AMC Engineering PLLC
18-36 42nd Street
Astoria, NY 11105
O: 718.545.0474

Revised – Underlined text is revised / added

September 20, 2022

Mr. Steve Watts, PE
NYSDEC, Region 2
Division of Water
47-40 21st Street
Long Island City, NY 11101-5407

Ref.: **SPDES PERMIT APPLICATION – Version #3**
NYCEDC PROJECT# 50106760 – Bush Terminal (North Campus)
13 42nd Street
Brooklyn, NY 11232
Block 715 Lot 1
GROUNDWATER DISCHARGE TO SURFACE WATER

Dear Mr. Watts:

The present is prepared to seek a SPDES permit from your department to temporarily discharge groundwater into the Upper New York Bay (Gowanus Bay). The project will be broken up into two phases. The maximum discharge rate for Phase 1 will be 100 gallons per minute (144,000 gallons per day), and the maximum discharge rate for Phase 2 will be 1600 GPM (2,304,000 GPD). Discharge is proposed through an existing combined sewer overflow (CSO) on 43rd Street, which feeds into the existing NYCDEP outfall #OH-004.

Site Background and Proposed Use

New York City Economic Development Corporation (NYCEDC) is the owner of the property located at 13 42nd Street, Brooklyn, NY 11232. The property is identified as Block 715, Lot 1 on the Brooklyn Borough Tax Map. The lot has frontage on 1st Avenue. The site is irregularly shaped with an unknown area.

The scope of work for this project, under NYCEDC Project# 50106760, is two-fold: a) renovations within existing building; and b) installation of new sewer and utility lines in the streets. The site is a private development and M1-3 – Heavy Manufacturing District (Low Performance). There are no environmental restrictions for this site. This redevelopment is not part any brownfield or superfund projects.

All renovations within the building will be occurring above the groundwater table, and so no dewatering activities are expected for this activity.

Dewatering activities are expected for the installation of new sewers and utility lines across the site. Grade elevation varies from El: +7’ to +10’. As per Preliminary Geotechnical Report by Oweis Engineering Inc. (dated April 26, 2019), groundwater was measured between El: +1’ to +2.5’. A copy of the Geotechnical Report is attached.

The bottom of sewer excavation measures between El: +1.5' (Phase 1) and El: -2.5' (Phase 2).

The proposed discharge is through a new proposed connection, which discharges into the existing Combined Sewer Overflow, and into Upper New York Bay.

Proposed Dewatering Activities and Treatment

The onsite dewatering activities will be separated into two (2) phases. Phase 1 activities are limited to the installation of new sewer and utility lines within the property (Bush Terminal North Campus). Phase 2 activities are limited to the removal and installation of new sewers on 1st Avenue, between 41st Street and 42nd Street.

Phase I Dewatering Activities – Bush Terminal North Campus

Through a wellpoint system, it is proposed to dewater a maximum of 100 GPM (144,000 GPD) during construction activities to facilitate the installation of new sewers and utilities. The project's lifetime is estimated to be 2 years. However, dewatering activities for Phase I are only required for a small portion of the project, and not expected to exceed 1 year.

A wellpoint system consisting of 1.5" wellpoints (total 355 expected) will be installed along the sewers requiring dewatering activities within the property, which are referenced as: 41st Street, 42nd Street, and Marginal Street. Wellpoints will be installed from grade elevation, down to El: -4'. Wellpoints will feed into an 10" PVC header pipe, which will discharge into the proposed treatment system.

Phase II Dewatering Activities – First Avenue

Approximately 315 lineal feet of excavation is necessary for the removal of an existing 18" sewer on 1st Avenue, between 41st Road and 42nd Road. The bottom of excavation for this work varies from El: +1.5' to El: -2.5'. The dewatering needs for the work on 1st Avenue will be achieved through five (5) deep wells installed to 50 feet below grade, or until practical refusal (whichever comes first). Each deep well will consist of 30' riser and 20' screen. The deep wells feed into a 10" PVC header pipe, which will discharge into the proposed treatment system. It is proposed to dewater a maximum of 1600 GPM (2,304,000 GPD) for Phase 2 activities.

Dewatering Treatment System

The treatment consists of six (6) 18,000 gallon settling tank (Adler or equal), three (3) duplex 7-bag filter units fitted with 5-micron filter bags (Griffin or equal), and six (6) 10000-lb activated carbon vessel (Griffin or equal), which is broken up into three (3) dewatering system trains in parallel. Each train is capable of handling 540 GPM, for a total of 1600 GPM. The groundwater from the discharge-end of the settling tanks will be pumped through the filter and carbon units, before converging streams and discharging into the existing DEP Outfall (#OH-004) via new connection, which feeds into the Upper New York Bay.

A throttling valve is installed at the discharge end of the tank to cap the discharge flow to 100 GPM (144,000 GPD) while Phase I is active, and 1600 GPM (2,304,000 GPD) while Phase II is active.

Sampling Events and Explanation of Analytical Testing Results

On April 22, 2020, AMC Engineering, PLLC personnel mobilized onsite to obtain a water sample from an onsite test pit. Prior to sampling, the test pit was opened and left to settle for 15 minutes. The water from the test pit was collected in dedicated sample jars.

The sample was immediately labeled and stored in a container, maintained at 4 °C. The laboratory courier from Phoenix Environmental Laboratories, Inc. (ELAP #11301) picked up the samples from the AMC office on April 23, 2020. A chain of custody was relinquished from AMC personnel to the lab personnel.

Field temperature and field pH were measured onsite using a portable pH – temperature meter.

T = 52.5 F pH = 8.22

The analytical results were compared to the NYSDEC's "Technical & Operations Guidance Series (TOGS) section 1.1.1 Class I criteria. All parameters were found below the Class I criteria, with the exception of the following:

- Cadmium (metal, total), found at 3 ug/L (standard value is 2.7 ug/L);
- Copper (metal, total), found at 38 ug/L (standard value is 3.4 ug/L);
- Copper (metal, dissolved), found at 26 ug/L (standard value is 3.4 ug/L);
- Lead (metal, total) found at 26 ug/L (standard value is 8 ug/L);
- Lead (metal, dissolved) found at 13 ug/L (standard value is 8 ug/L);
- Nickel (metal, total) found at 22 ug/L (standard value is 8.2 ug/L);
- Nickel (metal, dissolved) found at 23 ug/L (standard value is 8.2 ug/L);
- Zinc (metal, total) found at 728 ug/L (standard value is 66 ug/L);
- Zinc (metal, dissolved) found at 509 ug/L (standard value is 66 ug/L);
- PCB-1254 found at 0.26 ug/L (standard value for sum of PCBs is 1×10^{-6} ug/L);

No VOCs or SVOCs were found above the TOGS 1.1.1 Class I criteria. A SPDES Jurisdictional Determination request was submitted to the NYSDEC for review, comment, and approval.

In December 2021, the NYSDEC finished their review of the SPDES JD request, and requested that additional samples be taken, from the areas of work. The NYSDEC has instructed that four (4) onsite temporary wells (TW-1, TW-2, TW-3, and TW-4) be installed, and samples collected from each. A copy of the NYSDEC's SPDES Determination of Jurisdiction Letter can be found in **Attachment 2**.

On January 28, 2022, AMC Engineering mobilized onsite to obtain water samples from four (4) onsite temporary wells: TW-1, TW-2, TW-3, and TW-4. The wells were installed, purged, sampled, and removed on the same day. The location of the temporary wells can be found on the attached site plan.

Samples TW-1, TW-2, and TW-3 were collected in dedicated samples jars and tested for the following parameters:

- VOCs;
- SVOCs;
- Metals;
- PCBs;

Sample TW-4 was collected in dedicated sample jars and tested for the following parameters:

- VOCs;
- SVOCs;
- Metals;
- PCBs;
- DEP Discharge Parameters;

The samples were immediately labeled and stored in a container, maintained at 4 degrees Celsius. The laboratory courier from Phoenix (ELAP #11301) picked up the samples from the AMC office on January 31, 2022. A chain of custody was relinquished from AMC personnel to the lab personnel.

The analytical results were compared to the NYSDEC TOGS 1.1.1 Class I Standards. All results were below the Class I Standard, with the exception of hexachlorobenzene (SVOC) in samples TW-2 and TW-3, and tetrachloroethene (PCE, VOC) in sample TW-1.

Based on the findings of the January 2022 sampling event, the NYSDEC has determined that a SPDES permit was required for this project. To address the VOCs and SVOCs contamination found in the groundwater, activated carbon treatment was added to the dewatering treatment system.

Copies of the laboratory reports can be found in **Attachment 4**. Tabulated analytical results can be found in **Tables 1-2**.

Please, let me know if you require any additional information.

Yours truly,

Andrew Sung, EIT
AMC Engineering, PLLC

Ariel Czemerinski, PE
AMC Engineering, PLLC

Attached, and for your reference, please find:

Table 1. Tabulated Analytical Results (April 2020 Sampling Event)
Table 2. Tabulated Analytical Results (January 2022 Sampling Event)

Attachments

1. Letter of Authorization
2. SPDES Determination of Jurisdiction Letter
3. NY-2C Form
4. Analytical Results of Water to be Discharged;
    a. April 2020 Sampling Event
    b. January 2022 Sampling Event
5. Technical Information of Proposed Settling Tank, Pumps, and Treatment;
6. Digital Map;
7. Sanborn Maps;
8. Geotechnical Report;
9. DEP Sewer Map;
10. Proposed Dewatering Plan (DW-1)

Table 1. Tabulated Analytical Results

Phoenix Environmental Laboratories, Inc.					
587 East Middle Turnpike					
P.O. Box 370	Lab Sample Id		**NYSDEC**	CF78034	
Manchester, CT 06040	Collection Date		**TOGS 1.1.1**	4/22/2020	
(860) 645-1102	Client Id		**Class I**	TEST PIT	
	Matrix		**(Saline**	Gw Discharge	
Project Id : 13 42ND ST BK SUNSET PARK			**Waters)**		
	CAS	Units	**Limit**	Result	RL
Miscellaneous/Inorganics					
Carbonaceous BOD	PHNX - CBOD	mg/L	N/A	< 20	20
Chloride	16887-00-6	mg/L	N/A	605	15.0
Flash Point	PHNX - FLASH POINT	Degree F	N/A	>200	200
Ignitability	PHNX - IGNITABILITY	degree F	N/A	Passed	140
Nitrite-N	14797-65-0	mg/L	N/A	0.025	0.010
Nitrate-N	14797-55-8	mg/L	N/A	0.23	0.02
Oil and Grease by EPA 1664A	PHNX - OIL-GREASE	mg/L	N/A	2.3	1.4
pH	PHNX - PH	pH Units	6.5<pH<8.5	7.88	1.00
Nitrogen Tot Kjeldahl	PHNX - NITTOTKJELD	mg/L	N/A	8.9	0.20
Total Nitrogen	PHNX - TOTNIT	mg/L	N/A	9.16	0.10
O&G, Non-polar Material	PHNX - OIL-GREASE-NP	mg/L	N/A	< 1.4	1.4
Total Suspended Solids	PHNX - TOTSUSPENDSOL	mg/L	N/A	28	5.0
Total Solids	PHNX - TOTSOLIDS	mg/L	N/A	2,500	100
Metals, Total					
Antimony	7440-36-0	mg/L	N/A	< 0.003	0.003
Arsenic	7440-38-2	mg/L	0.036	0.007	0.002
Beryllium	7440-41-7	mg/L	N/A	< 0.001	0.001
Cadmium	7440-43-9	mg/L	0.0027	0.003	0.001
Chromium	7440-47-3	mg/L	N/A	0.005	0.001
Copper	7440-50-8	mg/L	0.0034	0.038	0.003
Lead	7439-92-1	mg/L	0.008	0.026	0.001
Mercury	7439-97-6	mg/L	0.0007	< 0.0002	0.0002
Nickel	7440-02-0	mg/L	0.0082	0.022	0.001
Selenium	7782-49-2	mg/L	N/A	< 0.005	0.005
Silver	7440-22-4	mg/L	N/A	< 0.001	0.001
Thallium	7440-28-0	mg/L	N/A	< 0.0005	0.0005
Zinc	7440-66-6	mg/L	0.066	0.728	0.002
Metals, Dissolved					
Antimony (Dissolved)	7440-36-0	mg/L	N/A	< 0.005	0.005
Arsenic (Dissolved)	7440-38-2	mg/L	0.036	0.005	0.004
Beryllium (Dissolved)	7440-41-7	mg/L	N/A	< 0.001	0.001
Cadmium (Dissolved)	7440-43-9	mg/L	0.0027	0.001	0.001
Chromium (Dissolved)	7440-47-3	mg/L	N/A	0.003	0.001
Copper (Dissolved)	7440-50-8	mg/L	0.0034	0.026	0.005
Lead (Dissolved)	7439-92-1	mg/L	0.008	0.013	0.002
Mercury (Dissolved)	7439-97-6	mg/L	0.0007	< 0.0002	0.0002
Nickel (Dissolved)	7440-02-0	mg/L	0.0082	0.023	0.001
Selenium (Dissolved)	7782-49-2	mg/L	N/A	< 0.011	0.011
Silver (Dissolved)	7440-22-4	mg/L	N/A	< 0.001	0.001
Thallium (Dissolved)	7440-28-0	mg/L	N/A	< 0.0003	0.0003
Zinc (Dissolved)	7440-66-6	mg/L	0.066	0.509	0.002
PCBs By E608.3					
PCB-1016	12674-11-2	ug/L		< 0.050	0.050
PCB-1221	11104-28-2	ug/L		< 0.050	0.050
PCB-1232	11141-16-5	ug/L		< 0.050	0.050
PCB-1242	53469-21-9	ug/L		< 0.050	0.050
PCB-1248	12672-29-6	ug/L	Sum < 0.000001	< 0.050	0.050
PCB-1254	11097-69-1	ug/L		0.26	0.050
PCB-1260	11096-82-5	ug/L		< 0.050	0.050
PCB-1262	37324-23-5	ug/L		< 0.050	0.050
PCB-1268	11100-14-4	ug/L		< 0.050	0.050

Result Detected	
RL Exceeds Criteria	
Result Exceeds Criteria	

Table 1. Tabulated Analytical Results (cont'd)

Phoenix Environmental Laboratories, Inc.					
587 East Middle Turnpike					
P.O. Box 370	Lab Sample Id		**NYSDEC**	CF78034	
Manchester, CT 06040	Collection Date		**TOGS 1.1.1**	4/22/2020	
(860) 645-1102	Client Id		**Class I**	TEST PIT	
	Matrix		**(Saline**	Gw Discharge	
Project Id : 13 42ND ST BK SUNSET PARK		**Units**	**Waters)**		
	CAS		**Limit**	Result	RL
Base Neutrals & Acid Compounds By E625.1					
1,2,4-Trichlorobenzene	120-82-1	ug/L	N/A	< 5.4	5.4
1,2-Dichlorobenzene	95-50-1	ug/L	5*	< 5.4	5.4
1,2-Diphenylhydrazine	122-66-7	ug/L	N/A	< 5.4	5.4
1,3-Dichlorobenzene	541-73-1	ug/L	5*	< 5.4	5.4
1,4-Dichlorobenzene	106-46-7	ug/L	5*	< 5.4	5.4
2,4,6-Trichlorophenol	88-06-2	ug/L	N/A	< 5.4	5.4
2,4-Dichlorophenol	120-83-2	ug/L	N/A	< 5.4	5.4
2,4-Dimethylphenol	105-67-9	ug/L	1000	< 5.4	5.4
2,4-Dinitrophenol	51-28-5	ug/L	400	< 5.4	5.4
2,4-Dinitrotoluene	121-14-2	ug/L	N/A	< 5.4	5.4
2,6-Dinitrotoluene	606-20-2	ug/L	N/A	< 5.4	5.4
2-Chloronaphthalene	91-58-7	ug/L	N/A	< 5.4	5.4
2-Chlorophenol	95-57-8	ug/L	N/A	< 5.4	5.4
2-Methylnaphthalene	91-57-6	ug/L	N/A	< 5.4	5.4
2-Nitrophenol	88-75-5	ug/L	N/A	< 5.4	5.4
3,3-Dichlorobenzidine	91-94-1	ug/L	N/A	< 5.4	5.4
4,6-Dinitro-2-methylphenol	534-52-1	ug/L	N/A	< 5.4	5.4
4-Bromophenyl phenyl ether	101-55-3	ug/L	N/A	< 5.4	5.4
4-Chloro-3-methylphenol	59-50-7	ug/L	N/A	< 5.4	5.4
4-Chlorophenyl phenyl ether	7005-72-3	ug/L	N/A	< 5.4	5.4
4-Nitrophenol	100-02-7	ug/L	N/A	< 5.4	5.4
Acenaphthene	83-32-9	ug/L	6.6	< 5.4	5.4
Acenaphthylene	208-96-8	ug/L	N/A	< 5.4	5.4
Anthracene	120-12-7	ug/L	N/A	< 5.4	5.4
Benz(a)anthracene	56-55-3	ug/L	N/A	< 5.4	5.4
Benzidine	92-87-5	ug/L	N/A	< 5.4	5.4
Benzo(a)pyrene	50-32-8	ug/L	0.0006	< 5.4	5.4
Benzo(b)fluoranthene	205-99-2	ug/L	N/A	< 5.4	5.4
Benzo(ghi)perylene	191-24-2	ug/L	N/A	< 5.4	5.4
Benzo(k)fluoranthene	207-08-9	ug/L	N/A	< 5.4	5.4
Benzyl butyl phthalate	85-68-7	ug/L	N/A	< 5.4	5.4
Bis(2-chloroethoxy)methane	111-91-1	ug/L	N/A	< 5.4	5.4
Bis(2-chloroethyl)ether	111-44-4	ug/L	N/A	< 5.4	5.4
Bis(2-chloroisopropyl)ether	39638-32-9	ug/L	N/A	< 5.4	5.4
Bis(2-ethylhexyl)phthalate	117-81-7	ug/L	N/A	7.6	5.4
Chrysene	218-01-9	ug/L	N/A	< 5.4	5.4
Dibenz(a,h)anthracene	53-70-3	ug/L	N/A	< 5.4	5.4
Diethyl phthalate	84-66-2	ug/L	N/A	< 5.4	5.4
Dimethylphthalate	131-11-3	ug/L	N/A	< 5.4	5.4
Di-n-butylphthalate	84-74-2	ug/L	N/A	< 5.4	5.4
Di-n-octylphthalate	117-84-0	ug/L	N/A	< 5.4	5.4
Fluoranthene	206-44-0	ug/L	N/A	< 5.4	5.4
Fluorene	86-73-7	ug/L	2.5	< 5.4	5.4
Hexachlorobenzene	118-74-1	ug/L	0.00003	< 5.4	5.4
Hexachlorobutadiene	87-68-3	ug/L	0.01	< 5.4	5.4
Hexachlorocyclopentadiene	77-47-4	ug/L	N/A	< 5.4	5.4
Hexachloroethane	67-72-1	ug/L	N/A	< 5.4	5.4
Indeno(1,2,3-cd)pyrene	193-39-5	ug/L	N/A	< 5.4	5.4
Isophorone	78-59-1	ug/L	N/A	< 5.4	5.4
Naphthalene	91-20-3	ug/L	16	2.2	5.4
Nitrobenzene	98-95-3	ug/L	N/A	< 5.4	5.4
N-Nitrosodimethylamine	62-75-9	ug/L	N/A	< 5.4	5.4
N-Nitrosodi-n-propylamine	621-64-7	ug/L	N/A	< 5.4	5.4
N-Nitrosodiphenylamine	86-30-6	ug/L	N/A	< 5.4	5.4
Pentachlorophenol	87-86-5	ug/L	N/A	< 5.4	5.4
Phenanthrene	85-01-8	ug/L	1.5	< 5.4	5.4
Phenol	108-95-2	ug/L	N/A	< 5.4	5.4
Pyrene	129-00-0	ug/L	N/A	< 5.4	5.4

Result Detected	
RL Exceeds Criteria	
Result Exceeds Criteria	

Table 1. Tabulated Analytical Results (cont'd)

Phoenix Environmental Laboratories, Inc.		Units			
587 East Middle Turnpike					
P.O. Box 370	Lab Sample Id		**NYSDEC**	CF78034	
Manchester, CT 06040	Collection Date		**TOGS 1.1.1**	4/22/2020	
(860) 645-1102	Client Id		**Class I**	TEST PIT	
	Matrix		**(Saline**	Gw Discharge	
Project Id : 13 42ND ST BK SUNSET PARK			**Waters)**		
	CAS		**Limit**	Result	RL
Volatiles By E624.1					
1,1,1-Trichloroethane	71-55-6	ug/L	N/A	< 5.0	5.0
1,1,2,2-tetrachloroethane	79-34-5	ug/L	N/A	< 5.0	5.0
1,1,2-Trichloroethane	79-00-5	ug/L	N/A	< 5.0	5.0
1,1-Dichloroethane	75-34-3	ug/L	N/A	< 5.0	5.0
1,1-Dichloroethene	75-35-4	ug/L	N/A	< 0.50	0.50
1,2-Dichlorobenzene	95-50-1	ug/L	5	< 0.50	0.50
1,2-Dichloroethane	107-06-2	ug/L	N/A	< 5.0	5.0
1,2-Dichloropropane	78-87-5	ug/L	N/A	< 5.0	5.0
1,3-Dichlorobenzene	541-73-1	ug/L	5	< 5.0	5.0
1,3-Dichloropropene	542-75-6	ug/L	N/A	< 5.0	5.0
1,4-Dichlorobenzene	106-46-7	ug/L	5	< 5.0	5.0
Benzene	71-43-2	ug/L	10	< 5.0	5.0
Bromodichloromethane	75-27-4	ug/L	N/A	< 5.0	5.0
Bromoform	75-25-2	ug/L	N/A	< 5.0	5.0
Bromomethane	74-83-9	ug/L	N/A	< 5.0	5.0
Carbon tetrachloride	56-23-5	ug/L	N/A	< 5.0	5.0
Chlorobenzene	108-90-7	ug/L	5	< 5.0	5.0
Chloroethane	75-00-3	ug/L	N/A	< 5.0	5.0
Chloroform	67-66-3	ug/L	N/A	< 0.50	0.50
Chloromethane	74-87-3	ug/L	N/A	< 0.50	0.50
cis-1,2-Dichloroethene	156-59-2	ug/L	N/A	< 0.50	0.50
cis-1,3-Dichloropropene	10061-01-5	ug/L	N/A	< 5.0	5.0
Dibromochloromethane	124-48-1	ug/L	N/A	< 5.0	5.0
Ethylbenzene	100-41-4	ug/L	4.5	< 5.0	5.0
m&p-Xylene	179601-23-1	ug/L	19	< 0.50	0.50
Methyl tert-butyl ether (MTBE)	1634-04-4	ug/L	N/A	< 1.0	1.0
Methylene chloride	75-09-2	ug/L	200	< 5.0	5.0
o-Xylene	95-47-6	ug/L	19	< 5.0	5.0
Tetrachloroethene	127-18-4	ug/L	1	< 0.50	0.50
Toluene	108-88-3	ug/L	92	< 0.50	0.50
trans-1,2-Dichloroethene	156-60-5	ug/L	N/A	< 0.50	0.50
trans-1,3-Dichloropropene	10061-02-6	ug/L	N/A	< 5.0	5.0
Trichloroethene	79-01-6	ug/L	40	< 5.0	5.0
Trichlorofluoromethane	75-69-4	ug/L	N/A	< 0.50	0.50
Vinyl chloride	75-01-4	ug/L	N/A	< 0.50	0.50

Result Detected	
RL Exceeds Criteria	
Result Exceeds Criteria	

Table 2. Tabulated Analytical Results (TW-1, TW-2, TW-3)

Phoenix Environmental Laboratories, Inc.										
587 East Middle Turnpike										
P.O. Box 370	Lab Sample Id		**NYSDEC**	CK26064		CK26065		CK26066	
Manchester, CT 06040	Collection Date		**TOGS 1.1.1**	1/28/2022		1/28/2022		1/28/2022	
(860) 645-1102	Client Id		**Class I**	TW1		TW2		TW3	
	Matrix		**(Saline**	Gw Discharge		Gw Discharge		Gw Discharge	
Project Id : 13 42ND STREET BROOKLYN		**Units**	**Waters)**						
	CAS		**Limit**	Result	RL	Result	RL	Result	RL
Miscellaneous/Inorganics									
Nitrite as Nitrogen	14797-65-0	mg/L	N/A	< 0.05	0.05	< 1.00	1.00	< 1.00	1.00
Nitrate as Nitrogen	14797-55-8	mg/L	N/A	11	0.25	< 0.05	0.05	< 0.05	0.05
pH	PHNX - PH	pH Units	6.5<pH<8.5	8.15	1.00	7.3	1.00	8.15	1.00
Temperature; Field Analysis	610-001	deg. F	N/A	59.7	0.1	52.9	0.1	55.2	0.1
Metals, Total									
Antimony	7440-36-0	mg/L	N/A	< 0.003	0.003	< 0.013	0.013	< 0.013	0.013
Arsenic	7440-38-2	mg/L	0.036	0.002	0.002	< 0.010	0.010	< 0.010	0.010
Beryllium	7440-41-7	mg/L	N/A	< 0.001	0.001	< 0.003	0.003	< 0.003	0.003
Cadmium	7440-43-9	mg/L	0.0027	< 0.001	0.001	< 0.003	0.003	< 0.003	0.003
Chromium	7440-47-3	mg/L	N/A	< 0.001	0.001	< 0.003	0.003	< 0.003	0.003
Copper	7440-50-8	mg/L	0.0034	< 0.003	0.003	< 0.013	0.013	0.017	0.013
Lead	7439-92-1	mg/L	0.008	< 0.001	0.001	< 0.005	0.005	0.219	0.005
Mercury	7439-97-6	mg/L	0.0007	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002	0.0002
Nickel	7440-02-0	mg/L	0.0082	0.002	0.001	< 0.003	0.003	< 0.003	0.003
Selenium	7782-49-2	mg/L	N/A	< 0.005	0.005	< 0.025	0.025	< 0.025	0.025
Silver	7440-22-4	mg/L	N/A	< 0.001	0.001	0.004	0.003	< 0.003	0.003
Thallium	7440-28-0	mg/L	N/A	< 0.001	0.001	< 0.005	0.005	< 0.005	0.005
Zinc	7440-66-6	mg/L	0.066	< 0.002	0.002	0.016	0.010	0.067	0.010
Metals, Dissolved									
Antimony (Dissolved)	7440-36-0	mg/L	N/A	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005
Arsenic (Dissolved)	7440-38-2	mg/L	0.036	< 0.004	0.004	< 0.004	0.004	0.005	0.004
Beryllium (Dissolved)	7440-41-7	mg/L	N/A	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001
Cadmium (Dissolved)	7440-43-9	mg/L	0.0027	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001
Chromium (Dissolved)	7440-47-3	mg/L	N/A	< 0.001	0.001	< 0.001	0.001	< 0.001	0.001
Copper (Dissolved)	7440-50-8	mg/L	0.0034	< 0.005	0.005	< 0.005	0.005	< 0.005	0.005
Lead (Dissolved)	7439-92-1	mg/L	0.008	< 0.002	0.002	< 0.002	0.002	0.01	0.002
Nickel (Dissolved)	7440-02-0	mg/L	0.0082	< 0.001	0.001	0.003	0.001	< 0.001	0.001
Selenium (Dissolved)	7782-49-2	mg/L	N/A	< 0.011	0.011	< 0.011	0.011	< 0.011	0.011
Silver (Dissolved)	7440-22-4	mg/L	N/A	< 0.001	0.001	0.001	0.001	< 0.001	0.001
Thallium (Dissolved)	7440-28-0	mg/L	N/A	< 0.002	0.002	< 0.002	0.002	< 0.002	0.002
Zinc (Dissolved)	7440-66-6	mg/L	0.066	< 0.002	0.002	0.016	0.002	0.003	0.002
PCBs By E608.3									
PCB-1016	12674-11-2	ug/L	Sum < 0.000001	< 0.038	0.038	< 0.058	0.058	< 0.057	0.057
PCB-1221	11104-28-2	ug/L		< 0.038	0.038	< 0.058	0.058	< 0.057	0.057
PCB-1232	11141-16-5	ug/L		< 0.038	0.038	< 0.058	0.058	< 0.057	0.057
PCB-1242	53469-21-9	ug/L		< 0.038	0.038	< 0.058	0.058	< 0.057	0.057
PCB-1248	12672-29-6	ug/L		< 0.038	0.038	< 0.058	0.058	< 0.057	0.057
PCB-1254	11097-69-1	ug/L		< 0.038	0.038	< 0.058	0.058	< 0.057	0.057
PCB-1260	11096-82-5	ug/L		< 0.038	0.038	< 0.058	0.058	< 0.057	0.057
PCB-1262	37324-23-5	ug/L		< 0.038	0.038	< 0.058	0.058	< 0.057	0.057
PCB-1268	11100-14-4	ug/L		< 0.038	0.038	< 0.058	0.058	< 0.057	0.057

Result Detected	
RL Exceeds Criteria	
Result Exceeds Criteria	

Table 2. Tabulated Analytical Results (TW-1, TW-2, TW-3) [cont'd]

Phoenix Environmental Laboratories, Inc.										
587 East Middle Turnpike										
P.O. Box 370	Lab Sample Id		**NYSDEC**	CK26064		CK26065		CK26066	
Manchester, CT 06040	Collection Date		**TOGS 1.1.1**	1/28/2022		1/28/2022		1/28/2022	
(860) 645-1102	Client Id		**Class I**	TW1		TW2		TW3	
	Matrix		**(Saline**	Gw Discharge		Gw Discharge		Gw Discharge	
Project Id : 13 42ND STREET BROOKLYN			**Waters)**						
	CAS	**Units**	**Limit**	Result	RL	Result	RL	Result	RL
Semivolatiles By E625.1/E625.1SIM									
1,2,4-Trichlorobenzene	120-82-1	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
1,2-Dichlorobenzene	95-50-1	ug/L	5	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
1,2-Diphenylhydrazine	122-66-7	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
1,3-Dichlorobenzene	541-73-1	ug/L	5	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
1,4-Dichlorobenzene	106-46-7	ug/L	5	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
2,4,5-Trichlorophenol	95-95-4	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
2,4,6-Trichlorophenol	88-06-2	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
2,4-Dichlorophenol	120-83-2	ug/L	1000	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
2,4-Dimethylphenol	105-67-9	ug/L	400	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
2,4-Dinitrophenol	51-28-5	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
2,4-Dinitrotoluene	121-14-2	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
2,6-Dichlorophenol	87-65-0	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
2,6-Dinitrotoluene	606-20-2	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
2-Chloronaphthalene	91-58-7	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
2-Chlorophenol	95-57-8	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
2-Methylnaphthalene	91-57-6	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
2-Methylphenol (o-cresol)	95-48-7	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
2-Nitroaniline	88-74-4	ug/L	N/A	< 10	10	< 10	10	< 9.4	9.4
2-Nitrophenol	88-75-5	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
3&4-Methylphenol (m&p-cresol)	PHNX - M&P CRESOL	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
3,3'-Dichlorobenzidine	91-94-1	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
3-Nitroaniline	99-09-2	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
4,6-Dinitro-2-methylphenol	534-52-1	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
4-Bromophenyl phenyl ether	101-55-3	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
4-Chloro-3-methylphenol	59-50-7	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
4-Chloroaniline	106-47-8	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
4-Chlorophenyl phenyl ether	7005-72-3	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
4-Nitroaniline	100-01-6	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
4-Nitrophenol	100-02-7	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
Acenaphthene	83-32-9	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
Acenaphthylene	208-96-8	ug/L	N/A	< 10	10	< 10	10	< 9.4	9.4
Anthracene	120-12-7	ug/L	N/A	< 10	10	< 10	10	< 9.4	9.4
Benzidine	92-87-5	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
Benzo(a)anthracene	56-55-3	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
Benzo(a)pyrene	50-32-8	ug/L	0.0006	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
Benzo(b)fluoranthene	205-99-2	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
Benzo(g,h,i)perylene	191-24-2	ug/L	N/A	< 1.0	1.0	< 1.0	1.0	< 0.94	0.94
Benzo(k)fluoranthene	207-08-9	ug/L	N/A	< 1.0	1.0	< 1.0	1.0	< 0.94	0.94
Benzoic acid	65-85-0	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
Benzyl alcohol	100-51-6	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
Benzyl butyl phthalate	85-68-7	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
Bis(2-chloroethoxy)methane	111-91-1	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
Bis(2-chloroethyl)ether	111-44-4	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
Bis(2-chloroisopropyl)ether	108-60-1	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
Bis(2-ethylhexyl)phthalate	117-81-7	ug/L	N/A	< 1.0	1.0	< 1.0	1.0	< 0.94	0.94
Chrysene	218-01-9	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
Dibenz(a,h)anthracene	53-70-3	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
Dibenzofuran	132-64-9	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
Diethyl phthalate	84-66-2	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
Dimethylphthalate	131-11-3	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
Di-n-butylphthalate	84-74-2	ug/L	N/A	< 5.1	5.1	< 5.0	5.0	< 4.7	4.7
Di-n-octylphthalate	117-84-0	ug/L	N/A	< 0.05	0.05	0.17	0.05	< 0.05	0.05
Fluoranthene	206-44-0	ug/L	N/A	< 0.05	0.05	< 0.05	0.05	< 0.05	0.05
Fluorene	86-73-7	ug/L	2.5	< 0.05	0.05	0.2	0.05	< 0.05	0.05
Hexachlorobenzene	118-74-1	ug/L	0.00003	< 0.04	0.04	0.59	0.04	0.06	0.04
Hexachlorobutadiene	87-68-3	ug/L	0.01	< 0.05	0.05	0.66	0.05	0.07	0.05
Hexachlorocyclopentadiene	77-47-4	ug/L	N/A	< 0.05	0.05	0.37	0.05	< 0.05	0.05
Hexachloroethane	67-72-1	ug/L	N/A	< 0.10	0.10	0.6	0.10	< 0.09	0.09
Indeno(1,2,3-c,d)pyrene	193-39-5	ug/L	N/A	< 0.05	0.05	0.36	0.05	0.06	0.05
Isophorone	78-59-1	ug/L	N/A	< 0.05	0.05	0.66	0.05	0.06	0.05
Naphthalene	91-20-3	ug/L	16	< 0.02	0.02	0.08	0.02	< 0.02	0.02
Nitrobenzene	98-95-3	ug/L	N/A	< 0.06	0.06	< 0.06	0.06	< 0.06	0.06
N-Nitrosodimethylamine	62-75-9	ug/L	N/A	< 0.10	0.10	< 0.10	0.10	< 0.09	0.09
N-Nitrosodi-n-propylamine	621-64-7	ug/L	N/A	< 0.10	0.10	< 0.10	0.10	< 0.09	0.09
N-Nitrosodiphenylamine	86-30-6	ug/L	N/A	< 0.05	0.05	0.42	0.05	< 0.05	0.05
Pentachlorophenol	87-86-5	ug/L	N/A	< 0.10	0.10	< 0.10	0.10	< 0.09	0.09
Phenanthrene	85-01-8	ug/L	1.5	< 0.05	0.05	< 0.05	0.05	< 0.05	0.05
Phenol	108-95-2	ug/L	N/A	< 0.05	0.05	< 0.05	0.05	< 0.05	0.05
Pyrene	129-00-0	ug/L	N/A	< 0.05	0.05	0.33	0.05	0.09	0.05
Pyridine	110-86-1	ug/L	N/A	< 0.51	0.51	< 0.50	0.50	< 0.47	0.47

Result Detected	
RL Exceeds Criteria	
Result Exceeds Criteria	

Table 2. Tabulated Analytical Results (TW-1, TW-2, TW-3) [cont'd]

Phoenix Environmental Laboratories, Inc.										
587 East Middle Turnpike										
P.O. Box 370	Lab Sample Id		**NYSDEC**	CK26064		CK26065		CK26066	
Manchester, CT 06040	Collection Date		**TOGS 1.1.1**	1/28/2022		1/28/2022		1/28/2022	
(860) 645-1102	Client Id		**Class I**	TW1		TW2		TW3	
	Matrix		**(Saline**	Gw Discharge		Gw Discharge		Gw Discharge	
Project Id : 13 42ND STREET BROOKLYN			**Waters)**						
	CAS	**Units**	**Limit**	Result	RL	Result	RL	Result	RL
Volatiles By E624.1									
1,1,1-Trichloroethane	71-55-6	ug/L	N/A	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
1,1,2,2-tetrachloroethane	79-34-5	ug/L	N/A	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
1,1,2-Trichloroethane	79-00-5	ug/L	N/A	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
1,1-Dichloroethane	75-34-3	ug/L	N/A	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
1,1-Dichloroethene	75-35-4	ug/L	N/A	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
1,2-Dichlorobenzene	95-50-1	ug/L	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
1,2-Dichloroethane	107-06-2	ug/L	N/A	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
1,2-Dichloropropane	78-87-5	ug/L	N/A	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
1,3-Dichlorobenzene	541-73-1	ug/L	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
1,3-Dichloropropene	542-75-6	ug/L	N/A	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
1,4-Dichlorobenzene	106-46-7	ug/L	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Benzene	71-43-2	ug/L	10	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Bromodichloromethane	75-27-4	ug/L	N/A	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Bromoform	75-25-2	ug/L	N/A	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Bromomethane	74-83-9	ug/L	N/A	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Carbon tetrachloride	56-23-5	ug/L	N/A	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Chlorobenzene	108-90-7	ug/L	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Chloroethane	75-00-3	ug/L	N/A	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Chloroform	67-66-3	ug/L	N/A	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Chloromethane	74-87-3	ug/L	N/A	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
cis-1,2-Dichloroethene	156-59-2	ug/L	N/A	0.71	5.0	< 5.0	5.0	0.63	5.0
cis-1,3-Dichloropropene	10061-01-5	ug/L	N/A	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Dibromochloromethane	124-48-1	ug/L	N/A	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Ethylbenzene	100-41-4	ug/L	4.5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
m&p-Xylenes	179601-23-1	ug/L	19	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Methyl t-butyl ether (MTBE)	1634-04-4	ug/L	N/A	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Methylene chloride	75-09-2	ug/L	200	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
o-Xylene	95-47-6	ug/L	19	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Tetrachloroethene	127-18-4	ug/L	1	1.3	5.0	< 5.0	5.0	< 5.0	5.0
Toluene	108-88-3	ug/L	92	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Total Xylenes	1330-20-7	ug/L	N/A	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
trans-1,2-Dichloroethene	156-60-5	ug/L	N/A	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
trans-1,3-Dichloropropene	10061-02-6	ug/L	N/A	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Trichloroethene	79-01-6	ug/L	40	0.91	5.0	2.1	5.0	< 5.0	5.0
Trichlorofluoromethane	75-69-4	ug/L	N/A	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Vinyl chloride	75-01-4	ug/L	N/A	< 5.0	5.0	< 5.0	5.0	0.82	5.0

Result Detected	
RL Exceeds Criteria	
Result Exceeds Criteria	

Table 2. Tabulated Analytical Results (TW-4)

