6.1	77	0.00	7.85
89		styrene	0.896	0.882	1.6	76	0.00	7.87
90		bromoform	0.180	0.173	3.9	75	0.00	8.05
91		butyl acrylate	0.526	0.549	-4.4	80	0.00	7.84
92		isopropylbenzene	1.376	1.309	4.9	75	0.00	8.14
93		cis-1,4-dichloro-2-butene	0.114	0.109	4.4	76	0.00	8.28
94	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	82	0.00	9.25

6.8.4
6

Continuing Calibration Summary

Job Number: JD39846
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V3C7643-CC7629
Lab FileID: 3C173647.D

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95	S	4-bromofluorobenzene (s)	0.937	0.954	-1.8	85	0.00	8.32
96		bromobenzene	0.705	0.665	5.7	75	0.00	8.43
97		1,1,2,2-tetrachloroethane	0.586	0.598	-2.0	80	0.00	8.47
98		trans-1,4-dichloro-2-bute	0.101	0.093	7.9	67	0.00	8.53
99		1,2,3-trichloropropane	0.193	0.193	0.0	80	0.00	8.51
100		n-propylbenzene	3.213	3.142	2.2	77	0.00	8.48
101		2-chlorotoluene	0.692	0.644	6.9	74	0.00	8.58
102		4-chlorotoluene	0.716	0.674	5.9	73	0.00	8.67
103		1,3,5-trimethylbenzene	2.365	2.254	4.7	75	0.00	8.64
104		tert-butylbenzene	2.082	2.003	3.8	75	0.00	8.89
105		1,2,4-trimethylbenzene	2.413	2.303	4.6	75	0.00	8.94
106		sec-butylbenzene	3.008	2.905	3.4	74	0.00	9.06
107		1,3-dichlorobenzene	1.404	1.277	9.0	74	0.00	9.19
108		p-isopropyltoluene	2.654	2.547	4.0	73	0.00	9.19
109		1,4-dichlorobenzene	1.428	1.313	8.1	75	0.00	9.27
110		1,2,3-trimethylbenzene	2.391	2.284	4.5	75	0.00	9.28
111		1,2-dichlorobenzene	1.321	1.201	9.1	73	0.00	9.56
112		n-butylbenzene	1.319	1.262	4.3	74	0.00	9.51
113		1,2-dibromo-3-chloropropa	0.149	0.143	4.0	75	0.00	10.19
114		1,3,5-trichlorobenzene	1.091	1.036	5.0	73	0.00	10.31
115		1,2,4-trichlorobenzene	0.964	0.908	5.8	73	0.00	10.81
116		hexachlorobutadiene	0.549	0.499	9.1	71	0.00	10.90
117		naphthalene	2.262	2.274	-0.5	76	0.00	11.00
118		1,2,3-trichlorobenzene	0.930	0.906	2.6	75	0.00	11.19
119		hexachloroethane	0.368	0.311	15.5	63	0.00	9.72
120		benzyl chloride	1.089	0.972	10.7	67	0.00	9.38
121		2-methylnaphthalene			-----NA-----			
122		pentafluorobenzene (a)	1.000	1.000	0.0	93	0.00	3.94
123		vinyl bromide			-----NA-----			

(#) = Out of Range
3C173276.D M3C7629.M

SPCC's out = 0 CCC's out = 0
Thu Mar 10 15:54:57 2022 MS3C

6.8.4
6

Continuing Calibration Summary

Page 1 of 3

Job Number: JD39846
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V3C7644-CC7629
 Lab FileID: 3C173678.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ne...21\v3c7644\3c173678.d Vial: 5
 Acq On : 18 Feb 2022 9:11 am Operator: THIENN
 Sample : CC7629-50 Inst : MS3C
 Misc : MS56826,V3C7644,5.0,,,,,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M3C7629.M (RTE Integrator)
 Title : Method SW846 8260C/D, Rxi624 20m x 0.18mm x 1.0um
 Last Update : Mon Sep 13 11:48:20 2010
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	69	0.00	2.52
2	ethanol	0.203	0.281	-38.4#	95	0.00	1.94
3	tertiary butyl alcohol	1.151	1.286	-11.7	75	0.00	2.58
4	1,4-dioxane	0.125	0.173	-38.4#	89	0.00	5.19
5 I	pentafluorobenzene	1.000	1.000	0.0	86	0.00	3.94
6	dichlorodifluoromethane	0.370	0.292	21.1#	64	0.00	1.05
7	chloromethane	0.489	0.517	-5.7	92	0.00	1.21
8	1,3-butadiene	0.311	0.316	-1.6	84	0.00	1.29
9	vinyl chloride	0.365	0.392	-7.4	87	0.00	1.27
10	bromomethane	0.232	0.170	26.7#	66	0.00	1.50
11	chloroethane	0.229	0.243	-6.1	88	0.00	1.57
12	trichlorofluoromethane	0.530	0.472	10.9	73	0.00	1.73
13	ethyl ether	0.176	0.201	-14.2	91	0.00	1.94
14	acrolein	0.049	0.058	-18.4	104	0.00	2.08
15	freon 113	0.276	0.229	17.0	68	0.00	2.08
16	1,1-dichloroethene	0.296	0.294	0.7	82	0.00	2.10
17	acetone	0.096	0.091	5.2	94	0.00	2.19
18	acetonitrile	0.039	0.045	-15.4	101	0.00	2.44
----- True		Calc.	% Drift	-----			
19	iodomethane	50.000	51.596	-3.2	93	0.00	2.23
----- AvgRF		CCRF	% Dev	-----			
20	carbon disulfide	1.028	1.015	1.3	86	0.00	2.26
21	methylene chloride	0.363	0.344	5.2	88	0.00	2.50
22	methyl acetate	0.245	0.255	-4.1	97	0.00	2.40
23	methyl tert butyl ether	0.878	0.921	-4.9	87	0.00	2.64
24	trans-1,2-dichloroethene	0.330	0.353	-7.0	87	0.00	2.66
25	hexane	0.673	0.534	20.7#	70	0.00	2.80
26	di-isopropyl ether	1.151	1.317	-14.4	96	0.00	3.00
27	ethyl tert-butyl ether	1.105	1.200	-8.6	87	0.00	3.29
28	2-butanone	0.031	0.034	-9.7	86	0.00	3.51
29	1,1-dichloroethane	0.618	0.665	-7.6	88	0.00	3.02
30	chloroprene	0.564	0.582	-3.2	83	0.00	3.06
31	acrylonitrile	0.094	0.131	-39.4#	119	0.00	2.73
32	vinyl acetate	0.074	0.078	-5.4	85	0.00	3.04
33	ethyl acetate	0.055	0.058	-5.5	92	0.00	3.53
34	2,2-dichloropropane	0.509	0.489	3.9	78	0.00	3.46
35	cis-1,2-dichloroethene	0.356	0.375	-5.3	84	0.00	3.49
36	propionitrile	0.042	0.048	-14.3	93	0.00	3.63
37	bromochloromethane	0.218	0.219	-0.5	84	0.00	3.70

Continuing Calibration Summary

Job Number: JD39846
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V3C7644-CC7629
Lab FileID: 3C173678.D

Page 2 of 3

38	tetrahydrofuran	0.107	0.113	-5.6	95	0.00	3.70
39	chloroform	0.639	0.590	7.7	83	0.00	3.76
40	tert-butyl formate	0.303	0.213	29.7#	56	0.00	3.76
41	isobutyl alcohol	0.059	0.044	25.4#	66	0.00	4.17
42 S	dibromofluoromethane (s)	0.383	0.371	3.1	83	0.00	3.90
43	methacrylonitrile	0.118	0.128	-8.5	89	0.00	3.72
44	1,1,1-trichloroethane	0.540	0.528	2.2	78	0.00	3.87
45	cyclohexane	0.532	0.465	12.6	72	0.00	3.86
46	1,1-dichloropropene	0.174	0.172	1.1	81	0.00	4.02
47	tert-amyl alcohol	0.033	0.028	15.2	76	0.00	4.24
48	carbon tetrachloride	0.472	0.436	7.6	73	0.00	3.98
49 I	1,4-difluorobenzene	1.000	1.000	0.0	87	0.00	4.59
50 S	1,2-dichloroethane-d4 (s)	0.301	0.278	7.6	78	0.00	4.22
51	2,2,4-trimethylpentane	1.121	0.954	14.9	71	0.00	4.17
52	tert-amyl methyl ether	0.241	0.239	0.8	83	0.00	4.27
53	n-butyl alcohol	0.007	0.007	0.0	79	0.00	4.81
54	benzene	0.936	1.002	-7.1	88	0.00	4.19
55	heptane	0.232	0.193	16.8	69	0.00	4.36
56	isopropyl acetate	0.241	0.239	0.8	83	0.00	4.27
57	1,2-dichloroethane	0.339	0.315	7.1	77	0.00	4.29
58	trichloroethene	0.256	0.258	-0.8	83	0.00	4.81
59	ethyl acrylate	0.317	0.321	-1.3	80	0.00	4.93
60	2-nitropropane	0.103	0.075	27.2#	65	0.02	5.66
61	2-chloroethyl vinyl ether	0.147	0.162	-10.2	87	0.00	5.67
62	methyl methacrylate	0.065	0.067	-3.1	86	0.00	5.17
63	1,2-dichloropropane	0.246	0.276	-12.2	91	0.00	5.07
64	methylcyclohexane	0.445	0.362	18.7	69	0.00	4.91
65	dibromomethane	0.138	0.136	1.4	81	0.00	5.19
66	bromodichloromethane	0.307	0.315	-2.6	83	0.00	5.35
67	epichlorohydrin	0.023	0.026	-13.0	93	0.00	5.75
68	cis-1,3-dichloropropene	0.383	0.420	-9.7	86	0.00	5.80
69	4-methyl-2-pentanone	0.038	0.040	-5.3	84	0.00	5.93
70	3-methyl-1-butanol	0.011	0.009	18.2	71	0.00	6.02
71 I	chlorobenzene-d5	1.000	1.000	0.0	86	0.00	7.31
72 S	toluene-d8 (s)	1.256	1.260	-0.3	86	0.00	5.99
73	toluene	0.799	0.771	3.5	85	0.00	6.05
74	trans-1,3-dichloropropene	0.398	0.419	-5.3	81	0.00	6.35
75	ethyl methacrylate	0.344	0.364	-5.8	84	0.00	6.38
76	1,1,2-trichloroethane	0.196	0.204	-4.1	84	0.00	6.51
77	2-hexanone	0.100	0.111	-11.0	89	0.00	6.71
78	tetrachloroethene	0.334	0.331	0.9	82	0.00	6.53
79	1,3-dichloropropane	0.404	0.424	-5.0	85	0.00	6.66
80	butyl acetate	0.183	0.193	-5.5	88	0.00	6.81
81	dibromochloromethane	0.281	0.294	-4.6	82	0.00	6.83
82	1,2-dibromoethane	0.242	0.251	-3.7	82	0.00	6.93
83	n-butyl ether	1.341	1.527	-13.9	92	0.00	7.39
84	chlorobenzene	0.831	0.832	-0.1	83	0.00	7.34
85	1,1,1,2-tetrachloroethane	0.285	0.300	-5.3	81	0.00	7.42
86	ethylbenzene	1.394	1.443	-3.5	85	0.00	7.41
87	m,p-xylene	0.554	0.573	-3.4	86	0.00	7.51
88	o-xylene	1.122	1.151	-2.6	85	0.00	7.85
89	styrene	0.896	0.963	-7.5	85	0.00	7.87
90	bromoform	0.180	0.180	0.0	79	0.00	8.06
91	butyl acrylate	0.526	0.552	-4.9	82	0.00	7.84
92	isopropylbenzene	1.376	1.425	-3.6	83	0.00	8.14
93	cis-1,4-dichloro-2-butene	0.114	0.115	-0.9	81	0.00	8.28
94 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	82	0.00	9.25

6.8.5

6

Continuing Calibration Summary

Job Number: JD39846
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V3C7644-CC7629
Lab FileID: 3C173678.D

Page 3 of 3

95	S	4-bromofluorobenzene (s)	0.937	0.955	-1.9	85	0.00	8.32
96		bromobenzene	0.705	0.734	-4.1	82	0.00	8.43
97		1,1,2,2-tetrachloroethane	0.586	0.624	-6.5	83	0.00	8.47
98		trans-1,4-dichloro-2-bute	0.101	0.096	5.0	70	0.00	8.53
99		1,2,3-trichloropropane	0.193	0.198	-2.6	82	0.00	8.51
100		n-propylbenzene	3.213	3.492	-8.7	85	0.00	8.48
101		2-chlorotoluene	0.692	0.730	-5.5	83	0.00	8.58
102		4-chlorotoluene	0.716	0.776	-8.4	84	0.00	8.67
103		1,3,5-trimethylbenzene	2.365	2.538	-7.3	84	0.00	8.64
104		tert-butylbenzene	2.082	2.214	-6.3	82	0.00	8.89
105		1,2,4-trimethylbenzene	2.413	2.611	-8.2	85	0.00	8.94
106		sec-butylbenzene	3.008	3.189	-6.0	81	0.00	9.06
107		1,3-dichlorobenzene	1.404	1.451	-3.3	84	0.00	9.19
108		p-isopropyltoluene	2.654	2.872	-8.2	82	0.00	9.19
109		1,4-dichlorobenzene	1.428	1.467	-2.7	84	0.00	9.27
110		1,2,3-trimethylbenzene	2.391	2.555	-6.9	84	0.00	9.28
111		1,2-dichlorobenzene	1.321	1.348	-2.0	81	0.00	9.56
112		n-butylbenzene	1.319	1.421	-7.7	83	0.00	9.51
113		1,2-dibromo-3-chloropropa	0.149	0.147	1.3	76	0.00	10.19
114		1,3,5-trichlorobenzene	1.091	1.216	-11.5	85	0.00	10.31
115		1,2,4-trichlorobenzene	0.964	1.059	-9.9	85	0.01	10.81
116		hexachlorobutadiene	0.549	0.570	-3.8	81	0.00	10.90
117		naphthalene	2.262	2.469	-9.2	82	0.00	11.00
118		1,2,3-trichlorobenzene	0.930	1.034	-11.2	86	0.00	11.19
119		hexachloroethane	0.368	0.356	3.3	72	0.00	9.72
120		benzyl chloride	1.089	1.218	-11.8	83	0.00	9.38
121		2-methylnaphthalene			-----NA-----			
122		pentafluorobenzene (a)	1.000	1.000	0.0	95	0.00	3.94
123		vinyl bromide			-----NA-----			

(#) = Out of Range
3C173276.D M3C7629.M

SPCC's out = 0 CCC's out = 0
Sun Feb 20 22:35:13 2022

6.8.5
9

Continuing Calibration Summary

Page 1 of 3

Job Number: JD39846
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VA10562-CC10542
 Lab FileID: A268830.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\lo...-21\va10562\A268830.D Vial: 1
 Acq On : 18 Feb 2022 8:39 am Operator: thienn
 Sample : cc10542-50 Inst : MSA
 Misc : MS56831,VA10562,5,,,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MA10542.M (RTE Integrator)
 Title : SW-846 8260C/D/EPA 624.1 Rxi-624 60mx0.25mmx1.4umFri Jan 28 14:20:00 2022
 Last Update : Fri Jan 28 14:20:00 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
1 I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	59	-0.03	8.09
2	ethanol			-----NA-----			
3 M	tertiary butyl alcohol	1.174	1.351	-15.1	70	-0.03	8.22
4	1,4-dioxane	0.059	0.083	-40.7#	80	-0.02	12.10
5 I	pentafluorobenzene	1.000	1.000	0.0	74	0.00	10.42
6	chlorodifluoromethane	0.698	0.693	0.7	78	0.00	4.47
7 M	dichlorodifluoromethane	0.838	0.630	24.8#	58	0.00	4.46
8 M	chloromethane	0.953	0.992	-4.1	82	0.00	4.87
	----- True	Calc.	% Drift	-----			
9 M	vinyl chloride	50.000	57.058	-14.1	80	0.00	5.14
	----- AvgRF	CCRF	% Dev	-----			
10	1,3-butadiene	0.588	0.586	0.3	75	0.00	5.18
11 M	bromomethane	0.495	0.663	-33.9#	97	0.00	5.81
12 M	chloroethane	0.321	0.387	-20.6#	85	0.00	5.99
13 M	trichlorofluoromethane	0.774	0.847	-9.4	74	0.00	6.54
14 M	ethyl ether	0.216	0.228	-5.6	81	-0.02	6.93
15 M	acrolein	0.177	0.149	15.8	70	-0.05	7.15
16	freon 113	0.382	0.376	1.6	73	-0.01	7.37
17 M	1,1-dichloroethene	0.519	0.540	-4.0	85	0.01	7.41
18 M	acetone	0.072	0.059	18.1	62	-0.03	7.40
19 M	acetonitrile	0.091	0.078	14.3	64	-0.01	7.84
20 M	iodomethane	0.840	0.910	-8.3	77	0.00	7.64
21 M	carbon disulfide	1.576	1.486	5.7	75	-0.01	7.83
22 M	methylene chloride	0.486	0.507	-4.3	82	0.00	8.11
23 M	methyl acetate	0.485	0.416	14.2	68	-0.01	7.87
24 M	methyl tert butyl ether	1.085	0.968	10.8	72	0.00	8.50
25	acrylonitrile	0.292	0.282	3.4	71	-0.01	8.41
26 M	trans-1,2-dichloroethene	0.453	0.467	-3.1	82	0.00	8.54
27	hexane	0.614	0.582	5.2	73	0.00	8.92
28 M	di-isopropyl ether	1.253	1.174	6.3	73	0.00	9.13
29 M	ethyl tert-butyl ether	1.014	0.934	7.9	69	0.00	9.60
30 M	2-butanone	0.090	0.080	11.1	58	0.00	9.80
31 M	1,1-dichloroethane	0.725	0.771	-6.3	79	0.00	9.12
32 M	chloroprene	0.602	0.623	-3.5	75	0.00	9.24
33 M	vinyl acetate	0.098	0.092	6.1	65	0.00	9.06
34 M	ethyl acetate	0.147	0.120	18.4	61	0.00	9.82
35 M	2,2-dichloropropane	0.406	0.369	9.1	74	0.00	9.88
36 M	cis-1,2-dichloroethene	0.523	0.524	-0.2	81	0.00	9.86
37	methyl acrylate	0.119	0.100	16.0	70	0.00	9.90

Continuing Calibration Summary

Job Number: JD39846
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VA10562-CC10542
Lab FileID: A268830.D

Page 2 of 3

38	M	propionitrile	0.120	0.107	10.8	64	0.00	9.87
39	M	bromochloromethane	0.272	0.304	-11.8	81	0.00	10.16
40	M	tetrahydrofuran	0.293	0.220	24.9#	61	0.00	10.22
41	M	chloroform	0.809	0.827	-2.2	81	0.00	10.26
42		tert-butyl formate	0.213	0.192	9.9	68	0.00	10.29
43	S	dibromofluoromethane (s)	0.447	0.470	-5.1	79	0.00	10.45
44	M	methacrylonitrile	0.295	0.250	15.3	64	0.00	10.07
45		cyclohexane	0.686	0.676	1.5	73	0.00	10.66
46	M	1,1,1-trichloroethane	0.646	0.627	2.9	75	0.00	10.54
47		iso-butyl alcohol	0.077	0.070	9.1	67	0.00	10.66
48		1,1-dichloropropene	0.541	0.577	-6.7	79	0.00	10.71
49		carbon tetrachloride	0.532	0.623	-17.1	75	0.00	10.75
50		tert-amyl alcohol	0.054	0.045	16.7	63	-0.02	10.84
51	I	1,4-difluorobenzene	1.000	1.000	0.0	80	0.00	11.38
52	S	1,2-dichloroethane-d4 (s)	0.313	0.307	1.9	80	0.00	10.89
53	M	benzene	1.123	1.107	1.4	81	0.00	10.97
54	M	iso-octane	0.900	0.877	2.6	80	0.00	11.08
55		tert-amyl methyl ether	0.660	0.548	17.0	70	0.00	11.05
56	M	heptane	0.207	0.185	10.6	76	0.00	11.24
57	M	isopropyl acetate	0.079	0.077	2.5	77	0.00	10.87
58	M	1,2-dichloroethane	0.423	0.430	-1.7	84	0.00	10.98
59		n-butyl alcohol	0.016	0.013	18.8	67	-0.02	11.45
60		ethyl acrylate	0.578	0.512	11.4	67	0.00	11.69
61	M	trichloroethene	0.307	0.301	2.0	82	0.00	11.71
62	M	2-nitropropane	0.148	0.118	20.3#	66	0.00	12.48
63	m	methylcyclohexane	0.473	0.425	10.1	77	0.00	12.04
64	M	2-chloroethyl vinyl ether	0.102	0.085	16.7	66	0.00	12.52
65	M	methyl methacrylate	0.111	0.096	13.5	69	0.00	11.97
66	M	1,2-dichloropropane	0.284	0.275	3.2	76	0.00	12.01
67	M	dibromomethane	0.210	0.208	1.0	82	0.00	12.12
68	M	bromodichloromethane	0.435	0.405	6.9	80	0.00	12.28
69		epichlorohydrin	0.056	0.044	21.4#	62	0.00	12.62
70	M	cis-1,3-dichloropropene	0.467	0.426	8.8	73	0.00	12.77
71	M	4-methyl-2-pentanone	0.208	0.182	12.5	69	0.00	12.87
72	M	3-methyl-1-butanol	0.037	0.030	18.9	70	0.00	12.88
73	I	chlorobenzene-d5	1.000	1.000	0.0	79	0.00	14.77
74	S	toluene-d8 (s)	1.196	1.170	2.2	77	0.00	13.11
75		toluene	0.823	0.805	2.2	78	0.00	13.19
76		trans-1,3-dichloropropene	0.481	0.478	0.6	79	0.00	13.38
77		ethyl methacrylate	0.564	0.494	12.4	71	0.00	13.37
78		1,1,2-trichloroethane	0.285	0.267	6.3	77	0.00	13.62
79		2-hexanone	0.261	0.227	13.0	69	0.00	13.80
80	M	tetrachloroethene	0.413	0.410	0.7	80	0.00	13.80
81	M	1,3-dichloropropane	0.522	0.550	-5.4	81	0.00	13.82
82	M	butyl acetate	0.359	0.304	15.3	72	0.00	13.89
83	M	dibromochloromethane	0.447	0.431	3.6	78	0.00	14.09
84	M	1,2-dibromoethane	0.375	0.364	2.9	76	0.00	14.27
85	M	n-butyl ether	1.451	1.346	7.2	72	0.00	14.76
86	M	chlorobenzene	1.007	1.024	-1.7	80	0.00	14.81
87	M	1,1,1,2-tetrachloroethane	0.347	0.361	-4.0	78	0.00	14.88
88	M	ethylbenzene	1.602	1.564	2.4	78	0.00	14.88
89	M	m,p-xylene	0.652	0.655	-0.5	79	0.00	15.01
90	M	o-xylene	0.660	0.680	-3.0	81	0.00	15.46
91	M	styrene	1.093	1.164	-6.5	81	0.00	15.47
92		butyl acrylate	0.809	0.769	4.9	75	0.00	15.25
93		n-amyl acetate	0.297	0.296	0.3	80	0.00	15.49
94	M	bromoform	0.324	0.307	5.2	70	0.00	15.72
95		isopropylbenzene	1.588	1.681	-5.9	80	0.00	15.86

6.8.9

6

Continuing Calibration Summary

Job Number: JD39846
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Page 3 of 3
Sample: VA10562-CC10542
Lab FileID: A268830.D

		True	Calc.	% Drift			
96	cis-1,4-dichloro-2-butene	50.000	55.586	-11.2	100	0.00	15.88
		AvgRF	CCRF	% Dev			
97 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	78	0.00	17.39
98 S	4-bromofluorobenzene (s)	0.855	0.770	9.9	72	0.00	16.07
99 M	bromobenzene	0.877	0.825	5.9	75	0.00	16.29
100 M	1,1,2,2-tetrachloroethane	1.065	0.976	8.4	76	0.00	16.15
101 M	trans-1,4-dichloro-2-bute	0.183	0.250	-36.6#	95	0.00	16.18
102 M	1,2,3-trichloropropane	0.331	0.307	7.3	74	0.00	16.25
103 M	n-propylbenzene	3.523	3.491	0.9	81	0.00	16.32
104 M	2-chlorotoluene	0.825	0.822	0.4	81	0.00	16.47
105 M	4-chlorotoluene	2.182	2.084	4.5	79	0.00	16.60
106 M	1,3,5-trimethylbenzene	2.610	2.589	0.8	80	0.00	16.49
107 M	tert-butylbenzene	2.364	2.350	0.6	80	0.00	16.88
108 M	1,2,4-trimethylbenzene	2.813	2.749	2.3	80	0.00	16.94
109 M	sec-butylbenzene	3.261	3.391	-4.0	83	0.00	17.13
110 M	1,3-dichlorobenzene	1.601	1.603	-0.1	79	0.00	17.32
111 M	p-isopropyltoluene	2.983	3.094	-3.7	82	0.00	17.27
112	1,2,3-trimethylbenzene	2.795	2.844	-1.8	83	0.00	17.41
113 M	1,4-dichlorobenzene	1.634	1.672	-2.3	82	0.00	17.42
114 M	1,2-dichlorobenzene	1.581	1.628	-3.0	80	0.00	17.84
115 M	n-butylbenzene	1.310	1.413	-7.9	83	0.00	17.73
116 M	1,2-dibromo-3-chloropropa	0.291	0.277	4.8	71	0.00	18.67
117 M	1,3,5-trichlorobenzene	1.092	1.079	1.2	76	0.00	18.90
118 M	1,2,4-trichlorobenzene	0.801	0.896	-11.9	80	0.00	19.64
119 M	hexachlorobutadiene	0.423	0.380	10.2	70	0.00	19.78
120 M	naphthalene	2.678	2.854	-6.6	86	0.00	19.97
121 M	1,2,3-trichlorobenzene	0.719	0.816	-13.5	86	0.00	20.22
122 M	hexachloroethane	0.407	0.376	7.6	67	0.00	18.17
123	2-methylnaphthalene	10.991	14.721	-33.9#	114	0.00	21.27

(#) = Out of Range SPCC's out = 0 CCC's out = 0
A268339.D MA10542.M Mon Feb 21 08:28:22 2022

6.8.9
6

Initial Calibration Summary

Page 1 of 2

Job Number: JD39846
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EP6785-ICC6785
 Lab FileID: P147187.D

Response Factor Report MSVOAMSP

Method : C:\MSDCHEM\1\METHODS\MP6785AP9.M (RTE Integrator)
 Title : Semi Volatile Extractables by GC/MS
 Last Update : Thu Jan 20 09:38:06 2022
 Response via : Initial Calibration

Calibration Files

2 =p147191.D 5 =p147190.D 25 =p147188.D 80 =p147186.D
 100 =p147185.D 50 =p147187.D 10 =p147189.D 1 =p147192.D

Compound	2	5	25	80	100	50	10	1	Avg %RSD

102) I 1,4-Dichlorobenzene-d	-----ISTD-----								
103) 2-Picoline	1.308	1.288	1.301	1.357	1.371	1.341	1.294	1.253	1.314 2.98
104) Pentachloroe	0.550	0.553	0.514	0.537	0.532	0.526	0.531	0.494	0.530 3.57
105) Methyl metha	0.796	0.709	0.710	0.750	0.745	0.727	0.728	0.672	0.730 4.95
106) N-Nitrosodie	0.534	0.546	0.545	0.562		0.544	0.554	0.470	0.536 5.69
107) N-Nitrosomet	0.434	0.449	0.517	0.518	0.515	0.510	0.510	0.471	0.491 6.93
108) Ethyl methan	0.905	0.929	0.925	0.955	0.938	0.938	0.930	0.960	0.935 1.85
109) N-Nitrosopyr	0.341	0.441	0.465	0.281	0.194	0.463	0.416	0.372	27.85
110) N-Nitrosomor	0.649	0.652	0.603	0.549	0.546	0.567	0.624	0.540	0.591 7.91
111) o-Toluidine	1.981	1.917	1.887	1.700	1.662	1.754	1.985	1.822	1.839 6.75
112) I Naphthalene-d8A	-----ISTD-----								
113) O,O,O-Trieth	0.137	0.150	0.150	0.153	0.154	0.150	0.149	0.145	0.148 3.66
114) N-Nitrosopip	0.167	0.179	0.170	0.168	0.171	0.169	0.172	0.172	0.171 2.19
115) A,A-Dimethyl	0.583	0.570	0.625	0.634	0.633	0.620	0.626	0.562	0.607 4.91
116) Hexachloropr	0.196	0.209	0.222	0.225	0.218	0.224	0.213	0.194	0.213 5.76
117) N-Nitrosodi-	0.204	0.197	0.206	0.204	0.207	0.203	0.206	0.213	0.205 2.18
118) p-Phenylened	0.184	0.176	0.225	0.171	0.164	0.165	0.249		0.191 17.36
119) Safrole	0.230	0.224	0.253	0.249	0.248	0.247	0.252	0.233	0.242 4.62
120) Isosafrole	0.092	0.091	0.101	0.105	0.106	0.103	0.104	0.099	0.100 5.74
121) Acenaphthene-d10A	-----ISTD-----								
122) Thionazin	0.148	0.145	0.153	0.152	0.152	0.152	0.154	0.142	0.150 2.85
123) Tetraethyl d	0.193	0.194	0.216	0.216	0.216	0.216	0.217	0.198	0.208 5.27
124) Phorate	0.756	0.858	0.946	0.912	0.901	0.905	0.931	0.740	0.869 9.09
125) Phenacetin	0.448	0.544	0.594	0.589	0.577	0.580	0.595	0.401	0.541 13.82
126) 1,4-Naphthoq		0.218	0.261	0.240	0.220	0.254	0.253		0.241 7.71
127) m-Dinitroben	0.130	0.154	0.180	0.190	0.187	0.185	0.180	0.113	0.165 17.71
128) Pentachlorob	0.496	0.490	0.525	0.508	0.498	0.502	0.527	0.496	0.505 2.74
129) 2-Naphthylam	0.922	1.039	1.031	0.954	0.944	0.958	1.091	0.922	0.983 6.38
130) 1-Naphthylam	0.956	1.019	1.028	0.956	0.934	0.952	1.062	0.953	0.982 4.77
131) 5-Nitro-o-to	0.279	0.324	0.339	0.332	0.338	0.321	0.345	0.218	0.312 13.88
132) I Phenanthrene-d10A	-----ISTD-----								
133) Disulfoton	0.262	0.283	0.294	0.284	0.283	0.285	0.290	0.243	0.278 6.09
134) Dinoseb		0.100	0.163	0.180	0.183	0.178	0.139		0.157 20.63
---- Quadratic regression ---- Coefficient = 0.9999									
Response Ratio = -0.01027 + 0.18028 *A + 0.00284 *A^2									
135) Dimethoate	0.205	0.218	0.232	0.219	0.210	0.230	0.237	0.169	0.215 10.04
136) 4-Aminobiphe	0.586	0.628	0.616	0.591	0.591	0.630	0.611	0.543	0.599 4.77
137) Methyl parat	0.123	0.152	0.170	0.156	0.151	0.165	0.170		0.155 10.55
138) Parathion	0.108	0.124	0.130	0.126	0.125	0.132	0.126	0.092	0.120 11.42
139) Diphenylamin	0.461	0.474	0.488	0.481	0.471	0.493	0.489	0.443	0.475 3.55

Initial Calibration Summary

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Job Number: JD39846
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EP6785-ICC6785
Lab FileID: P147187.D

140)	Isodrin	0.100	0.111	0.110	0.110	0.105	0.115	0.114	0.106	0.109	4.51
141)	Diallate	0.074	0.060	0.060	0.062	0.058	0.061	0.060	0.074	0.064	10.34
142)	Pentachloron	0.040	0.042	0.043	0.043	0.043	0.046	0.044	0.033	0.042#	9.60
143)	Pronamide	0.250	0.260	0.283	0.283	0.278	0.286	0.281	0.202	0.265	10.80
144)	4-Nitroquino	0.021	0.043	0.088	0.091	0.088	0.092	0.066		0.070	40.08
---- Quadratic regression ---- Coefficient = 0.9981											
Response Ratio = -0.01872 + 0.09480 *A + -0.00033 *A^2											
145)	Methapyrilin	0.308	0.258	0.162	0.144	0.194	0.308		0.229		31.56
---- Quadratic regression ---- Coefficient = 0.9950											
Response Ratio = 0.00996 + 0.25859 *A + -0.04901 *A^2											
146)	sym-Trinitro	0.035	0.061	0.064	0.065	0.066	0.052		0.057		21.32
---- Quadratic regression ---- Coefficient = 0.9998											
Response Ratio = -0.00442 + 0.07002 *A + -0.00133 *A^2											
147)	I Chrysene-d12A	-----ISTD-----									
148)	Aramite	0.050	0.046	0.064	0.067	0.064	0.066	0.061	0.046	0.058	15.46
149)	p-(Dimethyla	0.243	0.273	0.304	0.298		0.308	0.299	0.222	0.278	12.15
150)	Kepone	0.092	0.095	0.082	0.056		0.066	0.096	0.082	0.081	18.78
151)	Famphur	0.434	0.430	0.329	0.201	0.173	0.251	0.387		0.315	34.29
---- Quadratic regression ---- Coefficient = 0.9962											
Response Ratio = 0.03987 + 0.35577 *A + -0.01275 *A^2											
152)	2-Acetylamin	0.273	0.357	0.453	0.462	0.453	0.460	0.415		0.410	17.35
153)	Chlorobenzil	0.283	0.307	0.353	0.357		0.353	0.342	0.280	0.325	10.48
154)	I Perylene-d12A	-----ISTD-----									
155)	4,4-Methylen	0.016	0.015	0.018	0.023		0.019	0.019		0.018#	16.41
156)	Hexachloroph									0.000#	-1.00
157)	3-Methylchol	0.175	0.178	0.186	0.183	0.185	0.183			0.182	2.29

(#) = Out of Range ### Number of calibration levels exceeded format ###

MP6741AP9.M

Thu Jan 20 09:51:20 2022

ACLIMS

Initial Calibration Verification

Page 1 of 2

Job Number: JD39846
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EP6785-ICV6785
 Lab FileID: P147193.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EP6785\p147193.D Vial: 10
 Acq On : 20 Jan 2022 6:44 am Operator: chriss2
 Sample : icv6785-50 Inst : MSVOAMSP
 Misc : op36737,ep6785,30.0,,,1,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP6741AP9.M (RTE Integrator)
 Title : Semi Volatile Extractables by GC/MS
 Last Update : Thu Jan 20 09:38:06 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.

102 I	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	117	0.00	4.26
103 M	2-Picoline	1.314	1.356	-3.2	118	0.00	2.72
104	Pentachloroethane	0.530	0.457	13.8	102	0.00	4.05
105 M	Methyl methanesulfonate	0.730	0.620	15.1	100	0.02	3.12
106 M	N-Nitrosodiethylamine	0.536	0.536	0.0	115	0.01	3.43
107 M	N-Nitrosomethylethylamine	0.491	0.502	-2.2	115	0.00	2.84
108 M	Ethyl methanesulfonate	0.935	0.917	1.9	114	0.01	3.69
109 M	N-Nitrosopyrrolidine	0.372	0.408	-9.7	103	0.01	4.56
110 M	N-Nitrosomorpholine	0.591	0.537	9.1	111	0.00	4.59
112 I	Naphthalene-d8A	1.000	1.000	0.0	117	0.00	5.19
113 M	O,O,O-Triethyl phosphorot	0.148	0.148	0.0	115	0.00	5.01
114 M	N-Nitrosopiperidine	0.171	0.167	2.3	115	0.00	4.80
115 M	A,A-Dimethylphenethylamin	0.607	0.598	1.5	112	-0.09	5.10
116 M	Hexachloropropene	0.213	0.208	2.3	108	0.00	5.26
117 M	N-Nitrosodi-n-butylamine	0.205	0.253	-23.4	145	0.00	5.50
118	p-Phenylenediamine	0.191	0.209	-9.4	148	-0.03	5.51
119 M	Safrole	0.242	0.248	-2.5	117	0.00	5.65
121	Acenaphthene-d10A	1.000	1.000	0.0	112	0.00	6.51
122 M	Thionazin	0.150	0.144	4.0	107	0.00	7.03
123 M	Tetraethyl dithiopyrophos	0.208	0.205	1.4	107	0.00	7.40
124 M	Phorate	0.869	0.908	-4.5	113	0.00	7.55
125 M	Phenacetin	0.541	0.567	-4.8	110	0.02	7.60
126 M	1,4-Naphthoquinone	0.241	0.349	-44.8#	154	0.00	6.20
127 M	m-Dinitrobenzene	0.165	0.183	-10.9	111	0.00	6.32
128 M	Pentachlorobenzene	0.505	0.499	1.2	112	0.00	6.66
131 M	5-Nitro-o-toluidine	0.312	0.285	8.7	100	0.00	7.08
132 I	Phenanthrene-d10A	1.000	1.000	0.0	115	0.00	8.22
133 M	Disulfoton	0.278	0.291	-4.7	118	0.01	8.28
	-----	AvgRF	CCRF	% Dev	-----		
135 M	Dimethoate	0.215	0.197	8.4	99	0.02	7.78

8.8.8

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Initial Calibration Verification

Job Number: JD39846
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EP6785-ICV6785
Lab FileID: P147193.D

Page 2 of 2

137 M	Methyl parathion	0.155	0.127	18.1	89	0.00	8.87
138 M	Parathion	0.120	0.130	-8.3	113	0.02	9.58
139 M	Diphenylamine	0.475	0.558	-17.5	130	0.00	7.19
140 M	Isodrin	0.109	0.118	-8.3	119	0.00	9.98
141 M	Diallate	0.064	0.060	6.3	115	0.00	7.65
142 M	Pentachloronitrobenzene	0.042	0.044	-4.8	110	0.00	7.97
143 M	Pronamide	0.265	0.301	-13.6	122	0.01	8.11

		True	Calc.	% Drift			
144 M	4-Nitroquinoline 1-oxide	200.000	188.224	5.9	92	0.01	9.56
145 M	Methapyriline	50.000	37.998	24.0	101	0.00	9.76
146 M	sym-Trinitrobenzene	50.000	46.278	7.4	105	-0.01	7.55

		AvgRF	CCRF	% Dev			
147 I	Chrysene-d12A	1.000	1.000	0.0	111	0.00	13.31
148	Aramite	0.058	0.069	-19.0	116	0.01	11.42
149 M	p-(Dimethylamine)azobenze	0.278	0.284	-2.2	103	0.00	11.48

		AvgRF	CCRF	% Dev			
152 M	2-Acetylaminofluorene	0.410	0.452	-10.2	109	0.02	12.76
153 M	Chlorobenzilate	0.325	0.351	-8.0	111	0.00	11.63
154 I	Perylene-d12A	1.000	1.000	0.0	111	0.00	16.33
155 M	4,4-Methylene-bis-(2-chlo	0.018	0.015#	16.7	88	-0.02	16.87

(#) = Out of Range SPCC's out = 0 CCC's out = 0
p147187a.D MP6741AP9.M Thu Jan 20 09:51:54 2022 ACLIMS

8.8.9

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Continuing Calibration Summary

Page 1 of 2

Job Number: JD39846
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EP6813-CC6785
 Lab FileID: P147623.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\jo...2122\ep6813\p147623.d Vial: 4
 Acq On : 19 Feb 2022 4:21 am Operator: chriss2
 Sample : cc6785-50 Inst : MSVOAMSP
 Misc : op36737,ep6813,30.0,,,1,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP6741AP9.M (RTE Integrator)
 Title : Semi Volatile Extractables by GC/MS
 Last Update : Mon Feb 21 00:32:03 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
102 I	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	78	0.04	4.33
103 M	2-Picoline	1.314	1.275	3.0	74	0.03	2.77
104	Pentachloroethane	0.530	0.526	0.8	78	0.03	4.12
105 M	Methyl methanesulfonate	0.730	0.677	7.3	72	0.03	3.18
106 M	N-Nitrosodiethylamine	0.536	0.565	-5.4	81	0.03	3.50
107 M	N-Nitrosomethylethylamine	0.491	0.518	-5.5	79	0.03	2.90
108 M	Ethyl methanesulfonate	0.935	0.873	6.6	72	0.04	3.76
109 M	N-Nitrosopyrrolidine	0.372	0.832	-123.7#	140	0.05	4.65
110 M	N-Nitrosomorpholine	0.591	0.608	-2.9	83	0.04	4.67
111 M	o-Toluidine	1.839	1.823	0.9	81	0.04	4.67
112 I	Naphthalene-d8A	1.000	1.000	0.0	82	0.04	5.28
113 M	O,O,O-Triethyl phosphorot	0.148	0.159	-7.4	87	0.04	5.08
114 M	N-Nitrosopiperidine	0.171	0.178	-4.1	86	0.04	4.89
115 M	A,A-Dimethylphenethylamin	0.607	0.599	1.3	79	0.00	5.20
116 M	Hexachloropropene	0.213	0.218	-2.3	79	0.04	5.35
117 M	N-Nitrosodi-n-butylamine	0.205	0.217	-5.9	87	0.04	5.57
118	p-Phenylenediamine	0.191	0.148	22.5#	74	0.01	5.60
119 M	Safrole	0.242	0.264	-9.1	88	0.04	5.73
120	Isosafrole	0.100	0.110	-10.0	87	0.05	6.11
121	Acenaphthene-d10A	1.000	1.000	0.0	84	0.06	6.62
122 M	Thionazin	0.150	0.153	-2.0	85	0.07	7.16
123 M	Tetraethyl dithiopyrophos	0.208	0.228	-9.6	89	0.07	7.52
124 M	Phorate	0.869	0.944	-8.6	88	0.07	7.68
125 M	Phenacetin	0.541	0.599	-10.7	87	0.08	7.74
126 M	1,4-Naphthoquinone	0.241	0.264	-9.5	87	0.05	6.30
127 M	m-Dinitrobenzene	0.165	0.197	-19.4	90	0.05	6.42
128 M	Pentachlorobenzene	0.505	0.505	0.0	85	0.06	6.77
129 M	2-Naphthylamine	0.983	0.975	0.8	86	0.07	6.98
130 M	1-Naphthylamine	0.982	1.000	-1.8	89	0.06	6.90
131 M	5-Nitro-o-toluidine	0.312	0.349	-11.9	91	0.07	7.20
132 I	Phenanthrene-d10A	1.000	1.000	0.0	91	0.09	8.38
133 M	Disulfoton	0.278	0.268	3.6	85	0.09	8.44
	----- True		Calc.	% Drift			
134 M	Dinoseb	50.000	53.707	-7.4	97	0.09	8.42
	----- AvgRF		CCRF	% Dev			
135 M	Dimethoate	0.215	0.213	0.9	84	0.09	7.92

8.8.15
8

Continuing Calibration Summary

Job Number: JD39846
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EP6813-CC6785
Lab FileID: P147623.D

Page 2 of 2

136 M	4-Aminobiphenyl	0.599	0.646	-7.8	93	0.09	8.14
137 M	Methyl parathion	0.155	0.171	-10.3	94	0.09	9.04
138 M	Parathion	0.120	0.130	-8.3	89	0.10	9.76
139 M	Diphenylamine	0.475	0.487	-2.5	90	0.07	7.32
140 M	Isodrin	0.109	0.111	-1.8	88	0.11	10.17
141 M	Diallate	0.064	0.059	7.8	88	0.08	7.79
142 M	Pentachloronitrobenzene	0.042	0.043#	-2.4	85	0.09	8.13
143 M	Pronamide	0.265	0.284	-7.2	90	0.08	8.25
----- True Calc. % Drift -----							
144 M	4-Nitroquinoline 1-oxide	200.000	198.740	0.6	87	0.11	9.77
145 M	Methapyriline	50.000	45.460	9.1	90	0.10	9.94
146 M	sym-Trinitrobenzene	50.000	55.618	-11.2	99	0.07	7.69
----- AvgRF CCRF % Dev -----							
147 I	Chrysene-d12A	1.000	1.000	0.0	97	0.12	13.53
148	Aramite	0.058	0.071	-22.4#	105	0.11	11.61
149 M	p- (Dimethylamine) azobenze	0.278	0.300	-7.9	95	0.11	11.68
150	Kepone	0.081	0.057	29.6#	84	0.11	12.33
----- True Calc. % Drift -----							
151 M	Famphur	300.000	243.846	18.7	90	0.12	12.39
----- AvgRF CCRF % Dev -----							
152 M	2-Acetylaminofluorene	0.410	0.482	-17.6	102	0.13	12.98
153 M	Chlorobenzilate	0.325	0.346	-6.5	96	0.11	11.82
154 I	Perylene-d12A	1.000	1.000	0.0	100	0.12	16.57
155 M	4,4-Methylene-bis- (2-chlo	0.018	0.022#	-22.2#	115	0.12	17.11
157	3-Methylcholanthrene	0.182	0.180	1.1	98	0.13	17.18

(#) = Out of Range SPCC's out = 0 CCC's out = 0
p147328.d MP6741AP9.M Mon Feb 21 00:54:41 2022

8.8.15
8

Continuing Calibration Summary

Page 1 of 1

Job Number: JD39846
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EP6813-CC6741
Lab FileID: P147624.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\jo...2122\ep6813\p147624.d Vial: 5
Acq On : 19 Feb 2022 4:50 am Operator: chriss2
Sample : cc6741-5 Inst : MSVOAMSP
Misc : op36737,ep6813,30.0,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP6741AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Feb 21 00:32:03 2022
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
173 I	Chrysene-d12d	1.000	1.000	0.0	100	0.11	13.53
174	2,3,7,8-tcdd	0.163	0.163	0.0	100	0.12	12.71

(#) = Out of Range SPCC's out = 0 CCC's out = 0
p147384.d MP6741AP9.M Mon Feb 21 00:33:23 2022

8.8.16
8

Initial Calibration Summary

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Job Number: JD39846
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EZ7699-ICC7699
 Lab FileID: Z154918.D

Response Factor Report GCMSZ

Method : C:\MSDCHEM\1\METHODS\MZ7699.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
 Last Update : Thu Feb 10 09:30:17 2022
 Response via : Initial Calibration

Calibration Files

100 =z154914.D 80 =z154916.D 50 =z154918.D 25 =z154920.D
 10 =z154921.D 5 =z154919.D 2 =z154917.D 1 =z154915.D

Compound	100	80	50	25	10	5	2	1	Avg	%RSD

1) I 1,4-Dichlorobenzene-d	-----ISTD-----									
2) 1,4-Dioxane	0.631	0.610	0.577	0.562	0.531	0.553	0.649	0.735	0.606	10.87
3) Pyridine	1.683	1.632	1.533	1.486	1.348	1.312	1.309	1.370	1.459	10.05
4) N-Nitrosodim	0.942	0.915	0.858	0.832	0.740	0.745	0.659	0.661	0.794	13.75
5) 2-Fluorophen	1.447	1.403	1.335	1.266	1.157	1.148	1.130	1.108	1.249	10.63
6) Indene	2.345	2.357	2.334	2.306	2.168	2.167	2.118	2.151	2.243	4.49
7) Cumene	3.358	3.282	3.149	3.052	2.859	2.887	2.813	2.752	3.019	7.51
8) Phenol-d5	1.836	1.802	1.727	1.654	1.534	1.504	1.445	1.496	1.625	9.28
9) Phenol	2.004	1.951	1.883	1.816	1.706	1.641	1.607	1.568	1.772	9.31
10) Aniline	2.189	2.174	2.126	2.030	1.912	1.875	1.765	1.715	1.973	9.31
11) bis(2-Chloro	1.366	1.350	1.286	1.296	1.261	1.284	1.259	1.297	1.300	2.99
12) 2-Chlorophen	1.446	1.429	1.406	1.387	1.278	1.249	1.189	1.226	1.326	7.66
13) Decane	1.458	1.447	1.375	1.328	1.273	1.310	1.287	1.573	1.381	7.53
14) 1,3-Dichloro	1.575	1.564	1.523	1.529	1.441	1.422	1.456	1.382	1.486	4.76
15) 1,4-Dichloro	1.582	1.578	1.561	1.555	1.465	1.454	1.418	1.375	1.498	5.37
16) Benzyl alcoh	0.945	0.931	0.895	0.863	0.796	0.777	0.704	0.752	0.833	10.59
17) 1,2-Dichloro	1.506	1.502	1.468	1.449	1.419	1.396	1.393	1.403	1.442	3.20
18) Acetophenone	1.804	1.836	1.830	1.771	1.628	1.651	1.586	1.606	1.714	6.19
19) 2-Methylphen	1.289	1.292	1.256	1.233	1.139	1.120	1.081	1.147	1.195	6.89
20) 2,2'-oxybis(	0.378	0.379	0.382	0.374	0.365	0.366	0.333	0.359	0.367	4.27
21) 3&4-Methylph	1.284	1.306	1.302	1.283	1.193	1.169	1.130	1.115	1.223	6.53
22) n-Nitroso-di	0.937	0.941	0.938	0.907	0.810	0.827	0.808	0.821	0.873	7.13
23) Hexachloroet	0.507	0.508	0.484	0.497	0.468	0.456	0.463	0.425	0.476	6.06
24) I Naphthalene-d8	-----ISTD-----									
25) Nitrobenzene	0.375	0.369	0.360	0.342	0.318	0.315	0.307	0.311	0.337	8.23
26) Nitrobenzene	0.379	0.374	0.364	0.347	0.326	0.322	0.317	0.319	0.344	7.56
27) Quinoline	0.695	0.695	0.686	0.658	0.618	0.612	0.594	0.530	0.636	9.16
28) Isophorone	0.701	0.679	0.660	0.624	0.566	0.558	0.525	0.532	0.606	11.42
29) 2-Nitropheno	0.200	0.202	0.194	0.178	0.161	0.152	0.152	0.157	0.174	12.47
30) 2,4-Dimethyl	0.363	0.364	0.366	0.340	0.319	0.316	0.293	0.290	0.331	9.49
31) Benzoic Acid	0.265	0.252	0.240	0.200	0.145	0.114			0.202	30.45
---- Quadratic regression ---- Coefficient = 0.9993										
Response Ratio = -0.01514 + 0.21578 *A + 0.02242 *A^2										
32) bis(2-Chloro	0.431	0.428	0.416	0.406	0.369	0.383	0.352	0.385	0.396	7.25
33) 2,4-Dichloro	0.297	0.298	0.292	0.276	0.256	0.247	0.225	0.229	0.265	11.29
34) 2,6-Dichloro	0.294	0.295	0.291	0.280	0.258	0.255	0.238	0.249	0.270	8.35
35) 1,3,5-Trichl	0.342	0.341	0.343	0.326	0.308	0.315	0.298	0.294	0.321	6.24
36) 1,2,4-Trichl	0.325	0.328	0.320	0.312	0.292	0.289	0.282	0.280	0.303	6.57
37) 1,2,3-Trichl	0.306	0.306	0.303	0.292	0.286	0.292	0.265	0.276	0.291	5.00
38) Naphthalene	1.046	1.049	1.033	1.018	0.995	0.996	1.000	0.984	1.015	2.49
39) 4-Chloroanil	0.444	0.446	0.445	0.426	0.397	0.381	0.352	0.330	0.402	11.26
40) 2,3-Dichloro	0.345	0.344	0.356	0.342	0.320	0.317	0.297	0.291	0.327	7.41
41) Hydroquinone	0.341	0.335	0.329	0.304	0.252	0.226			0.298	16.06
42) Hexachlorobu	0.184	0.182	0.179	0.172	0.163	0.164	0.154	0.153	0.169	7.25

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Initial Calibration Summary

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Job Number: JD39846
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EZ7699-ICC7699
 Lab FileID: Z154918.D

43)	4-Chloro-3-m	0.304	0.297	0.287	0.270	0.247	0.239	0.226	0.227	0.262	12.04
44)	2-Methylnaph	0.627	0.627	0.615	0.598	0.563	0.552	0.552	0.527	0.583	6.68
45)	1-Methylnaph	0.587	0.592	0.580	0.564	0.536	0.538	0.507	0.493	0.550	6.75
46)	I Acenaphthene-d10	-----ISTD-----									
47)	Hexachlorocy	0.417	0.411	0.398	0.383	0.340	0.334	0.311	0.298	0.362	12.86
48)	1,2,4,5-tetr	0.591	0.602	0.585	0.574	0.524	0.536	0.522	0.484	0.552	7.56
49)	2,4,6-Trichl	0.390	0.391	0.382	0.376	0.341	0.336	0.306	0.310	0.354	9.91
50)	2,4,5-Trichl	0.410	0.410	0.406	0.388	0.345	0.346	0.324	0.316	0.368	10.78
51)	2-Fluorobiph	1.331	1.357	1.338	1.319	1.252	1.218	1.199	1.147	1.270	6.06
52)	2-Chloronaph	1.153	1.171	1.166	1.154	1.089	1.101	1.048	1.069	1.119	4.28
53)	Biphenyl	1.520	1.538	1.523	1.525	1.402	1.413	1.353	1.345	1.452	5.67
54)	2-Nitroanili	0.346	0.343	0.324	0.306	0.270	0.258	0.230	0.259	0.292	14.91
55)	Dimethylphth	1.277	1.287	1.254	1.246	1.160	1.142	1.138	1.077	1.197	6.50
56)	Acenaphthyle	1.715	1.714	1.659	1.647	1.511	1.484	1.393	1.350	1.559	9.25
57)	2,6-Dinitrot	0.291	0.293	0.280	0.272	0.240	0.227	0.210	0.191	0.251	15.49
58)	3-Nitroanili	0.344	0.344	0.332	0.318	0.272	0.266	0.230		0.301	14.86
59)	Acenaphthene	1.235	1.221	1.203	1.204	1.106	1.118	1.059	1.063	1.151	6.30
60)	2,4-Dinitrop	0.202	0.197	0.184	0.168	0.138	0.116	0.099		0.158	25.74
---- Quadratic regression ---- Coefficient = 0.9994											
Response Ratio = -0.00878 + 0.16354*A + 0.00839 *A^2											
61)	4-Nitropheno	0.167	0.168	0.156	0.147	0.121	0.118	0.110		0.141	17.33
62)	Dibenzofuran	1.645	1.649	1.613	1.611	1.525	1.511	1.482	1.462	1.562	4.83
63)	2,4-Dinitrot	0.388	0.392	0.374	0.362	0.313	0.294	0.251	0.250	0.328	18.01
64)	2,3,4,6-Tetr	0.341	0.346	0.334	0.317	0.288	0.266	0.249		0.306	12.66
65)	Diethylphtha	1.302	1.316	1.283	1.267	1.184	1.161	1.073	1.329	1.239	7.29
66)	Fluorene	1.357	1.367	1.349	1.331	1.230	1.193	1.149	1.140	1.264	7.67
67)	4-Chlorophen	0.615	0.617	0.607	0.601	0.568	0.545	0.566	0.549	0.583	5.10
68)	4-Nitroanili	0.346	0.342	0.337	0.323	0.273	0.246			0.311	13.37
69)	I Phenanthrene-d10	-----ISTD-----									
70)	4,6-Dinitro-	0.133	0.129	0.121	0.115	0.094	0.085			0.113	17.19
71)	n-Nitrosodip	0.674	0.668	0.637	0.615	0.578	0.570	0.557	0.640	0.617	7.29
72)	Pentachloron	0.057	0.056	0.052	0.047	0.043	0.042			0.049#	13.08
73)	1,2-Diphenyl	0.851	0.844	0.791	0.763	0.708	0.687	0.649	0.726	0.752	9.70
74)	2,4,6-Tribo	0.180	0.176	0.163	0.152	0.134	0.129			0.156	13.53
75)	4-Bromopheny	0.248	0.243	0.229	0.221	0.207	0.204	0.187	0.213	0.219	9.38
76)	Hexachlorobe	0.312	0.310	0.295	0.286	0.271	0.270	0.248	0.320	0.289	8.59
77)	Pentachlorop	0.207	0.205	0.191	0.175	0.153	0.144	0.125		0.171	18.60
78)	Phenanthrene	1.143	1.132	1.099	1.056	1.034	1.044	1.035	1.493	1.130	13.55
79)	Anthracene	1.164	1.165	1.112	1.069	1.005	0.990	0.932	1.206	1.080	9.05
80)	Carbazole	1.088	1.080	1.032	1.005	0.935	0.920	0.881	1.166	1.013	9.58
81)	Di-n-butylph	1.461	1.422	1.337	1.239	1.111	1.071	0.985		1.232	14.87
82)	Fluoranthene	1.284	1.265	1.195	1.127	1.048	1.023	0.997	1.351	1.161	11.44
83)	Octadecane	0.538	0.519	0.475	0.440	0.408	0.399	0.392	0.438	0.451	12.22
84)	I Chrysene-d12	-----ISTD-----									
85)	Benzidine	0.603	0.573	0.571	0.523	0.474	0.444	0.429	0.462	0.510	13.05
86)	Pyrene	1.222	1.233	1.221	1.196	1.171	1.150	1.133	1.488	1.227	9.08
87)	Terphenyl-d1	0.975	0.986	0.966	0.951	0.889	0.887	0.877	1.127	0.957	8.47
88)	Butylbenzylp	0.607	0.599	0.569	0.522	0.460	0.431	0.376	0.477	0.505	16.45
89)	Benzo[a]anth	1.219	1.208	1.201	1.162	1.091	1.089	1.145	1.396	1.189	8.19
90)	3,3'-Dichlor	0.505	0.513	0.502	0.476	0.423	0.414	0.399	0.579	0.476	12.79
91)	Chrysene	1.106	1.114	1.120	1.120	1.080	1.085	1.044	1.201	1.109	4.09
92)	bis(2-Ethylh	0.858	0.841	0.814	0.759	0.651	0.596	0.516	0.684	0.715	17.29
93)	I Perylene-d12	-----ISTD-----									
94)	Di-n-octylph	1.488	1.452	1.375	1.231	1.005	0.899	0.793		1.178	23.74
---- Quadratic regression ---- Coefficient = 0.9993											