Phoenix Environmental Laboratories, Inc.					
587 East Middle Turnpike					
P.O. Box 370	Lab Sample Id		**NYSDEC**	CK26063	
Manchester, CT 06040	Collection Date		**TOGS 1.1.1**	1/28/2022	
(860) 645-1102	Client Id		**Class I**	TW4	
	Matrix		**(Saline**	Gw Discharge	
Project Id : 13 42ND STREET BROOKLYN		**Units**	**Waters)**		
	CAS		**Limit**	Result	RL
Miscellaneous/Inorganics					
Flash Point	PHNX - FLASH POINT	Degree F	N/A	>200	200
Ignitability	PHNX - IGNITABILITY	degree F	N/A	Passed	140
Nitrite as Nitrogen	14797-65-0	mg/L	N/A	< 0.05	0.05
Nitrate as Nitrogen	14797-55-8	mg/L	N/A	3.59	0.25
Oil and Grease by EPA 1664A	PHNX - OIL-GREASE	mg/L	N/A	< 1.4	1.4
pH	PHNX - PH	pH Units	6.5<pH<8.5	7.52	1.00
Temperature; Field Analysis	610-001	deg. F	N/A	60.4	0.1
O&G, Non-polar Material	PHNX - OIL-GREASE-NP	mg/L	N/A	< 1.4	1.4
Total Suspended Solids	PHNX - TOTSUSPENDSOL	mg/L	N/A	17	3.3
Metals, Total					
Antimony	7440-36-0	mg/L	N/A	< 0.003	0.003
Arsenic	7440-38-2	mg/L	0.036	< 0.002	0.002
Beryllium	7440-41-7	mg/L	N/A	< 0.001	0.001
Cadmium	7440-43-9	mg/L	0.0027	< 0.001	0.001
Chromium	7440-47-3	mg/L	N/A	0.004	0.001
Copper	7440-50-8	mg/L	0.0034	0.006	0.003
Lead	7439-92-1	mg/L	0.008	< 0.001	0.001
Mercury	7439-97-6	mg/L	0.0007	< 0.0002	0.0002
Nickel	7440-02-0	mg/L	0.0082	0.008	0.001
Selenium	7782-49-2	mg/L	N/A	< 0.005	0.005
Silver	7440-22-4	mg/L	N/A	< 0.001	0.001
Thallium	7440-28-0	mg/L	N/A	< 0.001	0.001
Zinc	7440-66-6	mg/L	0.066	0.009	0.002
Metals, Dissolved					
Antimony (Dissolved)	7440-36-0	mg/L	N/A	< 0.005	0.005
Arsenic (Dissolved)	7440-38-2	mg/L	0.036	< 0.004	0.004
Beryllium (Dissolved)	7440-41-7	mg/L	N/A	< 0.001	0.001
Cadmium (Dissolved)	7440-43-9	mg/L	0.0027	< 0.001	0.001
Chromium (Dissolved)	7440-47-3	mg/L	N/A	< 0.001	0.001
Copper (Dissolved)	7440-50-8	mg/L	0.0034	< 0.005	0.005
Lead (Dissolved)	7439-92-1	mg/L	0.008	< 0.002	0.002
Mercury (Dissolved)	7439-97-6	mg/L	0.0007	< 0.0002	0.0002
Nickel (Dissolved)	7440-02-0	mg/L	0.0082	0.003	0.001
Selenium (Dissolved)	7782-49-2	mg/L	N/A	< 0.011	0.011
Silver (Dissolved)	7440-22-4	mg/L	N/A	< 0.001	0.001
Thallium (Dissolved)	7440-28-0	mg/L	N/A	< 0.002	0.002
Zinc (Dissolved)	7440-66-6	mg/L	0.066	< 0.002	0.002
PCBs By E608.3					
PCB-1016	12674-11-2	ug/L	Sum < 0.000001	< 0.049	0.049
PCB-1221	11104-28-2	ug/L		< 0.049	0.049
PCB-1232	11141-16-5	ug/L		< 0.049	0.049
PCB-1242	53469-21-9	ug/L		< 0.049	0.049
PCB-1248	12672-29-6	ug/L		< 0.049	0.049
PCB-1254	11097-69-1	ug/L		< 0.049	0.049
PCB-1260	11096-82-5	ug/L		< 0.049	0.049
PCB-1262	37324-23-5	ug/L		< 0.049	0.049
PCB-1268	11100-14-4	ug/L		< 0.049	0.049

Result Detected	
RL Exceeds Criteria	
Result Exceeds Criteria	

Table 2. Tabulated Analytical Results (TW-4) [cont'd]

Phoenix Environmental Laboratories, Inc.		Units			
587 East Middle Turnpike					
P.O. Box 370	Lab Sample Id		**NYSDEC**	CK26063	
Manchester, CT 06040	Collection Date		**TOGS 1.1.1**	1/28/2022	
(860) 645-1102	Client Id		**Class I**	TW4	
	Matrix		**(Saline**	Gw Discharge	
Project Id : 13 42ND STREET BROOKLYN			**Waters)**		
	CAS		**Limit**	Result	RL
Volatiles By E624.1					
1,1,1-Trichloroethane	71-55-6	ug/L	N/A	< 0.50	0.50
1,1,2,2-tetrachloroethane	79-34-5	ug/L	N/A	< 0.50	0.50
1,1,2-Trichloroethane	79-00-5	ug/L	N/A	< 0.50	0.50
1,1-Dichloroethane	75-34-3	ug/L	N/A	< 0.50	0.50
1,1-Dichloroethene	75-35-4	ug/L	N/A	< 0.50	0.50
1,2-Dichlorobenzene	95-50-1	ug/L	5	< 0.50	0.50
1,2-Dichloroethane	107-06-2	ug/L	N/A	< 0.50	0.50
1,2-Dichloropropane	78-87-5	ug/L	N/A	< 0.50	0.50
1,3-Dichlorobenzene	541-73-1	ug/L	5	< 0.50	0.50
1,4-Dichlorobenzene	106-46-7	ug/L	5	< 0.50	0.50
Benzene	71-43-2	ug/L	10	< 0.50	0.50
Bromodichloromethane	75-27-4	ug/L	N/A	< 0.50	0.50
Bromoform	75-25-2	ug/L	N/A	< 0.50	0.50
Bromomethane	74-83-9	ug/L	N/A	< 0.50	0.50
Carbon tetrachloride	56-23-5	ug/L	N/A	< 0.50	0.50
Chlorobenzene	108-90-7	ug/L	5	< 0.50	0.50
Chloroethane	75-00-3	ug/L	N/A	< 0.50	0.50
Chloroform	67-66-3	ug/L	N/A	2	0.50
Chloromethane	74-87-3	ug/L	N/A	< 0.50	0.50
cis-1,2-Dichloroethene	156-59-2	ug/L	N/A	< 0.50	0.50
cis-1,3-Dichloropropene	10061-01-5	ug/L	N/A	< 0.40	0.40
Dibromochloromethane	124-48-1	ug/L	N/A	< 0.50	0.50
Ethylbenzene	100-41-4	ug/L	4.5	< 0.50	0.50
m&p-Xylene	179601-23-1	ug/L	19	< 0.50	0.50
Methyl tert-butyl ether (MTBE)	1634-04-4	ug/L	N/A	< 1.0	1.0
Methylene chloride	75-09-2	ug/L	200	< 0.50	0.50
Naphthalene	91-20-3	ug/L	N/A	< 1.0	1.0
o-Xylene	95-47-6	ug/L	19	< 0.50	0.50
Tetrachloroethene	127-18-4	ug/L	1	0.31	0.50
Toluene	108-88-3	ug/L	92	< 0.50	0.50
trans-1,2-Dichloroethene	156-60-5	ug/L	N/A	< 0.50	0.50
trans-1,3-Dichloropropene	10061-02-6	ug/L	N/A	< 0.40	0.40
Trichloroethene	79-01-6	ug/L	40	1	0.50
Trichlorofluoromethane	75-69-4	ug/L	N/A	< 0.50	0.50
Vinyl chloride	75-01-4	ug/L	N/A	< 0.50	0.50

Result Detected	
RL Exceeds Criteria	
Result Exceeds Criteria	

Table 2. Tabulated Analytical Results (TW-4) [cont'd]

Phoenix Environmental Laboratories, Inc.					
587 East Middle Turnpike					
P.O. Box 370	Lab Sample Id		**NYSDEC**	CK26063	
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(860) 645-1102	Client Id		**Class I**	TW4	
	Matrix		**(Saline**	Gw Discharge	
Project Id : 13 42ND STREET BROOKLYN			**Waters)**		
	CAS	**Units**	**Limit**	Result	RL
Semivolatiles By E625.1/E625.1SIM					
1,2,4-Trichlorobenzene	120-82-1	ug/L	N/A	< 5.0	5.0
1,2-Dichlorobenzene	95-50-1	ug/L	5	< 5.0	5.0
1,2-Diphenylhydrazine	122-66-7	ug/L	N/A	< 5.0	5.0
1,3-Dichlorobenzene	541-73-1	ug/L	5	< 5.0	5.0
1,4-Dichlorobenzene	106-46-7	ug/L	5	< 5.0	5.0
2,4,5-Trichlorophenol	95-95-4	ug/L	N/A	< 5.0	5.0
2,4,6-Trichlorophenol	88-06-2	ug/L	N/A	< 5.0	5.0
2,4-Dichlorophenol	120-83-2	ug/L	1000	< 5.0	5.0
2,4-Dimethylphenol	105-67-9	ug/L	400	< 5.0	5.0
2,4-Dinitrophenol	51-28-5	ug/L	N/A	< 5.0	5.0
2,4-Dinitrotoluene	121-14-2	ug/L	N/A	< 5.0	5.0
2,6-Dichlorophenol	87-65-0	ug/L	N/A	< 5.0	5.0
2,6-Dinitrotoluene	606-20-2	ug/L	N/A	< 5.0	5.0
2-Chloronaphthalene	91-58-7	ug/L	N/A	< 5.0	5.0
2-Chlorophenol	95-57-8	ug/L	N/A	< 5.0	5.0
2-Methylnaphthalene	91-57-6	ug/L	N/A	< 5.0	5.0
2-Methylphenol (o-cresol)	95-48-7	ug/L	N/A	< 5.0	5.0
2-Nitroaniline	88-74-4	ug/L	N/A	< 9.9	9.9
2-Nitrophenol	88-75-5	ug/L	N/A	< 5.0	5.0
3&4-Methylphenol (m&p-cresol)	PHNX - M&P CRESOL	ug/L	N/A	< 5.0	5.0
3,3'-Dichlorobenzidine	91-94-1	ug/L	N/A	< 5.0	5.0
3-Nitroaniline	99-09-2	ug/L	N/A	< 5.0	5.0
4,6-Dinitro-2-methylphenol	534-52-1	ug/L	N/A	< 5.0	5.0
4-Bromophenyl phenyl ether	101-55-3	ug/L	N/A	< 5.0	5.0
4-Chloro-3-methylphenol	59-50-7	ug/L	N/A	< 5.0	5.0
4-Chloroaniline	106-47-8	ug/L	N/A	< 5.0	5.0
4-Chlorophenyl phenyl ether	7005-72-3	ug/L	N/A	< 5.0	5.0
4-Nitroaniline	100-01-6	ug/L	N/A	< 5.0	5.0
4-Nitrophenol	100-02-7	ug/L	N/A	< 5.0	5.0
Acenaphthene	83-32-9	ug/L	N/A	< 0.05	0.05
Acenaphthylene	208-96-8	ug/L	N/A	< 0.05	0.05
Anthracene	120-12-7	ug/L	N/A	< 0.05	0.05
Benzidine	92-87-5	ug/L	N/A	< 5.0	5.0
Benzo(a)anthracene	56-55-3	ug/L	N/A	< 0.04	0.04
Benzo(a)pyrene	50-32-8	ug/L	0.0006	< 0.05	0.05
Benzo(b)fluoranthene	205-99-2	ug/L	N/A	< 0.05	0.05
Benzo(g,h,i)perylene	191-24-2	ug/L	N/A	< 0.10	0.10
Benzo(k)fluoranthene	207-08-9	ug/L	N/A	< 0.05	0.05
Benzoic acid	65-85-0	ug/L	N/A	< 9.9	9.9
Benzyl alcohol	100-51-6	ug/L	N/A	< 9.9	9.9
Benzyl butyl phthalate	85-68-7	ug/L	N/A	< 5.0	5.0
Bis(2-chloroethoxy)methane	111-91-1	ug/L	N/A	< 5.0	5.0
Bis(2-chloroethyl)ether	111-44-4	ug/L	N/A	< 5.0	5.0
Bis(2-chloroisopropyl)ether	108-60-1	ug/L	N/A	< 5.0	5.0
Bis(2-ethylhexyl)phthalate	117-81-7	ug/L	N/A	< 0.99	0.99
Chrysene	218-01-9	ug/L	N/A	< 0.05	0.05
Dibenz(a,h)anthracene	53-70-3	ug/L	N/A	< 0.02	0.02
Dibenzofuran	132-64-9	ug/L	N/A	< 0.99	0.99
Diethyl phthalate	84-66-2	ug/L	N/A	< 5.0	5.0
Dimethylphthalate	131-11-3	ug/L	N/A	< 5.0	5.0
Di-n-butylphthalate	84-74-2	ug/L	N/A	< 5.0	5.0
Di-n-octylphthalate	117-84-0	ug/L	N/A	< 5.0	5.0
Fluoranthene	206-44-0	ug/L	N/A	< 5.0	5.0
Fluorene	86-73-7	ug/L	2.5	< 5.0	5.0
Hexachlorobenzene	118-74-1	ug/L	0.00003	< 0.06	0.06
Hexachlorobutadiene	87-68-3	ug/L	0.01	< 0.10	0.10
Hexachlorocyclopentadiene	77-47-4	ug/L	N/A	< 0.10	0.10
Hexachloroethane	67-72-1	ug/L	N/A	< 0.99	0.99
Indeno(1,2,3-c,d)pyrene	193-39-5	ug/L	N/A	< 0.05	0.05
Isophorone	78-59-1	ug/L	N/A	< 5.0	5.0
Naphthalene	91-20-3	ug/L	16	< 5.0	5.0
Nitrobenzene	98-95-3	ug/L	N/A	< 0.10	0.10
N-Nitrosodimethylamine	62-75-9	ug/L	N/A	< 0.05	0.05
N-Nitrosodi-n-propylamine	621-64-7	ug/L	N/A	< 5.0	5.0
N-Nitrosodiphenylamine	86-30-6	ug/L	N/A	< 5.0	5.0
Pentachlorophenol	87-86-5	ug/L	N/A	< 0.05	0.05
Phenanthrene	85-01-8	ug/L	1.5	< 0.05	0.05
Phenol	108-95-2	ug/L	N/A	< 5.0	5.0
Pyrene	129-00-0	ug/L	N/A	< 5.0	5.0
Pyridine	110-86-1	ug/L	N/A	< 0.50	0.50

Result Detected	
RL Exceeds Criteria	
Result Exceeds Criteria	

1. Letter of Authorization

LETTER OF AUTHORIZATION

Date: 04/27/2022

To Whom It May Concern:

Re.: Premises: Bush Terminal--13 42nd Street
Street Address

Brooklyn *City* | Brooklyn *Borough*

Lot No.: 1 **Block No.:** 715

I, DAVID ANEIRO, *Owner's Name*, have authorized ARIEL CZEMERINSKI *PE / RA / Agent's Name* (P.E.) / R.A. / Agent

18-36 42nd Street *PE / RA/ Agent's Street Address* | *Floor #* | Queens *Borough* | NY *State* | 11105 *Zip*

to file plans and

DOCUMENTS FOR A DEWATERING SYSTEM WITH THE NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION,

AND THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION.

I FURTHER AUTHORIZE HIM TO SIGN THE APPLICATION FORMS IN SUPPORT OF THE DEWATERING

APPLICATION AT THE ABOVE PREMISES ON MY BEHALF.

The signature of the owner constitutes an agreement that the owner assumes responsibility for the installation, alteration and use of the equipment or control apparatus concerned

Signature of Owner	Name of incorporated entity: New York City Economic Development Corporation		
	Street Address: One Liberty Plaza, 14th Floor		
If corporation, state title of officer signing: Senior Vice President	City: New York	State: NY	Zip: 10006

(Please Notarize Here/Below)

FRANCES TUFANO
NOTARY PUBLIC, STATE OF NEW YORK
Registration No. O1TU5080131
Qualified in Queens County
Commission Expires June 16, 2023

2. SPDES Determination of Jurisdiction Letter

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Permits, Region 2
47-40 21st Street, Long Island City, NY 11101
P: (718) 482-4997 | F: (718) 482-4975
www.dec.ny.gov

April 8, 2022

Ms. Karina Gilbert
Senior Vice President
New York City Economic Development Corporation
One Liberty Plaza, 14th Floor
New York, NY 10006

Re: NYSDEC Application # 2-6102-00617/00011
Facility: NYC EDC - BUSH TERMINAL PIERS 5, 6, & 7
43RD ST AND MARGINAL ST
BROOKLYN, NY 11232
Temporary construction dewatering discharge
ECL Article 17 -- Water Pollution Control
NOTICE OF DETERMINATION OF JURISDICTION

Dear Ms. Gilbert:

The action referenced above, as described in the jurisdictional determination request dated June 3, 2021, received by the Department on August 18, 2021, and addendum dated and received by the Department on February 10, 2022, assigned application number 2-6102-00617/00011, is within the jurisdiction of the DEC under the Water Pollution Control Act (Article 17 of the Environmental Conservation Law). Therefore, an individual State Pollutant Discharge Elimination System (SPDES) permit and treatment is required for this proposed discharge. Please submit application form NY-2C and associated information required by 6 NYCRR Part 750-01 to the Department. The form is available at: https://www.dec.ny.gov/docs/water_pdf/ny2cfillable.pdf.

The Division of Water, following a review of the submitted application package, including the groundwater sampling results that were collected by AMC Engineering on January 28, 2022, and April 22, 2020, has determined that the groundwater at the site may contain pollutants at levels of concern based on the groundwater sampling results, site location, limited site history, and proposed duration of the dewatering operation. Based on this, it has been determined that a SPDES permit and associated treatment is required for this proposed discharge. Please submit a full SPDES application package if you wish to proceed as planned. If your plans change and will no longer include a direct discharge, please inform the Department.

Environmental Justice:
Based on a preliminary screen of census block groups proximate to the project site, we have determined that your project may impact potential environmental justice areas (PEJAs). As defined by NYSDEC policy "CP-29 Environmental Justice and Permitting" (March 2003), PEJAs are "minority or low income communit(ies) that may bear a disproportionate share of negative environmental consequences..." Applications of this type (SPDES) are subject to specific requirements to ensure community input during the review process. A map that depicts PEJAs relative to your project location may be obtained by utilizing the DECinfo Locator and activating

the *Potential Environmental Justice Area* layer under the *Public Involvement Layers* (see: https://gisservices.dec.ny.gov/gis/dil/).

CP-29 contains additional requirements for SPDES permit applications within PEJAs. In particular, Section V "Procedures," Subsection D, of CP-29 requires the submission of a written Public Participation Plan to ensure public participation during the application review process. Your Public Participation Plan (PPP) must focus on the community potentially affected by the proposed project, inform interested stakeholders about the proposed action and, also, outline and describe a program of activities that provide opportunities for public participation in the NYSDEC environmental permit review process. Public participation in the NYSDEC environmental permit review process means a program of activities that provides opportunities for stakeholders to be informed about and involved in the review of a proposed action.

In preparing the above requested plan, please refer to "Tips for Preparation of a Public Participation Plan" (https://www.dec.ny.gov/docs/permits_ej_operations_pdf/ppp.pdf). Additional information and guidance on CP-29 please may be found at: http://www.dec.ny.gov/docs/permits_ej_operations_pdf/cp29a.pdf and https://www.dec.ny.gov/public/36929.html. For your reference, examples of Public Participation Plans are available at: http://www.dec.ny.gov/public/36929.html.

Please note that submission and approval of the PPP by the Department is a required element of completeness. Although you have not yet submitted a SPDES application, we are providing you with this determination now so that you can begin preparing the Public Participation Plan simultaneously with the application.

Technical questions concerning this matter should be directed to Atiqur Rahman in the Division of Water at (718) 482-4882. Administrative questions should be directed to Caitlyn Nichols in the Division of Environmental Permits at (718) 482-4079.

Sincerely,

Stephen A. Watts III
Regional Permit Administrator

Stephen A Watts III Digitally signed by Stephen A Watts III
Date: 2022.04.08 20:51:59 -04'00'

ecc: A. Rahman, P.E., DOW
S. Southwell, P.E., DOW
AMC Engineering PLLC
File/RPA

3. NY-2C Form

DEC Identification Number	SPDES Permit Number	Facility Name	Form Approved: 3/1/2022
2-6102-00617/00012			

Form NY-2C PART I SPDES

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

New York State Department of Environmental Conservation
Application for SPDES Permit to Discharge Wastewater
GENERAL INFORMATION

SECTION 1. PERMIT ACTION REQUESTED

Permit Action Requested

1.1 What is the reason for submitting this application?

- ☒ A NEW proposed Discharge
- ☐ A RENEWAL of an existing permit
- ☐ An EXISTING discharge currently without permit
- ☐ An EBPS REQUEST FOR INFORMATION response
- ☐ A MODIFICATION of the existing permit (describe below)

1.2 Increased Discharge Request

Is this application a request for an increase in the quantity of water discharged from your facility to the waters of the State?

- ☐ Yes ➔ Describe the increase:
- ☒ No ➔ Skip to Item 2.1

SECTION 2. PERMITTEE & FACILITY NAME, LEGAL STATUS, MAILING ADDRESS, AND LOCATION (40 CFR 122.21(f)(2))

Permittee & Facility Name, Legal Status, Mailing Address, and Location

2.1 Permittee Name

New York City Economic Development Corporation (NYC EDC)

2.2 Permittee Mailing Address

Street or P.O. box: One Liberty Plaza, 14th Floor

City or town	State	ZIP code
New York	NY	10006

2.3 Permitee Legal Status

- ☐ Public—federal
- ☐ Public—state
- ☒ Other public (specify) City
- ☐ Private
- ☐ Other (specify) _____

2.4 Facility Name

NYCEDC Project #50106760 - Bush Terminal (North Campus)

2.5 NYSDEC Identification Number

2-6102-00617/00012

2.6 Facility Contact

Name (first and last)	Title	Phone number
David Aneiro	Senior Vice President	212-312-3800

Email address: operations@edc.nyc

2.7 Facility Location

Street, route number, or other specific identifier: 13 42nd Street (41 St, 42 St, 43 St, Marginal Str, MiNi Ln, and First Ave)

County name	County code (if known)	
Kings	047	

City or town	State	ZIP code
Brooklyn	NY	11232

DEC Identification Number	SPDES Permit Number	Facility Name	Form Approved: 3/1/2022
2-6102-00617/00012			

SECTION 3. SIC AND NAICS CODES (40 CFR 122.21(f)(3))

SIC and NAICS Codes

	SIC Code(s)	Description (optional)
3.1	1623	Water, Sewer, Pipeline, and Communications and Power Line Construction

	NAICS Code(s)	Description (optional)
3.2		

SECTION 4. OPERATOR INFORMATION (40 CFR 122.21(f)(4))

Operator Information

4.1 **Name of Operator**

Griffin Dewatering

4.2 Is the name you listed in Item 4.1 also the owner?

☐ Yes ➔ Skip to Item 5.1 ☒ No

4.3 **Operator Status**

☐ Public—federal ☐ Public—state ☐ Other public (specify)_____

☒ Private ☐ Other (specify) _____

4.4 **Phone Number of Operator**

908-241-5560

Operator Information Continued

4.5 **Operator Address**

Street or P.O. Box

111 North Michigan Avenue

City or town	State	ZIP code
Kenilworth	NJ	07033

Email address of operator

rafael.rivera@griffindewatering.com

SECTION 5. INDIAN LAND (40 CFR 122.21(f)(5))

Indian Land

5.1 Is the facility located on Indian Land?

☐ Yes ☒ No

SECTION 6. EXISTING ENVIRONMENTAL PERMITS (40 CFR 122.21(f)(6))

Existing Environmental Permits

6.1 **Existing Environmental Permits** (check all that apply and print or type the corresponding permit number for each)

☐ SPDES _____	☐ RCRA (hazardous wastes) _____	☐ UIC (underground injection) _____
☐ PSD (air emissions) _____	☐ Nonattainment program (CAA) _____	☐ NESHAPs (CAA) _____
☐ Ocean dumping (MPRSA) _____	☐ Dredge or fill (CWA Section 404) _____	☐ Other (specify) _____

SECTION 7. MAP (40 CFR 122.21(f)(7))

Map

7.1 Have you attached a topographic map containing all required information to this application? (See instructions for specific requirements.)

☐ Yes ☒ No

SECTION 8. NATURE OF BUSINESS (40 CFR 122.21(f)(8))

Nature of Business

8.1 Describe the nature of your business.

Dewatering activities are required for the installation of new sewer and utility lines in the streets.

SECTION 9. WATER SUPPLY & COOLING WATER INTAKE STRUCTURES (40 CFR 122.21(f)(9))

Water Supply Source(s)

9.1 What water supply source(s) does your facility use? Identify the name or owner of each source. (check all that apply)

☒ Municipal ☐ Private Intake ☐ Private Well ☐ Other (specify)

Owner: NYCDEP

9.2 Provide the amount of water typically consumed from each of these sources.

Municipal	N/A	MGD	Private Well		MGD
Private Intake		MGD	Other		MGD

9.3 Is the facility located within a sole source aquifer as shown on Exhibit 2C-6?

☒ Yes ➔Complete Application Supplement B (see SPDES website) ☐ No

Cooling Water Intake Structures

9.4 Does your facility use any of these water sources for cooling water?

☐ Yes ☒ No ➔SKIP to Item 10.1.

9.5 Identify the sources used for cooling water. (Note that facilities that use a cooling water intake structure as described at 40 CFR 125, Subparts I and J and NYSDEC Commisioner's Policy 52 (CP-52) may have additional application requirements. Consult with NYSDEC to determine if additional information is needed.)

Thermal Discharges

9.6 If your industry group is listed (see instructions), or the temperature of your discharge exceeds the receiving water temperature by greater than 3°F, provide the following data in (°F):

Avg. Temp.	Max Temp.	Avg. Delta T	Max Delta T

SECTION 10. VARIANCE REQUESTS (40 CFR 122.21(f)(10))

Variance Requests

10.1 Do you intend to request or renew one or more variances pursuant to 6 NYCRR 702.17 or authorized at 40 CFR 122.21(m)? (Check all that apply). Consult with NYSDEC to determine what information is needed.

☐ Fundamentally different factors (CWA Section 301(n))

☐ Water quality related effluent limitations (CWA Section 302(b)(2))

☐ Non-conventional pollutants (CWA Section 301(c) and (g))

☐ Thermal discharges (CWA Section 316(a))

☐ NYS WQBEL (6 NYCRR 702.17)

☒ Not applicable

DEC Identification Number	SPDES Permit Number	Facility Name	Form Approved: 3/1/2022
2-6102-00617/00012			

SECTION 11. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))

Part I Checklist

11.1 In Column 1 below, mark the sections of Form NY-2C Part I that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert NYSDEC. Note that not all applicants are required to provide attachments.

Column 1	Column 2
☒ Section 1: Permit Action Requested	☐ w/ attachments
☒ Section 2: Name, Mailing Address, and Location	☐ w/ attachments
☒ Section 3: SIC Codes	☐ w/ attachments
☒ Section 4: Operator Information	☐ w/ attachments
☒ Section 5: Indian Land	☐ w/ attachments
☒ Section 6: Existing Environmental Permits	☐ w/ attachments
☒ Section 7: Map	☐ w/ topographic map ☐ w/ additional attachments
☒ Section 8: Nature of Business	☐ w/ attachments
☒ Section 9: Water Supply & CWIS	☐ w/ attachments ☒ w/ Sole Source Aquifer Supplement
☒ Section 10: Variance Requests	☐ w/ attachments
☒ Section 11: Checklist	☐ w/ attachments

PART II of Form NY-2C begins on the next page.

DEC Identification Number	SPDES Permit Number	Facility Name	Form Approved: 3/1/2022
2-6102-00617/00012			

Form NY-2C PART II SPDES		New York State Department of Environmental Conservation Application for SPDES Permit to Discharge Wastewater NEW AND EXISTING INDUSTRIAL OPERATIONS DETAILED INFORMATION

SECTION 1. OUTFALL LOCATION (40 CFR 122.21(g)(1)) & RECEIVING WATER DESCRIPTION (6 NYCRR 750-1.7(a))

Outfall Location & Receiving Water Description

1.1 Provide information on each of the facility's outfalls and the receiving waters in the table below.

	Outfall 001	Outfall _____	Outfall _____
Latitude	40 ° 39 ' 20.124 "	° ' "	° ' "
Longitude	74 ° 0 ' 55.367 "	° ' "	° ' "
Receiving Water Name	Upper New York Bay (Gowanus Bay)		
Water Index Number (WIN)			
Waterbody Inventory/ Priority Waterbodies List (WI/PWL) Segment			
Water Classification	Class SB		
Groundwater Discharges Only:			
Soil Type	N/A		
Depth to Water Table	N/A ft	ft	ft

SECTION 2. LINE DRAWING (40 CFR 122.21(g)(2))

Line Drawing

2.1 Have you attached a line drawing to this application that shows the water flow through your facility with a water balance? (See instructions for drawing requirements. See Exhibit 2C–3 at end of instructions for example.)

☒ Yes ☐ No

SECTION 3. AVERAGE FLOWS AND TREATMENT (40 CFR 122.21(g)(3))

Average Flows and Treatment

3.1 For each outfall identified under Item 1.1, provide average flow and treatment information. Add additional sheets if necessary.

****Outfall Number**** 001

Operations Contributing to Flow

Operation	Average Flow	Maximum Flow
Dewatering Phase I	0.144 MGD	0.144 MGD
Dewatering Phase II	2.304 MGD	2.304 MGD
	MGD	MGD
	MGD	MGD

Treatment Units

Description (include size, flow rate through each treatment unit, retention time, etc.)	Code from Table 2C-1	Final Disposal of Solid or Liquid Wastes Other Than by Discharge
six (6) 18,000 gallon settling tank (Adler or equal)	1-U	
three (3) duplex 7-bag filter units fitted with 5-micron filter bags (Griffin or equal)	1-T	
six (6) 10,000-lb activated carbon vessels (Griffin or equal)	2A	

Average Flows and Treatment Continued

3.1 cont.

****Outfall Number**** _____

Operations Contributing to Flow

Operation	Average Flow	Maximum Flow
	MGD	MGD
	MGD	MGD
	MGD	MGD
	MGD	MGD

Treatment Units

Description (include size, flow rate through each treatment unit, retention time, etc.)	Code from Table 2C-1	Final Disposal of Solid or Liquid Wastes Other Than by Discharge

****Outfall Number**** _____

Operations Contributing to Flow

Operation	Average Flow	Maximum Flow
	MGD	MGD
	MGD	MGD
	MGD	MGD
	MGD	MGD

Treatment Units

Description (include size, flow rate through each treatment unit, retention time, etc.)	Code from Table 2C-1	Final Disposal of Solid or Liquid Wastes Other Than by Discharge

WTCs

3.2 Does the facility utilize or plan to utilize any water treatment chemicals that can potentially be discharged from one or more outfalls?

☐ Yes ➔ Complete Table F ☒ No ➔SKIP to Section 4.

Mixing Zone Form

3.3 Has a Mixing Zone Analysis Form been completed and attached? All applicants must complete at least the Simple Form for each wastewater outfall to surface waters. Indicate which form was completed and is attached to this application.

☒ Yes ➔ Simple Form ☐ Yes ➔Detailed Form

DEC Identification Number	SPDES Permit Number	Facility Name	Form Approved: 3/1/2022
2-6102-00617/00012			

SECTION 4. INTERMITTENT FLOWS (40 CFR 122.21(g)(4))

Intermittent Flows

4.1 Except for storm runoff, leaks, or spills, are any discharges described in Sections 1 and 3 intermittent or seasonal?

☐ Yes ☒ No ➔ SKIP to Section 5.

4.2 Provide information on intermittent or seasonal flows for each applicable outfall. Attach additional pages, if necessary.

Outfall Number	Operation (list)	Frequency		Flow Rate		Duration
		Average Days/Week	Average Months/Year	Long-Term Average	Maximum Daily	
		days/week	months/year	MGD	MGD	days
		days/week	months/year	MGD	MGD	days
		days/week	months/year	MGD	MGD	days
		days/week	months/year	MGD	MGD	days
		days/week	months/year	MGD	MGD	days
		days/week	months/year	MGD	MGD	days
		days/week	months/year	MGD	MGD	days
		days/week	months/year	MGD	MGD	days
		days/week	months/year	MGD	MGD	days

SECTION 5. PRODUCTION (40 CFR 122.21(g)(5))

Applicable ELGs

5.1 Do any effluent limitation guidelines (ELGs) promulgated by EPA under Section 304 of the CWA apply to your facility?

☐ Yes ☒ No ➔ SKIP to Item 5.5.

5.2 Provide the following information on applicable ELGs.

ELG Category	ELG Subcategory	Regulatory Citation

Production-Based Limitations

5.3 Are any of the applicable ELGs expressed in terms of production (or other measure of operation)?

☐ Yes ☐ No ➔ SKIP to Item 5.5.

5.4 Provide an actual measure of daily production expressed in terms and units of applicable ELGs.

Outfall Number	Operation, Product, or Material	Quantity per Day	Unit of Measure

Specific Industry

5.5 Is your industry type listed as a specific industry requiring submission of a supplemental application form (see instructions)?

☐ Yes, supplemental form attached ☒ No ➔ SKIP to Section 6.

SECTION 6. SCHEDULED IMPROVEMENTS (40 CFR 122.21(g)(6))

Upgrades and Improvements

6.1 Are you presently voluntarily improving or required by any federal, state, or local authority to meet an implementation schedule for constructing, upgrading, or operating wastewater treatment equipment or practices or any other environmental programs that could affect the discharges described in this application?

☐ Yes ☒ No ➔ SKIP to Item 6.3.

6.2 Briefly identify each applicable project in the table below.

Brief Identification and Description of Project	Affected Outfalls (list outfall number)	Source(s) of Discharge	Final Compliance Dates	
			Required	Projected

6.3 Have you attached sheets describing any additional water pollution control programs (or other environmental projects that may affect your discharges) that you now have underway or planned? *(optional item)*

☐ Yes ☐ No ☒ Not applicable

SECTION 7. EFFLUENT AND INTAKE CHARACTERISTICS (40 CFR 122.21(g)(7))

Effluent and Intake Characteristics

See the instructions to determine the pollutants and parameters you are required to monitor and, in turn, the tables you must complete. Not all applicants need to complete each table.

Table A. Conventional and Non-Conventional Pollutants

7.1 Are you requesting a waiver from NYSDEC for one or more of the Table A pollutants for any of your outfalls?

☐ Yes ☒ No ➔ SKIP to Item 7.3.

7.2 If yes, indicate the applicable outfalls below. Attach waiver request and other required information to the application.

Outfall Number _____ Outfall Number _____ Outfall Number _____

7.3 Have you completed monitoring for all Table A pollutants at each of your outfalls for which a waiver has not been requested and attached the results to this application package?

☒ Yes ☐ No;a waiver request has been attached for all pollutants at all outfalls.

Table B. Toxic Metals, Cyanide, Total Phenols, and Organic Toxic Pollutants

7.4 Do any of the facility's processes that contribute wastewater fall into one or more of the primary industry categories listed in Exhibit 2C-5?

☐ Yes ☒ No ➔SKIP to Item 7.8.

7.5 Have you checked "Testing Required" for all toxic metals, cyanide, and total phenols in Section 1 of Table B?

☐ Yes ☐ No

7.6 List the applicable primary industry categories and check the boxes indicating the required GC/MS fraction(s) identified in Exhibit 2C-5.

Primary Industry Category	Required GC/MS Fraction(s) (Check applicable boxes.)
	☐ Volatile ☐ Acid ☐ Base/Neutral ☐ Pesticide
	☐ Volatile ☐ Acid ☐ Base/Neutral ☐ Pesticide
	☐ Volatile ☐ Acid ☐ Base/Neutral ☐ Pesticide

Effluent and Intake Characteristics Continued

7.7	Have you checked "Testing Required" for all required pollutants in Sections 2 through 5 of Table B for each of the GC/MS fractions checked in Item 7.6? ☐ Yes ☐ No
7.8	Have you checked "Believed Present" or "Believed Absent" for all pollutants listed in Sections 1 through 5 of Table B where testing is not required? ☒ Yes ☐ No
7.9	Have you provided (1) quantitative data for those Section 1, Table B, pollutants for which you have indicated testing is required or (2) quantitative data or other required information for those Section 1, Table B, pollutants that you have indicated are "Believed Present" in your discharge? ☐ Yes ☒ No
7.10	Have you provided (1) quantitative data for those Sections 2 through 5, Table B, pollutants for which you have determined testing is required or (2) quantitative data or an explanation for those Sections 2 through 5, Table B, pollutants you have indicated are "Believed Present" in your discharge? ☐ Yes ☒ No
Table C. Certain Conventional and Non-Conventional Pollutants	
7.11	Have you indicated whether pollutants are "Believed Present" or "Believed Absent" for all pollutants listed on Table C for all outfalls? ☒ Yes ☐ No
7.12	Have you completed Table C by providing (1) quantitative data for those pollutants that are limited either directly or indirectly in an ELG and/or (2) quantitative data or an explanation for those pollutants for which you have indicated "Believed Present"? ☐ Yes ☒ No
Table D. Certain Hazardous Substances and Asbestos	
7.13	Have you indicated whether pollutants are "Believed Present" or "Believed Absent" for all pollutants listed in Table D for all outfalls? ☒ Yes ☐ No
7.14	Have you completed Table D by (1) describing the reasons the applicable pollutants are expected to be discharged and (2) by providing quantitative data, if available? ☐ Yes ☒ No
Table E. 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (2,3,7,8-TCDD)	
7.15	Does the facility use or manufacture one or more of the 2,3,7,8-TCDD congeners listed in the instructions, or do you know or have reason to believe that TCDD is or may be present in the effluent? ☐ Yes ➔ Complete Table E. ☒ No ➔ SKIP to Section 8.
7.16	Have you completed Table E by reporting *qualitative* data for TCDD? ☐ Yes ☐ No

SECTION 8. USED OR MANUFACTURED TOXICS (40 CFR 122.21(g)(9))

Used or Manufactured Toxics

8.1	Are any other pollutants, substances, or components of substances, not already listed in Tables A-E, used or manufactured at your facility as an intermediate or final product or byproduct? ☐ Yes ☒ No ➔ SKIP to Section 9.		
8.2	List the pollutants below.		
	1.	4.	7.
	2.	5.	8.
	3.	6.	9.

SECTION 9. BIOLOGICAL TOXICITY TESTS (40 CFR 122.21(g)(11))

Biological Toxicity Tests

9.1 Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made within the last three years on (1) any of your discharges or (2) on a receiving water in relation to your discharge?

☐ Yes ☒ No ➔ SKIP to Section 10.

9.2 Identify the tests and their purposes below.

Test(s)	Purpose of Test(s)	Submitted to NYSDEC?	Date Submitted
		☐ Yes ☐ No	
		☐ Yes ☐ No	
		☐ Yes ☐ No	

SECTION 10. CONTRACT ANALYSES (40 CFR 122.21(g)(12))

Contract Analyses

10.1 Were any of the analyses reported in Section 7 performed by a contract laboratory or consulting firm?

☒ Yes ☐ No ➔ SKIP to Section 11.

10.2 Provide information for each contract laboratory or consulting firm below.

	Laboratory Number 1	Laboratory Number 2	Laboratory Number 3
Name of laboratory/firm	Phoenix Environmental Laboratories, Inc.		
ELAP Cert No.	11301		
Laboratory address	587 East Middle Turnpike P.O. Box 370, Manchester, CT 06045		
Phone number	(860) 645-1102		
Pollutant(s) analyzed	TOGS Class SB criteria		

SECTION 11. ADDITIONAL INFORMATION (40 CFR 122.21(g)(13))

Additional Information

11.1 Does your facility use, produce, store, distribute, or otherwise dispose of any significant quantity of substances listed in Tables B, C, D, E or those substances identified in Item 8.2?

☐ Yes ➔ Complete Table G. ☒ No ➔ SKIP to Item 11.2.

11.2 Does your facility utilize pumping stations to convey wastewaters on the site and/or in wastewater treatment?

☐ Yes ➔ Complete Table H. ☒ No ➔ SKIP to Item 11.3.

11.3 Has NYSDEC requested additional information?

☐ Yes ☒ No ➔ SKIP to Section 12.