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Initial Calibration Summary

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Job Number: JD39846
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EZ7699-ICC7699
Lab FileID: Z154918.D

$$\text{Response Ratio} = -0.02927 + 1.20387 *A + 0.12484 *A^2$$

95)	Benzo[b]fluo	1.390	1.389	1.316	1.267	1.126	1.096	1.048	1.119	1.219	11.29
96)	Benzo[k]fluo	1.134	1.122	1.148	1.129	1.084	1.049	0.961	1.044	1.084	5.85
97)	Benzo[a]pyre	1.206	1.207	1.168	1.108	0.983	0.953	0.905	0.990	1.065	11.40
98)	Indeno[1,2,3	1.205	1.172	1.109	1.020	0.898	0.862	0.839	0.861	0.996	15.11
99)	Dibenz(a,h)a	1.106	1.084	1.038	0.965	0.836	0.804	0.756	0.816	0.926	15.02
100)	Dibenz[a,h]a	1.281	1.263	1.209	1.131	1.013	0.957	0.899	0.900	1.082	14.73
101)	7,12-Dimethy	0.610	0.606	0.575	0.529	0.440	0.421			0.530	15.62
102)	Benzo[g,h,i]	1.280	1.262	1.218	1.149	1.030	1.011	0.972	0.981	1.113	11.61

(#) = Out of Range ### Number of calibration levels exceeded format ###

MZ7699.M

Thu Feb 10 10:03:28 2022

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Continuing Calibration Summary

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Job Number: JD39846
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EZ7709-CC7699
 Lab FileID: Z155151.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EZ7709\z155151.D Vial: 2
 Acq On : 21 Feb 2022 9:17 am Operator: jackleey
 Sample : cc7699-25 Inst : GCMSZ
 Misc : op36604,eZ7709,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MZ7699.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
 Last Update : Mon Feb 21 13:34:15 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	57	0.00	4.59
2	1,4-Dioxane	0.606	0.508	16.2	52	0.00	2.09
3 t	Pyridine	1.459	1.451	0.5	56	0.00	2.44
4 t	N-Nitrosodimethylamine	0.794	0.830	-4.5	57	0.00	2.39
5 S	2-Fluorophenol	1.249	1.256	-0.6	57	0.00	3.59
6 t	Indene	2.243	2.285	-1.9	57	0.00	4.77
7 t	Cumene	3.019	2.880	4.6	54	0.00	3.99
8 S	Phenol-d5	1.625	1.658	-2.0	58	0.00	4.32
9 t	Phenol	1.772	1.835	-3.6	58	0.00	4.33
10 t	Aniline	1.973	2.081	-5.5	59	0.00	4.34
11 t	bis(2-Chloroethyl)ether	1.300	1.287	1.0	57	0.00	4.40
12 t	2-Chlorophenol	1.326	1.343	-1.3	56	0.00	4.43
13 t	Decane	1.381	1.481	-7.2	64	0.00	4.47
14 t	1,3-Dichlorobenzene	1.486	1.526	-2.7	57	0.00	4.54
15 t	1,4-Dichlorobenzene	1.498	1.525	-1.8	56	0.00	4.60
16 t	Benzyl alcohol	0.833	0.770	7.6	51	0.00	4.69
17 t	1,2-Dichlorobenzene	1.442	1.461	-1.3	58	0.00	4.71
18 t	Acetophenone	1.714	1.912	-11.6	62	0.00	4.88
19 t	2-Methylphenol	1.195	1.363	-14.1	63	0.00	4.77
20 t	2,2'-oxybis(1-Chloropropa	0.367	0.371	-1.1	57	0.00	4.79
21 t	3&4-Methylphenol	1.223	1.325	-8.3	59	0.00	4.88
22 t	n-Nitroso-di-n-propylamin	0.873	1.033	-18.3	65	0.00	4.88
23 t	Hexachloroethane	0.476	0.527	-10.7	61	0.00	4.96
----- True Calc. % Drift -----							
31	Benzoic Acid	25.000	30.720	-22.9#	78	0.00	5.33
----- AvgRF CCRF % Dev -----							
32 t	bis(2-Chloroethoxy)methan	0.396	0.400	-1.0	59	0.00	5.33
33 t	2,4-Dichlorophenol	0.265	0.287	-8.3	62	0.00	5.40
34	2,6-Dichlorophenol	0.270	0.291	-7.8	62	0.00	5.57
35 t	1,3,5-Trichlorobenzene	0.321	0.332	-3.4	61	0.00	5.24
36 t	1,2,4-Trichlorobenzene	0.303	0.313	-3.3	60	0.00	5.46
37 t	1,2,3-Trichlorobenzene	0.291	0.308	-5.8	63	0.00	5.62

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Continuing Calibration Summary

Job Number: JD39846
Account: SESINJPB SESI Consulting Engineers
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Lab FileID: Z155151.D

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38 t	Naphthalene	1.015	0.994	2.1	58	0.00	5.52
39 t	4-Chloroaniline	0.402	0.445	-10.7	62	0.00	5.56
40 t	2,3-Dichloroaniline	0.327	0.366	-11.9	64	0.00	6.22
41 t	Hydroquinone	0.298	0.294	1.3	58	0.00	5.79
42 t	Hexachlorobutadiene	0.169	0.181	-7.1	62	0.00	5.61
43 t	4-Chloro-3-methylphenol	0.262	0.277	-5.7	61	0.00	5.90
44 t	2-Methylnaphthalene	0.583	0.601	-3.1	60	0.00	6.01
45 t	1-Methylnaphthalene	0.550	0.569	-3.5	60	0.00	6.08
46 I	Acenaphthene-d10	1.000	1.000	0.0	66	0.00	6.85
47 t	Hexachlorocyclopentadiene	0.362	0.360	0.6	62	0.00	6.13
48 t	1,2,4,5-tetrachlorobenzen	0.552	0.563	-2.0	65	0.00	6.14
49 t	2,4,6-Trichlorophenol	0.354	0.387	-9.3	68	0.00	6.22
50 t	2,4,5-Trichlorophenol	0.368	0.407	-10.6	69	0.00	6.25
51 S	2-Fluorobiphenyl	1.270	1.261	0.7	63	0.00	6.29
52 t	2-Chloronaphthalene	1.119	1.110	0.8	63	0.00	6.38
53 t	Biphenyl	1.452	1.411	2.8	61	0.00	6.37
54 t	2-Nitroaniline	0.292	0.337	-15.4	72	0.00	6.46
55 t	Dimethylphthalate	1.197	1.277	-6.7	67	0.00	6.61
56 t	Acenaphthylene	1.559	1.602	-2.8	64	0.00	6.72
57 t	2,6-Dinitrotoluene	0.251	0.288	-14.7	70	0.00	6.66
58 t	3-Nitroaniline	0.301	0.350	-16.3	72	0.00	6.81
59 t	Acenaphthene	1.151	1.154	-0.3	63	0.00	6.88
----- True Calc. % Drift -----							
60 t	2,4-Dinitrophenol	50.000	58.424	-16.8	78	0.00	6.90
----- AvgRF CCRF % Dev -----							
61 t	4-Nitrophenol	0.141	0.166	-17.7	74	0.00	6.95
62 t	Dibenzofuran	1.562	1.601	-2.5	65	0.00	7.04
63 t	2,4-Dinitrotoluene	0.328	0.402	-22.6#	73	0.00	7.02
64	2,3,4,6-Tetrachlorophenol	0.306	0.340	-11.1	71	0.00	7.15
65 t	Diethylphthalate	1.239	1.281	-3.4	67	0.00	7.26
66 t	Fluorene	1.264	1.318	-4.3	65	0.00	7.37
67 t	4-Chlorophenyl-phenylethe	0.583	0.613	-5.1	67	0.00	7.37
68 t	4-Nitroaniline	0.311	0.385	-23.8#	78	0.00	7.39
69 I	Phenanthrene-d10	1.000	1.000	0.0	70	0.00	8.42
70 t	4,6-Dinitro-2-methylpheno	0.113	0.127	-12.4	78	0.00	7.42
71 t	n-Nitrosodiphenylamine	0.617	0.582	5.7	66	0.00	7.49
72 t	Pentachloronitrobenzene	0.049	0.048#	2.0	71	0.00	8.20
73 t	1,2-Diphenylhydrazine	0.752	0.708	5.9	65	0.00	7.54
74 S	2,4,6-Tribromophenol	0.156	0.141	9.6	65	0.00	7.62
75 t	4-Bromophenyl-phenylether	0.219	0.207	5.5	66	0.00	7.90
76 t	Hexachlorobenzene	0.289	0.263	9.0	64	0.00	7.96
77 t	Pentachlorophenol	0.171	0.184	-7.6	74	0.00	8.19
78 t	Phenanthrene	1.130	1.040	8.0	69	0.00	8.45
79 t	Anthracene	1.080	1.062	1.7	70	0.00	8.51
80 t	Carbazole	1.013	1.021	-0.8	71	0.00	8.72
81 t	Di-n-butylphthalate	1.232	1.281	-4.0	73	0.00	9.24
82 t	Fluoranthene	1.161	1.188	-2.3	74	0.00	10.04
83 t	Octadecane	0.451	0.412	8.6	66	0.00	8.33
84 I	Chrysene-d12	1.000	1.000	0.0	79	0.00	12.21
85 t	Benzidine	0.510	0.586	-14.9	89	0.00	10.28
86 t	Pyrene	1.227	1.125	8.3	75	0.00	10.36
87 S	Terphenyl-d14	0.957	0.875	8.6	73	0.00	10.65
88 t	Butylbenzylphthalate	0.505	0.535	-5.9	81	0.00	11.45
89 t	Benzo[a]anthracene	1.189	1.149	3.4	79	0.00	12.19
90 t	3,3'-Dichlorobenzidine	0.476	0.501	-5.3	84	0.00	12.20

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Continuing Calibration Summary

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Job Number: JD39846
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Lab FileID: Z155151.D

91 t	Chrysene	1.109	1.061	4.3	75	0.00	12.24
92 t	bis(2-Ethylhexyl)phthalat	0.715	0.769	-7.6	81	0.00	12.40
93 I	Perylene-d12	1.000	1.000	0.0	77	0.00	14.28
		----- True	Calc.	% Drift	-----		
94 t	Di-n-octylphthalate	25.000	26.562	-6.2	82	0.00	13.38
		----- AvgRF	CCRF	% Dev	-----		
95 t	Benzo[b]fluoranthene	1.219	1.219	0.0	74	0.00	13.76
96 t	Benzo[k]fluoranthene	1.084	1.074	0.9	73	0.00	13.80
97 t	Benzo[a]pyrene	1.065	1.094	-2.7	76	0.00	14.20
98 t	Indeno[1,2,3-cd]pyrene	0.996	0.997	-0.1	75	0.00	15.60
99 t	Dibenz(a,h)acridine	0.926	0.930	-0.4	74	0.00	15.34
100 t	Dibenz[a,h]anthracene	1.082	1.082	0.0	73	0.00	15.64
101 t	7,12-Dimethylbenz(a)anthr	0.530	0.451	14.9	65	0.00	13.77
102 t	Benzo[g,h,i]perylene	1.113	1.102	1.0	74	0.00	15.94

(#) = Out of Range
z155151.D MZ7699.M

SPCC's out = 0 CCC's out = 0
Mon Feb 21 13:34:31 2022 YING

8.8.25
8

Continuing Calibration Summary

Page 1 of 1

Job Number: JD39846
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EZ7709-CC7700
 Lab FileID: Z155152.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EZ7709\z155152.D Vial: 3
 Acq On : 21 Feb 2022 9:41 am Operator: jackleey
 Sample : cc7700-25 Inst : GCMSZ
 Misc : op36604,eZ7709,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MZ7699.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
 Last Update : Mon Feb 21 13:34:15 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
103	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	57	0.00	4.58
104	Benzaldehyde	0.962	1.062	-10.4	61	0.00	4.26
105	Phenanthrene-d10a	1.000	1.000	0.0	71	0.00	8.42
	----- True Calc. % Drift -----						
106	Atrazine	25.000	27.493	-10.0	77	0.00	8.10
	----- AvgRF CCRF % Dev -----						
107 I	Naphthalene-d8a	1.000	1.000	0.0	57	0.00	5.50
	----- True Calc. % Drift -----						
108 t	Caprolactam	25.000	36.660	-46.6#	86	0.00	5.80
	----- AvgRF CCRF % Dev -----						
109	Phenanthrene-d10b	1.000	1.000	0.0	71	0.00	8.42
110 s	1-chlorooctadecane	0.262	0.296	-13.0	74	0.00	9.98
111 s	o-terphenyl	0.547	0.537	1.8	69	0.00	8.93

(#) = Out of Range
 z155151.D MZ7699.M

SPCC's out = 0 CCC's out = 0
 Mon Feb 21 13:34:33 2022 YING

8.8.26
8

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: JD39846

Account: SESINJPB SESI Consulting Engineers

Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38217-BS1	P147626.D	1	02/19/22	CS	02/18/22	OP38217	EP6813
OP38217-BSD	P147627.D	1	02/19/22	CS	02/18/22	OP38217	EP6813

The QC reported here applies to the following samples:

Method: SW846 8270E

JD39846-13

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	50	30.3	61	29.2	58	4	52-114/34
59-50-7	4-Chloro-3-methyl phenol	50	35.7	71	38.8	78	8	56-122/28
120-83-2	2,4-Dichlorophenol	50	34.7	69	38.2	76	10	58-121/31
105-67-9	2,4-Dimethylphenol	50	31.6	63	33.9	68	7	58-119/28
51-28-5	2,4-Dinitrophenol	100	83.4	83	87.9	88	5	33-151/38
534-52-1	4,6-Dinitro-o-cresol	50	46.7	93	48.5	97	4	37-152/37
95-48-7	2-Methylphenol	50	27.3	55	28.7	57	5	48-107/28
	3&4-Methylphenol	100	51.5	52	54.7	55	6	10-148/29
88-75-5	2-Nitrophenol	50	38.1	76	37.1	74	3	50-136/34
100-02-7	4-Nitrophenol	50	18.8	38	19.3	39	3	10-107/44
87-86-5	Pentachlorophenol	100	86.2	86	86.2	86	0	12-168/36
108-95-2	Phenol	50	14.3	29	14.8	30	3	10-94/32
58-90-2	2,3,4,6-Tetrachlorophenol	50	46.2	92	46.8	94	1	52-134/36
95-95-4	2,4,5-Trichlorophenol	50	44.0	88	44.5	89	1	56-128/35
88-06-2	2,4,6-Trichlorophenol	50	44.3	89	44.7	89	1	56-126/35
83-32-9	Acenaphthene	50	41.4	83	43.6	87	5	57-115/27
208-96-8	Acenaphthylene	50	33.1	66	36.5	73	10	51-114/26
98-86-2	Acetophenone	50	40.1	80	38.5	77	4	54-118/30
120-12-7	Anthracene	50	47.1	94	47.4	95	1	60-123/27
1912-24-9	Atrazine	50	52.1	104	50.8	102	3	66-134/30
100-52-7	Benzaldehyde	50	38.4	77	34.7	69	10	48-128/38
56-55-3	Benzo(a)anthracene	50	48.2	96	49.4	99	2	64-119/25
50-32-8	Benzo(a)pyrene	50	42.1	84	42.9	86	2	63-124/27
205-99-2	Benzo(b)fluoranthene	50	49.3	99	49.8	100	1	64-123/27
191-24-2	Benzo(g,h,i)perylene	50	52.5	105	52.9	106	1	59-124/30
207-08-9	Benzo(k)fluoranthene	50	46.9	94	46.4	93	1	58-122/28
101-55-3	4-Bromophenyl phenyl ether	50	48.4	97	47.6	95	2	56-126/28
85-68-7	Butyl benzyl phthalate	50	49.8	100	50.9	102	2	55-134/28
92-52-4	1,1'-Biphenyl	50	40.1	80	41.6	83	4	55-114/28
91-58-7	2-Chloronaphthalene	50	38.0	76	39.5	79	4	55-114/27
106-47-8	4-Chloroaniline	50	24.5	49	28.3	57	14	14-99/50
86-74-8	Carbazole	50	48.1	96	48.4	97	1	62-122/26
105-60-2	Caprolactam	50	16.5	33	17.4	35	5	10-106/27
218-01-9	Chrysene	50	46.1	92	46.4	93	1	60-120/25
111-91-1	bis(2-Chloroethoxy)methane	50	36.7	73	38.6	77	5	52-119/28
111-44-4	bis(2-Chloroethyl)ether	50	37.0	74	33.3	67	11	52-116/34

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: JD39846
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38217-BS1	P147626.D	1	02/19/22	CS	02/18/22	OP38217	EP6813
OP38217-BSD	P147627.D	1	02/19/22	CS	02/18/22	OP38217	EP6813

The QC reported here applies to the following samples:

Method: SW846 8270E

JD39846-13

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
108-60-1	2,2'-Oxybis(1-chloropropane)	50	38.2	76	35.1	70	8	50-121/34
7005-72-3	4-Chlorophenyl phenyl ether	50	46.7	93	46.9	94	0	54-120/28
121-14-2	2,4-Dinitrotoluene	50	53.2	106	49.8	100	7	56-133/26
606-20-2	2,6-Dinitrotoluene	50	46.6	93	48.4	97	4	59-130/26
91-94-1	3,3'-Dichlorobenzidine	50	36.3	72	89.7	40	9	13-118/50
123-91-1	1,4-Dioxane	50	17.3	35	17.5	35	1	13-86/42
53-70-3	Dibenzo(a,h)anthracene	50	47.5	95	46.3	93	3	58-126/28
132-64-9	Dibenzofuran	50	43.6	87	42.0	84	4	60-116/26
84-74-2	Di-n-butyl phthalate	50	51.7	103	52.3	105	1	57-129/29
117-84-0	Di-n-octyl phthalate	50	45.1	90	46.4	93	3	53-136/29
84-66-2	Diethyl phthalate	50	49.7	99	48.4	97	3	56-121/28
131-11-3	Dimethyl phthalate	50	45.3	91	47.0	94	4	57-119/27
117-81-7	bis(2-Ethylhexyl)phthalate	50	44.9	90	46.1	92	3	57-133/26
206-44-0	Fluoranthene	50	51.1	102	51.4	103	1	64-123/28
86-73-7	Fluorene	50	48.0	96	47.2	94	2	62-117/29
118-74-1	Hexachlorobenzene	50	45.7	91	45.3	91	1	56-127/27
87-68-3	Hexachlorobutadiene	50	24.9	50	29.0	58	15	34-121/35
77-47-4	Hexachlorocyclopentadiene	100	26.2	26* a	28.4	28* a	8	29-116/36
67-72-1	Hexachloroethane	50	26.9	54	28.1	56	4	36-111/41
193-39-5	Indeno(1,2,3-cd)pyrene	50	48.8	98	47.5	95	3	55-128/30
78-59-1	Isophorone	50	41.3	83	38.6	77	7	55-123/28
91-57-6	2-Methylnaphthalene	50	35.9	72	37.7	75	5	56-118/30
88-74-4	2-Nitroaniline	50	53.0	106	48.1	96	10	52-137/27
99-09-2	3-Nitroaniline	50	35.2	70	38.5	77	9	31-112/44
100-01-6	4-Nitroaniline	50	45.6	91	44.8	90	2	52-124/28
91-20-3	Naphthalene	50	34.1	68	36.2	72	6	57-111/29
98-95-3	Nitrobenzene	50	36.2	72	38.6	77	6	53-123/30
621-64-7	N-Nitroso-di-n-propylamine	50	43.9	88	41.9	84	5	48-122/28
86-30-6	N-Nitrosodiphenylamine	50	44.3	89	45.6	91	3	56-133/30
85-01-8	Phenanthrene	50	46.2	92	46.7	93	1	62-120/27
129-00-0	Pyrene	50	48.8	98	48.0	96	2	59-126/29
95-94-3	1,2,4,5-Tetrachlorobenzene	50	37.2	74	37.4	75	1	49-119/29

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: JD39846

Account: SESINJPB SESI Consulting Engineers

Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38217-BS1	P147626.D	1	02/19/22	CS	02/18/22	OP38217	EP6813
OP38217-BSD	P147627.D	1	02/19/22	CS	02/18/22	OP38217	EP6813

The QC reported here applies to the following samples:

Method: SW846 8270E

JD39846-13

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	36%	38%	10-90%
4165-62-2	Phenol-d5	25%	25%	10-101%
118-79-6	2,4,6-Tribromophenol	92%	97%	23-155%
4165-60-0	Nitrobenzene-d5	72%	76%	25-141%
321-60-8	2-Fluorobiphenyl	80%	84%	35-126%
1718-51-0	Terphenyl-d14	99%	99%	15-139%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Continuing Calibration Summary

Page 1 of 2

Job Number: JD39846
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: G1G6034-CC5985
 Lab FileID: 1G174602.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\sy...4\lg174602.d\ECD1A.CH Vial: 4
 Signal #2 : C:\msdchem\1\data\syrap\lg6034\lg174602.d\ECD2B.CH
 Acq On : 25 Feb 2022 2:55 pm Operator: kristis
 Sample : cc5985-50 Inst : HP G1530A
 Misc : op38204,lg6034,15.2,,,10,1 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\lpst5985.m (ChemStation Integrator)
 Title : PEST/PCB
 Last Update : Sun Feb 27 23:10:15 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	84	0.00	1.69- 1.75
2 SAB	Tetrachloro-m-xylene	0.968	0.865	10.6	81	0.00	2.22- 2.28
3	Hexachlorobenzene	1.475	1.334	9.6	82	0.00	2.54- 2.60
4 A	alpha-BHC	1.409	1.351	4.1	82	0.00	2.68- 2.74
5 MA	gamma-BHC	1.290	1.213	6.0	81	0.00	2.97- 3.03
6 MA	Heptachlor	1.274	1.170	8.2	82	0.00	3.48- 3.54
7 B	beta-BHC	0.564	0.501	11.2	79	0.00	3.04- 3.10
8 B	delta-BHC	1.218	1.227	-0.7	85	0.00	3.23- 3.29
9 MB	Aldrin	1.189	1.036	12.9	77	0.00	3.83- 3.89
10	Alachlor	0.137	0.115	16.1	70	0.00	3.97- 4.03
11 B	Heptachlor Epoxide	1.166	0.915	21.5#	74	0.00	4.58- 4.64
12 B	gamma-Chlordane	1.143	1.011	11.5	80	0.00	4.75- 4.81
13 B	alpha-Chlordane	1.097	0.948	13.6	78	0.00	4.93- 4.99
14 A	Endosulfan I	1.077	0.964	10.5	81	0.00	5.13- 5.19
15 B	4,4'-DDE	1.143	1.030	9.9	80	0.00	5.04- 5.10
16 MA	Dieldrin	1.153	1.067	7.5	83	0.00	5.48- 5.54
17 MA	Endrin	1.079	1.061	1.7	87	0.00	5.83- 5.89
18 A	4,4'-DDD	0.925	0.867	6.3	82	0.00	5.94- 6.01
19 B	Endosulfan II	0.996	0.932	6.4	84	0.00	6.17- 6.23
20 MA	4,4'-DDT	0.931	0.917	1.5	86	0.00	6.39- 6.45
21 B	Endrin Aldehyde	0.806	0.701	13.0	80	0.00	6.86- 6.92
22 B	Endosulfan Sulfate	0.920	0.894	2.8	88	0.00	7.61- 7.67
23 A	Methoxychlor	0.504	0.503	0.2	89	0.00	7.23- 7.29
24	Mirex	0.811	0.723	10.9	83	0.00	7.42- 7.48
25 B	Endrin Ketone	1.004	0.943	6.1	86	0.00	8.08- 8.14
26 SA	Decachlorobiphenyl	0.891	0.650	27.0#	70	0.00	9.91- 9.97
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	91	0.00	1.62- 1.82
28 L8	Toxaphene{A}			-----NA-----			
29 L8	Toxaphene{B}			-----NA-----			
30 L8	Toxaphene{C}			-----NA-----			
31 L8	Toxaphene{D}			-----NA-----			
32 L8	Toxaphene{E}			-----NA-----			
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	91	0.00	1.62- 1.82
34	Chlordane {A}			-----NA-----			
35	Chlordane {B}			-----NA-----			
36	Chlordane {C}			-----NA-----			
37	Chlordane {D}			-----NA-----			
38	Chlordane {E}			-----NA-----			

10.10.12 10

Continuing Calibration Summary

Page 2 of 2

Job Number: JD39846
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: G1G6034-CC5985
Lab FileID: 1G174602.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	90	0.00	1.93- 1.99
2	SAB	Tetrachloro-m-xylene	0.651	0.571	12.3	85	0.00	2.70- 2.76
3		Hexachlorobenzene	1.366	1.313	3.9	91	0.00	3.22- 3.28
4	A	alpha-BHC	1.356	1.336	1.5	87	0.00	3.37- 3.43
5	MA	gamma-BHC	1.247	1.202	3.6	86	0.00	3.81- 3.87
6	MA	Heptachlor	1.264	1.183	6.4	87	0.00	4.43- 4.49
7	B	beta-BHC	0.509	0.440	13.6	84	0.00	3.90- 3.96
8	B	delta-BHC	1.213	1.243	-2.5	90	0.00	4.32- 4.38
9	MB	Aldrin	1.203	1.075	10.6	83	0.00	4.91- 4.97
10		Alachlor	0.130	0.117	10.0	82	0.00	4.69- 4.75
11	B	Heptachlor Epoxide	1.098	0.997	9.2	85	0.00	5.79- 5.85
12	B	gamma-Chlordane	1.095	0.987	9.9	85	0.00	6.10- 6.16
13	B	alpha-Chlordane	1.094	0.964	11.9	85	0.00	6.34- 6.40
14	A	Endosulfan I	1.089	0.969	11.0	86	0.00	6.45- 6.51
15	B	4,4'-DDE	1.074	0.973	9.4	85	0.00	6.61- 6.67
16	MA	Dieldrin	1.138	1.049	7.8	86	0.00	6.92- 6.98
17	MA	Endrin	1.020	1.017	0.3	91	0.00	7.47- 7.53
18	A	4,4'-DDD	0.804	0.760	5.5	87	0.00	7.64- 7.70
19	B	Endosulfan II	0.989	0.868	12.2	86	0.00	7.85- 7.91
20	MA	4,4'-DDT	0.758	0.712	6.1	83	0.00	8.23- 8.29
21	B	Endrin Aldehyde	0.770	0.662	14.0	86	0.00	8.47- 8.53
22	B	Endosulfan Sulfate	0.855	0.835	2.3	93	0.00	8.98- 9.04
23	A	Methoxychlor	0.396	0.370	6.6	85	0.00	9.54- 9.60
24		Mirex	0.669	0.571	14.6	87	0.00	9.88- 9.94
25	B	Endrin Ketone	0.928	0.878	5.4	90	0.00	9.93- 9.99
26	SA	Decachlorobiphenyl	0.840	0.760	9.5	92	0.00	11.81-11.87
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.86- 2.06
28	L8	Toxaphene{A}			-----NA-----			
29	L8	Toxaphene{B}			-----NA-----			
30	L8	Toxaphene{C}			-----NA-----			
31	L8	Toxaphene{D}			-----NA-----			
32	L8	Toxaphene{E}			-----NA-----			
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.86- 2.06
34		Chlordane {A}			-----NA-----			
35		Chlordane {B}			-----NA-----			
36		Chlordane {C}			-----NA-----			
37		Chlordane {D}			-----NA-----			
38		Chlordane {E}			-----NA-----			

(#) = Out of Range
1g174602.d 1pst5985.m

SPCC's out = 0 CCC's out = 0
Mon Feb 28 00:24:02 2022

10.10.12 10

Isotope Dilution Standard Recovery Summary

Page 1 of 3

Job Number: JD39846

Account: ALNJ SGS Dayton, NJ

Project: SESINJPB: 1001 Whitlock Avenue, Bronx, NY

Method: EPA 537M BY ID

Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6	S7	S8
JD39846-1A	3Q55507.D	78	78	79	80	80	79	79	76
JD39846-2A	3Q55508.D	78	80	82	87	88	89	100	97
JD39846-3A	3Q55621.D	82	82	83	87	86	85	95	98
JD39846-3A	3Q55509.D	73	73	74	76	78	76	80	79
JD39846-5A	3Q55622.D	69	70	73	77	77	78	88	89
JD39846-5A	3Q55510.D	65	67	68	71	73	74	77	77
JD39846-6A	3Q55511.D	70	71	72	74	76	75	79	77
JD39846-7A	3Q55623.D	80	81	83	88	88	87	93	98
JD39846-7A	3Q55512.D	76	78	80	82	85	84	87	88
JD39846-8A	3Q55513.D	93	93	94	96	98	96	103	100
JD39846-9A	3Q55514.D	74	74	76	78	79	77	81	81
JD39846-10A	3Q55518.D	84	83	86	90	86	84	90	94
JD39846-11A	3Q55519.D	75	75	76	77	80	77	83	85
OP89889-BS	3Q55493.D	71	69	70	71	69	69	75	76
OP89889-MB	3Q55494.D	83	81	82	84	83	81	91	91
OP89889-MS	3Q55500.D	86	86	86	87	89	88	87	84
OP89889-MSD	3Q55501.D	88	88	89	92	93	92	102	94

Isotope Dilution Standards

Recovery Limits

S1 = 13C4-PFBA
S2 = 13C5-PFPeA
S3 = 13C5-PFHxA
S4 = 13C4-PFHpA
S5 = 13C8-PFOA
S6 = 13C9-PFNA
S7 = 13C6-PFDA
S8 = 13C7-PFUnDA

40-140%
50-150%
50-150%
50-150%
50-150%
50-150%
50-150%
40-140%

Isotope Dilution Standard Recovery Summary

Page 2 of 3

Job Number: JD39846
Account: ALNJ SGS Dayton, NJ
Project: SESINJPB: 1001 Whitlock Avenue, Bronx, NY

Method: EPA 537M BY ID	Matrix: SO
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S9	S10	S11	S12	S13	S14	S15	S16
JD39846-1A	3Q55507.D	77	75	78	80	77	59	84	85
JD39846-2A	3Q55508.D	90	89	88	92	92	61	61	69
JD39846-3A	3Q55621.D	87	82	90	92	93	92	39* a	40
JD39846-3A	3Q55509.D	76	73	76	76	78	78	32* a	36* a
JD39846-5A	3Q55622.D	80	76	84	87	83	69	41	44
JD39846-5A	3Q55510.D	74	72	75	76	77	63	34* a	40
JD39846-6A	3Q55511.D	73	72	75	76	76	49	46	54
JD39846-7A	3Q55623.D	88	82	93	91	90	71	32* a	40
JD39846-7A	3Q55512.D	83	82	83	86	84	64	29* a	32* a
JD39846-8A	3Q55513.D	96	94	96	96	95	70	79	85
JD39846-9A	3Q55514.D	78	75	79	79	80	58	48	55
JD39846-10A	3Q55518.D	86	86	84	91	87	83	73	77
JD39846-11A	3Q55519.D	77	75	77	77	79	68	55	57
OP89889-BS	3Q55493.D	72	69	73	75	73	69	82	78
OP89889-MB	3Q55494.D	85	82	86	88	87	90	100	93
OP89889-MS	3Q55500.D	85	85	88	89	89	70	98	93
OP89889-MSD	3Q55501.D	92	92	90	92	92	79	95	98

Isotope Dilution Standards

Recovery Limits

S9 = 13C2-PFDoDA	40-140%
S10 = 13C2-PFTeDA	30-130%
S11 = 13C3-PFBS	50-150%
S12 = 13C3-PFHxS	50-150%
S13 = 13C8-PFOS	50-150%
S14 = 13C8-FOSA	30-130%
S15 = d3-MeFOSAA	40-140%
S16 = d5-EtFOSAA	40-140%

(a) Outside control limits.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD39846
 Account: SESINJPB - SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

QC Batch ID: MP31357
 Matrix Type: SOLID

Methods: SW846 6010D
 Units: mg/kg

Prep Date: 02/18/22

Metal	JD39846-3 Original MS		SpikeLot MPSPK2	% Rec	QC Limits
Aluminum	11600	17100	2870	191.5 (a)	75-125
Antimony	1.5	106	230	45.5N (b)	75-125
Arsenic	2.7	205	230	88.0	75-125
Barium	55.5	275	230	95.5	75-125
Beryllium	0.44	206	230	89.4	75-125
Bismuth					
Boron					
Cadmium	0.11	217	230	94.4	75-125
Calcium	1410	3990	2870	89.8	75-125
Chromium	22.2	242	230	95.6	75-125
Cobalt	9.4	221	230	92.1	75-125
Copper	26.3	243	230	94.3	75-125
Iron	17300	21400	2870	142.7 (a)	75-125
Lead	5.6	222	230	94.2	75-125
Lithium					
Magnesium	3330	6290	2870	103.0	75-125
Manganese	326	1150	230	358.5N (b)	75-125
Molybdenum					
Nickel	20.1	237	230	94.4	75-125
Phosphorus					
Potassium	2400	5050	2870	92.2	75-125
Selenium	0.0	204	230	88.8	75-125
Silicon					
Silver	0.63	27.8	28.7	94.6	75-125
Sodium	98.8	2730	2870	91.6	75-125
Strontium					
Sulfur					
Thallium	0.75	216	230	93.7	75-125
Tin					
Titanium					
Tungsten					
Vanadium	29.8	248	230	94.9	75-125
Zinc	38.4	256	230	94.7	75-125

12.6.2
12

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD39846
 Account: SESINJPB - SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

QC Batch ID: MP31357
 Matrix Type: SOLID

Methods: SW846 6010D
 Units: mg/kg

Prep Date: 02/18/22

Metal	JD39846-3 Original MS	SpikeLot MPSPK2	% Rec	QC Limits
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Zirconium

Associated samples MP31357: JD39846-1, JD39846-2, JD39846-3, JD39846-5, JD39846-6, JD39846-7, JD39846-8, JD39846-9, JD39846-10, JD39846-11

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

(b) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

12.6.2
12

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD39846
 Account: SESINJPB - SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

QC Batch ID: MP31357
 Matrix Type: SOLID

Methods: SW846 6010D
 Units: mg/kg

Prep Date: 02/18/22

Metal	JD39846-3 Original MSD		Spikelet MPSPK2	% Rec	MSD RPD	QC Limit
Aluminum	11600	17300	2790	204.5 (a)	1.2	20
Antimony	1.5	100	223	44.2N (b)	5.8	20
Arsenic	2.7	200	223	88.5	2.5	20
Barium	55.5	273	223	97.5	0.7	20
Beryllium	0.44	202	223	90.4	2.0	20
Bismuth						
Boron						
Cadmium	0.11	211	223	94.6	2.8	20
Calcium	1410	4150	2790	98.3	3.9	20
Chromium	22.2	235	223	95.4	2.9	20
Cobalt	9.4	216	223	92.6	2.3	20
Copper	26.3	239	223	95.4	1.7	20
Iron	17300	21800	2790	161.4 (a)	1.9	20
Lead	5.6	215	223	93.9	3.2	20
Lithium						
Magnesium	3330	6480	2790	113.0	3.0	20
Manganese	326	860	223	239.5N (b)	28.9 (c)	20
Molybdenum						
Nickel	20.1	232	223	95.0	2.1	20
Phosphorus						
Potassium	2400	5490	2790	110.9	8.3	20
Selenium	0.0	199	223	89.2	2.5	20
Silicon						
Silver	0.63	27.0	27.9	94.6	2.9	20
Sodium	98.8	2700	2790	93.3	1.1	20
Strontium						
Sulfur						
Thallium	0.75	211	223	94.3	2.3	20
Tin						
Titanium						
Tungsten						
Vanadium	29.8	241	223	94.7	2.9	20
Zinc	38.4	251	223	95.3	2.0	20

12.6.2
12

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD39846
 Account: SESINJPB - SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

QC Batch ID: MP31357
 Matrix Type: SOLID

Methods: SW846 6010D
 Units: mg/kg

Prep Date: 02/18/22

Metal	JD39846-3 Original MSD	SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
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Zirconium

Associated samples MP31357: JD39846-1, JD39846-2, JD39846-3, JD39846-5, JD39846-6, JD39846-7, JD39846-8, JD39846-9, JD39846-10, JD39846-11

Results < IDL are shown as zero for calculation purposes

- (*) Outside of QC limits
- (N) Matrix Spike Rec. outside of QC limits
- (anr) Analyte not requested
- (a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- (b) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- (c) High rpd due to possible sample nonhomogeneity.

12.6.2
12

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD39846
 Account: SESINJPB - SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

QC Batch ID: MP31363
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 02/18/22

Metal	JD39833-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum	26.7	0.00	100.0 (a)	0-10
Antimony	0.00	0.00	NC	0-10
Arsenic	2.20	0.00	100.0 (a)	0-10
Barium	382	384	0.5	0-10
Beryllium	0.00	0.00	NC	0-10
Bismuth				
Boron				
Cadmium	0.900	0.00	100.0 (a)	0-10
Calcium	87500	88600	1.2	0-10
Cerium				
Chromium	1.00	1.80	80.0 (a)	0-10
Cobalt	0.00	0.00	NC	0-10
Copper	2.80	17.4	521.4 (a)	0-10
Iron	0.00	0.00	NC	0-10
Lead	0.00	0.00	NC	0-10
Lithium				
Magnesium	48400	50000	3.2	0-10
Manganese	21.6	21.8	0.9	0-10
Molybdenum				
Nickel	1.90	0.00	100.0 (a)	0-10
Phosphorus				
Potassium	3130	3430	9.4	0-10
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	1.10	0.00	100.0 (a)	0-10
Sodium	147000	150000	2.0	0-10
Strontium				
Sulfur				
Thallium	0.00	0.00	NC	0-10
Tin				
Titanium				
Tungsten				
Vanadium	1.50	0.00	100.0 (a)	0-10

12.7.4
12

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD39846
 Account: SESINJPB - SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

QC Batch ID: MP31363
 Matrix Type: AQUEOUS

Methods: SW846 6010D
 Units: ug/l

Prep Date: 02/18/22

JD39833-1		QC	
Metal	Original SDL 1:5	%DIF	Limits

Zinc	0.400	0.00	100.0 (a) 0-10
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Zirconium

Associated samples MP31363: JD39846-13

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

12.7.4
12

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD39846
Account: SESINJPB - SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Cyanide	GP38592/GN26579	JD39843-1	mg/kg	0.0	2.35	1.5	63.7N (a)	75-125%
Cyanide	GP38593/GN26579	JD39846-11	mg/kg	0.0	2.6	1.8	69.2N (a)	75-125%

Associated Samples:

Batch GP38592: JD39846-1, JD39846-2, JD39846-3, JD39846-5, JD39846-6, JD39846-7, JD39846-8, JD39846-9, JD39846-10

Batch GP38593: JD39846-11

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(a) Spike recovery indicates possible matrix interference.

14.3
14

HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

March 19th, 2022

Mr. Jesse Mausner, PG, LSRP, Project Manager
SESI Consulting Engineers
12A Maple Avenue
Pine Brook NJ, 07058

Re: Data Usability Summary Reports and Quality Assurance Validation Analyses for
SGS North America Inc. Project **(SDG) No.: JD39915**

Client Project ID: 11819–1001 Whitlock Avenue, Bronx, NY

Dear Mr. Mausner,

I thank you for your confidence in our data validation services and look forward to the growth of our business relationship. I Have enclosed with this letter the data usability summary reports (DUSRs) and data validation summaries for the above referenced laboratory (SDG) numbers issued by SGS North America Inc.

The overall evaluation of the SDG# JD39915 displays good degree of confidence and acceptance in accordance with the guidelines in the USEPA National Functional Guidelines and the method and QC Criteria specified in NYSDEC ASP Documents except for some qualified results that are identified in the validation summaries based solely on the stated above validation guidance criteria. However, the qualified data (Bias low, Bias High, Unreliable or unusable) may be subject to the user's reconsideration or determination in the circumstances of obtaining additional information that is not contained in the data validation criteria.

If you have any questions or comments regarding any of the attached data usability summary reports and or the data validation summaries, please do not hesitate to contact me at (413) 875-5049 or via email at hanibaltayeh@gmail.com.

Sincerely,



Hanibal C. Tayeh, Ph.D.

Data Validation and Forensic Geochemistry Expert

Files: DUSR-SESI-11819–1001 Whitlock Avenue, Bronx, NY - JD39915

DATA USABILITY SUMMARY REPORT (DUSR)

Site Location: 1001 Whitlock Avenue, Bronx, NY

SGS North America Inc.

Laboratory (SDG) # JD39915

Project No. 11819

Prepared for:

Mr. Jesse Mausner, PG, LSRP, Project Manager

SESI Consulting Engineers

12A Maple Avenue

Pine Brook NJ, 07058

Prepared by:

Hanibal Tayeh, Ph.D.

Data Validation and Forensic Geochemistry Expert

On

March 19th, 2022

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 5. DATA VALIDATION ACTIVE STANDARD OPERATING PROCEDURES (SOPs)
 6. DATA VALIDATION REPORT NARRATIVE
- SUPPORT DOCUMENTATION (Refer to the electronic Data Package PDF file)

1. GLOSSARY OF ACRONYMS & TERMS

The following acronyms and terms may have been used in the descriptive process of the Organic and Inorganic Data Validation.

Acronyms:

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene (volatile instrument performance check)
BNA	Base/Neutral/Acid
CARD	CLP Analytical Results Database
CCB	Continuing Calibration Blank
CCCs	Calibration Check Compounds
CCS	Contract Compliance Screening
CCV	Continuing Calibration Verification
CF	Calibration Factor
CLP	Contract Laboratory Program
CN	Cyanide
COC	Chain of Custody
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
CSF	Complete SDG File
CV	Cold Vapor
%D	Percent Difference
DAS	Delivery of Analytical Services
DCAA	2,4-Dichlorophenylacetic acid
DCB	Decachlorobiphenyl (Pesticide/PCB/ surrogate compound)
DFTPP	Decafluorotriphenylphosphine (semivolatile instrument performance check)
DSF	Data Summary Form
DVA	Data Validation Assessment
ECD	Electron-Capture Detector
EICP	Extended Ion Current Profile
EPA	United States Environmental Protection Agency
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas Chromatography
GC/EC	Gas Chromatography/Electron Capture
GC/MS	Gas Chromatography/Mass Spectra
GPC	Gel Permeation Chromatography (Clean Up)
ICAL	Initial Calibration
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit

HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

IRDA	Inorganic Regional Data Assessment
IS	Internal Standard
LCS	Laboratory Control Sample
LCL	Lower Control Limit
MCL	Maximum Contamination Level
MDL	Method Detection Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
m/z	The ratio of mass (m) to charge (z) of ions measured by GC/MS
OADS	Organic Analysis Data Sheet (Form 1)
ORDA	Organic Regional Data Assessment
PB	Preparation Blank
PCB	Poly Chlorinated Biphenyl
PEM	Performance Evaluation Mixture
PFAS	Polyfluorinated Alkyl Substances (PFAS analytes are listed below)
PRP	Potential Responsible Party
QA/QC	Quality Assurance/Quality Control
QAPjP	Quality Assurance Project Plan
QC	Quality Control
%R	Percent Recovery of spiked amount
RAS	Routine Analytical Services
RF	Response Factor
RIC	Reconstructed Ion Chromatogram
RPD	Relative Percent Difference
RRF	Relative Response Factor
RSD	Relative Standard Deviation
RT	Retention Time
RTW	Retention Time Window
SDG	Sample Delivery Group
SMC	System Monitoring Compound
SMO	Sample Management Office
SOP	Standard Operation Procedures
SOW	Statement of Work
SPCCs	System Performance Check Compounds
SSL	Samples Shipping Log
SVOA	Semivolatile Organic Analyte
TAL	Target Analyte List
TCL	Target Compound List
TCX	Tetrachloro-m-Xylene (Pesticide/PCB surrogate compound)
TIC	Tentatively Identified Compound
TPH	Total Petroleum Hydrocarbons
TR	Traffic Report
UCL	Upper Control Limit
VOA	Volatile Organic Analyte
VTSR	Validated Time of Sample Receipt

Polyfluorinated Alkyl Substances (PFAS) Acronyms

PFBA	Perfluorobutanoic acid
PFPeA	Perfluoropentanoic acid
PFHxA	Perfluorohexanoic acid
PFHpA	Perfluoroheptanoic acid
PFOA	Perfluorooctanoic acid
PFNA	Perfluorononanoic acid
PFDA	Perfluorodecanoic acid
PFUnA	Perfluoroundecanoic acid
PFDoA	Perfluorododecanoic acid
PFTriA or PFTriDA	Perfluorotridecanoic acid
PFTeA or PFTA	Perfluorotetradecanoic acid
PFBS	Perfluorobutanesulfonic acid
PFPeS	Perfluoropentanesulfonic acid
PFHxS	Perfluorohexanesulfonic acid
PFHpS	Perfluoroheptanesulfonic acid
PFOS	Perfluorooctanesulfonic acid
PFNS	Perfluorononanesulfonic acid
PFDS	Perfluorodecanesulfonic acid
FOSA	Perfluorooctane Sulfonamide
NMeFOSAA	N-methyl perfluorooctane sulfonamidoacetic acid
NEtFOSAA	N-ethyl perfluorooctane sulfonamidoacetic acid
4:2 FTS or 4:2	1H, 1H, 2H, 2H-perfluorohexanesulfonic acid
6:2 FTS or 6:2	1H, 1H, 2H, 2H-perfluorooctanesulfonic acid or 6:2 Fluorotelomersulfonate
8:2 FTS or 8:2	1H, 1H, 2H, 2H-perfluorodecanesulfonic acid or 8:2 Fluorotelomersulfonate

Terms:

Associated Samples: Any sample related to a particular QC analysis.

Case: A finite, usually predetermined number of samples collected over a given time period for a particular site. A Case consists of one or more Sample Delivery Group(s).

Continuing Calibration Blank (CCB): A deionized water sample run every ten (10) samples designed to detect any carryover contamination.

Continuing Calibration Verification (CCV): A deionized water sample run every ten (10) samples designed to detect any carryover contamination.

Contract Compliance Screening (CCS): A process in which the SMO inspects the data for contractual compliance and provides EMSL-LV laboratories and the Regions with their findings.

Contractual Holding Time: The time from VTSR (validated time of sample receipt) to laboratory extraction and /or analysis.

Data Validation Qualifier (DVQ): This refers to the column on the data summary form in which EPA Region III and other qualifiers have been placed by the data validator.

Data Validation Result (DVR): This refers to the column on the data summary form used to report results that have been modified by the data validator. A result in the DVR column that is qualified "U" indicates a modification of the reporting limit.

Field Blank Field blanks are intended to identify contaminants that may have been introduced in the field. Examples are rinsate blank (RB), field blanks (FB) and trip blank (TB).

Field Duplicate: A duplicate sample generated in the field; not in the laboratory.

Initial Calibration (ICAL): The establishment of a calibration curve with the appropriate number of standards and concentration ranges. The calibration curve plots absorbances and/or emissions versus concentration of the standards.

Initial Calibration Blank (ICB): First blank run after the calibration curve.

Initial Calibration Verification (ICV): First standard run after the calibration curve.

Matrix Spike/Matrix Spike Duplicate (MS/MSD): Introduction of a known concentration of a compound into a sample to provide information about the effect of sample matrix on the extraction and/or measurement methodology.

Post Digestion Spike: The addition of known amount of standard after digestion. (Also identified as analytical spike, or spike, for furnace analyses).

Preparation Blank (PB): Blank taken through the digestion process to detect internal laboratory contamination.

Performance Evaluation Mixture: A standard used to verify that the ICAL sequence is stable throughout the GC or GC/MS analyses.

Sample Delivery Group (SDG): Defined by one of the following, whichever occurs first:

- case of sample
- each twenty field samples in a case or
- each 14-day calendar period during which field samples in a case are received, beginning with the receipt of the first sample in the SDG.

Serial Dilution: A sample run at a specific dilution to determine whether any significant chemical or physical interferences exist due to sample matrix effect, for ICP only.

Technical Holding Time: The time from sample collection to laboratory extraction and /or analysis.

2. GLOSSARY OF DATA VALIDATION QUALIFIERS

(Used in the QA/QC Reviews for USEPA Region II)

The qualifiers listed below are used for data usability summary report (DUSR) purposes. However, it is important to note that the data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+	=	Analyte is present. Reported value may be biased high and associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

3. NYS DEC DATA USABILITY SUMMARY PARAMETERS

The parameters listed below are used for data usability summary report (DUSR) evaluation.

<i>Samples Handling and Management</i>
<i>Data Validation References</i>
<i>Laboratory Data Packages</i>
<i>Laboratory Analytical Methods</i>
<i>DATA Usability Assessment Summary</i>

4. DATA VALIDATION SUMMARY PARAMETERS

The parameters listed below are used for data validation evaluation.

	<i>Organic Data</i>	<i>Inorganic Data</i>
<i>Data Completeness</i>	X	X
<i>Holding Time</i>	X	X
<i>Chromatographic Behavior</i>	X	
<i>Compound Identification</i>	X	X
<i>GC/MS Tuning and Mass Calibration</i>	X	
<i>Initial Calibration Verification</i>	X	X
<i>Continuing Calibration</i>	X	X
<i>Method Blank Verification</i>	X	X
<i>Internal Standard Area Summary</i>	X	
<i>Surrogate Recoveries</i>	X	
<i>Matrix Spike/Matrix Spike Duplicate</i>	X	X
<i>Laboratory Control Sample (LCS)</i>	X	X
<i>Laboratory and Field Duplicates</i>	X	X
<i>ICP Interference Check Sample results</i>		X
<i>ICP Serial Dilution results</i>		X
<i>ICP CRDL Standard</i>		X
<i>Post Digestion Spike Analysis</i>		X
<i>Analyte Quantitation</i>		X

5. DATA VALIDATION ACTIVE STANDARD OPERATING PROCEDURES (SOPs)

Region 2 Quality Assurance Guidance and Standard Operating Procedures

<https://www.epa.gov/quality/region-2-quality-assurance-guidance-and-standard-operating-procedures>

Inorganic Validation SOPs

SOP #	Description	Date
SOP HW-3a ICP-AES Rev1 w/CRF	CLP ISM02.2 ICP-AES	September 2016
SOP HW-3b ICP-MS Rev1 w/CRF	CLP ISM02.2 ICP-MS	September 2016
SOP HW-3c Hg & CN Rev1 w/CRF	CLP ISM02.2 Mercury and Cyanide	September 2016

Organic Validation SOPs - CLP

SOP #	Description	Date
SOP HW-33A Low Medium VOA Rev 1 w/CRF	EPA CLP Method SOM02.2 for Low/Medium VOA	September 2016
SOP HW-34A Trace VOA Rev1 w/CRF	EPA CLP Method SOM02.2 for Trace VOA	September 2016
SOP HW-35A Rev1 w/CRF	EPA CLP Method SOM02.2 for Semi-Volatiles	September 2016
SOP HW-36A Rev 1 w/CRF	EPA CLP Method SOM02.2 for Pesticides	October 2016
SOP HW-37A Rev 0 w/CRF	EPA CLP Method SOM02.2 for PCBs Aroclor	June 2015

Organic Validation SOPs – Other

SOP #	Description	Date
SOP HW-11 Rev 3	SW-846 Method 8280 for Polychlorinated Dibenzodioxins/Polychlorinated Dibenzofurans	December 2010
SOP HW-16 Rev. 2.1	SW-846 Method 8330A Nitroaromatics and Nitroamines by HPLC	December 2010
SOP HW-17 Rev.3.1	SW-846 Method 8151A for Chlorinated Herbicides by GC	December 2010
SOP HW-19 Rev. 1.1	SW-846 Method 8290 for Polychlorinated dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by HRMS	December 2010
SOP HW-22 Rev. 5	SW-846 Method 8270D for Semivolatile Organic Compounds by GC/MS	December 2010
SOP HW-25 Rev. 3	EPA Method 1613, Revision B Tetra-through Octa-chlorinated Dioxins and Furans by Isotope Dilution by HRGC/HRMS	December 2010
SOP HWSS 24 Rev. 4	SW-846 Methods 8260B & 8260C for VOCs by GC/MS	October 2014
SOP HW-29 Rev. 2	EPA Method 524.2 for Purgeable Organic Compounds in Water by GC/MS	November 2010
SOP HW-31 Rev. 6	TO-15 Air Analysis for VOCs	September 2016
SOP HW-44 Rev. 1.1	SW-846 Method 8081B for Pesticide Compounds Organochlorine Pesticides by GC	December 2010
SOP HW-46 Rev. 1	EPA Method 1668 A for Chlorinated Biphenyl Congeners and EPA Non-RAS CBC01.0	September 2008

SOP HW-55 Rev. 2 w/CRF	EPA Non-RAS DLM02.0 for Tetra -through Octa-Chlorinated Dioxins and Furans by Isotope Dilution	December 2008
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6. DATA VALIDATION REPORT NARRATIVE

NYS DEC Data Usability Summary Report	SDG # JD39915
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NYS DEC Data Usability Summary Report
SDG # JD39915

Site Location	1001 Whitlock Avenue, Bronx, NY
Data Validation for Analytical Methods	Volatile Organic (EPA 8260D); Semi-Volatile (SW846 8270E), Pesticides (SW846 8081B), PCBs (SW846 8082A), TAL Metals (SW846 6010D, 7471B), PFAS (EPA 537M), Cyanide (SW846 9012B)
Number of Samples & Matrix	1 Soil Sample, 1 Field Blank, 1 Trip Blank
Sampled On	02/17/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39915 (-1-2-3)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 19 th , 2022

• **SAMPLE HANDLING AND MANAGEMENT**

As per the chain of custody (COC) record included in this specific SDG, samples associated with this data set were collected on February 17th, 2022, using the proper containers in accordance with the Sample Integrity and Preservation section of the stated above USEPA method and received by the laboratory on February 17th, 2022. The attached chain of custody (COC) displays a satisfactory record in terms of client and project information, site location, field sampling details (sampler, collection date and time), sample identification and matrix, preservation, required analysis, deliverable type and date, data management process and comparison.

Client Sample Identification	Laboratory Sample Identification
R1-SB10(2-2.5')	JD39915-1
FIELD BLANK	JD39915-2
TB	JD39915-3

• **DATA VALIDATION REFERENCES**

The organic data validation is conducted in accordance with the guidelines in the USEPA National Functional Guidelines for Organic Data Review and the USEPA Region II SOP HW-6-CLP Organic Data Review Preliminary review and the method and QC Criteria specified in NYSDEC ASP Documents.

The inorganic data validation is conducted in accordance with the guidelines in the USEPA National Functional Guidelines for Inorganic Data Review and the USEPA Region II SOP HW-2, Evaluation of Metals Data for the Contract Laboratory Program based on ILM05.3 and the method and QC Criteria specified in NYSDEC ASP Documents.

- **LABORATORY DATA PACKAGES**

The laboratory data packages for the stated SDG above is considered satisfactory in terms of pagination, quality control narration and completeness. Each package contained the laboratory quality assurance summary report, quality control summary data, sample nonconformance summaries, the required data package forms and tables in accordance with NYSDEC ASP documents, instrument tuning information, sample preparation and analysis batch and all associated standard, quality control and sample raw data.