11.4 List the information requested and attach it to this application.

1. 3.

2. 4.

SECTION 12. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))

Checklist and Certification Statement

12.1 In Column 1 below, mark the sections of Form NY-2C that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert NYSDEC. Note that not all applicants are required to complete all sections or provide attachments.

Column 1	Column 2
☒ Section 1: Outfall Location	☐ w/ attachments
☒ Section 2: Line Drawing	☒ w/ line drawing ☐ w/ additional attachments
☒ Section 3: Average Flows and Treatment	☐ w/ attachments ☒ w/ Simple MZ Form ☐ w/ Table F ☐ w/ Detailed MZ Form
☒ Section 4: Intermittent Flows	☐ w/ attachments
☒ Section 5: Production	☐ w/ attachments
☒ Section 6: Improvements	☐ w/ attachments ☐ w/ optional additional sheets describing any additional pollution control plans
☒ Section 7: Effluent and Intake Characteristics	☐ w/ request for a waiver and supporting information ☐ w/ explanation for identical outfalls ☐ w/ primary industry supplemental form ☐ w/ additional attachments ☐ w/ Table A ☐ w/ Table B ☐ w/ Table C ☐ w/ Table D ☐ w/ Table E ☐ w/ analytical results as an attachment
☒ Section 8: Used or Manufactured Toxics	☐ w/ attachments
☒ Section 9: Biological Toxicity Tests	☐ w/ attachments
☒ Section 10: Contract Analyses	☐ w/ attachments
☒ Section 11: Additional Information	☐ w/ attachments ☐ w/ Table G ☐ w/ Table H
☒ Section 12: Checklist and Certification Statement	☐ w/ attachments

12.2 **Certification Statement**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name (print or type first and last name)	Official title
David Aneiro	Senior Vice President
Signature	**Date signed**
	09/16/2022

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DEC Identification Number	SPDES Permit Number	Facility Name	Outfall Number
2-6102-00617/00012			

TABLE A. CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(iii))[1]

	Pollutant	Waiver Requested (if applicable)	Units (specify)		Effluent: Maximum Daily Discharge (required)	Effluent: Maximum Monthly Discharge (if available)	Effluent: Long-Term Average Daily Discharge (if available)	Effluent: Number of Analyses	Intake (O: Long-Term Average Value
	Mark "X" in Cell A6 if you have attached a request to NYSDEC for a waiver for *all* of the pollutants listed on this table for the noted outfall.								
1.	Biochemical oxygen demand (BOD5)	☐	Concentration						
			Mass						
2.	Chemical oxygen demand (COD)	☐	Concentration						
			Mass						
3.	Total organic carbon (TOC)	☐	Concentration						
			Mass						
4.	Total suspended solids (TSS)	☐	Concentration						
			Mass						
5.	Ammonia (as N)	☐	Concentration						
			Mass						
6.	Flow	☐	Rate						
7.	Temperature (winter)	☐	°C	°C					
	Temperature (summer)	☐	°C	°C					
8.	pH (minimum)	☐	Standard units	SU					
	pH (maximum)	☐	Standard units	SU					
9.	Mercury[2]	☐	Concentration						
			Mass						

1 Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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DEC Identification Number	SPDES Permit Number	Facility Name	Outfall Number
2-6102-00617/00012			

Form Approved: 3/1/2022

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
☐	Check here if you believe all pollutants on Table B to be absent in your discharge from the noted outfall. You need not check the "Believed Absent" box for each pollutant.											
Section 1. Toxic Metals, Cyanide, and Total Phenols												
1.1	Antimony, total (7440-36-0)	☐	☐	☒	Concentration							
					Mass							
1.2	Arsenic, total (7440-38-2)	☐	☐	☒	Concentration							
					Mass							
1.3	Beryllium, total (7440-41-7)	☐	☐	☒	Concentration							
					Mass							
1.4	Cadmium, total (7440-43-9)	☐	☒	☐	Concentration	3 ug/L						
					Mass							
1.5	Chromium, total (7440-47-3)	☐	☐	☒	Concentration							
					Mass							
1.6	Copper, total (7440-50-8)	☐	☒	☐	Concentration	38 ug/L						
					Mass							
1.7	Lead, total (7439-92-1)	☐	☒	☐	Concentration	26 ug/L						
					Mass							
1.8	Mercury, total (7439-97-6)	☐	☐	☒	Concentration							
					Mass							
1.9	Nickel, total (7440-02-0)	☐	☒	☐	Concentration	22 ug/L						
					Mass							
1.10	Selenium, total (7782-49-2)	☐	☐	☒	Concentration							
					Mass							
1.11	Silver, total (7440-22-4)	☐	☐	☒	Concentration							
					Mass							

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
1.12	Thallium, total (7440-28-0)	☐	☐	☒	Concentration							
					Mass							
1.13	Zinc, total (7440-66-6)	☐	☒	☐	Concentration	728 ug/L						
					Mass							
1.14	Cyanide, total (57-12-5)	☐	☐	☒	Concentration							
					Mass							
1.15	Phenols, total	☐	☐	☒	Concentration							
					Mass							
Section 2. Organic Toxic Pollutants (GC/MS Fraction—Volatile Compounds)												
2.1	Acrolein (107-02-8)	☐	☐	☒	Concentration							
					Mass							
2.2	Acrylonitrile (107-13-1)	☐	☐	☒	Concentration							
					Mass							
2.3	Benzene (71-43-2)	☐	☐	☒	Concentration							
					Mass							
2.4	Bromoform (75-25-2)	☐	☐	☒	Concentration							
					Mass							
2.5	Carbon tetrachloride (56-23-5)	☐	☐	☒	Concentration							
					Mass							
2.6	Chlorobenzene (108-90-7)	☐	☐	☒	Concentration							
					Mass							
2.7	Chlorodibromomethane (124-48-1)	☐	☐	☒	Concentration							
					Mass							
2.8	Chloroethane (75-00-3)	☐	☐	☒	Concentration							
					Mass							

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
2.9	2-chloroethylvinyl ether (110-75-8)	☐	☐	☒	Concentration							
					Mass							
2.10	Chloroform (67-66-3)	☐	☐	☒	Concentration							
					Mass							
2.11	Dichlorobromomethane (75-27-4)	☐	☐	☒	Concentration							
					Mass							
2.12	1,1-dichloroethane (75-34-3)	☐	☐	☒	Concentration							
					Mass							
2.13	1,2-dichloroethane (107-06-2)	☐	☐	☒	Concentration							
					Mass							
2.14	1,1-dichloroethylene (75-35-4)	☐	☐	☒	Concentration							
					Mass							
2.15	1,2-dichloropropane (78-87-5)	☐	☐	☒	Concentration							
					Mass							
2.16	1,3-dichloropropylene (542-75-6)	☐	☐	☒	Concentration							
					Mass							
2.17	Ethylbenzene (100-41-4)	☐	☐	☒	Concentration							
					Mass							
2.18	Methyl bromide (74-83-9)	☐	☐	☒	Concentration							
					Mass							
2.19	Methyl chloride (74-87-3)	☐	☐	☒	Concentration							
					Mass							
2.20	Methylene chloride (75-09-2)	☐	☐	☒	Concentration							
					Mass							
2.21	1,1,2,2- tetrachloroethane (79-34-5)	☐	☐	☒	Concentration							
					Mass							

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
2.22	Tetrachloroethylene (127-18-4)	☐	☐	☒	Concentration							
					Mass							
2.23	Toluene (108-88-3)	☐	☐	☒	Concentration							
					Mass							
2.24	1,2-trans-dichloroethylene (156-60-5)	☐	☐	☒	Concentration							
					Mass							
2.25	1,1,1-trichloroethane (71-55-6)	☐	☐	☒	Concentration							
					Mass							
2.26	1,1,2-trichloroethane (79-00-5)	☐	☐	☒	Concentration							
					Mass							
2.27	Trichloroethylene (79-01-6)	☐	☐	☒	Concentration							
					Mass							
2.28	Vinyl chloride (75-01-4)	☐	☐	☒	Concentration							
					Mass							
Section 3. Organic Toxic Pollutants (GC/MS Fraction—Acid Compounds)												
3.1	2-chlorophenol (95-57-8)	☐	☐	☒	Concentration							
					Mass							
3.2	2,4-dichlorophenol (120-83-2)	☐	☐	☒	Concentration							
					Mass							
3.3	2,4-dimethylphenol (105-67-9)	☐	☐	☒	Concentration							
					Mass							
3.4	4,6-dinitro-o-cresol (534-52-1)	☐	☐	☒	Concentration							
					Mass							
3.5	2,4-dinitrophenol (51-28-5)	☐	☐	☒	Concentration							
					Mass							

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
3.6	2-nitrophenol (88-75-5)	☐	☐	☒	Concentration							
					Mass							
3.7	4-nitrophenol (100-02-7)	☐	☐	☒	Concentration							
					Mass							
3.8	p-chloro-m-cresol (59-50-7)	☐	☐	☒	Concentration							
					Mass							
3.9	Pentachlorophenol (87-86-5)	☐	☐	☒	Concentration							
					Mass							
3.10	Phenol (108-95-2)	☐	☐	☒	Concentration							
					Mass							
3.11	2,4,6-trichlorophenol (88-05-2)	☐	☐	☒	Concentration							
					Mass							
Section 4. Organic Toxic Pollutants (GC/MS Fraction—Base /Neutral Compounds)												
4.1	Acenaphthene (83-32-9)	☐	☐	☒	Concentration							
					Mass							
4.2	Acenaphthylene (208-96-8)	☐	☐	☒	Concentration							
					Mass							
4.3	Anthracene (120-12-7)	☐	☐	☒	Concentration							
					Mass							
4.4	Benzidine (92-87-5)	☐	☐	☒	Concentration							
					Mass							
4.5	Benzo (a) anthracene (56-55-3)	☐	☐	☒	Concentration							
					Mass							
4.6	Benzo (a) pyrene (50-32-8)	☐	☐	☒	Concentration							
					Mass							

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
4.7	3,4-benzofluoranthene (205-99-2)	☐	☐	☒	Concentration							
					Mass							
4.8	Benzo (ghi) perylene (191-24-2)	☐	☐	☒	Concentration							
					Mass							
4.9	Benzo (k) fluoranthene (207-08-9)	☐	☐	☒	Concentration							
					Mass							
4.10	Bis (2-chloroethoxy) methane (111-91-1)	☐	☐	☒	Concentration							
					Mass							
4.11	Bis (2-chloroethyl) ether (111-44-4)	☐	☐	☒	Concentration							
					Mass							
4.12	Bis (2-chloroisopropyl) ether (102-80-1)	☐	☐	☒	Concentration							
					Mass							
4.13	Bis (2-ethylhexyl) phthalate (117-81-7)	☐	☐	☒	Concentration							
					Mass							
4.14	4-bromophenyl phenyl ether (101-55-3)	☐	☐	☒	Concentration							
					Mass							
4.15	Butyl benzyl phthalate (85-68-7)	☐	☐	☒	Concentration							
					Mass							
4.16	2-chloronaphthalene (91-58-7)	☐	☐	☒	Concentration							
					Mass							
4.17	4-chlorophenyl phenyl ether (7005-72-3)	☐	☐	☒	Concentration							
					Mass							
4.18	Chrysene (218-01-9)	☐	☐	☒	Concentration							
					Mass							
4.19	Dibenzo (a,h) anthracene (53-70-3)	☐	☐	☒	Concentration							
					Mass							

DEC Identification Number	SPDES Permit Number	Facility Name	Outfall Number	Form Approved: 3/1/2022
2-6102-00617/00012				

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
4.20	1,2-dichlorobenzene (95-50-1)	☐	☐	☒	Concentration							
					Mass							
4.21	1,3-dichlorobenzene (541-73-1)	☐	☐	☒	Concentration							
					Mass							
4.22	1,4-dichlorobenzene (106-46-7)	☐	☐	☒	Concentration							
					Mass							
4.23	3,3-dichlorobenzidine (91-94-1)	☐	☐	☒	Concentration							
					Mass							
4.24	Diethyl phthalate (84-66-2)	☐	☐	☒	Concentration							
					Mass							
4.25	Dimethyl phthalate (131-11-3)	☐	☐	☒	Concentration							
					Mass							
4.26	Di-n-butyl phthalate (84-74-2)	☐	☐	☒	Concentration							
					Mass							
4.27	2,4-dinitrotoluene (121-14-2)	☐	☐	☒	Concentration							
					Mass							
4.28	2,6-dinitrotoluene (606-20-2)	☐	☐	☒	Concentration							
					Mass							
4.29	Di-n-octyl phthalate (117-84-0)	☐	☐	☒	Concentration							
					Mass							
4.30	1,2-Diphenylhydrazine (as azobenzene) (122-66-7)	☐	☐	☒	Concentration							
					Mass							
4.31	Fluoranthene (206-44-0)	☐	☐	☒	Concentration							
					Mass							
4.32	Fluorene (86-73-7)	☐	☐	☒	Concentration							
					Mass							

DEC Identification Number	SPDES Permit Number	Facility Name	Outfall Number
2-6102-00617/00012			

Form Approved: 3/1/2022

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
4.33	Hexachlorobenzene (118-74-1)	☐	☐	☒	Concentration							
					Mass							
4.34	Hexachlorobutadiene (87-68-3)	☐	☐	☒	Concentration							
					Mass							
4.35	Hexachlorocyclopentadiene (77-47-4)	☐	☐	☒	Concentration							
					Mass							
4.36	Hexachloroethane (67-72-1)	☐	☐	☒	Concentration							
					Mass							
4.37	Indeno (1,2,3-cd) pyrene (193-39-5)	☐	☐	☒	Concentration							
					Mass							
4.38	Isophorone (78-59-1)	☐	☐	☒	Concentration							
					Mass							
4.39	Naphthalene (91-20-3)	☐	☐	☒	Concentration							
					Mass							
4.40	Nitrobenzene (98-95-3)	☐	☐	☒	Concentration							
					Mass							
4.41	N-nitrosodimethylamine (62-75-9)	☐	☐	☒	Concentration							
					Mass							
4.42	N-nitrosodi-n-propylamine (621-64-7)	☐	☐	☒	Concentration							
					Mass							
4.43	N-nitrosodiphenylamine (86-30-6)	☐	☐	☒	Concentration							
					Mass							
4.44	Phenanthrene (85-01-8)	☐	☐	☒	Concentration							
					Mass							
4.45	Pyrene (129-00-0)	☐	☐	☒	Concentration							
					Mass							

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
4.46	1,2,4-trichlorobenzene (120-82-1)	☐	☐	☒	Concentration							
					Mass							
Section 5. Organic Toxic Pollutants (GC/MS Fraction—Pesticides)												
5.1	Aldrin (309-00-2)	☐	☐	☒	Concentration							
					Mass							
5.2	α-BHC (319-84-6)	☐	☐	☒	Concentration							
					Mass							
5.3	β-BHC (319-85-7)	☐	☐	☒	Concentration							
					Mass							
5.4	γ-BHC (58-89-9)	☐	☐	☒	Concentration							
					Mass							
5.5	δ-BHC (319-86-8)	☐	☐	☒	Concentration							
					Mass							
5.6	Chlordane (57-74-9)	☐	☐	☒	Concentration							
					Mass							
5.7	4,4'-DDT (50-29-3)	☐	☐	☒	Concentration							
					Mass							
5.8	4,4'-DDE (72-55-9)	☐	☐	☒	Concentration							
					Mass							
5.9	4,4'-DDD (72-54-8)	☐	☐	☒	Concentration							
					Mass							
5.10	Dieldrin (60-57-1)	☐	☐	☒	Concentration							
					Mass							
5.11	α-endosulfan (115-29-7)	☐	☐	☒	Concentration							
					Mass							

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
5.12	β-endosulfan (115-29-7)	☐	☐	☒	Concentration							
					Mass							
5.13	Endosulfan sulfate (1031-07-8)	☐	☐	☒	Concentration							
					Mass							
5.14	Endrin (72-20-8)	☐	☐	☒	Concentration							
					Mass							
5.15	Endrin aldehyde (7421-93-4)	☐	☐	☒	Concentration							
					Mass							
5.16	Heptachlor (76-44-8)	☐	☐	☒	Concentration							
					Mass							
5.17	Heptachlor epoxide (1024-57-3)	☐	☐	☒	Concentration							
					Mass							
5.18	PCB-1242 (53469-21-9)	☐	☐	☒	Concentration							
					Mass							
5.19	PCB-1254 (11097-69-1)	☐	☐	☒	Concentration							
					Mass							
5.20	PCB-1221 (11104-28-2)	☐	☐	☒	Concentration							
					Mass							
5.21	PCB-1232 (11141-16-5)	☐	☐	☒	Concentration							
					Mass							
5.22	PCB-1248 (12672-29-6)	☐	☐	☒	Concentration							
					Mass							
5.23	PCB-1260 (11096-82-5)	☐	☐	☒	Concentration							
					Mass							
5.24	PCB-1016 (12674-11-2)	☐	☐	☒	Concentration							
					Mass							

DEC Identification Number	SPDES Permit Number	Facility Name	Outfall Number	Form Approved: 3/1/2022
2-6102-00617/00012				

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
5.25	Toxaphene (8001-35-2)	☐	☐	☒	Concentration							
					Mass							

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

[2] Analysis for Total Recoverable Mercury must be performed utilizing the low-level, USEPA Method 1631E.

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DEC Identification Number	SPDES Permit Number	Facility Name	Outfall Number	Form Approved: 3/1/2022
2-6102-00617/00012				

TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))[1]

	Pollutant (CAS Number, if available)	Presence or Absence (check one)		Units (specify)		Effluent				Intake (Optional)	
		Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
☐	Check here if you believe all pollutants on Table C to be ***present*** in your discharge from the noted outfall. You need *not* check the "Believed Present" box for each pollutant.										
☒	Check here if you believe all pollutants on Table C to be ***absent*** in your discharge from the noted outfall. You need *not* check the "Believed Absent" box for each pollutant.										
1.	Bromide (24959-67-9)	☐	☐	Concentration							
				Mass							
2.	Chlorine, total residual	☐	☐	Concentration							
				Mass							
3.	Color	☐	☐	Concentration							
				Mass							
4.	Fecal coliform	☐	☐	Concentration							
				Mass							
5.	Fluoride (16984-48-8)	☐	☐	Concentration							
				Mass							
6	Nitrate-nitrite	☐	☐	Concentration							
				Mass							
7.	Nitrogen, total organic (as N)	☐	☐	Concentration							
				Mass							
8.	Oil and grease	☐	☐	Concentration							
				Mass							
9.	Phosphorus (as P), total (7723-14-0)	☐	☐	Concentration							
				Mass							
10.	Sulfate (as SO_4) (14808-79-8)	☐	☐	Concentration							
				Mass							
11.	Sulfide (as S)	☐	☐	Concentration							
				Mass							

48

TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))[1]

	Pollutant (CAS Number, if available)	Presence or Absence (check one)		Units (specify)		Effluent				Intake (Optional)	
		Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
12.	Sulfite (as SO_3) (14265-45-3)	☐	☐	Concentration							
				Mass							
13.	Surfactants	☐	☐	Concentration							
				Mass							
14.	Aluminum, total (7429-90-5)	☐	☐	Concentration							
				Mass							
15.	Barium, total (7440-39-3)	☐	☐	Concentration							
				Mass							
16.	Boron, total (7440-42-8)	☐	☐	Concentration							
				Mass							
17.	Cobalt, total (7440-48-4)	☐	☐	Concentration							
				Mass							
18.	Iron, total (7439-89-6)	☐	☐	Concentration							
				Mass							
19.	Magnesium, total (7439-95-4)	☐	☐	Concentration							
				Mass							
20.	Molybdenum, total (7439-98-7)	☐	☐	Concentration							
				Mass							
21.	Manganese, total (7439-96-5)	☐	☐	Concentration							
				Mass							
22.	Tin, total (7440-31-5)	☐	☐	Concentration							
				Mass							
23.	Titanium, total (7440-32-6)	☐	☐	Concentration							
				Mass							

DEC Identification Number	SPDES Permit Number	Facility Name	Outfall Number	Form Approved: 3/1/2022
2-6102-00617/00012				

TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))[1]

	Pollutant (CAS Number, if available)	Presence or Absence (check one)		Units (specify)		Effluent				Intake (Optional)	
		Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
24.	**Radioactivity**										
	Alpha, total	☐	☐	Concentration							
				Mass							
	Beta, total	☐	☐	Concentration							
				Mass							
	Radium, total	☐	☐	Concentration							
				Mass							
	Radium 226, total	☐	☐	Concentration							
				Mass							

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
1.	Asbestos	☐	☒		
2.	Acetaldehyde	☐	☒		
3.	Allyl alcohol	☐	☒		
4.	Allyl chloride	☐	☒		
5.	Amyl acetate	☐	☒		
6.	Aniline	☐	☒		
7.	Benzonitrile	☐	☒		
8.	Benzyl chloride	☐	☒		
9.	Butyl acetate	☐	☒		
10.	Butylamine	☐	☒		
11.	Captan	☐	☒		
12.	Carbaryl	☐	☒		
13.	Carbofuran	☐	☒		
14.	Carbon disulfide	☐	☒		
15.	Chlorpyrifos	☐	☒		
16.	Coumaphos	☐	☒		
17.	Cresol	☐	☒		
18.	Crotonaldehyde	☐	☒		
19.	Cyclohexane	☐	☒		

TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
20.	2,4-D (2,4-dichlorophenoxyacetic acid)	☐	☒		
21.	Diazinon	☐	☒		
22.	Dicamba	☐	☒		
23.	Dichlobenil	☐	☒		
24.	Dichlone	☐	☒		
25.	2,2-dichloropropionic acid	☐	☒		
26.	Dichlorvos	☐	☒		
27.	Diethyl amine	☐	☒		
28.	Dimethyl amine	☐	☒		
29.	Dintrobenzene	☐	☒		
30.	Diquat	☐	☒		
31.	Disulfoton	☐	☒		
32.	Diuron	☐	☒		
33.	Epichlorohydrin	☐	☒		
34.	Ethion	☐	☒		
35.	Ethylene diamine	☐	☒		
36.	Ethylene dibromide	☐	☒		
37.	Formaldehyde	☐	☒		
38.	Furfural	☐	☒		

TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
39.	Guthion	☐	☒		
40.	Isoprene	☐	☒		
41.	Isopropanolamine	☐	☒		
42.	Kelthane	☐	☒		
43.	Kepone	☐	☒		
44.	Malathion	☐	☒		
45.	Mercaptodimethur	☐	☒		
46.	Methoxychlor	☐	☒		
47.	Methyl mercaptan	☐	☒		
48.	Methyl methacrylate	☐	☒		
49.	Methyl parathion	☐	☒		
50.	Mevinphos	☐	☒		
51.	Mexacarbate	☐	☒		
52.	Monoethyl amine	☐	☒		
53.	Monomethyl amine	☐	☒		
54.	Naled	☐	☒		
55.	Naphthenic acid	☐	☒		
56.	Nitrotoluene	☐	☒		
57.	Parathion	☐	☒		

TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
58.	Phenolsulfonate	☐	☒		
59.	Phosgene	☐	☒		
60.	Propargite	☐	☒		
61.	Propylene oxide	☐	☒		
62.	Pyrethrins	☐	☒		
63.	Quinoline	☐	☒		
64.	Resorcinol	☐	☒		
65.	Strontium	☐	☒		
66.	Strychnine	☐	☒		
67.	Styrene	☐	☒		
68.	2,4,5-T (2,4,5-trichlorophenoxyacetic acid)	☐	☒		
69.	TDE (tetrachlorodiphenyl ethane)	☐	☒		
70.	2,4,5-TP [2-(2,4,5-trichlorophenoxy) propanoic acid]	☐	☒		
71.	Trichlorofon	☐	☒		
72.	Triethanolamine	☐	☒		
73.	Triethylamine	☐	☒		
74.	Trimethylamine	☐	☒		
75.	Uranium	☐	☒		
76.	Vanadium	☐	☒		

TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
77.	Vinyl acetate	☐	☒		
78.	Xylene	☐	☒		
79.	Xylenol	☐	☒		
80.	Zirconium	☐	☒		

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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DEC Identification Number	SPDES Permit Number	Facility Name	Outfall Number	Form Approved: 3/1/2022
2-6102-00617/00012				

TABLE E. 2,3,7,8 TETRACHLORODIBENZO P DIOXIN (2,3,7,8 TCDD) (40 CFR 122.21(g)(7)(viii))

Pollutant	TCDD Congeners Used or Manufactured	Presence or Absence (check one)		Results of Screening Procedure
		Believed Present	Believed Absent	
2,3,7,8-TCDD	☐	☐	☒	

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TABLE F. WATER TREATMENT CHEMICAL LISTING

WTC Trade Name	Manufacturer	WTC Function	Authorized Dosage (lbs/d)		Discharge Outfall	Authorized Date	New or Increase Request (optional)
			Average	Maximum			
For all New or Increased WTCs, you must attach a completed WTC Request Form				☒ No new or increased WTC requests included as part of this application.			
e.g. Sodium Bisulfite	Slack	Dechlor	10.00	20.00	001	11/01/2019	☐New ☐Increase
							☐New ☐Increase
							☐New ☐Increase
							☐New ☐Increase
							☐New ☐Increase
							☐New ☐Increase
							☐New ☐Increase
							☐New ☐Increase
							☐New ☐Increase
							☐New ☐Increase
							☐New ☐Increase
							☐New ☐Increase
							☐New ☐Increase
							☐New ☐Increase
							☐New ☐Increase
							☐New ☐Increase
							☐New ☐Increase

60

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DEC Identification Number	SPDES Permit Number	Facility Name
2-6102-00617/00012		

TABLE G. INDUSTRIAL CHEMICAL SURVEY

Complete this table for all substances that have been used, produced, stored, distributed or otherwise disposed of in significant quantity AND for any quantity of BCCs, chemicals for which FDA fish flesh limits exist, or restricted pesticide products listed in Part 326, Section 2 of the ECL. Restricted pesticides also include those products whose labeling bears the statement "Restricted Use Pesticide." Do not include chemicals that are present as *de minimus* concentrations as listed in the SDS for that substance.

For any substance listed that is used in a manner which could cause them to come into contact with a wastewater that is ultimately discharged to the waters of the State through an outfall controlled by this permit application, identify it as "Present" and the Outfall(s) by which it may be discharged. Sampling results for these pollutants should also be included with Tables B-E.

☐ A separate, but equivalent table has been attached as part of this application.

Substance Name	CAS Number	Purpose of Use Code	Average Annual Usage	Amount On Hand	Presence in Discharge	Discharge Outfall
		PRO - Produced	Gal	Gal	☐Present ☐Not Present	
		PRO - Produced	Gal	Gal	☐Present ☐Not Present	
		PRO - Produced	Gal	Gal	☐Present ☐Not Present	
		PRO - Produced	Gal	Gal	☐Present ☐Not Present	
		PRO - Produced	Gal	Gal	☐Present ☐Not Present	
		PRO - Produced	Gal	Gal	☐Present ☐Not Present	
		PRO - Produced	Gal	Gal	☐Present ☐Not Present	
		PRO - Produced	Gal	Gal	☐Present ☐Not Present	
		PRO - Produced	Gal	Gal	☐Present ☐Not Present	
		PRO - Produced	Gal	Gal	☐Present ☐Not Present	
		PRO - Produced	Gal	Gal	☐Present ☐Not Present	
		PRO - Produced	Gal	Gal	☐Present ☐Not Present	
		PRO - Produced	Gal	Gal	☐Present ☐Not Present	
		PRO - Produced	Gal	Gal	☐Present ☐Not Present	

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TABLE H. FACILITY & COLLECTION SYSTEM RESILIENCY

Pump Station Name	PS Owner	General Location	Latitude (DMS)	Longitude (DMS)	Floor Elevation (ft, NAVD88)
Complete this table for all pump stations that exist at the wastewater treatment facility and within the collection system. Identify the name of the pump station, the owner of the pump station (if different than the SPDES permittee), the general location of the pump station (e.g. intersection of Green St. & Water St.), the latitude and longitude of the pump station in degrees-minutes-seconds (DMS) format, and the elevation in feet of the pump station floor (per the NAVD88 datum).					
☐ The wastewater treatment facility and collection system do not contain any pump stations.					
			° ' "	° ' "	
			° ' "	° ' "	
			° ' "	° ' "	
			° ' "	° ' "	
			° ' "	° ' "	
			° ' "	° ' "	
			° ' "	° ' "	
			° ' "	° ' "	
			° ' "	° ' "	
			° ' "	° ' "	

State Pollutant Discharge Elimination System (SPDES)

Application Supplement B
DISCHARGES WITHIN SOLE SOURCE AQUIFERS

Facility Name: Bush Terminal (North Campus)	SPDES Number: NY

Your facility may be located in a sole source aquifer area, which is an area designated by Federal or State statutes. Maps showing the designated sole source areas can be found on the internet at: www.epa.gov/Region02/water/aquifer/index.html.

Chapter 663 of the Laws of 1983 added Section 17-0828 to the Environmental Conservation Law which requires that any person seeking a SPDES permit or a renewal hereunder, within an area designated pursuant to any federal or state statute as a sole source aquifer, shall include as a part of the required information, the name and address of all public water purveyors with a service area or portion thereof located within a three mile radius of the applicant's facility.

For purposes of this section "public water purveyor" shall mean any person, partnership, public or private corporation, municipality, or public authority which sells water derived from a sole source aquifer to at least five service connections or at least twenty-five individuals.

---

1. Water Purveyors within a three mile radius of your facility:

Please complete the following information to the best of your knowledge and attach it to your application. Attach additional copies of this sheet as necessary.

	Name	Address
1.	None	N/A
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

SPDES DISCHARGE PERMIT
Simple Mixing Zone Form

Purpose & Instructions

The following information will inform the Department's review of your SPDES permit and the resulting effect on the receiving waterbody. Complete the information (one form for each outfall) based on either field observations or schematics/design drawings to the best of your ability. Please see the Mixing Zone Guidance for additional instructions. If an item is unavailable or non-applicable, please describe. Submit with the NY-2A or NY-2C Application Form to SPDESapp@dec.ny.gov.

Facility Name: NYCEDC Project #50106760 - Bush Terminal (North Campus) SPDES No.: _____ Outfall #: multiple

NYSDEC Permit Writer: Ariel Czemerinski Receiving Waterbody Class: SB

Email: ariel@amc-engineering.com Phone No.: (718) 545-0474

Observation Information

Name & Title of Observer: NYCDEP Date of Observation: _____

Phone Number: _____ Email: _____

Name of Receiving Waterbody: Upper New York Bay

Weather conditions at time of observation (describe any recent rain/melt events):

Avg. Width (ft): _____ Avg. Depth (ft): _____ Local Depth at Outfall (ft): _____

Has the receiving waterbody run dry in the last 5 years? ☐ Yes ☒ No

Are tidal conditions present? ☒ Yes ☐ No

Outfall Location & Configuration

Outfall #: 001 Location at end of pipe: Latitude: 40.65525 Longitude: -74.01666

Describe outfall (location, size, configuration, condition of the structure):

Outfall #001 is also identified as NYCDEP Outfall ID: OH-004. The outfall is the point of discharge from the existing DEP combined sewer overflow on 43rd Street. Conditions of the outfall cannot be determined, since the structure is underwater. A DEP Field Investigation was requested for further information pertaining to the outfall.

☐ **Option #1**: Bank Discharge (outfall pipe/channel does not extend very far into waterbody)

- ☐ Outfall pipe (____in diameter) discharges to waterbody at _____ feet from bank
  OR
- ☐ Channel/Ditch (____ft wide x ____ft deep x ____ft long) discharges to waterbody at bank

☒ **Option #2**: Extended Pipe Discharge (outfall pipe extends into waterbody)

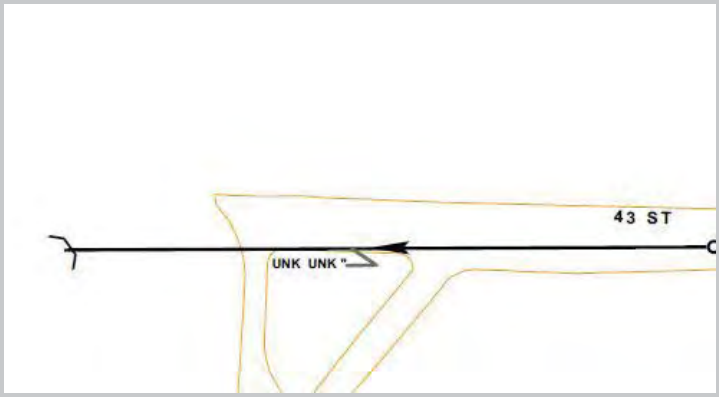
- ☒ Outfall pipe (TBD in diameter) is a single pipe with an open end or no diffuser
  OR
- ☐ Outfall pipe (____in diameter) has a diffuser with _____ port(s)

Outfall Photos & Schematics

Upload or attach photos/schematics that depict the location of the outfall (i.e. photo of outfall pipe/channel, satellite image with location of outfall, hand sketch, design schematic, view upstream, view downstream).
You will be prompted twice to select your photo/schematic.

Description:

Outfall Location (in the Upper New York Bay) (1 / 2)



Click to Upload Photo

Description:

Outfall Location (in the Upper New York Bay) (2 / 2)

Click to Upload Photo

Description:

Click to Upload Photo

Description:

Click to Upload Photo

4. Analytical Results of Water to be Discharged

April 2020 Sampling Event

PHOENIX
Environmental Laboratories, Inc.

Thursday, April 30, 2020

Attn: Ariel Czemerinski
AMC Engineering PLLC
18-36 42nd Street
Astoria, NY 11105

Project ID: 13 42ND ST BK SUNSET PARK
SDG ID: GCF78034
Sample ID#s: CF78034

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

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

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

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

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301

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

NY # 11301

Sample Id Cross Reference

April 30, 2020

SDG I.D.: GCF78034

Project ID: 13 42ND ST BK SUNSET PARK

Client Id	Lab Id	Matrix
TEST PIT	CF78034	GW DISCHARGE

PHOENIX

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

April 30, 2020

FOR: Attn: Ariel Czemerinski
AMC Engineering PLLC
18-36 42nd Street
Astoria, NY 11105

Sample Information		Custody Information		Date	Time
Matrix:	GW DISCHARGE	Collected by:		04/22/20	8:30
Location Code:	AMC-ENG	Received by:	SW	04/23/20	13:28
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCF78034
Phoenix ID: CF78034

Project ID: 13 42ND ST BK SUNSET PARK
Client ID: TEST PIT

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.001	0.001		mg/L	1	04/24/20	TH	E200.7
Arsenic	0.007	0.002		mg/L	1	04/24/20	TH	E200.7
Beryllium	< 0.001	0.001		mg/L	1	04/24/20	TH	E200.7
Cadmium	0.003	0.001		mg/L	1	04/24/20	TH	E200.7
Chromium	0.005	0.001		mg/L	1	04/24/20	TH	E200.7
Copper	0.038	0.003		mg/L	1	04/24/20	TH	E200.7
Silver (Dissolved)	< 0.001	0.001		mg/L	1	04/24/20	TH	E200.7
Arsenic (Dissolved)	0.005	0.004		mg/L	1	04/24/20	TH	E200.7
Beryllium (Dissolved)	< 0.001	0.001		mg/L	1	04/24/20	TH	E200.7
Cadmium (Dissolved)	0.001	0.001		mg/L	1	04/24/20	TH	E200.7
Chromium (Dissolved)	0.003	0.001		mg/L	1	04/24/20	TH	E200.7
Copper (Dissolved)	0.026	0.005		mg/L	1	04/24/20	TH	E200.7
Mercury (Dissolved)	< 0.0002	0.0002		mg/L	1	04/28/20	RS	E245.1
Nickel (Dissolved)	0.023	0.001		mg/L	1	04/24/20	TH	E200.7
Lead (Dissolved)	0.013	0.002		mg/L	1	04/24/20	TH	E200.7
Antimony (Dissolved)	< 0.005	0.005		mg/L	1	04/24/20	TH	E200.7
Selenium (Dissolved)	< 0.011	0.011		mg/L	1	04/24/20	TH	E200.7
Thallium (Dissolved)	< 0.0003	0.0003		mg/L	1	04/24/20	CPP	E200.8-5.4
Zinc (Dissolved)	0.509	0.002		mg/L	1	04/24/20	TH	E200.7
Mercury	< 0.0002	0.0002		mg/L	1	04/24/20	RS	E245.1
Nickel	0.022	0.001		mg/L	1	04/24/20	TH	E200.7
Lead	0.026	0.001		mg/L	1	04/24/20	TH	E200.7
Antimony	< 0.003	0.003		mg/L	1	04/24/20	TH	E200.7
Selenium	< 0.005	0.005		mg/L	1	04/24/20	TH	E200.7
Thallium	< 0.0005	0.0005		mg/L	10	04/27/20	CPP	E200.8-5.4
Zinc	0.728	0.002		mg/L	1	04/24/20	TH	E200.7
Carbonaceous BOD	< 20	20		mg/L	10	04/23/20 15:34	RVM	SM5210B-11
Carbonaceous BOD End Incubation						04/28/20 14:29	RVM	SM5210B-11

Project ID: 13 42ND ST BK SUNSET PARK
Client ID: TEST PIT

Phoenix I.D.: CF78034

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Chloride	605	15.0		mg/L	5	04/24/20	TB	SM4500CLE-11	
Flash Point	>200	200		Degree F	1	04/27/20	BJA	1010/CH7/ASTMD92	
Ignitability	Passed	140		degree F	1	04/27/20	BJA	SW846-Ignit	1
Nitrite-N	0.025	0.010		mg/L	1	04/23/20 18:53	TB	E353.2	
Nitrate-N	0.23	0.02		mg/L	1	04/23/20 18:53	TB	E353.2	
Oil and Grease by EPA 1664A	2.3	1.4		mg/L	1	04/24/20	MSF	EPA 1664	
pH	7.88	1.00		pH Units	1	04/23/20 21:50	AP/KDB	SM4500-H B-00	1
Nitrogen Tot Kjeldahl	8.90	0.20		mg/L	2	04/24/20	KDB	E351.1	
Total Nitrogen	9.16	0.10		mg/L	1	04/24/20	KDB	SM4500NH3/E300.0-11	1
O&G, Non-polar Material	< 1.4	1.4		mg/L	1	04/24/20	MSF	E1664A	
Total Suspended Solids	28	5.0		mg/L	1	04/23/20	ARG/QH	SM 2540D-11	
Total Solids	2500	100		mg/L	10	04/25/20	EG	SM2540B-11	
Filtration	Completed					04/23/20	AG	0.45um Filter	
Dissolved Mercury Digestion	Completed					04/28/20	RA/RA	E245.1	
Mercury Digestion	Completed					04/24/20	RA/LS	E245.1	
PCB Extraction	Completed					04/23/20	C	E608.3	
Semi-Volatile Extraction	Completed					04/23/20	P/S/AK	E625.1	
Dissolved Metals Preparation	Completed					04/23/20	AG	SW3005A	
Dissolved Metals Preparation	Completed					04/23/20	AG	SW3005A	
Total Metals Digestion	Completed					04/23/20	AG		
Total Metals Digestion MS	Completed					04/23/20	AG		
Polychlorinated Biphenyls									
PCB-1016	ND	0.050	0.050	ug/L	1	04/25/20	SC	E608.3	
PCB-1221	ND	0.050	0.050	ug/L	1	04/25/20	SC	E608.3	
PCB-1232	ND	0.050	0.050	ug/L	1	04/25/20	SC	E608.3	
PCB-1242	ND	0.050	0.050	ug/L	1	04/25/20	SC	E608.3	
PCB-1248	ND	0.050	0.050	ug/L	1	04/25/20	SC	E608.3	
PCB-1254	0.26	0.050	0.050	ug/L	1	04/25/20	SC	E608.3	
PCB-1260	ND	0.050	0.050	ug/L	1	04/25/20	SC	E608.3	
PCB-1262	ND	0.050	0.050	ug/L	1	04/25/20	SC	E608.3	1
PCB-1268	ND	0.050	0.050	ug/L	1	04/25/20	SC	E608.3	1
QA/QC Surrogates									
% DCBP	44			%	1	04/25/20	SC	30 - 150 %	
% DCBP (Confirmation)	51			%	1	04/25/20	SC	30 - 150 %	
% TCMX	47			%	1	04/25/20	SC	30 - 150 %	
% TCMX (Confirmation)	52			%	1	04/25/20	SC	30 - 150 %	
Volatiles									
1,1,1-Trichloroethane	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
1,1,2,2-tetrachloroethane	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
1,1,2-Trichloroethane	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
1,1-Dichloroethane	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
1,1-Dichloroethene	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
1,2-Dichlorobenzene	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
1,2-Dichloroethane	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
1,2-Dichloropropane	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
1,3-Dichlorobenzene	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
1,4-Dichlorobenzene	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
Benzene	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Bromodichloromethane	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
Bromoform	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
Bromomethane	ND	0.50	0.50	ug/L	1	04/23/20	MH	E624.1	
Carbon tetrachloride	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
Chlorobenzene	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
Chloroethane	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
Chloroform	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
Chloromethane	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
cis-1,2-Dichloroethene	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	04/23/20	MH	E624.1	
Dibromochloromethane	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
Ethylbenzene	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
m&p-Xylene	ND	0.50	0.42	ug/L	1	04/23/20	MH	E624.1	
Methyl tert-butyl ether (MTBE)	ND	1.0	0.50	ug/L	1	04/23/20	MH	E624.1	
Methylene chloride	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
o-Xylene	ND	0.50	0.45	ug/L	1	04/23/20	MH	E624.1	
Tetrachloroethene	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
Toluene	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
trans-1,2-Dichloroethene	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	04/23/20	MH	E624.1	
Trichloroethene	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
Trichlorofluoromethane	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
Vinyl chloride	ND	0.50	0.25	ug/L	1	04/23/20	MH	E624.1	
QA/QC Surrogates									
% 1,2-dichlorobenzene-d4	102			%	1	04/23/20	MH	70 - 130 %	
% Bromofluorobenzene	98			%	1	04/23/20	MH	70 - 130 %	
% Dibromofluoromethane	99			%	1	04/23/20	MH	70 - 130 %	
% Toluene-d8	101			%	1	04/23/20	MH	70 - 130 %	
Volatiles									
1,1,1-Trichloroethane	ND	5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
1,1,2,2-tetrachloroethane	ND	5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
1,1,2-Trichloroethane	ND	5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
1,1-Dichloroethane	ND	5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
1,1-Dichloroethene	ND	5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
1,2-Dichlorobenzene	ND	5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
1,2-Dichloroethane	ND	5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
1,2-Dichloropropane	ND	5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
1,3-Dichlorobenzene	ND	5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
1,3-Dichloropropene	ND	5.0	5.0	ug/L	1	04/23/20	MH	E624.1	1
1,4-Dichlorobenzene	ND	5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
Benzene	ND	5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
Bromodichloromethane	ND	5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
Bromoform	ND	5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
Bromomethane	ND	5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
Carbon tetrachloride	ND	5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
Chlorobenzene	ND	5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
Chloroethane	ND	5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
Chloroform	ND	5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
Chloromethane	ND	5.0	0.50	ug/L	1	04/23/20	MH	E624.1	

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
cis-1,2-Dichloroethene	ND		5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
Dibromochloromethane	ND		5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
Ethylbenzene	ND		5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
m&p-Xylenes	ND		5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
Methyl t-butyl ether (MTBE)	ND		5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
Methylene chloride	ND		5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
o-Xylene	ND		5.0	0.45	ug/L	1	04/23/20	MH	E624.1	
Tetrachloroethene	ND		5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
Toluene	ND		5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
Total Xylenes	ND		5.0	5.0	ug/L	1	04/23/20	MH	E624.1	
trans-1,2-Dichloroethene	ND		5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
Trichloroethene	ND		5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
Trichlorofluoromethane	ND		5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
Vinyl chloride	ND		5.0	0.50	ug/L	1	04/23/20	MH	E624.1	
QA/QC Surrogates										
% 1,2-dichlorobenzene-d4	102				%	1	04/23/20	MH	70 - 130 %	
% Bromofluorobenzene	98				%	1	04/23/20	MH	70 - 130 %	
% Dibromofluoromethane	99				%	1	04/23/20	MH	70 - 130 %	
% Toluene-d8	101				%	1	04/23/20	MH	70 - 130 %	
Semivolatiles										
1,2,4-Trichlorobenzene	ND		5.4	1.6	ug/L	1	04/28/20	WB	E625.1	
Naphthalene	2.2	J	5.4	1.6	ug/L	1	04/28/20	WB	E625.1	
Phenol	ND		5.4	1.7	ug/L	1	04/28/20	WB	E625.1	
QA/QC Surrogates										
% 2-Fluorobiphenyl	74				%	1	04/28/20	WB	30 - 130 %	
% 2-Fluorophenol	69				%	1	04/28/20	WB	10 - 130 %	
% Nitrobenzene-d5	94				%	1	04/28/20	WB	15 - 130 %	
% Phenol-d5	80				%	1	04/28/20	WB	10 - 130 %	
Base Neutrals & Acid Compounds										
1,2,4-Trichlorobenzene	ND		5.4	1.6	ug/L	1	04/28/20	WB	E625.1	
1,2-Dichlorobenzene	ND		5.4	1.5	ug/L	1	04/28/20	WB	E625.1	1
1,2-Diphenylhydrazine	ND		5.4	5.4	ug/L	1	04/28/20	WB	E625.1	1
1,3-Dichlorobenzene	ND		5.4	1.6	ug/L	1	04/28/20	WB	E625.1	1
1,4-Dichlorobenzene	ND		5.4	1.6	ug/L	1	04/28/20	WB	E625.1	1
2,4,6-Trichlorophenol	ND		5.4	1.7	ug/L	1	04/28/20	WB	E625.1	
2,4-Dichlorophenol	ND		5.4	1.9	ug/L	1	04/28/20	WB	E625.1	
2,4-Dimethylphenol	ND		5.4	1.3	ug/L	1	04/28/20	WB	E625.1	
2,4-Dinitrophenol	ND		5.4	3.8	ug/L	1	04/28/20	WB	E625.1	
2,4-Dinitrotoluene	ND		5.4	2.1	ug/L	1	04/28/20	WB	E625.1	
2,6-Dinitrotoluene	ND		5.4	1.7	ug/L	1	04/28/20	WB	E625.1	
2-Chloronaphthalene	ND		5.4	1.5	ug/L	1	04/28/20	WB	E625.1	
2-Chlorophenol	ND		5.4	1.5	ug/L	1	04/28/20	WB	E625.1	
2-Methylnaphthalene	ND		5.4	1.6	ug/L	1	04/28/20	WB	E625.1	1
2-Methylphenol (o-cresol)	ND		5.4	0.97	ug/L	1	04/28/20	WB	E625.1	
2-Nitrophenol	ND		5.4	3.4	ug/L	1	04/28/20	WB	E625.1	
3&4-Methylphenol (m&p-cresol)	ND		5.4	0.97	ug/L	1	04/28/20	WB	E625.1	

Project ID: 13 42ND ST BK SUNSET PARK
Client ID: TEST PIT

Phoenix I.D.: CF78034

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
3,3-Dichlorobenzidine	ND		5.4	5.4	ug/L	1	04/28/20	WB	E625.1
4,6-Dinitro-2-methylphenol	ND		5.4	5.4	ug/L	1	04/28/20	WB	E625.1
4-Bromophenyl phenyl ether	ND		5.4	1.6	ug/L	1	04/28/20	WB	E625.1
4-Chloro-3-methylphenol	ND		5.4	1.9	ug/L	1	04/28/20	WB	E625.1
4-Chlorophenyl phenyl ether	ND		5.4	1.8	ug/L	1	04/28/20	WB	E625.1
4-Nitrophenol	ND		5.4	2.4	ug/L	1	04/28/20	WB	E625.1
Acenaphthene	ND		5.4	1.6	ug/L	1	04/28/20	WB	E625.1
Acenaphthylene	ND		5.4	1.5	ug/L	1	04/28/20	WB	E625.1
Anthracene	ND		5.4	1.8	ug/L	1	04/28/20	WB	E625.1
Benz(a)anthracene	ND		5.4	1.8	ug/L	1	04/28/20	WB	E625.1
Benzidine	ND		5.4	3.2	ug/L	1	04/28/20	WB	E625.1
Benzo(a)pyrene	ND		5.4	1.8	ug/L	1	04/28/20	WB	E625.1
Benzo(b)fluoranthene	ND		5.4	1.8	ug/L	1	04/28/20	WB	E625.1
Benzo(ghi)perylene	ND		5.4	1.7	ug/L	1	04/28/20	WB	E625.1
Benzo(k)fluoranthene	ND		5.4	1.8	ug/L	1	04/28/20	WB	E625.1
Benzyl butyl phthalate	ND		5.4	1.4	ug/L	1	04/28/20	WB	E625.1
Bis(2-chloroethoxy)methane	ND		5.4	1.5	ug/L	1	04/28/20	WB	E625.1
Bis(2-chloroethyl)ether	ND		5.4	1.5	ug/L	1	04/28/20	WB	E625.1
Bis(2-chloroisopropyl)ether	ND		5.4	1.5	ug/L	1	04/28/20	WB	E625.1
Bis(2-ethylhexyl)phthalate	7.6		5.4	1.6	ug/L	1	04/28/20	WB	E625.1
Chrysene	ND		5.4	1.8	ug/L	1	04/28/20	WB	E625.1
Dibenz(a,h)anthracene	ND		5.4	1.7	ug/L	1	04/28/20	WB	E625.1
Diethyl phthalate	ND		5.4	1.7	ug/L	1	04/28/20	WB	E625.1
Dimethylphthalate	ND		5.4	1.7	ug/L	1	04/28/20	WB	E625.1
Di-n-butylphthalate	ND		5.4	1.4	ug/L	1	04/28/20	WB	E625.1
Di-n-octylphthalate	ND		5.4	1.4	ug/L	1	04/28/20	WB	E625.1
Fluoranthene	ND		5.4	1.7	ug/L	1	04/28/20	WB	E625.1
Fluorene	ND		5.4	1.8	ug/L	1	04/28/20	WB	E625.1
Hexachlorobenzene	ND		5.4	1.6	ug/L	1	04/28/20	WB	E625.1
Hexachlorobutadiene	ND		5.4	2.0	ug/L	1	04/28/20	WB	E625.1
Hexachlorocyclopentadiene	ND		5.4	1.7	ug/L	1	04/28/20	WB	E625.1
Hexachloroethane	ND		5.4	1.6	ug/L	1	04/28/20	WB	E625.1
Indeno(1,2,3-cd)pyrene	ND		5.4	1.8	ug/L	1	04/28/20	WB	E625.1
Isophorone	ND		5.4	1.5	ug/L	1	04/28/20	WB	E625.1
Naphthalene	2.2	J	5.4	1.6	ug/L	1	04/28/20	WB	E625.1
Nitrobenzene	ND		5.4	1.9	ug/L	1	04/28/20	WB	E625.1
N-Nitrosodimethylamine	ND		5.4	1.5	ug/L	1	04/28/20	WB	E625.1
N-Nitrosodi-n-propylamine	ND		5.4	1.7	ug/L	1	04/28/20	WB	E625.1
N-Nitrosodiphenylamine	ND		5.4	2.1	ug/L	1	04/28/20	WB	E625.1
Pentachlorophenol	ND		5.4	2.0	ug/L	1	04/28/20	WB	E625.1
Phenanthrene	ND		5.4	1.5	ug/L	1	04/28/20	WB	E625.1
Phenol	ND		5.4	1.7	ug/L	1	04/28/20	WB	E625.1
Pyrene	ND		5.4	1.9	ug/L	1	04/28/20	WB	E625.1
QA/QC Surrogates									
% 2,4,6-Tribromophenol	107				%	1	04/28/20	WB	15 - 130 %
% 2-Fluorobiphenyl	74				%	1	04/28/20	WB	30 - 130 %
% 2-Fluorophenol	69				%	1	04/28/20	WB	10 - 130 %
% Nitrobenzene-d5	94				%	1	04/28/20	WB	15 - 130 %
% Phenol-d5	80				%	1	04/28/20	WB	10 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
% Terphenyl-d14	28			%	1	04/28/20	WB	30 - 130 %	3

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

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1 QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

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

Ignitability is based solely on the results of the closed cup flashpoint analysis performed above. Passed is >140 degree F.

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

Semi-Volatile Comment:
Poor surrogate recovery was observed for one acid and/or one base surrogate. The other surrogates associated with this sample were within QA/QC criteria. No significant bias suspected.

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

Phyllis Shiller, Laboratory Director
April 30, 2020
Reviewed and Released by: Rashmi Makol, Project Manager

Environmental Laboratories, Inc.
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NY # 11301

QA/QC Report

April 30, 2020

QA/QC Data

SDG I.D.: GCF78034

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 527898 (mg/L), QC Sample No: CF78032 (CF78034)													
Mercury (Dissolved)	BRL	0.0002	<0.0002	<0.0003	NC	97.1			96.0			80 - 120	20
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.													
QA/QC Batch 527576 (mg/L), QC Sample No: CF78405 (CF78034)													
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	101			96.7			80 - 120	20
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.													
QA/QC Batch 527474 (mg/L), QC Sample No: CF76449 (CF78034)													
ICP Metals - Aqueous													
Antimony	BRL	0.0025	<0.003	<0.0025	NC	96.2	98.6	2.5	103			80 - 120	20
Arsenic	BRL	0.0020	0.004	0.0039	NC	93.5	95.8	2.4	101			80 - 120	20
Beryllium	BRL	0.0005	<0.001	<0.0005	NC	98.1	101	2.9	102			80 - 120	20
Cadmium	BRL	0.0005	<0.001	<0.0005	NC	93.3	95.8	2.6	94.3			80 - 120	20
Chromium	BRL	0.0005	0.004	0.0010	NC	95.4	97.4	2.1	97.0			80 - 120	20
Copper	BRL	0.0025	0.027	0.0255	5.70	97.3	101	3.7	106			80 - 120	20
Lead	BRL	0.0010	0.002	0.0019	NC	91.4	93.9	2.7	94.8			80 - 120	20
Nickel	BRL	0.0005	0.015	0.0134	11.3	94.6	96.8	2.3	95.9			80 - 120	20
Selenium	BRL	0.0050	0.012	0.0132	NC	88.8	91.0	2.4	93.2			80 - 120	20
Silver	BRL	0.0005	0.001	<0.0005	NC	95.5	98.0	2.6	104			80 - 120	20
Zinc	BRL	0.0020	0.063	0.0607	3.70	93.3	95.5	2.3	98.1			80 - 120	20
Comment:													
Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%.													
QA/QC Batch 527504 (mg/L), QC Sample No: CF77398 (CF78034)													
ICP Metals - Dissolved													
Antimony	BRL	0.005	<0.005	<0.005	NC	88.5	89.8	1.5	90.7			80 - 120	20
Arsenic	BRL	0.004	<0.004	<0.004	NC	87.4	89.0	1.8	90.2			80 - 120	20
Beryllium	BRL	0.001	<0.001	<0.001	NC	90.3	91.6	1.4	92.7			80 - 120	20
Cadmium	BRL	0.001	<0.001	<0.001	NC	89.0	90.2	1.3	88.1			80 - 120	20
Chromium	BRL	0.001	<0.001	<0.001	NC	90.2	91.3	1.2	90.6			80 - 120	20
Copper	BRL	0.005	<0.005	<0.005	NC	88.5	90.1	1.8	92.0			80 - 120	20
Lead	BRL	0.002	<0.002	<0.002	NC	84.7	85.7	1.2	85.1			80 - 120	20
Nickel	BRL	0.001	<0.001	<0.001	NC	87.1	87.9	0.9	86.7			80 - 120	20
Selenium	BRL	0.011	<0.011	<0.011	NC	83.2	85.1	2.3	86.1			80 - 120	20
Silver	BRL	0.001	<0.001	<0.001	NC	87.0	88.9	2.2	91.6			80 - 120	20
Zinc	BRL	0.002	<0.002	<0.002	NC	86.4	87.3	1.0	87.5			80 - 120	20
Comment:													
Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%.													
QA/QC Batch 527473 (mg/L), QC Sample No: CF77049 2X (CF78034)													
ICP MS Metals - Aqueous													
Thallium	BRL	0.0001	<0.0005	<0.0005	NC	97.0	96.6	0.4	95.4			80 - 120	20

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Comment:													
Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%.													
QA/QC Batch 527501 (mg/L), QC Sample No: CF78032 (CF78034)													
ICP Metals MS - Dissolved													
Thallium	BRL	0.0003	<0.0003	<0.0003	NC	88.4	87.3	1.3	87.1			80 - 120	20
Comment:													
Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%.													

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NY # 11301

QA/QC Report

April 30, 2020

QA/QC Data

SDG I.D.: GCF78034

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 527571 (mg/L), QC Sample No: CF77767 (CF78034)													
O&G, Non-polar Material	BRL	1.4	<1.4	<1.4	NC	94.0			90.0			85 - 115	20
Comment:													
Additional criteria matrix spike acceptance range is 75-125%.													
QA/QC Batch 527570 (mg/L), QC Sample No: CF77767 (CF78034)													
Oil and Grease by EPA 1664A	BRL	1.4	<1.4	<1.4	NC	96.0			93.0			85 - 115	20
Comment:													
Additional: MS acceptance range 75-125%.													
QA/QC Batch 527483 (mg/L), QC Sample No: CF77869 (CF78034)													
B.O.D./5 day	BRL	2.0	<4.0	<4.0	NC	109			88.5			70 - 130	20
B.O.D./5 day GGA CBOD						89.1						84 - 115	20
QA/QC Batch 527563 (pH), QC Sample No: CF77917 (CF78034)													
pH			7.36	7.37	0.10	98.9						85 - 115	20
QA/QC Batch 527745 (mg/L), QC Sample No: CF78034 (CF78034)													
Total Solids	BRL	10	2500	2600	3.90	100						85 - 115	20
QA/QC Batch 527549 (mg/L), QC Sample No: CF78034 (CF78034)													
Total Suspended Solids	BRL	2.5	28	23	NC	97.0						85 - 115	20
QA/QC Batch 527806 (Degree F), QC Sample No: CF78458 (CF78034)													
Flash Point			>200	>200	NC	101						75 - 125	30
Comment:													
Additional criteria matrix spike acceptance range is 75-125%.													
QA/QC Batch 527696 (mg/L), QC Sample No: CF77218 (CF78034)													
Chloride	BRL	3.0	125	126	0.80	97.8			103			90 - 110	20
QA/QC Batch 527534 (mg/L), QC Sample No: CF78249 (CF78034)													
Nitrate-N	BRL	0.02	0.71	0.70	1.40	102			97.7			90 - 110	20
Nitrite-N	BRL	0.01	0.092	0.09	2.20	101			100			90 - 110	20
QA/QC Batch 527555 (mg/L), QC Sample No: CF76406 (CF78034)													
Nitrogen Tot Kjeldahl	BRL	0.10	4.24	4.48	5.50	97.7			103			85 - 115	20
Comment:													
TKN is reported as Organic Nitrogen in the Blank, LCS, DUP and MS.													
Additional criteria: LCS acceptance range for waters is 85-115% and for soils is 75-125%. MS acceptance range is 75-125%.													

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NY # 11301

QA/QC Report

April 30, 2020

QA/QC Data

SDG I.D.: GCF78034

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 527488 (ug/L), QC Sample No: CF78094 (CF78034)										
Polychlorinated Biphenyls										
PCB-1016	ND	0.050	82	86	4.8				50 - 140	20
PCB-1221	ND	0.050							40 - 140	20
PCB-1232	ND	0.050							40 - 140	20
PCB-1242	ND	0.050							40 - 140	20
PCB-1248	ND	0.050							40 - 140	20
PCB-1254	ND	0.050							40 - 140	20
PCB-1260	ND	0.050	82	89	8.2				30 - 140	20
PCB-1262	ND	0.050							40 - 140	20
PCB-1268	ND	0.050							40 - 140	20
% DCBP (Surrogate Rec)	91	%	88	89	1.1				30 - 150	20
% DCBP (Surrogate Rec) (Confirm	83	%	96	95	1.0				30 - 150	20
% TCMX (Surrogate Rec)	75	%	79	79	0.0				30 - 150	20
% TCMX (Surrogate Rec) (Confirm	75	%	78	79	1.3				30 - 150	20
Comment:										
A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.										
QA/QC Batch 527489 (ug/L), QC Sample No: CF78094 (CF78034)										
Semivolatiles										
1,2,4-Trichlorobenzene	ND	3.5	83	79	4.9				57 - 130	50
1,2-Dichlorobenzene	ND	1.0	84	77	8.7				30 - 130	20
1,2-Diphenylhydrazine	ND	1.6	108	103	4.7				10 - 130	20
1,3-Dichlorobenzene	ND	1.0	83	74	11.5				46 - 154	20
1,4-Dichlorobenzene	ND	1.0	82	74	10.3				30 - 130	20
2,4,6-Trichlorophenol	ND	1.0	101	97	4.0				52 - 129	58
2,4-Dichlorophenol	ND	1.0	93	87	6.7				53 - 122	50
2,4-Dimethylphenol	ND	1.0	100	95	5.1				42 - 120	58
2,4-Dinitrophenol	ND	1.0	117	104	11.8				10 - 173	132
2,4-Dinitrotoluene	ND	3.5	119	114	4.3				48 - 127	42
2,6-Dinitrotoluene	ND	3.5	110	106	3.7				68 - 137	48
2-Chloronaphthalene	ND	3.5	85	82	3.6				65 - 120	24
2-Chlorophenol	ND	1.0	93	81	13.8				36 - 120	61
2-Methylnaphthalene	ND	3.5	86	83	3.6				10 - 130	20
2-Methylphenol (o-cresol)	ND	1.0	98	85	14.2				10 - 130	20
2-Nitrophenol	ND	1.0	101	93	8.2				45 - 167	55
3&4-Methylphenol (m&p-cresol)	ND	1.0	105	93	12.1				10 - 130	20
3,3'-Dichlorobenzidine	ND	5.0	62	56	10.2				8 - 213	108
4,6-Dinitro-2-methylphenol	ND	1.0	116	111	4.4				10 - 130	20
4-Bromophenyl phenyl ether	ND	3.5	94	88	6.6				65 - 120	43
4-Chloro-3-methylphenol	ND	1.0	113	105	7.3				41 - 128	73
4-Chlorophenyl phenyl ether	ND	1.0	90	88	2.2				38 - 145	61
4-Nitrophenol	ND	1.0	144	134	7.2				13 - 129	131

QA/QC Data

SDG I.D.: GCF78034

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Acenaphthene	ND	1.5	94	91	3.2				60 - 132	48
Acenaphthylene	ND	3.5	88	82	7.1				54 - 126	74
Anthracene	ND	1.5	94	89	5.5				43 - 120	66
Benz(a)anthracene	ND	1.5	100	95	5.1				42 - 133	53
Benzidine	ND	4.5	61	<10	NC				10 - 130	20
Benzo(a)pyrene	ND	1.5	95	89	6.5				32 - 148	72
Benzo(b)fluoranthene	ND	1.5	115	112	2.6				42 - 140	71
Benzo(ghi)perylene	ND	1.5	97	93	4.2				10 - 195	97
Benzo(k)fluoranthene	ND	1.5	76	75	1.3				25 - 146	63
Benzyl butyl phthalate	ND	1.5	109	105	3.7				10 - 140	60
Bis(2-chloroethoxy)methane	ND	3.5	89	80	10.7				49 - 165	54
Bis(2-chloroethyl)ether	ND	1.0	86	73	16.4				43 - 126	108
Bis(2-chloroisopropyl)ether	ND	1.0	90	81	10.5				63 - 139	76
Bis(2-ethylhexyl)phthalate	ND	1.5	110	106	3.7				29 - 137	82
Chrysene	ND	1.5	97	95	2.1				44 - 140	87
Dibenz(a,h)anthracene	ND	1.5	100	96	4.1				10 - 200	126
Diethyl phthalate	ND	1.5	101	102	1.0				10 - 120	100
Dimethylphthalate	ND	1.5	97	95	2.1				10 - 120	183
Di-n-butylphthalate	ND	1.5	105	102	2.9				8 - 120	47
Di-n-octylphthalate	ND	1.5	101	98	3.0				19 - 132	69
Fluoranthene	ND	1.5	97	95	2.1				43 - 121	66
Fluorene	ND	1.5	91	89	2.2				70 - 120	38
Hexachlorobenzene	ND	3.5	95	92	3.2				8 - 142	55
Hexachlorobutadiene	ND	3.5	82	78	5.0				38 - 120	62
Hexachlorocyclopentadiene	ND	3.5	32	30	6.5				10 - 130	20
Hexachloroethane	ND	3.5	88	79	10.8				55 - 120	52
Indeno(1,2,3-cd)pyrene	ND	3.5	97	90	7.5				10 - 151	99
Isophorone	ND	3.5	90	89	1.1				47 - 180	93
Naphthalene	ND	1.5	81	77	5.1				36 - 120	65
Nitrobenzene	ND	3.5	100	91	9.4				54 - 158	62
N-Nitrosodimethylamine	ND	1.0	66	61	7.9				10 - 130	20
N-Nitrosodi-n-propylamine	ND	3.5	97	87	10.9				14 - 198	87
N-Nitrosodiphenylamine	ND	3.5	85	83	2.4				10 - 130	20
Pentachlorophenol	ND	3.5	113	106	6.4				38 - 152	86
Phenanthrene	ND	1.5	93	91	2.2				65 - 120	39
Phenol	ND	1.0	89	78	13.2				17 - 120	64
Pyrene	ND	1.5	97	95	2.1				70 - 120	49
% 2,4,6-Tribromophenol	86	%	114	108	5.4				15 - 130	20
% 2-Fluorobiphenyl	77	%	79	77	2.6				30 - 130	20
% 2-Fluorophenol	66	%	78	66	16.7				10 - 130	20
% Nitrobenzene-d5	82	%	94	86	8.9				15 - 130	20
% Phenol-d5	76	%	86	73	16.4				10 - 130	20
% Terphenyl-d14	89	%	98	97	1.0				30 - 130	20
QA/QC Batch 527637 (ug/L), QC Sample No: CF77983 (CF78034)										
Volatiles										
1,1,1-Trichloroethane	ND	1.0	97	86	12.0				75 - 125	20
1,1,2,2-Tetrachloroethane	ND	0.50	113	98	14.2				60 - 140	20
1,1,2-Trichloroethane	ND	1.0	102	89	13.6				71 - 129	20
1,1-Dichloroethane	ND	1.0	98	84	15.4				72 - 128	20
1,1-Dichloroethene	ND	1.0	98	87	11.9				50 - 150	20
1,2-Dichlorobenzene	ND	1.0	102	90	12.5				63 - 137	20
1,2-Dichloroethane	ND	1.0	106	91	15.2				68 - 132	20

QA/QC Data

SDG I.D.: GCF78034

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
1,2-Dichloropropane	ND	1.0	101	88	13.8				40 - 160	20	
1,3-Dichlorobenzene	ND	1.0	103	89	14.6				73 - 127	20	
1,4-Dichlorobenzene	ND	1.0	102	87	15.9				63 - 137	20	
Benzene	ND	0.70	106	90	16.3				64 - 136	20	
Bromodichloromethane	ND	0.50	102	86	17.0				65 - 135	20	
Bromoform	ND	1.0	101	89	12.6				71 - 129	20	
Bromomethane	ND	1.0	99	80	21.2				40 - 160	20	r
Carbon tetrachloride	ND	1.0	96	83	14.5				73 - 127	20	
Chlorobenzene	ND	1.0	103	89	14.6				66 - 134	20	
Chloroethane	ND	1.0	92	73	23.0				40 - 160	20	r
Chloroform	ND	1.0	98	86	13.0				67 - 133	20	
Chloromethane	ND	1.0	93	81	13.8				40 - 160	20	
cis-1,2-Dichloroethene	ND	1.0	98	84	15.4				69 - 131	20	
cis-1,3-Dichloropropene	ND	0.40	101	87	14.9				40 - 160	20	
Dibromochloromethane	ND	0.50	105	91	14.3				67 - 133	20	
Ethylbenzene	ND	1.0	104	90	14.4				59 - 141	20	
m&p-Xylene	ND	1.0	103	89	14.6				70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	1.0	99	87	12.9				70 - 130	30	
Methylene chloride	ND	1.0	95	83	13.5				60 - 140	20	
o-Xylene	ND	1.0	102	89	13.6				70 - 130	30	
Tetrachloroethene	ND	1.0	100	87	13.9				73 - 127	20	
Toluene	ND	1.0	103	89	14.6				74 - 126	20	
trans-1,2-Dichloroethene	ND	1.0	97	85	13.2				69 - 131	20	
trans-1,3-Dichloropropene	ND	0.40	105	88	17.6				50 - 150	20	
Trichloroethene	ND	1.0	98	86	13.0				66 - 134	20	
Trichlorofluoromethane	ND	1.0	102	88	14.7				48 - 152	20	
Vinyl chloride	ND	1.0	100	89	11.6				40 - 160	20	
% 1,2-dichlorobenzene-d4	100	%	102	101	1.0				70 - 130	30	
% Bromofluorobenzene	98	%	99	100	1.0				70 - 130	30	
% Dibromofluoromethane	103	%	98	102	4.0				70 - 130	30	
% Toluene-d8	101	%	101	100	1.0				70 - 130	30	

Comment:

A blank MS/MSD was analyzed with this batch.

l = This parameter is outside laboratory LCS/LCSD specified recovery limits.
r = This parameter is outside laboratory RPD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
April 30, 2020

Thursday, April 30, 2020

Criteria: NY: DEP EFF

State: NY

Sample Criteria Exceedances Report

GCF78034 - AMC-ENG

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

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

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Comments

April 30, 2020 SDG I.D.: GCF78034

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY Temperature Narration

April 30, 2020

SDG I.D.: GCF78034

The samples in this delivery group were received at 3.1°C.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

WCP

PHOENIX
Environmental Laboratories, Inc.

NY/NJ CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823

Client Services (860) 645-8726

Temp 3.1 Pg 1 of 1

Data Delivery:
☐ Fax #:
☑ Email ARIEL@AMC-ENGINEERING.COM

Customer: AMC ENGINEERING PLLC
Address: 18-36 42nd Street
Astoria NY 11105

Project: 13 42nd St, Bk - Sunset Park
Report to: ARIEL CZEMERINSKI
Invoice to: AMC ENGINEERING PLLC

Project P.O:
Phone #: 718 545-0474
Fax #: 516 706-3214

Sampler's Signature: [signature] Date: 4/22/2020

Client Sample - Information - Identification

Matrix Code:
DW=drinking water **WW**=wastewater **S**=soil/solid **O**=oil
GW=groundwater **SL**=sludge **A**=air **X**=other

Analysis Request

Phoenix Sample #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Full DEP + DEC Dewatering Protocol (See Attached)	+	+	+	+	+	+	+	+	+	+	+	Soil VOA [ ] Methanol [X] S. Bisulfate [ ] H2O	GL Soil container (8) oz	GL Soil container (2) oz	40 ml VOA Vial [ ] As is [x] HCl	GL Amber 1000ml [x] As is [x] H2SO4	PL As is [ ] 250ml [x] 500ml [x] 1000ml	PL H2SO4 [x] 250ml [ ] 500ml	PL HNO3 250ml	+	+	
78634	Test Pit	GW	4/22/20	8:30 AM	X													3	5	2	1	1				

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	4/22/20	11:00 am
[signature]	[signature]	4/23	1328

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
■ Standard
☐ Other 5 DAYS
* SURCHARGE APPLIES

NJ
☐ Res. Criteria
☐ Non-Res. Criteria
☐ Impact to GW Soil Cleanup Criteria
☐ GW Criteria

NY
☐ TAGM 4046 GW
☐ TAGM 4046 SOIL
☐ NY375 Unrestricted Soil
☐ NY375 Residential Soil
☐ NY375 Restricted
■ DEP+DEC Dewatering Protocol

Data Format
☐ Phoenix Std Report
■ Excel
■ PDF
☐ GIS/Key
☐ EQuIS
☐ NJ Hazsite EDD
☐ NY EZ EDD (ASP)
☐ Other

Data Package
☐ NJ Reduced Deliv. *
☐ NY Enhanced (ASP B) *
☐ Other

Comments, Special Requirements or Regulations:

pH = 8.22 Temp = 52.5 °F

State where samples were collected: NY

Note: For Chromium: If outside of holding time, please test for Total chromium instead of Cr(IV)

CCF 78034

TABLE A: –

LIMITATIONS FOR EFFLUENT TO ***SANITARY OR COMBINED*** SEWERS

Parameter[1]	Daily Limit	Test	Units	Sample Type	Monthly Limit
Non-polar material[2]	50		mg/l	Instantaneous	---
~~pH~~	5-12		SU's	Instantaneous	---
~~Temperature~~	< 150		Degree F	Instantaneous	---
Flash Point	> 140		Degree F	Instantaneous	---
Cadmium	2 0.69		mg/l mg/l	Instantaneous Composite	--- ---
Chromium (VI)	5		mg/l	Instantaneous	---
Copper	5		mg/l	Instantaneous	---
Lead	2		mg/l	Instantaneous	---
Mercury	0.05		mg/l	Instantaneous	---
Nickel	3		mg/l	Instantaneous	---
Zinc	5		mg/l	Instantaneous	---
Benzene	134		ppb	Instantaneous	57
Carbontetrachloride	---		ppb	Composite	---
Chloroform	---		ppb	Composite	---
1,4 Dichlorobenzene	---		Ppb	Composite	---
Ethylbenzene	380		ppb	Instantaneous	142
MTBE (Methyl-Tert-Butyl-Ether)	50		ppb	Instantaneous	---
Naphthalene	47		ppb	Composite	19
Phenol	---		ppb	Composite	---
Tetrachloroethylene (Perc)	20		ppb	Instantaneous	---
Toluene	74		ppb	Instantaneous	28
1,2,4 Trichlorobenzene	---		ppb	Composite	---
1,1,1 Trichloroethane	---		ppb	Composite	---
Xylenes (Total)	74		ppb	Instantaneous	28
PCB's (Total)[3]	1		ppb	Composite	---
Total Suspended Solids (TSS)	350[4]		mg/l	Instantaneous	---
CBOD[5]	---		ppm	Composite	---
Chloride[5]	---		ppm	Instantaneous	---
Total Nitrogen[5]	---		Mg/L	Composite	---
Total Solids[5]	---		Mg/L	Instantaneous	---
~~Other~~					

1 All handling and preservation of collected samples and laboratory analyses of samples shall be performed in accordance with 40 C.F.R. pt. 136. If 40 C.F.R. pt. 136 does not cover the pollutant in question, the handling, preservation, and analysis must be performed in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater." All analyses shall be performed using a detection level less than the lowest applicable regulatory discharge limit. If a parameter does not have a limit, then the detection level is defined as the least of the Practical Quantitation Limits identified in NYSDEC's Analytical Detectability and Quantitation Guidelines for Selected Environmental Parameters, December 1988

2 Analysis for ***non-polar materials*** must be done by EPA method 1664 Rev. A. Non-Polar Material shall mean that portion of the oil and grease that is not eliminated from a solution containing N–Hexane, or any other extraction solvent the EPA shall prescribe, by silica gel absorption.

3 Analysis for PCB=s is required if ***both*** conditions listed below are met:
1) if proposed discharge ≥ 10,000 gpd;
2) if duration of a discharge > 10 days.
Analysis for PCB=s must be done by EPA method 608 with MDL=<65 ppt. PCB's (total) is the sum of PCB-1242 (Arochlor 1242), PCB-1254 (Arochlor 1254), PCB-1221 (Arochlor 1221), PCB-1232 (Arochlor 1232), PCB-1248 (Arochlor 1248), PCB-1260 (Arochlor 1260) and PCB-1016 (Arochlor 1016).

4 For discharge ≥ 10,000 gpd, the TSS limit is 350 mg/l. For discharge < 10,000gpd, the limit is determined on a case by case basis.

5 Analysis for Carbonaceous Biochemical Oxygen Demand (CBOD), Chloride, Total Solids and Total Nitrogen are required if proposed discharge ≥ 10,000 gpd.

GCF 78034

NYSDEC Region 2 - Dewatering Project Sampling Information (Revised- 09/12/17)				
PROJECT NAME / ID #:				
#	**PARAMETER**	**TYPE**	**EPA METHOD**	**DETECTION**
1	pH	Grab	150.1	
2	Temperature	°F	After Pumping	
3	Oil & Grease	Grab	1664A or 1664B	
4	Total Suspended Solids	Grab	160.2	
5	Volatile Organic Compounds (VOC)	Grab	624	EPA MDL
6	Semi VOCs/ Base Neutral Compounds	Grab	625	EPA MDL
7	Nitrate/Nitrite	Grab	300 or 353.3	EPA MDL
8	Metals–Total and Dissolved (13 Priority Poliutant non-Hg Metals)	Grab	200.7 Rev 4.4 – Preferred Method 200.2, 200.8	EPA MDL
	Mercury- Total and Dissolved	Grab	1669 – Sampling Method 1631 – Analysis	EPA MDL
9	PCBs	Grab	608	EPA MDL

NOTES

- Well/Wellpoint samples are to be collected after development of the well by a licensed well driller duly registered in accordance with Section 15-1525 of the Environmental Conservation Law of the State of New York.
- Water samples collected from a test pit will only be accepted from projects where all dewatering is taking place via sumping from trenches.
- A minimum of two (2) raw samples must be collected in accordance with standards specified in 40 CFR Part 136. Samples should be collected from two (2) representative locations within the vicinity of the proposed excavation area. Location, depth [of monitoring well/wellpoint or test pit], and date of collection must be provided for each sample.
- The Department may require sampling from additional locations depending on the size of the proposed project area.
- Samples must be tested for each parameter using the EPA approved method listed above. If another method is used, the Department will not accept the results.
- The Department may require testing for additional parameters if the proposed dewatering site is suspected of being contaminated.
- All analyses must be performed by a laboratory certified by the NYS Department of Health.
- The Method Detection Limit (MDL) is the level at which the analytical procedure referenced is capable of determining with a 99% probability that the substance is present. This value is determined in distilled water with no interfering substances present.
- When collecting samples, temporary discharge must be contained on-site or disposed of off-site and must not cause or contribute to a contravention of surface or ground water quality standards.

PLEASE submit an electronic copy (CD with OCR searchable pdf) of all information including complete sampling data, test results and lab records (i.e. data sheets and chain of custodies) and TWO (2) hardcopies of the sampling summary report (along with required application materials) to:

Regional Permit Administrator
NYSDEC Division of Environmental Permits, Region 2
47-40 21st Street; Long Island City, New York 11101

January 2022 Sampling Event

PHOENIX
Environmental Laboratories, Inc.

Thursday, February 03, 2022

Attn: Ariel Czemerinski
AMC Engineering PLLC
18-36 42nd Street
Astoria, NY 11105

Project ID: **13 42ND STREET BROOKLYN**
SDG ID: **GCK26064**
Sample ID#s: CK26064 - CK26066

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

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

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

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

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301

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

NY # 11301

SDG Comments

February 03, 2022

SDG I.D.: GCK26064

SIM Analysis:
The lowest possible reporting limit under SIM conditions is 0.02 ug/L. The NY TOGS GA criteria for some PAHs is 0.002 ug/L. This level can not be achieved.