- **LABORATORY ANALYTICAL METHODS**

A peer review of the quality assurance criteria listed in the laboratory data package shows with good degree of certainty the laboratory's compliance with the procedures set forth in the required USEPA analytical methods as indicated in the chain of custody. No deviations from the said methods have been noticed.

- **DATA USABILITY ASSESSMENT SUMMARY**

The overall data package assessment provided by the laboratory for the stated above sample delivery group (SDG) suggests acceptable laboratory performances of the required methods. All samples were successfully analyzed for all target compounds in accordance with the Quality Assurance/Quality Control (QA/QC) requirements for the USEPA analytical methods used for the analyses. In view of the data usability and completeness, the minor issues listed below regarding biases identified during data validation should be taken into high degree of consideration. They are as follows:

✓ **Volatile Organic Compounds – SW846 8260D Method**

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detected results of dichlorodifluoromethane, Chloromethane, Vinyl Chloride, Acrolein, 2-Nitropropane, 3-methyl-1-butanol, in the associated sample, JD39915-3 , should be qualified estimated (J). -Detected results of 1,4-Dioxane, for dichlorodifluoromethane, Vinyl Chloride, Bromomethane, Chloroethane, Iodomethane, 3-methyl-1-butanol, cis-1,4-dichloro-2-butene, trans-1,4-dichloro-2-butene, 1,2-dibromo-3-chloropropane, Naphthalene, 2-Methylnaphthalene, in the associated sample, JD39915-2 , should be qualified estimated (J). -Detected results of Heptane, 1,2,4-trichlorobenzene, Naphthalene, 1,2,3-trichlorobenzene, in the associated sample, JD39915-1 , should be qualified estimated (J).	CCV

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2	-Detected results of target VOC compounds in sample JD39915-2 , should be qualified Estimated Bias High (J+).	SR
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✓ Semi-Volatile Organic Compounds – SW846 8270E Method

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detected results of Pentachloronitrobenzene, in samples JD39915 (-1, -2) , should be considered Estimated (J).	ICV
2	-Detected results of Pentachloronitrobenzene, N-Nitrosodimethylamine, bis(2-Chloroethyl)ether, Nitrobenzene, Isophorone, Hexachlorocyclopentadiene, 2-Nitroaniline, 4-Nitrophenol, 1,2-Diphenylhydrazine, Benzidine, Di-n-Octylphthalate, in sample JD39915-1 , should be considered Estimated (J). -Detected results of Pentachloronitrobenzene, 2-Nitrophenol, 4-Chloroaniline, Benzidine, Caprolactam, in sample JD39915-2 , should be considered Estimated (J).	CCV
3	-Detected results for Bis(2-ethylhexyl)phthalate in sample JD39915-1 , that are less than five times the highest blank concentration should be reported as Not Detected (U). -Detected results for Di-n-butyl phthalate in sample JD39915-2 , that are less than five times the highest blank concentration should be reported as Not Detected (U).	BLK

✓ Pesticides - SW846 8081B Method

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detection results of Endrin Ketone, in sample JD39915-1 , should be qualifies Estimated (J).	CCV
2	-Detection results of ALL target pesticides , in samples JD39915 (-1, -2) , should be qualifies Estimated (J).	LCS

✓ Polychlorinated Biphenyls (PCBs) – SW846 8082A Method

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	Data set was in compliance with the method quality control requirements.	ALL

✓ PFAS-NYSDEC Target List - EPA 537M Method

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
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1	Data set was in compliance with the method quality control requirements.	ALL
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✓ TAL Metals - SW846 6010D, 7471B Methods

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	Data set was in compliance with the method quality control requirements.	ALL

✓ Cyanide - SW846 9012B Method

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	Data set was in compliance with the method quality control requirements.	ALL

Data Validation Assessment

SDG # JD39915

Data Validation for Analytical Method	Volatile Organic Compounds (SW846 8260D Method)
Number of Samples & Matrix	1 Soil Sample, 1 Field Blank, 1 Trip Blank
Sampled On	02/17/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39915 (-1, -2, -3)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time (HOLDT):** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms), display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph/mass spectrometry (GCMS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **GC/MS Tuning and Mass Calibration:** The standard tuning criteria were within control limits as outlined in the EPA and SW846 methods.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs) and Percent Relative Standard Deviation (%RSDs) and in some cases the coefficient of determination COD: (Average RRFs must be greater than the required values and at least greater than 0.01 for all target compounds and >0.001 for 1,4 Dioxane, %RSD must be less than 20%, and the coefficient of determination (COD) must be greater than 0.995). This evaluation displays the following:

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-In the initial calibration reference sample: V1X8415-ICC8415 analyzed on 02/09/2022, both the average RRFs, %RSDs and the coefficient of determination (COD), for all target compounds were in compliance with the method calibration criteria.

-In the initial calibration reference sample: VL10152-ICC10152 analyzed on 02/08/2022, both the average RRFs and %RSDs for all target compounds were in compliance with the method calibration criteria.

-In the initial calibration reference sample: VY8522-ICC8522 analyzed on 02/04/2022, both the average RRFs and %RSDs for all target compounds were in compliance with the method calibration criteria.

No action is required when less than 20% of the continuing calibration target compounds are outside the method control limits provide no Average Relative Response Factor (RRFs) is less than 0.01 for all target compounds.

Quality Judgement: No actions are required.

- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for the required frequency, Relative Response Factor (RRFs) and Percent Difference (%Ds). This evaluation displays the following:

- The continuing calibration reference sample: V1X8420-CC8415, analyzed on 02/21/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT for dichlorodifluoromethane, Chloromethane, Vinyl Chloride, 2-Nitropropane, Where %Ds were above the method allowable maximums. %Areas for dichlorodifluoromethane, Chloromethane, Vinyl Chloride, 1,2-dibromo-3-chloropropane, Naphthalene, were below the control limits.

- The continuing calibration reference sample: V1X8421-CC8415, analyzed on 02/21/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT for dichlorodifluoromethane, Chloromethane, Acrolein, 2-Nitropropane, 3-methyl-1-butanol, Where %Ds were above the method allowable maximums. %Areas for dichlorodifluoromethane, Chloromethane, Vinyl Chloride, Acrolein, Acrylonitrile, n-butyl alcohol, 2-Hexanone, Butyl Acetate, n-Amyl Acetate, 4-Chlorotoluene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, Benzyl Chloride, 1,3,5-trichlorobenzene, Naphthalene, 1,2,4-trichlorobenzene, 1,2,3-trichlorobenzene, were below the control limits.

- The continuing calibration reference sample: VL10183-CC10152, analyzed on 02/18/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT for 1,4-Dioxane, for dichlorodifluoromethane, Vinyl Chloride, Bromomethane, Chloroethane, Iodomethane, 3-methyl-1-butanol, cis-1,4-dichloro-2-butene, trans-1,4-dichloro-2-butene, 1,2-dibromo-3-chloropropane, Naphthalene, 2-Methylnaphthalene, where %Ds were above the method allowable maximums.

- The continuing calibration reference sample: VY8531-CC8522, analyzed on 02/22/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT for Heptane, 1,2,4-trichlorobenzene, Naphthalene, 1,2,3-trichlorobenzene, where %Ds were above the method allowable maximums.

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No action is required when less than 20% of the continuing calibration target compounds are outside the method control limits provide no Average Relative Response Factor (RRFs) is less than 0.01 for all target compounds.

Quality Judgement:

-Detected results of dichlorodifluoromethane, Chloromethane, Vinyl Chloride, Acrolein, 2-Nitropropane, 3-methyl-1-butanol, in the associated sample, JD39915-3, should be qualified estimated (J).

-Detected results of 1,4-Dioxane, for dichlorodifluoromethane, Vinyl Chloride, Bromomethane, Chloroethane, Iodomethane, 3-methyl-1-butanol, cis-1,4-dichloro-2-butene, trans-1,4-dichloro-2-butene, 1,2-dibromo-3-chloropropane, Naphthalene, 2-Methylnaphthalene, in the associated sample, JD39915-2, should be qualified estimated (J).

-Detected results of Heptane, 1,2,4-trichlorobenzene, Naphthalene, 1,2,3-trichlorobenzene, in the associated sample, JD39915-1, should be qualified estimated (J).

- **Method Blank Verification (BLK):** Method blank analyses included in this data set of laboratory data package concluded no detection for the target compounds in lab sample reference: VL10183-MB, on 02/18/2022, and V1X8420-MB, on 02/21/2022, VY8531-MB on 02/22/2022.

Quality Judgement: No actions are required.

- **Internal Standard Area Summary (IS):** As indicated in the method internal standard criteria, the laboratory data package for the stated SDG confirmed the following:

-The internal standard retention times were within method control limits.

-The internal standard areas were within method control limits.

- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries were within method control limits for all samples, EXCEPT for the following:

-In sample JD39915-2, %Rs of Surrogate 4-Bromofluorobenzene, was above control limit.

Quality Judgement:

-Detected results of target VOC compounds in sample JD39915-2, should be qualified Estimated Bias High (J+).

- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes (Percent Recoveries: %Rs and Relative Percent Difference: %RPDs). The following summarizes this evaluation:

-In LCS ID# VL10183-BS, on 02/18/2022, V1X8420-BS, on 02/21/2022, %Rs for all target volatile compounds were within the method control limits.

-In LCS ID# VY8531-BS, on 02/22/2022, %Rs for all target volatile compounds were within the method control limits, EXCEPT for 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, where %Rs were above method control limits.

Quality Judgement:

-Detected results of 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, in the associated sample, JD39915-1, should be qualified estimated (J).

- **Laboratory and Field Duplicates (DUP):** According to both the chain of custody record, and the data set provided by the laboratory, a laboratory duplicate sample was analyzed from unrelated sample. A field duplicate sample wasn't collected in this samples set. The following summarizes this evaluation:

-Few laboratory duplicate samples were analyzed in this data set using unrelated samples.

Quality Judgement: No actions are required.

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** As required by the method quality assurance/quality control criteria, the matrix spike and matrix spike duplicate in a designated sample listed in this data set has been evaluated for method compliance purposes. The following summarizes this evaluation:

-Few matrix spike processes were analyzed in this data set using unrelated samples.

Quality Judgement: No Actions are required.

- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD39915

Data Validation for Analytical Method	Semi-Volatile Organic Compounds (SW846 8270E Method)
Number of Samples & Matrix	1 Soil Sample, 1 Field Blank
Sampled On	02/17/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39915 (-1, -2)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph/mass spectrometry (GCMS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **GC/MS Tuning and Mass Calibration:** The DFTPP tuning criteria were within control limits as outlined in the EPA and SW846 methods.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs) and Percent Relative Standard Deviation (%RSDs) and in some cases the coefficient of determination COD: (In general, Average RRFs must be greater than the required values as defined by EPA/SW846 Method. %RSD must be less than 20%, and the coefficient of determination (COD) must be greater than 0.995). This evaluation displays the following:
-In the initial calibration of EM7636-ICC7636 on 01/12/2022, Average RRFs were above the allowable minimum as required by the method, EXCEPT for Pentachloronitrobenzene, where average RRFs was below the allowable minimum. %RSDs were below

the method allowable maximum (20%). The coefficient of determination (COD) was greater than 0.995.

-In the initial calibration of EZ7699-ICC7699 on 02/10/2022, Average RRFs were above the allowable minimum as required by the method, EXCEPT for Pentachloronitrobenzene, where average RRFs was below the allowable minimum. %RSDs were below the method allowable maximum (20%). The coefficient of determination (COD) was greater than 0.995.

No action is required when less than 20% of the target compounds do not meet the method control limits provide no Relative Response Factor (RRFs) is less than 0.01 for all target compounds as the allowable minimum.

Quality Judgement:

-Detected results of Pentachloronitrobenzene, in samples JD39915 (-1, -2), should be considered Estimated (J).

- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds) and confirmed the following:

-The continuing calibration (Sample: EM7687-CC7636 on 02/22/2022), The RRFs for target compounds were above the minimum values set by the method, EXCEPT for Pentachloronitrobenzene, where RRF was below the allowable minimum. %Ds for N-Nitrosodimethylamine, bis(2-Chloroethyl)ether, Nitrobenzene, Isophorone, Hexachlorocyclopentadiene, 2-Nitroaniline, 4-Nitrophenol, 1,2-Diphenylhydrazine, Benzidine, Di-n-Octylphthalate, were above the allowable maximum.

-The continuing calibration (Sample: EM7687-CC7637 on 02/22/2022), The RRFs for target compounds were above the minimum values set by the method. %Ds were below the allowable maximum.

-The continuing calibration (Sample: EZ7710-CC7699 on 02/22/2022), The RRFs for target compounds were above the minimum values set by the method, EXCEPT for Pentachloronitrobenzene, where RRF was below the allowable minimum. %Ds for 2-Nitrophenol, 4-Chloroaniline, Benzidine, were above the allowable maximum. %Area for 1,4-Dioxane, was below control limit.

-The continuing calibration (Sample: EZ7710-CC7700 on 02/22/2022), The RRFs for target compounds were above the minimum values set by the method. %Ds for Caprolactam, was above the allowable maximum.

No action is required when less than 20% of the target compounds do not meet the method control limits provide no Relative Response Factor (RRFs) is less than 0.01 for all target compounds as the allowable minimum.

Quality Judgement:

-Detected results of Pentachloronitrobenzene, N-Nitrosodimethylamine, bis(2-Chloroethyl)ether, Nitrobenzene, Isophorone, Hexachlorocyclopentadiene, 2-Nitroaniline, 4-Nitrophenol, 1,2-Diphenylhydrazine, Benzidine, Di-n-Octylphthalate, in sample JD39915-1, should be considered Estimated (J).

-Detected results of Pentachloronitrobenzene, 2-Nitrophenol, 4-Chloroaniline, Benzidine, Caprolactam, in sample JD39915-2, should be considered Estimated (J).

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- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target compounds at the method reporting limits, EXCEPT in:
 - OP38251-MB1 on 02/22/2022, reported bis(2-Ethylhexyl)phthalate @ 8.3 ug/kg J.
 - OP38240-MB1 on 02/22/2022, reported Di-n-butyl phthalate @ 1.3 ug/l J.Quality Judgement:
 - Detected results for Bis(2-ethylhexyl)phthalate in sample JD39915-1, that are less than five times the highest blank concentration should be reported as Not Detected (U).
 - Detected results for Di-n-butyl phthalate in sample JD39915-2, that are less than five times the highest blank concentration should be reported as Not Detected (U).
- **Internal Standard Area Summary (IS):** As indicated in the method internal standard criteria, the laboratory data package for the stated SDG confirmed the following:
 - The internal standard retention times were within method control limits.
 - The internal standard areas were within method control limits.
- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries were within method control limits for all samples.
Quality Judgement: No actions are required.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:
 - In OP38251-BS1, OP38240-BS1, Percent recoveries (%Rs) for all target compounds were within method control limits.Quality Judgement: No actions are required.
- **Laboratory and Field Duplicates (DUP):** According to both the chain of custody record, and the data set provided by the laboratory, a laboratory duplicate sample wasn't analyzed from this samples set. No field duplicate sample was collected in this samples set.
Quality Judgement: No actions are required.
- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** No Matrix spike/Matrix spike duplicate were performed from this samples set. However, laboratory provided a selected matrix spike and matrix spike duplicate data from unrelated samples.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD39915

Data Validation for Analytical Method	Pesticides (SW846 8081B Method)
Number of Samples & Matrix	1 Soil Sample, 1 Field Blank
Sampled On	02/17/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39915 (-1, -2)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph (GC) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards used in this data set has been evaluated for compliance with method criteria for Percent Relative Standard Deviation %RSDs (<20%):
 - In the initial calibration sample reference: Sample: G1G5985-ICC5985 on 01/24/2022, %RSDs for pesticides target compounds, were below the allowable maximum.
 - In the initial calibration sample reference: Sample: G8G1762-ICC1762 on 02/18/2022, %RSDs for pesticides target compounds, were below the allowable maximum.Quality Judgement: No actions are required.
- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Percent Difference (%Ds <20%):

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-In continuing calibration (G1G6033-CC5985, on 02/25/2022), %Ds for all pesticides target compounds were below the allowable maximums.

-In continuing calibration (G1G6034-CC5985 on 02/25/2022), %Ds for all pesticides target compounds were below the allowable maximums, EXCEPT for Heptachlor Epoxide, Decachlorobiphenyl (1st, column only), where %Ds were above the allowable maximum.

-In continuing calibration (G8G1772-CC1762, on 02/23/2022), %Ds for Endrin Ketone (both columns), were below the allowable maximums.

-In continuing calibration (G8G1772-CC1762, on 02/23/2022), %Ds for delta-BHC, Endrin Ketone (1st, column only), were below the allowable maximums.

Quality Judgement:

-Detection results of Endrin Ketone, in sample JD39915-1, should be qualifies Estimated (J).

- **DDT/Endrin Breakdown Check (DDT/Endrin Check):** Per method requirements, the percent breakdowns were below the allowable maximum (20% for DDT & Endrin).
- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target pesticide compounds in OP38256-MB1 on 02/23/2022, OP38256-MB1 a, analyzed on 02/24/2022, OP38246-MB1, on 02/25/2022.
- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries of all samples were within method control limits.
Quality Judgement: No actions are required as long a valid column is used for quantitation.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:
 - In LCS (OP38256-BS1, OP38256-BS1 a, OP38246-BS1), %Rs were within the method control limits.
 - In LCSDUP (OP38246-BSD), %RPDs were above the allowable maximum.Quality Judgement:
-Detection results of ALL target pesticides, in samples JD39915 (-1, -2), should be qualifies Estimated (J).
- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** No Matrix spike/Matrix spike duplicate were performed from this samples set. However, laboratory provided a selected matrix spike and matrix spike duplicate data from unrelated samples.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

Data Validation Assessment

SDG # JD39915

Data Validation for Analytical Method	Polychlorinated Biphenyls (PCBs) – SW846 8082A Method
Number of Samples & Matrix	1 Soil Sample, 1 Field Blank
Sampled On	02/17/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39915 (-1, -2)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph (GC) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards used in this data set has been evaluated for compliance with method criteria for Average Relative Standard Deviation %RSDs (<20%):
-In the initial calibration of G2G5562-ICC5562 on 01/10/2022, GXX7733-ICC7733 on 02/21/2022, GRK194-ICC194, on 02/03/2022, %RSDs all Aroclor target compounds were below the allowable maximum.
Quality Judgement: No actions are required as long a valid column is used for quantitation.
- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Percent Difference (%Ds <20%):

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-In the continuing calibration reference ID: G2G5605-CC5562 on 02/28/2022, GRK212-CC194, on 02/22/2022, GXX7735-CC7733, GXX7736-CC7733, on 02/23/2022, the overall %Ds for all Aroclor target compounds were below the allowable maximums.
Quality Judgement: No actions are required as long a valid column is used for quantitation.

- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target Aroclor compounds in OP38257-MB1 analyzed on 02/22/2022, OP38247-MB1 on 02/23/2022.
- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries of all samples were within method control limits.
Quality Judgement: No actions are required as long a valid column is used for quantitation.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:
 - In LCS (OP38257-BS1), %Rs for Aroclor 1016, Aroclor 1260 were within method control limits.
 - In LCS (OP38247-BS1), %Rs for Aroclor 1016, Aroclor 1260 were within method control limits.
 - In LCSDUP (OP38247-BSD), %Rs for Aroclor 1016, Aroclor 1260 were within method control limits. %RPDs were below the allowable maximum.Quality Judgement: No actions are required.
- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** No Matrix spike/Matrix spike duplicate were performed from this samples set. However, laboratory provided a selected matrix spike and matrix spike duplicate data from unrelated samples.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD39915

Data Validation for Analytical Method	PFAS-NYSDEC Target List (EPA 537M Method)
Number of Samples & Matrix	1 Soil Sample, 1 Field Blank
Sampled On	02/17/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39915 (-1, -2)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time (HOLDT):** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the LC/TANDEM Mass Spectrometer (LC/MS/MS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs), Percent Relative Standard Deviation for both internal standard and external standard criteria (%RSDs <50%), and in some cases the coefficient of determination COD (>0.995). This evaluation displays the following:
-The initial calibration methods used in this data set, sample reference ID: S3Q762-ICC762, on 02/25/2022, S3Q765-ICC765, on 02/28/2022, display an acceptable performance and compliance with the method criteria listed above.
Quality Judgement: No actions are required.
- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for

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compliance with method criteria for all target PFAS compounds: Required frequency (one per ten field samples), Percent Difference (%Ds < 50%), and or for Percent Recovery (70<%Rs<130). This evaluation displays the following:

-In continuing calibration laboratory reference ID: Lab FileID: 3Q55182.D, Lab FileID: 3Q55183.D, Lab FileID: 3Q55194.D, Lab FileID: 3Q55206.D, Lab FileID: 3Q55218.D, Lab FileID: 3Q55220.D, Lab FileID: 3Q55231.D, Lab FileID: 3Q55243.D, Lab FileID: 3Q55424.D, Lab FileID: 3Q55425.D, Lab FileID: S3Q765-CC765, Lab FileID: 3Q55462.D, Lab FileID: 3Q55464.D, Lab FileID: 3Q55474.D, Lab FileID: 3Q55485.D, %Ds for target PFAS compounds below the allowable maximum.

Quality Judgement: No actions are required.

- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target compounds above both the MDL and the RL in OP89888-MB, on 03/01/2022. OP89877-MB, on 02/26/2022. S3Q762-IBLK, on 02/25/2022. S3Q765-IBLK, S3Q765-IBLK, on 02/28/2022.

Quality Judgement: No actions are required.

- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior (Isotope Dilution Analyte (IDA) Recovery must be > 10% for Data acceptance, 50<%Rs<150; 25<%Rs<150 for poor response analytes), in the SDG data set displays the following:
 - Isotope Dilution Standard Recoveries (%Rs) in all samples of this set, were within the method control limits.

Quality Judgement: No actions are required.

- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:

-In LCS OP89888-BS/3Q55471.D, OP89877-BS/3Q55212.D, %Rs were within the method control limits.

Quality Judgement: No actions are required.

- **Secondary Ion Transition Monitoring (SITM):** Quantifier and qualifier ions have been monitored for all target PFAS analytes (PFBA and PFPeA are exceptions). The laboratory derived criteria have been used to determine if the ratios are acceptable. (If the ratios fall outside of the laboratory criteria, results will be qualified as an estimated maximum concentration).

-No forms or data were provided.

- **Laboratory and Field Duplicates (DUP):** A Field duplicate sample wasn't provided in this samples set. Laboratory duplicate from this samples set wasn't analyzed. However, laboratory provided a selected duplicate data from unrelated samples.

Quality Judgement: No actions are required.

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- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** No Matrix spike/Matrix spike duplicate were performed from this samples set. However, laboratory provided a selected matrix spike and matrix spike duplicate data from unrelated samples.

Quality Judgement: No actions are required.

- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD39915

Data Validation for Analytical Method	TAL Metals (SW846 6010D, 7471B Methods)
Number of Samples & Matrix	1 Soil Sample, 1 Field Blank
Sampled On	02/17/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39915 (-1, -2)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were digested and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Initial and Continuing Calibration Verification (ICCV):** As indicated in the method calibration criteria, the initial calibration standards used in this data set has been evaluated for compliance with method criteria for Percent Recoveries (%Rs):
 - In File ID: SC021822M2.ICP, analyzed on 02/18/2022, %Rs for Total metals (EPA 6010D) in all ICVs and CCVs were within method control limits.
 - In File ID: SC022122M1.ICP, analyzed on 02/21/2022, %Rs for Total metals (EPA 6010D) in all ICVs and CCVs were within method control limits.Quality Judgement: No actions are required.
- **CRDL Standard (CRDL):** As indicated in the method calibration criteria, the CRDL standards of this data set have been evaluated for compliance with method criteria for Percent Recoveries (%Rs) for target metals elements:
 - In File ID: SD021722M2.ICP (LOW CALIBRATION CHECK STANDARDS-EPA 6010D), %Rs for total target metals were within method control limits (70-130%).
 - In File ID: SC021822M1.ICP (LOW CALIBRATION CHECK STANDARDS-EPA 6010D), %Rs for total target metals were within method control limits (70-130%).
 - In File ID: SF022122M1.ICP (LOW CALIBRATION CHECK STANDARDS-EPA 6010D), %Rs for total target metals were within method control limits (70-130%).Quality Judgement: No actions are required.
- **Method Blank Verification:** Method blank analyses included in this data set has been evaluated to ensure target metals were reported below CRDL:
 - In File ID: SC021822M2.ICP, File ID: SC022122M1.ICP, all quality control blanks (ICBs, CCBs) were below RL as required by EPA 6010D, 7473 Methods.Quality Judgement: No actions are required.

- **ICP Interference Check Sample (ICPINTERF):** An evaluation of the Interference Check Sample has been evaluated for percent recoveries (%Rs) compliance with methods criteria (80-120%):
 - File ID: SC021822M2.ICP, %Rs for target metals (EPA 6010D), were within the method control limits.
 - File ID: SD021822M1.ICP, %Rs for target metals (EPA 6010D), were within the method control limits.
 - File ID: SF022122M1.ICP, %Rs for target metals (EPA 6010D), were within the method control limits.

Quality Judgement: No actions are required.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes (%Rs within control limits). The following summarizes this evaluation:
 - In LCS QC Batch ID: MP31373, on 02/18/2022, QC Batch ID: MP31382, on 02/21/2022, (EPA 6010D) for total metals, %Rs were within the method control limits.

Quality Judgement: No actions are required.
- **Spike Sample Recovery (SSR):** Spike samples in this data set have been evaluated for method compliance purposes (%Rs within control limits). The out-of-control spike recoveries for analytes whose unspiked concentrations are $\geq 4x$ the spike added have been disregarded:
 - In QC Batch ID: MP31373, laboratory used unrelated sample (JD39909-04) for matrix spike and duplicate processes.
 - In QC Batch ID: MP31382, laboratory used unrelated sample (JD39921-1) for matrix spike and duplicate processes. %Rs were within method control limits. %RPDs were below the allowable maximum.

Quality Judgement: No actions are required.
- **Laboratory Duplicate (DUP):** Target metals Duplicate analysis has been evaluated for relative percent differences compliance with the method criteria (%RPDs <20% for aqueous and <35% for soil matrices):
 - A Field duplicate sample wasn't provided in this samples set. Laboratory duplicate from the samples set wasn't analyzed.

Quality Judgement: No actions are required.
- **ICP Serial Dilution (ISDil):** ICP serial dilution for target metals has been evaluated to ensure compliance with method criteria (Concentration in the original sample is $> 50x$ the MDL that is calculated for the sample and %Ds must be below the allowable maximums 10%):
 - In QC Batch ID: MP31373/sample JD39909-04, on 02/18/2022, %Ds of target metals (EPA 6010D) were below the allowable maximum.
 - In QC Batch ID: MP31382/sample JD39921-1, on 02/21/2022, %Ds of target metals (EPA 6010D) were below the allowable maximum.

Note: Other elements with low initial sample concentration (< 50 times IDL), displayed anticipated high value of %Ds above the allowable maximum.

Quality Judgement: No actions are required.

- **Mercury Overall Evaluation (Hg):** All initial and continuing calibration checks, Blank results summaries, low calibration check standards, laboratory control sample summaries, Matrix spike and duplicate summaries, were in compliance with method quality control criteria.
- **Standard Reference Material Recovery (Hg):** Forms were not provided.
- **Total & Soluble Metals Comparison (T&S-Comp):** Not applicable.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD39915

Data Validation for Analytical Method	Cyanide (SW846 9012B Method)
Number of Samples & Matrix	1 Soil Sample, 1 Field Blank
Sampled On	02/17/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD39915 (-1, -2)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Initial Calibration Verification (ICCV):** As indicated in the method calibration criteria, the initial calibration standards (ICV, CCV) used in this data set have been evaluated for compliance with method criteria ($90\% < \%Rs < 110\%$):
-In File ID: E022122W1.CN, %Rs for Cyanide standards (ICV, CCV) were within method control limits.
Quality Judgement: No actions are required.
- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection of Cyanide above the RL.
Quality Judgement: No actions are required.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes ($\%Rs$ within control limits-80-120%). The following summarizes this evaluation:
-In Batch IDs (GP38618/GN26582, GP38621/GN26582), for Cyanide LCS evaluation, %Rs were within the method control limits.
Quality Judgement: No actions are required.
- **Matrix Spike/Matrix Spike Duplicate (MS/MSD):**
-In batch ID: GP38618/GN26582, unrelated sample ID: JD39909-1, was used for matrix spike evaluation. %Rs were below the method control limits (75-125%).
-In batch ID: GP38621/GN26582, unrelated sample ID: JD39864-4, was used for matrix spike evaluation. %Rs were below the method control limits (75-125%).

Quality Judgement: No actions are required.

- **Laboratory Duplicate (DUP):** Cyanide Duplicate analysis has been evaluated for relative percent differences compliance with the method criteria (%RPDs <20% for aqueous and <35% for soil matrices):
-%RPDs for laboratory duplicate were below the allowable maximums.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Validated QA Data

Continuing Calibration Summary

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Job Number: JD39915
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V1X8420-CC8415
 Lab FileID: 1X194510.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\kr...022\vx8420\1x194510.d Vial: 4
 Acq On : 21 Feb 2022 11:38 am Operator: nickw
 Sample : cc8415-20 Inst : ACC-VOA-MSX
 Misc : MS56859,V1X8420,5,,,,,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M1X8415.M (RTE Integrator)
 Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
 Last Update : Wed Feb 09 16:13:26 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	62	-0.03	2.50
2	ethanol	0.077	0.081	-5.2	65	-0.03	2.00
3	tertiary butyl alcohol	0.696	0.688	1.1	63	-0.02	2.55
4	1,4-dioxane	0.070	0.064	8.6	54	-0.01	4.45
5 I	pentafluorobenzene	1.000	1.000	0.0	64	-0.02	3.58
6	chlorodifluoromethane	0.377	0.346	8.2	59	-0.03	1.30
7	dichlorodifluoromethane	0.406	0.297	26.8#	46#	-0.03	1.28
8	chloromethane	0.499	0.383	23.2#	50#	-0.03	1.41
9	vinyl chloride	0.376	0.296	21.3#	50#	-0.03	1.48
10	bromomethane	0.131	0.112	14.5	52	-0.02	1.70
11	chloroethane	0.152	0.146	3.9	59	-0.03	1.76
12	trichlorofluoromethane	0.478	0.433	9.4	57	-0.03	1.92
13	1,3-butadiene	0.288	0.297	-3.1	65	-0.03	1.51
14	ethyl ether	0.117	0.111	5.1	59	-0.03	2.08
15	acrolein	0.063	0.051	19.0	52	-0.02	2.17
16	1,1-dichloroethene	0.230	0.209	9.1	58	-0.03	2.23
17	freon 113	0.278	0.259	6.8	58	-0.03	2.23
18	acetone	0.025	0.023	8.0	58	-0.03	2.24
19	acetonitrile	0.048	0.045	6.3	63	-0.03	2.41
----- True		Calc.	% Drift	-----			
20	iodomethane	20.000	12.948	35.3#	45	-0.02	2.33
----- AvgRF		CCRF	% Dev	-----			
21	carbon disulfide	0.656	0.605	7.8	60	-0.03	2.38
22	methylene chloride	0.242	0.203	16.1	57	-0.03	2.52
23	methyl acetate	0.293	0.277	5.5	62	-0.02	2.42
24	methyl tert butyl ether	0.606	0.575	5.1	60	-0.02	2.67
25	acrylonitrile	0.135	0.121	10.4	56	-0.02	2.65
26	trans-1,2-dichloroethene	0.244	0.226	7.4	59	-0.02	2.68
27	hexane	0.490	0.458	6.5	60	-0.02	2.84
28	di-isopropyl ether	1.002	0.997	0.5	64	-0.02	2.94
29	2-butanone	0.026	0.024	7.7	59	-0.02	3.26
30	1,1-dichloroethane	0.507	0.473	6.7	59	-0.02	2.95
31	chloroprene	0.494	0.495	-0.2	62	-0.02	2.99
32	vinyl acetate	0.042	0.037	11.9	55	-0.02	2.93
33	ethyl tert-butyl ether	0.823	0.786	4.5	62	-0.02	3.16
34	ethyl acetate	0.054	0.048	11.1	56	-0.02	3.27
35	2,2-dichloropropane	0.349	0.359	-2.9	64	-0.02	3.29
36	cis-1,2-dichloroethene	0.261	0.234	10.3	58	-0.02	3.28
37	methyl acrylate	0.337	0.318	5.6	61	-0.02	3.31

Continuing Calibration Summary

Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V1X8420-CC8415
Lab FileID: 1X194510.D

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38	propionitrile	0.050	0.046	8.0	59	-0.02	3.30
		----- True	Calc.	% Drift	-----		
39	tert-butyl formate	20.000	18.554	7.2	76	-0.02	3.50
		----- AvgRF	CCRF	% Dev	-----		
40	bromochloromethane	0.133	0.122	8.3	58	-0.02	3.43
41	tetrahydrofuran	0.120	0.111	7.5	63	-0.02	3.44
42	chloroform	0.460	0.418	9.1	62	-0.02	3.48
43 S	dibromofluoromethane (s)	0.424	0.428	-0.9	63	-0.02	3.58
44	methacrylonitrile	0.101	0.092	8.9	59	-0.02	3.40
45	1,1,1-trichloroethane	0.424	0.403	5.0	61	-0.02	3.60
46	cyclohexane	0.407	0.355	12.8	57	-0.02	3.65
47 m	tert amyl alcohol	0.010	0.009	10.0	55	-0.02	3.78
48	1,1-dichloropropene	0.354	0.329	7.1	59	-0.01	3.70
49	isobutyl alcohol	0.007	0.007	0.0	68	-0.01	3.89
50	carbon tetrachloride	0.378	0.374	1.1	62	-0.02	3.70
51	isopropyl acetate	0.044	0.042	4.5	62	-0.02	3.81
52 I	1,4-difluorobenzene	1.000	1.000	0.0	62	-0.02	4.07
53 S	1,2-dichloroethane-d4 (s)	0.345	0.377	-9.3	67	-0.02	3.80
54	iso-octane	0.772	0.745	3.5	61	-0.01	3.89
55	epichlorohydrin	0.024	0.022	8.3	57	-0.01	4.80
56	n-butyl alcohol	0.005	0.004	20.0	62	-0.01	4.13
57	benzene	0.656	0.609	7.2	60	-0.02	3.83
58	tert-amyl methyl ether	0.450	0.435	3.3	61	-0.01	3.89
59	heptane	0.146	0.145	0.7	61	-0.02	3.98
60	1,2-dichloroethane	0.285	0.265	7.0	63	-0.02	3.85
61	trichloroethene	0.214	0.196	8.4	58	-0.02	4.24
62 m	ethyl acrylate	0.257	0.246	4.3	60	-0.02	4.26
63	2-nitropropane	0.047	0.062	-31.9#	87	-0.02	4.72
64	2-chloroethyl vinyl ether	0.132	0.122	7.6	60	-0.01	4.76
65	methyl methacrylate	0.044	0.040	9.1	58	-0.01	4.42
66	1,2-dichloropropane	0.071	0.070	1.4	63	-0.01	4.41
67	dibromomethane	0.111	0.104	6.3	61	-0.02	4.47
68	methylcyclohexane	0.310	0.284	8.4	57	-0.01	4.40
69	bromodichloromethane	0.219	0.214	2.3	61	-0.01	4.58
70	cis-1,3-dichloropropene	0.260	0.246	5.4	58	-0.01	4.88
71	4-methyl-2-pentanone	0.074	0.067	9.5	57	-0.01	4.96
		----- True	Calc.	% Drift	-----		
72	3-methyl-1-butanol	400.000	325.108	18.7	65	-0.02	4.98
		----- AvgRF	CCRF	% Dev	-----		
73 I	chlorobenzene-d5	1.000	1.000	0.0	59	-0.01	6.15
74 S	toluene-d8 (s)	1.191	1.235	-3.7	61	-0.01	5.07
75	toluene	0.515	0.492	4.5	58	-0.01	5.12
76	trans-1,3-dichloropropene	0.282	0.286	-1.4	60	-0.01	5.27
77	ethyl methacrylate	0.230	0.219	4.8	56	0.00	5.29
78	1,1,2-trichloroethane	0.148	0.147	0.7	61	-0.01	5.42
79	tetrachloroethene	0.197	0.191	3.0	59	-0.01	5.50
80	1,3-dichloropropane	0.292	0.279	4.5	58	-0.01	5.55
81	2-hexanone	0.087	0.081	6.9	56	-0.01	5.56
82	butyl acetate	0.145	0.137	5.5	56	-0.01	5.64
83	dibromochloromethane	0.216	0.226	-4.6	61	-0.01	5.71
84	1,2-dibromoethane	0.198	0.192	3.0	58	-0.01	5.81
85 m	n-butyl ether	1.072	1.040	3.0	57	-0.01	6.22
86	chlorobenzene	0.630	0.566	10.2	57	0.00	6.18
87	1,1,1,2-tetrachloroethane	0.202	0.199	1.5	58	-0.01	6.24

6.9.4

6

Continuing Calibration Summary

Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V1X8420-CC8415
Lab FileID: 1X194510.D

Page 3 of 3

88		ethylbenzene	0.997	0.922	7.5	56	-0.01	6.24
89		m,p-xylene	0.407	0.372	8.6	55	-0.01	6.35
90		o-xylene	0.796	0.739	7.2	55	-0.01	6.65
91		styrene	0.645	0.591	8.4	54	0.00	6.67
92		butyl acrylate	0.444	0.451	-1.6	58	0.00	6.59
93		n-amyl acetate	0.128	0.120	6.3	55	-0.01	6.76
94		bromoform	0.137	0.142	-3.6	63	0.00	6.82
95		isopropylbenzene	1.029	0.943	8.4	55	0.00	6.94
96		cis-1,4-dichloro-2-butene	0.086	0.088	-2.3	61	0.00	6.99
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	56	0.00	7.96
98	S	4-bromofluorobenzene (s)	0.839	0.857	-2.1	58	-0.01	7.08
99		bromobenzene	0.464	0.435	6.3	54	-0.01	7.20
100		1,1,2,2-tetrachloroethane	0.432	0.410	5.1	56	0.00	7.18
101		trans-1,4-dichloro-2-bute	0.163	0.169	-3.7	59	0.00	7.21
102		1,2,3-trichloropropane	0.127	0.124	2.4	57	0.00	7.23
103		n-propylbenzene	2.136	2.068	3.2	55	0.00	7.27
104		2-chlorotoluene	0.466	0.437	6.2	54	0.00	7.34
105		4-chlorotoluene	1.327	1.347	-1.5	55	0.00	7.43
106		1,3,5-trimethylbenzene	1.498	1.442	3.7	55	-0.01	7.40
107		tert-butylbenzene	1.362	1.295	4.9	54	0.00	7.64
108		1,2,4-trimethylbenzene	1.516	1.451	4.3	54	0.00	7.69
109		sec-butylbenzene	1.957	1.854	5.3	54	0.00	7.81
110		1,3-dichlorobenzene	0.901	0.826	8.3	54	-0.01	7.90
111		p-isopropyltoluene	1.713	1.648	3.8	54	0.00	7.92
112		1,4-dichlorobenzene	0.935	0.842	9.9	53	0.00	7.97
113		1,2-dichlorobenzene	0.865	0.782	9.6	53	0.00	8.23
114		benzyl chloride	0.752	0.813	-8.1	61	0.00	8.05
115		n-butylbenzene	0.795	0.752	5.4	54	0.00	8.20
116		1,2-dibromo-3-chloropropa	0.113	0.100	11.5	49#	0.00	8.76
117		1,3,5-trichlorobenzene	0.637	0.578	9.3	52	0.00	8.88
118		hexachlorobutadiene	0.228	0.226	0.9	57	0.00	9.37
119		naphthalene	1.636	1.433	12.4	49#	0.00	9.46
120		1,2,4-trichlorobenzene	0.539	0.491	8.9	51	0.00	9.29
121	m	1,2,3-trichlorobenzene	0.527	0.463	12.1	51	0.00	9.59
----- True			Calc.	% Drift	-----			
122		hexachloroethane	20.000	16.707	16.5	60	0.00	8.42
----- AvgRF			CCRF	% Dev	-----			
123		2-methylnaphthalene	-----NA-----					

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1X194383.D M1X8415.M Fri Feb 25 11:34:39 2022

6.9.4

6

Continuing Calibration Summary

Page 1 of 3

Job Number: JD39915
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V1X8421-CC8415
 Lab FileID: 1X194536.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ne...-24\vx8421\1x194536.d Vial: 30
 Acq On : 21 Feb 2022 11:22 pm Operator: edwardd
 Sample : CC8415-50 Inst : ACC-VOA-MSX
 Misc : MS56872,V1X8421,5,,,,,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\M1X8415.M (RTE Integrator)
 Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
 Last Update : Wed Feb 09 16:13:26 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	54	-0.03	2.49
2	ethanol	0.077	0.083	-7.8	61	-0.03	1.99
3	tertiary butyl alcohol	0.696	0.697	-0.1	51	-0.03	2.54
4	1,4-dioxane	0.070	0.070	0.0	52	-0.02	4.45
5 I	pentafluorobenzene	1.000	1.000	0.0	62	-0.02	3.57
6	chlorodifluoromethane	0.377	0.364	3.4	59	-0.04	1.29
7	dichlorodifluoromethane	0.406	0.300	26.1#	44#	-0.04	1.27
8	chloromethane	0.499	0.396	20.6#	49#	-0.04	1.40
9	vinyl chloride	0.376	0.310	17.6	50#	-0.04	1.47
10	bromomethane	0.131	0.133	-1.5	59	-0.03	1.69
11	chloroethane	0.152	0.143	5.9	55	-0.03	1.76
12	trichlorofluoromethane	0.478	0.446	6.7	56	-0.03	1.91
13	1,3-butadiene	0.288	0.308	-6.9	64	-0.03	1.50
14	ethyl ether	0.117	0.114	2.6	55	-0.03	2.07
15	acrolein	0.063	0.048	23.8#	45#	-0.03	2.16
16	1,1-dichloroethene	0.230	0.225	2.2	58	-0.03	2.23
17	freon 113	0.278	0.278	0.0	58	-0.03	2.22
18	acetone	0.025	0.023	8.0	54	-0.03	2.24
19	acetonitrile	0.048	0.044	8.3	58	-0.03	2.40
----- True		Calc.	% Drift	-----			
20	iodomethane	50.000	41.853	16.3	52	-0.03	2.33
----- AvgRF		CCRF	% Dev	-----			
21	carbon disulfide	0.656	0.628	4.3	58	-0.03	2.38
22	methylene chloride	0.242	0.205	15.3	54	-0.03	2.51
23	methyl acetate	0.293	0.277	5.5	58	-0.03	2.42
24	methyl tert butyl ether	0.606	0.601	0.8	56	-0.03	2.66
25	acrylonitrile	0.135	0.112	17.0	49#	-0.03	2.64
26	trans-1,2-dichloroethene	0.244	0.233	4.5	56	-0.03	2.68
27	hexane	0.490	0.487	0.6	59	-0.03	2.83
28	di-isopropyl ether	1.002	1.038	-3.6	60	-0.02	2.94
29	2-butanone	0.026	0.024	7.7	52	-0.02	3.26
30	1,1-dichloroethane	0.507	0.488	3.7	58	-0.03	2.94
31	chloroprene	0.494	0.521	-5.5	60	-0.02	2.98
32	vinyl acetate	0.042	0.041	2.4	56	-0.02	2.92
33	ethyl tert-butyl ether	0.823	0.817	0.7	57	-0.02	3.15
34	ethyl acetate	0.054	0.051	5.6	58	-0.02	3.27
35	2,2-dichloropropane	0.349	0.353	-1.1	58	-0.02	3.29
36	cis-1,2-dichloroethene	0.261	0.244	6.5	55	-0.02	3.28
37	methyl acrylate	0.337	0.323	4.2	55	-0.02	3.30

Continuing Calibration Summary

Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V1X8421-CC8415
Lab FileID: 1X194536.D

Page 2 of 3

38	propionitrile	0.050	0.046	8.0	55	-0.02	3.30
----- True		Calc.	% Drift	-----			
39	tert-butyl formate	50.000	41.599	16.8	56	-0.02	3.50
----- AvgRF		CCRF	% Dev	-----			
40	bromochloromethane	0.133	0.128	3.8	54	-0.02	3.43
41	tetrahydrofuran	0.120	0.108	10.0	58	-0.02	3.43
42	chloroform	0.460	0.417	9.3	58	-0.02	3.47
43 S	dibromofluoromethane (s)	0.424	0.435	-2.6	63	-0.02	3.58
44	methacrylonitrile	0.101	0.094	6.9	53	-0.02	3.39
45	1,1,1-trichloroethane	0.424	0.426	-0.5	59	-0.02	3.60
46	cyclohexane	0.407	0.368	9.6	54	-0.02	3.65
47 m	tert amyl alcohol	0.010	0.009	10.0	54	-0.02	3.78
48	1,1-dichloropropene	0.354	0.353	0.3	57	-0.02	3.69
49	isobutyl alcohol	0.007	0.007	0.0	68	-0.02	3.88
50	carbon tetrachloride	0.378	0.403	-6.6	59	-0.02	3.70
51	isopropyl acetate	0.044	0.042	4.5	53	-0.02	3.81
52 I	1,4-difluorobenzene	1.000	1.000	0.0	62	-0.02	4.07
53 S	1,2-dichloroethane-d4 (s)	0.345	0.362	-4.9	66	-0.02	3.80
54	iso-octane	0.772	0.787	-1.9	60	-0.02	3.88
55	epichlorohydrin	0.024	0.022	8.3	52	-0.02	4.79
56	n-butyl alcohol	0.005	0.004	20.0	47#	-0.02	4.12
57	benzene	0.656	0.620	5.5	56	-0.02	3.82
58	tert-amyl methyl ether	0.450	0.433	3.8	55	-0.02	3.88
59	heptane	0.146	0.145	0.7	57	-0.02	3.98
60	1,2-dichloroethane	0.285	0.263	7.7	59	-0.02	3.84
61	trichloroethene	0.214	0.205	4.2	55	-0.02	4.24
62 m	ethyl acrylate	0.257	0.238	7.4	55	-0.02	4.26
63	2-nitropropane	0.047	0.061	-29.8#	77	-0.02	4.72
64	2-chloroethyl vinyl ether	0.132	0.121	8.3	54	-0.02	4.75
65	methyl methacrylate	0.044	0.040	9.1	53	-0.02	4.41
66	1,2-dichloropropane	0.071	0.070	1.4	58	-0.02	4.41
67	dibromomethane	0.111	0.102	8.1	56	-0.02	4.47
68	methylcyclohexane	0.310	0.300	3.2	57	-0.02	4.40
69	bromodichloromethane	0.219	0.216	1.4	57	-0.01	4.58
70	cis-1,3-dichloropropene	0.260	0.255	1.9	55	-0.02	4.87
71	4-methyl-2-pentanone	0.074	0.064	13.5	51	-0.01	4.96
----- True		Calc.	% Drift	-----			
72	3-methyl-1-butanol	1000.000	675.151	32.5#	44	-0.02	4.98
----- AvgRF		CCRF	% Dev	-----			
73 I	chlorobenzene-d5	1.000	1.000	0.0	59	-0.01	6.15
74 S	toluene-d8 (s)	1.191	1.222	-2.6	60	-0.01	5.07
75	toluene	0.515	0.491	4.7	55	-0.02	5.12
76	trans-1,3-dichloropropene	0.282	0.293	-3.9	55	-0.01	5.27
77	ethyl methacrylate	0.230	0.211	8.3	50	-0.01	5.29
78	1,1,2-trichloroethane	0.148	0.147	0.7	54	-0.02	5.42
79	tetrachloroethene	0.197	0.198	-0.5	56	-0.01	5.50
80	1,3-dichloropropane	0.292	0.283	3.1	54	-0.01	5.55
81	2-hexanone	0.087	0.075	13.8	49#	-0.01	5.56
82	butyl acetate	0.145	0.129	11.0	49#	-0.01	5.64
83	dibromochloromethane	0.216	0.230	-6.5	54	-0.01	5.71
84	1,2-dibromoethane	0.198	0.188	5.1	53	-0.01	5.81
85 m	n-butyl ether	1.072	1.033	3.6	53	-0.01	6.22
86	chlorobenzene	0.630	0.558	11.4	53	-0.01	6.18
87	1,1,1,2-tetrachloroethane	0.202	0.209	-3.5	54	-0.01	6.24

6.9.5

6

Continuing Calibration Summary

Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V1X8421-CC8415
Lab FileID: 1X194536.D

Page 3 of 3

88	ethylbenzene	0.997	0.945	5.2	54	-0.01	6.24
89	m,p-xylene	0.407	0.375	7.9	53	-0.01	6.35
90	o-xylene	0.796	0.738	7.3	53	-0.01	6.65
91	styrene	0.645	0.592	8.2	51	0.00	6.67
92	butyl acrylate	0.444	0.431	2.9	51	0.00	6.59
93	n-amyl acetate	0.128	0.113	11.7	47#	-0.01	6.76
94	bromoform	0.137	0.144	-5.1	54	-0.01	6.82
95	isopropylbenzene	1.029	0.969	5.8	53	-0.01	6.94
96	cis-1,4-dichloro-2-butene	0.086	0.087	-1.2	52	0.00	6.99
97 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	56	-0.01	7.95
98 S	4-bromofluorobenzene (s)	0.839	0.853	-1.7	57	-0.01	7.08
99	bromobenzene	0.464	0.443	4.5	51	-0.01	7.20
100	1,1,2,2-tetrachloroethane	0.432	0.397	8.1	51	0.00	7.18
101	trans-1,4-dichloro-2-bute	0.163	0.161	1.2	53	-0.01	7.21
102	1,2,3-trichloropropane	0.127	0.119	6.3	51	-0.01	7.23
103	n-propylbenzene	2.136	2.119	0.8	53	0.00	7.27
104	2-chlorotoluene	0.466	0.440	5.6	51	0.00	7.34
105	4-chlorotoluene	1.327	1.186	10.6	46#	0.00	7.43
106	1,3,5-trimethylbenzene	1.498	1.451	3.1	51	-0.01	7.40
107	tert-butylbenzene	1.362	1.347	1.1	53	0.00	7.64
108	1,2,4-trimethylbenzene	1.516	1.469	3.1	51	0.00	7.69
109	sec-butylbenzene	1.957	1.930	1.4	52	-0.01	7.80
110	1,3-dichlorobenzene	0.901	0.829	8.0	50#	-0.01	7.90
111	p-isopropyltoluene	1.713	1.700	0.8	52	0.00	7.92
112	1,4-dichlorobenzene	0.935	0.853	8.8	50#	0.00	7.97
113	1,2-dichlorobenzene	0.865	0.796	8.0	50#	0.00	8.23
114	benzyl chloride	0.752	0.709	5.7	46#	-0.01	8.05
115	n-butylbenzene	0.795	0.776	2.4	51	0.00	8.20
116	1,2-dibromo-3-chloropropa	0.113	0.095	15.9	44#	0.00	8.76
117	1,3,5-trichlorobenzene	0.637	0.585	8.2	48#	0.00	8.88
118	hexachlorobutadiene	0.228	0.227	0.4	53	0.00	9.37
119	naphthalene	1.636	1.399	14.5	46#	0.00	9.46
120	1,2,4-trichlorobenzene	0.539	0.490	9.1	47#	0.00	9.29
121 m	1,2,3-trichlorobenzene	0.527	0.460	12.7	46#	0.00	9.59

122	hexachloroethane	True	Calc.	% Drift		
		50.000	43.131	13.7	53	0.00 8.42

123	2-methylnaphthalene	AvgRF	CCRF	% Dev		
				NA		

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1X194385.D M1X8415.M Wed Feb 23 18:19:41 2022

6.9.5

6

Continuing Calibration Summary

Page 1 of 3

Job Number: JD39915
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VL10183-CC10152
 Lab FileID: L338023.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ni...183-partial\l338023.d Vial: 52
 Acq On : 18 Feb 2022 10:02 am Operator: nicoleh
 Sample : cc10152-20 Inst : GCMSL
 Misc : MS56807,VL10183,5,,,,,1 Multiplr: 1.00
 MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\ML10152.M (RTE Integrator)
 Title : SW846 Method V8260C/D, column ZB-624 60m x 0.25mm x 1.4 um
 Last Update : Tue Feb 08 15:29:57 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	134	0.00	3.12
2	1,4-dioxane	0.164	0.118	28.0#	98	0.00	5.35
3	ethanol	0.153	0.124	19.0	107	0.00	2.54
4 M	tertiary butyl alcohol	1.205	1.109	8.0	122	0.00	3.18
5 I	pentafluorobenzene	1.000	1.000	0.0	102	0.00	4.35
6	chlorodifluoromethane	0.476	0.376	21.0#	76	0.00	1.70
7	dichlorodifluoromethane	0.777	0.665	14.4	89	0.00	1.68
8	chloromethane	0.590	0.482	18.3	76	0.00	1.84
9	vinyl chloride	0.850	0.662	22.1#	75	0.00	1.93
10	bromomethane	0.505	0.387	23.4#	85	0.00	2.18
11	chloroethane	0.530	0.366	30.9#	78	0.00	2.26
12	trichlorofluoromethane	0.812	0.821	-1.1	97	0.00	2.45
13	ethyl ether	0.292	0.261	10.6	94	0.00	2.64
14	acrolein	0.089	0.084	5.6	93	0.00	2.74
15	freon 113	0.384	0.322	16.1	82	0.00	2.81
16	1,1-dichloroethene	0.439	0.373	15.0	88	0.00	2.82
17	acetone	0.043	0.046	-7.0	103	0.00	2.83
18	acetonitrile	0.038	0.032	15.8	89	0.00	3.02
19	iodomethane	0.473	0.310	34.5#	64	0.00	2.93
20	iso-butyl alcohol	0.023	0.021	8.7	99	0.00	4.49
21	carbon disulfide	1.368	1.147	16.2	84	0.00	3.00
22	methylene chloride	0.538	0.437	18.8	90	0.00	3.15
23	methyl acetate	0.093	0.100	-7.5	120	0.00	3.04
24	methyl tert butyl ether	1.453	1.365	6.1	96	0.00	3.32
25	trans-1,2-dichloroethene	0.494	0.409	17.2	83	0.00	3.34
26	hexane	0.690	0.586	15.1	87	0.00	3.52
27	di-isopropyl ether	1.489	1.254	15.8	86	0.00	3.63
28	ethyl tert-butyl ether	1.440	1.359	5.6	96	0.00	3.87
29	2-butanone	0.067	0.068	-1.5	110	0.00	3.99
30 M	1,1-dichloroethane	0.862	0.767	11.0	93	0.00	3.64
31	chloroprene	0.645	0.587	9.0	94	0.00	3.69
32	acrylonitrile	0.192	0.173	9.9	85	0.00	3.30
33	vinyl acetate	0.133	0.107	19.5	90	0.00	3.61
34	ethyl acetate	0.080	0.070	12.5	97	0.00	4.00
35	2,2-dichloropropane	0.740	0.742	-0.3	99	0.00	4.04
36	cis-1,2-dichloroethene	0.545	0.469	13.9	89	0.00	4.02
37	propionitrile	0.068	0.068	0.0	97	0.00	4.04
38	methyl acrylate	0.102	0.087	14.7	93	0.00	4.05
39	bromochloromethane	0.255	0.209	18.0	85	0.00	4.19
40	tetrahydrofuran	0.076	0.076	0.0	116	0.00	4.20
41	chloroform	0.922	0.819	11.2	93	0.00	4.24

Continuing Calibration Summary

Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VL10183-CC10152
Lab FileID: L338023.D