EPA method 625 is not approved for drinking water matrices.
This analysis should not be used for compliance purposes.
Sample CK26064 was received past hold time for Nitrite as Nitrogen (E300.0).
Sample CK26064 was received past hold time for Nitrate as Nitrogen (E300.0).
Sample CK26065 was received past hold time for Nitrite as Nitrogen (E300.0).
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NY # 11301

Sample Id Cross Reference

February 03, 2022

SDG I.D.: GCK26064

Project ID: 13 42ND STREET BROOKLYN

Client Id	Lab Id	Matrix
TW1	CK26064	GW DISCHARGE
TW2	CK26065	GW DISCHARGE
TW3	CK26066	GW DISCHARGE

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 03, 2022

FOR: Attn: Ariel Czemerinski
AMC Engineering PLLC
18-36 42nd Street
Astoria, NY 11105

Sample Information		Custody Information		Date	Time
Matrix:	GW DISCHARGE	Collected by:		01/28/22	15:30
Location Code:	AMC-ENG	Received by:	B	01/31/22	14:11
Rush Request:	24 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCK26064
Phoenix ID: CK26064

Project ID: 13 42ND STREET BROOKLYN
Client ID: TW1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Silver	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Arsenic	0.002	0.002		mg/L	1	02/01/22	EK	E200.7	
Beryllium	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Cadmium	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Chromium	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Copper	< 0.003	0.003		mg/L	1	02/01/22	EK	E200.7	
Silver (Dissolved)	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Arsenic (Dissolved)	< 0.004	0.004		mg/L	1	02/01/22	EK	E200.7	
Beryllium (Dissolved)	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Cadmium (Dissolved)	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Chromium (Dissolved)	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Copper (Dissolved)	< 0.005	0.005		mg/L	1	02/01/22	EK	E200.7	
Nickel (Dissolved)	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Lead (Dissolved)	< 0.002	0.002		mg/L	1	02/01/22	EK	E200.7	
Antimony (Dissolved)	< 0.005	0.005		mg/L	1	02/01/22	EK	E200.7	
Selenium (Dissolved)	< 0.011	0.011		mg/L	1	02/01/22	EK	E200.7	
Thallium (Dissolved)	< 0.002	0.002		mg/L	1	02/01/22	AP	SM3113B	
Zinc (Dissolved)	< 0.002	0.002		mg/L	1	02/01/22	EK	E200.7	
Mercury	< 0.0002	0.0002		mg/L	1	02/01/22	AP	E245.1	
Nickel	0.002	0.001		mg/L	1	02/01/22	EK	E200.7	
Lead	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Antimony	< 0.003	0.003		mg/L	1	02/01/22	EK	E200.7	
Selenium	< 0.005	0.005		mg/L	1	02/01/22	EK	E200.7	
Thallium	< 0.001	0.001		mg/L	1	02/01/22	AP	SM3113B	
Zinc	< 0.002	0.002		mg/L	1	02/01/22	EK	E200.7	
Nitrite as Nitrogen	< 0.05	0.05		mg/L	5	01/31/22 23:34	BS\EG	E300.0	
Nitrate as Nitrogen	11.0	0.25		mg/L	5	01/31/22 23:34	BS\EG	E300.0	
pH	7.85	1.00		pH Units	1	01/31/22 21:42	MW	SM4500-H B-00	1

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Filtration	Completed						01/31/22	AG	0.45um Filter	
Mercury Digestion	Completed						02/01/22	AB/AB	E245.1	
pH	8.15		1.00		pH Units	1	01/28/22	*	FIELD	1
PCB Extraction	Completed						01/31/22	B/F	E608.3	
Semi-Volatile Extraction	Completed						01/31/22	F/F	E625.1	
Temperature; Field Analysis	59.7		0.1		deg. F	1	01/28/22		E170.1	
Dissolved Metals Preparation	Completed						01/31/22	AG	SW3005A	
Total Metals Digestion	Completed						01/31/22	AG		
Polychlorinated Biphenyls										
PCB-1016	ND		0.038	0.038	ug/L	1	02/01/22	SC	E608.3	
PCB-1221	ND		0.038	0.038	ug/L	1	02/01/22	SC	E608.3	
PCB-1232	ND		0.038	0.038	ug/L	1	02/01/22	SC	E608.3	
PCB-1242	ND		0.038	0.038	ug/L	1	02/01/22	SC	E608.3	
PCB-1248	ND		0.038	0.038	ug/L	1	02/01/22	SC	E608.3	
PCB-1254	ND		0.038	0.038	ug/L	1	02/01/22	SC	E608.3	
PCB-1260	ND		0.038	0.038	ug/L	1	02/01/22	SC	E608.3	
PCB-1262	ND		0.038	0.038	ug/L	1	02/01/22	SC	E608.3	1
PCB-1268	ND		0.038	0.038	ug/L	1	02/01/22	SC	E608.3	1
QA/QC Surrogates										
% DCBP	56				%	1	02/01/22	SC	30 - 150 %	
% DCBP (Confirmation)	57				%	1	02/01/22	SC	30 - 150 %	
% TCMX	44				%	1	02/01/22	SC	30 - 150 %	
% TCMX (Confirmation)	45				%	1	02/01/22	SC	30 - 150 %	
Volatiles										
1,1,1-Trichloroethane	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,1,2,2-tetrachloroethane	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,1-Dichloroethane	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,1-Dichloroethene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,2-Dichlorobenzene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,2-Dichloroethane	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,2-Dichloropropane	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,3-Dichlorobenzene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,3-Dichloropropene	ND		5.0	5.0	ug/L	1	02/01/22	MH	E624.1	1
1,4-Dichlorobenzene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Benzene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Bromodichloromethane	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Bromoform	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Bromomethane	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Carbon tetrachloride	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Chlorobenzene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Chloroethane	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Chloroform	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Chloromethane	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
cis-1,2-Dichloroethene	0.71	J	5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Dibromochloromethane	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Ethylbenzene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
m&p-Xylenes	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
Methyl t-butyl ether (MTBE)	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
Methylene chloride	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
o-Xylene	ND		5.0	0.45	ug/L	1	02/01/22	MH	E624.1
Tetrachloroethene	1.3	J	5.0	0.50	ug/L	1	02/01/22	MH	E624.1
Toluene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
Total Xylenes	ND		5.0	5.0	ug/L	1	02/01/22	MH	E624.1
trans-1,2-Dichloroethene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
Trichloroethene	0.91	J	5.0	0.50	ug/L	1	02/01/22	MH	E624.1
Trichlorofluoromethane	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
Vinyl chloride	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
QA/QC Surrogates									
% 1,2-dichlorobenzene-d4	99				%	1	02/01/22	MH	70 - 130 %
% Bromofluorobenzene	104				%	1	02/01/22	MH	70 - 130 %
% Dibromofluoromethane	103				%	1	02/01/22	MH	70 - 130 %
% Toluene-d8	100				%	1	02/01/22	MH	70 - 130 %
Semivolatiles by (SIM)									
Acenaphthene	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Acenaphthylene	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Anthracene	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Benzo(a)anthracene	ND		0.04	0.04	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Benzo(a)pyrene	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Benzo(b)fluoranthene	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Benzo(g,h,i)perylene	ND		0.10	0.10	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Benzo(k)fluoranthene	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Chrysene	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Dibenz(a,h)anthracene	ND		0.02	0.01	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Hexachlorobenzene	ND		0.06	0.06	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Hexachlorobutadiene	ND		0.10	0.10	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Hexachlorocyclopentadiene	ND		0.10	0.10	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Indeno(1,2,3-c,d)pyrene	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Nitrobenzene	ND		0.10	0.10	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
N-Nitrosodimethylamine	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Pentachlorophenol	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Phenanthrene	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Pyridine	ND		0.51	1.3	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
QA/QC Surrogates									
% 2,4,6-Tribromophenol	59				%	1	02/01/22	WB	15 - 110 %
% 2-Fluorobiphenyl	51				%	1	02/01/22	WB	30 - 130 %
% 2-Fluorophenol	26				%	1	02/01/22	WB	15 - 110 %
% Nitrobenzene-d5	50				%	1	02/01/22	WB	30 - 130 %
% Phenol-d5	20				%	1	02/01/22	WB	15 - 110 %
% Terphenyl-d14	66				%	1	02/01/22	WB	30 - 130 %
Semivolatiles									
1,2,4-Trichlorobenzene	ND		5.1	1.5	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
1,2-Dichlorobenzene	ND		5.1	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM 1

Project ID: 13 42ND STREET BROOKLYN
Client ID: TW1

Phoenix I.D.: CK26064

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
1,2-Diphenylhydrazine	ND	5.1	5.1	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
1,3-Dichlorobenzene	ND	5.1	1.5	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
1,4-Dichlorobenzene	ND	5.1	1.5	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
2,4,5-Trichlorophenol	ND	5.1	0.92	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2,4,6-Trichlorophenol	ND	5.1	0.92	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2,4-Dichlorophenol	ND	5.1	0.92	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2,4-Dimethylphenol	ND	5.1	0.92	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2,4-Dinitrophenol	ND	5.1	0.92	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2,4-Dinitrotoluene	ND	5.1	2.0	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2,6-Dichlorophenol	ND	5.1	0.92	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
2,6-Dinitrotoluene	ND	5.1	1.6	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2-Chloronaphthalene	ND	5.1	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2-Chlorophenol	ND	5.1	0.92	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2-Methylnaphthalene	ND	5.1	1.5	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
2-Methylphenol (o-cresol)	ND	5.1	0.92	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2-Nitroaniline	ND	10	5.2	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
2-Nitrophenol	ND	5.1	0.92	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
3&4-Methylphenol (m&p-cresol)	ND	5.1	0.92	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
3,3'-Dichlorobenzidine	ND	5.1	2.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
3-Nitroaniline	ND	5.1	5.1	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
4,6-Dinitro-2-methylphenol	ND	5.1	0.92	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
4-Bromophenyl phenyl ether	ND	5.1	1.5	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
4-Chloro-3-methylphenol	ND	5.1	0.92	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
4-Chloroaniline	ND	5.1	2.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
4-Chlorophenyl phenyl ether	ND	5.1	1.7	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
4-Nitroaniline	ND	5.1	1.7	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
4-Nitrophenol	ND	5.1	0.92	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Benzidine	ND	5.1	3.0	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Benzoic acid	ND	10	10	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
Benzyl alcohol	ND	10	5.1	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
Benzyl butyl phthalate	ND	5.1	1.3	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Bis(2-chloroethoxy)methane	ND	5.1	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Bis(2-chloroethyl)ether	ND	5.1	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Bis(2-chloroisopropyl)ether	ND	5.1	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
Bis(2-ethylhexyl)phthalate	ND	1.0	1.0	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Dibenzofuran	ND	1.0	1.0	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
Diethyl phthalate	ND	5.1	1.6	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Dimethylphthalate	ND	5.1	1.6	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Di-n-butylphthalate	ND	5.1	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Di-n-octylphthalate	ND	5.1	1.3	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Fluoranthene	ND	5.1	1.7	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Fluorene	ND	5.1	1.7	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Hexachloroethane	ND	1.0	1.0	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Isophorone	ND	5.1	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Naphthalene	ND	5.1	1.5	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
N-Nitrosodi-n-propylamine	ND	5.1	1.7	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
N-Nitrosodiphenylamine	ND	5.1	2.0	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Phenol	ND	5.1	0.92	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Pyrene	ND	5.1	1.8	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	

Project ID: 13 42ND STREET BROOKLYN
Client ID: TW1

Phoenix I.D.: CK26064

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
QA/QC Surrogates								
% 2,4,6-Tribromophenol	64			%	1	02/01/22	WB	15 - 130 %
% 2-Fluorobiphenyl	57			%	1	02/01/22	WB	30 - 130 %
% 2-Fluorophenol	33			%	1	02/01/22	WB	10 - 130 %
% Nitrobenzene-d5	55			%	1	02/01/22	WB	15 - 130 %
% Phenol-d5	20			%	1	02/01/22	WB	10 - 130 %
% Terphenyl-d14	76			%	1	02/01/22	WB	30 - 130 %

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

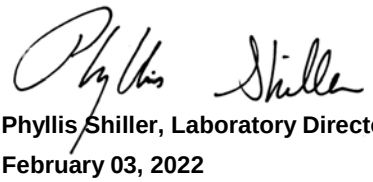
RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1 QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

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

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

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



Phyllis Shiller, Laboratory Director

February 03, 2022

Reviewed and Released by: Rashmi Makol, Project Manager

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 03, 2022

FOR: Attn: Ariel Czemerinski
AMC Engineering PLLC
18-36 42nd Street
Astoria, NY 11105

Sample Information		Custody Information		Date	Time
Matrix:	GW DISCHARGE	Collected by:		01/28/22	15:30
Location Code:	AMC-ENG	Received by:	B	01/31/22	14:11
Rush Request:	24 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCK26064
Phoenix ID: CK26065

Project ID: 13 42ND STREET BROOKLYN
Client ID: TW2

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Silver	0.004	0.003		mg/L	5	02/01/22	EK	E200.7	
Arsenic	< 0.010	0.010		mg/L	5	02/01/22	EK	E200.7	
Beryllium	< 0.003	0.003		mg/L	5	02/01/22	EK	E200.7	
Cadmium	< 0.003	0.003		mg/L	5	02/01/22	EK	E200.7	
Chromium	< 0.003	0.003		mg/L	5	02/01/22	EK	E200.7	
Copper	< 0.013	0.013		mg/L	5	02/01/22	EK	E200.7	
Silver (Dissolved)	0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Arsenic (Dissolved)	< 0.004	0.004		mg/L	1	02/01/22	EK	E200.7	
Beryllium (Dissolved)	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Cadmium (Dissolved)	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Chromium (Dissolved)	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Copper (Dissolved)	< 0.005	0.005		mg/L	1	02/01/22	EK	E200.7	
Nickel (Dissolved)	0.003	0.001		mg/L	1	02/01/22	EK	E200.7	
Lead (Dissolved)	< 0.002	0.002		mg/L	1	02/01/22	EK	E200.7	
Antimony (Dissolved)	< 0.005	0.005		mg/L	1	02/01/22	EK	E200.7	
Selenium (Dissolved)	< 0.011	0.011		mg/L	1	02/01/22	EK	E200.7	
Thallium (Dissolved)	< 0.002	0.002		mg/L	1	02/01/22	AP	SM3113B	
Zinc (Dissolved)	0.016	0.002		mg/L	1	02/01/22	EK	E200.7	
Mercury	< 0.0002	0.0002		mg/L	1	02/01/22	AP	E245.1	
Nickel	< 0.003	0.003		mg/L	5	02/01/22	EK	E200.7	
Lead	< 0.005	0.005		mg/L	5	02/01/22	EK	E200.7	
Antimony	< 0.013	0.013		mg/L	5	02/01/22	EK	E200.7	
Selenium	< 0.025	0.025		mg/L	5	02/01/22	EK	E200.7	
Thallium	< 0.005	0.005		mg/L	1	02/01/22	AP	SM3113B	
Zinc	0.016	0.010		mg/L	5	02/01/22	EK	E200.7	
Nitrite as Nitrogen	< 1.00	1.00		mg/L	100	01/31/22 23:44	BS\EG	E300.0	
Nitrate as Nitrogen	< 0.05	0.05		mg/L	1	01/31/22 20:24	BS\EG	E300.0	
pH	7.02	1.00		pH Units	1	01/31/22 21:42	MW	FIELD	1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Filtration	Completed					01/31/22	AG	0.45um Filter	
Mercury Digestion	Completed					02/01/22	AB/AB	E245.1	
pH	7.30	1.00		pH Units	1	01/28/22	*	FIELD	1
PCB Extraction	Completed					01/31/22	B/F	E608.3	
Semi-Volatile Extraction	Completed					01/31/22	F/F	E625.1	
Temperature; Field Analysis	52.9	0.1		deg. F	1	01/28/22		E170.1	
Dissolved Metals Preparation	Completed					01/31/22	AG	SW3005A	
Total Metals Digestion	Completed					01/31/22	AG		
Polychlorinated Biphenyls									
PCB-1016	ND	0.058	0.058	ug/L	1	02/01/22	SC	E608.3	
PCB-1221	ND	0.058	0.058	ug/L	1	02/01/22	SC	E608.3	
PCB-1232	ND	0.058	0.058	ug/L	1	02/01/22	SC	E608.3	
PCB-1242	ND	0.058	0.058	ug/L	1	02/01/22	SC	E608.3	
PCB-1248	ND	0.058	0.058	ug/L	1	02/01/22	SC	E608.3	
PCB-1254	ND	0.058	0.058	ug/L	1	02/01/22	SC	E608.3	
PCB-1260	ND	0.058	0.058	ug/L	1	02/01/22	SC	E608.3	
PCB-1262	ND	0.058	0.058	ug/L	1	02/01/22	SC	E608.3	1
PCB-1268	ND	0.058	0.058	ug/L	1	02/01/22	SC	E608.3	1
QA/QC Surrogates									
% DCBP	32			%	1	02/01/22	SC	30 - 150 %	
% DCBP (Confirmation)	38			%	1	02/01/22	SC	30 - 150 %	
% TCMX	33			%	1	02/01/22	SC	30 - 150 %	
% TCMX (Confirmation)	39			%	1	02/01/22	SC	30 - 150 %	
Volatiles									
1,1,1-Trichloroethane	ND	5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,1,2,2-tetrachloroethane	ND	5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,1,2-Trichloroethane	ND	5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,1-Dichloroethane	ND	5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,1-Dichloroethene	ND	5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,2-Dichlorobenzene	ND	5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,2-Dichloroethane	ND	5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,2-Dichloropropane	ND	5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,3-Dichlorobenzene	ND	5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,3-Dichloropropene	ND	5.0	5.0	ug/L	1	02/01/22	MH	E624.1	1
1,4-Dichlorobenzene	ND	5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Benzene	ND	5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Bromodichloromethane	ND	5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Bromoform	ND	5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Bromomethane	ND	5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Carbon tetrachloride	ND	5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Chlorobenzene	ND	5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Chloroethane	ND	5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Chloroform	ND	5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Chloromethane	ND	5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
cis-1,2-Dichloroethene	ND	5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
cis-1,3-Dichloropropene	ND	5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Dibromochloromethane	ND	5.0	0.50	ug/L	1	02/01/22	MH	E624.1	

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Ethylbenzene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
m&p-Xylenes	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
Methyl t-butyl ether (MTBE)	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
Methylene chloride	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
o-Xylene	ND		5.0	0.45	ug/L	1	02/01/22	MH	E624.1
Tetrachloroethene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
Toluene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
Total Xylenes	ND		5.0	5.0	ug/L	1	02/01/22	MH	E624.1
trans-1,2-Dichloroethene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
Trichloroethene	2.1	J	5.0	0.50	ug/L	1	02/01/22	MH	E624.1
Trichlorofluoromethane	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
Vinyl chloride	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
QA/QC Surrogates									
% 1,2-dichlorobenzene-d4	99				%	1	02/01/22	MH	70 - 130 %
% Bromofluorobenzene	106				%	1	02/01/22	MH	70 - 130 %
% Dibromofluoromethane	102				%	1	02/01/22	MH	70 - 130 %
% Toluene-d8	99				%	1	02/01/22	MH	70 - 130 %
Semivolatiles by (SIM)									
Acenaphthene	0.17		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Acenaphthylene	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Anthracene	0.20		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Benzo(a)anthracene	0.59		0.04	0.04	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Benzo(a)pyrene	0.66		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Benzo(b)fluoranthene	0.37		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Benzo(g,h,i)perylene	0.60		0.10	0.10	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Benzo(k)fluoranthene	0.36		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Chrysene	0.66		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Dibenz(a,h)anthracene	0.08		0.02	0.01	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Hexachlorobenzene	ND		0.06	0.06	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Hexachlorobutadiene	ND		0.10	0.10	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Hexachlorocyclopentadiene	ND		0.10	0.10	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Indeno(1,2,3-c,d)pyrene	0.42		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Nitrobenzene	ND		0.10	0.10	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
N-Nitrosodimethylamine	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Pentachlorophenol	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Phenanthrene	0.33		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Pyridine	ND		0.50	1.2	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
QA/QC Surrogates									
% 2,4,6-Tribromophenol	61				%	1	02/01/22	WB	15 - 110 %
% 2-Fluorobiphenyl	50				%	1	02/01/22	WB	30 - 130 %
% 2-Fluorophenol	33				%	1	02/01/22	WB	15 - 110 %
% Nitrobenzene-d5	77				%	1	02/01/22	WB	30 - 130 %
% Phenol-d5	23				%	1	02/01/22	WB	15 - 110 %
% Terphenyl-d14	51				%	1	02/01/22	WB	30 - 130 %
Semivolatiles									
1,2,4-Trichlorobenzene	ND		5.0	1.5	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
1,2-Dichlorobenzene	ND		5.0	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM

Project ID: 13 42ND STREET BROOKLYN
Client ID: TW2

Phoenix I.D.: CK26065

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
1,2-Diphenylhydrazine	ND	5.0	5.0	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
1,3-Dichlorobenzene	ND	5.0	1.5	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
1,4-Dichlorobenzene	ND	5.0	1.5	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
2,4,5-Trichlorophenol	ND	5.0	0.90	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2,4,6-Trichlorophenol	ND	5.0	0.90	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2,4-Dichlorophenol	ND	5.0	0.90	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2,4-Dimethylphenol	ND	5.0	0.90	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2,4-Dinitrophenol	ND	5.0	0.90	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2,4-Dinitrotoluene	ND	5.0	2.0	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2,6-Dichlorophenol	ND	5.0	0.90	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
2,6-Dinitrotoluene	ND	5.0	1.6	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2-Chloronaphthalene	ND	5.0	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2-Chlorophenol	ND	5.0	0.90	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2-Methylnaphthalene	ND	5.0	1.5	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
2-Methylphenol (o-cresol)	ND	5.0	0.90	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2-Nitroaniline	ND	10	5.1	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
2-Nitrophenol	ND	5.0	0.90	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
3&4-Methylphenol (m&p-cresol)	ND	5.0	0.90	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
3,3'-Dichlorobenzidine	ND	5.0	2.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
3-Nitroaniline	ND	5.0	5.0	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
4,6-Dinitro-2-methylphenol	ND	5.0	0.90	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
4-Bromophenyl phenyl ether	ND	5.0	1.5	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
4-Chloro-3-methylphenol	ND	5.0	0.90	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
4-Chloroaniline	ND	5.0	2.3	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
4-Chlorophenyl phenyl ether	ND	5.0	1.7	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
4-Nitroaniline	ND	5.0	1.7	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
4-Nitrophenol	ND	5.0	0.90	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Benzidine	ND	5.0	2.9	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Benzoic acid	ND	10	10	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
Benzyl alcohol	ND	10	5.0	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
Benzyl butyl phthalate	ND	5.0	1.3	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Bis(2-chloroethoxy)methane	ND	5.0	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Bis(2-chloroethyl)ether	ND	5.0	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Bis(2-chloroisopropyl)ether	ND	5.0	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
Bis(2-ethylhexyl)phthalate	ND	1.0	1.0	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Dibenzofuran	ND	1.0	1.0	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
Diethyl phthalate	ND	5.0	1.6	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Dimethylphthalate	ND	5.0	1.6	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Di-n-butylphthalate	ND	5.0	1.3	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Di-n-octylphthalate	ND	5.0	1.3	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Fluoranthene	ND	5.0	1.6	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Fluorene	ND	5.0	1.7	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Hexachloroethane	ND	1.0	1.0	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Isophorone	ND	5.0	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Naphthalene	ND	5.0	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
N-Nitrosodi-n-propylamine	ND	5.0	1.6	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
N-Nitrosodiphenylamine	ND	5.0	1.9	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Phenol	ND	5.0	0.90	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Pyrene	ND	5.0	1.7	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
QA/QC Surrogates								
% 2,4,6-Tribromophenol	91			%	1	02/01/22	WB	15 - 130 %
% 2-Fluorobiphenyl	62			%	1	02/01/22	WB	30 - 130 %
% 2-Fluorophenol	34			%	1	02/01/22	WB	10 - 130 %
% Nitrobenzene-d5	95			%	1	02/01/22	WB	15 - 130 %
% Phenol-d5	25			%	1	02/01/22	WB	10 - 130 %
% Terphenyl-d14	66			%	1	02/01/22	WB	30 - 130 %

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

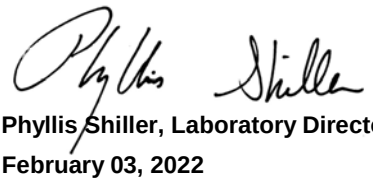
RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1 QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

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

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

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



Phyllis Shiller, Laboratory Director

February 03, 2022

Reviewed and Released by: Rashmi Makol, Project Manager

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 03, 2022

FOR: Attn: Ariel Czemerinski
AMC Engineering PLLC
18-36 42nd Street
Astoria, NY 11105

Sample Information		Custody Information		Date	Time
Matrix:	GW DISCHARGE	Collected by:		01/28/22	15:30
Location Code:	AMC-ENG	Received by:	B	01/31/22	14:11
Rush Request:	24 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCK26064
Phoenix ID: CK26066

Project ID: 13 42ND STREET BROOKLYN
Client ID: TW3

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Silver	< 0.003	0.003		mg/L	5	02/01/22	EK	E200.7	
Arsenic	< 0.010	0.010		mg/L	5	02/01/22	EK	E200.7	
Beryllium	< 0.003	0.003		mg/L	5	02/01/22	EK	E200.7	
Cadmium	< 0.003	0.003		mg/L	5	02/01/22	EK	E200.7	
Chromium	< 0.003	0.003		mg/L	5	02/01/22	EK	E200.7	
Copper	0.017	0.013		mg/L	5	02/01/22	EK	E200.7	
Silver (Dissolved)	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Arsenic (Dissolved)	0.005	0.004		mg/L	1	02/01/22	EK	E200.7	
Beryllium (Dissolved)	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Cadmium (Dissolved)	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Chromium (Dissolved)	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Copper (Dissolved)	< 0.005	0.005		mg/L	1	02/01/22	EK	E200.7	
Nickel (Dissolved)	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Lead (Dissolved)	0.010	0.002		mg/L	1	02/01/22	EK	E200.7	
Antimony (Dissolved)	< 0.005	0.005		mg/L	1	02/01/22	EK	E200.7	
Selenium (Dissolved)	< 0.011	0.011		mg/L	1	02/01/22	EK	E200.7	
Thallium (Dissolved)	< 0.002	0.002		mg/L	1	02/01/22	AP	SM3113B	
Zinc (Dissolved)	0.003	0.002		mg/L	1	02/01/22	EK	E200.7	
Mercury	< 0.0002	0.0002		mg/L	1	02/01/22	AP	E245.1	
Nickel	< 0.003	0.003		mg/L	5	02/01/22	EK	E200.7	
Lead	0.219	0.005		mg/L	5	02/01/22	EK	E200.7	
Antimony	< 0.013	0.013		mg/L	5	02/01/22	EK	E200.7	
Selenium	< 0.025	0.025		mg/L	5	02/01/22	EK	E200.7	
Thallium	< 0.005	0.005		mg/L	1	02/01/22	AP	SM3113B	
Zinc	0.067	0.010		mg/L	5	02/01/22	EK	E200.7	
Nitrite as Nitrogen	< 1.00	1.00		mg/L	100	01/31/22 23:54	BS\EG	E300.0	
Nitrate as Nitrogen	< 0.05	0.05		mg/L	1	01/31/22 20:34	BS\EG	E300.0	
pH	8.15	1.00		pH Units	1	01/31/22 21:42	MW	SM4500-H B-00	1

Ver 1

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Filtration	Completed						01/31/22	AG	0.45um Filter	
Mercury Digestion	Completed						02/01/22	AB/AB	E245.1	
pH	8.56		1.00		pH Units	1	01/28/22	*	FIELD	1
PCB Extraction	Completed						01/31/22	B/F	E608.3	
Semi-Volatile Extraction	Completed						01/31/22	F/F	E625.1	
Temperature; Field Analysis	55.2		0.1		deg. F	1	01/28/22		E170.1	
Dissolved Metals Preparation	Completed						01/31/22	AG	SW3005A	
Total Metals Digestion	Completed						01/31/22	AG		
Polychlorinated Biphenyls										
PCB-1016	ND		0.057	0.057	ug/L	1	02/01/22	SC	E608.3	
PCB-1221	ND		0.057	0.057	ug/L	1	02/01/22	SC	E608.3	
PCB-1232	ND		0.057	0.057	ug/L	1	02/01/22	SC	E608.3	
PCB-1242	ND		0.057	0.057	ug/L	1	02/01/22	SC	E608.3	
PCB-1248	ND		0.057	0.057	ug/L	1	02/01/22	SC	E608.3	
PCB-1254	ND		0.057	0.057	ug/L	1	02/01/22	SC	E608.3	
PCB-1260	ND		0.057	0.057	ug/L	1	02/01/22	SC	E608.3	
PCB-1262	ND		0.057	0.057	ug/L	1	02/01/22	SC	E608.3	1
PCB-1268	ND		0.057	0.057	ug/L	1	02/01/22	SC	E608.3	1
QA/QC Surrogates										
% DCBP	56				%	1	02/01/22	SC	30 - 150 %	
% DCBP (Confirmation)	52				%	1	02/01/22	SC	30 - 150 %	
% TCMX	63				%	1	02/01/22	SC	30 - 150 %	
% TCMX (Confirmation)	52				%	1	02/01/22	SC	30 - 150 %	
Volatiles										
1,1,1-Trichloroethane	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,1,2,2-tetrachloroethane	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,1-Dichloroethane	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,1-Dichloroethene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,2-Dichlorobenzene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,2-Dichloroethane	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,2-Dichloropropane	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,3-Dichlorobenzene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
1,3-Dichloropropene	ND		5.0	5.0	ug/L	1	02/01/22	MH	E624.1	1
1,4-Dichlorobenzene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Benzene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Bromodichloromethane	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Bromoform	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Bromomethane	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Carbon tetrachloride	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Chlorobenzene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Chloroethane	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Chloroform	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Chloromethane	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
cis-1,2-Dichloroethene	0.63	J	5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	
Dibromochloromethane	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1	

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Ethylbenzene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
m&p-Xylenes	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
Methyl t-butyl ether (MTBE)	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
Methylene chloride	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
o-Xylene	ND		5.0	0.45	ug/L	1	02/01/22	MH	E624.1
Tetrachloroethene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
Toluene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
Total Xylenes	ND		5.0	5.0	ug/L	1	02/01/22	MH	E624.1
trans-1,2-Dichloroethene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
Trichloroethene	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
Trichlorofluoromethane	ND		5.0	0.50	ug/L	1	02/01/22	MH	E624.1
Vinyl chloride	0.82	J	5.0	0.50	ug/L	1	02/01/22	MH	E624.1
QA/QC Surrogates									
% 1,2-dichlorobenzene-d4	100				%	1	02/01/22	MH	70 - 130 %
% Bromofluorobenzene	104				%	1	02/01/22	MH	70 - 130 %
% Dibromofluoromethane	102				%	1	02/01/22	MH	70 - 130 %
% Toluene-d8	99				%	1	02/01/22	MH	70 - 130 %
Semivolatiles by (SIM)									
Acenaphthene	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Acenaphthylene	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Anthracene	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Benzo(a)anthracene	0.06		0.04	0.04	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Benzo(a)pyrene	0.07		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Benzo(b)fluoranthene	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Benzo(g,h,i)perylene	ND		0.09	0.09	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Benzo(k)fluoranthene	0.06		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Chrysene	0.06		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Dibenz(a,h)anthracene	ND		0.02	0.01	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Hexachlorobenzene	ND		0.06	0.06	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Hexachlorobutadiene	ND		0.09	0.09	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Hexachlorocyclopentadiene	ND		0.09	0.09	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Indeno(1,2,3-c,d)pyrene	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Nitrobenzene	ND		0.09	0.09	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
N-Nitrosodimethylamine	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Pentachlorophenol	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Phenanthrene	0.09		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Pyridine	ND		0.47	1.2	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
QA/QC Surrogates									
% 2,4,6-Tribromophenol	65				%	1	02/01/22	WB	15 - 110 %
% 2-Fluorobiphenyl	56				%	1	02/01/22	WB	30 - 130 %
% 2-Fluorophenol	33				%	1	02/01/22	WB	15 - 110 %
% Nitrobenzene-d5	51				%	1	02/01/22	WB	30 - 130 %
% Phenol-d5	25				%	1	02/01/22	WB	15 - 110 %
% Terphenyl-d14	58				%	1	02/01/22	WB	30 - 130 %
Semivolatiles									
1,2,4-Trichlorobenzene	ND		4.7	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
1,2-Dichlorobenzene	ND		4.7	1.3	ug/L	1	02/01/22	WB	E625.1/E625.1SIM 1

Project ID: 13 42ND STREET BROOKLYN
Client ID: TW3

Phoenix I.D.: CK26066

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
1,2-Diphenylhydrazine	ND	4.7	4.7	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
1,3-Dichlorobenzene	ND	4.7	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
1,4-Dichlorobenzene	ND	4.7	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
2,4,5-Trichlorophenol	ND	4.7	0.85	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2,4,6-Trichlorophenol	ND	4.7	0.85	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2,4-Dichlorophenol	ND	4.7	0.85	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2,4-Dimethylphenol	ND	4.7	0.85	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2,4-Dinitrophenol	ND	4.7	0.85	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2,4-Dinitrotoluene	ND	4.7	1.9	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2,6-Dichlorophenol	ND	4.7	0.85	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
2,6-Dinitrotoluene	ND	4.7	1.5	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2-Chloronaphthalene	ND	4.7	1.3	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2-Chlorophenol	ND	4.7	0.85	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2-Methylnaphthalene	ND	4.7	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
2-Methylphenol (o-cresol)	ND	4.7	0.85	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2-Nitroaniline	ND	9.4	4.7	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
2-Nitrophenol	ND	4.7	0.85	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
3&4-Methylphenol (m&p-cresol)	ND	4.7	0.85	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
3,3'-Dichlorobenzidine	ND	4.7	2.2	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
3-Nitroaniline	ND	4.7	4.7	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
4,6-Dinitro-2-methylphenol	ND	4.7	0.85	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
4-Bromophenyl phenyl ether	ND	4.7	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
4-Chloro-3-methylphenol	ND	4.7	0.85	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
4-Chloroaniline	ND	4.7	2.2	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
4-Chlorophenyl phenyl ether	ND	4.7	1.6	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
4-Nitroaniline	ND	4.7	1.6	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
4-Nitrophenol	ND	4.7	0.85	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Benzidine	ND	4.7	2.8	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Benzoic acid	ND	9.4	9.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
Benzyl alcohol	ND	9.4	4.7	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
Benzyl butyl phthalate	ND	4.7	1.2	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Bis(2-chloroethoxy)methane	ND	4.7	1.3	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Bis(2-chloroethyl)ether	ND	4.7	1.3	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Bis(2-chloroisopropyl)ether	ND	4.7	1.3	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
Bis(2-ethylhexyl)phthalate	ND	0.94	0.94	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Dibenzofuran	ND	0.94	0.94	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
Diethyl phthalate	ND	4.7	1.5	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Dimethylphthalate	ND	4.7	1.5	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Di-n-butylphthalate	ND	4.7	1.3	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Di-n-octylphthalate	ND	4.7	1.2	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Fluoranthene	ND	4.7	1.5	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Fluorene	ND	4.7	1.6	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Hexachloroethane	ND	0.94	0.94	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Isophorone	ND	4.7	1.3	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Naphthalene	ND	4.7	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
N-Nitrosodi-n-propylamine	ND	4.7	1.5	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
N-Nitrosodiphenylamine	ND	4.7	1.8	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Phenol	ND	4.7	0.85	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Pyrene	ND	4.7	1.6	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
QA/QC Surrogates								
% 2,4,6-Tribromophenol	80			%	1	02/01/22	WB	15 - 130 %
% 2-Fluorobiphenyl	58			%	1	02/01/22	WB	30 - 130 %
% 2-Fluorophenol	36			%	1	02/01/22	WB	10 - 130 %
% Nitrobenzene-d5	55			%	1	02/01/22	WB	15 - 130 %
% Phenol-d5	23			%	1	02/01/22	WB	10 - 130 %
% Terphenyl-d14	78			%	1	02/01/22	WB	30 - 130 %

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

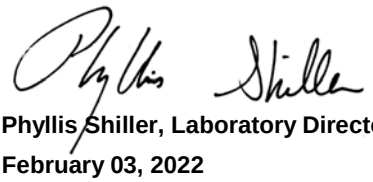
RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1 QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

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

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

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



Phyllis Shiller, Laboratory Director

February 03, 2022

Reviewed and Released by: Rashmi Makol, Project Manager

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

NY # 11301

QA/QC Report

February 03, 2022

QA/QC Data

SDG I.D.: GCK26064

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 609404 (mg/L), QC Sample No: CK15476 (CK26064, CK26065, CK26066)													
Thallium (Dissolved)	BRL	0.002	<0.002	<0.002	NC	104			102			80 - 120	20
QA/QC Batch 610197 (mg/L), QC Sample No: CK25888 (CK26064, CK26065, CK26066)													
Thallium - Water	BRL	0.001	<0.005	<0.005	NC	99.4			109			80 - 120	20
QA/QC Batch 610264 (mg/L), QC Sample No: CK25948 (CK26064, CK26065, CK26066)													
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	119			122			80 - 120	20
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.													
QA/QC Batch 610196 (mg/L), QC Sample No: CK24153 (CK26064, CK26065, CK26066)													
ICP Metals - Aqueous													
Antimony	BRL	0.0025	<0.003	<0.0025	NC	105	106	0.9	109			80 - 120	20
Arsenic	BRL	0.0020	<0.005	0.0037	NC	104	106	1.9	108			80 - 120	20
Beryllium	BRL	0.0005	<0.001	<0.0005	NC	107	110	2.8	109			80 - 120	20
Cadmium	BRL	0.0005	<0.001	<0.0005	NC	109	110	0.9	109			80 - 120	20
Chromium	BRL	0.0005	<0.001	<0.0005	NC	105	107	1.9	106			80 - 120	20
Copper	BRL	0.0025	0.008	0.0078	NC	105	107	1.9	112			80 - 120	20
Lead	BRL	0.0010	<0.001	<0.0010	NC	104	107	2.8	109			80 - 120	20
Nickel	BRL	0.0005	0.029	0.0289	0.30	105	107	1.9	108			80 - 120	20
Selenium	BRL	0.0050	0.006	0.0062	NC	101	104	2.9	106			80 - 120	20
Silver	BRL	0.0005	<0.001	<0.0005	NC	102	104	1.9	107			80 - 120	20
Zinc	BRL	0.0020	0.073	0.0707	NC	106	108	1.9	109			80 - 120	20
Comment:													
Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%.													
QA/QC Batch 610192 (mg/L), QC Sample No: CK25888 (CK26064, CK26065, CK26066)													
ICP Metals - Dissolved													
Antimony	BRL	0.005	<0.053	<0.053	NC	86.2	88.0	2.1	92.0	101	9.3	80 - 120	20
Arsenic	BRL	0.004	<0.043	<0.043	NC	87.2	88.5	1.5	96.4	106	9.5	80 - 120	20
Beryllium	BRL	0.001	<0.011	<0.011	NC	94.6	92.5	2.2	88.9	97.2	8.9	80 - 120	20
Cadmium	BRL	0.001	<0.011	<0.011	NC	88.8	90.1	1.5	96.4	103	6.6	80 - 120	20
Chromium	BRL	0.001	<0.011	<0.011	NC	89.7	92.4	3.0	95.8	104	8.2	80 - 120	20
Copper	BRL	0.005	<0.053	<0.053	NC	89.7	91.2	1.7	88.9	98.8	10.5	80 - 120	20
Lead	BRL	0.002	<0.021	<0.021	NC	88.5	90.3	2.0	93.4	102	8.8	80 - 120	20
Nickel	BRL	0.001	<0.011	<0.011	NC	88.4	90.7	2.6	87.7	94.6	7.6	80 - 120	20
Selenium	BRL	0.011	<0.11	<0.11	NC	82.5	84.1	1.9	89.0	97.5	9.1	80 - 120	20
Silver	BRL	0.001	<0.011	<0.011	NC	86.5	86.4	0.1	93.4	104	10.7	80 - 120	20
Zinc	BRL	0.002	<0.021	<0.021	NC	85.9	87.9	2.3	92.8	102	9.4	80 - 120	20
Comment:													
Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%.													