Page 2 of 3

42	S	dibromofluoromethane (s)	0.442	0.404	8.6	93	0.00	4.36
43		methacrylonitrile	0.229	0.226	1.3	109	0.00	4.15
44		1,1,1-trichloroethane	0.770	0.652	15.3	90	0.00	4.39
45		cyclohexane	0.747	0.664	11.1	92	0.00	4.45
46		1,1-dichloropropene	0.671	0.585	12.8	89	0.00	4.49
47		carbon tetrachloride	0.672	0.562	16.4	89	0.00	4.50
48		isopropyl acetate	0.120	0.115	4.2	108	0.00	4.61
49		tert amyl alcohol	0.017	0.019	-11.8	107	0.00	4.59
50	I	1,4-difluorobenzene	1.000	1.000	0.0	96	0.00	4.92
51	S	1,2-dichloroethane-d4 (s)	0.295	0.331	-12.2	105	0.00	4.61
52		tert-amyl methyl ether	0.933	0.908	2.7	93	0.00	4.70
53		2,2,4-trimethylpentane	0.846	0.790	6.6	84	0.00	4.71
54		n-butyl alcohol	0.008	0.009	-12.5	108	0.00	4.98
55	M	benzene	1.202	1.116	7.2	87	0.00	4.64
56		heptane	0.190	0.174	8.4	97	0.00	4.82
57		1,2-dichloroethane	0.431	0.411	4.6	92	0.00	4.67
58		trichloroethene	0.324	0.315	2.8	92	0.00	5.11
59		ethyl acrylate	0.373	0.402	-7.8	103	0.00	5.13
60		2-nitropropane	0.094	0.095	-1.1	113	0.00	5.67
61		2-chloroethyl vinyl ether	0.159	0.149	6.3	89	0.00	5.69
62		methyl methacrylate	0.093	0.089	4.3	91	0.00	5.31
63		1,2-dichloropropane	0.315	0.302	4.1	93	0.00	5.31
64		methylcyclohexane	0.526	0.465	11.6	85	0.00	5.30
65		dibromomethane	0.199	0.189	5.0	91	0.00	5.38
66		bromodichloromethane	0.433	0.416	3.9	91	0.00	5.50
67		cis-1,3-dichloropropene	0.542	0.524	3.3	98	0.00	5.84
68		epichlorohydrin	0.032	0.035	-9.4	114	0.00	5.75
69		4-methyl-2-pentanone	0.117	0.130	-11.1	99	0.00	5.94
70		3-methyl-1-butanol	0.008	0.010	-25.0#	121	0.00	5.95
71	I	chlorobenzene-d5	1.000	1.000	0.0	96	0.00	7.31
72	S	toluene-d8 (s)	1.368	1.294	5.4	93	0.00	6.07
73		toluene	0.944	0.840	11.0	85	0.00	6.12
74		trans-1,3-dichloropropene	0.593	0.580	2.2	97	0.00	6.29
75		ethyl methacrylate	0.499	0.533	-6.8	101	0.00	6.31
76		1,1,2-trichloroethane	0.295	0.290	1.7	95	0.00	6.46
77		2-hexanone	0.130	0.146	-12.3	106	0.00	6.63
78		tetrachloroethene	0.406	0.339	16.5	82	0.00	6.56
79		1,3-dichloropropane	0.592	0.575	2.9	97	0.00	6.61
80		butyl acetate	0.220	0.237	-7.7	103	0.00	6.71
81		dibromochloromethane	0.385	0.370	3.9	90	0.00	6.80
82		1,2-dibromoethane	0.367	0.346	5.7	91	0.00	6.92
83		n-butyl ether	1.318	1.325	-0.5	91	0.00	7.38
84		chlorobenzene	1.038	0.927	10.7	87	0.00	7.34
85		1,1,1,2-tetrachloroethane	0.354	0.326	7.9	86	0.00	7.41
86		ethylbenzene	1.669	1.572	5.8	90	0.00	7.42
87		m,p-xylene	0.655	0.599	8.5	85	0.00	7.53
88		o-xylene	0.674	0.612	9.2	87	0.00	7.89
89		butyl acrylate	0.612	0.661	-8.0	101	0.00	7.80
90		styrene	1.106	1.005	9.1	88	0.00	7.90
91		bromoform	0.276	0.245	11.2	89	0.00	8.08
92		isopropylbenzene	1.630	1.481	9.1	97	0.00	8.22
93		cis-1,4-dichloro-2-butene	0.184	0.109	40.8#	65	0.00	8.27
94	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	93	0.00	9.51
95	S	4-bromofluorobenzene (s)	0.970	1.113	-14.7	109	0.00	8.40
96		bromobenzene	0.938	0.877	6.5	83	0.00	8.54
97		1,1,2,2-tetrachloroethane	1.080	1.158	-7.2	98	0.00	8.51
98		trans-1,4-dichloro-2-bute	0.263	0.206	21.7#	71	0.00	8.54

6.9.9

6

Continuing Calibration Summary

Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VL10183-CC10152
Lab FileID: L338023.D

Page 3 of 3

99	1,2,3-trichloropropane	0.296	0.318	-7.4	93	0.00	8.57
100	n-propylbenzene	4.243	4.247	-0.1	89	0.00	8.62
101	2-chlorotoluene	0.894	0.852	4.7	87	0.00	8.71
102	4-chlorotoluene	0.918	0.879	4.2	91	0.00	8.83
103	1,3,5-trimethylbenzene	2.958	2.815	4.8	89	0.00	8.78
104	tert-butylbenzene	2.527	2.464	2.5	88	0.00	9.09
105	1,2,4-trimethylbenzene	3.051	2.905	4.8	90	0.00	9.15
106	sec-butylbenzene	3.661	3.559	2.8	89	0.00	9.31
107	1,3-dichlorobenzene	1.681	1.584	5.8	87	0.00	9.44
108	p-isopropyltoluene	3.035	2.961	2.4	87	0.00	9.46
109	1,4-dichlorobenzene	1.712	1.542	9.9	87	0.00	9.54
110	1,2,3-trimethylbenzene	2.766	2.676	3.3	88	0.00	9.55
111	1,2-dichlorobenzene	1.565	1.513	3.3	90	0.00	9.89
112	n-butylbenzene	1.518	1.510	0.5	93	0.00	9.85
113	1,2-dibromo-3-chloropropa	0.192	0.245	-27.6#	120	0.00	10.66
114	1,3,5-trichlorobenzene	1.021	1.033	-1.2	91	0.00	10.84
115	1,2,4-trichlorobenzene	0.792	0.864	-9.1	95	0.00	11.47
116	hexachlorobutadiene	0.335	0.385	-14.9	103	0.00	11.61
117	naphthalene	2.059	2.491	-21.0#	104	0.00	11.74
118	1,2,3-trichlorobenzene	0.694	0.741	-6.8	99	0.00	11.96
119	hexachloroethane	0.550	0.501	8.9	80	0.00	10.15
120	benzyl chloride	1.773	2.104	-18.7	117	0.00	9.64
121	2-methylnaphthalene	8.226	9.901	-20.4#	113	0.00	12.87
122	pentafluorobenzene (a)	1.000	1.000	0.0	71	0.00	4.35
123	Freon 142B			-----NA-----			
124	allyl chloride			-----NA-----			
125	1,4-dichlorobenzene-d4 (a)	1.000	1.000	0.0	77	0.00	9.51
126	pentachloroethane			-----NA-----			

(#) = Out of Range
L337232.D ML10152.M

SPCC's out = 0 CCC's out = 0
Sun Feb 20 23:45:29 2022

6.9.9
9

Continuing Calibration Summary

Page 1 of 3

Job Number: JD39915
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VY8531-CC8522
 Lab FileID: Y194718.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ne...531-halfway\y194718.d Vial: 1
 Acq On : 22 Feb 2022 10:20 am Operator: PrashanS
 Sample : CC8522-50 Inst : MSY
 Misc : MS56589,VY8531,5.0,,,,,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MY8522.M (RTE Integrator)
 Title : Method SW846 8260C/D, ZB624 60m x 0.25mm x 1.4um
 Last Update : Mon Sep 13 11:48:20 2010
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	97	-0.01	7.46
2	ethanol			-----NA-----			
3	tertiary butyl alcohol	1.647	1.643	0.2	101	0.00	7.57
4	1,4-dioxane	0.117	0.130	-11.1	103	0.00	11.30
5 I	pentafluorobenzene	1.000	1.000	0.0	107	0.00	9.73
6	chlorodifluoromethane	0.792	0.708	10.6	101	-0.01	4.25
7	dichlorodifluoromethane	0.718	0.753	-4.9	111	0.00	4.23
8	chloromethane	0.994	0.984	1.0	110	0.00	4.50
9	vinyl chloride	0.857	0.929	-8.4	111	0.02	4.77
10	1,3-butadiene	0.653	0.612	6.3	100	0.00	4.80
11	bromomethane	0.584	0.612	-4.8	110	0.00	5.40
12	chloroethane	0.403	0.434	-7.7	106	0.00	5.57
13	trichlorofluoromethane	0.939	1.012	-7.8	110	0.00	6.01
14	ethyl ether	0.150	0.163	-8.7	111	0.00	6.40
15	acrolein	0.045	0.045	0.0	107	0.01	6.63
16	freon 113	0.532	0.595	-11.8	116	0.02	6.87
17	1,1-dichloroethene	0.713	0.754	-5.8	108	0.00	6.83
18	acetone	0.019	0.019	0.0	102	-0.01	6.81
19	acetonitrile	0.036	0.035	2.8	105	0.00	7.23
20	iodomethane	0.950	1.043	-9.8	113	-0.01	7.08
21	carbon disulfide	1.769	1.785	-0.9	106	-0.01	7.23
22	methylene chloride	0.503	0.481	4.4	110	-0.01	7.52
23	methyl acetate	0.033	0.034	-3.0	99	0.01	7.28
24	methyl tert butyl ether	0.996	1.051	-5.5	108	0.00	7.90
25	trans-1,2-dichloroethene	0.641	0.673	-5.0	111	0.00	7.92
26	hexane	0.738	0.614	16.8	91	0.00	8.28
27	di-isopropyl ether	1.450	1.519	-4.8	107	0.00	8.48
28	ethyl tert-butyl ether	1.281	1.374	-7.3	108	0.00	8.94
29	2-butanone	0.023	0.023	0.0	115	0.00	9.12
30	1,1-dichloroethane	0.757	0.806	-6.5	110	0.00	8.49
31	chloroprene	0.662	0.700	-5.7	108	0.00	8.59
32	acrylonitrile	0.085	0.101	-18.8	118	0.00	7.81
33	vinyl acetate	0.046	0.046	0.0	89	0.01	8.42
34	ethyl acetate	0.036	0.033	8.3	99	0.00	9.14
35	2,2-dichloropropane	0.806	0.748	7.2	99	0.00	9.24
36	cis-1,2-dichloroethene	0.500	0.511	-2.2	111	0.00	9.20
37	propionitrile	0.034	0.032	5.9	100	0.00	9.19
38	bromochloromethane	0.275	0.305	-10.9	114	0.00	9.49
39	tetrahydrofuran	0.028	0.027	3.6	100	0.00	9.52
40	chloroform	0.796	0.807	-1.4	112	0.00	9.57
41	tert-butyl formate	0.242	0.283	-16.9	117	0.00	9.62

Continuing Calibration Summary

Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VY8531-CC8522
Lab FileID: Y194718.D

Page 2 of 3

42		isobutyl alcohol	0.122	0.124	-1.6	109	0.00	9.95
43	S	dibromofluoromethane (s)	0.376	0.392	-4.3	110	0.00	9.76
44		methacrylonitrile	0.092	0.088	4.3	100	0.00	9.40
45		1,1,1-trichloroethane	0.893	0.979	-9.6	116	0.00	9.85
46		cyclohexane	0.869	1.022	-17.6	117	0.00	9.97
47		1,1-dichloropropene	0.586	0.605	-3.2	110	0.00	10.01
48		tert-amyl alcohol	0.012	0.011	8.3	97	0.00	10.12
49		carbon tetrachloride	0.821	0.925	-12.7	118	0.00	10.05
50	I	1,4-difluorobenzene	1.000	1.000	0.0	111	0.00	10.66
51	S	1,2-dichloroethane-d4 (s)	0.230	0.231	-0.4	105	0.00	10.18
52		2,2,4-trimethylpentane	1.382	1.220	11.7	94	0.00	10.36
53		tert-amyl methyl ether	0.778	0.806	-3.6	110	0.00	10.34
54		n-butyl alcohol	0.005	0.004	20.0	95	0.00	10.70
55		benzene	1.230	1.200	2.4	109	0.00	10.26
56		heptane	0.266	0.211	20.7#	86	0.00	10.52
57		isopropyl acetate	0.038	0.037	2.6	104	0.00	10.15
58		1,2-dichloroethane	0.345	0.329	4.6	105	0.00	10.28
59		trichloroethene	0.388	0.400	-3.1	115	0.00	10.98
60		ethyl acrylate	0.228	0.216	5.3	102	0.00	10.96
61		2-nitropropane	0.050	0.044	12.0	107	0.00	11.71
62		2-chloroethyl vinyl ether	0.110	0.105	4.5	99	0.00	11.75
63		methyl methacrylate	0.048	0.046	4.2	103	0.00	11.22
64		1,2-dichloropropane	0.297	0.295	0.7	108	0.00	11.26
65		methylcyclohexane	0.624	0.637	-2.1	110	0.00	11.28
66		dibromomethane	0.166	0.160	3.6	107	0.00	11.37
67		bromodichloromethane	0.413	0.409	1.0	109	0.00	11.52
68		epichlorohydrin	0.017	0.015	11.8	99	0.00	11.83
69		cis-1,3-dichloropropene	0.449	0.444	1.1	106	0.00	11.97
70		4-methyl-2-pentanone	0.075	0.072	4.0	103	0.00	12.06
71		3-methyl-1-butanol	0.005	0.005	0.0	97	0.00	12.06
72	I	chlorobenzene-d5	1.000	1.000	0.0	112	0.00	13.77
73	S	toluene-d8 (s)	1.164	1.152	1.0	109	0.00	12.28
74		toluene	0.937	0.858	8.4	109	0.00	12.35
75		trans-1,3-dichloropropene	0.433	0.414	4.4	106	0.00	12.53
76		ethyl methacrylate	0.290	0.278	4.1	104	0.00	12.52
77		1,1,2-trichloroethane	0.194	0.190	2.1	107	0.00	12.74
78		2-hexanone	0.075	0.070	6.7	101	0.00	12.91
79		tetrachloroethene	0.458	0.483	-5.5	117	0.00	12.91
80		1,3-dichloropropane	0.370	0.352	4.9	108	0.00	12.93
81		butyl acetate	0.153	0.130	15.0	99	0.00	12.99
82		dibromochloromethane	0.354	0.360	-1.7	110	0.00	13.17
83		1,2-dibromoethane	0.252	0.250	0.8	109	0.00	13.32
84		n-butyl ether	1.743	1.689	3.1	106	0.00	13.76
85		chlorobenzene	1.075	1.076	-0.1	113	0.00	13.80
86		1,1,1,2-tetrachloroethane	0.419	0.453	-8.1	114	0.00	13.86
87		ethylbenzene	1.827	1.816	0.6	111	0.00	13.86
88		m,p-xylene	0.735	0.746	-1.5	112	0.00	13.98
89		o-xylene	1.541	1.567	-1.7	110	0.00	14.38
90		styrene	1.184	1.229	-3.8	112	0.00	14.39
91		bromoform	0.237	0.258	-8.9	113	0.00	14.61
92		butyl acrylate	0.532	0.540	-1.5	101	0.00	14.20
93		isopropylbenzene	2.013	2.112	-4.9	112	0.00	14.73
94		cis-1,4-dichloro-2-butene	0.114	0.115	-0.9	103	0.00	14.75
95	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	115	0.00	16.08
96	S	4-bromofluorobenzene (s)	0.934	0.832	10.9	108	0.00	14.92
97		bromobenzene	0.982	0.909	7.4	115	0.00	15.10
98		1,1,2,2-tetrachloroethane	0.630	0.575	8.7	107	0.00	14.99

6.9.13

6

Continuing Calibration Summary

Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VY8531-CC8522
Lab FileID: Y194718.D

Page 3 of 3

99	trans-1,4-dichloro-2-bute	0.155	0.143	7.7	100	0.00	15.02
100	1,2,3-trichloropropane	0.165	0.152	7.9	111	0.00	15.08
101	n-propylbenzene	4.625	4.190	9.4	111	0.00	15.13
102	2-chlorotoluene	0.994	0.945	4.9	116	0.00	15.26
103	4-chlorotoluene	2.766	2.490	10.0	112	0.00	15.37
104	1,3,5-trimethylbenzene	3.195	3.040	4.9	113	0.00	15.29
105	tert-butylbenzene	2.758	2.658	3.6	112	0.00	15.63
106	1,2,4-trimethylbenzene	3.261	3.103	4.8	113	0.00	15.68
107	sec-butylbenzene	4.305	4.165	3.3	113	0.00	15.85
108	1,3-dichlorobenzene	1.956	1.859	5.0	117	0.00	16.01
109	p-isopropyltoluene	3.607	3.569	1.1	113	0.00	15.98
110	1,2,3-trimethylbenzene	2.984	2.894	3.0	113	0.00	16.10
111	1,4-dichlorobenzene	1.896	1.804	4.9	118	0.00	16.11
112	1,2-dichlorobenzene	1.678	1.648	1.8	117	0.00	16.47
113	n-butylbenzene	1.762	1.739	1.3	109	0.00	16.38
114	1,2-dibromo-3-chloropropa	0.106	0.114	-7.5	111	0.00	17.23
115	1,3,5-trichlorobenzene	1.157	1.257	-8.6	122	0.00	17.43
116	1,2,4-trichlorobenzene	0.533	0.702	-31.7#	133	0.00	18.07
117	hexachlorobutadiene	0.555	0.618	-11.4	123	0.00	18.19
118	naphthalene	0.688	0.982	-42.7#	129	0.00	18.36
119	1,2,3-trichlorobenzene	0.231	0.389	-68.4#	152	0.00	18.59
120	hexachloroethane	0.625	0.675	-8.0	119	0.00	16.77
121	benzyl chloride	0.979	0.858	12.4	90	0.00	16.19
122	2-methylnaphthalene			-----NA-----			
123	pentafluorobenzene (a)	1.000	1.000	0.0	99	0.00	9.73
124	vinyl bromide			-----NA-----			

(#) = Out of Range
Y194588.D MY8522.M

SPCC's out = 0 CCC's out = 0
Wed Feb 23 01:08:33 2022

6.9.13

6

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: JD39915
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD39824-8MS	L338033.D	10	02/18/22	NH	n/a	n/a	VL10183
JD39824-8MSD	L338034.D	10	02/18/22	NH	n/a	n/a	VL10183
JD39824-8 ^a	L338029.D	10	02/18/22	NH	n/a	n/a	VL10183

The QC reported here applies to the following samples:

Method: SW846 8260D

JD39915-2

CAS No.	Compound	JD39824-8		Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q								
67-64-1	Acetone	ND		2000	2130	107	2000	1960	98	8	22-134/19
71-43-2	Benzene	ND		500	490	98	500	492	98	0	49-137/12
74-97-5	Bromochloromethane	ND		500	450	90	500	434	87	4	78-122/12
75-27-4	Bromodichloromethane	ND		500	525	105	500	517	103	2	76-121/12
75-25-2	Bromoform	ND		500	476	95	500	464	93	3	70-133/13
74-83-9	Bromomethane	ND		500	263	53	500	290	58	10	27-164/38
78-93-3	2-Butanone (MEK)	ND		2000	2090	105	2000	2010	101	4	52-137/17
75-15-0	Carbon disulfide	ND		500	437	87	500	437	87	0	54-136/16
56-23-5	Carbon tetrachloride	ND		500	450	90	500	452	90	0	70-132/13
108-90-7	Chlorobenzene	ND		500	472	94	500	475	95	1	68-123/12
75-00-3	Chloroethane	ND		500	336	67	500	337	67	0	48-152/17
67-66-3	Chloroform	ND		500	462	92	500	453	91	2	68-120/13
74-87-3	Chloromethane	ND		500	402	80	500	381	76	5	35-156/18
110-82-7	Cyclohexane	ND		500	465	93	500	455	91	2	53-146/14
96-12-8	1,2-Dibromo-3-chloropropane	ND		500	661	132	500	626	125	5	63-134/16
124-48-1	Dibromochloromethane	ND		500	498	100	500	484	97	3	75-122/12
106-93-4	1,2-Dibromoethane	ND		500	487	97	500	477	95	2	63-134/12
95-50-1	1,2-Dichlorobenzene	ND		500	498	100	500	498	100	0	74-119/12
541-73-1	1,3-Dichlorobenzene	ND		500	496	99	500	500	100	1	75-117/12
106-46-7	1,4-Dichlorobenzene	ND		500	473	95	500	473	95	0	72-117/12
75-71-8	Dichlorodifluoromethane	ND		500	416	83	500	422	84	1	34-163/16
75-34-3	1,1-Dichloroethane	ND		500	481	96	500	464	93	4	68-129/13
107-06-2	1,2-Dichloroethane	ND		500	501	100	500	497	99	1	66-120/13
75-35-4	1,1-Dichloroethene	ND		500	461	92	500	441	88	4	59-133/15
156-59-2	cis-1,2-Dichloroethene	25.4		500	464	88	500	459	87	1	52-140/12
156-60-5	trans-1,2-Dichloroethene	ND		500	447	89	500	438	88	2	70-125/13
78-87-5	1,2-Dichloropropane	ND		500	494	99	500	490	98	1	73-124/12
10061-01-5	cis-1,3-Dichloropropene	ND		500	523	105	500	525	105	0	75-125/13
10061-02-6	trans-1,3-Dichloropropene	ND		500	503	101	500	500	100	1	75-122/12
100-41-4	Ethylbenzene	ND		500	479	96	500	471	94	2	37-144/12
76-13-1	Freon 113	ND		500	455	91	500	441	88	3	61-142/14
591-78-6	2-Hexanone	ND		2000	2140	107	2000	2030	102	5	56-132/16
98-82-8	Isopropylbenzene	ND		500	502	100	500	497	99	1	71-126/13
79-20-9	Methyl Acetate	ND		500	523	105	500	505	101	4	51-139/18
108-87-2	Methylcyclohexane	ND		500	489	98	500	502	100	3	59-137/16
1634-04-4	Methyl Tert Butyl Ether	ND		500	498	100	500	481	96	3	66-124/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD39824-8MS	L338033.D	10	02/18/22	NH	n/a	n/a	VL10183
JD39824-8MSD	L338034.D	10	02/18/22	NH	n/a	n/a	VL10183
JD39824-8 ^a	L338029.D	10	02/18/22	NH	n/a	n/a	VL10183

The QC reported here applies to the following samples:

Method: SW846 8260D

JD39915-2

CAS No.	Compound	JD39824-8 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	2000	2280	114	2000	2190	110	4	65-135/14
75-09-2	Methylene chloride	ND	500	424	85	500	424	85	0	66-125/14
100-42-5	Styrene	ND	500	473	95	500	463	93	2	71-133/12
79-34-5	1,1,2,2-Tetrachloroethane	ND	500	551	110	500	539	108	2	68-127/14
127-18-4	Tetrachloroethene	1450	500	1540	18* ^b	500	1530	16* ^b	1	58-132/13
108-88-3	Toluene	ND	500	468	94	500	469	94	0	46-139/12
87-61-6	1,2,3-Trichlorobenzene	ND	500	594	119	500	604	121	2	57-136/17
120-82-1	1,2,4-Trichlorobenzene	ND	500	598	120	500	600	120	0	61-137/16
71-55-6	1,1,1-Trichloroethane	ND	500	460	92	500	462	92	0	67-132/13
79-00-5	1,1,2-Trichloroethane	ND	500	502	100	500	496	99	1	75-120/12
79-01-6	Trichloroethene	139	500	616	95	500	620	96	1	56-136/12
75-69-4	Trichlorofluoromethane	ND	500	495	99	500	493	99	0	61-145/16
75-01-4	Vinyl chloride	ND	500	379	76	500	375	75	1	41-156/16
	m,p-Xylene	ND	1000	946	95	1000	942	94	0	32-151/12
95-47-6	o-Xylene	ND	500	487	97	500	483	97	1	50-139/12
1330-20-7	Xylene (total)	ND	1500	1430	95	1500	1420	95	1	38-147/12

CAS No.	Surrogate Recoveries	MS	MSD	JD39824-8	Limits
1868-53-7	Dibromofluoromethane	89%	90%	92%	80-120%
17060-07-0	1,2-Dichloroethane-D4	109%	110%	111%	80-120%
2037-26-5	Toluene-D8	92%	93%	104%	80-120%
460-00-4	4-Bromofluorobenzene	116%* ^c	119%* ^c	118%* ^c	82-114%

(a) Dilution required due to high concentration of target compound.

(b) Outside control limits due to high level in sample relative to spike amount.

(c) Outside of in house control limits, but within reasonable method recovery limits.

* = Outside of Control Limits.

Surrogate Recovery Summary

Page 1 of 1

Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Method: SW846 8260D

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JD39915-2	L338037.D	90	110	99	115* a
JD39915-3	1X194522.D	104	108	103	102
JD39824-8MS	L338033.D	89	109	92	116* a
JD39824-8MSD	L338034.D	90	110	93	119* a
JD39928-7MS	1X194517.D	100	105	104	102
JD39928-7MSD	1X194518.D	101	104	104	103
V1X8420-BS	1X194512.D	101	105	103	102
V1X8420-MB	1X194514.D	102	108	103	105
VL10183-BS	L338025.D	92	112	93	116* a
VL10183-MB	L338027.D	89	112	102	113

Surrogate
Compounds

Recovery
Limits

S1 = Dibromofluoromethane
S2 = 1,2-Dichloroethane-D4
S3 = Toluene-D8
S4 = 4-Bromofluorobenzene

80-120%
80-120%
80-120%
82-114%

(a) Outside of in house control limits, but within reasonable method recovery limits.

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Initial Calibration Summary

Page 1 of 3

Job Number: JD39915
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EM7636-ICC7636
 Lab FileID: M177497.D

Response Factor Report MSM

Method : C:\MSDCHEM\1\METHODS\MM7636.M (RTE Integrator)
 Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
 Last Update : Wed Jan 12 08:43:28 2022
 Response via : Initial Calibration

Calibration Files

2 =m177496.D 5 =m177498.D 100 =m177493.D 50 =m177497.D
 1 =m177494.D 10 =m177500.D 80 =m177495.D 25 =m177499.D

Compound	2	5	100	50	1	10	80	25	Avg	%RSD

1) I 1,4-Dichlorobenzene-d	-----ISTD-----									
2) 1,4-Dioxane	0.666	0.665	0.882	0.834	0.752	0.698	0.843	0.786	0.766	10.99
3) Pyridine	1.744	1.737	1.987	1.998	1.679	1.850	1.978	1.976	1.869	7.10
4) N-Nitrosodim	0.556	0.553	0.709	0.680	0.674	0.562	0.691	0.620	0.631	10.47
5) 2-Fluorophen	1.410	1.615	1.773	1.790	1.586	1.591	1.770	1.789	1.666	8.27
6) Indene	2.364	2.378	1.966	2.142	2.522	2.301	2.072	2.282	2.253	8.05
7) Cumene	3.633	3.828	3.443	3.780	3.491	3.786	3.613	3.916	3.686	4.55
8) Phenol-d5	1.918	2.039	2.094	2.168	2.043	2.095	2.137	2.175	2.084	4.04
9) Phenol	1.970	2.057	1.723	1.868	2.094	1.955	1.765	1.985	1.927	6.86
10) Aniline	2.517	2.628	2.166	2.330	2.696	2.501	2.225	2.521	2.448	7.72
11) bis(2-Chloro	1.659	1.597	1.376	1.486	1.644	1.497	1.431	1.560	1.531	6.62
12) 2-Chlorophen	1.561	1.567	1.347	1.428	1.471	1.514	1.379	1.499	1.471	5.50
13) Decane	1.013	1.046	0.817	0.868	1.069	0.940	0.855	0.946	0.944	9.86
14) 1,3-Dichloro	1.502	1.668	1.416	1.503	1.622	1.633	1.481	1.590	1.552	5.69
15) 1,4-Dichloro	1.356	1.414	1.305	1.386	1.305	1.371	1.358	1.431	1.366	3.34
16) Benzyl alcoh	0.834	0.938	0.954	0.963	0.947	0.926	0.966	0.966	0.937	4.69
17) 1,2-Dichloro	1.434	1.443	1.271	1.404	1.511	1.442	1.329	1.456	1.411	5.42
18) Acetophenone	1.996	2.072	1.498	1.691	1.972	1.854	1.574	1.778	1.804	11.46
19) 2-Methylphen	1.257	1.283	1.201	1.266	1.340	1.286	1.225	1.324	1.273	3.65
20) 2,2'-oxybis(	0.394	0.419	0.340	0.352	0.408	0.377	0.347	0.369	0.376	7.73
21) 3&4-Methylph	1.323	1.342	1.177	1.276	1.400	1.337	1.216	1.297	1.296	5.54
22) n-Nitroso-di	1.024	0.985	0.790	0.821	1.080	0.945	0.807	0.922	0.922	11.65
23) Hexachloroet	0.560	0.585	0.538	0.572	0.518	0.554	0.554	0.560	0.555	3.66
24) I Naphthalene-d8	-----ISTD-----									
25) Nitrobenzene	0.443	0.421	0.372	0.391	0.423	0.403	0.392	0.408	0.407	5.46
26) Nitrobenzene	0.440	0.422	0.354	0.378	0.443	0.404	0.368	0.396	0.400	8.25
27) Quinoline	0.760	0.766	0.733	0.773	0.778	0.762	0.773	0.793	0.767	2.24
28) Isophorone	0.827	0.838	0.775	0.815	0.836	0.848	0.806	0.848	0.824	3.01
29) 2-Nitrophen	0.232	0.213	0.202	0.217	0.210	0.229	0.210	0.229	0.218	4.93
30) 2,4-Dimethyl	0.437	0.420	0.324	0.342	0.422	0.390	0.338	0.374	0.381	11.35
31) Benzoic acid	0.222	0.177	0.335	0.334		0.245	0.335	0.316	0.281	23.26
---- Quadratic regression ---- Coefficient = 0.9975										
Response Ratio = -0.00901 + 0.31510 *A + 0.01134 *A^2										
32) bis(2-Chloro	0.524	0.514	0.417	0.442	0.497	0.475	0.434	0.474	0.472	8.22
33) 2,4-Dichloro	0.329	0.324	0.286	0.305	0.328	0.313	0.300	0.316	0.312	4.79
34) 2,6-Dichloro	0.273	0.274	0.249	0.264	0.274	0.277	0.258	0.278	0.269	3.90
35) 1,3,5-Trichl	0.384	0.386	0.305	0.337	0.388	0.374	0.319	0.364	0.357	9.08
36) 1,2,4-Trichl	0.391	0.379	0.324	0.354	0.371	0.375	0.339	0.363	0.362	6.11
37) 1,2,3-Trichl	0.329	0.332	0.282	0.300	0.342	0.330	0.295	0.316	0.316	6.71
38) Naphthalene	0.955	0.975	0.884	0.936	0.998	0.947	0.921	0.953	0.946	3.65
39) 4-Chloroanil	0.456	0.482	0.409	0.434	0.423	0.448	0.426	0.453	0.441	5.18
40) 2,3-Dichloro	0.416	0.407	0.333	0.361	0.408	0.390	0.351	0.373	0.380	7.97
41) Hydroquinone	0.348	0.383	0.381	0.405	0.322	0.399	0.392	0.419	0.381	8.32
42) Hexachlorobu	0.204	0.202	0.178	0.191	0.182	0.193	0.188	0.198	0.192	4.76

8.7.1
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Initial Calibration Summary

Page 2 of 3

Job Number: JD39915
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EM7636-ICC7636
 Lab FileID: M177497.D

43)	4-Chloro-3-m	0.357	0.358	0.337	0.361	0.358	0.367	0.353	0.370	0.358	2.78
44)	2-Methylnaph	0.673	0.692	0.590	0.641	0.642	0.691	0.614	0.683	0.653	5.80
45)	1-Methylnaph	0.739	0.773	0.649	0.700	0.770	0.752	0.669	0.729	0.722	6.36
46)	I Acenaphthene-d10	-----ISTD-----									
47)	Hexachlorocy	0.290	0.328	0.314	0.327	0.327	0.336	0.316	0.339	0.322	4.79
48)	1,2,4,5-Tetr	0.642	0.579	0.445	0.463		0.558	0.445	0.516	0.521	14.54
49)	2,4,6-Trichl	0.438	0.410	0.361	0.379	0.443	0.414	0.369	0.406	0.402	7.57
50)	2,4,5-Trichl	0.431	0.437	0.392	0.396	0.382	0.418	0.392	0.419	0.408	5.01
51)	2-Fluorobiph	1.376	1.364	1.171	1.206	1.452	1.290	1.197	1.275	1.292	7.70
52)	2-Chloronaph	1.261	1.242	0.954	1.010	1.255	1.165	0.966	1.087	1.117	11.69
53)	Biphenyl	1.652	1.592	1.369	1.415	1.662	1.544	1.384	1.484	1.513	7.76
54)	2-Nitroanili	0.350	0.363	0.366	0.361	0.347	0.378	0.361	0.362	0.361	2.64
55)	Dimethylphth	1.544	1.478	1.406	1.457	1.574	1.522	1.434	1.512	1.491	3.84
56)	Acenaphthyle	1.836	1.838	1.541	1.637	1.858	1.765	1.587	1.714	1.722	7.12
57)	2,6-Dinitrot	0.297	0.313	0.314	0.317	0.276	0.323	0.318	0.324	0.310	5.22
58)	3-Nitroanili	0.362	0.389	0.405	0.412	0.418	0.413	0.410	0.409	0.402	4.58
59)	Acenaphthene	1.018	1.056	1.015	1.026	1.082	1.076	1.013	1.063	1.044	2.73
60)	2,4-Dinitrop	0.106	0.144	0.220	0.207		0.168	0.217	0.195	0.180	23.70
---- Quadratic regression ---- Coefficient = 0.9998											
Response Ratio = -0.01053 + 0.19483*A + 0.00579 *A^2											
61)	4-Nitropheno	0.184	0.211	0.237	0.236	0.151	0.220	0.239	0.231	0.214	14.65
62)	Dibenzofuran	1.709	1.703	1.467	1.546	1.775	1.700	1.486	1.644	1.629	7.04
63)	2,4-Dinitrot	0.353	0.397	0.365	0.383	0.347	0.413	0.377	0.403	0.380	6.29
64)	2,3,4,6-Tetr	0.329	0.380	0.362	0.365	0.378	0.368	0.369	0.377	0.366	4.43
65)	Diethylphtha	1.574	1.558	1.437	1.481	1.485	1.545	1.464	1.542	1.511	3.32
66)	Fluorene	1.461	1.474	1.258	1.314	1.377	1.425	1.271	1.394	1.372	6.06
67)	4-Chlorophen	0.707	0.698	0.557	0.584	0.680	0.657	0.566	0.637	0.636	9.42
68)	4-Nitroanili	0.347	0.359	0.335	0.328	0.367	0.360	0.325	0.350	0.346	4.53
69)	I Phenanthrene-d10	-----ISTD-----									
70)	4,6-Dinitro-	0.096	0.137	0.132		0.111	0.136	0.126	0.123		13.13
71)	n-Nitrosodip	0.654	0.638	0.566	0.596	0.640	0.637	0.581	0.609	0.615	5.16
72)	Pentachloron	0.035	0.043	0.036	0.037	0.039	0.038	0.037	0.037	0.038#	6.79
73)	1,2-Diphenyl	0.815	0.829	0.701	0.735	0.893	0.798	0.714	0.754	0.780	8.40
74)	2,4,6-Tribro	0.114	0.125	0.114	0.117	0.121	0.124	0.116	0.119	0.119	3.72
75)	4-Bromopheny	0.221	0.232	0.228	0.227	0.255	0.234	0.227	0.237	0.233	4.45
76)	Hexachlorobe	0.263	0.259	0.208	0.221	0.268	0.246	0.215	0.231	0.239	9.72
77)	Pentachlorop	0.164	0.174	0.171	0.177	0.133	0.172	0.171	0.179	0.168	8.70
78)	Phenanthrene	1.014	1.018	0.909	0.930	0.984	0.967	0.920	0.960	0.963	4.30
79)	Anthracene	1.098	1.101	0.987	1.009	1.165	1.075	1.000	1.054	1.061	5.74
80)	Carbazole	1.125	1.107	0.994	1.028	1.098	1.060	1.012	1.060	1.060	4.44
81)	Di-n-butylph	1.435	1.528	1.385	1.449	1.478	1.474	1.411	1.489	1.456	3.14
82)	Fluoranthene	1.311	1.378	1.217	1.277	1.332	1.340	1.231	1.319	1.301	4.24
83)	Octadecane	0.323	0.342	0.335	0.332	0.337	0.330	0.334	0.323	0.332	1.93
84)	I Chrysene-d12	-----ISTD-----									
85)	Benzidine	0.906	0.961	1.223	1.144	0.907	1.014	1.148	1.099	1.050	11.43
86)	Pyrene	1.602	1.577	1.467	1.450	1.700	1.514	1.473	1.491	1.534	5.57
87)	Terphenyl-d1	1.119	1.196	1.199	1.173	1.201	1.130	1.203	1.165	1.173	2.81
88)	Butylbenzylp	0.737	0.796	0.880	0.857	0.779	0.797	0.883	0.838	0.821	6.33
89)	Benzo[a]anth	1.349	1.371	1.455	1.463	1.430	1.343	1.488	1.445	1.418	3.94
90)	3,3'-Dichlor	0.414	0.474	0.517	0.505	0.428	0.460	0.523	0.492	0.477	8.45
91)	Chrysene	1.104	1.115	1.197	1.149	1.162	1.121	1.183	1.148	1.147	2.86
92)	bis(2-Ethylh	0.959	0.971	1.075	1.036	0.997	0.979	1.077	1.016	1.014	4.49
93)	I Perylene-d12	-----ISTD-----									
94)	Di-n-octylph	1.768	1.874	1.603	1.738	1.878	1.790	1.672	1.842	1.771	5.50
95)	Benzo[b]fluo	1.412	1.378	1.168	1.251	1.402	1.380	1.219	1.340	1.319	7.06

8.7.1
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Initial Calibration Summary

Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EM7636-ICC7636
Lab FileID: M177497.D

96)	Benzo[k]fluo	1.289	1.258	0.952	1.028	1.348	1.157	0.974	1.073	1.135	13.29
97)	Benzo[a]pyre	1.279	1.265	1.111	1.208	1.314	1.247	1.164	1.254	1.230	5.39
98)	Indeno[1,2,3	0.925	0.934	0.898	0.952	1.022	0.959	0.937	0.975	0.950	3.90
99)	Dibenz(a,h)a	0.856	0.873	0.843	0.915	0.882	0.876	0.898	0.943	0.886	3.65
100)	Dibenz[a,h]a	0.921	1.001	0.936	0.963	1.089	1.008	0.959	0.991	0.983	5.35
101)	7,12-Dimethy	0.631	0.604	0.488	0.533	0.636	0.586	0.514	0.566	0.570	9.57
102)	Benzo[g,h,i]	1.071	1.063	0.975	1.066	1.182	1.088	1.049	1.098	1.074	5.36

(#) = Out of Range ### Number of calibration levels exceeded format ###

MM7636.M Wed Jan 12 08:59:57 2022

8.7.1
8

Continuing Calibration Summary

Page 1 of 3

Job Number: JD39915
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EM7687-CC7636
 Lab FileID: M178374.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM7687\m178374.D Vial: 2
 Acq On : 22 Feb 2022 1:30 am Operator: chriss2
 Sample : cc7636-50 Inst : MSM
 Misc : op37014,em7687,30.0,,,1,1 Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MM7636.M (RTE Integrator)
 Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
 Last Update : Mon Feb 21 13:03:07 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	85	0.00	4.63
2 t	1,4-Dioxane	0.766	0.702	8.4	71	0.00	2.15
3 t	Pyridine	1.869	1.678	10.2	71	0.00	2.49
4 t	N-Nitrosodimethylamine	0.631	0.479	24.1#	60	0.00	2.44
5 S	2-Fluorophenol	1.666	1.515	9.1	72	0.00	3.65
6 t	Indene	2.253	2.320	-3.0	92	0.00	4.84
7 t	Cumene	3.686	3.185	13.6	71	0.00	4.03
8 S	Phenol-d5	2.084	1.908	8.4	75	0.00	4.37
9 t	Phenol	1.927	1.879	2.5	85	0.00	4.38
10 t	Aniline	2.448	2.090	14.6	76	0.00	4.39
11 t	bis(2-Chloroethyl)ether	1.531	1.208	21.1#	69	0.00	4.44
12 t	2-Chlorophenol	1.471	1.425	3.1	85	0.00	4.48
13 t	Decane	0.944	0.768	18.6	75	0.00	4.51
14 t	1,3-Dichlorobenzene	1.552	1.482	4.5	84	0.00	4.59
15 t	1,4-Dichlorobenzene	1.366	1.407	-3.0	86	0.00	4.65
16 t	Benzyl alcohol	0.937	0.944	-0.7	83	0.00	4.75
17 t	1,2-Dichlorobenzene	1.411	1.354	4.0	82	0.00	4.76
18 t	Acetophenone	1.804	1.645	8.8	83	0.00	4.96
19 t	2-Methylphenol	1.273	1.151	9.6	77	0.00	4.84
20 t	2,2'-oxybis(1-Chloropropa	0.376	0.339	9.8	82	0.00	4.85
21 t	3&4-Methylphenol	1.296	1.201	7.3	80	0.00	4.97
22 t	n-Nitroso-di-n-propylamin	0.922	0.759	17.7	78	0.00	4.96
23 t	Hexachloroethane	0.555	0.464	16.4	69	0.00	5.04
24 I	Naphthalene-d8	1.000	1.000	0.0	85	0.00	5.77
25 S	Nitrobenzene-d5	0.407	0.307	24.6#	67	0.00	5.08
26 t	Nitrobenzene	0.400	0.287	28.3#	65	0.00	5.10
27 t	Quinoline	0.767	0.789	-2.9	87	0.00	6.17
28 t	Isophorone	0.824	0.651	21.0#	68	0.00	5.32
29 t	2-Nitrophenol	0.218	0.212	2.8	83	0.00	5.39
30 t	2,4-Dimethylphenol	0.381	0.320	16.0	80	0.00	5.43
----- True Calc. % Drift -----							
31 t	Benzoic acid	50.000	42.242	15.5	68	0.03	5.55
----- AvgRF CCRF % Dev -----							
32 t	bis(2-Chloroethoxy)methan	0.472	0.382	19.1	73	0.00	5.52
33 t	2,4-Dichlorophenol	0.312	0.299	4.2	83	0.00	5.63
34 t	2,6-Dichlorophenol	0.269	0.272	-1.1	87	0.00	5.86
35 t	1,3,5-Trichlorobenzene	0.357	0.318	10.9	80	0.00	5.40
36 t	1,2,4-Trichlorobenzene	0.362	0.315	13.0	76	0.00	5.71
37 t	1,2,3-Trichlorobenzene	0.316	0.280	11.4	79	0.00	5.94

8.7.9
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Continuing Calibration Summary

Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EM7687-CC7636
Lab FileID: M178374.D

Page 2 of 3

38 t	Naphthalene	0.946	0.991	-4.8	90	0.00	5.79
39 t	4-Chloroaniline	0.441	0.444	-0.7	87	0.00	5.85
40 t	2,3-Dichloroaniline	0.380	0.376	1.1	89	0.00	6.97
41 t	Hydroquinone	0.381	0.357	6.3	75	0.00	6.23
42 t	Hexachlorobutadiene	0.192	0.155	19.3	69	0.00	5.92
43 t	4-Chloro-3-methylphenol	0.358	0.315	12.0	74	0.00	6.42
44 t	2-Methylnaphthalene	0.653	0.643	1.5	85	0.00	6.60
45 t	1-Methylnaphthalene	0.722	0.715	1.0	87	0.00	6.72
46 I	Acenaphthene-d10	1.000	1.000	0.0	85	0.00	8.11
47 t	Hexachlorocyclopentadiene	0.322	0.249	22.7#	65	0.00	6.80
48	1,2,4,5-Tetrachlorobenzen	0.521	0.493	5.4	91	0.00	6.82
49 t	2,4,6-Trichlorophenol	0.402	0.363	9.7	81	0.00	6.99
50 t	2,4,5-Trichlorophenol	0.408	0.393	3.7	84	0.00	7.04
51 S	2-Fluorobiphenyl	1.292	1.268	1.9	90	0.00	7.10
52 t	2-Chloronaphthalene	1.117	1.044	6.5	88	0.00	7.26
53 t	Biphenyl	1.513	1.465	3.2	88	0.00	7.24
54 t	2-Nitroaniline	0.361	0.285	21.1#	67	0.00	7.43
55 t	Dimethylphthalate	1.491	1.374	7.8	80	0.00	7.73
56 t	Acenaphthylene	1.722	1.718	0.2	89	0.00	7.89
57 t	2,6-Dinitrotoluene	0.310	0.319	-2.9	86	0.00	7.82
58 t	3-Nitroaniline	0.402	0.387	3.7	80	0.00	8.08
59 t	Acenaphthene	1.044	1.116	-6.9	93	0.00	8.17
----- True Calc. % Drift -----							
60 t	2,4-Dinitrophenol	100.000	97.633	2.4	82	0.00	8.27
----- AvgRF CCRF % Dev -----							
61 t	4-Nitrophenol	0.214	0.139	35.0#	50	0.00	8.42
62 t	Dibenzofuran	1.629	1.662	-2.0	92	0.00	8.46
63 t	2,4-Dinitrotoluene	0.380	0.390	-2.6	87	0.00	8.49
64 t	2,3,4,6-Tetrachlorophenol	0.366	0.334	8.7	78	0.00	8.68
65 t	Diethylphthalate	1.511	1.336	11.6	77	0.00	8.93
66 t	Fluorene	1.372	1.380	-0.6	90	0.00	9.05
67 t	4-Chlorophenyl-phenylethe	0.636	0.604	5.0	88	0.00	9.08
68 t	4-Nitroaniline	0.346	0.340	1.7	88	0.00	9.12
69 I	Phenanthrene-d10	1.000	1.000	0.0	84	0.00	10.75
70 t	4,6-Dinitro-2-methylpheno	0.123	0.124	-0.8	79	0.00	9.20
71 t	n-Nitrosodiphenylamine	0.615	0.646	-5.0	91	0.00	9.30
72	Pentachloronitrobenzene	0.038	0.041#	-7.9	93	0.00	10.44
73 t	1,2-Diphenylhydrazine	0.780	0.573	26.5#	66	0.00	9.37
74 S	2,4,6-Tribromophenol	0.119	0.117	1.7	85	0.00	9.47
75 t	4-Bromophenyl-phenylether	0.233	0.229	1.7	85	0.00	9.97
76 t	Hexachlorobenzene	0.239	0.241	-0.8	92	0.00	10.03
77 t	Pentachlorophenol	0.168	0.146	13.1	70	0.00	10.43
78 t	Phenanthrene	0.963	0.969	-0.6	88	0.00	10.79
79 t	Anthracene	1.061	1.050	1.0	88	0.00	10.89
80 t	Carbazole	1.060	1.099	-3.7	90	0.00	11.24
81 t	Di-n-butylphthalate	1.456	1.352	7.1	78	0.00	12.06
82 t	Fluoranthene	1.301	1.234	5.1	81	0.00	13.09
83 t	Octadecane	0.332	0.315	5.1	80	0.00	10.76
84 I	Chrysene-d12	1.000	1.000	0.0	87	0.00	15.94
85	Benzidine	1.050	0.763	27.3#	58	0.00	13.45
86 t	Pyrene	1.534	1.466	4.4	88	0.00	13.52
87 S	Terphenyl-d14	1.173	1.179	-0.5	87	0.00	13.95
88 t	Butylbenzylphthalate	0.821	0.719	12.4	73	0.00	15.01
89 t	Benzo[a]anthracene	1.418	1.352	4.7	80	0.00	15.92
90 t	3,3'-Dichlorobenzidine	0.477	0.482	-1.0	83	0.00	15.95

8.7.9
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Continuing Calibration Summary

Page 3 of 3

Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EM7687-CC7636
Lab FileID: M178374.D

91	t	Chrysene	1.147	1.202	-4.8	91	0.00	15.99
92	t	bis(2-Ethylhexyl)phthalat	1.014	0.951	6.2	80	0.00	16.24
93	I	Perylene-d12	1.000	1.000	0.0	89	0.00	18.56
94	t	Di-n-octylphthalate	1.771	1.414	20.2#	72	0.00	17.48
95	t	Benzo[b]fluoranthene	1.319	1.176	10.8	84	0.00	17.93
96	t	Benzo[k]fluoranthene	1.135	1.070	5.7	93	0.02	17.98
97	t	Benzo[a]pyrene	1.230	1.150	6.5	85	0.00	18.47
98	t	Indeno[1,2,3-cd]pyrene	0.950	1.041	-9.6	97	0.02	20.29
99	t	Dibenz(a,h)acridine	0.886	0.997	-12.5	97	0.00	19.93
100	t	Dibenz[a,h]anthracene	0.983	1.167	-18.7	108	0.00	20.34
101	t	7,12-Dimethylbenz(a)anthr	0.570	0.500	12.3	83	0.00	17.93
102	t	Benzo[g,h,i]perylene	1.074	1.145	-6.6	96	0.02	20.75

(#) = Out of Range
m178235.D MM7636.M

SPCC's out = 0 CCC's out = 0
Tue Feb 22 12:31:39 2022

8.7.9
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Initial Calibration Summary

Page 1 of 3

Job Number: JD39915
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EZ7699-ICC7699
 Lab FileID: Z154918.D

Response Factor Report GCMSZ

Method : C:\MSDCHEM\1\METHODS\MZ7699.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
 Last Update : Thu Feb 10 09:30:17 2022
 Response via : Initial Calibration

Calibration Files

100 =z154914.D 80 =z154916.D 50 =z154918.D 25 =z154920.D
 10 =z154921.D 5 =z154919.D 2 =z154917.D 1 =z154915.D

Compound	100	80	50	25	10	5	2	1	Avg	%RSD

1) I 1,4-Dichlorobenzene-d	-----ISTD-----									
2) 1,4-Dioxane	0.631	0.610	0.577	0.562	0.531	0.553	0.649	0.735	0.606	10.87
3) Pyridine	1.683	1.632	1.533	1.486	1.348	1.312	1.309	1.370	1.459	10.05
4) N-Nitrosodim	0.942	0.915	0.858	0.832	0.740	0.745	0.659	0.661	0.794	13.75
5) 2-Fluorophen	1.447	1.403	1.335	1.266	1.157	1.148	1.130	1.108	1.249	10.63
6) Indene	2.345	2.357	2.334	2.306	2.168	2.167	2.118	2.151	2.243	4.49
7) Cumene	3.358	3.282	3.149	3.052	2.859	2.887	2.813	2.752	3.019	7.51
8) Phenol-d5	1.836	1.802	1.727	1.654	1.534	1.504	1.445	1.496	1.625	9.28
9) Phenol	2.004	1.951	1.883	1.816	1.706	1.641	1.607	1.568	1.772	9.31
10) Aniline	2.189	2.174	2.126	2.030	1.912	1.875	1.765	1.715	1.973	9.31
11) bis(2-Chloro	1.366	1.350	1.286	1.296	1.261	1.284	1.259	1.297	1.300	2.99
12) 2-Chlorophen	1.446	1.429	1.406	1.387	1.278	1.249	1.189	1.226	1.326	7.66
13) Decane	1.458	1.447	1.375	1.328	1.273	1.310	1.287	1.573	1.381	7.53
14) 1,3-Dichloro	1.575	1.564	1.523	1.529	1.441	1.422	1.456	1.382	1.486	4.76
15) 1,4-Dichloro	1.582	1.578	1.561	1.555	1.465	1.454	1.418	1.375	1.498	5.37
16) Benzyl alcoh	0.945	0.931	0.895	0.863	0.796	0.777	0.704	0.752	0.833	10.59
17) 1,2-Dichloro	1.506	1.502	1.468	1.449	1.419	1.396	1.393	1.403	1.442	3.20
18) Acetophenone	1.804	1.836	1.830	1.771	1.628	1.651	1.586	1.606	1.714	6.19
19) 2-Methylphen	1.289	1.292	1.256	1.233	1.139	1.120	1.081	1.147	1.195	6.89
20) 2,2'-oxybis(	0.378	0.379	0.382	0.374	0.365	0.366	0.333	0.359	0.367	4.27
21) 3&4-Methylph	1.284	1.306	1.302	1.283	1.193	1.169	1.130	1.115	1.223	6.53
22) n-Nitroso-di	0.937	0.941	0.938	0.907	0.810	0.827	0.808	0.821	0.873	7.13
23) Hexachloroet	0.507	0.508	0.484	0.497	0.468	0.456	0.463	0.425	0.476	6.06
24) I Naphthalene-d8	-----ISTD-----									
25) Nitrobenzene	0.375	0.369	0.360	0.342	0.318	0.315	0.307	0.311	0.337	8.23
26) Nitrobenzene	0.379	0.374	0.364	0.347	0.326	0.322	0.317	0.319	0.344	7.56
27) Quinoline	0.695	0.695	0.686	0.658	0.618	0.612	0.594	0.530	0.636	9.16
28) Isophorone	0.701	0.679	0.660	0.624	0.566	0.558	0.525	0.532	0.606	11.42
29) 2-Nitrophen	0.200	0.202	0.194	0.178	0.161	0.152	0.152	0.157	0.174	12.47
30) 2,4-Dimethyl	0.363	0.364	0.366	0.340	0.319	0.316	0.293	0.290	0.331	9.49
31) Benzoic Acid	0.265	0.252	0.240	0.200	0.145	0.114			0.202	30.45
---- Quadratic regression ---- Coefficient = 0.9993										
Response Ratio = -0.01514 + 0.21578 *A + 0.02242 *A^2										
32) bis(2-Chloro	0.431	0.428	0.416	0.406	0.369	0.383	0.352	0.385	0.396	7.25
33) 2,4-Dichloro	0.297	0.298	0.292	0.276	0.256	0.247	0.225	0.229	0.265	11.29
34) 2,6-Dichloro	0.294	0.295	0.291	0.280	0.258	0.255	0.238	0.249	0.270	8.35
35) 1,3,5-Trichl	0.342	0.341	0.343	0.326	0.308	0.315	0.298	0.294	0.321	6.24
36) 1,2,4-Trichl	0.325	0.328	0.320	0.312	0.292	0.289	0.282	0.280	0.303	6.57
37) 1,2,3-Trichl	0.306	0.306	0.303	0.292	0.286	0.292	0.265	0.276	0.291	5.00
38) Naphthalene	1.046	1.049	1.033	1.018	0.995	0.996	1.000	0.984	1.015	2.49
39) 4-Chloroanil	0.444	0.446	0.445	0.426	0.397	0.381	0.352	0.330	0.402	11.26
40) 2,3-Dichloro	0.345	0.344	0.356	0.342	0.320	0.317	0.297	0.291	0.327	7.41
41) Hydroquinone	0.341	0.335	0.329	0.304	0.252	0.226			0.298	16.06
42) Hexachlorobu	0.184	0.182	0.179	0.172	0.163	0.164	0.154	0.153	0.169	7.25

8.7.11
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Initial Calibration Summary

Page 2 of 3

Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EZ7699-ICC7699
Lab FileID: Z154918.D

43)	4-Chloro-3-m	0.304	0.297	0.287	0.270	0.247	0.239	0.226	0.227	0.262	12.04
44)	2-Methylnaph	0.627	0.627	0.615	0.598	0.563	0.552	0.552	0.527	0.583	6.68
45)	1-Methylnaph	0.587	0.592	0.580	0.564	0.536	0.538	0.507	0.493	0.550	6.75
46)	I Acenaphthene-d10	-----ISTD-----									
47)	Hexachlorocy	0.417	0.411	0.398	0.383	0.340	0.334	0.311	0.298	0.362	12.86
48)	1,2,4,5-tetr	0.591	0.602	0.585	0.574	0.524	0.536	0.522	0.484	0.552	7.56
49)	2,4,6-Trichl	0.390	0.391	0.382	0.376	0.341	0.336	0.306	0.310	0.354	9.91
50)	2,4,5-Trichl	0.410	0.410	0.406	0.388	0.345	0.346	0.324	0.316	0.368	10.78
51)	2-Fluorobiph	1.331	1.357	1.338	1.319	1.252	1.218	1.199	1.147	1.270	6.06
52)	2-Chloronaph	1.153	1.171	1.166	1.154	1.089	1.101	1.048	1.069	1.119	4.28
53)	Biphenyl	1.520	1.538	1.523	1.525	1.402	1.413	1.353	1.345	1.452	5.67
54)	2-Nitroanili	0.346	0.343	0.324	0.306	0.270	0.258	0.230	0.259	0.292	14.91
55)	Dimethylphth	1.277	1.287	1.254	1.246	1.160	1.142	1.138	1.077	1.197	6.50
56)	Acenaphthyle	1.715	1.714	1.659	1.647	1.511	1.484	1.393	1.350	1.559	9.25
57)	2,6-Dinitrot	0.291	0.293	0.280	0.272	0.240	0.227	0.210	0.191	0.251	15.49
58)	3-Nitroanili	0.344	0.344	0.332	0.318	0.272	0.266	0.230		0.301	14.86
59)	Acenaphthene	1.235	1.221	1.203	1.204	1.106	1.118	1.059	1.063	1.151	6.30
60)	2,4-Dinitrop	0.202	0.197	0.184	0.168	0.138	0.116	0.099		0.158	25.74
---- Quadratic regression ---- Coefficient = 0.9994											
Response Ratio = -0.00878 + 0.16354*A + 0.00839 *A^2											
61)	4-Nitropheno	0.167	0.168	0.156	0.147	0.121	0.118	0.110		0.141	17.33
62)	Dibenzofuran	1.645	1.649	1.613	1.611	1.525	1.511	1.482	1.462	1.562	4.83
63)	2,4-Dinitrot	0.388	0.392	0.374	0.362	0.313	0.294	0.251	0.250	0.328	18.01
64)	2,3,4,6-Tetr	0.341	0.346	0.334	0.317	0.288	0.266	0.249		0.306	12.66
65)	Diethylphtha	1.302	1.316	1.283	1.267	1.184	1.161	1.073	1.329	1.239	7.29
66)	Fluorene	1.357	1.367	1.349	1.331	1.230	1.193	1.149	1.140	1.264	7.67
67)	4-Chlorophen	0.615	0.617	0.607	0.601	0.568	0.545	0.566	0.549	0.583	5.10
68)	4-Nitroanili	0.346	0.342	0.337	0.323	0.273	0.246			0.311	13.37
69)	I Phenanthrene-d10	-----ISTD-----									
70)	4,6-Dinitro-	0.133	0.129	0.121	0.115	0.094	0.085			0.113	17.19
71)	n-Nitrosodip	0.674	0.668	0.637	0.615	0.578	0.570	0.557	0.640	0.617	7.29
72)	Pentachloron	0.057	0.056	0.052	0.047	0.043	0.042			0.049#	13.08
73)	1,2-Diphenyl	0.851	0.844	0.791	0.763	0.708	0.687	0.649	0.726	0.752	9.70
74)	2,4,6-Tribr	0.180	0.176	0.163	0.152	0.134	0.129			0.156	13.53
75)	4-Bromopheny	0.248	0.243	0.229	0.221	0.207	0.204	0.187	0.213	0.219	9.38
76)	Hexachlorobe	0.312	0.310	0.295	0.286	0.271	0.270	0.248	0.320	0.289	8.59
77)	Pentachlorop	0.207	0.205	0.191	0.175	0.153	0.144	0.125		0.171	18.60
78)	Phenanthrene	1.143	1.132	1.099	1.056	1.034	1.044	1.035	1.493	1.130	13.55
79)	Anthracene	1.164	1.165	1.112	1.069	1.005	0.990	0.932	1.206	1.080	9.05
80)	Carbazole	1.088	1.080	1.032	1.005	0.935	0.920	0.881	1.166	1.013	9.58
81)	Di-n-butylph	1.461	1.422	1.337	1.239	1.111	1.071	0.985		1.232	14.87
82)	Fluoranthene	1.284	1.265	1.195	1.127	1.048	1.023	0.997	1.351	1.161	11.44
83)	Octadecane	0.538	0.519	0.475	0.440	0.408	0.399	0.392	0.438	0.451	12.22
84)	I Chrysene-d12	-----ISTD-----									
85)	Benzidine	0.603	0.573	0.571	0.523	0.474	0.444	0.429	0.462	0.510	13.05
86)	Pyrene	1.222	1.233	1.221	1.196	1.171	1.150	1.133	1.488	1.227	9.08
87)	Terphenyl-d1	0.975	0.986	0.966	0.951	0.889	0.887	0.877	1.127	0.957	8.47
88)	Butylbenzylp	0.607	0.599	0.569	0.522	0.460	0.431	0.376	0.477	0.505	16.45
89)	Benzo[a]anth	1.219	1.208	1.201	1.162	1.091	1.089	1.145	1.396	1.189	8.19
90)	3,3'-Dichlor	0.505	0.513	0.502	0.476	0.423	0.414	0.399	0.579	0.476	12.79
91)	Chrysene	1.106	1.114	1.120	1.120	1.080	1.085	1.044	1.201	1.109	4.09
92)	bis(2-Ethylh	0.858	0.841	0.814	0.759	0.651	0.596	0.516	0.684	0.715	17.29
93)	I Perylene-d12	-----ISTD-----									
94)	Di-n-octylph	1.488	1.452	1.375	1.231	1.005	0.899	0.793		1.178	23.74
---- Quadratic regression ---- Coefficient = 0.9993											

8.7.11
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Initial Calibration Summary

Page 3 of 3

Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EZ7699-ICC7699
Lab FileID: Z154918.D

$$\text{Response Ratio} = -0.02927 + 1.20387 *A + 0.12484 *A^2$$

95)	Benzo[b]fluo	1.390	1.389	1.316	1.267	1.126	1.096	1.048	1.119	1.219	11.29
96)	Benzo[k]fluo	1.134	1.122	1.148	1.129	1.084	1.049	0.961	1.044	1.084	5.85
97)	Benzo[a]pyre	1.206	1.207	1.168	1.108	0.983	0.953	0.905	0.990	1.065	11.40
98)	Indeno[1,2,3	1.205	1.172	1.109	1.020	0.898	0.862	0.839	0.861	0.996	15.11
99)	Dibenz(a,h)a	1.106	1.084	1.038	0.965	0.836	0.804	0.756	0.816	0.926	15.02
100)	Dibenz[a,h]a	1.281	1.263	1.209	1.131	1.013	0.957	0.899	0.900	1.082	14.73
101)	7,12-Dimethy	0.610	0.606	0.575	0.529	0.440	0.421			0.530	15.62
102)	Benzo[g,h,i]	1.280	1.262	1.218	1.149	1.030	1.011	0.972	0.981	1.113	11.61

(#) = Out of Range ### Number of calibration levels exceeded format ###

MZ7699.M

Thu Feb 10 10:03:28 2022

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8.7.11
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Continuing Calibration Summary

Page 1 of 3

Job Number: JD39915
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EZ7710-CC7699
 Lab FileID: Z155184.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EZ7710\z155184.D Vial: 2
 Acq On : 22 Feb 2022 2:52 am Operator: chriss2
 Sample : cc7699-50 Inst : GCMSZ
 Misc : op36604,eZ7710,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MZ7699.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
 Last Update : Mon Feb 21 13:34:15 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	57	-0.02	4.57
2	1,4-Dioxane	0.606	0.501	17.3	49#	-0.02	2.07
3 t	Pyridine	1.459	1.364	6.5	50	-0.03	2.41
4 t	N-Nitrosodimethylamine	0.794	0.783	1.4	52	-0.02	2.37
5 S	2-Fluorophenol	1.249	1.233	1.3	52	-0.02	3.57
6 t	Indene	2.243	2.386	-6.4	58	-0.02	4.75
7 t	Cumene	3.019	2.908	3.7	52	-0.02	3.97
8 S	Phenol-d5	1.625	1.640	-0.9	54	-0.02	4.30
9 t	Phenol	1.772	1.829	-3.2	55	-0.02	4.31
10 t	Aniline	1.973	2.031	-2.9	54	-0.02	4.33
11 t	bis(2-Chloroethyl)ether	1.300	1.259	3.2	56	-0.02	4.38
12 t	2-Chlorophenol	1.326	1.343	-1.3	54	-0.02	4.41
13 t	Decane	1.381	1.400	-1.4	58	-0.02	4.45
14 t	1,3-Dichlorobenzene	1.486	1.552	-4.4	58	-0.02	4.52
15 t	1,4-Dichlorobenzene	1.498	1.575	-5.1	57	-0.02	4.58
16 t	Benzyl alcohol	0.833	0.790	5.2	50	-0.02	4.67
17 t	1,2-Dichlorobenzene	1.442	1.490	-3.3	58	-0.02	4.69
18 t	Acetophenone	1.714	1.974	-15.2	61	-0.02	4.87
19 t	2-Methylphenol	1.195	1.356	-13.5	61	-0.02	4.75
20 t	2,2'-oxybis(1-Chloropropa	0.367	0.365	0.5	54	-0.02	4.77
21 t	3&4-Methylphenol	1.223	1.401	-14.6	61	-0.01	4.87
22 t	n-Nitroso-di-n-propylamin	0.873	1.040	-19.1	63	-0.02	4.87
23 t	Hexachloroethane	0.476	0.546	-14.7	64	-0.02	4.94
24 I	Naphthalene-d8	1.000	1.000	0.0	57	-0.02	5.49
25 S	Nitrobenzene-d5	0.337	0.345	-2.4	54	-0.02	4.97
26 t	Nitrobenzene	0.344	0.367	-6.7	57	-0.01	4.99
27 t	Quinoline	0.636	0.693	-9.0	57	-0.02	5.75
28 t	Isophorone	0.606	0.674	-11.2	58	-0.02	5.16
29 t	2-Nitrophenol	0.174	0.211	-21.3#	62	-0.02	5.21
30 t	2,4-Dimethylphenol	0.331	0.351	-6.0	54	-0.02	5.25
----- True		Calc.	% Drift	-----			
31	Benzoic Acid	50.000	57.136	-14.3	64	0.00	5.33
----- AvgRF		CCRF	% Dev	-----			
32 t	bis(2-Chloroethoxy)methan	0.396	0.414	-4.5	56	-0.02	5.31
33 t	2,4-Dichlorophenol	0.265	0.307	-15.8	60	-0.01	5.39
34	2,6-Dichlorophenol	0.270	0.318	-17.8	62	-0.02	5.55
35 t	1,3,5-Trichlorobenzene	0.321	0.377	-17.4	62	-0.02	5.22
36 t	1,2,4-Trichlorobenzene	0.303	0.346	-14.2	61	-0.02	5.45
37 t	1,2,3-Trichlorobenzene	0.291	0.331	-13.7	62	-0.02	5.60

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Continuing Calibration Summary

Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EZ7710-CC7699
Lab FileID: Z155184.D

Page 2 of 3

38 t	Naphthalene	1.015	1.061	-4.5	58	-0.02	5.50
39 t	4-Chloroaniline	0.402	0.483	-20.1#	62	-0.02	5.54
40 t	2,3-Dichloroaniline	0.327	0.392	-19.9	62	-0.02	6.21
41 t	Hydroquinone	0.298	0.294	1.3	51	-0.02	5.77
42 t	Hexachlorobutadiene	0.169	0.201	-18.9	64	-0.02	5.59
43 t	4-Chloro-3-methylphenol	0.262	0.279	-6.5	55	-0.02	5.88
44 t	2-Methylnaphthalene	0.583	0.636	-9.1	59	-0.02	6.00
45 t	1-Methylnaphthalene	0.550	0.612	-11.3	60	-0.02	6.07
46 I	Acenaphthene-d10	1.000	1.000	0.0	61	-0.02	6.83
47 t	Hexachlorocyclopentadiene	0.362	0.420	-16.0	64	-0.02	6.11
48 t	1,2,4,5-tetrachlorobenzen	0.552	0.621	-12.5	65	-0.02	6.12
49 t	2,4,6-Trichlorophenol	0.354	0.408	-15.3	65	-0.02	6.21
50 t	2,4,5-Trichlorophenol	0.368	0.409	-11.1	62	-0.02	6.23
51 S	2-Fluorobiphenyl	1.270	1.313	-3.4	60	-0.02	6.27
52 t	2-Chloronaphthalene	1.119	1.145	-2.3	60	-0.02	6.37
53 t	Biphenyl	1.452	1.481	-2.0	59	-0.02	6.35
54 t	2-Nitroaniline	0.292	0.316	-8.2	60	-0.02	6.45
55 t	Dimethylphthalate	1.197	1.263	-5.5	62	-0.02	6.60
56 t	Acenaphthylene	1.559	1.624	-4.2	60	-0.02	6.71
57 t	2,6-Dinitrotoluene	0.251	0.284	-13.1	62	-0.02	6.64
58 t	3-Nitroaniline	0.301	0.341	-13.3	63	-0.02	6.79
59 t	Acenaphthene	1.151	1.211	-5.2	62	-0.02	6.86
----- True Calc. % Drift -----							
60 t	2,4-Dinitrophenol	100.000	116.458	-16.5	72	-0.02	6.89
----- AvgRF CCRF % Dev -----							
61 t	4-Nitrophenol	0.141	0.165	-17.0	65	-0.02	6.93
62 t	Dibenzofuran	1.562	1.656	-6.0	63	-0.02	7.02
63 t	2,4-Dinitrotoluene	0.328	0.393	-19.8	64	-0.02	7.00
64	2,3,4,6-Tetrachlorophenol	0.306	0.351	-14.7	64	-0.02	7.13
65 t	Diethylphthalate	1.239	1.273	-2.7	61	-0.02	7.24
66 t	Fluorene	1.264	1.418	-12.2	64	-0.02	7.35
67 t	4-Chlorophenyl-phenylethe	0.583	0.661	-13.4	67	-0.02	7.35
68 t	4-Nitroaniline	0.311	0.362	-16.4	66	-0.02	7.37
69 I	Phenanthrene-d10	1.000	1.000	0.0	65	-0.03	8.40
70 t	4,6-Dinitro-2-methylpheno	0.113	0.134	-18.6	71	-0.02	7.40
71 t	n-Nitrosodiphenylamine	0.617	0.605	1.9	61	-0.02	7.47
72 t	Pentachloronitrobenzene	0.049	0.049#	0.0	61	-0.02	8.18
73 t	1,2-Diphenylhydrazine	0.752	0.715	4.9	58	-0.02	7.52
74 S	2,4,6-Tribromophenol	0.156	0.148	5.1	58	-0.02	7.60
75 t	4-Bromophenyl-phenylether	0.219	0.220	-0.5	62	-0.02	7.88
76 t	Hexachlorobenzene	0.289	0.272	5.9	59	-0.03	7.93
77 t	Pentachlorophenol	0.171	0.197	-15.2	66	-0.02	8.17
78 t	Phenanthrene	1.130	1.080	4.4	63	-0.03	8.42
79 t	Anthracene	1.080	1.101	-1.9	64	-0.03	8.49
80 t	Carbazole	1.013	1.033	-2.0	65	-0.02	8.70
81 t	Di-n-butylphthalate	1.232	1.303	-5.8	63	-0.02	9.21
82 t	Fluoranthene	1.161	1.211	-4.3	65	-0.03	10.02
83 t	Octadecane	0.451	0.422	6.4	57	-0.03	8.31
84 I	Chrysene-d12	1.000	1.000	0.0	73	-0.03	12.18
85 t	Benzidine	0.510	0.621	-21.8#	79	-0.02	10.26
86 t	Pyrene	1.227	1.115	9.1	67	-0.03	10.34
87 S	Terphenyl-d14	0.957	0.865	9.6	65	-0.03	10.62
88 t	Butylbenzylphthalate	0.505	0.504	0.2	65	-0.03	11.43
89 t	Benzo[a]anthracene	1.189	1.131	4.9	69	-0.03	12.16
90 t	3,3'-Dichlorobenzidine	0.476	0.510	-7.1	74	-0.03	12.17

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Continuing Calibration Summary

Page 3 of 3

Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EZ7710-CC7699
Lab FileID: Z155184.D

91 t	Chrysene	1.109	1.042	6.0	68	-0.03	12.22
92 t	bis(2-Ethylhexyl)phthalat	0.715	0.740	-3.5	66	-0.03	12.37
93 I	Perylene-d12	1.000	1.000	0.0	66	-0.03	14.25
----- True Calc. % Drift -----							
94 t	Di-n-octylphthalate	50.000	51.187	-2.4	66	-0.03	13.35
----- AvgRF CCRF % Dev -----							
95 t	Benzo[b]fluoranthene	1.219	1.341	-10.0	68	-0.03	13.73
96 t	Benzo[k]fluoranthene	1.084	1.164	-7.4	67	-0.03	13.78
97 t	Benzo[a]pyrene	1.065	1.164	-9.3	66	-0.03	14.17
98 t	Indeno[1,2,3-cd]pyrene	0.996	1.082	-8.6	65	-0.03	15.58
99 t	Dibenz(a,h)acridine	0.926	1.007	-8.7	64	-0.03	15.31
100 t	Dibenz[a,h]anthracene	1.082	1.200	-10.9	66	-0.03	15.61
101 t	7,12-Dimethylbenz(a)anthr	0.530	0.544	-2.6	63	-0.03	13.74
102 t	Benzo[g,h,i]perylene	1.113	1.191	-7.0	65	-0.03	15.91

(#) = Out of Range
z155092.D MZ7699.M

SPCC's out = 0 CCC's out = 0
Tue Feb 22 11:07:55 2022 YING

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Continuing Calibration Summary

Page 1 of 1

Job Number: JD39915
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EZ7710-CC7700
 Lab FileID: Z155185.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EZ7710\z155185.D Vial: 3
 Acq On : 22 Feb 2022 3:16 am Operator: chriss2
 Sample : cc7700-50 Inst : GCMSZ
 Misc : op36604,eZ7710,1000,,,1,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MZ7699.M (RTE Integrator)
 Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
 Last Update : Mon Feb 21 13:34:15 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.

103	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	62	-0.02	4.57
104	Benzaldehyde	0.962	1.047	-8.8	61	-0.02	4.25
105	Phenanthrene-d10a	1.000	1.000	0.0	66	-0.03	8.39
----- True Calc. % Drift -----							
106	Atrazine	50.000	52.255	-4.5	67	-0.02	8.08
----- AvgRF CCRF % Dev -----							
107 I	Naphthalene-d8a	1.000	1.000	0.0	60	-0.02	5.49
----- True Calc. % Drift -----							
108 t	Caprolactam	50.000	60.663	-21.3#	70	-0.01	5.78
----- AvgRF CCRF % Dev -----							
109	Phenanthrene-d10b	1.000	1.000	0.0	66	-0.03	8.39
110 s	1-chlorooctadecane	0.262	0.296	-13.0	65	-0.03	9.96
111 s	o-terphenyl	0.547	0.580	-6.0	64	-0.03	8.90

(#) = Out of Range
 z155092.D MZ7699.M

SPCC's out = 0 CCC's out = 0
 Tue Feb 22 11:07:57 2022 YING

8.7.20
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Method Blank Summary

Page 1 of 3

Job Number: JD39915
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38251-MB1	M178378.D	1	02/22/22	CS	02/21/22	OP38251	EM7687

The QC reported here applies to the following samples:

Method: SW846 8270E

JD39915-1

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	67	16	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	20	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	28	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	59	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	170	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	170	36	ug/kg	
95-48-7	2-Methylphenol	ND	67	21	ug/kg	
	3&4-Methylphenol	ND	67	27	ug/kg	
88-75-5	2-Nitrophenol	ND	170	22	ug/kg	
100-02-7	4-Nitrophenol	ND	330	89	ug/kg	
87-86-5	Pentachlorophenol	ND	130	31	ug/kg	
108-95-2	Phenol	ND	67	17	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	170	22	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	25	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	20	ug/kg	
83-32-9	Acenaphthene	ND	33	11	ug/kg	
208-96-8	Acenaphthylene	ND	33	17	ug/kg	
98-86-2	Acetophenone	ND	170	7.2	ug/kg	
120-12-7	Anthracene	ND	33	20	ug/kg	
1912-24-9	Atrazine	ND	67	14	ug/kg	
56-55-3	Benzo(a)anthracene	ND	33	9.4	ug/kg	
50-32-8	Benzo(a)pyrene	ND	33	15	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	33	15	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	33	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	33	16	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	67	13	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	67	8.1	ug/kg	
92-52-4	1,1'-Biphenyl	ND	67	4.6	ug/kg	
100-52-7	Benzaldehyde	ND	170	8.3	ug/kg	
91-58-7	2-Chloronaphthalene	ND	67	7.9	ug/kg	
106-47-8	4-Chloroaniline	ND	170	12	ug/kg	
86-74-8	Carbazole	ND	67	4.8	ug/kg	
105-60-2	Caprolactam	ND	67	13	ug/kg	
218-01-9	Chrysene	ND	33	10	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	67	7.1	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	67	14	ug/kg	

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Method Blank Summary

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Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38251-MB1	M178378.D	1	02/22/22	CS	02/21/22	OP38251	EM7687

The QC reported here applies to the following samples:

Method: SW846 8270E

JD39915-1

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	67	12	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	67	11	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	33	10	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	33	17	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	67	28	ug/kg	
123-91-1	1,4-Dioxane	ND	33	22	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	33	15	ug/kg	
132-64-9	Dibenzofuran	ND	67	14	ug/kg	
84-74-2	Di-n-butyl phthalate	111	67	5.4	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	67	8.3	ug/kg	
84-66-2	Diethyl phthalate	ND	67	7.1	ug/kg	
131-11-3	Dimethyl phthalate	ND	67	5.9	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	8.3	67	7.8	ug/kg	J
206-44-0	Fluoranthene	ND	33	15	ug/kg	
86-73-7	Fluorene	ND	33	15	ug/kg	
118-74-1	Hexachlorobenzene	ND	67	8.4	ug/kg	
87-68-3	Hexachlorobutadiene	ND	33	13	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	330	13	ug/kg	
67-72-1	Hexachloroethane	ND	170	16	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	33	16	ug/kg	
78-59-1	Isophorone	ND	67	7.1	ug/kg	
91-57-6	2-Methylnaphthalene	ND	33	7.5	ug/kg	
88-74-4	2-Nitroaniline	ND	170	7.9	ug/kg	
99-09-2	3-Nitroaniline	ND	170	8.3	ug/kg	
100-01-6	4-Nitroaniline	ND	170	8.6	ug/kg	
91-20-3	Naphthalene	ND	33	9.4	ug/kg	
98-95-3	Nitrobenzene	ND	67	13	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	67	9.6	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	12	ug/kg	
85-01-8	Phenanthrene	ND	33	11	ug/kg	
129-00-0	Pyrene	ND	33	11	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	170	8.5	ug/kg	

8.1.1
8

Method Blank Summary

Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38251-MB1	M178378.D	1	02/22/22	CS	02/21/22	OP38251	EM7687

The QC reported here applies to the following samples: Method: SW846 8270E

JD39915-1

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	33% 10-109%
4165-62-2	Phenol-d5	33% 10-105%
118-79-6	2,4,6-Tribromophenol	46% 10-135%
4165-60-0	Nitrobenzene-d5	35% 10-119%
321-60-8	2-Fluorobiphenyl	49% 18-112%
1718-51-0	Terphenyl-d14	49% 18-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.38	160	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

8.1.1
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Method Blank Summary

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Job Number: JD39915
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38240-MB1	Z155187.D	1	02/22/22	CS	02/21/22	OP38240	EZ7710

The QC reported here applies to the following samples:

Method: SW846 8270E

JD39915-2

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	5.0	1.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.0	1.3	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.96	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	1.5	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
98-86-2	Acetophenone	ND	2.0	0.21	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
1912-24-9	Atrazine	ND	2.0	0.45	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.29	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.21	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.40	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.21	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
86-74-8	Carbazole	ND	1.0	0.23	ug/l	
105-60-2	Caprolactam	ND	2.0	0.65	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	

8.1.2
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Method Blank Summary

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Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38240-MB1	Z155187.D	1	02/22/22	CS	02/21/22	OP38240	EZ7710

The QC reported here applies to the following samples:

Method: SW846 8270E

JD39915-2

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
123-91-1	1,4-Dioxane	ND	1.0	0.66	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.22	ug/l	
84-74-2	Di-n-butyl phthalate	1.3	2.0	0.50	ug/l	J
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.21	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.28	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.39	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.44	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.37	ug/l	

8.1.2
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Method Blank Summary

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Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38240-MB1	Z155187.D	1	02/22/22	CS	02/21/22	OP38240	EZ7710

The QC reported here applies to the following samples:

Method: SW846 8270E

JD39915-2

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	26% 10-90%
4165-62-2	Phenol-d5	18% 10-101%
118-79-6	2,4,6-Tribromophenol	53% 23-155%
4165-60-0	Nitrobenzene-d5	68% 25-141%
321-60-8	2-Fluorobiphenyl	75% 35-126%
1718-51-0	Terphenyl-d14	61% 15-139%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

8.1.2
8

Continuing Calibration Summary

Page 1 of 2

Job Number: JD39915
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: G1G6034-CC5985
 Lab FileID: 1G174602.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\sy...4\lg174602.d\ECD1A.CH Vial: 4
 Signal #2 : C:\msdchem\1\data\syrap\lg6034\lg174602.d\ECD2B.CH
 Acq On : 25 Feb 2022 2:55 pm Operator: kristis
 Sample : cc5985-50 Inst : HP G1530A
 Misc : op38204,lg6034,15.2,,,10,1 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\lpst5985.m (ChemStation Integrator)
 Title : PEST/PCB
 Last Update : Sun Feb 27 23:10:15 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	84	0.00	1.69- 1.75
2 SAB	Tetrachloro-m-xylene	0.968	0.865	10.6	81	0.00	2.22- 2.28
3	Hexachlorobenzene	1.475	1.334	9.6	82	0.00	2.54- 2.60
4 A	alpha-BHC	1.409	1.351	4.1	82	0.00	2.68- 2.74
5 MA	gamma-BHC	1.290	1.213	6.0	81	0.00	2.97- 3.03
6 MA	Heptachlor	1.274	1.170	8.2	82	0.00	3.48- 3.54
7 B	beta-BHC	0.564	0.501	11.2	79	0.00	3.04- 3.10
8 B	delta-BHC	1.218	1.227	-0.7	85	0.00	3.23- 3.29
9 MB	Aldrin	1.189	1.036	12.9	77	0.00	3.83- 3.89
10	Alachlor	0.137	0.115	16.1	70	0.00	3.97- 4.03
11 B	Heptachlor Epoxide	1.166	0.915	21.5#	74	0.00	4.58- 4.64
12 B	gamma-Chlordane	1.143	1.011	11.5	80	0.00	4.75- 4.81
13 B	alpha-Chlordane	1.097	0.948	13.6	78	0.00	4.93- 4.99
14 A	Endosulfan I	1.077	0.964	10.5	81	0.00	5.13- 5.19
15 B	4,4'-DDE	1.143	1.030	9.9	80	0.00	5.04- 5.10
16 MA	Dieldrin	1.153	1.067	7.5	83	0.00	5.48- 5.54
17 MA	Endrin	1.079	1.061	1.7	87	0.00	5.83- 5.89
18 A	4,4'-DDD	0.925	0.867	6.3	82	0.00	5.94- 6.01
19 B	Endosulfan II	0.996	0.932	6.4	84	0.00	6.17- 6.23
20 MA	4,4'-DDT	0.931	0.917	1.5	86	0.00	6.39- 6.45
21 B	Endrin Aldehyde	0.806	0.701	13.0	80	0.00	6.86- 6.92
22 B	Endosulfan Sulfate	0.920	0.894	2.8	88	0.00	7.61- 7.67
23 A	Methoxychlor	0.504	0.503	0.2	89	0.00	7.23- 7.29
24	Mirex	0.811	0.723	10.9	83	0.00	7.42- 7.48
25 B	Endrin Ketone	1.004	0.943	6.1	86	0.00	8.08- 8.14
26 SA	Decachlorobiphenyl	0.891	0.650	27.0#	70	0.00	9.91- 9.97
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	91	0.00	1.62- 1.82
28 L8	Toxaphene{A}			-----NA-----			
29 L8	Toxaphene{B}			-----NA-----			
30 L8	Toxaphene{C}			-----NA-----			
31 L8	Toxaphene{D}			-----NA-----			
32 L8	Toxaphene{E}			-----NA-----			
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	91	0.00	1.62- 1.82
34	Chlordane {A}			-----NA-----			
35	Chlordane {B}			-----NA-----			
36	Chlordane {C}			-----NA-----			
37	Chlordane {D}			-----NA-----			
38	Chlordane {E}			-----NA-----			

10.10.8 10

Continuing Calibration Summary

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Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: G1G6034-CC5985
Lab FileID: 1G174602.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	90	0.00	1.93- 1.99
2	SAB	Tetrachloro-m-xylene	0.651	0.571	12.3	85	0.00	2.70- 2.76
3		Hexachlorobenzene	1.366	1.313	3.9	91	0.00	3.22- 3.28
4	A	alpha-BHC	1.356	1.336	1.5	87	0.00	3.37- 3.43
5	MA	gamma-BHC	1.247	1.202	3.6	86	0.00	3.81- 3.87
6	MA	Heptachlor	1.264	1.183	6.4	87	0.00	4.43- 4.49
7	B	beta-BHC	0.509	0.440	13.6	84	0.00	3.90- 3.96
8	B	delta-BHC	1.213	1.243	-2.5	90	0.00	4.32- 4.38
9	MB	Aldrin	1.203	1.075	10.6	83	0.00	4.91- 4.97
10		Alachlor	0.130	0.117	10.0	82	0.00	4.69- 4.75
11	B	Heptachlor Epoxide	1.098	0.997	9.2	85	0.00	5.79- 5.85
12	B	gamma-Chlordane	1.095	0.987	9.9	85	0.00	6.10- 6.16
13	B	alpha-Chlordane	1.094	0.964	11.9	85	0.00	6.34- 6.40
14	A	Endosulfan I	1.089	0.969	11.0	86	0.00	6.45- 6.51
15	B	4,4'-DDE	1.074	0.973	9.4	85	0.00	6.61- 6.67
16	MA	Dieldrin	1.138	1.049	7.8	86	0.00	6.92- 6.98
17	MA	Endrin	1.020	1.017	0.3	91	0.00	7.47- 7.53
18	A	4,4'-DDD	0.804	0.760	5.5	87	0.00	7.64- 7.70
19	B	Endosulfan II	0.989	0.868	12.2	86	0.00	7.85- 7.91
20	MA	4,4'-DDT	0.758	0.712	6.1	83	0.00	8.23- 8.29
21	B	Endrin Aldehyde	0.770	0.662	14.0	86	0.00	8.47- 8.53
22	B	Endosulfan Sulfate	0.855	0.835	2.3	93	0.00	8.98- 9.04
23	A	Methoxychlor	0.396	0.370	6.6	85	0.00	9.54- 9.60
24		Mirex	0.669	0.571	14.6	87	0.00	9.88- 9.94
25	B	Endrin Ketone	0.928	0.878	5.4	90	0.00	9.93- 9.99
26	SA	Decachlorobiphenyl	0.840	0.760	9.5	92	0.00	11.81-11.87
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.86- 2.06
28	L8	Toxaphene{A}			-----NA-----			
29	L8	Toxaphene{B}			-----NA-----			
30	L8	Toxaphene{C}			-----NA-----			
31	L8	Toxaphene{D}			-----NA-----			
32	L8	Toxaphene{E}			-----NA-----			
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.86- 2.06
34		Chlordane {A}			-----NA-----			
35		Chlordane {B}			-----NA-----			
36		Chlordane {C}			-----NA-----			
37		Chlordane {D}			-----NA-----			
38		Chlordane {E}			-----NA-----			

(#) = Out of Range
1g174602.d 1pst5985.m

SPCC's out = 0 CCC's out = 0
Mon Feb 28 00:24:02 2022

10.10.8 10

Continuing Calibration Summary

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Job Number: JD39915
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: G8G1772-CC1762
 Lab FileID: 8G41468.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\ch...72\8g41468.d\ECD1A.ch Vial: 2
 Signal #2 : C:\msdchem\1\data\chris2\8g1772\8g41468.d\ECD2B.ch
 Acq On : 23 Feb 2022 12:08 am Operator: christp
 Sample : cc1762-25 Inst : GC8G
 Misc : op38182,g8g1772,15.3,,,10,1 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\8pst1762.m (ChemStation Integrator)
 Title : PEST/PCB
 Last Update : Thu Feb 24 01:51:03 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	92	0.00	1.23- 2.23
2 SAB	Tetrachloro-m-xylene	0.950	0.859	9.6	86	0.00	2.43- 2.49
3	hexachlorobenzene	1.567	1.545	1.4	91	0.00	2.81- 2.87
4 A	alpha-BHC	1.253	1.309	-4.5	93	0.00	2.96- 3.02
5 MA	gamma-BHC	1.157	1.196	-3.4	92	0.00	3.29- 3.35
6 MA	Heptachlor	1.266	1.330	-5.1	95	0.00	3.81- 3.87
7 B	beta-BHC	0.505	0.530	-5.0	98	0.00	3.37- 3.43
8 B	delta-BHC	0.942	1.060	-12.5	101	0.00	3.56- 3.62
9 MB	Aldrin	1.144	1.191	-4.1	93	0.00	4.16- 4.22
10	alachlor	0.144	0.150	-4.2	89	0.00	4.32- 4.38
11 B	Heptachlor Epoxide	1.109	1.220	-10.0	99	0.00	4.89- 4.95
12 B	gamma-Chlordane	1.113	1.111	0.2	91	0.00	5.06- 5.12
13 B	alpha-Chlordane	1.070	1.117	-4.4	93	0.00	5.24- 5.30
14 A	Endosulfan I	1.037	1.104	-6.5	95	0.00	5.42- 5.48
15 B	4,4'-DDE	1.092	1.185	-8.5	96	0.00	5.35- 5.41
16 MA	Dieldrin	1.117	1.134	-1.5	92	0.00	5.74- 5.80
17 MA	Endrin	1.018	1.120	-10.0	99	0.00	6.07- 6.13
18 A	4,4'-DDD	0.854	0.923	-8.1	98	0.00	6.20- 6.26
19 B	Endosulfan II	0.956	0.997	-4.3	94	0.00	6.40- 6.46
20 MA	4,4'-DDT	0.873	0.919	-5.3	95	0.00	6.62- 6.68
21 B	Endrin Aldehyde	0.761	0.818	-7.5	100	0.00	7.03- 7.09
22 B	Endosulfan Sulfate	0.814	0.883	-8.5	100	0.00	7.72- 7.78
23 A	Methoxychlor	0.514	0.559	-8.8	100	0.00	7.41- 7.47
24	Mirex	0.911	0.870	4.5	88	0.00	7.57- 7.63
25 B	Endrin Ketone	0.823	1.007	-22.4#	112	0.00	8.16- 8.22
26 SA	Decachlorobiphenyl	1.237	1.232	0.4	92	0.00	9.98-10.04
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	92	0.00	1.23- 2.23
28 L8	Toxaphene{A}			-----NA-----			
29 L8	Toxaphene{B}			-----NA-----			
30 L8	Toxaphene{C}			-----NA-----			
31 L8	Toxaphene{D}			-----NA-----			
32 L8	Toxaphene{E}			-----NA-----			
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	92	0.00	1.23- 2.23
34	Chlordane {A}			-----NA-----			
35	Chlordane {B}			-----NA-----			
36	Chlordane {C}			-----NA-----			
37	Chlordane {D}			-----NA-----			
38	Chlordane {E}			-----NA-----			

10.10.23 10

Initial Calibration Verification

Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Page 2 of 2
Sample: G8G1762-ICV1762
Lab FileID: 8G41287A.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	118	-0.02	1.57- 2.57
2	SAB	Tetrachloro-m-xylene					-----NA-----	
3		hexachlorobenzene					-----NA-----	
4	A	alpha-BHC					-----NA-----	
5	MA	gamma-BHC					-----NA-----	
6	MA	Heptachlor					-----NA-----	
7	B	beta-BHC					-----NA-----	
8	B	delta-BHC					-----NA-----	
9	MB	Aldrin					-----NA-----	
10		alachlor					-----NA-----	
11	B	Heptachlor Epoxide					-----NA-----	
12	B	gamma-Chlordane					-----NA-----	
13	B	alpha-Chlordane					-----NA-----	
14	A	Endosulfan I					-----NA-----	
15	B	4,4'-DDE					-----NA-----	
16	MA	Dieldrin					-----NA-----	
17	MA	Endrin					-----NA-----	
18	A	4,4'-DDD					-----NA-----	
19	B	Endosulfan II					-----NA-----	
20	MA	4,4'-DDT					-----NA-----	
21	B	Endrin Aldehyde					-----NA-----	
22	B	Endosulfan Sulfate					-----NA-----	
23	A	Methoxychlor					-----NA-----	
24		Mirex	0.643	0.655	-1.9	122	-0.01	9.93- 9.99
25	B	Endrin Ketone					-----NA-----	
26	SA	Decachlorobiphenyl					-----NA-----	
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	118	-0.03	1.57- 2.57
28	L8	Toxaphene{A}					-----NA-----	
29	L8	Toxaphene{B}					-----NA-----	
30	L8	Toxaphene{C}					-----NA-----	
31	L8	Toxaphene{D}					-----NA-----	
32	L8	Toxaphene{E}					-----NA-----	
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	118	-0.03	1.57- 2.57
34		Chlordane {A}					-----NA-----	
35		Chlordane {B}					-----NA-----	
36		Chlordane {C}					-----NA-----	
37		Chlordane {D}					-----NA-----	
38		Chlordane {E}					-----NA-----	

(#) = Out of Range
8g41278.d 8PST1762.M

SPCC's out = 0 CCC's out = 0
Fri Feb 18 13:21:39 2022

10.10.22 10

Initial Calibration Verification

Page 1 of 2

Job Number: JD39915
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: G8G1762-ICV1762
 Lab FileID: 8G41287A.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\8g1762\8g41287a.d\ECD1A.ch Vial: 17
 Signal #2 : C:\msdchem\1\data\8g1762\8g41287a.d\ECD2B.ch
 Acq On : 18 Feb 2022 3:56 am Operator: rebeccak
 Sample : icv1762-25 Inst : GC8G
 Misc : op37935,g8g1762,1000,,,5,5 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\METHODS\8PST1762.M (ChemStation Integrator)
 Title : PEST/PCB
 Last Update : Fri Feb 18 13:11:45 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	116	-0.03	1.22- 2.22
2 SAB	Tetrachloro-m-xylene			-----NA-----			
3	hexachlorobenzene			-----NA-----			
4 A	alpha-BHC			-----NA-----			
5 MA	gamma-BHC			-----NA-----			
6 MA	Heptachlor			-----NA-----			
7 B	beta-BHC			-----NA-----			
8 B	delta-BHC			-----NA-----			
9 MB	Aldrin			-----NA-----			
10	alachlor			-----NA-----			
11 B	Heptachlor Epoxide			-----NA-----			
12 B	gamma-Chlordane			-----NA-----			
13 B	alpha-Chlordane			-----NA-----			
14 A	Endosulfan I			-----NA-----			
15 B	4,4'-DDE			-----NA-----			
16 MA	Dieldrin			-----NA-----			
17 MA	Endrin			-----NA-----			
18 A	4,4'-DDD			-----NA-----			
19 B	Endosulfan II			-----NA-----			
20 MA	4,4'-DDT			-----NA-----			
21 B	Endrin Aldehyde			-----NA-----			
22 B	Endosulfan Sulfate			-----NA-----			
23 A	Methoxychlor			-----NA-----			
24	Mirex	0.911	0.908	0.3	116	-0.01	7.56- 7.62
25 B	Endrin Ketone			-----NA-----			
26 SA	Decachlorobiphenyl			-----NA-----			
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	116	-0.03	1.22- 2.22
28 L8	Toxaphene{A}			-----NA-----			
29 L8	Toxaphene{B}			-----NA-----			
30 L8	Toxaphene{C}			-----NA-----			
31 L8	Toxaphene{D}			-----NA-----			
32 L8	Toxaphene{E}			-----NA-----			
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	116	-0.03	1.22- 2.22
34	Chlordane {A}			-----NA-----			
35	Chlordane {B}			-----NA-----			
36	Chlordane {C}			-----NA-----			
37	Chlordane {D}			-----NA-----			
38	Chlordane {E}			-----NA-----			

10.10.22 10

Initial Calibration Verification

Page 2 of 2

Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: G8G1762-ICV1762
Lab FileID: 8G41287.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	117	-0.02	1.57- 2.57
2	SAB	Tetrachloro-m-xylene					-----NA-----	
3		hexachlorobenzene	1.222	1.268	-3.8	122	-0.01	3.54- 3.60
4	A	alpha-BHC					-----NA-----	
5	MA	gamma-BHC					-----NA-----	
6	MA	Heptachlor					-----NA-----	
7	B	beta-BHC					-----NA-----	
8	B	delta-BHC					-----NA-----	
9	MB	Aldrin					-----NA-----	
10		alachlor	0.138	0.154	-11.6	124	-0.01	5.04- 5.10
11	B	Heptachlor Epoxide					-----NA-----	
12	B	gamma-Chlordane					-----NA-----	
13	B	alpha-Chlordane					-----NA-----	
14	A	Endosulfan I					-----NA-----	
15	B	4,4'-DDE					-----NA-----	
16	MA	Dieldrin					-----NA-----	
17	MA	Endrin					-----NA-----	
18	A	4,4'-DDD					-----NA-----	
19	B	Endosulfan II					-----NA-----	
20	MA	4,4'-DDT					-----NA-----	
21	B	Endrin Aldehyde					-----NA-----	
22	B	Endosulfan Sulfate					-----NA-----	
23	A	Methoxychlor					-----NA-----	
24		Mirex					-----NA-----	
25	B	Endrin Ketone					-----NA-----	
26	SA	Decachlorobiphenyl					-----NA-----	
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	117	-0.03	1.57- 2.57
28	L8	Toxaphene{A}					-----NA-----	
29	L8	Toxaphene{B}					-----NA-----	
30	L8	Toxaphene{C}					-----NA-----	
31	L8	Toxaphene{D}					-----NA-----	
32	L8	Toxaphene{E}					-----NA-----	
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	117	-0.03	1.57- 2.57
34		Chlordane {A}					-----NA-----	
35		Chlordane {B}					-----NA-----	
36		Chlordane {C}					-----NA-----	
37		Chlordane {D}					-----NA-----	
38		Chlordane {E}					-----NA-----	

(#) = Out of Range
8g41278.d 8PST1762.M

SPCC's out = 0 CCC's out = 0
Fri Feb 18 13:19:14 2022

10.10.21 10

Initial Calibration Verification

Page 1 of 2

Job Number: JD39915
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: G8G1762-ICV1762
 Lab FileID: 8G41287.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\8g1762\8g41287.d\ECD1A.ch Vial: 16
 Signal #2 : C:\msdchem\1\data\8g1762\8g41287.d\ECD2B.ch
 Acq On : 18 Feb 2022 3:39 am Operator: rebeccak
 Sample : icv1762-25 Inst : GC8G
 Misc : op37935,g8g1762,1000,,,5,5 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\METHODS\8PST1762.M (ChemStation Integrator)
 Title : PEST/PCB
 Last Update : Fri Feb 18 13:11:45 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	113	-0.03	1.22- 2.22
2 SAB	Tetrachloro-m-xylene			-----NA-----			
3	hexachlorobenzene	1.567	1.716	-9.5	124	-0.02	2.80- 2.86
4 A	alpha-BHC			-----NA-----			
5 MA	gamma-BHC			-----NA-----			
6 MA	Heptachlor			-----NA-----			
7 B	beta-BHC			-----NA-----			
8 B	delta-BHC			-----NA-----			
9 MB	Aldrin			-----NA-----			
10	alachlor	0.144	0.173	-20.1#	125	-0.01	4.31- 4.37
11 B	Heptachlor Epoxide			-----NA-----			
12 B	gamma-Chlordane			-----NA-----			
13 B	alpha-Chlordane			-----NA-----			
14 A	Endosulfan I			-----NA-----			
15 B	4,4'-DDE			-----NA-----			
16 MA	Dieldrin			-----NA-----			
17 MA	Endrin			-----NA-----			
18 A	4,4'-DDD			-----NA-----			
19 B	Endosulfan II			-----NA-----			
20 MA	4,4'-DDT			-----NA-----			
21 B	Endrin Aldehyde			-----NA-----			
22 B	Endosulfan Sulfate			-----NA-----			
23 A	Methoxychlor			-----NA-----			
24	Mirex			-----NA-----			
25 B	Endrin Ketone			-----NA-----			
26 SA	Decachlorobiphenyl			-----NA-----			
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	113	-0.03	1.22- 2.22
28 L8	Toxaphene{A}			-----NA-----			
29 L8	Toxaphene{B}			-----NA-----			
30 L8	Toxaphene{C}			-----NA-----			
31 L8	Toxaphene{D}			-----NA-----			
32 L8	Toxaphene{E}			-----NA-----			
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	113	-0.03	1.22- 2.22
34	Chlordane {A}			-----NA-----			
35	Chlordane {B}			-----NA-----			
36	Chlordane {C}			-----NA-----			
37	Chlordane {D}			-----NA-----			
38	Chlordane {E}			-----NA-----			

10.10.21 10

Initial Calibration Verification

Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Page 2 of 2
Sample: G8G1762-ICV1762
Lab FileID: 8G41286.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	115	-0.03	1.57- 2.57
2	SAB	Tetrachloro-m-xylene	1.078	1.117	-3.6	130	-0.02	2.99- 3.05
3		hexachlorobenzene					-----NA-----	
4	A	alpha-BHC					-----NA-----	
5	MA	gamma-BHC					-----NA-----	
6	MA	Heptachlor					-----NA-----	
7	B	beta-BHC					-----NA-----	
8	B	delta-BHC					-----NA-----	
9	MB	Aldrin					-----NA-----	
10		alachlor					-----NA-----	
11	B	Heptachlor Epoxide					-----NA-----	
12	B	gamma-Chlordane					-----NA-----	
13	B	alpha-Chlordane					-----NA-----	
14	A	Endosulfan I					-----NA-----	
15	B	4,4'-DDE					-----NA-----	
16	MA	Dieldrin					-----NA-----	
17	MA	Endrin					-----NA-----	
18	A	4,4'-DDD					-----NA-----	
19	B	Endosulfan II					-----NA-----	
20	MA	4,4'-DDT					-----NA-----	
21	B	Endrin Aldehyde					-----NA-----	
22	B	Endosulfan Sulfate					-----NA-----	
23	A	Methoxychlor					-----NA-----	
24		Mirex					-----NA-----	
25	B	Endrin Ketone					-----NA-----	
26	SA	Decachlorobiphenyl	0.672	0.658	2.1	121	-0.01	12.09-12.15
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	-0.03	1.57- 2.57
28	L8	Toxaphene{A}	0.012	0.013	-8.3	104	-0.01	7.03- 7.23
29	L8	Toxaphene{B}	0.019	0.018	5.3	94	-0.01	7.90- 8.10
30	L8	Toxaphene{C}	0.035	0.036	-2.9	102	-0.01	8.06- 8.26
31	L8	Toxaphene{D}	0.024	0.019	20.8#	80	-0.01	8.50- 8.70
32	L8	Toxaphene{E}	0.020	0.020	0.0	101	-0.02	9.40- 9.60
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	110	-0.03	1.57- 2.57
34		Chlordane {A}					-----NA-----	
35		Chlordane {B}					-----NA-----	
36		Chlordane {C}					-----NA-----	
37		Chlordane {D}					-----NA-----	
38		Chlordane {E}					-----NA-----	

(#) = Out of Range
8g41279.d 8PST1762.M

SPCC's out = 0 CCC's out = 0
Tue Feb 22 12:05:47 2022

10.10.20 10

Initial Calibration Verification

Page 1 of 2

Job Number: JD39915
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: G8G1762-ICV1762
 Lab FileID: 8G41286.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\8g1762\8g41286.d\ECD1A.ch Vial: 15
 Signal #2 : C:\msdchem\1\data\8g1762\8g41286.d\ECD2B.ch
 Acq On : 18 Feb 2022 3:23 am Operator: rebeccak
 Sample : icv1762-500 Inst : GC8G
 Misc : op37935,g8g1762,1000,,,5,5 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\METHODS\8PST1762.M (ChemStation Integrator)
 Title : PEST/PCB
 Last Update : Tue Feb 22 11:56:38 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	111	-0.03	1.22- 2.22
2 SAB	Tetrachloro-m-xylene	0.950	1.049	-10.4	125	-0.02	2.42- 2.48
3	hexachlorobenzene			-----NA-----			
4 A	alpha-BHC			-----NA-----			
5 MA	gamma-BHC			-----NA-----			
6 MA	Heptachlor			-----NA-----			
7 B	beta-BHC			-----NA-----			
8 B	delta-BHC			-----NA-----			
9 MB	Aldrin			-----NA-----			
10	alachlor			-----NA-----			
11 B	Heptachlor Epoxide			-----NA-----			
12 B	gamma-Chlordane			-----NA-----			
13 B	alpha-Chlordane			-----NA-----			
14 A	Endosulfan I			-----NA-----			
15 B	4,4'-DDE			-----NA-----			
16 MA	Dieldrin			-----NA-----			
17 MA	Endrin			-----NA-----			
18 A	4,4'-DDD			-----NA-----			
19 B	Endosulfan II			-----NA-----			
20 MA	4,4'-DDT			-----NA-----			
21 B	Endrin Aldehyde			-----NA-----			
22 B	Endosulfan Sulfate			-----NA-----			
23 A	Methoxychlor			-----NA-----			
24	Mirex			-----NA-----			
25 B	Endrin Ketone			-----NA-----			
26 SA	Decachlorobiphenyl	1.237	1.253	-1.3	118	-0.01	9.96-10.02
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	-0.03	1.22- 2.22
28 L8	Toxaphene{A}	0.009	0.010	-11.1	110	0.00	5.68- 5.88
29 L8	Toxaphene{B}	0.027	0.026	3.7	97	-0.01	6.31- 6.51
30 L8	Toxaphene{C}	0.028	0.030	-7.1	106	-0.01	6.49- 6.69
31 L8	Toxaphene{D}	0.015	0.017	-13.3	117	0.00	6.84- 7.04
32 L8	Toxaphene{E}	0.025	0.026	-4.0	101	0.00	7.49- 7.69
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	110	-0.03	1.22- 2.22
34	Chlordane {A}			-----NA-----			
35	Chlordane {B}			-----NA-----			
36	Chlordane {C}			-----NA-----			
37	Chlordane {D}			-----NA-----			
38	Chlordane {E}			-----NA-----			

10.10.20 10

Initial Calibration Verification

Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Page 2 of 2
Sample: G8G1762-ICV1762
Lab FileID: 8G41285.D

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	118	-0.03	1.57- 2.57
2	SAB	Tetrachloro-m-xylene	1.078	1.105	-2.5	132	-0.01	2.99- 3.05
3		hexachlorobenzene					-----NA-----	
4	A	alpha-BHC					-----NA-----	
5	MA	gamma-BHC					-----NA-----	
6	MA	Heptachlor					-----NA-----	
7	B	beta-BHC					-----NA-----	
8	B	delta-BHC					-----NA-----	
9	MB	Aldrin					-----NA-----	
10		alachlor					-----NA-----	
11	B	Heptachlor Epoxide					-----NA-----	
12	B	gamma-Chlordane					-----NA-----	
13	B	alpha-Chlordane					-----NA-----	
14	A	Endosulfan I					-----NA-----	
15	B	4,4'-DDE					-----NA-----	
16	MA	Dieldrin					-----NA-----	
17	MA	Endrin					-----NA-----	
18	A	4,4'-DDD					-----NA-----	
19	B	Endosulfan II					-----NA-----	
20	MA	4,4'-DDT					-----NA-----	
21	B	Endrin Aldehyde					-----NA-----	
22	B	Endosulfan Sulfate					-----NA-----	
23	A	Methoxychlor					-----NA-----	
24		Mirex					-----NA-----	
25	B	Endrin Ketone					-----NA-----	
26	SA	Decachlorobiphenyl	0.672	0.636	5.4	120	-0.01	12.09-12.15
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	-0.03	1.57- 2.57
28	L8	Toxaphene{A}					-----NA-----	
29	L8	Toxaphene{B}					-----NA-----	
30	L8	Toxaphene{C}					-----NA-----	
31	L8	Toxaphene{D}					-----NA-----	
32	L8	Toxaphene{E}					-----NA-----	
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	113	-0.03	1.57- 2.57
34		Chlordane {A}	0.063	0.069	-9.5	122	-0.01	4.69- 4.89
35		Chlordane {B}	0.037	0.040	-8.1	123	0.00	5.36- 5.56
36		Chlordane {C}	0.125	0.133	-6.4	120	-0.01	6.29- 6.49
37		Chlordane {D}	0.206	0.215	-4.4	118	-0.01	6.53- 6.73
38		Chlordane {E}	0.030	0.033	-10.0	121	-0.01	8.01- 8.21

(#) = Out of Range
8g41279.d 8PST1762.M

SPCC's out = 0 CCC's out = 0
Tue Feb 22 12:05:07 2022

10.10.19
10

Continuing Calibration Summary

Page 1 of 2

Job Number: JD39915
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: G8G1773-CC1762
 Lab FileID: 8G41499.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\tr...73\8g41499.d\ECD1A.ch Vial: 4
 Signal #2 : C:\msdchem\1\data\trude\...8g1773\8g41499.d\ECD2B.ch
 Acq On : 23 Feb 2022 12:08 pm Operator: chorngli
 Sample : cc1762-50 Inst : GC8G
 Misc : op38256,g8g1773,15.8,,,10,1 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\8PST1762.M (ChemStation Integrator)
 Title : PEST/PCB
 Last Update : Wed Feb 23 22:15:17 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.00	1.21- 2.21
2 SAB	Tetrachloro-m-xylene	0.950	0.901	5.2	92	0.00	2.42- 2.48
3	hexachlorobenzene	1.567	1.551	1.0	96	0.00	2.80- 2.86
4 A	alpha-BHC	1.253	1.418	-13.2	98	0.00	2.96- 3.02
5 MA	gamma-BHC	1.157	1.291	-11.6	98	0.00	3.28- 3.34
6 MA	Heptachlor	1.266	1.404	-10.9	99	0.00	3.80- 3.86
7 B	beta-BHC	0.505	0.547	-8.3	103	0.00	3.36- 3.42
8 B	delta-BHC	0.942	1.159	-23.0#	103	0.00	3.56- 3.62
9 MB	Aldrin	1.144	1.325	-15.8	101	0.00	4.15- 4.21
10	alachlor	0.144	0.153	-6.3	97	0.00	4.31- 4.37
11 B	Heptachlor Epoxide	1.109	1.159	-4.5	95	0.00	4.89- 4.95
12 B	gamma-Chlordane	1.113	1.178	-5.8	96	0.00	5.05- 5.11
13 B	alpha-Chlordane	1.070	1.165	-8.9	97	0.00	5.23- 5.29
14 A	Endosulfan I	1.037	1.142	-10.1	98	0.00	5.41- 5.47
15 B	4,4'-DDE	1.092	1.231	-12.7	99	0.00	5.35- 5.41
16 MA	Dieldrin	1.117	1.238	-10.8	99	0.00	5.74- 5.80
17 MA	Endrin	1.018	1.196	-17.5	105	0.00	6.07- 6.13
18 A	4,4'-DDD	0.854	0.991	-16.0	102	0.00	6.19- 6.25
19 B	Endosulfan II	0.956	1.062	-11.1	100	0.00	6.39- 6.45
20 MA	4,4'-DDT	0.873	1.008	-15.5	101	0.00	6.62- 6.68
21 B	Endrin Aldehyde	0.761	0.891	-17.1	108	0.00	7.03- 7.09
22 B	Endosulfan Sulfate	0.814	0.929	-14.1	106	0.00	7.72- 7.78
23 A	Methoxychlor	0.514	0.559	-8.8	100	0.00	7.41- 7.47
24	Mirex	0.911	0.898	1.4	95	0.00	7.56- 7.62
25 B	Endrin Ketone	0.823	1.052	-27.8#	118	0.00	8.16- 8.22
26 SA	Decachlorobiphenyl	1.237	1.148	7.2	93	0.00	9.97-10.03
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	85	0.00	1.21- 2.21
28 L8	Toxaphene{A}			-----NA-----			
29 L8	Toxaphene{B}			-----NA-----			
30 L8	Toxaphene{C}			-----NA-----			
31 L8	Toxaphene{D}			-----NA-----			
32 L8	Toxaphene{E}			-----NA-----			
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	94	0.00	1.21- 2.21
34	Chlordane {A}			-----NA-----			
35	Chlordane {B}			-----NA-----			
36	Chlordane {C}			-----NA-----			
37	Chlordane {D}			-----NA-----			
38	Chlordane {E}			-----NA-----			

10.10.24 10

Continuing Calibration Summary

Job Number: JD39915
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: G8G1773-CC1762
Lab FileID: 8G41499.D

Page 2 of 2

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	69	0.00	1.57- 2.57
2	SAB	Tetrachloro-m-xylene	1.078	0.947	12.2	66	0.00	2.99- 3.05
3		hexachlorobenzene	1.222	1.129	7.6	65	0.00	3.54- 3.60
4	A	alpha-BHC	1.348	1.270	5.8	65	0.00	3.71- 3.77
5	MA	gamma-BHC	1.189	1.134	4.6	66	0.00	4.16- 4.22
6	MA	Heptachlor	1.176	1.109	5.7	68	0.00	4.76- 4.82
7	B	beta-BHC	0.514	0.555	-8.0	76	0.00	4.26- 4.32
8	B	delta-BHC	1.045	1.051	-0.6	70	0.00	4.67- 4.73
9	MB	Aldrin	1.082	1.071	1.0	67	0.00	5.23- 5.29
10		alachlor	0.138	0.117	15.2	60	0.00	5.04- 5.10
11	B	Heptachlor Epoxide	1.015	0.944	7.0	66	0.00	6.07- 6.13
12	B	gamma-Chlordane	1.007	0.981	2.6	67	0.00	6.36- 6.42
13	B	alpha-Chlordane	1.027	0.942	8.3	67	0.00	6.59- 6.65
14	A	Endosulfan I	0.944	0.921	2.4	69	0.00	6.69- 6.75
15	B	4,4'-DDE	1.043	1.014	2.8	67	0.00	6.86- 6.92
16	MA	Dieldrin	1.020	0.985	3.4	67	0.00	7.13- 7.19
17	MA	Endrin	0.863	0.870	-0.8	69	0.00	7.64- 7.70
18	A	4,4'-DDD	0.846	0.818	3.3	68	0.00	7.82- 7.88
19	B	Endosulfan II	0.834	0.812	2.6	68	0.00	7.99- 8.05
20	MA	4,4'-DDT	0.710	0.709	0.1	66	0.00	8.35- 8.41
21	B	Endrin Aldehyde	0.639	0.635	0.6	70	0.00	8.57- 8.63
22	B	Endosulfan Sulfate	0.660	0.661	-0.2	69	0.00	9.04- 9.10
23	A	Methoxychlor	0.334	0.329	1.5	65	0.00	9.60- 9.66
24		Mirex	0.643	0.558	13.2	62	0.00	9.93- 9.99
25	B	Endrin Ketone	0.642	0.711	-10.7	75	0.00	10.00-10.06
26	SA	Decachlorobiphenyl	0.672	0.520	22.6#	58	0.00	12.09-12.15
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	60	0.00	1.57- 2.57
28	L8	Toxaphene{A}			-----NA-----			
29	L8	Toxaphene{B}			-----NA-----			
30	L8	Toxaphene{C}			-----NA-----			
31	L8	Toxaphene{D}			-----NA-----			
32	L8	Toxaphene{E}			-----NA-----			
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	66	0.00	1.57- 2.57
34		Chlordane {A}			-----NA-----			
35		Chlordane {B}			-----NA-----			
36		Chlordane {C}			-----NA-----			
37		Chlordane {D}			-----NA-----			
38		Chlordane {E}			-----NA-----			

(#) = Out of Range
8g41499.d 8PST1762.M

SPCC's out = 0 CCC's out = 0
Wed Feb 23 23:18:05 2022

10.10.24 10

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: JD39915
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38246-BS1	1G174583.D	1	02/25/22	CP	02/21/22	OP38246	G1G6033
OP38246-BSD	1G174584.D	1	02/25/22	CP	02/21/22	OP38246	G1G6033

The QC reported here applies to the following samples:

Method: SW846 8081B

JD39915-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	0.2	0.16	80	0.24	120	40* a	54-152/36
319-84-6	alpha-BHC	0.2	0.12	60	0.21	105	55* a	50-161/35
319-85-7	beta-BHC	0.2	0.13	65	0.24	120	59* a	56-150/36
319-86-8	delta-BHC	0.2	0.15	75	0.27	135	57* a	10-183/39
58-89-9	gamma-BHC (Lindane)	0.2	0.13	65	0.23	115	56* a	53-157/36
5103-71-9	alpha-Chlordane	0.2	0.15	75	0.26	130	54* a	57-152/37
5103-74-2	gamma-Chlordane	0.2	0.13	65	0.21	105	47* a	55-153/37
60-57-1	Dieldrin	0.2	0.16	80	0.26	130	48* a	56-163/36
72-54-8	4,4'-DDD	0.2	0.14	70	0.24	120	53* a	50-154/37
72-55-9	4,4'-DDE	0.2	0.15	75	0.24	120	46* a	47-157/43
50-29-3	4,4'-DDT	0.2	0.16	80	0.25	125	44* a	52-167/42
72-20-8	Endrin	0.2	0.16	80	0.27	135	51* a	55-165/36
1031-07-8	Endosulfan sulfate	0.2	0.15	75	0.25	125	50* a	43-150/36
7421-93-4	Endrin aldehyde	0.2	0.13	65	0.23	115	56* a	33-163/41
53494-70-5	Endrin ketone	0.2	0.15	75	0.25	125	50* a	42-178/38
959-98-8	Endosulfan-I	0.2	0.17	85	0.28	140	49* a	57-154/37
33213-65-9	Endosulfan-II	0.2	0.16	80	0.26	130	48* a	54-160/38
76-44-8	Heptachlor	0.2	0.15	75	0.25	125	50* a	55-151/37
1024-57-3	Heptachlor epoxide	0.2	0.15	75	0.26	130	54* a	58-157/36
72-43-5	Methoxychlor	0.2	0.15	75	0.26	130	54* a	55-155/39

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	80%	173%	10-190%
877-09-8	Tetrachloro-m-xylene	59%	102%	10-190%
2051-24-3	Decachlorobiphenyl	37%	91%	10-156%
2051-24-3	Decachlorobiphenyl	32%	56%	10-156%

(a) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

March 19th, 2022

Mr. Jesse Mausner, PG, LSRP, Project Manager
SESI Consulting Engineers
12A Maple Avenue
Pine Brook NJ, 07058

Re: Data Usability Summary Reports and Quality Assurance Validation Analyses for
SGS North America Inc. Project **(SDG) No.: JD40006**

Client Project ID: 11819–1001 Whitlock Avenue, Bronx, NY

Dear Mr. Mausner,

I thank you for your confidence in our data validation services and look forward to the growth of our business relationship. I Have enclosed with this letter the data usability summary reports (DUSRs) and data validation summaries for the above referenced laboratory (SDG) numbers issued by SGS North America Inc.