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NY # 11301

QA/QC Report

February 03, 2022

QA/QC Data

SDG I.D.: GCK26064

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 610245 (PH), QC Sample No: CK25763 (CK26064, CK26065, CK26066)													
pH at 25C - Soil			7.11	7.08	0.40	101						85 - 115	20
QA/QC Batch 610326 (mg/L), QC Sample No: CK26364 (CK26065, CK26066)													
Nitrate as Nitrogen	BRL	0.05	0.54	0.55	1.80	106			100			90 - 110	20
Nitrite as Nitrogen	BRL	0.004	<0.004	<0.004	NC	99.8			107			90 - 110	20
QA/QC Batch 610327 (mg/L), QC Sample No: CK26486 (CK26064, CK26065, CK26066)													
Nitrate as Nitrogen	BRL	0.05	0.02	<0.05	NC	104			98.3			90 - 110	20
Nitrite as Nitrogen	BRL	0.004	<0.004	<0.004	NC	101			102			90 - 110	20

PHOENIX

Environmental Laboratories, Inc.
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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

QA/QC Report

February 03, 2022

QA/QC Data

SDG I.D.: GCK26064

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 610238 (ug/L), QC Sample No: CK26063 (CK26064, CK26065, CK26066)										
Polychlorinated Biphenyls										
PCB-1016	ND	0.050	80	84	4.9				50 - 140	20
PCB-1221	ND	0.050							40 - 140	20
PCB-1232	ND	0.050							40 - 140	20
PCB-1242	ND	0.050							40 - 140	20
PCB-1248	ND	0.050							40 - 140	20
PCB-1254	ND	0.050							40 - 140	20
PCB-1260	ND	0.050	87	94	7.7				30 - 140	20
PCB-1262	ND	0.050							40 - 140	20
PCB-1268	ND	0.050							40 - 140	20
% DCBP (Surrogate Rec)	54	%	62	58	6.7				30 - 150	20
% DCBP (Surrogate Rec) (Confirm	65	%	70	63	10.5				30 - 150	20
% TCMX (Surrogate Rec)	42	%	45	42	6.9				30 - 150	20
% TCMX (Surrogate Rec) (Confirm	47	%	51	47	8.2				30 - 150	20
Comment:										
A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.										
QA/QC Batch 610214 (ug/L), QC Sample No: CK26063 (CK26064, CK26065, CK26066)										
Semivolatiles (SIM)										
Acenaphthene	ND	0.50	58	58	0.0				60 - 132	48
Acenaphthylene	ND	0.50	60	62	3.3				54 - 126	74
Anthracene	ND	0.50	60	60	0.0				43 - 120	66
Benz(a)anthracene	ND	0.50	72	72	0.0				42 - 133	53
Benzo(a)pyrene	ND	0.50	66	66	0.0				32 - 148	72
Benzo(b)fluoranthene	ND	0.50	68	70	2.9				42 - 140	71
Benzo(ghi)perylene	ND	0.50	70	72	2.8				10 - 195	97
Benzo(k)fluoranthene	ND	0.50	69	68	1.5				25 - 146	63
Chrysene	ND	0.50	64	66	3.1				44 - 140	87
Dibenz(a,h)anthracene	ND	0.50	66	68	3.0				10 - 200	126
Hexachlorobenzene	ND	0.50	62	62	0.0				8 - 142	55
Hexachlorobutadiene	ND	0.50	44	46	4.4				38 - 120	62
Hexachlorocyclopentadiene	ND	0.50	37	39	5.3				10 - 130	20
Indeno(1,2,3-cd)pyrene	ND	0.50	70	72	2.8				10 - 151	99
Nitrobenzene	ND	0.50	66	65	1.5				54 - 158	62
N-Nitrosodimethylamine	ND	0.05	39	38	2.6				10 - 130	20
Pentachlorophenol	ND	0.50	54	52	3.8				38 - 152	86
Phenanthrene	ND	0.50	67	68	1.5				65 - 120	39
Pyridine	ND	0.50	42	35	18.2				10 - 130	20
% 2,4,6-Tribromophenol	58	%	68	67	1.5				15 - 130	20
% 2-Fluorobiphenyl	57	%	61	62	1.6				30 - 130	20
% 2-Fluorophenol	36	%	34	33	3.0				10 - 130	20
% Nitrobenzene-d5	65	%	62	61	1.6				15 - 130	20

Parameter	Blank	Blk RL		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
% Phenol-d5	26	%		25	24	4.1				10 - 130	20	
% Terphenyl-d14	66	%		68	67	1.5				30 - 130	20	

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QA/QC Batch 610214 (ug/L), QC Sample No: CK26063 (CK26064, CK26065, CK26066)

Semivolatiles

1,2,4-Trichlorobenzene	ND	3.5		62	67	7.8				57 - 130	50	
1,2-Dichlorobenzene	ND	1.0		62	64	3.2				30 - 130	20	
1,2-Diphenylhydrazine	ND	1.6		76	81	6.4				10 - 130	20	
1,3-Dichlorobenzene	ND	1.0		62	64	3.2				46 - 154	20	
1,4-Dichlorobenzene	ND	1.0		64	65	1.6				30 - 130	20	
2,4,5-Trichlorophenol	ND	1.0		88	91	3.4				10 - 130	20	
2,4,6-Trichlorophenol	ND	1.0		87	90	3.4				52 - 129	58	
2,4-Dichlorophenol	ND	1.0		82	86	4.8				53 - 122	50	
2,4-Dimethylphenol	ND	1.0		80	84	4.9				42 - 120	58	
2,4-Dinitrophenol	ND	1.0		62	74	17.6				10 - 173	132	
2,4-Dinitrotoluene	ND	3.5		85	94	10.1				48 - 127	42	
2,6-Dichlorophenol	ND	10		74	79	6.5				10 - 130	20	
2,6-Dinitrotoluene	ND	3.5		79	88	10.8				68 - 137	48	
2-Chloronaphthalene	ND	3.5		73	81	10.4				65 - 120	24	
2-Chlorophenol	ND	1.0		67	72	7.2				36 - 120	61	
2-Methylnaphthalene	ND	3.5		70	76	8.2				10 - 130	20	
2-Methylphenol (o-cresol)	ND	1.0		69	70	1.4				10 - 130	20	
2-Nitroaniline	ND	3.5		123	128	4.0				10 - 130	20	
2-Nitrophenol	ND	1.0		74	79	6.5				45 - 167	55	
3&4-Methylphenol (m&p-cresol)	ND	1.0		66	67	1.5				10 - 130	20	
3,3'-Dichlorobenzidine	ND	5.0		113	115	1.8				8 - 213	108	
3-Nitroaniline	ND	5.0		104	110	5.6				10 - 130	20	
4,6-Dinitro-2-methylphenol	ND	1.0		75	83	10.1				10 - 130	20	
4-Bromophenyl phenyl ether	ND	3.5		84	85	1.2				65 - 120	43	
4-Chloro-3-methylphenol	ND	1.0		90	91	1.1				41 - 128	73	
4-Chloroaniline	ND	3.5		81	86	6.0				10 - 130	20	
4-Chlorophenyl phenyl ether	ND	1.0		82	88	7.1				38 - 145	61	
4-Nitroaniline	ND	5.0		87	87	0.0				10 - 130	20	
4-Nitrophenol	ND	1.0		41	46	11.5				13 - 129	131	
Benzidine	ND	4.5		82	38	73.3				10 - 130	20	r
Benzoic acid	ND	10		<10	<10	NC				10 - 130	20	l
Benzyl Alcohol	ND	5.0		65	68	4.5				10 - 130	20	
Benzyl butyl phthalate	ND	1.5		93	97	4.2				10 - 140	60	
Bis(2-chloroethoxy)methane	ND	3.5		76	81	6.4				49 - 165	54	
Bis(2-chloroethyl)ether	ND	1.0		59	59	0.0				43 - 126	108	
Bis(2-chloroisopropyl)ether	ND	1.0		57	59	3.4				10 - 130	20	
Bis(2-ethylhexyl)phthalate	ND	1.5		93	96	3.2				29 - 137	82	
Dibenzofuran	ND	3.5		79	83	4.9				10 - 130	20	
Diethyl phthalate	ND	1.5		87	92	5.6				10 - 120	100	
Dimethylphthalate	ND	1.5		86	91	5.6				10 - 120	183	
Di-n-butylphthalate	ND	1.5		92	95	3.2				8 - 120	47	
Di-n-octylphthalate	ND	1.5		92	95	3.2				19 - 132	69	
Fluoranthene	ND	1.5		87	92	5.6				43 - 121	66	
Fluorene	ND	1.5		80	85	6.1				70 - 120	38	
Hexachloroethane	ND	3.5		60	63	4.9				55 - 120	52	
Isophorone	ND	3.5		68	70	2.9				47 - 180	93	

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Naphthalene	ND	1.5	66	69	4.4				36 - 120	65
N-Nitrosodi-n-propylamine	ND	3.5	75	79	5.2				14 - 198	87
N-Nitrosodiphenylamine	ND	3.5	82	87	5.9				10 - 130	20
Phenol	ND	1.0	33	34	3.0				17 - 120	64
Pyrene	ND	1.5	88	91	3.4				70 - 120	49
% 2,4,6-Tribromophenol	60	%	82	88	7.1				15 - 130	20
% 2-Fluorobiphenyl	60	%	75	78	3.9				30 - 130	20
% 2-Fluorophenol	41	%	44	43	2.3				10 - 130	20
% Nitrobenzene-d5	70	%	66	69	4.4				15 - 130	20
% Phenol-d5	28	%	29	30	3.4				10 - 130	20
% Terphenyl-d14	73	%	86	87	1.2				30 - 130	20

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QA/QC Batch 610421 (ug/L), QC Sample No: CK26413 (CK26064, CK26065, CK26066)

Volatiles

1,1,1-Trichloroethane	ND	1.0	118	117	0.9	119	119	0.0	75 - 125	20
1,1,2,2-Tetrachloroethane	ND	0.50	90	88	2.2	100	101	1.0	60 - 140	20
1,1,2-Trichloroethane	ND	1.0	96	96	0.0	103	104	1.0	71 - 129	20
1,1-Dichloroethane	ND	1.0	101	101	0.0	107	106	0.9	72 - 128	20
1,1-Dichloroethene	ND	1.0	107	106	0.9	113	110	2.7	50 - 150	20
1,2-Dichlorobenzene	ND	1.0	101	101	0.0	105	105	0.0	63 - 137	20
1,2-Dichloroethane	ND	1.0	119	120	0.8	119	119	0.0	68 - 132	20
1,2-Dichloropropane	ND	1.0	95	96	1.0	102	101	1.0	40 - 160	20
1,3-Dichlorobenzene	ND	1.0	103	102	1.0	106	108	1.9	73 - 127	20
1,4-Dichlorobenzene	ND	1.0	100	100	0.0	105	105	0.0	63 - 137	20
Benzene	ND	0.70	95	97	2.1	103	103	0.0	64 - 136	20
Bromodichloromethane	ND	0.50	115	116	0.9	114	116	1.7	65 - 135	20
Bromoform	ND	1.0	106	109	2.8	102	108	5.7	71 - 129	20
Bromomethane	ND	1.0	122	122	0.0	78	82	5.0	40 - 160	20
Carbon tetrachloride	ND	1.0	120	124	3.3	114	117	2.6	73 - 127	20
Chlorobenzene	ND	1.0	101	100	1.0	105	107	1.9	66 - 134	20
Chloroethane	ND	1.0	115	113	1.8	126	120	4.9	40 - 160	20
Chloroform	ND	1.0	107	108	0.9	113	111	1.8	67 - 133	20
Chloromethane	ND	1.0	99	99	0.0	101	104	2.9	40 - 160	20
cis-1,2-Dichloroethene	ND	1.0	98	99	1.0	103	104	1.0	69 - 131	20
cis-1,3-Dichloropropene	ND	0.40	101	102	1.0	105	105	0.0	40 - 160	20
Dibromochloromethane	ND	0.50	110	112	1.8	109	113	3.6	67 - 133	20
Ethylbenzene	ND	1.0	101	102	1.0	108	108	0.0	59 - 141	20
m&p-Xylene	ND	1.0	104	104	0.0	107	109	1.9	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	108	106	1.9	115	115	0.0	70 - 130	30
Methylene chloride	ND	1.0	93	93	0.0	95	98	3.1	60 - 140	20
o-Xylene	ND	1.0	102	102	0.0	104	107	2.8	70 - 130	30
Tetrachloroethene	ND	1.0	106	104	1.9	108	109	0.9	73 - 127	20
Toluene	ND	1.0	99	101	2.0	106	105	0.9	74 - 126	20
trans-1,2-Dichloroethene	ND	1.0	106	110	3.7	110	109	0.9	69 - 131	20
trans-1,3-Dichloropropene	ND	0.40	106	109	2.8	107	109	1.9	50 - 150	20
Trichloroethene	ND	1.0	101	99	2.0	106	106	0.0	66 - 134	20
Trichlorofluoromethane	ND	1.0	138	134	2.9	137	135	1.5	48 - 152	20
Vinyl chloride	ND	1.0	107	106	0.9	109	106	2.8	40 - 160	20
% 1,2-dichlorobenzene-d4	98	%	99	98	1.0	99	98	1.0	70 - 130	30
% Bromofluorobenzene	102	%	105	105	0.0	104	103	1.0	70 - 130	30
% Dibromofluoromethane	100	%	97	97	0.0	102	101	1.0	70 - 130	30

QA/QC Data

SDG I.D.: GCK26064

Parameter	Blank	Blk RL		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
% Toluene-d8	99	%		100	101	1.0	100	100	0.0	70 - 130	30

Comment:

A blank MS/MSD was analyzed with this batch.

l = This parameter is outside laboratory LCS/LCSD specified recovery limits.
r = This parameter is outside laboratory RPD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
February 03, 2022

Thursday, February 03, 2022

Criteria: NY: DEP EFF

State: NY

Sample Criteria Exceedances Report

GCK26064 - AMC-ENG

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

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

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Comments

February 03, 2022 SDG I.D.: GCK26064

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

Environmental Laboratories, Inc.
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Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY Temperature Narration

February 03, 2022

SDG I.D.: GCK26064

The samples in this delivery group were received at 1.1°C.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

PHOENIX
Environmental Laboratories, Inc.

NY/NJ CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823

Client Services (860) 645-8726

Temp 4.1 Pg 1 of 1

Data Delivery:
☐ Fax #: WCIP
☑ Emai ARIEL@AMC-ENGINEERING.COM

Customer:	AMC ENGINEERING PLLC	Project:	13 42nd Street, Brooklyn	Project P.O:	
Address:	18-36 42nd Street	Report to:	ARIEL CZEMERINSKI	Phone #:	718 545-0474
	Astoria NY 11105	Invoice to:	AMC ENGINEERING PLLC	Fax #:	516 706-3214

Client Sample - Information - Identification

Sampler's Signature: Jonathan Yi Date: 01/28/2022

Matrix Code:
DW=drinking water **WW**=wastewater **S**=soil/solid **O**=oil
GW=groundwater **SL**=sludge **A**=air **X**=other

Analysis Request

Phoenix Sample #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	DEC SVOCs (See attached)	DEC VOCs (See attached)	DEC PCBs (See attached)	DEC Metals (See attached)	+	+	+	+	+	+	+	+	Soil VOA [ ] Methanol [X] S. Bisulfate [ ] H2O	GL Soil container (8) oz	GL Soil container (2) oz	40 ml VOA Vial [ ] As is [x] HCl	GL Amber 1000ml [x] As is [ ] H2SO4	PL As is [ ] 250ml [x] 500ml [x] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
26064	TW1	GW	1/28/2022	3:30 PM	X	X	X	X											3	2			1			
26065	TW2	GW	1/28/2022	3:30 PM	X	X	X	X											3	2			1			
26066	TW3	GW	1/28/2022	3:30 PM	X	X	X	X											3	2			1			

Relinquished by:	Accepted by:	Date:	Time:
Jonathan Yi		1/28/22	4PM
		1.31.22	11:50
	MZ	1/31/22	14:11

Comments, Special Requirements or Regulations:

	TW1	TW2	TW3
pH	8.15	7.30	8.36
Temp	59.7°F	57.9°F	59.7°F

*Please Note 1-day TAT

Turnaround:
■ 1 Day*
☐ 2 Days*
☐ 3 Days*
☐ Standard
☐ Other 5 DAYS
* SURCHARGE APPLIES

NJ
☐ Res. Criteria
☐ Non-Res. Criteria
☐ Impact to GW Soil Cleanup Criteria
☐ GW Criteria

NY
☐ TAGM 4046 GW
☐ TAGM 4046 SOIL
☐ NY375 Unrestricted Soil
☐ NY375 Residential Soil
☐ NY375 Restricted
☐ DEP Dewatering Protocol

Data Format
☐ Phoenix Std Report
■ Excel
■ PDF
☐ GIS/Key
☐ EQuIS
☐ NJ Hazsite EDD
☐ NY EZ EDD (ASP)
☐ Other

Data Package
☐ NJ Reduced Deliv. *
☐ NY Enhanced (ASP B) *
☐ Other

State where samples were collected: NY

118

DEC Parameters GCK 26064

NYSDEC Region 2 - Dewatering Project Sampling Information (Revised- 09/12/17)				
PROJECT NAME / ID #:				
#	**PARAMETER**	**TYPE**	**EPA METHOD**	**DETECTION**
1	pH	Grab	150.1	
2	Temperature	°F	After Pumping	
3	Oil & Grease	Grab	1664A or 1664B	
4	Total Suspended Solids	Grab	160.2	
5	Volatile Organic Compounds (VOC)	Grab	624	EPA MDL
6	Semi VOCs/ Base Neutral Compounds	Grab	625	EPA MDL
7	Nitrate/Nitrite	Grab	300 or 353.3	EPA MDL
8	Metals–Total and Dissolved (13 Priority Pollutant non-Hg Metals)	Grab	200.7 Rev 4.4 – Preferred Method 200.2, 200.8	EPA MDL
	Mercury- Total and Dissolved	Grab	1669 – Sampling Method 1631 – Analysis	EPA MDL
9	PCBs	Grab	608	EPA MDL

NOTES

- Well/Wellpoint samples are to be collected after development of the well by a licensed well driller duly registered in accordance with Section 15-1525 of the Environmental Conservation Law of the State of New York.
- Water samples collected from a test pit will only be accepted from projects where all dewatering is taking place via sumping from trenches.
- A minimum of two (2) raw samples must be collected in accordance with standards specified in 40 CFR Part 136. Samples should be collected from two (2) representative locations within the vicinity of the proposed excavation area. Location, depth [of monitoring well/wellpoint or test pit], and date of collection must be provided for each sample.
- The Department may require sampling from additional locations depending on the size of the proposed project area.
- Samples must be tested for each parameter using the EPA approved method listed above. If another method is used, the Department will not accept the results.
- The Department may require testing for additional parameters if the proposed dewatering site is suspected of being contaminated.
- All analyses must be performed by a laboratory certified by the NYS Department of Health.
- The Method Detection Limit (MDL) is the level at which the analytical procedure referenced is capable of determining with a 99% probability that the substance is present. This value is determined in distilled water with no interfering substances present.
- When collecting samples, temporary discharge must be contained on-site or disposed of off-site and must not cause or contribute to a contravention of surface or ground water quality standards.

PLEASE submit an electronic copy (CD with OCR searchable pdf) of all information including complete sampling data, test results and lab records (i.e. data sheets and chain of custodies) and TWO (2) hardcopies of the sampling summary report (along with required application materials) to:

Regional Permit Administrator
NYSDEC Division of Environmental Permits, Region 2
47-40 21st Street; Long Island City, New York 11101

Makrina Nolan

Subject: GCK26063/GCK26064

From: Ariel Czemerinski [mailto:ariel@amc-engineering.com]
Sent: Tuesday, February 1, 2022 10:45 AM
To: Makrina Nolan
Subject: Re: Samples received yesterday

Please, analyze TW4 for total Cr instead. Nitrate and Nitrite can be analyzed past hold

Ariel Czemerinski, PE
AMC Engineering PLLC
18-36 42nd Street
Astoria, NY 11105
Ariel@AMC-Engineering.com
w 718 545-0474
c 516 987-1662

From: Makrina Nolan <Makrina@phoenixlabs.com>
Sent: Tuesday, February 1, 2022 10:17 AM
To: Ariel Czemerinski <ariel@amc-engineering.com>
Subject: Samples received yesterday

Hi Ariel,

We received your samples yesterday, with regards to the attached two chains. Unfortunately, sample all of these samples were received and analyzed past hold for Nitrate and Nitrite. Additionally, sample "TW4" was received and analyzed past hold for HexChrome. These results will be reported to you with a comment to reflect this unless I hear from you otherwise.

Thank you,

Makrina Nolan
Client Services –Project Manager
Drinking Water Specialist
Phoenix Environmental Labs
587 Middle Turnpike East
Manchester, CT
Direct Line: 860-645-3219
Website: www.phoenixlabs.com

Bobbi Aloisa

From: Bobbi Aloisa
Sent: Tuesday, February 01, 2022 12:13 PM
To: ariel@amc-engineering.com; asung@amc-engineering.com
Cc: Bobbi Aloisa
Subject: Bottles missing on 24hr rush

HI Ariel and Andrew-
On the chain below , we didn't receive any bottles for Oil and Grease, or TSS , therefore, they can't be tested on these samples.

LMK if you have any questions
Bobbi

Bobbi Aloisa
Vice President | Director of Client Services
Phoenix Environmental Laboratories, Inc.
587 East Middle Turnpike | Manchester, CT 06040
Direct Line: (860)-645-8728
www.phoenixlabs.com

PHOENIX
Environmental Laboratories, Inc.

NY/NJ CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Customer:	AMC ENGINEERING PLLC	Project:	13 42nd Street, Brooklyn
Address:	18-36 42nd Street	Report to:	ARIEL CZEMERINSKI
	Astoria NY 11105	Invoice to:	AMC ENGINEERING PLLC

Client Sample - Information - Identification

Sampler's Signature: Jonathan Yi Date: 01/28/2022

Matrix Code:
DW=drinking water **WW**=wastewater **S**=soil/solid **O**=oil
GW=groundwater **SL**=sludge **A**=air **X**=other

Analysis Request

Phoenix Sample #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	DEC SVOCs (See attached)	DEC VOCs (See attached)	DEC PCBs (See attached)	DEC Metals (See attached)	+	+	+	+	+	+	+	+	Soil
26064	TW1	GW	1/28/2022	3:30 PM	X	X	X	X									
26065	TW2	GW	1/28/2022	3:30 PM	X	X	X	X									
26066	TW3	GW	1/28/2022	3:30 PM	X	X	X	X									

Relinquished by:	Accepted by:	Date:	Time:
Jonathan Yi		1/28/22	4pm
		1.31.22	11:50
	MZ	1/31/22	14:11

Turnaround:
- ■ 1 Day*
- ☐ 2 Days*
- ☐ 3 Days*
- ☐ Standard
- ☐ Other 5 DAYS

* **SURCHARGE APPLIES**

NJ
- ☐ Res. Criteria
- ☐ Non-Res. Criteria
- ☐ Impact to GW Soil Cleanup Criteria
- ☐ GW Criteria

Comments, Special Requirements or Regulations:

	TW1	TW2	TW3
pH	8.15	7.30	8.36
Temp	59.7°F	52.9°F	55.2°F

*Please Note 1-day TAT

State where samples were collec

Bobbi Aloisa

From: Bobbi Aloisa
Sent: Tuesday, February 01, 2022 2:55 PM
To: ariel@amc-engineering.com; asung@amc-engineering.com
Cc: Bobbi Aloisa
Subject: one more small issue
Attachments: GCK26064-ChainofCustody-1.pdf

Hi Andrew
One more issue with these samples, the dissolved Mercury couldn't be tested, we ran out of unpreserved sample and couldn't digest/analyze for that one element.

Bobbi

Bobbi Aloisa
Vice President | Director of Client Services
Phoenix Environmental Laboratories, Inc.
587 East Middle Turnpike | Manchester, CT 06040
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PHOENIX
Environmental Laboratories, Inc.

Thursday, February 03, 2022

Attn: Ariel Czemerinski
AMC Engineering PLLC
18-36 42nd Street
Astoria, NY 11105

Project ID: 13 42ND STREET BROOKLYN
SDG ID: GCK26063
Sample ID#s: CK26063

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

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

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

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

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301

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

NY # 11301

SDG Comments

February 03, 2022

SDG I.D.: GCK26063

SIM Analysis:
The lowest possible reporting limit under SIM conditions is 0.02 ug/L. The NY TOGS GA criteria for some PAHs is 0.002 ug/L. This level can not be achieved.

EPA method 625 is not approved for drinking water matrices.
This analysis should not be used for compliance purposes.
Sample CK26063 was received past hold time for Nitrite as Nitrogen (E300.0).
Sample CK26063 was received past hold time for Nitrate as Nitrogen (E300.0).

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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Sample Id Cross Reference

February 03, 2022

SDG I.D.: GCK26063

Project ID: 13 42ND STREET BROOKLYN

Client Id	Lab Id	Matrix
TW4	CK26063	GW DISCHARGE

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 03, 2022

FOR: Attn: Ariel Czemerinski
AMC Engineering PLLC
18-36 42nd Street
Astoria, NY 11105

Sample Information		Custody Information		Date	Time
Matrix:	GW DISCHARGE	Collected by:		01/28/22	15:30
Location Code:	AMC-ENG	Received by:	B	01/31/22	14:11
Rush Request:	24 Hour	Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GCK26063
Phoenix ID: CK26063

Project ID: 13 42ND STREET BROOKLYN
Client ID: TW4

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Silver	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Arsenic	< 0.002	0.002		mg/L	1	02/01/22	EK	E200.7	
Beryllium	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Cadmium	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Chromium	0.004	0.001		mg/L	1	02/01/22	EK	E200.7	
Copper	0.006	0.003		mg/L	1	02/01/22	EK	E200.7	
Silver (Dissolved)	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Arsenic (Dissolved)	< 0.004	0.004		mg/L	1	02/01/22	EK	E200.7	
Beryllium (Dissolved)	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Cadmium (Dissolved)	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Chromium (Dissolved)	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Copper (Dissolved)	< 0.005	0.005		mg/L	1	02/01/22	EK	E200.7	
Mercury (Dissolved)	< 0.0002	0.0002		mg/L	1	02/01/22	AP	E245.1	
Nickel (Dissolved)	0.003	0.001		mg/L	1	02/01/22	EK	E200.7	
Lead (Dissolved)	< 0.002	0.002		mg/L	1	02/01/22	EK	E200.7	
Antimony (Dissolved)	< 0.005	0.005		mg/L	1	02/01/22	EK	E200.7	
Selenium (Dissolved)	< 0.011	0.011		mg/L	1	02/01/22	EK	E200.7	
Thallium (Dissolved)	< 0.002	0.002		mg/L	1	02/01/22	AP	SM3113B	
Zinc (Dissolved)	< 0.002	0.002		mg/L	1	02/01/22	EK	E200.7	
Mercury	< 0.0002	0.0002		mg/L	1	02/01/22	AP	E245.1	
Nickel	0.008	0.001		mg/L	1	02/01/22	EK	E200.7	
Lead	< 0.001	0.001		mg/L	1	02/01/22	EK	E200.7	
Antimony	< 0.003	0.003		mg/L	1	02/01/22	EK	E200.7	
Selenium	< 0.005	0.005		mg/L	1	02/01/22	EK	E200.7	
Thallium	< 0.001	0.001		mg/L	1	02/01/22	AP	SM3113B	
Zinc	0.009	0.002		mg/L	1	02/01/22	EK	E200.7	
Flash Point	>200	200		Degree F	1	02/01/22	G	SW1010B	
Ignitability	Passed	140		degree F	1	02/01/22	G	SW846-Ignit	1

Ver 1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Nitrite as Nitrogen	< 0.05	0.05		mg/L	5	01/31/22 22:28	BS\EG	E300.0	
Nitrate as Nitrogen	3.59	0.25		mg/L	5	01/31/22 22:28	BS\EG	E300.0	
Oil and Grease by EPA 1664A	< 1.4	1.4		mg/L	1	02/01/22	MSF	EPA 1664	
pH	7.61	1.00		pH Units	1	01/31/22 21:42	MW	FIELD	1
O&G, Non-polar Material	< 1.4	1.4		mg/L	1	02/01/22	MSF	E1664A	
Total Suspended Solids	17	3.3		mg/L	0.7	02/01/22	AMM	SM 2540D-11	
Filtration	Completed					01/31/22	AG	0.45um Filter	
Dissolved Mercury Digestion	Completed					02/01/22	AB/AB	E245.1	
Mercury Digestion	Completed					02/01/22	AB/AB	E245.1	
pH	7.52	1.00		pH Units	1	01/28/22	*	FIELD	1
PCB Extraction	Completed					01/31/22	B/F	E608.3	
Semi-Volatile Extraction	Completed					01/31/22	F/F	E625.1	
Temperature; Field Analysis	60.4	0.1		deg. F	1	01/28/22		E170.1	
Dissolved Metals Preparation	Completed					01/31/22	AG	SW3005A	
Total Metals Digestion	Completed					01/31/22	AG		
Polychlorinated Biphenyls									
PCB-1016	ND	0.049	0.049	ug/L	1	02/01/22	SC	E608.3	
PCB-1221	ND	0.049	0.049	ug/L	1	02/01/22	SC	E608.3	
PCB-1232	ND	0.049	0.049	ug/L	1	02/01/22	SC	E608.3	
PCB-1242	ND	0.049	0.049	ug/L	1	02/01/22	SC	E608.3	
PCB-1248	ND	0.049	0.049	ug/L	1	02/01/22	SC	E608.3	
PCB-1254	ND	0.049	0.049	ug/L	1	02/01/22	SC	E608.3	
PCB-1260	ND	0.049	0.049	ug/L	1	02/01/22	SC	E608.3	
PCB-1262	ND	0.049	0.049	ug/L	1	02/01/22	SC	E608.3	1
PCB-1268	ND	0.049	0.049	ug/L	1	02/01/22	SC	E608.3	1
QA/QC Surrogates									
% DCBP	47			%	1	02/01/22	SC	30 - 150 %	
% DCBP (Confirmation)	48			%	1	02/01/22	SC	30 - 150 %	
% TCMX	46			%	1	02/01/22	SC	30 - 150 %	
% TCMX (Confirmation)	45			%	1	02/01/22	SC	30 - 150 %	
Volatiles									
1,1,1-Trichloroethane	ND	0.50	0.25	ug/L	1	02/01/22	MH	E624.1	
1,1,2,2-tetrachloroethane	ND	0.50	0.25	ug/L	1	02/01/22	MH	E624.1	
1,1,2-Trichloroethane	ND	0.50	0.25	ug/L	1	02/01/22	MH	E624.1	
1,1-Dichloroethane	ND	0.50	0.25	ug/L	1	02/01/22	MH	E624.1	
1,1-Dichloroethene	ND	0.50	0.25	ug/L	1	02/01/22	MH	E624.1	
1,2-Dichlorobenzene	ND	0.50	0.25	ug/L	1	02/01/22	MH	E624.1	
1,2-Dichloroethane	ND	0.50	0.25	ug/L	1	02/01/22	MH	E624.1	
1,2-Dichloropropane	ND	0.50	0.25	ug/L	1	02/01/22	MH	E624.1	
1,3-Dichlorobenzene	ND	0.50	0.25	ug/L	1	02/01/22	MH	E624.1	
1,4-Dichlorobenzene	ND	0.50	0.25	ug/L	1	02/01/22	MH	E624.1	
Benzene	ND	0.50	0.25	ug/L	1	02/01/22	MH	E624.1	
Bromodichloromethane	ND	0.50	0.25	ug/L	1	02/01/22	MH	E624.1	
Bromoform	ND	0.50	0.25	ug/L	1	02/01/22	MH	E624.1	
Bromomethane	ND	0.50	0.50	ug/L	1	02/01/22	MH	E624.1	
Carbon tetrachloride	ND	0.50	0.25	ug/L	1	02/01/22	MH	E624.1	
Chlorobenzene	ND	0.50	0.25	ug/L	1	02/01/22	MH	E624.1	

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Chloroethane	ND		0.50	0.25	ug/L	1	02/01/22	MH	E624.1
Chloroform	2.0		0.50	0.25	ug/L	1	02/01/22	MH	E624.1
Chloromethane	ND		0.50	0.25	ug/L	1	02/01/22	MH	E624.1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L	1	02/01/22	MH	E624.1
cis-1,3-Dichloropropene	ND		0.40	0.25	ug/L	1	02/01/22	MH	E624.1
Dibromochloromethane	ND		0.50	0.25	ug/L	1	02/01/22	MH	E624.1
Ethylbenzene	ND		0.50	0.25	ug/L	1	02/01/22	MH	E624.1
m&p-Xylene	ND		0.50	0.42	ug/L	1	02/01/22	MH	E624.1
Methyl tert-butyl ether (MTBE)	ND		1.0	0.50	ug/L	1	02/01/22	MH	E624.1
Methylene chloride	ND		0.50	0.25	ug/L	1	02/01/22	MH	E624.1
Naphthalene	ND		1.0	1.0	ug/L	1	02/01/22	MH	E624.1
o-Xylene	ND		0.50	0.45	ug/L	1	02/01/22	MH	E624.1
Tetrachloroethene	0.31	J	0.50	0.25	ug/L	1	02/01/22	MH	E624.1
Toluene	ND		0.50	0.25	ug/L	1	02/01/22	MH	E624.1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L	1	02/01/22	MH	E624.1
trans-1,3-Dichloropropene	ND		0.40	0.25	ug/L	1	02/01/22	MH	E624.1
Trichloroethene	1.0		0.50	0.25	ug/L	1	02/01/22	MH	E624.1
Trichlorofluoromethane	ND		0.50	0.25	ug/L	1	02/01/22	MH	E624.1
Vinyl chloride	ND		0.50	0.25	ug/L	1	02/01/22	MH	E624.1
QA/QC Surrogates									
% 1,2-dichlorobenzene-d4	99				%	1	02/01/22	MH	70 - 130 %
% Bromofluorobenzene	103				%	1	02/01/22	MH	70 - 130 %
% Dibromofluoromethane	101				%	1	02/01/22	MH	70 - 130 %
% Toluene-d8	100				%	1	02/01/22	MH	70 - 130 %

Semivolatiles by (SIM)

Acenaphthene	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Acenaphthylene	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Anthracene	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Benzo(a)anthracene	ND		0.04	0.04	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Benzo(a)pyrene	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Benzo(b)fluoranthene	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Benzo(g,h,i)perylene	ND		0.10	0.10	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Benzo(k)fluoranthene	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Chrysene	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Dibenz(a,h)anthracene	ND		0.02	0.01	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Hexachlorobenzene	ND		0.06	0.06	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Hexachlorobutadiene	ND		0.10	0.10	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Hexachlorocyclopentadiene	ND		0.10	0.10	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Indeno(1,2,3-c,d)pyrene	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Nitrobenzene	ND		0.10	0.10	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
N-Nitrosodimethylamine	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Pentachlorophenol	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Phenanthrene	ND		0.05	0.05	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Pyridine	ND		0.50	1.2	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
QA/QC Surrogates									
% 2,4,6-Tribromophenol	61				%	1	02/01/22	WB	15 - 110 %
% 2-Fluorobiphenyl	56				%	1	02/01/22	WB	30 - 130 %
% 2-Fluorophenol	32				%	1	02/01/22	WB	15 - 110 %
% Nitrobenzene-d5	57				%	1	02/01/22	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
% Phenol-d5	23			%	1	02/01/22	WB	15 - 110 %	
% Terphenyl-d14	64			%	1	02/01/22	WB	30 - 130 %	
Semivolatiles									
1,2,4-Trichlorobenzene	ND	5.0	1.5	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
1,2-Dichlorobenzene	ND	5.0	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
1,2-Diphenylhydrazine	ND	5.0	5.0	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
1,3-Dichlorobenzene	ND	5.0	1.5	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
1,4-Dichlorobenzene	ND	5.0	1.5	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
2,4,5-Trichlorophenol	ND	5.0	0.89	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2,4,6-Trichlorophenol	ND	5.0	0.89	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2,4-Dichlorophenol	ND	5.0	0.89	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2,4-Dimethylphenol	ND	5.0	0.89	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2,4-Dinitrophenol	ND	5.0	0.89	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2,4-Dinitrotoluene	ND	5.0	2.0	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2,6-Dichlorophenol	ND	5.0	0.89	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
2,6-Dinitrotoluene	ND	5.0	1.6	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2-Chloronaphthalene	ND	5.0	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2-Chlorophenol	ND	5.0	0.89	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2-Methylnaphthalene	ND	5.0	1.5	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
2-Methylphenol (o-cresol)	ND	5.0	0.89	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
2-Nitroaniline	ND	9.9	5.0	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
2-Nitrophenol	ND	5.0	0.89	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
3&4-Methylphenol (m&p-cresol)	ND	5.0	0.89	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
3,3'-Dichlorobenzidine	ND	5.0	2.3	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
3-Nitroaniline	ND	5.0	5.0	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
4,6-Dinitro-2-methylphenol	ND	5.0	0.89	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
4-Bromophenyl phenyl ether	ND	5.0	1.5	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
4-Chloro-3-methylphenol	ND	5.0	0.89	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
4-Chloroaniline	ND	5.0	2.3	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
4-Chlorophenyl phenyl ether	ND	5.0	1.7	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
4-Nitroaniline	ND	5.0	1.7	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
4-Nitrophenol	ND	5.0	0.89	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Benzidine	ND	5.0	2.9	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Benzoic acid	ND	9.9	9.9	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
Benzyl alcohol	ND	9.9	5.0	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
Benzyl butyl phthalate	ND	5.0	1.3	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Bis(2-chloroethoxy)methane	ND	5.0	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Bis(2-chloroethyl)ether	ND	5.0	1.3	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Bis(2-chloroisopropyl)ether	ND	5.0	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
Bis(2-ethylhexyl)phthalate	ND	0.99	0.99	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Dibenzofuran	ND	0.99	0.99	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	1
Diethyl phthalate	ND	5.0	1.6	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Dimethylphthalate	ND	5.0	1.5	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Di-n-butylphthalate	ND	5.0	1.3	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Di-n-octylphthalate	ND	5.0	1.3	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Fluoranthene	ND	5.0	1.6	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Fluorene	ND	5.0	1.6	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Hexachloroethane	ND	0.99	0.99	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	
Isophorone	ND	5.0	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	5.0	1.4	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
N-Nitrosodi-n-propylamine	ND	5.0	1.6	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
N-Nitrosodiphenylamine	ND	5.0	1.9	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Phenol	ND	5.0	0.89	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
Pyrene	ND	5.0	1.7	ug/L	1	02/01/22	WB	E625.1/E625.1SIM
QA/QC Surrogates								
% 2,4,6-Tribromophenol	87			%	1	02/01/22	WB	15 - 130 %
% 2-Fluorobiphenyl	64			%	1	02/01/22	WB	30 - 130 %
% 2-Fluorophenol	38			%	1	02/01/22	WB	10 - 130 %
% Nitrobenzene-d5	58			%	1	02/01/22	WB	15 - 130 %
% Phenol-d5	23			%	1	02/01/22	WB	10 - 130 %
% Terphenyl-d14	71			%	1	02/01/22	WB	30 - 130 %

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

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1 QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

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

Ignitability is based solely on the results of the closed cup flashpoint analysis performed above. Passed is >140 degree F.