The overall evaluation of the SDG# JD40006 displays good degree of confidence and acceptance in accordance with the guidelines in the USEPA National Functional Guidelines and the method and QC Criteria specified in NYSDEC ASP Documents except for some qualified results that are identified in the validation summaries based solely on the stated above validation guidance criteria. However, the qualified data (Bias low, Bias High, Unreliable or unusable) may be subject to the user's reconsideration or determination in the circumstances of obtaining additional information that is not contained in the data validation criteria.

If you have any questions or comments regarding any of the attached data usability summary reports and or the data validation summaries, please do not hesitate to contact me at (413) 875-5049 or via email at hanibaltayeh@gmail.com.

Sincerely,



Hanibal C. Tayeh, Ph.D.

Data Validation and Forensic Geochemistry Expert

Files: DUSR-SESI-11819–1001 Whitlock Avenue, Bronx, NY - JD40006

DATA USABILITY SUMMARY REPORT (DUSR)

Site Location: 1001 Whitlock Avenue, Bronx, NY

SGS North America Inc.

Laboratory (SDG) # JD40006

Project No. 11819

Prepared for:

Mr. Jesse Mausner, PG, LSRP, Project Manager

SESI Consulting Engineers

12A Maple Avenue

Pine Brook NJ, 07058

Prepared by:

Hanibal Tayeh, Ph.D.

Data Validation and Forensic Geochemistry Expert

On

March 19th, 2022

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1. GLOSSARY OF ACRONYMS & TERMS
 2. GLOSSARY OF DATA VALIDATION QUALIFIERS
 3. NYS DEC DATA UASABILITY SUMMARY PARAMETERS
 4. DATA VALIDATION PARAMETERS
 5. DATA VALIDATION ACTIVE STANDARD OPERATING PROCEDURES (SOPs)
 6. DATA VALIDATION REPORT NARRATIVE
- SUPPORT DOCUMENTATION (Refer to the electronic Data Package PDF file)

1. GLOSSARY OF ACRONYMS & TERMS

The following acronyms and terms may have been used in the descriptive process of the Organic and Inorganic Data Validation.

Acronyms:

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene (volatile instrument performance check)
BNA	Base/Neutral/Acid
CARD	CLP Analytical Results Database
CCB	Continuing Calibration Blank
CCCs	Calibration Check Compounds
CCS	Contract Compliance Screening
CCV	Continuing Calibration Verification
CF	Calibration Factor
CLP	Contract Laboratory Program
CN	Cyanide
COC	Chain of Custody
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
CSF	Complete SDG File
CV	Cold Vapor
%D	Percent Difference
DAS	Delivery of Analytical Services
DCAA	2,4-Dichlorophenylacetic acid
DCB	Decachlorobiphenyl (Pesticide/PCB/ surrogate compound)
DFTPP	Decafluorotriphenylphosphine (semivolatile instrument performance check)
DSF	Data Summary Form
DVA	Data Validation Assessment
ECD	Electron-Capture Detector
EICP	Extended Ion Current Profile
EPA	United States Environmental Protection Agency
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas Chromatography
GC/EC	Gas Chromatography/Electron Capture
GC/MS	Gas Chromatography/Mass Spectra
GPC	Gel Permeation Chromatography (Clean Up)
ICAL	Initial Calibration
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit

HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

IRDA	Inorganic Regional Data Assessment
IS	Internal Standard
LCS	Laboratory Control Sample
LCL	Lower Control Limit
MCL	Maximum Contamination Level
MDL	Method Detection Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
m/z	The ratio of mass (m) to charge (z) of ions measured by GC/MS
OADS	Organic Analysis Data Sheet (Form 1)
ORDA	Organic Regional Data Assessment
PB	Preparation Blank
PCB	Poly Chlorinated Biphenyl
PEM	Performance Evaluation Mixture
PFAS	Polyfluorinated Alkyl Substances (PFAS analytes are listed below)
PRP	Potential Responsible Party
QA/QC	Quality Assurance/Quality Control
QAPjP	Quality Assurance Project Plan
QC	Quality Control
%R	Percent Recovery of spiked amount
RAS	Routine Analytical Services
RF	Response Factor
RIC	Reconstructed Ion Chromatogram
RPD	Relative Percent Difference
RRF	Relative Response Factor
RSD	Relative Standard Deviation
RT	Retention Time
RTW	Retention Time Window
SDG	Sample Delivery Group
SMC	System Monitoring Compound
SMO	Sample Management Office
SOP	Standard Operation Procedures
SOW	Statement of Work
SPCCs	System Performance Check Compounds
SSL	Samples Shipping Log
SVOA	Semivolatile Organic Analyte
TAL	Target Analyte List
TCL	Target Compound List
TCX	Tetrachloro-m-Xylene (Pesticide/PCB surrogate compound)
TIC	Tentatively Identified Compound
TPH	Total Petroleum Hydrocarbons
TR	Traffic Report
UCL	Upper Control Limit
VOA	Volatile Organic Analyte
VTSR	Validated Time of Sample Receipt

Polyfluorinated Alkyl Substances (PFAS) Acronyms

PFBA	Perfluorobutanoic acid
PFPeA	Perfluoropentanoic acid
PFHxA	Perfluorohexanoic acid
PFHpA	Perfluoroheptanoic acid
PFOA	Perfluorooctanoic acid
PFNA	Perfluorononanoic acid
PFDA	Perfluorodecanoic acid
PFUnA	Perfluoroundecanoic acid
PFDoA	Perfluorododecanoic acid
PFTriA or PFTriDA	Perfluorotridecanoic acid
PFTeA or PFTA	Perfluorotetradecanoic acid
PFBS	Perfluorobutanesulfonic acid
PFPeS	Perfluoropentanesulfonic acid
PFHxS	Perfluorohexanesulfonic acid
PFHpS	Perfluoroheptanesulfonic acid
PFOS	Perfluorooctanesulfonic acid
PFNS	Perfluorononanesulfonic acid
PFDS	Perfluorodecanesulfonic acid
FOSA	Perfluorooctane Sulfonamide
NMeFOSAA	N-methyl perfluorooctane sulfonamidoacetic acid
NEtFOSAA	N-ethyl perfluorooctane sulfonamidoacetic acid
4:2 FTS or 4:2	1H, 1H, 2H, 2H-perfluorohexanesulfonic acid
6:2 FTS or 6:2	1H, 1H, 2H, 2H-perfluorooctanesulfonic acid or 6:2 Fluorotelomersulfonate
8:2 FTS or 8:2	1H, 1H, 2H, 2H-perfluorodecanesulfonic acid or 8:2 Fluorotelomersulfonate

Terms:

Associated Samples: Any sample related to a particular QC analysis.

Case: A finite, usually predetermined number of samples collected over a given time period for a particular site. A Case consists of one or more Sample Delivery Group(s).

Continuing Calibration Blank (CCB): A deionized water sample run every ten (10) samples designed to detect any carryover contamination.

Continuing Calibration Verification (CCV): A deionized water sample run every ten (10) samples designed to detect any carryover contamination.

Contract Compliance Screening (CCS): A process in which the SMO inspects the data for contractual compliance and provides EMSL-LV laboratories and the Regions with their findings.

Contractual Holding Time: The time from VTSR (validated time of sample receipt) to laboratory extraction and /or analysis.

Data Validation Qualifier (DVQ): This refers to the column on the data summary form in which EPA Region III and other qualifiers have been placed by the data validator.

Data Validation Result (DVR): This refers to the column on the data summary form used to report results that have been modified by the data validator. A result in the DVR column that is qualified "U" indicates a modification of the reporting limit.

Field Blank Field blanks are intended to identify contaminants that may have been introduced in the field. Examples are rinsate blank (RB), field blanks (FB) and trip blank (TB).

Field Duplicate: A duplicate sample generated in the field; not in the laboratory.

Initial Calibration (ICAL): The establishment of a calibration curve with the appropriate number of standards and concentration ranges. The calibration curve plots absorbances and/or emissions versus concentration of the standards.

Initial Calibration Blank (ICB): First blank run after the calibration curve.

Initial Calibration Verification (ICV): First standard run after the calibration curve.

Matrix Spike/Matrix Spike Duplicate (MS/MSD): Introduction of a known concentration of a compound into a sample to provide information about the effect of sample matrix on the extraction and/or measurement methodology.

Post Digestion Spike: The addition of known amount of standard after digestion. (Also identified as analytical spike, or spike, for furnace analyses).

Preparation Blank (PB): Blank taken through the digestion process to detect internal laboratory contamination.

Performance Evaluation Mixture: A standard used to verify that the ICAL sequence is stable throughout the GC or GC/MS analyses.

Sample Delivery Group (SDG): Defined by one of the following, whichever occurs first:

- case of sample
- each twenty field samples in a case or
- each 14-day calendar period during which field samples in a case are received, beginning with the receipt of the first sample in the SDG.

Serial Dilution: A sample run at a specific dilution to determine whether any significant chemical or physical interferences exist due to sample matrix effect, for ICP only.

Technical Holding Time: The time from sample collection to laboratory extraction and /or analysis.

2. GLOSSARY OF DATA VALIDATION QUALIFIERS

(Used in the QA/QC Reviews for USEPA Region II)

The qualifiers listed below are used for data usability summary report (DUSR) purposes. However, it is important to note that the data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+	=	Analyte is present. Reported value may be biased high and associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

3. NYS DEC DATA USABILITY SUMMARY PARAMETERS

The parameters listed below are used for data usability summary report (DUSR) evaluation.

<i>Samples Handling and Management</i>
<i>Data Validation References</i>
<i>Laboratory Data Packages</i>
<i>Laboratory Analytical Methods</i>
<i>DATA Usability Assessment Summary</i>

4. DATA VALIDATION SUMMARY PARAMETERS

The parameters listed below are used for data validation evaluation.

	<i>Organic Data</i>	<i>Inorganic Data</i>
<i>Data Completeness</i>	X	X
<i>Holding Time</i>	X	X
<i>Chromatographic Behavior</i>	X	
<i>Compound Identification</i>	X	X
<i>GC/MS Tuning and Mass Calibration</i>	X	
<i>Initial Calibration Verification</i>	X	X
<i>Continuing Calibration</i>	X	X
<i>Method Blank Verification</i>	X	X
<i>Internal Standard Area Summary</i>	X	
<i>Surrogate Recoveries</i>	X	
<i>Matrix Spike/Matrix Spike Duplicate</i>	X	X
<i>Laboratory Control Sample (LCS)</i>	X	X
<i>Laboratory and Field Duplicates</i>	X	X
<i>ICP Interference Check Sample results</i>		X
<i>ICP Serial Dilution results</i>		X
<i>ICP CRDL Standard</i>		X
<i>Post Digestion Spike Analysis</i>		X
<i>Analyte Quantitation</i>		X

5. DATA VALIDATION ACTIVE STANDARD OPERATING PROCEDURES (SOPs)

Region 2 Quality Assurance Guidance and Standard Operating Procedures

<https://www.epa.gov/quality/region-2-quality-assurance-guidance-and-standard-operating-procedures>

Inorganic Validation SOPs

SOP #	Description	Date
SOP HW-3a ICP-AES Rev1 w/CRF	CLP ISM02.2 ICP-AES	September 2016
SOP HW-3b ICP-MS Rev1 w/CRF	CLP ISM02.2 ICP-MS	September 2016
SOP HW-3c Hg & CN Rev1 w/CRF	CLP ISM02.2 Mercury and Cyanide	September 2016

Organic Validation SOPs - CLP

SOP #	Description	Date
SOP HW-33A Low Medium VOA Rev 1 w/CRF	EPA CLP Method SOM02.2 for Low/Medium VOA	September 2016
SOP HW-34A Trace VOA Rev1 w/CRF	EPA CLP Method SOM02.2 for Trace VOA	September 2016
SOP HW-35A Rev1 w/CRF	EPA CLP Method SOM02.2 for Semi-Volatiles	September 2016
SOP HW-36A Rev 1 w/CRF	EPA CLP Method SOM02.2 for Pesticides	October 2016
SOP HW-37A Rev 0 w/CRF	EPA CLP Method SOM02.2 for PCBs Aroclor	June 2015

Organic Validation SOPs – Other

SOP #	Description	Date
SOP HW-11 Rev 3	SW-846 Method 8280 for Polychlorinated Dibenzodioxins/Polychlorinated Dibenzofurans	December 2010
SOP HW-16 Rev. 2.1	SW-846 Method 8330A Nitroaromatics and Nitroamines by HPLC	December 2010
SOP HW-17 Rev.3.1	SW-846 Method 8151A for Chlorinated Herbicides by GC	December 2010
SOP HW-19 Rev. 1.1	SW-846 Method 8290 for Polychlorinated dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by HRMS	December 2010
SOP HW-22 Rev. 5	SW-846 Method 8270D for Semivolatile Organic Compounds by GC/MS	December 2010
SOP HW-25 Rev. 3	EPA Method 1613, Revision B Tetra-through Octa-chlorinated Dioxins and Furans by Isotope Dilution by HRGC/HRMS	December 2010
SOP HWSS 24 Rev. 4	SW-846 Methods 8260B & 8260C for VOCs by GC/MS	October 2014
SOP HW-29 Rev. 2	EPA Method 524.2 for Purgeable Organic Compounds in Water by GC/MS	November 2010
SOP HW-31 Rev. 6	TO-15 Air Analysis for VOCs	September 2016
SOP HW-44 Rev. 1.1	SW-846 Method 8081B for Pesticide Compounds Organochlorine Pesticides by GC	December 2010
SOP HW-46 Rev. 1	EPA Method 1668 A for Chlorinated Biphenyl Congeners and EPA Non-RAS CBC01.0	September 2008

SOP HW-55 Rev. 2 w/CRF	EPA Non-RAS DLM02.0 for Tetra -through Octa-Chlorinated Dioxins and Furans by Isotope Dilution	December 2008
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6. DATA VALIDATION REPORT NARRATIVE

NYS DEC Data Usability Summary Report	SDG # JD40006
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NYS DEC Data Usability Summary Report
SDG # JD40006

Site Location	1001 Whitlock Avenue, Bronx, NY
Data Validation for Analytical Methods	Volatile Organic (EPA 8260D); 1,4-Dioxane (SW846 8270E BY SIM), TAL Metals (SW846 6010D, 7471B), PFAS (EPA 537M)
Number of Samples & Matrix	3 Ground Water Samples, 1 Duplicate, 1 Field Blank, 1 Trip Blank
Sampled On	02/18/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD40006 (-1-2-3-4-5-6)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 19 th , 2022

• **SAMPLE HANDLING AND MANAGEMENT**

As per the chain of custody (COC) record included in this specific SDG, samples associated with this data set were collected on February 18th, 2022, using the proper containers in accordance with the Sample Integrity and Preservation section of the stated above USEPA method and received by the laboratory on February 18th, 2022. The attached chain of custody (COC) displays a satisfactory record in terms of client and project information, site location, field sampling details (sampler, collection date and time), sample identification and matrix, preservation, required analysis, deliverable type and date, data management process and comparison.

Client Sample Identification	Laboratory Sample Identification
MW-3R	JD40006-1
R1-MW-4	JD40006-2
MW-2R	JD40006-3
DUP	JD40006-4
FIELD BLANK	JD40006-5
TRIP BLANK	JD40006-6

• **DATA VALIDATION REFERENCES**

The organic data validation is conducted in accordance with the guidelines in the USEPA National Functional Guidelines for Organic Data Review and the USEPA Region II SOP HW-6-CLP Organic Data Review Preliminary review and the method and QC Criteria specified in NYSDEC ASP Documents.

The inorganic data validation is conducted in accordance with the guidelines in the USEPA National Functional Guidelines for Inorganic Data Review and the USEPA Region II SOP HW-2, Evaluation of Metals Data for the Contract Laboratory Program

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based on ILM05.3 and the method and QC Criteria specified in NYSDEC ASP Documents.

- **LABORATORY DATA PACKAGES**

The laboratory data packages for the stated SDG above is considered satisfactory in terms of pagination, quality control narration and completeness. Each package contained the laboratory quality assurance summary report, quality control summary data, sample nonconformance summaries, the required data package forms and tables in accordance with NYSDEC ASP documents, instrument tuning information, sample preparation and analysis batch and all associated standard, quality control and sample raw data.

- **LABORATORY ANALYTICAL METHODS**

A peer review of the quality assurance criteria listed in the laboratory data package shows with good degree of certainty the laboratory's compliance with the procedures set forth in the required USEPA analytical methods as indicated in the chain of custody. No deviations from the said methods have been noticed.

- **DATA USABILITY ASSESSMENT SUMMARY**

The overall data package assessment provided by the laboratory for the stated above sample delivery group (SDG) suggests acceptable laboratory performances of the required methods. All samples were successfully analyzed for all target compounds in accordance with the Quality Assurance/Quality Control (QA/QC) requirements for the USEPA analytical methods used for the analyses. In view of the data usability and completeness, the minor issues listed below regarding biases identified during data validation should be taken into high degree of consideration. They are as follows:

✓ **Volatile Organic Compounds – SW846 8260D Method**

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detected results of Iodomethane, in the associated samples, JD40006 (1,2,3,5,6) , should be qualified estimated (J). -Detected results of n-Butyl Alcohol, 3-Methyl-1-Butanol, in the associated sample, JD40006-4 , should be qualified estimated (J).	ICV
2	-Detected results of Ethanol, 1,4-Dioxane, dichlorodifluoromethane, Di-Isopropyl Ether, Ethyl Acetate, 2,2-Dichloropropane, isobutyl Alcohol, 2,2,4-Trimethylpentane, Heptane, 3-Methyl-1-Butanol, Benzyl Chloride, in the associated samples, JD40006 (1,2,3,5,6) , should be qualified estimated (J).	CCV

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	-Detected results of Vinyl Chloride, Bromomethane, Chloroethane, Iodomethane, Vinyl Acetate, Methyl Acrylate, cis-1,4-dichloro-2-butene, in the associated sample, JD40006-4 , should be qualified estimated (J).	
3	-Detected results of target VOC compounds in sample JD40006-4 , should be qualified Estimated Bias High (J+).	SR

✓ 1,4-Dioxane – SW846 8270E By SIM Method

	Data Assessment Judgement (Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)	DVA Reference
1	-Detected results of 1,4-Dioxane in sample JD40006-(1,2,3,4) , should be considered Estimated (J).	CCV
2	-Detected results of 1,4-Dioxane in samples JD40006 (1, 2, 3, 4) , should be qualified Estimated Bias Low (J-). -Non-Detected results of 1,4-Dioxane in samples JD40006 (1, 2, 3, 4) , should be qualified Estimated (UJ).	LCS

✓ PFAS-NYSDEC Target List - EPA 537M Method

	Data Assessment Judgement (Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)	DVA Reference
1	Data set was in compliance with the method quality control requirements.	ALL

✓ TAL Metals - SW846 6010D, 7471B Methods

	Data Assessment Judgement (Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)	DVA Reference
1	-Detected results of Aluminum, Iron in samples R1-MW-4/JD40006-2, DUP/JD40006-4, should be qualified Estimated (J).	DUP

Data Validation Assessment

SDG # JD40006

Data Validation for Analytical Method	Volatile Organic Compounds (SW846 8260D Method)
Number of Samples & Matrix	3 Ground Water Samples, 1 Duplicate, 1 Field Blank, 1 Trip Blank
Sampled On	02/18/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD40006 (-1-2-3-4-5-6)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time (HOLDT):** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms), display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph/mass spectrometry (GCMS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **GC/MS Tuning and Mass Calibration:** The standard tuning criteria were within control limits as outlined in the EPA and SW846 methods.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs) and Percent Relative Standard Deviation (%RSDs) and in some cases the coefficient of determination COD: (Average RRFs must be greater than the required values and at least greater than 0.01 for all target compounds and >0.001 for 1,4 Dioxane, %RSD must be less than 20%, and the coefficient of determination (COD) must be greater than 0.995). This evaluation displays the following:

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-In the initial calibration reference sample: V3D7354-ICC7354 analyzed on 02/03/2022, both the average RRFs, %RSDs and the coefficient of determination (COD), for all target compounds were in compliance with the method calibration criteria, EXCEPT:

%RSDs for Iodomethane, was above the allowable maximum. Average RRFs for n-Butyl Alcohol, was below the allowable minimum.

-In the initial calibration reference sample: VL10152-ICC10152 analyzed on 02/08/2022, both the average RRFs, %RSDs and the coefficient of determination (COD), for all target compounds were in compliance with the method calibration criteria, EXCEPT:

Average RRFs for n-Butyl Alcohol, 3-Methyl-1-Butanol, were below the allowable minimum.

No action is required when less than 20% of the continuing calibration target compounds are outside the method control limits provide no Average Relative Response Factor (RRFs) is less than 0.01 for all target compounds.

Quality Judgement:

-Detected results of Iodomethane, in the associated samples, JD40006 (1,2,3,5,6), should be qualified estimated (J).

-Detected results of n-Butyl Alcohol, 3-Methyl-1-Butanol, in the associated sample, JD40006-4, should be qualified estimated (J).

• **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for the required frequency, Relative Response Factor (RRFs) and Percent Difference (%Ds). This evaluation displays the following:

-The continuing calibration reference sample: V3D7372-CC7354, analyzed on 02/21/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT:

%Ds for Ethanol, 1,4-Dioxane, dichlorodifluoromethane, Di-Isopropyl Ether, Ethyl Acetate, 2,2-Dichloropropane, isobutyl Alcohol, 2,2,4-Trimethylpentane, Heptane, 3-Methyl-1-Butanol, Benzyl Chloride, were above the allowable maximum. RRFs for isobutyl Alcohol, 3-Methyl-1-Butanol, were below the allowable minimum. %Areas for Ethanol, 1,4-Dioxane, were below the control limits.

-The continuing calibration reference sample: VL10187-CC10152, analyzed on 02/22/2022, met the required criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds), EXCEPT:

%Ds for Vinyl Chloride, Bromomethane, Chloroethane, Iodomethane, Vinyl Acetate, Methyl Acrylate, cis-1,4-dichloro-2-butene, were above the allowable maximum.

No action is required when less than 20% of the continuing calibration target compounds are outside the method control limits provide no Average Relative Response Factor (RRFs) is less than 0.01 for all target compounds.

Quality Judgement:

-Detected results of Ethanol, 1,4-Dioxane, dichlorodifluoromethane, Di-Isopropyl Ether, Ethyl Acetate, 2,2-Dichloropropane, isobutyl Alcohol, 2,2,4-Trimethylpentane, Heptane, 3-Methyl-1-Butanol, Benzyl Chloride, in the associated samples, JD40006 (1,2,3,5,6), should be qualified estimated (J).

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-Detected results of Vinyl Chloride, Bromomethane, Chloroethane, Iodomethane, Vinyl Acetate, Methyl Acrylate, cis-1,4-dichloro-2-butene, in the associated sample, JD40006-4, should be qualified estimated (J).

- **Method Blank Verification (BLK):** Method blank analyses included in this data set of laboratory data package concluded no detection for the target compounds in lab sample reference: V3D7372-MB, on 02/21/2022, VL10187-MB on 02/22/2022.

Quality Judgement: No actions are required.

- **Internal Standard Area Summary (IS):** As indicated in the method internal standard criteria, the laboratory data package for the stated SDG confirmed the following:

-The internal standard retention times were within method control limits.

-The internal standard areas were within method control limits.

- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries were within method control limits for all samples, EXCEPT for the following:

-In sample JD40006-4, %Rs of Surrogate 4-Bromofluorobenzene, was above control limit.

Quality Judgement:

-Detected results of target VOC compounds in sample JD40006-4, should be qualified Estimated Bias High (J+).

- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes (Percent Recoveries: %Rs and Relative Percent Difference: %RPDs). The following summarizes this evaluation:

-In LCS ID# V3D7372-BS, on 02/21/2022, VL10187-BS, on 02/22/2022, %Rs for all target volatile compounds were within the method control limits.

Quality Judgement: No actions are required.

- **Laboratory and Field Duplicates (DUP):** According to both the chain of custody record, and the data set provided by the laboratory, a laboratory duplicate sample wasn't analyzed from this samples set.

-A field duplicate sample (DUP/JD40006-4), included in this samples set, was originated from R1-MW-4/JD40006-2. The following summarizes this evaluation:

	Detected Compounds	DUP JD40006-4 (ug/L)	R1-MW-4 JD40006-2 (ug/L)	%RPDs
1	Acetone	17	18.8	10.1
2	Toluene	ND @ 1.0	0.53 J	NC

NC = Value is not calculated due to low initial sample concentration.

%RPDs was below the allowable maximum.

Quality Judgement: No actions are required.

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** As required by the method quality assurance/quality control criteria, the matrix spike and matrix spike duplicate in a designated sample listed in this data set has been evaluated for method compliance purposes. The following summarizes this evaluation:

-Few matrix spike processes were analyzed in this data set using unrelated samples.

Quality Judgement: No Actions are required.

- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD40006

Data Validation for Analytical Method	1,4-Dioxane (SW846 8270E By SIM Method)
Number of Samples & Matrix	3 Ground Water Samples, 1 Duplicate, 1 Field Blank
Sampled On	02/18/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD40006 (-1-2-3-4-5)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph/mass spectrometry (GCMS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **GC/MS Tuning and Mass Calibration:** The DFTPP tuning criteria were within control limits as outlined in the EPA and SW846 methods.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs) and Percent Relative Standard Deviation (%RSDs) and in some cases the coefficient of determination COD: (In general, Average RRFs must be greater than the required values as defined by EPA/SW846 Method. %RSD must be less than 20%, and the coefficient of determination (COD) must be greater than 0.995). This evaluation displays the following:
-In the initial calibration of E4M4886-ICC4886 on 12/15/2021, Average RRFs for 1,4-Dioxane was above the allowable minimum as required by the method.

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-In the initial calibration of E4P2704-ICC2704 on 02/18/2022, Average RRFs for 1,4-Dioxane was above the allowable minimum as required by the method.

No action is required when less than 20% of the target compounds do not meet the method control limits provide no Relative Response Factor (RRFs) is less than 0.01 for all target compounds as the allowable minimum.

Quality Judgement: No actions are required.

- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds) and confirmed the following:

-The continuing calibration (Sample: E4M4961-CC4886 on 02/25/2022), The RRFs for 1,4-Dioxane, was above the minimum values set by the method. %Ds for 1,4-Dioxane, was below the allowable maximum.

-The continuing calibration (Sample: E4P2708-CC2704 on 02/22/2022), The RRFs for 1,4-Dioxane, was above the minimum values set by the method. %Ds for 1,4-Dioxane, was above the allowable maximum.

No action is required when less than 20% of the target compounds do not meet the method control limits provide no Relative Response Factor (RRFs) is less than 0.01 for all target compounds as the allowable minimum.

Quality Judgement:

-Detected results of 1,4-Dioxane in sample JD40006-(1,2,3,4), should be considered Estimated (J).

- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package (OP38284A-MB1, OP38283-MB1) reported no detection for target compounds at the method reporting limits.

Quality Judgement: No actions are required.

- **Internal Standard Area Summary (IS):** As indicated in the method internal standard criteria, the laboratory data package for the stated SDG confirmed the following:

-The internal standard retention times were within method control limits.

-The internal standard areas were within method control limits.

- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries were within method control limits for all samples.

Quality Judgement: No actions are required.

- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:

-In LCS OP38284A-BS12, LCSDUP OP38284A-BSD12, %Rs of 1,4-Dioxane, were within method control limits. %RPDs was below the allowable maximum.

-In LCS OP38283-BS1, %Rs of 1,4-Dioxane, were within method control limits.

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-In LCSDUP OP38283-BSD, %Rs of 1,4-Dioxane, was below method control limits. %RPDs was above the allowable maximum.

Quality Judgement:

-Detected results of 1,4-Dioxane in samples JD40006 (1, 2, 3, 4), should be qualified Estimated Bias Low (J-).

-Non-Detected results of 1,4-Dioxane in samples JD40006 (1, 2, 3, 4), should be qualified Estimated (UJ).

- **Laboratory and Field Duplicates (DUP):** According to both the chain of custody record, and the data set provided by the laboratory, a laboratory duplicate sample wasn't analyzed from this samples set.
-A field duplicate sample (DUP/JD40006-4), included in this samples set, was originated from R1-MW-4/JD40006-2. The following summarizes this evaluation:

	Detected Compounds	DUP JD40006-4 (ug/L)	R1-MW-4 JD40006-2 (ug/L)	%RPDs
1	1,4-Dioxane	ND @ 0.27	ND @ 0.27	NC

NC = Value is not calculated due to low initial sample concentration.

Quality Judgement: No actions are required.

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** No Matrix spike/Matrix spike duplicate were performed from this samples set.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD40006

Data Validation for Analytical Method	PFAS-NYSDEC Target List (EPA 537M Method)
Number of Samples & Matrix	3 Ground Water Samples, 1 Duplicate, 1 Field Blank
Sampled On	02/18/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD40006 (-1-2-3-4-5)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time (HOLDT):** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the LC/TANDEM Mass Spectrometer (LC/MS/MS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs), Percent Relative Standard Deviation for both internal standard and external standard criteria (%RSDs <50%), and in some cases the coefficient of determination COD (>0.995). This evaluation displays the following:
-The initial calibration methods used in this data set, sample reference ID: S3Q765-ICC765, on 02/28/2022, display an acceptable performance and compliance with the method criteria listed above.
Quality Judgement: No actions are required.
- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for

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compliance with method criteria for all target PFAS compounds: Required frequency (one per ten field samples), Percent Difference (%Ds < 50%), and or for Percent Recovery (70<%Rs<130). This evaluation displays the following:

-In continuing calibration laboratory reference ID: Lab FileID: S3Q767-CC765, %Ds for target PFAS compounds below the allowable maximum.

Quality Judgement: No actions are required.

- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target compounds above both the MDL and the RL in S3Q767-IBLK, on 02/28/2022, OP89908-MB, on 03/03/2022.

Quality Judgement: No actions are required.

- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior (Isotope Dilution Analyte (IDA) Recovery must be > 10% for Data acceptance, 50<%Rs<150; 25<%Rs<150 for poor response analytes), in the SDG data set displays the following:

- Isotope Dilution Standard Recoveries (%Rs) in all samples of this set, were within the method control limits.

Quality Judgement: No actions are required.

- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:

-In LCS OP89908-BS/3Q55631.D, %Rs were within the method control limits.

Quality Judgement: No actions are required.

- **Secondary Ion Transition Monitoring (SITM):** Quantifier and qualifier ions have been monitored for all target PFAS analytes (PFBA and PFPeA are exceptions). The laboratory derived criteria have been used to determine if the ratios are acceptable. (If the ratios fall outside of the laboratory criteria, results will be qualified as an estimated maximum concentration).

-No forms or data were provided.

- **Laboratory and Field Duplicates (DUP):** A Field duplicate sample was provided in this samples set. Laboratory duplicate from this samples set wasn't analyzed. However, laboratory provided a selected duplicate data from unrelated samples.

-A field duplicate sample (DUP/JD40006-4A), included in this samples set, was originated from R1-MW-4/JD40006-2A. The following summarizes this evaluation:

	Detected Compounds	DUP JD40006-4A (ng/L)	R1-MW-4 JD40006-2A (ng/L)	%RPDs
1	Perfluorobutanoic acid	9.7	9.3	4.2
2	Perfluoropentanoic acid	17.4	17.2	1.2
3	Perfluorohexanoic acid	17.3	16.9	2.3

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4	Perfluoroheptanoic acid	18.2	18.4	1.1
5	Perfluorooctanoic acid	47.2	46.7	1.1
6	Perfluorononanoic acid	ND @1.9	1.2	NC
7	Perfluorobutanesulfonic acid	6.6	6.2	6.3
8	Perfluorohexanesulfonic acid	11.2	11.1	0.9
9	Perfluorooctanesulfonic acid	12.3	12.1	1.6

NC = Value is not calculated due to low initial sample concentration.

%RPDs were below the allowable maximum.

Quality Judgement: No actions are required.

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** No Matrix spike/Matrix spike duplicate were performed from this samples set. However, laboratory provided a selected matrix spike and matrix spike duplicate data from unrelated samples.

Quality Judgement: No actions are required.

- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD40006

Data Validation for Analytical Method	TAL Metals (SW846 6010D, 7471B Methods)
Number of Samples & Matrix	2 Ground Water Samples, 1 Duplicate, 1 Field Blank, 1 Trip Blank
Sampled On	02/18/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD40006 (-2-3-4-5)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were digested and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Initial and Continuing Calibration Verification (ICCV):** As indicated in the method calibration criteria, the initial calibration standards used in this data set has been evaluated for compliance with method criteria for Percent Recoveries (%Rs):
-In File ID: SC022122M1.ICP, analyzed on 02/21/2022, SC022222M1.ICP, on 02/22/2022, %Rs for Total metals (EPA 6010D) in all ICVs and CCVs were within method control limits.
Quality Judgement: No actions are required.
- **CRDL Standard (CRDL):** As indicated in the method calibration criteria, the CRDL standards of this data set have been evaluated for compliance with method criteria for Percent Recoveries (70<%Rs<130%) for target metals elements:
-In File ID: SC022122M1.ICP, SC022222M1.ICP, (LOW CALIBRATION CHECK STANDARDS-EPA 6010D), %Rs for total target metals were within method control limits (70-130%).
Quality Judgement: No actions are required.
- **Method Blank Verification:** Method blank analyses included in this data set has been evaluated to ensure target metals were reported below CRDL:
-In File ID: SC022122M1.ICP, SC022222M1.ICP, all quality control blanks (ICBs, CCBs) were below RL as required by EPA 6010D, 7473 Methods.
Quality Judgement: No actions are required.
- **ICP Interference Check Sample (ICPINTERF):** An evaluation of the Interference Check Sample has been evaluated for percent recoveries (%Rs) compliance with methods criteria (80-120%):

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-File ID: SC022122M1.ICP, SC022222M1.ICP, %Rs for target metals (EPA 6010D), were within the method control limits.

Quality Judgement: No actions are required.

- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes (%Rs within control limits). The following summarizes this evaluation:
-In LCS QC Batch ID: MP31392, on 02/21/2022, (EPA 6010D) for total metals, %Rs were within the method control limits.
Quality Judgement: No actions are required.
- **Spike Sample Recovery (SSR):** Spike samples in this data set have been evaluated for method compliance purposes (%Rs within control limits). The out-of-control spike recoveries for analytes whose unspiked concentrations are $\geq 4x$ the spike added have been disregarded:
-In QC Batch ID: MP31392, laboratory used unrelated sample (JD39926-3) for matrix spike and duplicate processes.
Quality Judgement: No actions are required.
- **Laboratory Duplicate (DUP):** Target metals Duplicate analysis has been evaluated for relative percent differences compliance with the method criteria (%RPDs <20% for aqueous and <35% for soil matrices):
-A field duplicate sample (DUP/JD40006-4), included in this samples set, was originated from R1-MW-4/JD40006-2. The following summarizes this evaluation:

	Detected Compounds	DUP JD40006-4 (ug/L)	R1-MW-4 JD40006-2 (ug/L)	%RPDs
1	Aluminum	5760	2280	86
2	Arsenic	10.3	ND @ 10	NC
3	Calcium	210000	227000	7.8
4	Chromium	33	ND @ 33	NC
5	Iron	11000	4490	84
6	Lead	16.7	ND @ 10	NC
7	Magnesium	19600	20500	4.5
8	Manganese	2570	2720	5.7
9	Sodium	41900	45300	7.8
10	Zinc	73.3	ND @ 67	NC

NC = Value is not calculated due to low initial sample concentration.

%RPDs of Aluminum, Iron, were above the allowable maximum.

Quality Judgement:

-Detected results of Aluminum, Iron in samples R1-MW-4/JD40006-2, DUP/JD40006-4, should be qualified Estimated (J).

HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

- **ICP Serial Dilution (ISDil):** ICP serial dilution for target metals has been evaluated to ensure compliance with method criteria (Concentration in the original sample is > 50x the MDL that is calculated for the sample and %Ds must be below the allowable maximums 10%):
-In QC Batch ID: MP31392/sample JD39926-3, on 02/21/2022, %Ds of target metals (EPA 6010D) were below the allowable maximum.
Note: Other elements with low initial sample concentration (< 50 times IDL), displayed anticipated high value of %Ds above the allowable maximum.
Quality Judgement: No actions are required.
- **Mercury Overall Evaluation (Hg):** All initial and continuing calibration checks, Blank results summaries, low calibration check standards, laboratory control sample summaries, Matrix spike and duplicate summaries, were in compliance with method quality control criteria.
- **Standard Reference Material Recovery (Hg):** Forms were not provided.
- **Total & Soluble Metals Comparison (T&S-Comp):** Not applicable.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Validated QA Data

Initial Calibration Summary

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Job Number: JD40006
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V3D7354-ICC7354
Lab FileID: 3D173436.D

Response Factor Report MS3D

Method : C:\msdchem\1\METHODS\M3D7354.M (RTE Integrator)
Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xThu Feb 03 16:08:26 2022
Last Update : Thu Feb 03 16:08:26 2022
Response via : Initial Calibration

Calibration Files

1 =3D173431.D 0.5 =3D173430.D 100 =3D173437.D 50 =3D173436.D
20 =3D173435.D 200 =3D173438.D 4 =3D173433.D 2 =3D173432.D
8 =3D173434.D 0.2 =3D173429.D = =

Compound

	1	0.5	100	50	20	200	4	2	8	0.2	Avg	%RSD
1) tert butyl alcohol-d9 -----ISTD-----												
2) tertiary butyl alcohol	1.399	1.297	1.318	1.278	1.251	1.356	1.408	1.313		1.327	4.22	
3) ethanol	0.170	0.155	0.161	0.161	0.138	0.163	0.166	0.166		0.160	6.20	
4) 1,4-dioxane	0.123	0.156	0.160	0.157	0.151	0.171	0.170	0.156		0.155	9.53	
5) I pentafluorobenzene -----ISTD-----												
6) chlorodifluoromethane *This compound fails Initial Calibration criteria*	0.594	0.612	0.609	0.538	0.538		0.578		0.578	5.76		
7) dichlorodifluoromethane	0.645	0.658	0.651	0.593	0.570	0.533	0.572		0.603	8.04		
8) chloromethane	0.645	0.572	0.569	0.591	0.614	0.520	0.567	0.535	0.576	0.577	6.53	
9) vinyl chloride	0.505	0.406	0.609	0.624	0.633	0.556	0.583	0.535	0.577	0.550	0.558	11.97
10) 1,3-butadiene	0.461	0.446	0.465	0.493	0.491	0.422	0.462	0.464	0.456	0.489	0.465	4.72
11) bromomethane	0.194	0.203	0.299	0.273	0.253	0.275	0.190	0.186	0.220	0.258	0.235	17.53
12) chloroethane	0.437	0.371	0.375	0.373	0.341	0.354	0.362	0.344		0.369	8.15	
13) trichlorofluoromethane	0.621	0.722	0.737	0.732	0.671	0.632	0.574	0.679		0.671	8.75	
14) ethyl ether	0.281	0.293	0.296	0.293	0.275	0.267	0.285	0.271		0.283	3.95	
15) acrolein	0.088	0.089	0.088	0.087	0.095	0.097	0.078		0.089	6.91		
16) freon 113	0.289	0.186	0.325	0.339	0.333	0.306	0.300	0.341	0.316	0.304	15.64	
17) 1,1-dichloroethene	0.335	0.302	0.377	0.395	0.395	0.354	0.374	0.386	0.370	0.310	0.360	9.37
18) acetone	0.041	0.041	0.043	0.042	0.038	0.039	0.046	0.040		0.041	5.66	
19) acetonitrile	0.074	0.070	0.061	0.064	0.066	0.056	0.065	0.076	0.061	0.066	9.66	
20) iodomethane *This compound fails Initial Calibration criteria*	0.511	0.478	0.377	0.498	0.214	0.179	0.260		0.360	39.41		
21) carbon disulfide	1.243	1.087	1.194	1.248	1.250	1.083	1.179	1.264	1.146	1.188	5.91	
22) methylene chloride	0.562	0.525	0.468	0.480	0.510	0.441	0.506	0.560	0.463	0.502	8.49	
23) methyl acetate												

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Initial Calibration Summary

Job Number: JD40006
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Sample: V3D7354-ICC7354
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	0.389	0.318	0.336	0.353	0.354	0.317	0.327	0.372	0.324	0.343	7.39
24)	methyl tert butyl ether										
	1.211		1.276	1.338	1.341	1.181	1.247	1.320	1.211	1.266	4.94
25)	trans-1,2-dichloroethene										
	0.420	0.265	0.417	0.426	0.437	0.393	0.416	0.435	0.394	0.400	13.22
26)	di-isopropyl ether										
	1.304	1.003	1.331	1.407	1.452	1.209	1.366	1.501	1.336	1.297	10.52
27)	2-butanone										
	0.046		0.055	0.055	0.054	0.055	0.051	0.047	0.047	0.051	7.81
28)	1,1-dichloroethane										
	0.755	0.618	0.747	0.777	0.803	0.699	0.791	0.821	0.761	0.887	9.42
29)	chloroprene										
	0.604	0.471	0.694	0.709	0.713	0.655	0.660	0.673	0.652	0.665	10.80
30)	acrylonitrile										
		0.164	0.165	0.161	0.171	0.153	0.141	0.141		0.157	7.70
31)	hexane										
	0.288		0.361	0.364	0.362	0.340	0.326	0.360	0.328	0.341	7.79
32)	vinyl acetate										
		0.119	0.118	0.117	0.119	0.099	0.116	0.103		0.113	7.32
33)	ethyl tert-butyl ether										
	1.277		1.472	1.505	1.531	1.376	1.414	1.490	1.403	1.433	5.80
34)	ethyl acetate										
	0.057		0.067	0.075	0.069	0.071	0.060	0.064	0.070	0.067	8.92
35)	2,2-dichloropropane										
	0.577		0.590	0.599	0.617	0.555	0.582	0.613	0.560	0.587	3.87
36)	cis-1,2-dichloroethene										
	0.466	0.372	0.459	0.467	0.481	0.438	0.459	0.470	0.470	0.454	7.19
37)	methyl acrylate										
		0.074	0.073	0.076	0.073	0.069	0.072	0.068		0.072	3.85
38)	propionitrile										
	0.062		0.066	0.068	0.070	0.061	0.065	0.073	0.065	0.066	5.85
39)	bromochloromethane										
	0.179		0.225	0.228	0.226	0.219	0.210	0.234	0.209	0.216	8.01
40)	tetrahydrofuran										
		0.131	0.129	0.137	0.128	0.147		0.131		0.134	5.21
41)	chloroform										
	0.536	0.481	0.505	0.509	0.522	0.479	0.522	0.531	0.495	0.509	4.07
42)	t-butyl formate										
	0.392		0.460	0.450	0.436	0.451	0.387	0.376	0.386	0.417	8.42
43)	dibromofluoromethane (s)										
	0.404	0.396	0.406	0.404	0.400	0.415	0.397	0.406	0.399	0.405	1.37
44)	methacrylonitrile										
	0.145		0.198	0.195	0.193	0.198	0.191	0.194	0.176	0.186	9.66
45)	1,1,1-trichloroethane										
	0.570	0.553	0.689	0.697	0.682	0.668	0.651	0.681	0.635	0.732	8.57
46)	cyclohexane										
	0.627		0.704	0.706	0.691	0.665	0.649	0.592	0.623	0.657	6.33
47)	1,1-dichloropropene										
	0.529		0.582	0.589	0.577	0.555	0.551	0.577	0.526	0.561	4.34
48)	iso-butyl alcohol										
	0.019		0.019	0.018	0.018	0.017	0.018	0.020	0.017	0.018	5.23
49)	carbon tetrachloride										
	0.507		0.559	0.564	0.556	0.539	0.532	0.533	0.488	0.535	4.95
50)	tert amyl alcohol										
	0.021		0.018	0.017	0.017	0.016	0.017	0.019	0.016	0.018	9.21
51)	I 1,4-difluorobenzene -----ISTD-----										
52)	1,2-dichloroethane-d4 (s)										
	0.349	0.350	0.327	0.334	0.353	0.333	0.351	0.351	0.349	0.347	2.72
53)	n-butyl alcohol										

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Initial Calibration Summary

Job Number: JD40006
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Sample: V3D7354-ICC7354
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	0.008	0.009	0.009	0.009	0.009	0.008	0.009	0.008		0.009#	5.80		
54)	2,2,4-trimethylpentane												
	0.799	0.674	0.840	0.885	0.912	0.766	0.908	0.868	0.871	0.836	9.31		
55)	benzene												
	1.176	0.929	1.101	1.160	1.205	0.989	1.172	1.177	1.152	1.222	1.129	8.49	
56)	tert-amyl methyl ether												
	0.206		0.223	0.226	0.231	0.217	0.210	0.246	0.219	0.222	5.59		
57)	heptane												
	0.196	0.152	0.212	0.214	0.217	0.201	0.202	0.194	0.208	0.200	9.75		
58)	isopropyl acetate												
	0.062		0.074	0.072	0.071	0.072	0.076	0.061	0.065	0.069	8.39		
59)	1,2-dichloroethane												
	0.441	0.412	0.399	0.417	0.435	0.372	0.425	0.450	0.420	0.419	5.60		
60)	trichloroethene												
	0.258	0.184	0.307	0.311	0.309	0.290	0.286	0.301	0.280	0.281	14.26		
61)	ethyl acrylate												
	0.367	0.344	0.381	0.396	0.398	0.355	0.386	0.404	0.369	0.348	0.375	5.76	
62)	2-nitropropane												
		0.095	0.091	0.089	0.094	0.090	0.111	0.085		0.093	8.98		
63)	2-chloroethyl vinyl ether												
	0.179		0.193	0.203	0.204	0.173	0.189	0.189	0.186	0.189	5.71		
64)	methyl methacrylate												
	0.081		0.087	0.093	0.091	0.085	0.084	0.087	0.083	0.086	4.47		
65)	1,2-dichloropropane												
	0.265	0.235	0.310	0.315	0.320	0.289	0.304	0.308	0.298	0.281	0.292	9.00	
66)	dibromomethane												
	0.185	0.136	0.174	0.176	0.182	0.169	0.186	0.189	0.171	0.174	9.13		
67)	methylcyclohexane												
	0.425		0.495	0.513	0.517	0.460	0.494	0.477	0.474	0.482	6.24		
68)	bromodichloromethane												
	0.395	0.322	0.421	0.426	0.424	0.399	0.393	0.417	0.392	0.399	8.04		
69)	epichlorohydrin												
	0.033		0.035	0.035	0.035	0.032	0.034	0.035	0.031	0.034	4.41		
70)	cis-1,3-dichloropropene												
	0.491	0.360	0.513	0.523	0.511	0.482	0.487	0.504	0.474	0.455	0.480	9.76	
71)	4-methyl-2-pentanone												
	0.106	0.080	0.111	0.114	0.116	0.102	0.110	0.114	0.107	0.107	10.20		
72)	3-methyl-1-butanol												
	0.012		0.013	0.013	0.013	0.012	0.013	0.013	0.012	0.013	4.58		
73)	I	chlorobenzene-d5										-----ISTD-----	
74)	toluene-d8 (s)												
	1.283	1.279	1.214	1.219	1.248	1.207	1.270	1.286	1.254	1.292	1.255	2.55	
75)	toluene												
	0.811	0.595	0.781	0.812	0.843	0.724	0.816	0.850	0.808	0.870	0.791	10.09	
76)	trans-1,3-dichloropropene												
	0.431	0.314	0.513	0.515	0.506	0.491	0.465	0.475	0.461	0.464	13.53		
77)	ethyl methacrylate												
	0.414		0.427	0.452	0.464	0.400	0.436	0.468	0.420	0.435	5.58		
78)	1,1,2-trichloroethane												
	0.240		0.248	0.254	0.257	0.238	0.245	0.244	0.258	0.248	3.02		
79)	tetrachloroethene												
	0.247	0.187	0.250	0.262	0.267	0.237	0.256	0.277	0.250	0.248	10.38		
80)	1,3-dichloropropane												
	0.489	0.390	0.502	0.524	0.532	0.473	0.496	0.549	0.500	0.512	0.497	8.73	
81)	2-hexanone												
	0.107		0.112	0.118	0.122	0.101	0.122	0.121	0.115	0.115	6.66		
82)	butyl acetate												
	0.236		0.209	0.215	0.218	0.199	0.210	0.227	0.205	0.215	5.63		
83)	dibromochloromethane												

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Initial Calibration Summary

Job Number: JD40006
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Sample: V3D7354-ICC7354
Lab FileID: 3D173436.D

	0.290	0.243	0.333	0.337	0.329	0.324	0.314	0.340	0.299	0.312	9.87	
84)	1,2-dibromoethane											
	0.281	0.209	0.306	0.311	0.315	0.294	0.285	0.302	0.286	0.275	10.57	
85)	n-butyl ether											
	1.372	1.338	1.467	1.563	1.134	1.457	1.527	1.476	1.417	9.60		
86)	chlorobenzene											
	0.875	0.669	0.850	0.886	0.918	0.772	0.869	0.955	0.865	0.851	9.91	
87)	1,1,1,2-tetrachloroethane											
	0.257	0.293	0.300	0.302	0.277	0.270	0.292	0.285	0.285	5.51		
88)	ethylbenzene											
	1.572	1.194	1.377	1.504	1.611	1.179	1.609	1.699	1.561	1.478	12.66	
89)	m,p-xylene											
	0.622	0.481	0.572	0.609	0.642	0.510	0.628	0.678	0.604	0.680	10.89	
90)	o-xylene											
	0.631	0.463	0.605	0.639	0.665	0.548	0.644	0.648	0.618	0.660	10.18	
91)	styrene											
	1.019	0.990	1.060	1.098	0.875	1.055	1.058	1.044	1.025	6.66		
92)	bromoform											
	0.178	0.173	0.216	0.217	0.209	0.208	0.184	0.198	0.176	0.195	9.10	
93)	butyl acrylate											
	0.540	0.653	0.684	0.683	0.599	0.634	0.630	0.620	0.630	7.45		
94)	n-amyl acetate											
	0.257	0.243	0.252	0.254	0.228	0.243	0.249	0.235	0.245	4.11		
95)	isopropylbenzene											
	1.515	1.467	1.588	1.658	1.260	1.633	1.661	1.575	1.545	8.64		
96)	cis-1,4-dichloro-2-butene											
	0.158	0.158	0.151	0.151	0.126	0.135	0.130	0.144	9.34			
97)	I 1,4-dichlorobenzene-d -----ISTD-----											
98)	4-bromofluorobenzene (s)											
	1.065	1.069	1.106	1.089	1.074	1.140	1.077	1.083	1.079	1.074	1.086	2.05
99)	bromobenzene											
	0.664	0.776	0.779	0.785	0.734	0.731	0.839	0.728	0.755	6.94		
100)	1,1,2,2-tetrachloroethane											
	0.713	0.549	0.828	0.832	0.817	0.804	0.743	0.783	0.751	0.758	11.68	
101)	trans-1,4-dichloro-2-butene											
	0.264	0.267	0.259	0.252	0.242	0.226	0.224	0.248	7.09			
102)	1,2,3-trichloropropane											
	0.213	0.248	0.258	0.250	0.242	0.247	0.237	0.240	0.242	5.57		
103)	n-propylbenzene											
	3.374	3.526	3.791	3.888	3.096	3.782	3.971	3.688	3.640	8.01		
104)	2-chlorotoluene											
	0.748	0.751	0.759	0.752	0.714	0.723	0.806	0.733	0.748	3.74		
105)	4-chlorotoluene											
	0.757	0.750	0.779	0.783	0.720	0.733	0.784	0.746	0.757	3.15		
106)	1,3,5-trimethylbenzene											
	2.422	1.935	2.581	2.707	2.734	2.291	2.646	2.646	2.585	2.598	2.515	9.66
107)	tert-butylbenzene											
	0.528	0.580	0.598	0.595	0.550	0.558	0.532	0.542	0.561	4.90		
108)	1,2,4-trimethylbenzene											
	2.382	2.667	2.786	2.816	2.364	2.729	2.797	2.652	2.649	6.82		
109)	sec-butylbenzene											
	2.926	3.171	3.382	3.397	2.783	3.189	3.291	3.163	3.163	6.76		
110)	1,3-dichlorobenzene											
	1.425	1.475	1.511	1.521	1.356	1.444	1.524	1.428	1.461	4.00		
111)	p-isopropyltoluene											
	2.573	2.590	2.759	2.820	2.267	2.699	2.657	2.652	2.627	6.35		
112)	1,4-dichlorobenzene											
	1.436	1.116	1.415	1.462	1.468	1.325	1.376	1.509	1.382	1.498	1.399	8.22
113)	1,2,3-trimethylbenzene											