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

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

Phyllis Shiller, Laboratory Director
February 03, 2022
Reviewed and Released by: Rashmi Makol, Project Manager

PHOENIX

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

QA/QC Report

February 03, 2022

QA/QC Data

SDG I.D.: GCK26063

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 609404 (mg/L), QC Sample No: CK15476 (CK26063)													
Thallium (Dissolved)	BRL	0.002	<0.002	<0.002	NC	104			102			80 - 120	20
QA/QC Batch 610197 (mg/L), QC Sample No: CK25888 (CK26063)													
Thallium - Water	BRL	0.001	<0.005	<0.005	NC	99.4			109			80 - 120	20
QA/QC Batch 610268 (mg/L), QC Sample No: CK25177 (CK26063)													
Mercury (Dissolved)	BRL	0.0002	<0.0002	<0.0002	NC	93.1			95.8			80 - 120	20
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.													
QA/QC Batch 610264 (mg/L), QC Sample No: CK25948 (CK26063)													
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	119			122			80 - 120	20
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.													
QA/QC Batch 610196 (mg/L), QC Sample No: CK24153 (CK26063)													
ICP Metals - Aqueous													
Antimony	BRL	0.0025	<0.003	<0.0025	NC	105	106	0.9	109			80 - 120	20
Arsenic	BRL	0.0020	<0.005	0.0037	NC	104	106	1.9	108			80 - 120	20
Beryllium	BRL	0.0005	<0.001	<0.0005	NC	107	110	2.8	109			80 - 120	20
Cadmium	BRL	0.0005	<0.001	<0.0005	NC	109	110	0.9	109			80 - 120	20
Chromium	BRL	0.0005	<0.001	<0.0005	NC	105	107	1.9	106			80 - 120	20
Copper	BRL	0.0025	0.008	0.0078	NC	105	107	1.9	112			80 - 120	20
Lead	BRL	0.0010	<0.001	<0.0010	NC	104	107	2.8	109			80 - 120	20
Nickel	BRL	0.0005	0.029	0.0289	0.30	105	107	1.9	108			80 - 120	20
Selenium	BRL	0.0050	0.006	0.0062	NC	101	104	2.9	106			80 - 120	20
Silver	BRL	0.0005	<0.001	<0.0005	NC	102	104	1.9	107			80 - 120	20
Zinc	BRL	0.0020	0.073	0.0707	NC	106	108	1.9	109			80 - 120	20
Comment:													
Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%.													
QA/QC Batch 610192 (mg/L), QC Sample No: CK25888 (CK26063)													
ICP Metals - Dissolved													
Antimony	BRL	0.005	<0.053	<0.053	NC	86.2	88.0	2.1	92.0	101	9.3	80 - 120	20
Arsenic	BRL	0.004	<0.043	<0.043	NC	87.2	88.5	1.5	96.4	106	9.5	80 - 120	20
Beryllium	BRL	0.001	<0.011	<0.011	NC	94.6	92.5	2.2	88.9	97.2	8.9	80 - 120	20
Cadmium	BRL	0.001	<0.011	<0.011	NC	88.8	90.1	1.5	96.4	103	6.6	80 - 120	20
Chromium	BRL	0.001	<0.011	<0.011	NC	89.7	92.4	3.0	95.8	104	8.2	80 - 120	20
Copper	BRL	0.005	<0.053	<0.053	NC	89.7	91.2	1.7	88.9	98.8	10.5	80 - 120	20
Lead	BRL	0.002	<0.021	<0.021	NC	88.5	90.3	2.0	93.4	102	8.8	80 - 120	20
Nickel	BRL	0.001	<0.011	<0.011	NC	88.4	90.7	2.6	87.7	94.6	7.6	80 - 120	20
Selenium	BRL	0.011	<0.11	<0.11	NC	82.5	84.1	1.9	89.0	97.5	9.1	80 - 120	20
Silver	BRL	0.001	<0.011	<0.011	NC	86.5	86.4	0.1	93.4	104	10.7	80 - 120	20
Zinc	BRL	0.002	<0.021	<0.021	NC	85.9	87.9	2.3	92.8	102	9.4	80 - 120	20

QA/QC Data

SDG I.D.: GCK26063

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits

Comment:

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

Environmental Laboratories, Inc.
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NY # 11301

QA/QC Report

February 03, 2022

QA/QC Data

SDG I.D.: GCK26063

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 610312 (Degree F), QC Sample No: CK24527 (CK26063)													
Flash Point			>200	>200	NC	100						75 - 125	30
Comment:													
Additional criteria matrix spike acceptance range is 75-125%.													
QA/QC Batch 610245 (PH), QC Sample No: CK25763 (CK26063)													
pH at 25C - Soil			7.11	7.08	0.40	101						85 - 115	20
QA/QC Batch 610274 (mg/L), QC Sample No: CK25888 (CK26063)													
Total Suspended Solids	BRL	2.5	26	25	3.90	93.0						85 - 115	20
QA/QC Batch 610269 (mg/L), QC Sample No: CK25965 (CK26063)													
Oil and Grease by EPA 1664A	BRL	1.4				97.0	98.0	1.0				85 - 115	20
Comment:													
Additional: MS acceptance range 75-125%.													
QA/QC Batch 610270 (mg/L), QC Sample No: CK26063 (CK26063)													
O&G, Non-polar Material	BRL	1.4				94.0	92.0	2.2				85 - 115	20
Comment:													
Additional criteria matrix spike acceptance range is 75-125%.													
QA/QC Batch 610216 (mg/L), QC Sample No: CK26063 (CK26063)													
Chromium, Hexavalent	BRL	0.01	<0.01	<0.01	NC	95.8			114			90 - 110	20
Comment:													
Additional Hexavalent Chromium criteria: LCS acceptance range for waters is 90-110% and MS acceptance range is 85-115%.													
QA/QC Batch 610327 (mg/L), QC Sample No: CK26486 (CK26063)													
Nitrate as Nitrogen	BRL	0.05	0.02	<0.05	NC	104			98.3			90 - 110	20
Nitrite as Nitrogen	BRL	0.004	<0.004	<0.004	NC	101			102			90 - 110	20

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NY # 11301

QA/QC Report

February 03, 2022

QA/QC Data

SDG I.D.: GCK26063

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 610238 (ug/L), QC Sample No: CK26063 (CK26063)										
Polychlorinated Biphenyls										
PCB-1016	ND	0.050	80	84	4.9				50 - 140	20
PCB-1221	ND	0.050							40 - 140	20
PCB-1232	ND	0.050							40 - 140	20
PCB-1242	ND	0.050							40 - 140	20
PCB-1248	ND	0.050							40 - 140	20
PCB-1254	ND	0.050							40 - 140	20
PCB-1260	ND	0.050	87	94	7.7				30 - 140	20
PCB-1262	ND	0.050							40 - 140	20
PCB-1268	ND	0.050							40 - 140	20
% DCBP (Surrogate Rec)	54	%	62	58	6.7				30 - 150	20
% DCBP (Surrogate Rec) (Confirm	65	%	70	63	10.5				30 - 150	20
% TCMX (Surrogate Rec)	42	%	45	42	6.9				30 - 150	20
% TCMX (Surrogate Rec) (Confirm	47	%	51	47	8.2				30 - 150	20

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 610214 (ug/L), QC Sample No: CK26063 (CK26063)										
Semivolatiles (SIM)										
Acenaphthene	ND	0.50	58	58	0.0				60 - 132	48
Acenaphthylene	ND	0.50	60	62	3.3				54 - 126	74
Anthracene	ND	0.50	60	60	0.0				43 - 120	66
Benz(a)anthracene	ND	0.50	72	72	0.0				42 - 133	53
Benzo(a)pyrene	ND	0.50	66	66	0.0				32 - 148	72
Benzo(b)fluoranthene	ND	0.50	68	70	2.9				42 - 140	71
Benzo(ghi)perylene	ND	0.50	70	72	2.8				10 - 195	97
Benzo(k)fluoranthene	ND	0.50	69	68	1.5				25 - 146	63
Chrysene	ND	0.50	64	66	3.1				44 - 140	87
Dibenz(a,h)anthracene	ND	0.50	66	68	3.0				10 - 200	126
Hexachlorobenzene	ND	0.50	62	62	0.0				8 - 142	55
Hexachlorobutadiene	ND	0.50	44	46	4.4				38 - 120	62
Hexachlorocyclopentadiene	ND	0.50	37	39	5.3				10 - 130	20
Indeno(1,2,3-cd)pyrene	ND	0.50	70	72	2.8				10 - 151	99
Nitrobenzene	ND	0.50	66	65	1.5				54 - 158	62
N-Nitrosodimethylamine	ND	0.05	39	38	2.6				10 - 130	20
Pentachlorophenol	ND	0.50	54	52	3.8				38 - 152	86
Phenanthrene	ND	0.50	67	68	1.5				65 - 120	39
Pyridine	ND	0.50	42	35	18.2				10 - 130	20
% 2,4,6-Tribromophenol	58	%	68	67	1.5				15 - 130	20
% 2-Fluorobiphenyl	57	%	61	62	1.6				30 - 130	20
% 2-Fluorophenol	36	%	34	33	3.0				10 - 130	20
% Nitrobenzene-d5	65	%	62	61	1.6				15 - 130	20

Parameter	Blank	Blk RL		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
% Phenol-d5	26	%		25	24	4.1				10 - 130	20	
% Terphenyl-d14	66	%		68	67	1.5				30 - 130	20	

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QA/QC Batch 610214 (ug/L), QC Sample No: CK26063 (CK26063)

Semivolatiles

1,2,4-Trichlorobenzene	ND	3.5		62	67	7.8				57 - 130	50	
1,2-Dichlorobenzene	ND	1.0		62	64	3.2				30 - 130	20	
1,2-Diphenylhydrazine	ND	1.6		76	81	6.4				10 - 130	20	
1,3-Dichlorobenzene	ND	1.0		62	64	3.2				46 - 154	20	
1,4-Dichlorobenzene	ND	1.0		64	65	1.6				30 - 130	20	
2,4,5-Trichlorophenol	ND	1.0		88	91	3.4				10 - 130	20	
2,4,6-Trichlorophenol	ND	1.0		87	90	3.4				52 - 129	58	
2,4-Dichlorophenol	ND	1.0		82	86	4.8				53 - 122	50	
2,4-Dimethylphenol	ND	1.0		80	84	4.9				42 - 120	58	
2,4-Dinitrophenol	ND	1.0		62	74	17.6				10 - 173	132	
2,4-Dinitrotoluene	ND	3.5		85	94	10.1				48 - 127	42	
2,6-Dichlorophenol	ND	10		74	79	6.5				10 - 130	20	
2,6-Dinitrotoluene	ND	3.5		79	88	10.8				68 - 137	48	
2-Chloronaphthalene	ND	3.5		73	81	10.4				65 - 120	24	
2-Chlorophenol	ND	1.0		67	72	7.2				36 - 120	61	
2-Methylnaphthalene	ND	3.5		70	76	8.2				10 - 130	20	
2-Methylphenol (o-cresol)	ND	1.0		69	70	1.4				10 - 130	20	
2-Nitroaniline	ND	3.5		123	128	4.0				10 - 130	20	
2-Nitrophenol	ND	1.0		74	79	6.5				45 - 167	55	
3&4-Methylphenol (m&p-cresol)	ND	1.0		66	67	1.5				10 - 130	20	
3,3'-Dichlorobenzidine	ND	5.0		113	115	1.8				8 - 213	108	
3-Nitroaniline	ND	5.0		104	110	5.6				10 - 130	20	
4,6-Dinitro-2-methylphenol	ND	1.0		75	83	10.1				10 - 130	20	
4-Bromophenyl phenyl ether	ND	3.5		84	85	1.2				65 - 120	43	
4-Chloro-3-methylphenol	ND	1.0		90	91	1.1				41 - 128	73	
4-Chloroaniline	ND	3.5		81	86	6.0				10 - 130	20	
4-Chlorophenyl phenyl ether	ND	1.0		82	88	7.1				38 - 145	61	
4-Nitroaniline	ND	5.0		87	87	0.0				10 - 130	20	
4-Nitrophenol	ND	1.0		41	46	11.5				13 - 129	131	
Benzidine	ND	4.5		82	38	73.3				10 - 130	20	r
Benzoic acid	ND	10		<10	<10	NC				10 - 130	20	l
Benzyl Alcohol	ND	5.0		65	68	4.5				10 - 130	20	
Benzyl butyl phthalate	ND	1.5		93	97	4.2				10 - 140	60	
Bis(2-chloroethoxy)methane	ND	3.5		76	81	6.4				49 - 165	54	
Bis(2-chloroethyl)ether	ND	1.0		59	59	0.0				43 - 126	108	
Bis(2-chloroisopropyl)ether	ND	1.0		57	59	3.4				10 - 130	20	
Bis(2-ethylhexyl)phthalate	ND	1.5		93	96	3.2				29 - 137	82	
Dibenzofuran	ND	3.5		79	83	4.9				10 - 130	20	
Diethyl phthalate	ND	1.5		87	92	5.6				10 - 120	100	
Dimethylphthalate	ND	1.5		86	91	5.6				10 - 120	183	
Di-n-butylphthalate	ND	1.5		92	95	3.2				8 - 120	47	
Di-n-octylphthalate	ND	1.5		92	95	3.2				19 - 132	69	
Fluoranthene	ND	1.5		87	92	5.6				43 - 121	66	
Fluorene	ND	1.5		80	85	6.1				70 - 120	38	
Hexachloroethane	ND	3.5		60	63	4.9				55 - 120	52	
Isophorone	ND	3.5		68	70	2.9				47 - 180	93	

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Naphthalene	ND	1.5	66	69	4.4				36 - 120	65
N-Nitrosodi-n-propylamine	ND	3.5	75	79	5.2				14 - 198	87
N-Nitrosodiphenylamine	ND	3.5	82	87	5.9				10 - 130	20
Phenol	ND	1.0	33	34	3.0				17 - 120	64
Pyrene	ND	1.5	88	91	3.4				70 - 120	49
% 2,4,6-Tribromophenol	60	%	82	88	7.1				15 - 130	20
% 2-Fluorobiphenyl	60	%	75	78	3.9				30 - 130	20
% 2-Fluorophenol	41	%	44	43	2.3				10 - 130	20
% Nitrobenzene-d5	70	%	66	69	4.4				15 - 130	20
% Phenol-d5	28	%	29	30	3.4				10 - 130	20
% Terphenyl-d14	73	%	86	87	1.2				30 - 130	20

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QA/QC Batch 610421 (ug/L), QC Sample No: CK26413 (CK26063)

Volatiles

1,1,1-Trichloroethane	ND	1.0	118	117	0.9	119	119	0.0	75 - 125	20
1,1,2,2-Tetrachloroethane	ND	0.50	90	88	2.2	100	101	1.0	60 - 140	20
1,1,2-Trichloroethane	ND	1.0	96	96	0.0	103	104	1.0	71 - 129	20
1,1-Dichloroethane	ND	1.0	101	101	0.0	107	106	0.9	72 - 128	20
1,1-Dichloroethene	ND	1.0	107	106	0.9	113	110	2.7	50 - 150	20
1,2-Dichlorobenzene	ND	1.0	101	101	0.0	105	105	0.0	63 - 137	20
1,2-Dichloroethane	ND	1.0	119	120	0.8	119	119	0.0	68 - 132	20
1,2-Dichloropropane	ND	1.0	95	96	1.0	102	101	1.0	40 - 160	20
1,3-Dichlorobenzene	ND	1.0	103	102	1.0	106	108	1.9	73 - 127	20
1,4-Dichlorobenzene	ND	1.0	100	100	0.0	105	105	0.0	63 - 137	20
Benzene	ND	0.70	95	97	2.1	103	103	0.0	64 - 136	20
Bromodichloromethane	ND	0.50	115	116	0.9	114	116	1.7	65 - 135	20
Bromoform	ND	1.0	106	109	2.8	102	108	5.7	71 - 129	20
Bromomethane	ND	1.0	122	122	0.0	78	82	5.0	40 - 160	20
Carbon tetrachloride	ND	1.0	120	124	3.3	114	117	2.6	73 - 127	20
Chlorobenzene	ND	1.0	101	100	1.0	105	107	1.9	66 - 134	20
Chloroethane	ND	1.0	115	113	1.8	126	120	4.9	40 - 160	20
Chloroform	ND	1.0	107	108	0.9	113	111	1.8	67 - 133	20
Chloromethane	ND	1.0	99	99	0.0	101	104	2.9	40 - 160	20
cis-1,2-Dichloroethene	ND	1.0	98	99	1.0	103	104	1.0	69 - 131	20
cis-1,3-Dichloropropene	ND	0.40	101	102	1.0	105	105	0.0	40 - 160	20
Dibromochloromethane	ND	0.50	110	112	1.8	109	113	3.6	67 - 133	20
Ethylbenzene	ND	1.0	101	102	1.0	108	108	0.0	59 - 141	20
m&p-Xylene	ND	1.0	104	104	0.0	107	109	1.9	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	108	106	1.9	115	115	0.0	70 - 130	30
Methylene chloride	ND	1.0	93	93	0.0	95	98	3.1	60 - 140	20
Naphthalene	ND	1.0	92	92	0.0	99	105	5.9	70 - 130	30
o-Xylene	ND	1.0	102	102	0.0	104	107	2.8	70 - 130	30
Tetrachloroethene	ND	1.0	106	104	1.9	108	109	0.9	73 - 127	20
Toluene	ND	1.0	99	101	2.0	106	105	0.9	74 - 126	20
trans-1,2-Dichloroethene	ND	1.0	106	110	3.7	110	109	0.9	69 - 131	20
trans-1,3-Dichloropropene	ND	0.40	106	109	2.8	107	109	1.9	50 - 150	20
Trichloroethene	ND	1.0	101	99	2.0	106	106	0.0	66 - 134	20
Trichlorofluoromethane	ND	1.0	138	134	2.9	137	135	1.5	48 - 152	20
Vinyl chloride	ND	1.0	107	106	0.9	109	106	2.8	40 - 160	20
% 1,2-dichlorobenzene-d4	98	%	99	98	1.0	99	98	1.0	70 - 130	30
% Bromofluorobenzene	102	%	105	105	0.0	104	103	1.0	70 - 130	30

QA/QC Data

SDG I.D.: GCK26063

Parameter	Blank	Blk RL		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
% Dibromofluoromethane	100	%		97	97	0.0	102	101	1.0	70 - 130	30
% Toluene-d8	99	%		100	101	1.0	100	100	0.0	70 - 130	30

Comment:

A blank MS/MSD was analyzed with this batch.

l = This parameter is outside laboratory LCS/LCSD specified recovery limits.
r = This parameter is outside laboratory RPD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
February 03, 2022

Thursday, February 03, 2022

Criteria: NY: DEP EFF

State: NY

Sample Criteria Exceedances Report

GCK26063 - AMC-ENG

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

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

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Comments

February 03, 2022 SDG I.D.: GCK26063

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY Temperature Narration

February 03, 2022

SDG I.D.: GCK26063

The samples in this delivery group were received at 1.1°C.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

PHOENIX
Environmental Laboratories, Inc.

NY/NJ CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823

Client Services (860) 645-8726

Temp 4.1 Pg 1 of 1

Data Delivery:
☐ Fax #: WCIP
☑ Emai ARIEL@AMC-ENGINEERING.COM

Customer:	AMC ENGINEERING PLLC	Project:	13 42nd Street, Brooklyn	Project P.O:	
Address:	18-36 42nd Street	Report to:	ARIEL CZEMERINSKI	Phone #:	718 545-0474
	Astoria NY 11105	Invoice to:	AMC ENGINEERING PLLC	Fax #:	516 706-3214

Client Sample - Information - Identification

Sampler's Signature: Jonathan Yi Date: 01/28/2022

Matrix Code:
DW=drinking water **WW**=wastewater **S**=soil/solid **O**=oil
GW=groundwater **SL**=sludge **A**=air **X**=other

Analysis Request

Phoenix Sample #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	DEC SVOCs (See attached)	DEC VOCs (See attached)	DEC PCBs (See attached)	DEC Metals (See attached)	Reduced DEP (See attached)	+	+	+	+	+	+	+	Soil VOA [ ] Methanol [X] S. Bisulfate [ ] H2O	GL Soil container (8) oz	GL Soil container (2) oz	40 ml VOA Vial [ ] As is [x] HCl	GL Amber 1000ml [x] As is [ ] H2SO4	PL As is [ ] 250ml [x] 500ml [x] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
26063	TW4	GW	1/28/2022	3:30 PM	X	X	X	X	X										3	5	2	1	1			

Relinquished by:	Accepted by:	Date:	Time:
Jonathan Yi		1/28/22	
		1.31.22	11:30
	VM2	1/31/22	14:11

Comments, Special Requirements or Regulations:

	TW4
pH	7.55
Temp	60.4°F

*Note 1-day TAT

Please do NOT run overlapping parameters twice, between DEC and DEP sets.

Turnaround:
■ 1 Day*
☐ 2 Days*
☐ 3 Days*
☐ Standard
☐ Other 5 DAYS
* SURCHARGE APPLIES

NJ
☐ Res. Criteria
☐ Non-Res. Criteria
☐ Impact to GW Soil Cleanup Criteria
☐ GW Criteria

NY
☐ TAGM 4046 GW
☐ TAGM 4046 SOIL
☐ NY375 Unrestricted Soil
☐ NY375 Residential Soil
☐ NY375 Restricted
☐ DEP Dewatering Protocol

State where samples were collected: NY

Data Format
☐ Phoenix Std Report
■ Excel
■ PDF
☐ GIS/Key
☐ EQuIS
☐ NJ Hazsite EDD
☐ NY EZ EDD (ASP)
☐ Other

Data Package
☐ NJ Reduced Deliv. *
☐ NY Enhanced (ASP B) *
☐ Other

142

GCK 26063

Reduced DEP Parameters

FOR OFFICIAL USE ONLY This form has been received by the NYCDEP, Bureau of Customer Services on:	
Name:	**Signature:**

LIMITATIONS FOR EFFLUENT TO ***SANITARY OR COMBINED*** SEWERS

Parameter[1]	**Daily Limit[3]**	**Units**	**Sample Type**	**Monthly Limit[4]**
Non-polar material[2]	50	mg/l	Instantaneous	---
pH	5-12	SUs	Instantaneous	---
Temperature	< 150	Degree F	Instantaneous	---
Flash Point	> 140	Degree F	Instantaneous	---
Cadmium	2 0.69	mg/l mg/l	Instantaneous Composite	--- ---
Chromium (VI)	5	mg/l	Instantaneous	---
Copper	5	mg/l	Instantaneous	---
Lead	2	mg/l	Instantaneous	---
Mercury	0.05	mg/l	Instantaneous	---
Nickel	3	mg/l	Instantaneous	---
Zinc	5	mg/l	Instantaneous	---
Benzene	134	ppb	Instantaneous	57
Carbontetrachloride	---	---	Composite	---
Chloroform	---	---	Composite	---
1,4 Dichlorobenzene	---	---	Composite	---
Ethylbenzene	380	ppb	Instantaneous	142
MTBE (Methyl-Tert-Butyl-Ether)	50	ppb	Instantaneous	---
Naphthalene	47	ppb	Composite	19
Phenol	---	---	Composite	---
Tetrachloroethylene (Perc)	20	ppb	Instantaneous	---
Toluene	74	ppb	Instantaneous	28
1,2,4 Trichlorobenzene	---	---	Composite	---
1,1,1 Trichloroethane	---	---	Composite	---
Xylenes (Total)	74	ppb	Instantaneous	28
Total Suspended Solids (TSS)	350	mg/l	Instantaneous	---
Other				

GCK 26063

DEC Parameters

NYSDEC Region 2 - Dewatering Project Sampling Information (Revised- 09/12/17)				
PROJECT NAME / ID #:				
#	**PARAMETER**	**TYPE**	**EPA METHOD**	**DETECTION**
1	pH	Grab	150.1	
2	Temperature	°F	After Pumping	
3	Oil & Grease	Grab	1664A or 1664B	
4	Total Suspended Solids	Grab	160.2	
5	Volatile Organic Compounds (VOC)	Grab	624	EPA MDL
6	Semi VOCs/ Base Neutral Compounds	Grab	625	EPA MDL
7	Nitrate/Nitrite	Grab	300 or 353.3	EPA MDL
8	Metals–Total and Dissolved (13 Priority Pollutant non-Hg Metals)	Grab	200.7 Rev 4.4 – Preferred Method 200.2, 200.8	EPA MDL
	Mercury- Total and Dissolved	Grab	1669 – Sampling Method 1631 – Analysis	EPA MDL
9	PCBs	Grab	608	EPA MDL

NOTES

- Well/Wellpoint samples are to be collected after development of the well by a licensed well driller duly registered in accordance with Section 15-1525 of the Environmental Conservation Law of the State of New York.
- Water samples collected from a test pit will only be accepted from projects where all dewatering is taking place via sumping from trenches.
- A minimum of two (2) raw samples must be collected in accordance with standards specified in 40 CFR Part 136. Samples should be collected from two (2) representative locations within the vicinity of the proposed excavation area. Location, depth [of monitoring well/wellpoint or test pit], and date of collection must be provided for each sample.
- The Department may require sampling from additional locations depending on the size of the proposed project area.
- Samples must be tested for each parameter using the EPA approved method listed above. If another method is used, the Department will not accept the results.
- The Department may require testing for additional parameters if the proposed dewatering site is suspected of being contaminated.
- All analyses must be performed by a laboratory certified by the NYS Department of Health.
- The Method Detection Limit (MDL) is the level at which the analytical procedure referenced is capable of determining with a 99% probability that the substance is present. This value is determined in distilled water with no interfering substances present.
- When collecting samples, temporary discharge must be contained on-site or disposed of off-site and must not cause or contribute to a contravention of surface or ground water quality standards.

PLEASE submit an electronic copy (CD with OCR searchable pdf) of all information including complete sampling data, test results and lab records (i.e. data sheets and chain of custodies) and TWO (2) hardcopies of the sampling summary report (along with required application materials) to:

Regional Permit Administrator
NYSDEC Division of Environmental Permits, Region 2
47-40 21st Street; Long Island City, New York 11101

Makrina Nolan

Subject: GCK26063/GCK26064

From: Ariel Czemerinski [mailto:ariel@amc-engineering.com]
Sent: Tuesday, February 1, 2022 10:45 AM
To: Makrina Nolan
Subject: Re: Samples received yesterday

Please, analyze TW4 for total Cr instead. Nitrate and Nitrite can be analyzed past hold

Ariel Czemerinski, PE
AMC Engineering PLLC
18-36 42nd Street
Astoria, NY 11105
Ariel@AMC-Engineering.com
w 718 545-0474
c 516 987-1662

From: Makrina Nolan <Makrina@phoenixlabs.com>
Sent: Tuesday, February 1, 2022 10:17 AM
To: Ariel Czemerinski <ariel@amc-engineering.com>
Subject: Samples received yesterday

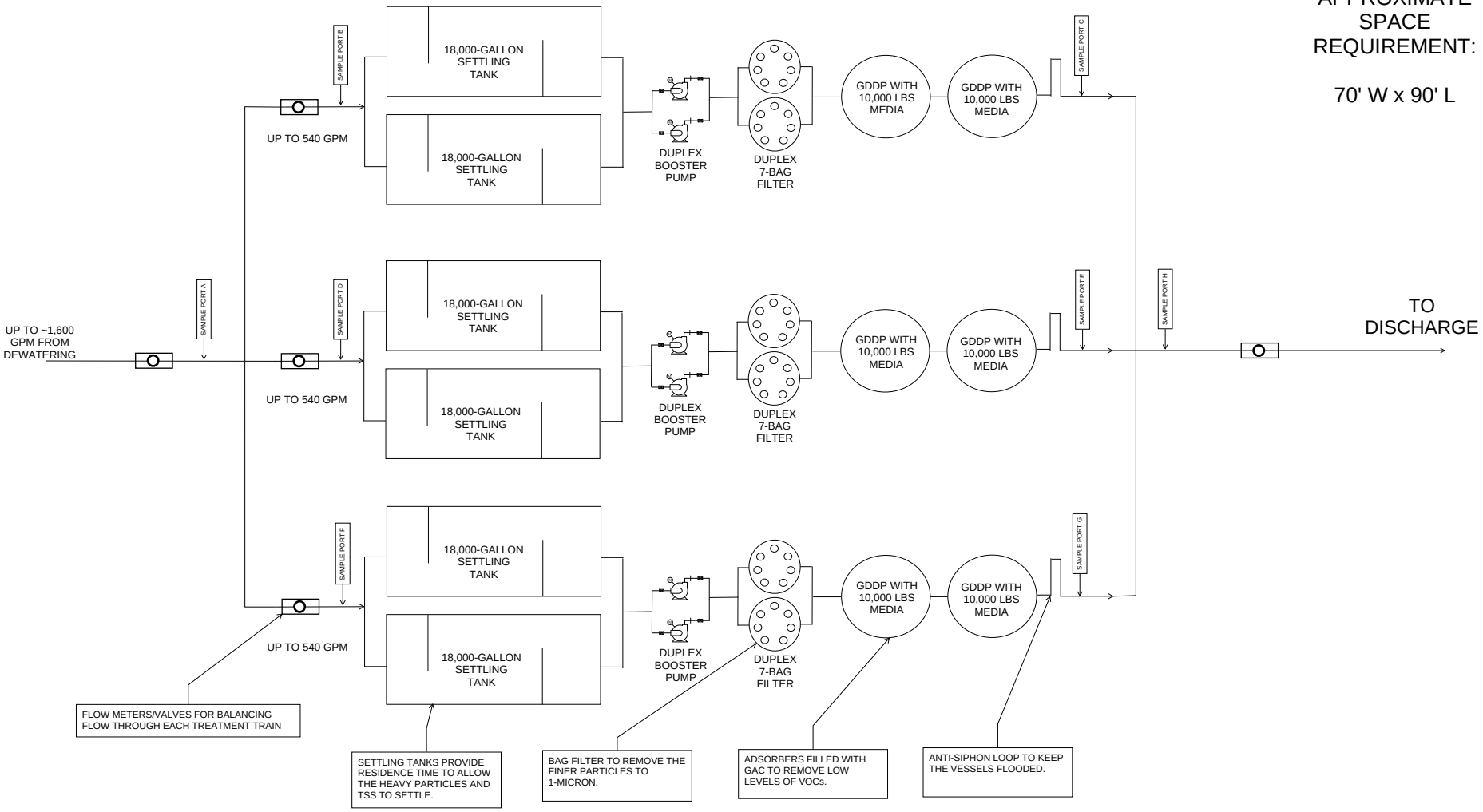
Hi Ariel,

We received your samples yesterday, with regards to the attached two chains. Unfortunately, sample all of these samples were received and analyzed past hold for Nitrate and Nitrite. Additionally, sample "TW4" was received and analyzed past hold for HexChrome. These results will be reported to you with a comment to reflect this unless I hear from you otherwise.

Thank you,

Makrina Nolan
Client Services –Project Manager
Drinking Water Specialist
Phoenix Environmental Labs
587 Middle Turnpike East
Manchester, CT
Direct Line: 860-645-3219
Website: www.phoenixlabs.com

5. Technical Information of Proposed Treatment System



GRIFFIN DEWATERING L.L.C.
5306 CLINTON DRIVE
HOUSTON, TX 77020
TEL: (713) 676-8000
FAX: (713) 676-8080
E MAIL: griffin@griffindewatering.com
WEBSITE: www.griffindewatering.com

REV.	DESCRIPTION	DATE	BY	APPVD.

BUSH TERMINAL

1,600 GPM SYSTEM

-

DRAWN: BG

SCALE: NA

DATE: 8/2/22

DWG: 1 OF 1

Easy-to-clean, smooth-wall interior

18,000 Gallon
Open-Top Weir Tank

Capacity: 18,060 gal (430 bbl)
Height: 13'
Width: 8'
Length: 43' 6"
Tare Weight: 30,000 lbs

All sizes are approximate

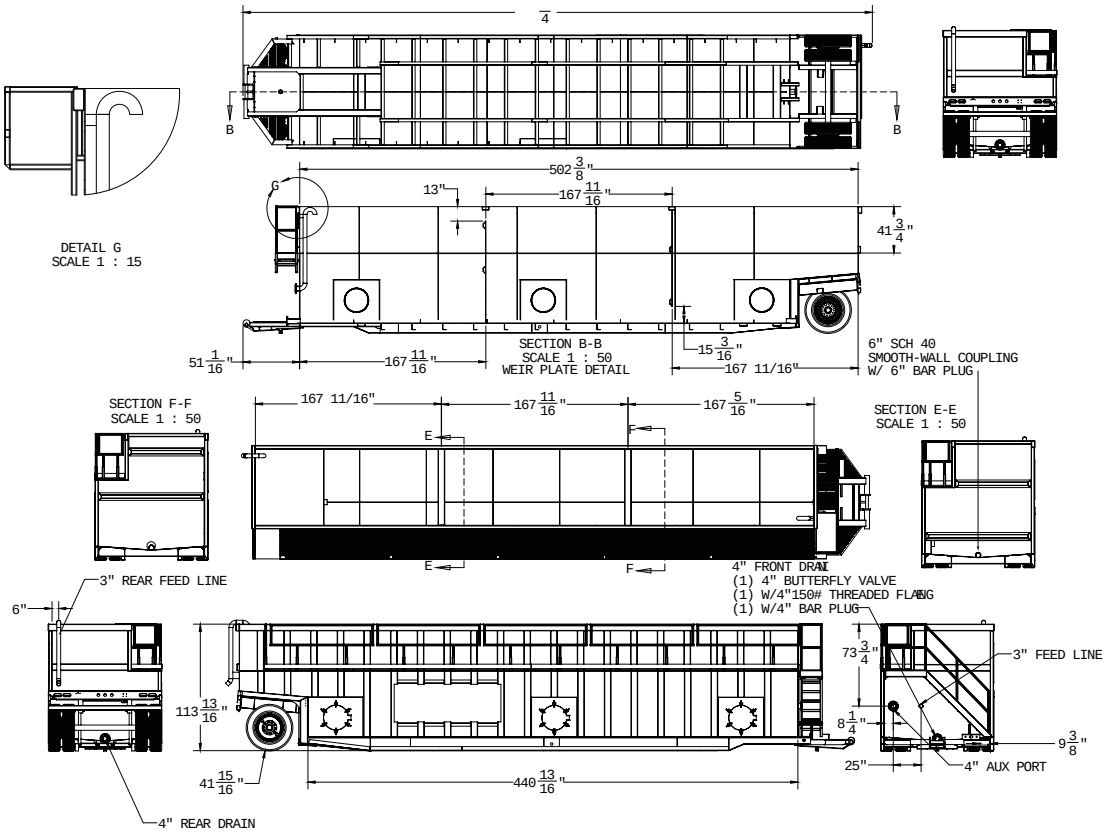
At Adler Tank Rentals, we are committed to providing safe and reliable containment solutions for all types of applications where performance matters.

Designed with internal weirs to promote faster separation of oils and particulate contaminants from stored groundwater, the 18,000 Gallon Open-Top Weir Tank can efficiently accommodate flows of up to 100 GPM or more in either pump-through or batch-treatment capacities.

Mechanical Features

- 3" fill line
- Three (3) standard 22" side-hinged manways
- Multiple 4" valved fill/drain ports, including floor-level valves for low point drain out
- Sloped and V bottom for quicker drain out and easier cleaning
- Easy-to-clean design with smooth-wall interior, no corrugations and no internal rods
- Front-mounted ladderwell for top access
- Fixed rear axle for increased maneuverability
- Nose rail cut-out for easy access when installing hose and fittings on the front/bottom of tank
- Internal baffles, or weirs (over and under), to accelerate settling of unwanted solids and fine sediments; may also be used in the separation of unwanted floating materials
- Can be used in a pump-through or batch-treatment capacity
- Flows of up to 100 GPM achievable depending on circumstances; may also be modified to achieve higher flows while maintaining efficiency
- One (1) front and one (1) rear 4" valved fill/drain port

18,000 Gallon Open-Top Weir Tank



Safety Features

- Non-slip step materials on ladderwells and catwalks
- "Safety yellow" rails and catwalks for high visibility
- Safe operation reminder decals
- Built-in stair and walkway

Options

- Weirs
- Audible alarms, strobes and level gauges (digital and mechanical)

Comprehensive Service

Adler Tank Rentals provides containment solutions for hazardous and non-hazardous liquids and solids. We offer 24-hour emergency service, expert planning assistance, transportation, repair and cleaning services. All of our rental equipment is serviced by experienced Adler technicians and tested to exceed even the most stringent industry standards.

GRIFFIN

8” Wellpoint Pump—Electric
Model 8WPRE

MODEL FEATURES

- Fully automatic, dry priming and dry running, self-contained, portable dewatering pump
- Handles large volumes of air and water
- Operates efficiently under intermittent flow conditions
- Automatically primes and re-primes at suction lifts of 25 feet or greater

PUMP

MODEL: Peerless
SIZE: 6” x 5” x 12”
CASING: Class 30 cast iron
IMPELLER: Enclosed, Bronze
SEAL: Double mechanical seal
SUCTION WEAR PLATE: Bronze
SHAFT: AISI 1040 or equivalent
SHAFT SLEEVE: Bronze or stainless steel
SOLIDS HANDLING: 1”

MOTOR

MODEL: 60hp
TYPE: TEFC Electric Motor, 1800 RPM, 230/460 Volts, 60 Hz, 3-phase
MANUFACTURER’S PERFORMANCE:
Rated Power—hp: 60
Rated speed—rpm: 1800

CONTROL PANEL

Across the Line Pump Panel in a Nema 3R Enclosure

VACUUM PUMP

MODEL: Wallenstein 402HRF
TYPE: Rotary vane, air cooled, oil lubricated
CAPACITY: 219 cubic inch SCFM @ 1150 rpm nominal
CASING: Class 30 cast iron
ROTOR: Class 30 cast iron with self-adjusting, Ferobestos® vanes

VACUUM PUMP OIL RECLAIMING SYSTEM

CONSTRUCTION: carbon steel
OIL FILL LEVEL: 10 gallons
VOLUME: 3000 cu in.
OIL COOLER: integral to air separation chamber

AIR SEPARATOR

CONSTRUCTION: Carbon steel
FLOAT ASSEMBLY: Direct-acting stainless steel float with stainless steel support and corrosion-resistant components
FLOAT SIZE: 636 cu in.
AIR DOME: Bronze with nylon valve seats and polypropylene backflow preventer check ball
VALVES: Nylon, replaceable
WET CHAMBER: 7813 cu in.
AIR CHAMBER: 4310 cu in.
VACUUM RELIEF VALVE: 50 CFM

STANDARD FITTINGS

DISCHARGE VALVE: Fabricated steel with 8” Victaulic® nipple, flapper-type with replaceable weights
INLET: 8” Victaulic® nipple

STANDARD EQUIPMENT

- I-beam skid frame
- Center point lifting bail
- Battery box
- Vacuum gauge with liquid filled, stainless steel case

AVAILABLE OPTIONS

- Optional Integral fuel tank (8” x 8” rectangular tubing) with 24 hour run time fuel capacity
- Optional DOT trailer
- Diesel engines & other pumps may be available upon customer request

PHYSICAL DIMENSIONS

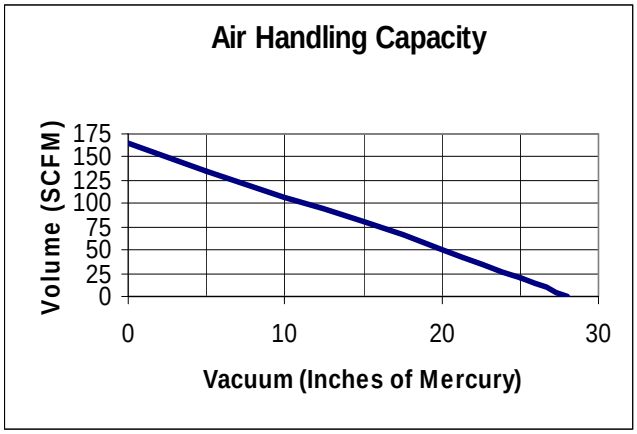
WEIGHT: 3800 lbs.
LENGTH: 110”
WIDTH: 42”
HEIGHT: 64”

GRIFFIN
PUMP & EQUIPMENT, INC.