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Initial Calibration Summary

Job Number: JD40006
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	2.475	2.520	2.629	2.636	2.249	2.590	2.739	2.541	2.547	5.71
114)	benzyl chloride									
		1.437	1.418	1.334	1.368	1.142	1.164	1.158	1.289	10.07
115)	1,2-dichlorobenzene									
	1.347	1.361	1.417	1.414	1.261	1.343	1.473	1.362	1.372	4.60
116)	n-butylbenzene									
	1.120	1.396	1.433	1.372	1.266	1.276	1.232	1.267	1.295	7.82
117)	1,2-dibromo-3-chloropropane									
	0.161	0.187	0.186	0.170	0.188	0.151	0.165	0.157	0.171	8.56
118)	1,3,5-trichlorobenzene									
	0.935	0.995	1.029	1.004	0.928	0.954	1.005	0.929	0.972	4.15
119)	1,2,4-trichlorobenzene									
	0.722	0.675	0.855	0.874	0.853	0.793	0.778	0.869	0.761	0.876
120)	hexachlorobutadiene									
	0.298	0.346	0.363	0.354	0.322	0.308	0.330	0.317	0.330	6.94
121)	naphthalene									
	1.895	1.521	2.234	2.337	2.300	1.989	2.128	2.146	2.072	2.069
122)	1,2,3-trichlorobenzene									
	0.627	0.703	0.731	0.699	0.659	0.664	0.685	0.649	0.677	4.95
123)	hexachloroethane									
		0.391	0.380	0.343	0.386	0.289	0.309	0.293	0.342	13.11
124)	2-methylnaphthalene									
									0.000#	-1.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

M3D7354.M Fri Feb 04 15:36:37 2022 3D

6.7.1
6

Continuing Calibration Summary

Job Number: JD40006
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V3D7372-CC7354
 Lab FileID: 3D173819.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ne...22\v3d7372\3d173819.d Vial: 3
 Acq On : 21 Feb 2022 9:41 am Operator: nickw
 Sample : CC7354-20 Inst : MS3D
 Misc : MS56759,V3D7372,5,,,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\M3D7354.M (RTE Integrator)
 Title : SW846 8260C/D/ EPA 624.1, Rxi-624 60 m x 0.25 mm xThu Feb 03 16:08:26 2022
 Last Update : Thu Feb 03 16:08:26 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
1	tert butyl alcohol-d9	1.000	1.000	0.0	74	0.00	2.92
2 M	tertiary butyl alcohol	1.327	1.383	-4.2	80	0.00	2.98
3	ethanol	0.160	0.074	53.8#	34#	0.00	2.36
4 M	1,4-dioxane	0.155	0.063	59.4#	30#	0.01	5.11
5 I	pentafluorobenzene	1.000	1.000	0.0	116	0.00	4.12
6	chlorodifluoromethane	0.578	0.589	-1.9	112	0.01	1.58
7 M	dichlorodifluoromethane	0.603	0.442	26.7#	79	0.00	1.57
8 M	chloromethane	0.577	0.500	13.3	94	0.00	1.71
9 M	vinyl chloride	0.558	0.507	9.1	93	0.00	1.79
10	1,3-butadiene	0.465	0.475	-2.2	112	0.00	1.83
11 M	bromomethane	0.235	0.203	13.6	93	0.01	2.04
12 M	chloroethane	0.369	0.346	6.2	108	0.01	2.11
13 M	trichlorofluoromethane	0.671	0.631	6.0	100	0.00	2.29
14 M	ethyl ether	0.283	0.316	-11.7	125	0.00	2.47
15 M	acrolein	0.089	0.088	1.1	116	0.00	2.55
16	freon 113	0.304	0.329	-8.2	115	0.00	2.64
17 M	1,1-dichloroethene	0.360	0.397	-10.3	116	0.00	2.64
18 M	acetone	0.041	0.047	-14.6	128	0.00	2.64
19 M	acetonitrile	0.066	0.054	18.2	94	0.00	2.81
20 M	iodomethane	0.360	0.351	2.5	108	0.00	2.75
21 M	carbon disulfide	1.188	1.286	-8.2	119	0.00	2.81
22 M	methylene chloride	0.502	0.507	-1.0	115	0.00	2.95
23 M	methyl acetate	0.343	0.367	-7.0	120	0.00	2.84
24 M	methyl tert butyl ether	1.266	1.396	-10.3	121	0.00	3.12
25 M	trans-1,2-dichloroethene	0.400	0.444	-11.0	118	0.00	3.14
26 M	di-isopropyl ether	1.321	1.615	-22.3#	129	0.00	3.42
27 M	2-butanone	0.051	0.057	-11.8	121	0.00	3.76
28 M	1,1-dichloroethane	0.766	0.816	-6.5	118	0.01	3.42
29 M	chloroprene	0.650	0.712	-9.5	116	0.00	3.47
30 M	acrylonitrile	0.157	0.173	-10.2	124	0.00	3.08
31	hexane	0.341	0.398	-16.7	127	0.00	3.32
32 M	vinyl acetate	0.113	0.117	-3.5	116	0.01	3.40
33 M	ethyl tert-butyl ether	1.433	1.651	-15.2	125	0.00	3.67
34 M	ethyl acetate	0.067	0.081	-20.9#	136	0.00	3.78
35 M	2,2-dichloropropane	0.587	0.722	-23.0#	135	0.00	3.81
36 M	cis-1,2-dichloroethene	0.454	0.484	-6.6	116	0.00	3.80
37	methyl acrylate	0.072	0.074	-2.8	112	0.00	3.82
38 M	propionitrile	0.066	0.062	6.1	102	0.00	3.80
39 M	bromochloromethane	0.216	0.225	-4.2	115	0.01	3.97
40 M	tetrahydrofuran	0.134	0.139	-3.7	117	0.00	3.98
41 M	chloroform	0.509	0.532	-4.5	118	0.01	4.02

Continuing Calibration Summary

Job Number: JD40006
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V3D7372-CC7354
Lab FileID: 3D173819.D

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42	M	t-butyl formate	0.417	0.467	-12.0	124	0.00	4.04
43	S	dibromofluoromethane (s)	0.403	0.399	1.0	116	0.00	4.12
44	M	methacrylonitrile	0.186	0.200	-7.5	120	0.00	3.92
45	M	1,1,1-trichloroethane	0.656	0.671	-2.3	114	0.00	4.16
46		cyclohexane	0.657	0.653	0.6	109	0.01	4.23
47		1,1-dichloropropene	0.561	0.594	-5.9	119	0.01	4.27
48		iso-butyl alcohol	0.018	0.010#	44.4#	65	0.01	4.27
49		carbon tetrachloride	0.535	0.540	-0.9	112	0.00	4.28
50		tert amyl alcohol	0.018	0.013	27.8#	85	0.00	4.36
51	I	1,4-difluorobenzene	1.000	1.000	0.0	116	0.00	4.68
52	S	1,2-dichloroethane-d4 (s)	0.344	0.330	4.1	108	0.00	4.37
53	M	n-butyl alcohol	0.009	0.004#	55.6#	54	0.00	4.74
54		2,2,4-trimethylpentane	0.836	1.079	-29.1#	137	0.00	4.48
55	M	benzene	1.129	1.224	-8.4	118	0.00	4.41
56	M	tert-amyl methyl ether	0.222	0.241	-8.6	121	0.00	4.48
57	M	heptane	0.200	0.259	-29.5#	138	0.01	4.60
58	M	isopropyl acetate	0.069	0.078	-13.0	128	0.01	4.39
59	M	1,2-dichloroethane	0.419	0.435	-3.8	116	0.00	4.43
60	M	trichloroethene	0.281	0.313	-11.4	117	0.00	4.88
61		ethyl acrylate	0.375	0.406	-8.3	118	0.00	4.89
62	M	2-nitropropane	0.093	0.088	5.4	115	0.00	5.40
63	M	2-chloroethyl vinyl ether	0.189	0.218	-15.3	123	0.00	5.45
64	M	methyl methacrylate	0.086	0.090	-4.7	115	0.00	5.07
65	M	1,2-dichloropropane	0.292	0.341	-16.8	123	0.01	5.07
66	M	dibromomethane	0.174	0.179	-2.9	114	0.00	5.14
67	M	methylcyclohexane	0.482	0.528	-9.5	118	0.01	5.07
68	M	bromodichloromethane	0.399	0.430	-7.8	117	0.00	5.25
69		epichlorohydrin	0.034	0.032	5.9	106	0.01	5.50
70	M	cis-1,3-dichloropropene	0.480	0.552	-15.0	125	0.00	5.59
71	M	4-methyl-2-pentanone	0.107	0.120	-12.1	120	0.01	5.69
72	M	3-methyl-1-butanol	0.013	0.009#	30.8#	75	0.01	5.71
73	I	chlorobenzene-d5	1.000	1.000	0.0	121	0.00	7.06
74	S	toluene-d8 (s)	1.255	1.202	4.2	116	0.01	5.82
75		toluene	0.791	0.816	-3.2	117	0.00	5.88
76		trans-1,3-dichloropropene	0.464	0.523	-12.7	125	0.00	6.04
77		ethyl methacrylate	0.435	0.457	-5.1	119	0.00	6.07
78		1,1,2-trichloroethane	0.248	0.252	-1.6	119	0.00	6.21
79	M	tetrachloroethene	0.248	0.269	-8.5	121	0.00	6.32
80	M	1,3-dichloropropane	0.497	0.527	-6.0	120	0.00	6.35
81		2-hexanone	0.115	0.123	-7.0	122	0.00	6.37
82	M	butyl acetate	0.215	0.221	-2.8	122	0.01	6.47
83	M	dibromochloromethane	0.312	0.322	-3.2	118	0.00	6.54
84	M	1,2-dibromoethane	0.286	0.305	-6.6	117	0.00	6.66
85		n-butyl ether	1.417	1.579	-11.4	122	0.00	7.15
86	M	chlorobenzene	0.851	0.883	-3.8	116	0.00	7.09
87	M	1,1,1,2-tetrachloroethane	0.285	0.294	-3.2	118	0.00	7.16
88	M	ethylbenzene	1.478	1.537	-4.0	115	0.00	7.17
89	M	m,p-xylene	0.603	0.623	-3.3	117	0.00	7.29
90	M	o-xylene	0.612	0.640	-4.6	116	0.00	7.64
91	M	styrene	1.025	1.073	-4.7	118	0.00	7.65
92	M	bromoform	0.195	0.208	-6.7	120	0.00	7.82
93		butyl acrylate	0.630	0.687	-9.0	121	0.00	7.56
94		n-amyl acetate	0.245	0.256	-4.5	122	0.00	7.76
95		isopropylbenzene	1.545	1.607	-4.0	117	0.00	7.98
96		cis-1,4-dichloro-2-butene	0.144	0.147	-2.1	117	0.00	8.01
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	123	0.00	9.25
98	S	4-bromofluorobenzene (s)	1.086	1.053	3.0	121	0.00	8.14

6.7.4

6

Continuing Calibration Summary

Job Number: JD40006
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: V3D7372-CC7354
Lab FileID: 3D173819.D

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99 M	bromobenzene	0.755	0.767	-1.6	120	0.00	8.28
100 M	1,1,2,2-tetrachloroethane	0.758	0.770	-1.6	116	0.00	8.25
101 M	trans-1,4-dichloro-2-bute	0.248	0.245	1.2	117	0.00	8.28
102 M	1,2,3-trichloropropane	0.242	0.231	4.5	114	0.00	8.31
103 M	n-propylbenzene	3.640	3.709	-1.9	117	0.00	8.37
104 M	2-chlorotoluene	0.748	0.725	3.1	119	0.00	8.46
105 M	4-chlorotoluene	0.757	0.753	0.5	118	0.00	8.57
106 M	1,3,5-trimethylbenzene	2.515	2.635	-4.8	118	0.00	8.54
107 M	tert-butylbenzene	0.561	0.564	-0.5	116	0.00	8.84
108 M	1,2,4-trimethylbenzene	2.649	2.715	-2.5	119	0.00	8.90
109 M	sec-butylbenzene	3.163	3.341	-5.6	121	0.00	9.06
110 M	1,3-dichlorobenzene	1.461	1.484	-1.6	120	0.00	9.18
111 M	p-isopropyltoluene	2.627	2.781	-5.9	121	0.00	9.21
112 M	1,4-dichlorobenzene	1.399	1.414	-1.1	118	0.00	9.28
113	1,2,3-trimethylbenzene	2.547	2.528	0.7	118	0.00	9.30
114	benzyl chloride	1.289	1.650	-28.0#	152	0.00	9.38
115 M	1,2-dichlorobenzene	1.372	1.383	-0.8	120	0.00	9.63
116 M	n-butylbenzene	1.295	1.414	-9.2	127	0.00	9.60
117 M	1,2-dibromo-3-chloropropa	0.171	0.169	1.2	122	0.00	10.39
118	1,3,5-trichlorobenzene	0.972	1.072	-10.3	131	0.00	10.59
119 M	1,2,4-trichlorobenzene	0.806	0.887	-10.0	128	0.00	11.21
120 M	hexachlorobutadiene	0.330	0.389	-17.9	135	0.00	11.37
121 M	naphthalene	2.069	2.259	-9.2	121	0.00	11.47
122 M	1,2,3-trichlorobenzene	0.677	0.750	-10.8	132	0.00	11.70
123 m	hexachloroethane	0.342	0.371	-8.5	133	0.00	9.90
124	2-methylnaphthalene	0.000	10.486	0.0	0#	0.00	12.60

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3D173435.D M3D7354.M Tue Feb 22 05:25:25 2022

6.7.4
6

Initial Calibration Summary

Page 1 of 5

Job Number: JD40006
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VL10152-ICC10152
Lab FileID: L337233.D

Response Factor Report GCMSL

Method : C:\MSDCHEM\1\METHODS\ML10152.M (RTE Integrator)
Title : SW846 Method V8260C/D, column ZB-624 60m x 0.25mm x 1.4 um
Last Update : Tue Feb 08 15:29:57 2022
Response via : Initial Calibration

Calibration Files

8	=L337231.D	0.5	=L337227.D	4	=L337230.D	50	=L337233.D
100	=L337234.D	1	=L337228.D	200	=L337235.D	20	=L337232.D
2	=L337229.D	0.2	=L337226.D	=		=	

Compound

	8	0.5	4	50	100	1	200	20	2	0.2	Avg	%RSD

1) I tert butyl alcohol-d9	-----ISTD-----											
2) 1,4-dioxane	0.180		0.172	0.164	0.163	0.138	0.163	0.161	0.168		0.164	7.50
3) ethanol	0.156		0.151	0.151	0.154	0.167	0.140	0.156	0.149		0.153	5.04
4) tertiary butyl alcohol	1.220	0.775	1.305	1.187	1.216	1.369	1.175	1.217	1.378		1.205	14.78
5) I pentafluorobenzene	-----ISTD-----											
6) chlorodifluoromethane	*This compound fails Initial Calibration criteria*											
	0.540	0.362	0.483	0.509	0.499	0.485	0.467	0.503	0.434		0.476	10.91
7) dichlorodifluoromethane	0.795		0.844	0.797	0.794		0.778	0.764	0.666		0.777	7.05
8) chloromethane	0.644	0.575	0.607	0.613	0.591	0.569	0.543	0.646	0.533	0.576	0.590	6.51
9) vinyl chloride	0.975	0.829	0.904	0.902	0.859	0.665	0.771	0.896	0.853		0.850	10.54
10) bromomethane	0.473	0.522	0.436	0.486	0.535	0.426	0.688	0.466	0.423	0.599	0.505	16.68
11) chloroethane	0.470	0.740	0.565	0.512	0.508	0.499	0.483	0.476	0.521		0.530	15.74
12) trichlorofluoromethane	0.907	0.859	0.871	0.844	0.819	0.725	0.801	0.859	0.768	0.668	0.812	9.01
13) ethyl ether	0.313		0.306	0.293	0.303		0.303	0.283	0.241		0.292	8.37
14) acrolein	0.096		0.066	0.089	0.097		0.094	0.092			0.089	12.90
15) freon 113	0.394	0.434	0.363	0.399	0.399	0.348	0.396	0.398	0.399	0.311	0.384	8.99
16) 1,1-dichloroethene	0.462	0.406	0.478	0.450	0.447	0.481	0.426	0.434	0.444	0.361	0.439	8.05
17) acetone	0.043		0.048	0.041	0.042	0.042	0.040	0.045	0.043		0.043	5.83
18) acetonitrile	0.042		0.038	0.037	0.038		0.035	0.037	0.039		0.038	5.84
19) iodomethane	0.401		0.377	0.552	0.568		0.565	0.493	0.353		0.473	19.83
20) iso-butyl alcohol	0.024		0.029	0.021	0.021		0.019	0.021	0.026		0.023	15.72
21) carbon disulfide	1.512	1.505	1.371	1.355	1.344	1.166	1.285	1.390	1.389		1.368	7.70
22) methylene chloride	0.536	0.595	0.577	0.487	0.502	0.629	0.488	0.494	0.535		0.538	9.60
23) methyl acetate												

Initial Calibration Summary

Job Number: JD40006
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Page 2 of 5
Sample: VL10152-ICC10152
Lab FileID: L337233.D

	0.096	0.093	0.094	0.100	0.093	0.085	0.093	5.02	
24)	methyl tert butyl ether								
	1.509	1.582	1.453	1.507	1.513	1.361	1.449	1.454	1.394 1.308 1.453 5.59
25)	trans-1,2-dichloroethene								
	0.486	0.486	0.548	0.489	0.489	0.411	0.477	0.505	0.457 0.589 0.494 9.74
26)	hexane								
	0.707	0.723	0.660	0.703	0.726	0.607	0.709	0.689	0.698 0.677 0.690 5.14
27)	di-isopropyl ether								
	1.634	1.459	1.569	1.529	1.455	1.354	1.360	1.493	1.544 1.489 6.24
28)	ethyl tert-butyl ether								
	1.547	1.477	1.476	1.521	1.288	1.450	1.440	1.321	1.440 6.33
29)	2-butanone								
	0.069	0.064	0.066	0.072	0.061	0.072	0.063	0.072	0.067 6.90
30)	1,1-dichloroethane								
	0.915	0.813	0.895	0.859	0.897	0.836	0.903	0.843	0.800 0.862 4.85
31)	chloroprene								
	0.680	0.709	0.631	0.663	0.659	0.553	0.649	0.640	0.629 0.639 0.645 6.28
32)	acrylonitrile								
	0.207	0.186	0.163	0.203	0.210	0.193	0.201	0.207	0.158 0.192 10.07
33)	vinyl acetate								
	0.129	0.147	0.126	0.138	0.136	0.122	0.131	0.133	6.45
34)	ethyl acetate								
	0.081	0.074	0.089	0.084	0.077	0.074	0.080	7.52	
35)	2,2-dichloropropane								
	0.811	0.660	0.763	0.787	0.813	0.672	0.808	0.760	0.741 0.579 0.740 10.61
36)	cis-1,2-dichloroethene								
	0.529	0.599	0.546	0.551	0.565	0.516	0.567	0.535	0.495 0.545 5.64
37)	propionitrile								
	0.071	0.066	0.071	0.071	0.070	0.064	0.066	0.071	0.067 0.068 4.29
38)	methyl acrylate								
	0.098	0.098	0.096	0.102	0.110	0.103	0.095	0.117	0.102 7.48
39)	bromochloromethane								
	0.249	0.236	0.286	0.266	0.274	0.230	0.277	0.252	0.221 0.255 8.91
40)	tetrahydrofuran								
	0.077	0.071	0.070	0.080	0.084	0.067	0.084	0.076	9.17
41)	chloroform								
	0.957	1.067	0.938	0.913	0.943	0.811	0.913	0.901	0.858 0.922 7.65
42)	dibromofluoromethane (s)								
	0.449	0.422	0.449	0.450	0.466	0.430	0.471	0.445	0.419 0.419 0.442 4.25
43)	methacrylonitrile								
	0.237	0.243	0.231	0.252	0.199	0.258	0.211	0.204	0.229 9.77
44)	1,1,1-trichloroethane								
	0.792	0.873	0.761	0.783	0.824	0.715	0.805	0.736	0.644 0.770 8.66
45)	cyclohexane								
	0.849	0.783	0.738	0.763	0.791	0.599	0.773	0.737	0.690 0.747 9.47
46)	1,1-dichloropropene								
	0.754	0.637	0.715	0.712	0.601	0.701	0.670	0.578	0.671 9.12
47)	carbon tetrachloride								
	0.693	0.728	0.639	0.698	0.716	0.653	0.700	0.642	0.576 0.672 7.15
48)	isopropyl acetate								
	0.118	0.114	0.124	0.135	0.130	0.108	0.111	0.120	8.51
49)	tert amyl alcohol								
	0.017	0.015	0.016	0.018	0.016	0.018	0.017	6.51	
50)	I 1,4-difluorobenzene -----ISTD-----								
51)	1,2-dichloroethane-d4 (s)								
	0.295	0.289	0.290	0.296	0.314	0.287	0.309	0.304	0.280 0.288 0.295 3.71
52)	tert-amyl methyl ether								
	0.997	0.935	1.001	0.957	0.947	0.945	0.943	0.944	0.900 0.762 0.933 7.17
53)	2,2,4-trimethylpentane								

6.7.5
6

Initial Calibration Summary

Job Number: JD40006
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VL10152-ICC10152
Lab FileID: L337233.D

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	0.951	0.830	0.889	0.892	0.845	0.717	0.836	0.907	0.767	0.822	0.846	8.13
54)	n-butyl alcohol											
	0.009	0.006	0.008	0.008	0.009	0.009	0.009	0.008	0.007		0.008	10.05
55)	benzene											
	1.287	1.014	1.255	1.212	1.169	1.145	1.115	1.243	1.103	1.481	1.202	10.62
56)	heptane											
	0.188	0.148	0.192	0.190	0.191	0.182	0.197	0.173	0.187	0.252	0.190	13.71
57)	1,2-dichloroethane											
	0.450	0.448	0.414	0.423	0.428	0.476	0.419	0.433	0.439	0.377	0.431	6.08
58)	trichloroethene											
	0.351	0.229	0.316	0.329	0.339	0.363	0.346	0.330	0.325	0.310	0.324	11.47
59)	ethyl acrylate											
	0.399	0.275	0.393	0.386	0.392	0.352	0.381	0.378	0.423	0.348	0.373	10.89
60)	2-nitropropane											
	0.087		0.095	0.104		0.103	0.081				0.094	10.65
61)	2-chloroethyl vinyl ether											
	0.159		0.144	0.164	0.177		0.176	0.161	0.133		0.159	10.07
62)	methyl methacrylate											
	0.085		0.087	0.089	0.098		0.104	0.094			0.093	7.62
63)	1,2-dichloropropane											
	0.313	0.300	0.305	0.313	0.325	0.319	0.331	0.313	0.314		0.315	3.01
64)	methylcyclohexane											
	0.535	0.510	0.516	0.537	0.562	0.489	0.580	0.526	0.478		0.526	6.16
65)	dibromomethane											
	0.219	0.182	0.197	0.203	0.211	0.189	0.218	0.200	0.179	0.194	0.199	7.01
66)	bromodichloromethane											
	0.474	0.346	0.430	0.435	0.457	0.397	0.452	0.439	0.472		0.433	9.30
67)	cis-1,3-dichloropropene											
	0.508	0.521	0.586	0.535	0.569	0.572	0.550	0.517	0.528	0.528	0.542	4.85
68)	epichlorohydrin											
	0.030		0.034	0.031	0.034	0.031	0.032	0.030	0.035		0.032	6.58
69)	4-methyl-2-pentanone											
	0.122	0.105	0.126	0.121	0.124	0.106	0.120	0.127	0.102		0.117	8.38
70)	3-methyl-1-butanol											
	0.009		0.008	0.009	0.009		0.009	0.008	0.007		0.008	10.45
71)	I chlorobenzene-d5 -----ISTD-----											
72)	toluene-d8 (s)											
	1.373	1.411	1.365	1.366	1.304	1.405	1.304	1.340	1.413	1.400	1.368	3.01
73)	toluene											
	0.922	1.065	0.986	0.951	0.914	0.955	0.887	0.955	0.906	0.899	0.944	5.55
74)	trans-1,3-dichloropropene											
	0.608	0.540	0.560	0.622	0.610	0.606	0.597	0.573	0.631	0.579	0.593	4.88
75)	ethyl methacrylate											
	0.517		0.482	0.530	0.527		0.501	0.509	0.425		0.499	7.29
76)	1,1,2-trichloroethane											
	0.316		0.331	0.297	0.288	0.278	0.279	0.295	0.276		0.295	6.71
77)	2-hexanone											
	0.130		0.140	0.134	0.127	0.130	0.115	0.132	0.132		0.130	5.46
78)	tetrachloroethene											
	0.426	0.472	0.403	0.387	0.372	0.413	0.364	0.396	0.425		0.406	8.01
79)	1,3-dichloropropane											
	0.592	0.634	0.612	0.585	0.562	0.602	0.533	0.569	0.637		0.592	5.77
80)	butyl acetate											
	0.208		0.222	0.231	0.224		0.212	0.221			0.220	3.74
81)	dibromochloromethane											
	0.407	0.374	0.380	0.401	0.404	0.386	0.387	0.397	0.376	0.339	0.385	5.16
82)	1,2-dibromoethane											
	0.393	0.372	0.379	0.356	0.365	0.343	0.348	0.366	0.385		0.367	4.56
83)	n-butyl ether											

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Initial Calibration Summary

Job Number: JD40006
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Project: 1001 Whitlock Avenue, Bronx, NY

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	1.445	1.076	1.422	1.462	1.349	1.189	1.208	1.393	1.315		1.318	10.10
84)	chlorobenzene											
	1.054	1.086	1.034	1.043	0.991	1.062	0.943	1.027	1.038	1.098	1.038	4.32
85)	1,1,1,2-tetrachloroethane											
	0.366	0.359	0.355	0.361	0.356	0.318	0.349	0.364	0.358		0.354	4.10
86)	ethylbenzene											
	1.793	1.597	1.794	1.723	1.572	1.581	1.409	1.682	1.752	1.786	1.669	7.59
87)	m,p-xylene											
	0.689	0.619	0.691	0.700	0.641	0.694	0.622	0.675	0.641	0.579	0.655	6.22
88)	o-xylene											
	0.703	0.685	0.655	0.720	0.714	0.563	0.710	0.676	0.692	0.624	0.674	7.25
89)	butyl acrylate											
	0.624		0.582	0.698	0.665	0.541	0.628	0.632	0.527		0.612	9.58
90)	styrene											
	1.074	1.171	1.116	1.151	1.157	1.034	1.097	1.099	1.058		1.106	4.24
91)	bromoform											
	0.254	0.312	0.237	0.280	0.290	0.300	0.289	0.263	0.262		0.276	8.68
92)	isopropylbenzene											
	1.702	1.648	1.622	1.737	1.694	1.623	1.526	1.467	1.613	1.670	1.630	5.03
93)	cis-1,4-dichloro-2-butene											
	0.180		0.155	0.192	0.204		0.196	0.162	0.201		0.184	10.51
94)	I 1,4-dichlorobenzene-d -----ISTD-----											
95)	4-bromofluorobenzene (s)											
	0.963	0.955	0.964	0.981	0.976	0.988	0.996	0.952	0.971	0.955	0.970	1.53
96)	bromobenzene											
	0.954	1.063	0.984	0.972	0.896	0.814	0.851	0.991	0.977	0.877	0.938	8.09
97)	1,1,2,2-tetrachloroethane											
	1.099	1.288	1.071	1.056	1.043	1.043	0.971	1.099	1.052		1.080	8.02
98)	trans-1,4-dichloro-2-butene											
	0.283		0.259	0.265	0.262		0.234	0.273			0.263	6.32
99)	1,2,3-trichloropropane											
	0.306	0.290	0.305	0.307	0.277	0.283	0.262	0.320	0.316		0.296	6.51
100)	n-propylbenzene											
	4.686	4.070	4.532	4.438	3.919	4.333	3.503	4.440	4.365	4.141	4.243	8.14
101)	2-chlorotoluene											
	0.949	0.841	0.883	0.934	0.874	0.901	0.841	0.909	0.911		0.894	4.19
102)	4-chlorotoluene											
	0.936	0.837	0.818	0.968	0.919	1.097	0.882	0.906	0.903		0.918	8.89
103)	1,3,5-trimethylbenzene											
	3.114	2.801	2.874	3.024	2.787	3.003	2.566	2.964	2.986	3.460	2.958	7.96
104)	tert-butylbenzene											
	2.711		2.474	2.692	2.476	2.446	2.366	2.603	2.450		2.527	4.98
105)	1,2,4-trimethylbenzene											
	3.015	2.955	2.982	3.114	2.994	2.890	2.747	3.005	2.938	3.871	3.051	9.94
106)	sec-butylbenzene											
	3.930	3.818	3.810	3.909	3.673	3.523	3.331	3.732	3.623	3.257	3.661	6.30
107)	1,3-dichlorobenzene											
	1.851	1.501	1.661	1.759	1.702	1.577	1.645	1.706	1.731		1.681	6.09
108)	p-isopropyltoluene											
	3.173	2.978	3.148	3.172	2.994	2.859	2.714	3.175	3.082	3.060	3.035	5.06
109)	1,4-dichlorobenzene											
	1.677	1.531	1.744	1.723	1.665	1.750	1.617	1.654	1.719	2.037	1.712	7.72
110)	1,2,3-trimethylbenzene											
	2.858	2.307	2.798	2.996	2.784	2.886	2.521	2.838	2.896	2.777	2.766	7.33
111)	1,2-dichlorobenzene											
	1.602	1.397	1.589	1.663	1.613	1.402	1.529	1.562	1.493	1.800	1.565	7.70
112)	n-butylbenzene											
	1.510		1.366	1.640	1.572	1.595	1.514	1.515	1.431		1.518	5.80
113)	1,2-dibromo-3-chloropropane											

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Initial Calibration Summary

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Job Number: JD40006
Account: SESINJPB SESI Consulting Engineers
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Sample: VL10152-ICC10152
Lab FileID: L337233.D

	0.172	0.191	0.211	0.215	0.212	0.190	0.156	0.192	11.57
114)	1,3,5-trichlorobenzene								
	1.068	1.163	0.982	1.056	0.972	0.985	0.924	1.059	0.977
115)	1,2,4-trichlorobenzene								
	0.831	0.743	0.843	0.810	0.654	0.770	0.847	0.838	0.792
116)	hexachlorobutadiene								
	0.323	0.340	0.321	0.288	0.278	0.351	0.441	0.335	16.01
117)	naphthalene								
	2.244	1.414	1.995	2.302	2.206	2.085	2.102	2.244	1.942
118)	1,2,3-trichlorobenzene								
	0.655	0.747	0.712	0.703	0.714	0.656	0.698	0.669	0.694
119)	hexachloroethane								
	0.564	0.533	0.584	0.573	0.525	0.545	0.582	0.494	0.550
120)	benzyl chloride								
	1.631	1.605	1.992	2.008	1.931	1.677	1.567	1.773	11.00
121)	2-methylnaphthalene *This compound fails Initial Calibration criteria*								
	6.660	8.931	8.857	8.489	8.195	8.226	11.24		
122)	pentafluorobenzene (a) -----ISTD-----								
123)	Freon 142B								
	0.753	0.724	0.775	0.752	0.699	0.770	0.893	0.767	8.03
124)	allyl chloride								
	0.251	0.253	0.276	0.280	0.273	0.269	0.333	0.276	9.93
125)	1,4-dichlorobenzene-d -----ISTD-----								
126)	pentachloroethane								
	0.461	0.418	0.498	0.538	0.535	0.461	0.571	0.498	10.85

(#)= Out of Range ### Number of calibration levels exceeded format ###									

ML10152.M Tue Feb 08 15:31:25 2022 1

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Continuing Calibration Summary

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Job Number: JD40006
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VL10187-CC10152
 Lab FileID: L338145.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\lo...-24\vl10187\l338145.d Vial: 82
 Acq On : 22 Feb 2022 10:09 am Operator: nicoleh
 Sample : cc10152-20 Inst : GCMSL
 Misc : MS56837,VL10187,5,,,,,1 Multiplr: 1.00
 MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\ML10152.M (RTE Integrator)
 Title : SW846 Method V8260C/D, column ZB-624 60m x 0.25mm x 1.4 um
 Last Update : Tue Feb 08 15:29:57 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
1 I	tert butyl alcohol-d9	1.000	1.000	0.0	106	0.00	3.12
2	1,4-dioxane	0.164	0.150	8.5	99	0.00	5.35
3	ethanol	0.153	0.140	8.5	96	0.00	2.54
4 M	tertiary butyl alcohol	1.205	1.245	-3.3	109	0.00	3.18
5 I	pentafluorobenzene	1.000	1.000	0.0	103	0.00	4.35
6	chlorodifluoromethane	0.476	0.458	3.8	93	0.00	1.70
7	dichlorodifluoromethane	0.777	0.769	1.0	103	0.00	1.68
8	chloromethane	0.590	0.501	15.1	80	0.00	1.84
9	vinyl chloride	0.850	0.677	20.4#	77	0.00	1.93
10	bromomethane	0.505	0.386	23.6#	85	0.00	2.18
11	chloroethane	0.530	0.367	30.8#	79	0.00	2.26
12	trichlorofluoromethane	0.812	0.807	0.6	96	0.00	2.45
13	ethyl ether	0.292	0.268	8.2	97	0.00	2.63
14	acrolein	0.089	0.087	2.2	97	0.00	2.74
15	freon 113	0.384	0.351	8.6	90	0.00	2.81
16	1,1-dichloroethene	0.439	0.392	10.7	93	0.00	2.82
17	acetone	0.043	0.044	-2.3	99	0.00	2.83
18	acetonitrile	0.038	0.035	7.9	97	0.00	3.02
19	iodomethane	0.473	0.340	28.1#	71	0.00	2.93
20	iso-butyl alcohol	0.023	0.019	17.4	91	0.00	4.50
21	carbon disulfide	1.368	1.247	8.8	92	0.00	3.00
22	methylene chloride	0.538	0.461	14.3	96	0.00	3.15
23	methyl acetate	0.093	0.093	0.0	111	0.00	3.04
24	methyl tert butyl ether	1.453	1.394	4.1	98	0.00	3.32
25	trans-1,2-dichloroethene	0.494	0.425	14.0	86	0.00	3.34
26	hexane	0.690	0.656	4.9	98	0.00	3.52
27	di-isopropyl ether	1.489	1.298	12.8	89	0.00	3.62
28	ethyl tert-butyl ether	1.440	1.343	6.7	96	0.00	3.87
29	2-butanone	0.067	0.064	4.5	104	0.00	3.99
30 M	1,1-dichloroethane	0.862	0.823	4.5	100	0.00	3.63
31	chloroprene	0.645	0.607	5.9	97	0.00	3.69
32	acrylonitrile	0.192	0.177	7.8	88	0.00	3.30
33	vinyl acetate	0.133	0.103	22.6#	87	0.00	3.61
34	ethyl acetate	0.080	0.072	10.0	100	0.00	4.00
35	2,2-dichloropropane	0.740	0.712	3.8	96	0.00	4.04
36	cis-1,2-dichloroethene	0.545	0.481	11.7	92	0.00	4.02
37	propionitrile	0.068	0.066	2.9	96	0.00	4.04
38	methyl acrylate	0.102	0.080	21.6#	86	0.00	4.05
39	bromochloromethane	0.255	0.220	13.7	89	0.00	4.19
40	tetrahydrofuran	0.076	0.068	10.5	104	0.00	4.20
41	chloroform	0.922	0.841	8.8	96	0.00	4.24

Continuing Calibration Summary

Job Number: JD40006
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VL10187-CC10152
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42	S	dibromofluoromethane (s)	0.442	0.386	12.7	89	0.00	4.36
43		methacrylonitrile	0.229	0.214	6.6	104	0.00	4.15
44		1,1,1-trichloroethane	0.770	0.681	11.6	95	0.00	4.39
45		cyclohexane	0.747	0.683	8.6	95	0.00	4.45
46		1,1-dichloropropene	0.671	0.629	6.3	96	0.00	4.49
47		carbon tetrachloride	0.672	0.588	12.5	94	0.00	4.50
48		isopropyl acetate	0.120	0.110	8.3	104	0.00	4.61
49		tert amyl alcohol	0.017	0.018	-5.9	100	0.00	4.59
50	I	1,4-difluorobenzene	1.000	1.000	0.0	92	0.00	4.92
51	S	1,2-dichloroethane-d4 (s)	0.295	0.326	-10.5	99	0.00	4.61
52		tert-amyl methyl ether	0.933	0.982	-5.3	96	0.00	4.70
53		2,2,4-trimethylpentane	0.846	0.908	-7.3	93	0.00	4.70
54		n-butyl alcohol	0.008	0.009	-12.5	95	0.00	4.97
55	M	benzene	1.202	1.248	-3.8	93	0.00	4.64
56		heptane	0.190	0.193	-1.6	103	0.00	4.82
57		1,2-dichloroethane	0.431	0.436	-1.2	93	0.00	4.67
58		trichloroethene	0.324	0.321	0.9	90	0.00	5.11
59		ethyl acrylate	0.373	0.385	-3.2	94	0.00	5.13
60		2-nitropropane	0.094	0.096	-2.1	109	0.00	5.66
61		2-chloroethyl vinyl ether	0.159	0.165	-3.8	95	0.00	5.69
62		methyl methacrylate	0.093	0.098	-5.4	96	0.00	5.31
63		1,2-dichloropropane	0.315	0.327	-3.8	97	0.00	5.32
64		methylcyclohexane	0.526	0.537	-2.1	94	0.00	5.30
65		dibromomethane	0.199	0.201	-1.0	93	0.00	5.38
66		bromodichloromethane	0.433	0.442	-2.1	93	0.00	5.50
67		cis-1,3-dichloropropene	0.542	0.558	-3.0	100	0.00	5.84
68		epichlorohydrin	0.032	0.034	-6.3	107	0.00	5.75
69		4-methyl-2-pentanone	0.117	0.130	-11.1	95	0.00	5.94
70		3-methyl-1-butanol	0.008	0.009	-12.5	102	0.00	5.96
71	I	chlorobenzene-d5	1.000	1.000	0.0	91	0.00	7.32
72	S	toluene-d8 (s)	1.368	1.317	3.7	90	0.00	6.07
73		toluene	0.944	0.920	2.5	88	0.00	6.12
74		trans-1,3-dichloropropene	0.593	0.588	0.8	94	0.00	6.29
75		ethyl methacrylate	0.499	0.555	-11.2	99	0.00	6.31
76		1,1,2-trichloroethane	0.295	0.303	-2.7	94	0.00	6.47
77		2-hexanone	0.130	0.145	-11.5	100	0.00	6.62
78		tetrachloroethene	0.406	0.374	7.9	86	0.00	6.56
79		1,3-dichloropropane	0.592	0.620	-4.7	99	0.00	6.61
80		butyl acetate	0.220	0.237	-7.7	97	0.00	6.71
81		dibromochloromethane	0.385	0.384	0.3	88	0.00	6.80
82		1,2-dibromoethane	0.367	0.368	-0.3	92	0.00	6.92
83		n-butyl ether	1.318	1.394	-5.8	91	0.00	7.38
84		chlorobenzene	1.038	0.980	5.6	87	0.00	7.34
85		1,1,1,2-tetrachloroethane	0.354	0.345	2.5	86	0.00	7.41
86		ethylbenzene	1.669	1.678	-0.5	91	0.00	7.42
87		m,p-xylene	0.655	0.631	3.7	85	0.00	7.53
88		o-xylene	0.674	0.646	4.2	87	0.00	7.89
89		butyl acrylate	0.612	0.681	-11.3	98	0.00	7.80
90		styrene	1.106	1.068	3.4	89	0.00	7.91
91		bromoform	0.276	0.243	12.0	84	0.00	8.08
92		isopropylbenzene	1.630	1.647	-1.0	102	0.00	8.22
93		cis-1,4-dichloro-2-butene	0.184	0.123	33.2#	69	0.00	8.27
94	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	89	0.00	9.51
95	S	4-bromofluorobenzene (s)	0.970	1.112	-14.6	103	0.00	8.39
96		bromobenzene	0.938	0.960	-2.3	86	0.00	8.54
97		1,1,2,2-tetrachloroethane	1.080	1.210	-12.0	97	0.00	8.51
98		trans-1,4-dichloro-2-bute	0.263	0.212	19.4	69	0.00	8.55

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Continuing Calibration Summary

Job Number: JD40006
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: VL10187-CC10152
Lab FileID: L338145.D

Page 3 of 3

99	1,2,3-trichloropropane	0.296	0.324	-9.5	90	0.00	8.57
100	n-propylbenzene	4.243	4.543	-7.1	91	0.00	8.62
101	2-chlorotoluene	0.894	0.903	-1.0	88	0.00	8.71
102	4-chlorotoluene	0.918	0.930	-1.3	91	0.00	8.83
103	1,3,5-trimethylbenzene	2.958	3.022	-2.2	90	0.00	8.78
104	tert-butylbenzene	2.527	2.657	-5.1	90	0.00	9.09
105	1,2,4-trimethylbenzene	3.051	3.124	-2.4	92	0.00	9.15
106	sec-butylbenzene	3.661	3.871	-5.7	92	0.00	9.31
107	1,3-dichlorobenzene	1.681	1.646	2.1	85	0.00	9.44
108	p-isopropyltoluene	3.035	3.037	-0.1	85	0.00	9.46
109	1,4-dichlorobenzene	1.712	1.565	8.6	84	0.00	9.54
110	1,2,3-trimethylbenzene	2.766	2.862	-3.5	89	0.00	9.55
111	1,2-dichlorobenzene	1.565	1.563	0.1	89	0.00	9.89
112	n-butylbenzene	1.518	1.541	-1.5	90	0.00	9.85
113	1,2-dibromo-3-chloropropa	0.192	0.214	-11.5	100	0.00	10.66
114	1,3,5-trichlorobenzene	1.021	1.105	-8.2	92	0.00	10.84
115	1,2,4-trichlorobenzene	0.792	0.860	-8.6	90	0.00	11.47
116	hexachlorobutadiene	0.335	0.397	-18.5	100	0.00	11.61
117	naphthalene	2.059	2.441	-18.6	96	0.00	11.74
118	1,2,3-trichlorobenzene	0.694	0.762	-9.8	97	0.00	11.96
119	hexachloroethane	0.550	0.503	8.5	77	0.00	10.16
120	benzyl chloride	1.773	1.886	-6.4	100	0.00	9.64
121	2-methylnaphthalene	8.226	9.041	-9.9	98	0.00	12.87
122	pentafluorobenzene (a)	1.000	1.000	0.0	71	0.00	4.35
123	Freon 142B		-----NA-----				
124	allyl chloride		-----NA-----				
125	1,4-dichlorobenzene-d4 (a)	1.000	1.000	0.0	73	0.00	9.51
126	pentachloroethane		-----NA-----				

(#) = Out of Range
L337232.D ML10152.M

SPCC's out = 0 CCC's out = 0
Thu Feb 24 04:32:33 2022

6.7.8
6

Surrogate Recovery Summary

Page 1 of 1

Job Number: JD40006
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Method: SW846 8260D

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JD40006-1	3D173836.D	110	102	99	95
JD40006-2	3D173844.D	111	104	98	95
JD40006-3	3D173845.D	111	101	98	96
JD40006-4	L338161.D	88	117	101	117* a
JD40006-5	3D173830.D	109	103	100	96
JD40006-6	3D173835.D	109	101	98	96
JD39614-36MS	L338155.D	90	108	93	115* a
JD39614-36MSD	L338156.D	88	107	97	118* a
JD39952-4MS	3D173832.D	112	100	93	99
JD39952-4MSD	3D173833.D	110	97	94	98
V3D7372-BS	3D173822.D	101	95	95	101
V3D7372-MB	3D173824.D	101	100	100	96
VL10187-BS	L338147.D	89	109	93	116* a
VL10187-MB	L338149.D	88	110	103	119* a

Surrogate
Compounds

Recovery
Limits

S1 = Dibromofluoromethane
S2 = 1,2-Dichloroethane-D4
S3 = Toluene-D8
S4 = 4-Bromofluorobenzene

80-120%
80-120%
80-120%
82-114%

(a) Outside of in house control limits, but within reasonable method recovery limits.

6.6.1
6

Continuing Calibration Summary

Page 1 of 2

Job Number: JD40006
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: E4P2708-CC2704
 Lab FileID: 4P51937.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E4P2708\4p51937.D Vial: 2
 Acq On : 22 Feb 2022 11:49 pm Operator: chriss2
 Sample : cc2704-0.1 Inst : MS4P
 Misc : op38241a,e4p2708,250,,,1,1 Multiplr: 1.00
 MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\MET...\M4P2704SIMLVI.M (RTE Integrator)
 Title : Semi Volatile Extractables by GC/MS
 Last Update : Mon Feb 21 11:29:18 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
1 I	1-Methylnaphthalene-d10	1.000	1.000	0.0	145	-0.03	6.31
2 t	1,4-Dioxane	0.250	0.159	36.4#	80	-0.01	1.41
3 S	2-Fluorophenol	0.607	0.559	7.9	132	-0.03	3.08
4 S	Phenol-d5	0.919	0.925	-0.7	148	-0.03	4.08
5	Phenol	1.005	1.011	-0.6	147	-0.04	4.09
7 S	Nitrobenzene-d5	1.041	0.986	5.3	144	-0.03	4.86
8 t	Naphthalene	2.694	2.581	4.2	149	-0.03	5.56
9 t	Hexachlorobutadiene	0.958	0.838	12.5	140	-0.03	5.70
10 t	2-Methylnaphthalene	1.476	1.362	7.7	154	-0.03	6.25
11 t	1-Methylnaphthalene	1.542	1.386	10.1	148	-0.03	6.34
12	Hexachlorocyclopentadiene	0.415	0.403	2.9	140	-0.02	6.40
13 I	Fluorene-d10	1.000	1.000	0.0	150	-0.03	7.77
14 S	2-Fluorobiphenyl	1.283	1.188	7.4	148	-0.02	6.63
15 t	Acenaphthylene	1.753	1.646	6.1	154	-0.03	7.12
16 t	Acenaphthene	1.279	1.206	5.7	151	-0.03	7.29
17 t	Fluorene	1.343	1.225	8.8	150	-0.03	7.80
----- True Calc. % Drift -----							
18	4,6-dinitro-2-methylpheno	500.000	571.984	-14.4	202	-0.03	7.90
----- AvgRF CCRF % Dev -----							
19 S	2,4,6-Tribromophenol	0.336	0.376	-11.9	160	-0.03	8.04
20	Fluoranthene-d10	1.000	1.000	0.0	151	-0.04	9.87
21 t	Hexachlorobenzene	0.504	0.465	7.7	149	-0.03	8.33
----- True Calc. % Drift -----							
22 t	Pentachlorophenol	500.000	507.394	-1.5	160	-0.02	8.56
----- AvgRF CCRF % Dev -----							
23 t	Phenanthrene	1.318	1.166	11.5	148	-0.03	8.72
24 t	Anthracene	1.254	1.155	7.9	155	-0.03	8.78
25 t	Fluoranthene	1.515	1.337	11.7	151	-0.03	9.89
26 t	Pyrene	1.412	1.327	6.0	156	-0.04	10.10
27 S	Terphenyl-d14	0.674	0.657	2.5	155	-0.03	10.30
28 t	Benzo[a]anthracene	0.987	1.000	-1.3	160	-0.03	11.28
29 t	Chrysene	1.058	1.017	3.9	152	-0.03	11.31
30 I	Benzo(a)pyrene-d12	1.000	1.000	0.0	132	-0.03	12.51
31 t	Benzo[b]fluoranthene	1.594	1.814	-13.8	156	-0.03	12.26
32 t	Benzo[k]fluoranthene	1.676	1.589	5.2	132	-0.03	12.29

8.6.8
8

Continuing Calibration Summary

Job Number: JD40006
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: E4P2708-CC2704
Lab FileID: 4P51937.D

33	t	Benzo[a]pyrene	1.867	1.658	11.2	131	-0.03	12.53
34	t	Indeno[1,2,3-cd]pyrene	1.807	2.135	-18.2	159	-0.04	13.41
35	t	Dibenz[a,h]anthracene	1.512	1.759	-16.3	160	-0.03	13.43
36	t	Benzo[g,h,i]perylene	1.655	1.914	-15.6	154	-0.04	13.63

(#) = Out of Range
4p51870.D M4P2704SIMLVI.M SPCC's out = 0 CCC's out = 0
Wed Feb 23 12:28:57 2022 YING

8.6.8
8

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: JD40006
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38283-BS1	4P51940.D	1	02/23/22	CS	02/22/22	OP38283	E4P2708
OP38283-BSD ^a	4P51941.D	1	02/23/22	CS	02/22/22	OP38283	E4P2708

The QC reported here applies to the following samples:

Method: SW846 8270E BY SIM

JD40006-1, JD40006-2, JD40006-3, JD40006-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
123-91-1	1,4-Dioxane	0.8	0.344	43	ND	0* ^b	200* ^c	10-110/40

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
4165-60-0	Nitrobenzene-d5	60%	34%	29-124%
321-60-8	2-Fluorobiphenyl	62%	42%	23-122%
1718-51-0	Terphenyl-d14	78%	55%	22-130%

(a) Recovery indicates possible low bias. Since blank spike recoveries are within control limits, data are qualified and reported.

(b) Outside of in house control limits.

(c) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

March 19th, 2022

Mr. Jesse Mausner, PG, LSRP, Project Manager
SESI Consulting Engineers
12A Maple Avenue
Pine Brook NJ, 07058

Re: Data Usability Summary Reports and Quality Assurance Validation Analyses for
SGS North America Inc. Project **(SDG) No.: JD40006R**

Client Project ID: 11819–1001 Whitlock Avenue, Bronx, NY

Dear Mr. Mausner,

I thank you for your confidence in our data validation services and look forward to the growth of our business relationship. I Have enclosed with this letter the data usability summary reports (DUSRs) and data validation summaries for the above referenced laboratory (SDG) numbers issued by SGS North America Inc.

The overall evaluation of the SDG# JD40006R displays good degree of confidence and acceptance in accordance with the guidelines in the USEPA National Functional Guidelines and the method and QC Criteria specified in NYSDEC ASP Documents except for some qualified results that are identified in the validation summaries based solely on the stated above validation guidance criteria. However, the qualified data (Bias low, Bias High, Unreliable or unusable) may be subject to the user's reconsideration or determination in the circumstances of obtaining additional information that is not contained in the data validation criteria.

If you have any questions or comments regarding any of the attached data usability summary reports and or the data validation summaries, please do not hesitate to contact me at (413) 875-5049 or via email at hanibaltayeh@gmail.com.

Sincerely,



Hanibal C. Tayeh, Ph.D.

Data Validation and Forensic Geochemistry Expert

Files: DUSR-SESI-11819–1001 Whitlock Avenue, Bronx, NY - JD40006R

DATA USABILITY SUMMARY REPORT (DUSR)

Site Location: 1001 Whitlock Avenue, Bronx, NY

SGS North America Inc.

Laboratory (SDG) # JD40006R

Project No. 11819

Prepared for:

Mr. Jesse Mausner, PG, LSRP, Project Manager

SESI Consulting Engineers

12A Maple Avenue

Pine Brook NJ, 07058

Prepared by:

Hanibal Tayeh, Ph.D.

Data Validation and Forensic Geochemistry Expert

On

March 19th, 2022

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 2. GLOSSARY OF DATA VALIDATION QUALIFIERS
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 5. DATA VALIDATION ACTIVE STANDARD OPERATING PROCEDURES (SOPs)
 6. DATA VALIDATION REPORT NARRATIVE
- SUPPORT DOCUMENTATION (Refer to the electronic Data Package PDF file)

1. GLOSSARY OF ACRONYMS & TERMS

The following acronyms and terms may have been used in the descriptive process of the Organic and Inorganic Data Validation.

Acronyms:

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene (volatile instrument performance check)
BNA	Base/Neutral/Acid
CARD	CLP Analytical Results Database
CCB	Continuing Calibration Blank
CCCs	Calibration Check Compounds
CCS	Contract Compliance Screening
CCV	Continuing Calibration Verification
CF	Calibration Factor
CLP	Contract Laboratory Program
CN	Cyanide
COC	Chain of Custody
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
CSF	Complete SDG File
CV	Cold Vapor
%D	Percent Difference
DAS	Delivery of Analytical Services
DCAA	2,4-Dichlorophenylacetic acid
DCB	Decachlorobiphenyl (Pesticide/PCB/ surrogate compound)
DFTPP	Decafluorotriphenylphosphine (semivolatile instrument performance check)
DSF	Data Summary Form
DVA	Data Validation Assessment
ECD	Electron-Capture Detector
EICP	Extended Ion Current Profile
EPA	United States Environmental Protection Agency
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas Chromatography
GC/EC	Gas Chromatography/Electron Capture
GC/MS	Gas Chromatography/Mass Spectra
GPC	Gel Permeation Chromatography (Clean Up)
ICAL	Initial Calibration
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit

HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

IRDA	Inorganic Regional Data Assessment
IS	Internal Standard
LCS	Laboratory Control Sample
LCL	Lower Control Limit
MCL	Maximum Contamination Level
MDL	Method Detection Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
m/z	The ratio of mass (m) to charge (z) of ions measured by GC/MS
OADS	Organic Analysis Data Sheet (Form 1)
ORDA	Organic Regional Data Assessment
PB	Preparation Blank
PCB	Poly Chlorinated Biphenyl
PEM	Performance Evaluation Mixture
PFAS	Polyfluorinated Alkyl Substances (PFAS analytes are listed below)
PRP	Potential Responsible Party
QA/QC	Quality Assurance/Quality Control
QAPjP	Quality Assurance Project Plan
QC	Quality Control
%R	Percent Recovery of spiked amount
RAS	Routine Analytical Services
RF	Response Factor
RIC	Reconstructed Ion Chromatogram
RPD	Relative Percent Difference
RRF	Relative Response Factor
RSD	Relative Standard Deviation
RT	Retention Time
RTW	Retention Time Window
SDG	Sample Delivery Group
SMC	System Monitoring Compound
SMO	Sample Management Office
SOP	Standard Operation Procedures
SOW	Statement of Work
SPCCs	System Performance Check Compounds
SSL	Samples Shipping Log
SVOA	Semivolatile Organic Analyte
TAL	Target Analyte List
TCL	Target Compound List
TCX	Tetrachloro-m-Xylene (Pesticide/PCB surrogate compound)
TIC	Tentatively Identified Compound
TPH	Total Petroleum Hydrocarbons
TR	Traffic Report
UCL	Upper Control Limit
VOA	Volatile Organic Analyte
VTSR	Validated Time of Sample Receipt

Polyfluorinated Alkyl Substances (PFAS) Acronyms

PFBA	Perfluorobutanoic acid
PFPeA	Perfluoropentanoic acid
PFHxA	Perfluorohexanoic acid
PFHpA	Perfluoroheptanoic acid
PFOA	Perfluorooctanoic acid
PFNA	Perfluorononanoic acid
PFDA	Perfluorodecanoic acid
PFUnA	Perfluoroundecanoic acid
PFDoA	Perfluorododecanoic acid
PFTriA or PFTriDA	Perfluorotridecanoic acid
PFTeA or PFTA	Perfluorotetradecanoic acid
PFBS	Perfluorobutanesulfonic acid
PFPeS	Perfluoropentanesulfonic acid
PFHxS	Perfluorohexanesulfonic acid
PFHpS	Perfluoroheptanesulfonic acid
PFOS	Perfluorooctanesulfonic acid
PFNS	Perfluorononanesulfonic acid
PFDS	Perfluorodecanesulfonic acid
FOSA	Perfluorooctane Sulfonamide
NMeFOSAA	N-methyl perfluorooctane sulfonamidoacetic acid
NEtFOSAA	N-ethyl perfluorooctane sulfonamidoacetic acid
4:2 FTS or 4:2	1H, 1H, 2H, 2H-perfluorohexanesulfonic acid
6:2 FTS or 6:2	1H, 1H, 2H, 2H-perfluorooctanesulfonic acid or 6:2 Fluorotelomersulfonate
8:2 FTS or 8:2	1H, 1H, 2H, 2H-perfluorodecanesulfonic acid or 8:2 Fluorotelomersulfonate

Terms:

Associated Samples: Any sample related to a particular QC analysis.

Case: A finite, usually predetermined number of samples collected over a given time period for a particular site. A Case consists of one or more Sample Delivery Group(s).

Continuing Calibration Blank (CCB): A deionized water sample run every ten (10) samples designed to detect any carryover contamination.

Continuing Calibration Verification (CCV): A deionized water sample run every ten (10) samples designed to detect any carryover contamination.

Contract Compliance Screening (CCS): A process in which the SMO inspects the data for contractual compliance and provides EMSL-LV laboratories and the Regions with their findings.

Contractual Holding Time: The time from VTSR (validated time of sample receipt) to laboratory extraction and /or analysis.

Data Validation Qualifier (DVQ): This refers to the column on the data summary form in which EPA Region III and other qualifiers have been placed by the data validator.

Data Validation Result (DVR): This refers to the column on the data summary form used to report results that have been modified by the data validator. A result in the DVR column that is qualified "U" indicates a modification of the reporting limit.

Field Blank Field blanks are intended to identify contaminants that may have been introduced in the field. Examples are rinsate blank (RB), field blanks (FB) and trip blank (TB).

Field Duplicate: A duplicate sample generated in the field; not in the laboratory.

Initial Calibration (ICAL): The establishment of a calibration curve with the appropriate number of standards and concentration ranges. The calibration curve plots absorbances and/or emissions versus concentration of the standards.

Initial Calibration Blank (ICB): First blank run after the calibration curve.

Initial Calibration Verification (ICV): First standard run after the calibration curve.

Matrix Spike/Matrix Spike Duplicate (MS/MSD): Introduction of a known concentration of a compound into a sample to provide information about the effect of sample matrix on the extraction and/or measurement methodology.

Post Digestion Spike: The addition of known amount of standard after digestion. (Also identified as analytical spike, or spike, for furnace analyses).

Preparation Blank (PB): Blank taken through the digestion process to detect internal laboratory contamination.

Performance Evaluation Mixture: A standard used to verify that the ICAL sequence is stable throughout the GC or GC/MS analyses.

Sample Delivery Group (SDG): Defined by one of the following, whichever occurs first:

- case of sample
- each twenty field samples in a case or
- each 14-day calendar period during which field samples in a case are received, beginning with the receipt of the first sample in the SDG.

Serial Dilution: A sample run at a specific dilution to determine whether any significant chemical or physical interferences exist due to sample matrix effect, for ICP only.

Technical Holding Time: The time from sample collection to laboratory extraction and /or analysis.

2. GLOSSARY OF DATA VALIDATION QUALIFIERS

(Used in the QA/QC Reviews for USEPA Region II)

The qualifiers listed below are used for data usability summary report (DUSR) purposes. However, it is important to note that the data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+	=	Analyte is present. Reported value may be biased high and associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

3. NYS DEC DATA USABILITY SUMMARY PARAMETERS

The parameters listed below are used for data usability summary report (DUSR) evaluation.

<i>Samples Handling and Management</i>
<i>Data Validation References</i>
<i>Laboratory Data Packages</i>
<i>Laboratory Analytical Methods</i>
<i>DATA Usability Assessment Summary</i>

4. DATA VALIDATION SUMMARY PARAMETERS

The parameters listed below are used for data validation evaluation.

	<i>Organic Data</i>	<i>Inorganic Data</i>
<i>Data Completeness</i>	X	X
<i>Holding Time</i>	X	X
<i>Chromatographic Behavior</i>	X	
<i>Compound Identification</i>	X	X
<i>GC/MS Tuning and Mass Calibration</i>	X	
<i>Initial Calibration Verification</i>	X	X
<i>Continuing Calibration</i>	X	X
<i>Method Blank Verification</i>	X	X
<i>Internal Standard Area Summary</i>	X	
<i>Surrogate Recoveries</i>	X	
<i>Matrix Spike/Matrix Spike Duplicate</i>	X	X
<i>Laboratory Control Sample (LCS)</i>	X	X
<i>Laboratory and Field Duplicates</i>	X	X
<i>ICP Interference Check Sample results</i>		X
<i>ICP Serial Dilution results</i>		X
<i>ICP CRDL Standard</i>		X
<i>Post Digestion Spike Analysis</i>		X
<i>Analyte Quantitation</i>		X

5. DATA VALIDATION ACTIVE STANDARD OPERATING PROCEDURES (SOPs)

Region 2 Quality Assurance Guidance and Standard Operating Procedures

<https://www.epa.gov/quality/region-2-quality-assurance-guidance-and-standard-operating-procedures>

Inorganic Validation SOPs

SOP #	Description	Date
SOP HW-3a ICP-AES Rev1 w/CRF	CLP ISM02.2 ICP-AES	September 2016
SOP HW-3b ICP-MS Rev1 w/CRF	CLP ISM02.2 ICP-MS	September 2016
SOP HW-3c Hg & CN Rev1 w/CRF	CLP ISM02.2 Mercury and Cyanide	September 2016

Organic Validation SOPs - CLP

SOP #	Description	Date
SOP HW-33A Low Medium VOA Rev 1 w/CRF	EPA CLP Method SOM02.2 for Low/Medium VOA	September 2016
SOP HW-34A Trace VOA Rev1 w/CRF	EPA CLP Method SOM02.2 for Trace VOA	September 2016
SOP HW-35A Rev1 w/CRF	EPA CLP Method SOM02.2 for Semi-Volatiles	September 2016
SOP HW-36A Rev 1 w/CRF	EPA CLP Method SOM02.2 for Pesticides	October 2016
SOP HW-37A Rev 0 w/CRF	EPA CLP Method SOM02.2 for PCBs Aroclor	June 2015

Organic Validation SOPs – Other

SOP #	Description	Date
SOP HW-11 Rev 3	SW-846 Method 8280 for Polychlorinated Dibenzodioxins/Polychlorinated Dibenzofurans	December 2010
SOP HW-16 Rev. 2.1	SW-846 Method 8330A Nitroaromatics and Nitroamines by HPLC	December 2010
SOP HW-17 Rev.3.1	SW-846 Method 8151A for Chlorinated Herbicides by GC	December 2010
SOP HW-19 Rev. 1.1	SW-846 Method 8290 for Polychlorinated dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by HRMS	December 2010
SOP HW-22 Rev. 5	SW-846 Method 8270D for Semivolatile Organic Compounds by GC/MS	December 2010
SOP HW-25 Rev. 3	EPA Method 1613, Revision B Tetra-through Octa-chlorinated Dioxins and Furans by Isotope Dilution by HRGC/HRMS	December 2010
SOP HWSS 24 Rev. 4	SW-846 Methods 8260B & 8260C for VOCs by GC/MS	October 2014
SOP HW-29 Rev. 2	EPA Method 524.2 for Purgeable Organic Compounds in Water by GC/MS	November 2010
SOP HW-31 Rev. 6	TO-15 Air Analysis for VOCs	September 2016
SOP HW-44 Rev. 1.1	SW-846 Method 8081B for Pesticide Compounds Organochlorine Pesticides by GC	December 2010
SOP HW-46 Rev. 1	EPA Method 1668 A for Chlorinated Biphenyl Congeners and EPA Non-RAS CBC01.0	September 2008

SOP HW-55 Rev. 2 w/CRF	EPA Non-RAS DLM02.0 for Tetra -through Octa-Chlorinated Dioxins and Furans by Isotope Dilution	December 2008
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6. DATA VALIDATION REPORT NARRATIVE

NYS DEC Data Usability Summary Report	SDG # JD40006R
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NYS DEC Data Usability Summary Report
SDG # JD40006R

Site Location	1001 Whitlock Avenue, Bronx, NY
Data Validation for Analytical Methods	Cyanide (SW846 9012B)
Number of Samples & Matrix	3 Ground Water Samples, 1 Duplicate, 1 Field Blank
Sampled On	02/18/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD40006R (-2-3-4-5)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 19 th , 2022

• **SAMPLE HANDLING AND MANAGEMENT**

As per the chain of custody (COC) record included in this specific SDG, samples associated with this data set were collected on February 18th, 2022, using the proper containers in accordance with the Sample Integrity and Preservation section of the stated above USEPA method and received by the laboratory on February 18th, 2022. The attached chain of custody (COC) displays a satisfactory record in terms of client and project information, site location, field sampling details (sampler, collection date and time), sample identification and matrix, preservation, required analysis, deliverable type and date, data management process and comparison.

Client Sample Identification	Laboratory Sample Identification
R1-MW-4	JD40006-2R
MW-2R	JD40006-3R
DUP	JD40006-4R
FIELD BLANK	JD40006-5R

• **DATA VALIDATION REFERENCES**

The organic data validation is conducted in accordance with the guidelines in the USEPA National Functional Guidelines for Organic Data Review and the USEPA Region II SOP HW-6-CLP Organic Data Review Preliminary review and the method and QC Criteria specified in NYSDEC ASP Documents.

The inorganic data validation is conducted in accordance with the guidelines in the USEPA National Functional Guidelines for Inorganic Data Review and the USEPA Region II SOP HW-2, Evaluation of Metals Data for the Contract Laboratory Program based on ILM05.3 and the method and QC Criteria specified in NYSDEC ASP Documents.

- **LABORATORY DATA PACKAGES**

The laboratory data packages for the stated SDG above is considered satisfactory in terms of pagination, quality control narration and completeness. Each package contained the laboratory quality assurance summary report, quality control summary data, sample nonconformance summaries, the required data package forms and tables in accordance with NYSDEC ASP documents, instrument tuning information, sample preparation and analysis batch and all associated standard, quality control and sample raw data.

- **LABORATORY ANALYTICAL METHODS**

A peer review of the quality assurance criteria listed in the laboratory data package shows with good degree of certainty the laboratory's compliance with the procedures set forth in the required USEPA analytical methods as indicated in the chain of custody. No deviations from the said methods have been noticed.

- **DATA USABILITY ASSESSMENT SUMMARY**

The overall data package assessment provided by the laboratory for the stated above sample delivery group (SDG) suggests acceptable laboratory performances of the required methods. All samples were successfully analyzed for all target compounds in accordance with the Quality Assurance/Quality Control (QA/QC) requirements for the USEPA analytical methods used for the analyses. In view of the data usability and completeness, the minor issues listed below regarding biases identified during data validation should be taken into high degree of consideration. They are as follows:

✓ **Cyanide - SW846 9012B Method**

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detected results of Cyanide in sample JD40006-2R, should be qualified Estimated Bias Low (J-). -Non-Detected results of Cyanide in sample JD40006-2R, should be qualified Estimated (UJ).	MS/MSD

Data Validation Assessment

SDG # 40006R

Data Validation for Analytical Method	Cyanide (SW846 9012B Method)
Number of Samples & Matrix	3 Ground Water Samples, 1 Duplicate, 1 Field Blank
Sampled On	02/18/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD40006R (-2-3-4-5)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Initial Calibration Verification (ICCV):** As indicated in the method calibration criteria, the initial calibration standards (ICV, CCV) used in this data set have been evaluated for compliance with method criteria ($90\% < \%Rs < 110\%$):
-In File ID: E022822W1.CN, %Rs for Cyanide standards (ICV, CCV) were within method control limits.
Quality Judgement: No actions are required.
- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection of Cyanide above the RL.
Quality Judgement: No actions are required.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes ($\%Rs$ within control limits-80-120%). The following summarizes this evaluation:
-In Batch IDs (GP38747/GN26836), for Cyanide LCS evaluation, %Rs were within the method control limits.
Quality Judgement: No actions are required.
- **Matrix Spike/Matrix Spike Duplicate (MS/MSD):**
-In batch ID: GP38747/GN26836, sample ID: JD40006-2R, was used for matrix spike evaluation. %Rs were below the method control limits (75-125%).
Quality Judgement:

HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

-Detected results of Cyanide in sample JD40006-2R, should be qualified Estimated Bias Low (J-).

-Non-Detected results of Cyanide in sample JD40006-2R, should be qualified Estimated (UJ).

- **Laboratory Duplicate (DUP):** Cyanide Duplicate analysis has been evaluated for relative percent differences compliance with the method criteria (%RPDs <20% for aqueous and <35% for soil matrices):
-%RPDs for laboratory duplicate were below the allowable maximums.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Validated QA Data

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD40006R
Account: SESINJPB - SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Cyanide	GP38747/GN26836	JD40006-2R	mg/l	0.0	0.0833	0.042	50.4N(a)	90-110%

Associated Samples:
Batch GP38747: JD40006-2R, JD40006-3R, JD40006-4R, JD40006-5R
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike recovery indicates possible matrix interference.

6.3
6

HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

March 19th, 2022

Mr. Jesse Mausner, PG, LSRP, Project Manager
SESI Consulting Engineers
12A Maple Avenue
Pine Brook NJ, 07058

Re: Data Usability Summary Reports and Quality Assurance Validation Analyses for
SGS North America Inc. Project **(SDG) No.: JD40098**

Client Project ID: 11819–1001 Whitlock Avenue, Bronx, NY

Dear Mr. Mausner,

I thank you for your confidence in our data validation services and look forward to the growth of our business relationship. I Have enclosed with this letter the data usability summary reports (DUSRs) and data validation summaries for the above referenced laboratory (SDG) numbers issued by SGS North America Inc.

The overall evaluation of the SDG# JD40098 displays good degree of confidence and acceptance in accordance with the guidelines in the USEPA National Functional Guidelines and the method and QC Criteria specified in NYSDEC ASP Documents except for some qualified results that are identified in the validation summaries based solely on the stated above validation guidance criteria. However, the qualified data (Bias low, Bias High, Unreliable or unusable) may be subject to the user's reconsideration or determination in the circumstances of obtaining additional information that is not contained in the data validation criteria.

If you have any questions or comments regarding any of the attached data usability summary reports and or the data validation summaries, please do not hesitate to contact me at (413) 875-5049 or via email at hanibaltayeh@gmail.com.

Sincerely,



Hanibal C. Tayeh, Ph.D.

Data Validation and Forensic Geochemistry Expert

Files: DUSR-SESI-11819–1001 Whitlock Avenue, Bronx, NY – JD40098

DATA USABILITY SUMMARY REPORT (DUSR)

Site Location: 1001 Whitlock Avenue, Bronx, NY

SGS North America Inc.

Laboratory (SDG) # JD40098

Project No. 11819

Prepared for:

Mr. Jesse Mausner, PG, LSRP, Project Manager

SESI Consulting Engineers

12A Maple Avenue

Pine Brook NJ, 07058

Prepared by:

Hanibal Tayeh, Ph.D.

Data Validation and Forensic Geochemistry Expert

On

March 19th, 2022

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1. GLOSSARY OF ACRONYMS & TERMS
 2. GLOSSARY OF DATA VALIDATION QUALIFIERS
 3. NYS DEC DATA UASABILITY SUMMARY PARAMETERS
 4. DATA VALIDATION PARAMETERS
 5. DATA VALIDATION ACTIVE STANDARD OPERATING PROCEDURES (SOPs)
 6. DATA VALIDATION REPORT NARRATIVE
- SUPPORT DOCUMENTATION (Refer to the electronic Data Package PDF file)

1. GLOSSARY OF ACRONYMS & TERMS

The following acronyms and terms may have been used in the descriptive process of the Organic and Inorganic Data Validation.

Acronyms:

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene (volatile instrument performance check)
BNA	Base/Neutral/Acid
CARD	CLP Analytical Results Database
CCB	Continuing Calibration Blank
CCCs	Calibration Check Compounds
CCS	Contract Compliance Screening
CCV	Continuing Calibration Verification
CF	Calibration Factor
CLP	Contract Laboratory Program
CN	Cyanide
COC	Chain of Custody
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
CSF	Complete SDG File
CV	Cold Vapor
%D	Percent Difference
DAS	Delivery of Analytical Services
DCAA	2,4-Dichlorophenylacetic acid
DCB	Decachlorobiphenyl (Pesticide/PCB/ surrogate compound)
DFTPP	Decafluorotriphenylphosphine (semivolatile instrument performance check)
DSF	Data Summary Form
DVA	Data Validation Assessment
ECD	Electron-Capture Detector
EICP	Extended Ion Current Profile
EPA	United States Environmental Protection Agency
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas Chromatography
GC/EC	Gas Chromatography/Electron Capture
GC/MS	Gas Chromatography/Mass Spectra
GPC	Gel Permeation Chromatography (Clean Up)
ICAL	Initial Calibration
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit

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IRDA	Inorganic Regional Data Assessment
IS	Internal Standard
LCS	Laboratory Control Sample
LCL	Lower Control Limit
MCL	Maximum Contamination Level
MDL	Method Detection Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
m/z	The ratio of mass (m) to charge (z) of ions measured by GC/MS
OADS	Organic Analysis Data Sheet (Form 1)
ORDA	Organic Regional Data Assessment
PB	Preparation Blank
PCB	Poly Chlorinated Biphenyl
PEM	Performance Evaluation Mixture
PFAS	Polyfluorinated Alkyl Substances (PFAS analytes are listed below)
PRP	Potential Responsible Party
QA/QC	Quality Assurance/Quality Control
QAPjP	Quality Assurance Project Plan
QC	Quality Control
%R	Percent Recovery of spiked amount
RAS	Routine Analytical Services
RF	Response Factor
RIC	Reconstructed Ion Chromatogram
RPD	Relative Percent Difference
RRF	Relative Response Factor
RSD	Relative Standard Deviation
RT	Retention Time
RTW	Retention Time Window
SDG	Sample Delivery Group
SMC	System Monitoring Compound
SMO	Sample Management Office
SOP	Standard Operation Procedures
SOW	Statement of Work
SPCCs	System Performance Check Compounds
SSL	Samples Shipping Log
SVOA	Semivolatile Organic Analyte
TAL	Target Analyte List
TCL	Target Compound List
TCX	Tetrachloro-m-Xylene (Pesticide/PCB surrogate compound)
TIC	Tentatively Identified Compound
TPH	Total Petroleum Hydrocarbons
TR	Traffic Report
UCL	Upper Control Limit
VOA	Volatile Organic Analyte
VTSR	Validated Time of Sample Receipt

Polyfluorinated Alkyl Substances (PFAS) Acronyms

PFBA	Perfluorobutanoic acid
PFPeA	Perfluoropentanoic acid
PFHxA	Perfluorohexanoic acid
PFHpA	Perfluoroheptanoic acid
PFOA	Perfluorooctanoic acid
PFNA	Perfluorononanoic acid
PFDA	Perfluorodecanoic acid
PFUnA	Perfluoroundecanoic acid
PFDoA	Perfluorododecanoic acid
PFTriA or PFTriDA	Perfluorotridecanoic acid
PFTeA or PFTA	Perfluorotetradecanoic acid
PFBS	Perfluorobutanesulfonic acid
PFPeS	Perfluoropentanesulfonic acid
PFHxS	Perfluorohexanesulfonic acid
PFHpS	Perfluoroheptanesulfonic acid
PFOS	Perfluorooctanesulfonic acid
PFNS	Perfluorononanesulfonic acid
PFDS	Perfluorodecanesulfonic acid
FOSA	Perfluorooctane Sulfonamide
NMeFOSAA	N-methyl perfluorooctane sulfonamidoacetic acid
NEtFOSAA	N-ethyl perfluorooctane sulfonamidoacetic acid
4:2 FTS or 4:2	1H, 1H, 2H, 2H-perfluorohexanesulfonic acid
6:2 FTS or 6:2	1H, 1H, 2H, 2H-perfluorooctanesulfonic acid or 6:2 Fluorotelomersulfonate
8:2 FTS or 8:2	1H, 1H, 2H, 2H-perfluorodecanesulfonic acid or 8:2 Fluorotelomersulfonate

Terms:

Associated Samples: Any sample related to a particular QC analysis.

Case: A finite, usually predetermined number of samples collected over a given time period for a particular site. A Case consists of one or more Sample Delivery Group(s).

Continuing Calibration Blank (CCB): A deionized water sample run every ten (10) samples designed to detect any carryover contamination.

Continuing Calibration Verification (CCV): A deionized water sample run every ten (10) samples designed to detect any carryover contamination.

Contract Compliance Screening (CCS): A process in which the SMO inspects the data for contractual compliance and provides EMSL-LV laboratories and the Regions with their findings.

Contractual Holding Time: The time from VTSR (validated time of sample receipt) to laboratory extraction and /or analysis.

Data Validation Qualifier (DVQ): This refers to the column on the data summary form in which EPA Region III and other qualifiers have been placed by the data validator.

Data Validation Result (DVR): This refers to the column on the data summary form used to report results that have been modified by the data validator. A result in the DVR column that is qualified "U" indicates a modification of the reporting limit.

Field Blank Field blanks are intended to identify contaminants that may have been introduced in the field. Examples are rinsate blank (RB), field blanks (FB) and trip blank (TB).

Field Duplicate: A duplicate sample generated in the field; not in the laboratory.

Initial Calibration (ICAL): The establishment of a calibration curve with the appropriate number of standards and concentration ranges. The calibration curve plots absorbances and/or emissions versus concentration of the standards.

Initial Calibration Blank (ICB): First blank run after the calibration curve.

Initial Calibration Verification (ICV): First standard run after the calibration curve.

Matrix Spike/Matrix Spike Duplicate (MS/MSD): Introduction of a known concentration of a compound into a sample to provide information about the effect of sample matrix on the extraction and/or measurement methodology.

Post Digestion Spike: The addition of known amount of standard after digestion. (Also identified as analytical spike, or spike, for furnace analyses).

Preparation Blank (PB): Blank taken through the digestion process to detect internal laboratory contamination.

Performance Evaluation Mixture: A standard used to verify that the ICAL sequence is stable throughout the GC or GC/MS analyses.

Sample Delivery Group (SDG): Defined by one of the following, whichever occurs first:

- case of sample
- each twenty field samples in a case or
- each 14-day calendar period during which field samples in a case are received, beginning with the receipt of the first sample in the SDG.

Serial Dilution: A sample run at a specific dilution to determine whether any significant chemical or physical interferences exist due to sample matrix effect, for ICP only.

Technical Holding Time: The time from sample collection to laboratory extraction and /or analysis.

2. GLOSSARY OF DATA VALIDATION QUALIFIERS

(Used in the QA/QC Reviews for USEPA Region II)

The qualifiers listed below are used for data usability summary report (DUSR) purposes. However, it is important to note that the data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+	=	Analyte is present. Reported value may be biased high and associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

3. NYS DEC DATA USABILITY SUMMARY PARAMETERS

The parameters listed below are used for data usability summary report (DUSR) evaluation.

<i>Samples Handling and Management</i>
<i>Data Validation References</i>
<i>Laboratory Data Packages</i>
<i>Laboratory Analytical Methods</i>
<i>DATA Usability Assessment Summary</i>

4. DATA VALIDATION SUMMARY PARAMETERS

The parameters listed below are used for data validation evaluation.

	<i>Organic Data</i>	<i>Inorganic Data</i>
<i>Data Completeness</i>	X	X
<i>Holding Time</i>	X	X
<i>Chromatographic Behavior</i>	X	
<i>Compound Identification</i>	X	X
<i>GC/MS Tuning and Mass Calibration</i>	X	
<i>Initial Calibration Verification</i>	X	X
<i>Continuing Calibration</i>	X	X
<i>Method Blank Verification</i>	X	X
<i>Internal Standard Area Summary</i>	X	
<i>Surrogate Recoveries</i>	X	
<i>Matrix Spike/Matrix Spike Duplicate</i>	X	X
<i>Laboratory Control Sample (LCS)</i>	X	X
<i>Laboratory and Field Duplicates</i>	X	X
<i>ICP Interference Check Sample results</i>		X
<i>ICP Serial Dilution results</i>		X
<i>ICP CRDL Standard</i>		X
<i>Post Digestion Spike Analysis</i>		X
<i>Analyte Quantitation</i>		X

5. DATA VALIDATION ACTIVE STANDARD OPERATING PROCEDURES (SOPs)

Region 2 Quality Assurance Guidance and Standard Operating Procedures

<https://www.epa.gov/quality/region-2-quality-assurance-guidance-and-standard-operating-procedures>

Inorganic Validation SOPs

SOP #	Description	Date
SOP HW-3a ICP-AES Rev1 w/CRF	CLP ISM02.2 ICP-AES	September 2016
SOP HW-3b ICP-MS Rev1 w/CRF	CLP ISM02.2 ICP-MS	September 2016
SOP HW-3c Hg & CN Rev1 w/CRF	CLP ISM02.2 Mercury and Cyanide	September 2016

Organic Validation SOPs - CLP

SOP #	Description	Date
SOP HW-33A Low Medium VOA Rev 1 w/CRF	EPA CLP Method SOM02.2 for Low/Medium VOA	September 2016
SOP HW-34A Trace VOA Rev1 w/CRF	EPA CLP Method SOM02.2 for Trace VOA	September 2016
SOP HW-35A Rev1 w/CRF	EPA CLP Method SOM02.2 for Semi-Volatiles	September 2016
SOP HW-36A Rev 1 w/CRF	EPA CLP Method SOM02.2 for Pesticides	October 2016
SOP HW-37A Rev 0 w/CRF	EPA CLP Method SOM02.2 for PCBs Aroclor	June 2015

Organic Validation SOPs – Other

SOP #	Description	Date
SOP HW-11 Rev 3	SW-846 Method 8280 for Polychlorinated Dibenzodioxins/Polychlorinated Dibenzofurans	December 2010
SOP HW-16 Rev. 2.1	SW-846 Method 8330A Nitroaromatics and Nitroamines by HPLC	December 2010
SOP HW-17 Rev.3.1	SW-846 Method 8151A for Chlorinated Herbicides by GC	December 2010
SOP HW-19 Rev. 1.1	SW-846 Method 8290 for Polychlorinated dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by HRMS	December 2010
SOP HW-22 Rev. 5	SW-846 Method 8270D for Semivolatile Organic Compounds by GC/MS	December 2010
SOP HW-25 Rev. 3	EPA Method 1613, Revision B Tetra-through Octa-chlorinated Dioxins and Furans by Isotope Dilution by HRGC/HRMS	December 2010
SOP HWSS 24 Rev. 4	SW-846 Methods 8260B & 8260C for VOCs by GC/MS	October 2014
SOP HW-29 Rev. 2	EPA Method 524.2 for Purgeable Organic Compounds in Water by GC/MS	November 2010
SOP HW-31 Rev. 6	TO-15 Air Analysis for VOCs	September 2016
SOP HW-44 Rev. 1.1	SW-846 Method 8081B for Pesticide Compounds Organochlorine Pesticides by GC	December 2010
SOP HW-46 Rev. 1	EPA Method 1668 A for Chlorinated Biphenyl Congeners and EPA Non-RAS CBC01.0	September 2008

SOP HW-55 Rev. 2 w/CRF	EPA Non-RAS DLM02.0 for Tetra -through Octa-Chlorinated Dioxins and Furans by Isotope Dilution	December 2008
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6. DATA VALIDATION REPORT NARRATIVE

NYS DEC Data Usability Summary Report	SDG # JD40098
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NYS DEC Data Usability Summary Report
SDG # JD40098

Site Location	1001 Whitlock Avenue, Bronx, NY
Data Validation for Analytical Methods	Semi-Volatile (SW846 8270E), Pesticides (SW846 8081B), PCBs (SW846 8082A), TAL Metals (SW846 6010D, 7471B),
Number of Samples & Matrix	3 Ground Water Samples, 1 DUP
Sampled On	02/22/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD40098 (-1-2-3-4)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 19 th , 2022

• **SAMPLE HANDLING AND MANAGEMENT**

As per the chain of custody (COC) record included in this specific SDG, samples associated with this data set were collected on February 22nd, 2022, using the proper containers in accordance with the Sample Integrity and Preservation section of the stated above USEPA method and received by the laboratory on February 22nd, 2022. The attached chain of custody (COC) displays a satisfactory record in terms of client and project information, site location, field sampling details (sampler, collection date and time), sample identification and matrix, preservation, required analysis, deliverable type and date, data management process and comparison.

Client Sample Identification	Laboratory Sample Identification
MW-3R	JD40098-1
R1-MW-4	JD40098-2
DUP	JD40098-3
MW-2R	JD40098-4

• **DATA VALIDATION REFERENCES**

The organic data validation is conducted in accordance with the guidelines in the USEPA National Functional Guidelines for Organic Data Review and the USEPA Region II SOP HW-6-CLP Organic Data Review Preliminary review and the method and QC Criteria specified in NYSDEC ASP Documents.

The inorganic data validation is conducted in accordance with the guidelines in the USEPA National Functional Guidelines for Inorganic Data Review and the USEPA Region II SOP HW-2, Evaluation of Metals Data for the Contract Laboratory Program based on ILM05.3 and the method and QC Criteria specified in NYSDEC ASP Documents.

- **LABORATORY DATA PACKAGES**

The laboratory data packages for the stated SDG above is considered satisfactory in terms of pagination, quality control narration and completeness. Each package contained the laboratory quality assurance summary report, quality control summary data, sample nonconformance summaries, the required data package forms and tables in accordance with NYSDEC ASP documents, instrument tuning information, sample preparation and analysis batch and all associated standard, quality control and sample raw data.

- **LABORATORY ANALYTICAL METHODS**

A peer review of the quality assurance criteria listed in the laboratory data package shows with good degree of certainty the laboratory's compliance with the procedures set forth in the required USEPA analytical methods as indicated in the chain of custody. No deviations from the said methods have been noticed.

- **DATA USABILITY ASSESSMENT SUMMARY**

The overall data package assessment provided by the laboratory for the stated above sample delivery group (SDG) suggests acceptable laboratory performances of the required methods. All samples were successfully analyzed for all target compounds in accordance with the Quality Assurance/Quality Control (QA/QC) requirements for the USEPA analytical methods used for the analyses. In view of the data usability and completeness, the minor issues listed below regarding biases identified during data validation should be taken into high degree of consideration. They are as follows:

✓ **Semi-Volatile Organic Compounds – SW846 8270E Method**

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detected results of Hydroquinone, Benzidine, in samples JD40098 (1, 2, 3, 4), should be considered Estimated (J)	CCV

✓ **Pesticides - SW846 8081B Method**

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detected results of alpha-BHC, beta-BHC, in samples JD40098 (1, 2, 3, 4), should be considered Estimated (J).	LCS

✓ **Polychlorinated Biphenyls (PCBs) – SW846 8082A Method**

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	Data set was in compliance with the method quality control requirements.	ALL

✓ **TAL Metals - SW846 6010D, 7471B Methods**

	Data Assessment Judgement <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	Data set was in compliance with the method quality control requirements.	ALL

Data Validation Assessment

SDG # JD40098

Data Validation for Analytical Method	Semi-Volatile Organic Compounds (SW846 8270E Method)
Number of Samples & Matrix	3 Ground Water Samples, 1 DUP
Sampled On	02/22/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD40098 (-1-2-3-4)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph/mass spectrometry (GCMS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **GC/MS Tuning and Mass Calibration:** The DFTPP tuning criteria were within control limits as outlined in the EPA and SW846 methods.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs) and Percent Relative Standard Deviation (%RSDs) and in some cases the coefficient of determination COD: (In general, Average RRFs must be greater than the required values as defined by EPA/SW846 Method. %RSD must be less than 20%, and the coefficient of determination (COD) must be greater than 0.995). This evaluation displays the following:

HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

-In the initial calibration of EP6741-ICC6741 on 12/03/2021, Average RRFs were above the allowable minimum as required by the method. %RSDs were below the method allowable maximum (20%). COD was greater than 0.995.

Quality Judgement: No actions are required.

- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds) and confirmed the following:
 - The continuing calibration (EP6818-CC6741 on 02/25/2022), The RRFs for target compounds were above the minimum values set by the method, EXCEPT: %Ds of Hydroquinone, Benzidine, were above the allowable maximums.No action is required when less than 20% of the target compounds do not meet the method control limits provide no Relative Response Factor (RRFs) is less than 0.01 for all target compounds as the allowable minimum.

Quality Judgement:

-Detected results of Hydroquinone, Benzidine, in samples JD40098 (1, 2, 3, 4), should be considered Estimated (J)

- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target compounds in OP38312-MB1 on 02/25/2022.
- **Internal Standard Area Summary (IS):** As indicated in the method internal standard criteria, the laboratory data package for the stated SDG confirmed the following:
 - The internal standard retention times were within method control limits.
 - The internal standard areas were within method control limits.
- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries were within method control limits.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:
 - In OP38312-BS1, Percent recoveries (%Rs) for all target compounds were within method control limits.

Quality Judgement: No actions are required.

- **Laboratory and Field Duplicates (DUP):** According to both the chain of custody record, and the data set provided by the laboratory, a laboratory duplicate sample wasn't analyzed from this samples set. A field duplicate sample (DUP/JD40098-3), included in this samples set, was originated from R1-MW-4/JD40098-2. The following summarizes this evaluation:

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	Detected Compounds	DUP JD40098-3 (ug/L)	R1-MW-4 JD40098-2 (ug/L)	%RPDs
1	1,4-Dioxane	ND @ 1.0	1.1	NC

NC = Value is not calculated due to low initial sample concentration.

%RPDs is not calculated due to low initial sample concentration.

Quality Judgement: No actions are required.

- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** No Matrix spike/Matrix spike duplicate were performed from this samples set. However, laboratory provided a selected matrix spike and matrix spike duplicate data from unrelated samples (OP38312-MS/OP38312-MSD). %Rs were within method control limits. %RPDs were below the allowable maximum.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD40098

Data Validation for Analytical Method	Pesticides (SW846 8081B Method)
Number of Samples & Matrix	3 Ground Water Samples, 1 DUP
Sampled On	02/22/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD40098 (-1-2-3-4)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph (GC) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards used in this data set has been evaluated for compliance with method criteria for Percent Relative Standard Deviation %RSDs (<20%):
 - In the initial calibration sample reference: G8G1783-ICC1783 on 03/02/2022, %RSDs for pesticides target compounds, were below the allowable maximum.Quality Judgement: No actions are required as long a valid column is used for quantitation.
- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Percent Difference (%Ds <20%):

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-In continuing calibration (G8G1784-CC1783 on 03/03/2022, %Ds for alpha-Chlordane, Endosulfan Sulfate (2nd, column), were above the allowable maximums.

-In continuing calibration (G8G1785-CC1783 on 03/03/2022, %Ds for target pesticide compounds were below the allowable maximums.

Quality Judgement: No actions are required as long a valid column is used for quantitation.

- **DDT/Endrin Breakdown Check (DDT/Endrin Check):** Per method requirements, the percent breakdowns were below the allowable maximum (20% for DDT & Endrin)
- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target compounds in OP38316A-MB1 on 03/03/2022.
- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries of all samples were within method control limits.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:
 - In LCS (OP38316A-BS1), %Rs were within the method control limits.
 - In LCSDUP (OP38316A-BSD), %Rs were within the method control limits. %RPDs were below the allowable maximum, EXCEPT for alpha-BHC, beta-BHC, where %RPDs were above the allowable maximum.

Quality Judgement:
-Detected results of alpha-BHC, beta-BHC, in samples JD40098 (1, 2, 3, 4), should be considered Estimated (J).
- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** No Matrix Spike/Matrix Spike Duplicate samples were analyzed in this samples set.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD40098

Data Validation for Analytical Method	Polychlorinated Biphenyls (PCBs) – SW846 8082A Method
Number of Samples & Matrix	3 Ground Water Samples, 1 DUP
Sampled On	02/22/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD40098 (-1-2-3-4)
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were extracted and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- **Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph (GC) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- **Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards used in this data set has been evaluated for compliance with method criteria for Average Relative Standard Deviation %RSDs (<20%):
-In the initial calibration of G2G5562-ICC5562 on 10/01/2022, %RSDs all Aroclor target compounds were below the allowable maximum.
Quality Judgement: No actions are required as long a valid column is used for quantitation.
- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Percent Difference (%Ds <20%):
-In the continuing calibration reference ID: G2G5605-CC5562 on 02/27/2022, The overall %Ds for all Aroclor target compounds were below the allowable maximums.

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Quality Judgement: No actions are required as long a valid column is used for quantitation.

- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package reported no detection for target compounds in OP38317A-MB1 analyzed on 02/28/2022.
- **Surrogate Recoveries (SR):** An evaluation of the surrogate standards behavior in the SDG data set concluded that the surrogate recoveries of all samples were within method control limits.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes. The following summarizes this evaluation:
 - In LCS (OP38317A-BS1), %Rs for Aroclor 1016, Aroclor 1260 were within method control limits.
 - In LCSDUP (OP38317-BSD), %Rs for Aroclor 1016, Aroclor 1260 were within method control limits. %RPDs were below the allowable maximum.Quality Judgement: No actions are required.
- **Matrix Spike and Matrix Spike Duplicate (MS/MSD):** No Matrix Spike/Matrix Spike Duplicate samples were analyzed in this samples set.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Data Validation Assessment

SDG # JD40098

Data Validation for Analytical Method	TAL Metals (SW846 6010D, 7471B Methods)
Number of Samples & Matrix	1 Ground Water Sample
Sampled On	02/22/2022
Analytical Laboratory	SGS North America Inc.
Laboratory Report Number	JD40098-1
Data Validation Reviewer	Hanibal Tayeh, Ph.D.
Data Validation Completed	March 19 th , 2022

- **Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- **Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were digested and analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- **Initial and Continuing Calibration Verification (ICCV):** As indicated in the method calibration criteria, the initial calibration standards used in this data set has been evaluated for compliance with method criteria for Percent Recoveries (%Rs):
 - In File ID: SC022322M1.ICP, analyzed on 02/23/2022, %Rs for Total metals (EPA 6010D) in all ICVs and CCVs were within method control limits.
 - In File ID: SF022422M1.ICP, analyzed on 02/24/2022, %Rs for Total metals (EPA 6010D) in all ICVs and CCVs were within method control limits.Quality Judgement: No actions are required.
- **CRDL Standard (CRDL):** As indicated in the method calibration criteria, the CRDL standards of this data set have been evaluated for compliance with method criteria for Percent Recoveries (%Rs) for target metals elements:
 - In File ID: SC022322M1.ICP (LOW CALIBRATION CHECK STANDARDS-EPA 6010D), %Rs for total target metals were within method control limits (70-130%).
 - In File ID: SF022422M1.ICP (LOW CALIBRATION CHECK STANDARDS-EPA 6010D), %Rs for total target metals were within method control limits (70-130%).Quality Judgement: No actions are required.
- **Method Blank Verification:** Method blank analyses included in this data set has been evaluated to ensure target metals were reported below CRDL:
 - In File ID: SC022322M1.ICP, all quality control blanks (ICBs, CCBs) were below RL as required by EPA 6010D, 7473 Methods.
 - In File ID: SF022422M1.ICP, all quality control blanks (ICBs, CCBs) were below RL as required by EPA 6010D, 7473 Methods.Quality Judgement: No actions are required.

- **ICP Interference Check Sample (ICPINTERF):** An evaluation of the Interference Check Sample has been evaluated for percent recoveries (%Rs) compliance with methods criteria (80-120%):
 - In File ID: SC022322M1.ICP, %Rs for target metals (EPA 6010D), were within the method control limits.
 - In File ID: SF022422M1.ICP, %Rs for target metals (EPA 6010D), were within the method control limits.Quality Judgement: No actions are required.
- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control samples in this data set have been evaluated for method compliance purposes (%Rs within control limits). The following summarizes this evaluation:
 - In LCS QC Batch ID: MP31431, on 02/23/2022, (EPA 6010D) for total metals, %Rs were within the method control limits.Quality Judgement: No actions are required.
- **Spike Sample Recovery (SSR):** Spike samples in this data set have been evaluated for method compliance purposes (%Rs within control limits). The out-of-control spike recoveries for analytes whose unspiked concentrations are $\geq 4x$ the spike added have been disregarded:
 - In unrelated sample JD40056-1, a matrix spike and matrix spike duplicate were performed in this samples set. %Rs for matrix spike (EPA 6010D), were within control limits. %RPDs were below the allowable maximum.Quality Judgement: No actions are required.
- **Laboratory Duplicate (DUP):** Target metals Duplicate analysis has been evaluated for relative percent differences compliance with the method criteria (%RPDs <20% for aqueous and <35% for soil matrices).
 - Laboratory duplicate selected from the samples set wasn't analyzed.
 - A field duplicate sample (DUP/JD40098-3), included in this samples set, was originated from R1-MW-4/JD40098-2. As per the chain of custody record, No TAL metals were analyzed.Quality Judgement: No actions are required.
- **ICP Serial Dilution (ISDil):** ICP serial dilution for target metals has been evaluated to ensure compliance with method criteria (Concentration in the original sample is > 50x the MDL that is calculated for the sample and %Ds must be below the allowable maximums 10%):
 - In QC Batch ID: MP31431/sample JD40056-1, on 02/23/2022, %Ds of target metals (EPA 6010D) were below the allowable maximum.Quality Judgement: No actions are required.
Percent difference was acceptable due to low initial sample concentration (< 50 times IDL).

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- **Mercury Overall Evaluation (Hg):** All initial and continuing calibration checks, Blank results summaries, low calibration check standards, laboratory control sample summaries, Matrix spike and duplicate summaries, were in compliance with method quality control criteria.
- **Standard Reference Material Recovery (Hg):** Forms were not provided.
- **Total & Soluble Metals Comparison (T&S-Comp):** Not applicable.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

Validated QA Data

Continuing Calibration Summary

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Job Number: JD40098
 Account: SESINJPB SESI Consulting Engineers
 Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EP6818-CC6741
 Lab FileID: P147704.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EP6818\p147704.D Vial: 2
 Acq On : 25 Feb 2022 11:46 am Operator: kristis
 Sample : cc6741-25 Inst : MSVOAMSP
 Misc : op36737,ep6818,30.0,,,1,1 Multiplr: 1.00
 MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP6741.M (RTE Integrator)
 Title : Semi Volatile Extractables by GC/MS
 Last Update : Wed Feb 23 13:24:01 2022
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev (min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	90	-0.02	4.37
2 t	1,4-Dioxane	0.520	0.569	-9.4	99	-0.01	1.79
3 t	Pyridine	1.336	1.388	-3.9	90	-0.01	2.13
4 t	N-Nitrosodimethylamine	0.521	0.533	-2.3	89	-0.01	2.11
5 S	2-Fluorophenol	1.266	1.281	-1.2	88	-0.02	3.37
6 t	Indene	2.247	2.304	-2.5	89	-0.02	4.56
7 t	Cumene	3.119	3.208	-2.9	90	-0.02	3.75
8 S	Phenol-d5	1.644	1.633	0.7	86	-0.02	4.13
9 t	Phenol	1.781	1.715	3.7	84	-0.02	4.14
10 t	Aniline	2.024	1.904	5.9	82	-0.02	4.13
11 t	bis(2-Chloroethyl)ether	1.190	1.167	1.9	86	-0.02	4.19
12 t	2-Chlorophenol	1.338	1.368	-2.2	90	-0.02	4.22
13 t	Decane	0.876	0.940	-7.3	93	-0.02	4.25
14 t	1,3-Dichlorobenzene	1.514	1.542	-1.8	89	-0.02	4.33
15 t	1,4-Dichlorobenzene	1.513	1.526	-0.9	88	-0.02	4.39
16 t	Benzyl alcohol	0.870	0.870	0.0	86	-0.02	4.49
17 t	1,2-Dichlorobenzene	1.436	1.466	-2.1	90	-0.02	4.50
18 t	Acetophenone	1.809	1.782	1.5	87	-0.02	4.68
19 t	2-Methylphenol	1.178	1.180	-0.2	86	-0.02	4.59
20 t	2,2'-oxybis(1-Chloropropa	0.364	0.360	1.1	87	-0.02	4.59
21 t	3&4-Methylphenol	1.240	1.226	1.1	86	-0.02	4.70
22	n-Nitroso-di-n-propylamin	0.845	0.822	2.7	88	-0.02	4.69
23 t	Hexachloroethane	0.543	0.533	1.8	87	-0.02	4.75
24 I	Naphthalene-d8	1.000	1.000	0.0	85	-0.02	5.32
25 S	Nitrobenzene-d5	0.345	0.347	-0.6	83	-0.02	4.79
26 t	Nitrobenzene	0.351	0.343	2.3	79	-0.02	4.81
27 t	Quinoline	0.665	0.663	0.3	82	-0.02	5.58
28 t	Isophorone	0.643	0.636	1.1	81	-0.02	4.99
29 t	2-Nitrophenol	0.181	0.201	-11.0	92	-0.02	5.04
30 t	2,4-Dimethylphenol	0.359	0.355	1.1	82	-0.02	5.08
----- True Calc. % Drift -----							
31 t	Benzoic acid	25.000	25.850	-3.4	93	-0.03	5.19
----- AvgRF CCRF % Dev -----							
32 t	bis(2-Chloroethoxy)methan	0.372	0.366	1.6	81	-0.02	5.15
33 t	2,4-Dichlorophenol	0.287	0.299	-4.2	86	-0.02	5.23
34	2,6-Dichlorophenol	0.278	0.289	-4.0	86	-0.02	5.38
35	1,3,5-Trichlorobenzene	0.332	0.348	-4.8	88	-0.02	5.05
36 t	1,2,4-Trichlorobenzene	0.325	0.328	-0.9	85	-0.02	5.27
37	1,2,3-Trichlorobenzene	0.310	0.309	0.3	84	-0.02	5.44

Continuing Calibration Summary

Job Number: JD40098
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EP6818-CC6741
Lab FileID: P147704.D

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38 t	Naphthalene	0.974	1.009	-3.6	86	-0.02	5.33
39 t	4-Chloroaniline	0.403	0.378	6.2	75	-0.02	5.38
40 t	2,3-Dichloroaniline	0.341	0.354	-3.8	84	-0.02	6.04
41 t	Hydroquinone	0.305	0.237	22.3#	65	-0.02	5.64
42 t	Hexachlorobutadiene	0.196	0.198	-1.0	85	-0.02	5.42
43 t	4-Chloro-3-methylphenol	0.308	0.307	0.3	81	-0.02	5.74
44 t	2-Methylnaphthalene	0.589	0.631	-7.1	88	-0.02	5.84
45 t	1-Methylnaphthalene	0.645	0.661	-2.5	86	-0.02	5.91
46 I	Acenaphthene-d10	1.000	1.000	0.0	84	-0.02	6.68
47 t	Hexachlorocyclopentadiene	0.321	0.320	0.3	78	-0.02	5.94
48	1,2,4,5-Tetrachlorobenzen	0.543	0.566	-4.2	86	-0.02	5.95
49 t	2,4,6-Trichlorophenol	0.363	0.385	-6.1	85	-0.02	6.05
50 t	2,4,5-Trichlorophenol	0.391	0.411	-5.1	84	-0.02	6.08
51 S	2-Fluorobiphenyl	1.302	1.346	-3.4	84	-0.02	6.11
52 t	2-Chloronaphthalene	1.108	1.126	-1.6	84	-0.02	6.20
53 t	Biphenyl	1.440	1.514	-5.1	86	-0.02	6.19
54 t	2-Nitroaniline	0.290	0.304	-4.8	81	-0.02	6.29
55 t	Dimethylphthalate	1.314	1.330	-1.2	82	-0.02	6.44
56 t	Acenaphthylene	1.568	1.669	-6.4	86	-0.02	6.55
		True	Calc.	% Drift			
57 t	2,6-Dinitrotoluene	25.000	26.532	-6.1	89	-0.02	6.50
		AvgRF	CCRF	% Dev			
58 t	3-Nitroaniline	0.309	0.270	12.6	66	-0.02	6.65
59 t	Acenaphthene	1.105	1.131	-2.4	83	-0.02	6.71
		True	Calc.	% Drift			
60 t	2,4-Dinitrophenol	50.000	48.504	3.0	80	-0.02	6.75
		AvgRF	CCRF	% Dev			
61 t	4-Nitrophenol	0.201	0.187	7.0	75	-0.02	6.85
62 t	Dibenzofuran	1.629	1.623	0.4	81	-0.02	6.88
63 t	2,4-Dinitrotoluene	0.368	0.397	-7.9	81	-0.02	6.88
64	2,3,4,6-Tetrachlorophenol	0.323	0.342	-5.9	83	-0.03	7.01
65 t	Diethylphthalate	1.319	1.299	1.5	79	-0.03	7.13
66 t	Fluorene	1.258	1.334	-6.0	85	-0.02	7.24
67 t	4-Chlorophenyl-phenylethe	0.621	0.645	-3.9	85	-0.02	7.25
68 t	4-Nitroaniline	0.315	0.257	18.4	61	-0.03	7.28
69 I	Phenanthrene-d10	1.000	1.000	0.0	81	-0.03	8.46
70 t	4,6-Dinitro-2-methylpheno	0.122	0.127	-4.1	85	-0.03	7.32
71 t	n-Nitrosodiphenylamine	0.592	0.630	-6.4	84	-0.03	7.39
72 t	1,2-Diphenylhydrazine	0.677	0.670	1.0	77	-0.03	7.43
73 S	2,4,6-Tribromophenol	0.114	0.137	-20.2#	92	-0.02	7.52
74 t	4-Bromophenyl-phenylether	0.213	0.232	-8.9	86	-0.03	7.84
75 t	Hexachlorobenzene	0.243	0.255	-4.9	85	-0.03	7.90
76 t	Pentachlorophenol	0.153	0.162	-5.9	83	-0.03	8.20
77 t	Phenanthrene	1.026	1.052	-2.5	82	-0.03	8.50
78 t	Anthracene	1.021	1.090	-6.8	83	-0.03	8.58
79 t	Carbazole	0.970	1.000	-3.1	81	-0.03	8.86
80 t	Di-n-butylphthalate	1.145	1.231	-7.5	79	-0.03	9.55
81 t	Fluoranthene	1.115	1.205	-8.1	82	-0.03	10.59
82 t	Octadecane	0.295	0.325	-10.2	83	-0.02	8.38
83 I	Chrysene-d12	1.000	1.000	0.0	80	-0.04	13.66
		True	Calc.	% Drift			
84 t	Benzidine	25.000	7.763	68.9#	20	-0.03	10.96

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Continuing Calibration Summary

Job Number: JD40098
Account: SESINJPB SESI Consulting Engineers
Project: 1001 Whitlock Avenue, Bronx, NY

Sample: EP6818-CC6741
Lab FileID: P147704.D

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		AvgRF	CCRF	% Dev			
85 t	Pyrene	1.228	1.304	-6.2	82	-0.04	11.02
86 S	Terphenyl-d14	0.947	1.041	-9.9	85	-0.04	11.46
87 t	Butylbenzylphthalate	0.527	0.557	-5.7	78	-0.03	12.65
88 t	Benzo[a]anthracene	1.153	1.239	-7.5	83	-0.04	13.64
89 t	3,3'-Dichlorobenzidine	0.427	0.389	8.9	69	-0.04	13.70
90 t	Chrysene	1.138	1.149	-1.0	79	-0.04	13.72
		True	Calc.	% Drift			
91 t	bis(2-Ethylhexyl)phthalat	25.000	25.738	-3.0	82	-0.03	14.07
		AvgRF	CCRF	% Dev			
92 I	Perylene-d12	1.000	1.000	0.0	84	-0.03	16.71
		True	Calc.	% Drift			
93 t	Di-n-octylphthalate	25.000	25.781	-3.1	86	-0.03	15.53
		AvgRF	CCRF	% Dev			
94 t	Benzo[b]fluoranthene	1.192	1.275	-7.0	83	-0.04	15.95
95 t	Benzo[k]fluoranthene	1.130	1.180	-4.4	80	-0.04	16.02
		True	Calc.	% Drift			
96 t	Benzo[a]pyrene	25.000	25.311	-1.2	85	-0.04	16.59
97 t	Indeno[1,2,3-cd]pyrene	25.000	27.327	-9.3	92	-0.04	18.66
		AvgRF	CCRF	% Dev			
98 t	Dibenz(a,h)acridine	0.910	1.039	-14.2	93	-0.04	18.31
		True	Calc.	% Drift			
99 t	Dibenz[a,h]anthracene	25.000	25.789	-3.2	86	-0.04	18.73
100 t	7,12-Dimethylbenz(a)anthr	25.000	25.885	-3.5	95	-0.04	15.97
		AvgRF	CCRF	% Dev			
101 t	Benzo[g,h,i]perylene	1.041	1.155	-11.0	85	-0.04	19.09

(#) = Out of Range
p147440.D MP6741.M

SPCC's out = 0 CCC's out = 0
Fri Feb 25 17:45:02 2022 ACLIMS

6.7.8

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Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: JD40098

Account: SESINJPB SESI Consulting Engineers

Project: 1001 Whitlock Avenue, Bronx, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38316A-BS1	8G41746.D	1	03/03/22	CP	02/24/22	OP38316A	G8G1784
OP38316A-BSD	8G41747.D	1	03/03/22	CP	02/24/22	OP38316A	G8G1784

The QC reported here applies to the following samples:

Method: SW846 8081B

JD40098-1, JD40098-2, JD40098-3, JD40098-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	0.25	0.17	68	0.14	56	19	54-152/36
319-84-6	alpha-BHC	0.25	0.27	108	0.18	72	40* a	50-161/35
319-85-7	beta-BHC	0.25	0.23	92	0.15	60	42* a	56-150/36
319-86-8	delta-BHC	0.25	0.22	88	0.16	64	36	10-183/39
58-89-9	gamma-BHC (Lindane)	0.25	0.21	84	0.19	76 b	35 b	53-157/36
5103-71-9	alpha-Chlordane	0.25	0.26	104 c	0.21	84 c	21 c	57-152/37
5103-74-2	gamma-Chlordane	0.25	0.24	96	0.20	80	18	55-153/37
60-57-1	Dieldrin	0.25	0.23	92	0.18	72	24	56-163/36
72-54-8	4,4'-DDD	0.25	0.25	100	0.19	76	27	50-154/37
72-55-9	4,4'-DDE	0.25	0.27	108	0.21	84	25	47-157/43
50-29-3	4,4'-DDT	0.25	0.16	64	0.14	56	13	52-167/42
72-20-8	Endrin	0.25	0.22	88	0.16	64	32	55-165/36
1031-07-8	Endosulfan sulfate	0.25	0.16	64	0.13	52	21	43-150/36
7421-93-4	Endrin aldehyde	0.25	0.24	96	0.18	72	29	33-163/41
53494-70-5	Endrin ketone	0.25	0.23	92	0.17	68	30	42-178/38
959-98-8	Endosulfan-I	0.25	0.19	76	0.16	64	17	57-154/37
33213-65-9	Endosulfan-II	0.25	0.27	108	0.20	80	30	54-160/38
76-44-8	Heptachlor	0.25	0.27	108	0.20	80	30	55-151/37
1024-57-3	Heptachlor epoxide	0.25	0.24	96	0.19	76	23	58-157/36
72-43-5	Methoxychlor	0.25	0.17	68	0.14	56	19	55-155/39

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	89%	70%	10-190%
877-09-8	Tetrachloro-m-xylene	85%	63%	10-190%
2051-24-3	Decachlorobiphenyl	28%	25%	10-156%
2051-24-3	Decachlorobiphenyl	33%	27%	10-156%

(a) Analytical precision exceeds in-house control limits.

(b) Reported from 1st signal. 2nd signal used for confirmation.

(c) Reported from the 1st signal. The %D of the CCV on the 2nd signal exceeds the method criteria of 20%, so it being used for confirmation only.

* = Outside of Control Limits.

8.2.1
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