5306 Clinton Drive, Houston, Texas 77020
(713) 671-7000 fax: (713) 671-7077
http://www.griffinpump.com
e-mail: gpe@griffinpump.com

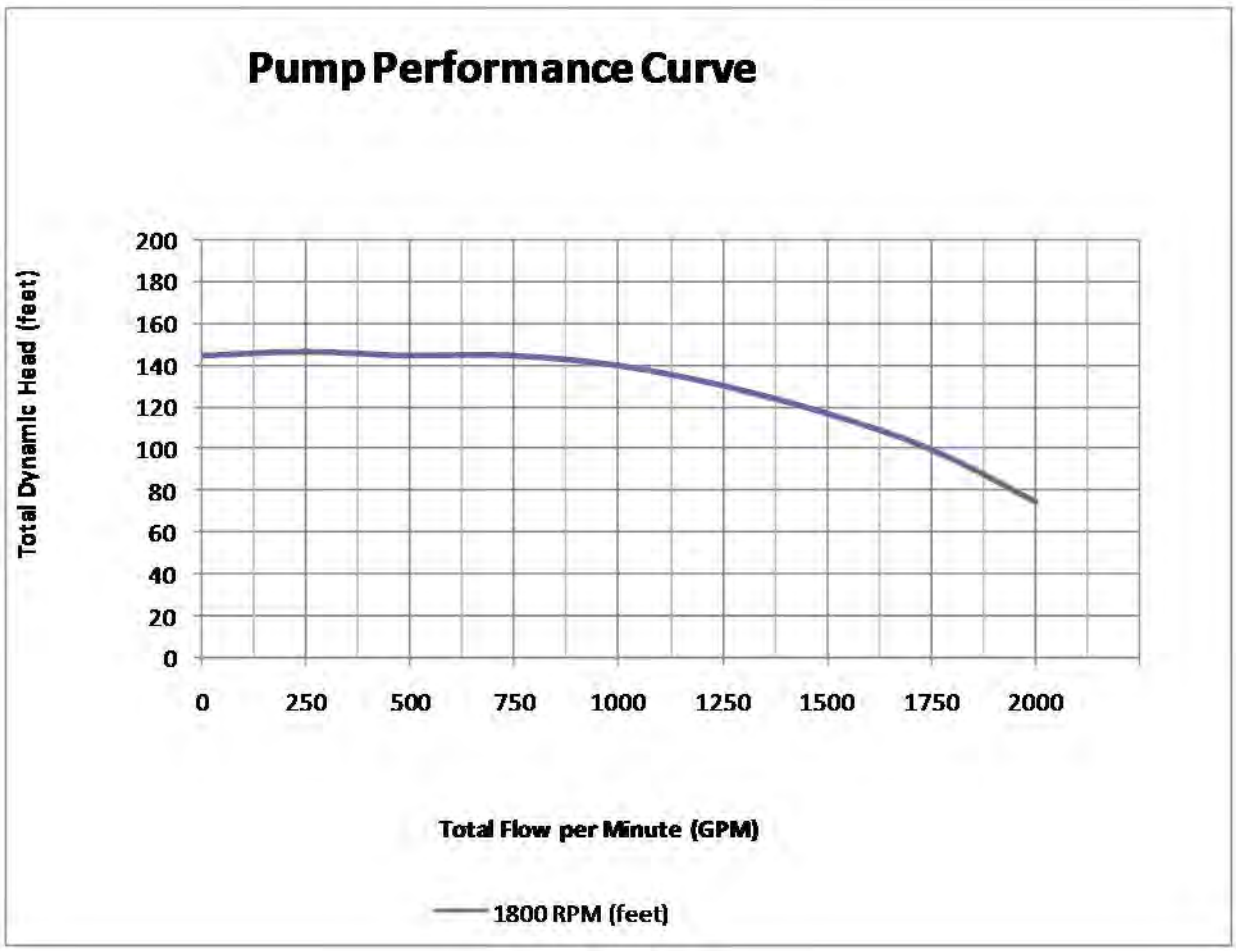
GRIFFIN PUMP & EQUIPMENT
8” WELLPOINT PUMP
Model: 8WPRD / 8WPRE

- Vacuum assisted, self-priming
- End suction
- Wellpoint systems
- High air-handling
- Centrifugal pump

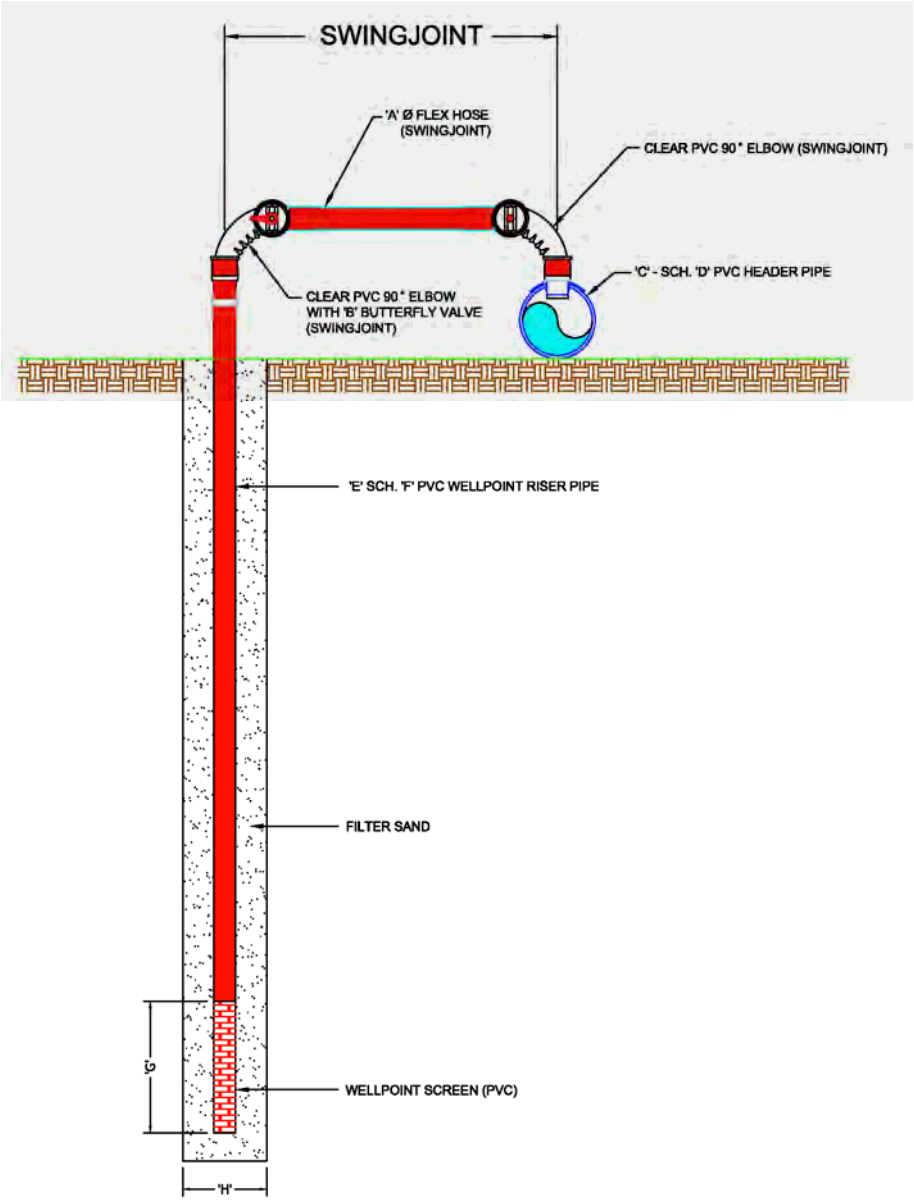


Driver RPM: 1800
Driven RPM: 850

Horsepower: 10
Type: Rotary Vane



GPE-090510



A	B	C	D	E	F	G	H
1 ½”	1 ½”	6”	40	1 ½”	40	3’-0”	6” to 8”

GRIFFIN DEWATERING, NEW ENGLAND, INC.
72 ESSEX STREET, SUITE 4
LODI, NEW JERSEY 07664

TEL: (201) 843-4532
FAX: (201) 843-4542
E MAIL: griffin@griffindewatering.com
WEBSITE: www.griffindewatering.com

TYPICAL WELLPOINT DETAIL

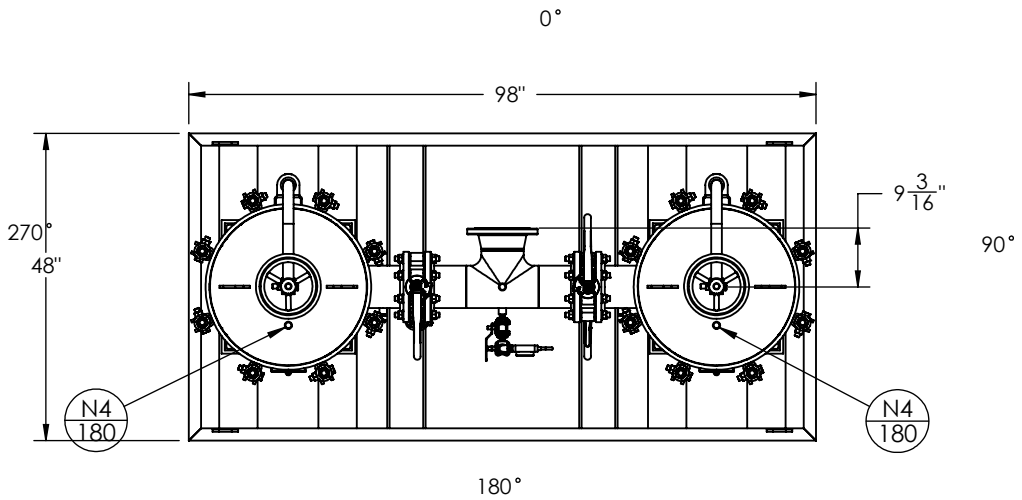
DRAWN: ARASH

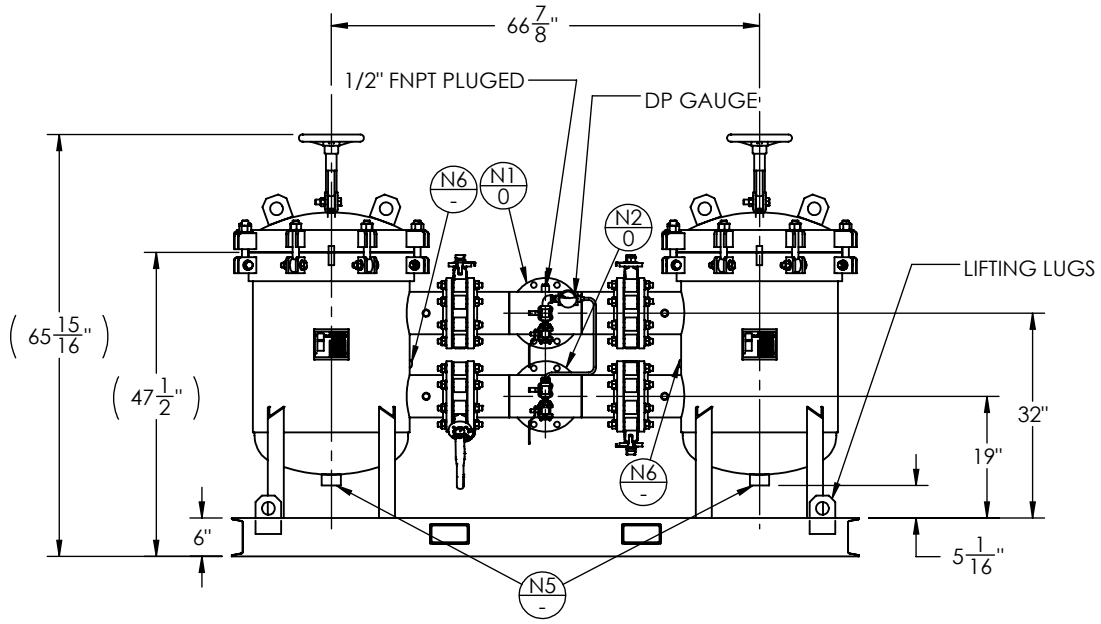
SCALE: N.T.S.

DATE: 02-23-2016

FIGURE: 1

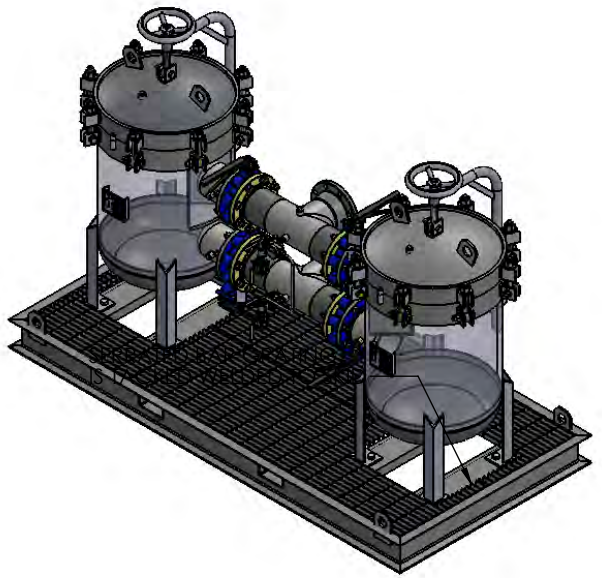
GRIFFIN





NOZZLE SCHEDULE			
MARK	QTY	SIZE / RATING	DESCRIPTION
N1	1	6" 150# RFSO	INLET
N2	1	6" 150# RFSO	OUTLET
N3	2	1/2" 3000# NPT	PRESSURE GAUGE
N4	2	1/2" 3000# NPT	VENT
N5	2	2" 3000# NPT	CLEAN DRAIN
N6	2	1/2" 3000# NPT	DIRTY DRAIN

VESSEL DESIGN CONDITIONS			
CODE:	ASME SECTION VIII DIV. 1, 2013 EDITION		
M.A.W.P.:	150 PSI @ 250°F	M.D.M.T.:	-20° F @ 150 PSI
M.A.E.P.:	15 PSI @ 250°F		
CORROSION ALLOWANCE:	NONE	HYDROTEST PRESS:	195 PSI
STAMP:	U	SERVICE:	NON LETHAL
PWHT:	N/A	RADIOGRAPHY:	N/A
MATERIAL:	CS	GASKET:	BUNA-N



NOTES:
1. DRY WEIGHT: 1569 LBS
2. FLOODED WEIGHT: 2800 LBS
3. SHIPPING WEIGHT: 2300 LBS
4. VESSEL VOLUME: 7.1 C.F. /VESSEL
5. EACH VESSEL WILL HOUSE (QTY=7) SIZE 2 FILTER BASKETS (14 TOTAL)
6. ISOLATIONS BUTTERFLY VALVES. CS BODY W/ SS316 TRIM, BUNA SEALS.
7. CARBON STEEL SKID WITHOUT CONTAINMENT.
8. SKID AND VESSELS ARE PAINTED FIL-TREK BLUE.

THIRD ANGLE PROJECTION

TOLERANCES-UNLESS OTHERWISE NOTED
DECIMAL .X =±.1" .XX =±.02" .XXX =±.005"
FRACTIONAL =±1/8"
ANGULAR =± 1°
MAX. MACHINED SURFACE FINISH 125

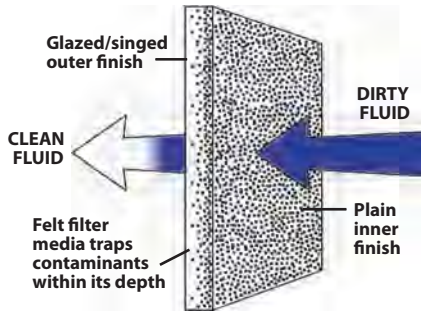
PARENT: NEW DESIGN

PO# CP-4776-HTX
Griffin Dewatering

EQUIPMENT:	DUPLEXED BAG FILTER VESSEL (LPD SERIES)
MODEL NO:	LPDV24-1412-6F-V2-150
CUSTOMER:	TOWNER FILTRATION

DRAWN: CR	DATE: 11/03/2016	SERIAL No. V7212-SKID	Part. No. V7212-A3-B3-SKID	REV. No. 1
CHK'D: JJJ	SCALE: NTS		DWG. No. V7212-A3-B3-SKID-1	

- Micron ratings from 1 to 200
- All industry standard & custom sizes available
- Broad chemical compatibility
- High flow/low pressure drop
- Sewn or fully-welded construction
- Handles on all bags
- Choice of steel ring or plastic flange
- Temperature ratings to 200ºF (PO), 275ºF (PE), 425ºF (HT) and 500ºF (Teflon®)
- Flow not exceed 100 GPM per bag



Felt Bag Materials

Constructed using 100% synthetic fibers in polypropylene, polyester, Nomex® and Teflon®. The proper combination of fiber diameters, weights and thicknesses result in an economical depth filter media. To reduce fiber migration, Polypropylene bags are treated with a glazed finish, while Polyester and Nomex® bags are singed .

- Polypropylene and Polyester materials meet FDA regulations for food contact under CFR21, Section 177.1520
- Silicone-free construction
- High dirt holding capacity
- Ability to remove both solid and gelatinous particles
- Low cost
- Glazed/singed finish on Polypropylene & Polyester reduces fiber-shedding

Felt Materials	Micron Ratings								
	1	3	5	10	25	50	75	100	200
Polyester	•	•	•	•	•	•	•	•	•
Polypropylene	•	•	•	•	•	•	•	•	•
Nomex®	•		•	•	•	•	•	•	•
Teflon®	•		•	•	•	•	•	•	

Felt Bag Styles

Steel-ring bags have a galvanized steel ring (stainless steel optional) sewn into the top of the bag. They are supplied with sewn seams standard.

Plastic flange bags have a specially-designed flange sewn to the top of the bag. They are supplied with sewn seams standard (fully-welded seams available upon request).

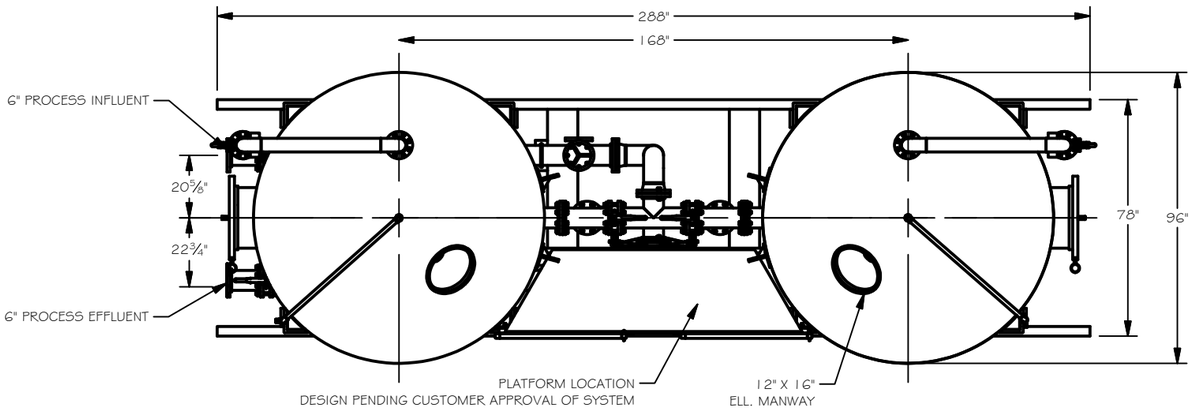
Welded Construction

Fully-welded bags are available in polypropylene and polyester felt for #1, #2, #3, #4 and #5 plastic flanges.

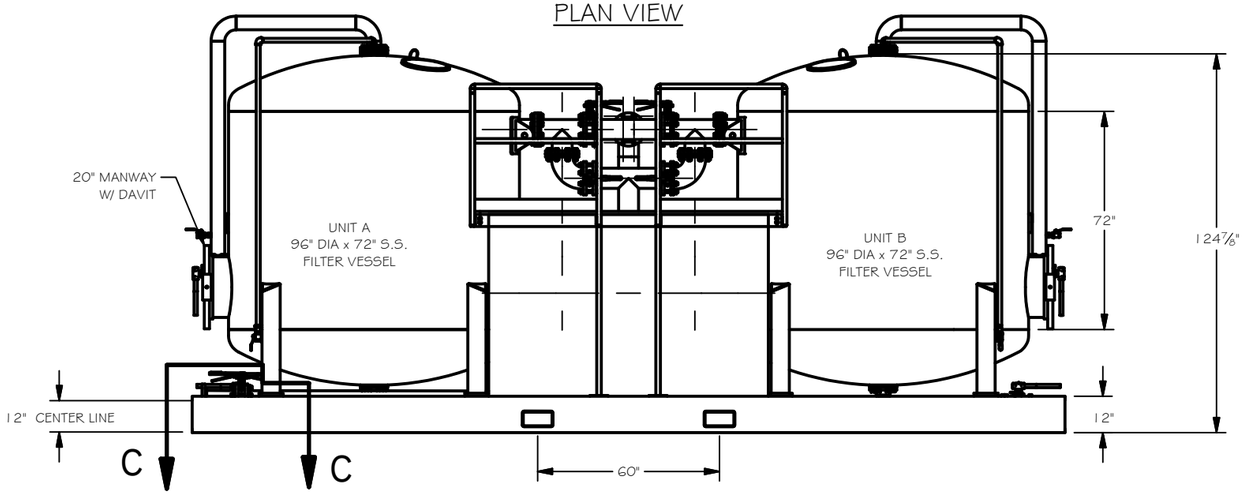
- No needle holes, thus increasing efficiencies by preventing by-pass
- Elimination of threads further reduces possibility of fiber-shedding

Ordering Information

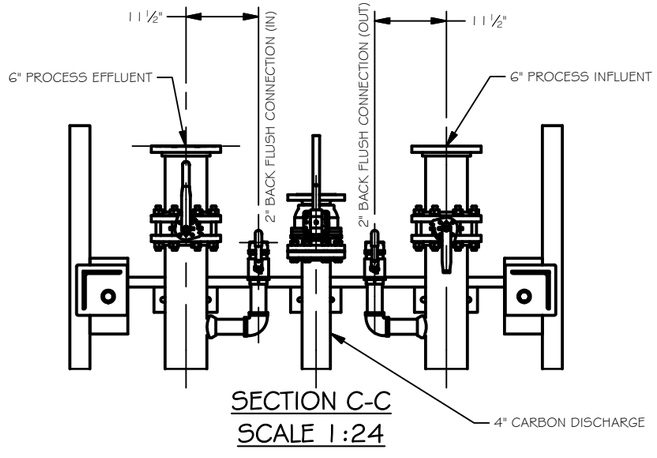
Media Type	Media Finish	Micron Rating	Bag Dimensions Size	Diam.	Length	Ring / Flange Styles	Options
PE = Polyester	P = Plain (PE, PO)	See Chart	P1 =	7.06″	16.5″	S = Galvanized steel	H = Handle (Standard on all ring style bags)
PO = Polypropylene	G = Glazed (PO)	See Chart	P2 =	7.06″	32.0″	SS = Stainless steel	EB = Edge binding
HT = Nomex®	S = Singed (PE, HT)	See Chart	P3 =	4.12″	8.0″	PP = Polypropylene ring	A = Auto seams
PTFE = Teflon®		See Chart	P4 =	4.12″	14.0″	T = Titanium	TTA = Turn, top stich, auto seam
			P5 =	4.12″	24.0″	P = AJR-P Flange	RC = Reverse collar
			P7 =	5.50″	15.0″	F = AJR-F Flange	SB = Spun bond cover
			P8 =	5.50″	21.0″	OSS = AJR-OSS	MC = Mesh cover
			P9 =	5.50″	31.0″	DS = Draw string	WE = Fully Welded Construction (Size #1 & #2)
			P11 =	8.50″	16.0″	NR = No ring	
			P12 =	8.50″	30.0″		
			C1 =	7.31″	16.5″		
			C2 =	7.31″	32.5″		
			RP-1 =	8.0″	30.0″		
			RP-2 =	8.0″	40.0″		
			PC-1 =	9.0″	20.0″		
			PC-2 =	9.0″	30.0″		
			X1 =	4.35″	8.0″		
			X2 =	4.35″	14.0″		
			XO1 =	6.0″	22.0″		



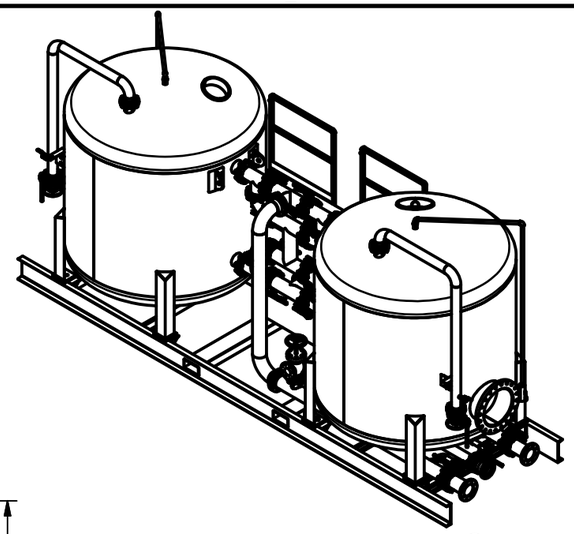
PLAN VIEW

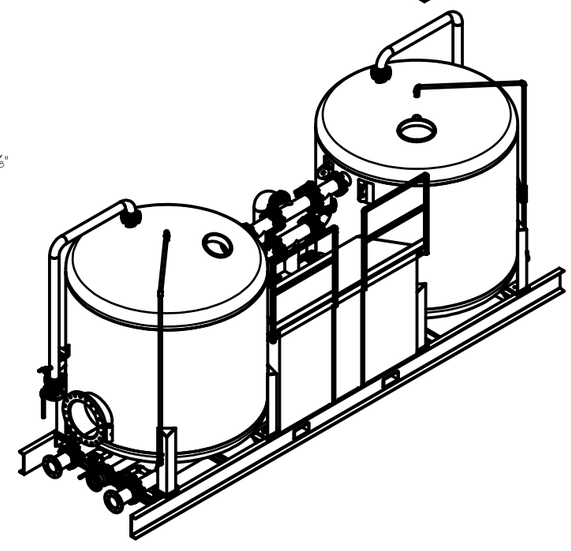


ELEVATION VIEW



SECTION C-C
SCALE 1:24





DESIGN CODE & CONDITIONS:

ASME CODE: NONE
RADIOGRAPHY: NONE
PWHT: NONE
MAWP: 75 PSI AT 150 f
MDMT: 0 f AT 75 PSI
TEST PRESSURE: 98 PSI WITH H2O FOR 20 MIN.
CORROSION ALLOWANCE: NONE
SYSTEM WT: 14452 LBS

SHOP COATINGS:

INTERIOR SURFACE PREP.: SSPC-SP10
INTERIOR 1'ST COAT: CARBOLINE PHENOLINE 309 – DFT 20-30 MILS (25-35 PER GRIFFIN)
INTERIOR 2'ND COAT: NONE
INTERIOR 3'RD COAT: NONE
EXTERIOR SURFACE PREP.: SSPC-SP6
EXTERIOR 1'ST COAT: CARBOZINC 859 – DFT 3-5 MILS
EXTERIOR 2'ND COAT: CARBOTHANE 134 HG – DFT 2-3 MILS - GRIFFIN RED
EXTERIOR 3'RD COAT: NONE

GENERAL CONSTRUCTION NOTES:

ALL WELDS SHALL BE NEAT IN APPEARANCE, FREE OF SLAG AND OTHER DEFECTS.
VESSEL SHALL BE CLEANED OF SCALE, OIL, WELD SPATTER AND ALL OTHER FOREIGN MATTER BEFORE HYDROSTATIC TESTING.
REMOVE ALL SHARP EDGES ON NOZZLES - ⅛" MIN.
FLANGES SHALL STRADDLE CENTERLINES.

TOLERANCE: +⅛" -⅛"
PERMISSIBLE OUT OF ROUNDNESS OF CYLINDRICAL AND CONICAL SHELLS SHALL NOT EXCEED 1% OF THE NOMINAL DIAMETER. THIS TOLERANCE TOLERANCE SHALL BE INCREASED TO 2% WHEN THE CROSS SECTION PASSES THROUGH OR WITHIN 1 ID OF A FITTING.
MAXIMUM MISALIGNMENT OF BUTT JOINTS IS LIMITED TO: CATAGORY A,B,C OR D UP TO ½" THICK-¼t PER UW-33.
HEAD TO SHELL WELD IS CATAGORY B.

SPECIAL CONSTRUCTION NOTES:

INTERNAL HEADER CONSTRUCTION - 6" SCH 10 304 STAINLESS STEEL
INTERNAL LATERALS - 1 ½" DIA. x 0.010" SLOT 316 STAINLESS STEEL
INTER CONNECTING PIPE - 6" SCH 40 SA-53
TERMINATING FLANGES - 6" 150# RAISE FACE
CARBON DISCHARGE PIPE - 4" SCH 10 SA-312 304L
CARBON DISCHARGE FLANGES - 4" 150# RAISE FACE
CARBON DISCHARGE VALVE - 4" STAINLESS STEEL BALL VALVE
ACCESS PLATEFORM STRUCTURAL FRAME - STEEL (SEE EXTERIOR PAINT)
PLATEFORM PAINT COLOR SAFETY YELLOW
ACCESS PLATEFORM GRATE - GALVANIZED

2" BACKFLUSH CONNECTIONS LOCATED AT PROCESS CONNECTIONS

REVISION HISTORY		
REV	DESCRIPTION	DATE
1	REVISED PER CUSTOMER MEETING NOTES	1/7/16
2	REVISED INTERIOR LINING	2/26/2016
3	ADD BACK FLUSH CONNECTION DETAIL	4/4/2016

PROJECT	GRIFFIN
PROJ. NO.	E-15-072
PO. NO.	

DRAWN BY	JB
DESIGN BY	JB
CHECKED BY	BB
DATE	12/7/2015
SCALE	NTS

TIGG LLC.

SYSTEM GENERAL ARRANGEMENT

C15-026-001 | 3

FOR CUSTOMER APPROVAL

Hydrosil International LTD.
125 Prairie Lake Road - East Dundee, IL 60118
Phone: 847-844-0680
Emergency Phone: 847-844-0680
Fax: 847-844-0799

HS-ACR

Liquid Phase, Coconut Shell Reactivated Carbon

What is HS-ACR

Hydrosil s **HS-ACR** is a reactivated granular activated carbon (GAC) manufactured via high temperature steam activation from selected grades of coconut shell. Hydrosil s **HS-ACR** is designed for liquid phase applications. The **HS-ACR** is high quality carbon with extraordinary surface area, fine pore structure, high density, and superior hardness. Hydrosil s **HS-ACR** for treating liquid phase uses macro and micro pore adsorption to remove contaminants.

Where is HS-ACR Used

HS-ACR is commonly used in oil and gas refineries, and industrial pollution control. Industrial projects that use **HS-ACR** include groundwater treatment, stormwater run-off treatment, and removal of dissolved organics.

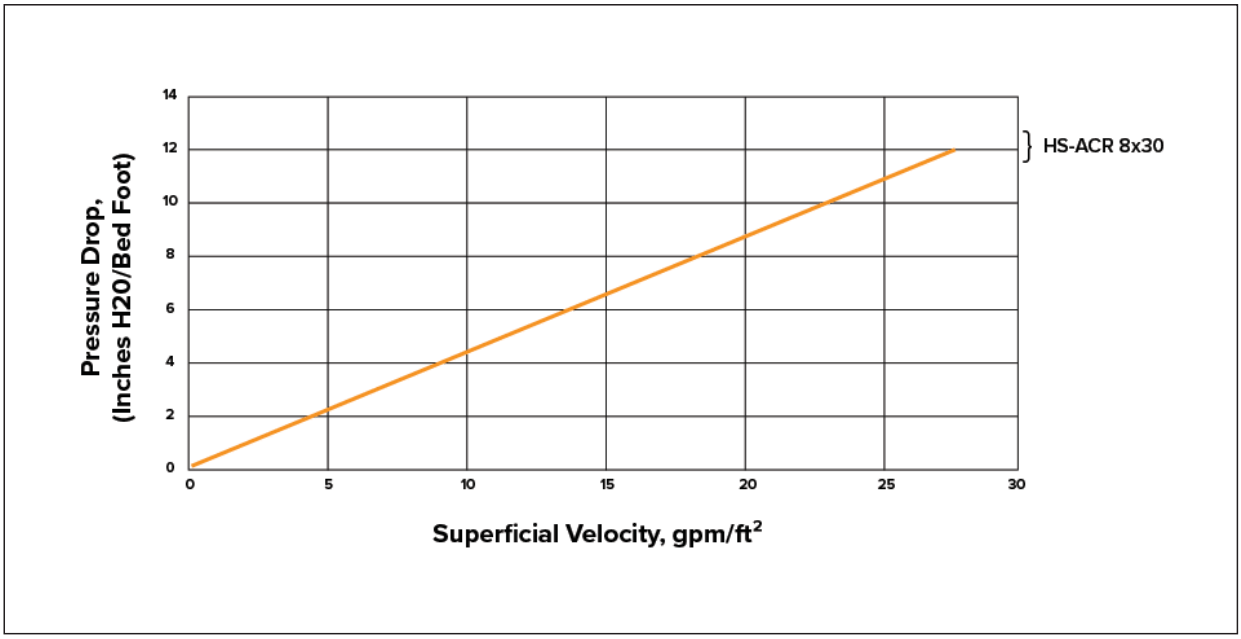
What is Reactivated Carbon

Reactivated carbon is a cost-effective alternative to virgin activated carbon. After the activated carbon is spent, the adsorbed organic compounds are destroyed via thermal treatment allowing the activated carbon to be used again. To reactivate carbon, the activated carbon is heated to high temperatures near 900 C which allows the organics that were adsorbed to be released from the pore structure. Once the organics are removed from the activated carbon pore structure the carbon is ready to be used again. The regeneration of activated carbon does result in a small loss of the activated carbons adsorption capacity.

What is Activated Carbon

Activated carbon commonly referred to as activated charcoal is a a highly porous material used to remove pollutants from contaminated liquid and gas streams. Activated carbon is derived from a variety of raw materials such as coconut, wood, coal (bituminous, anthracite, sub-bituminous, and lignite), peat, and bamboo. Each raw material has unique properties which effect the resulting pore structure, carbon content, and ash content, which are important characteristics when removing a contaminant of concern. The material is used in remediation, medical, and industrial applications where adsorption is required. Activated carbon has strong physical adsorption properties known as London Dispersion Forces which is a Van der Waals Force. The attraction between the activated carbon and the pollutant are highly dependent on the vapour pressure of the adsorbing molecules. Activated carbon is often altered or impregnated by chemicals to enhance the surface area of the carbon. When the carbon is chemically altered the bonds are much stronger than London Dispersion Forces. Chemicals often impregnated on activated carbon include potassium hydroxide, phosphoric acid, or sulfur. With the addition of chemicals the activated carbon will have an affinity for select compounds such acidic or basic pollutants.

HS-ACR Pressure Drop



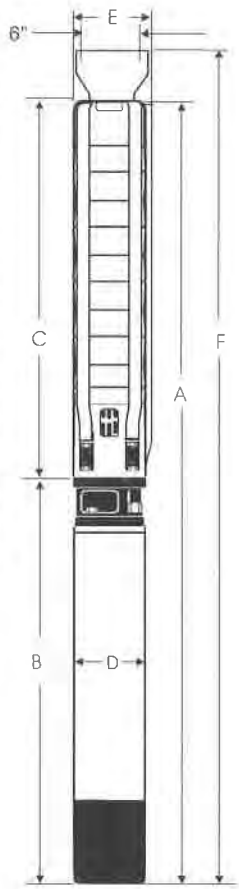
Typical Physical Properties

Property:	**Value:**
Iodine Number,	1000
Apparent Density, lb/ft 3	29-31
U.S. Standard Sieve Size (Mesh Size), 90% min	8 x 30
Hardness, Min. (ASTM D-3802)	95
Total Surface Area (BET), m 2 /gm	1100

DIMENSIONS AND WEIGHTS

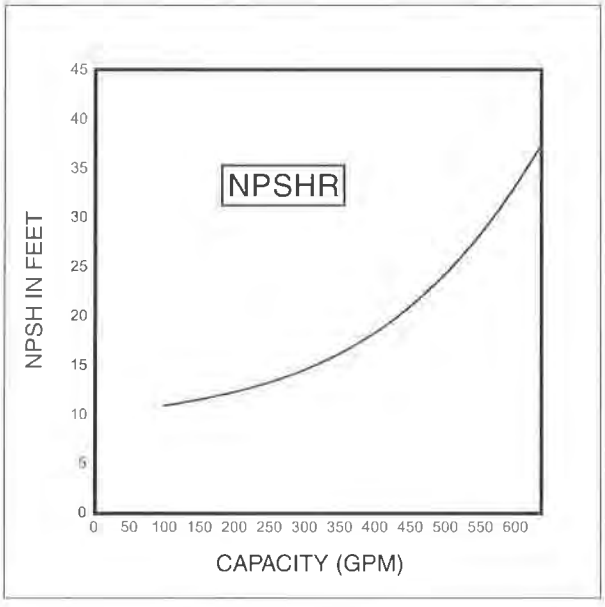
MODEL NO.	FIG.	HP	MOTOR SIZE	DISCH. SIZE	DIMENSIONS IN INCHES						APPROX. SHIP WT.
					A	B	C	D	E	F	
475S75-1A	A	7.5	6"	6" NPT	48.5	24.2	24.3	5.4	7	54.6	161
475S100-1	A	10	6"	6" NPT	49.7	25.4	24.3	5.4	7	55.8	171
475S150-2B	A	15	6"	6" NPT	57.4	28.0	29.4	5.4	7	63.5	195
475S200-2	A	20	6"	6" NPT	60.0	30.6	29.4	5.4	7	66.1	210
475S250-3A	A	25	6"	6" NPT	67.5	33.1	34.4	5.4	7	73.6	230
475S300-3	A	30	6"	6" NPT	70.1	35.7	34.4	5.4	7	76.2	230
475S300-4AB	A	30	6"	6" NPT	75.2	35.7	39.5	5.4	7	81.3	295
475S400-4*	A	40	6"	6" NPT	80.3	40.8	39.5	5.4	7	86.4	328
475S500-5B*	A	40	6"	6" NPT	85.3	40.8	44.5	5.4	7	91.4	336
475S500-5*	A	50	6"	6" NPT	102.5	58.0	44.5	5.4	7	108.6	428
475S500-6A*	A	50	6"	6" NPT	108.1	58.0	50.1	5.4	7	114.2	437
475S600-6*	A	60	6"	6" NPT	111.8	61.7	50.1	5.4	7.0	117.9	403
475S600-7*	A	60	6"	6" NPT	116.9	61.7	55.2	5.4	7.0	123.0	467
475S750-8	A	75	8"	6" NPT	107.6	47.4	60.2	7.5	7.7	113.6	547
475S1000-9	A	100	8"	6" NPT	120.1	54.9	65.2	7.5	7.7	126.2	641
475S1000-10	A	100	8"	6" NPT	125.2	54.9	70.3	7.5	7.7	131.2	648
475S1000-11	A	100	8"	6" NPT	130.3	54.9	75.4	7.5	7.7	136.4	654
475S1250-12	A	125	8"	6" NPT	149.2	68.8	80.4	7.5	7.7	155.3	862
475S1250-13	A	125	8"	6" NPT	154.3	68.8	85.5	7.5	7.7	160.4	868
Pipe Adapter	A									6.1	

NOTES: All models suitable for use in 8" wells, unless otherwise noted.
Weights include pump end with motor in lbs
*Alternate motors sizes available.
All models come with a standard 5"-6" Pipe Adapter refer to chart for dimensions



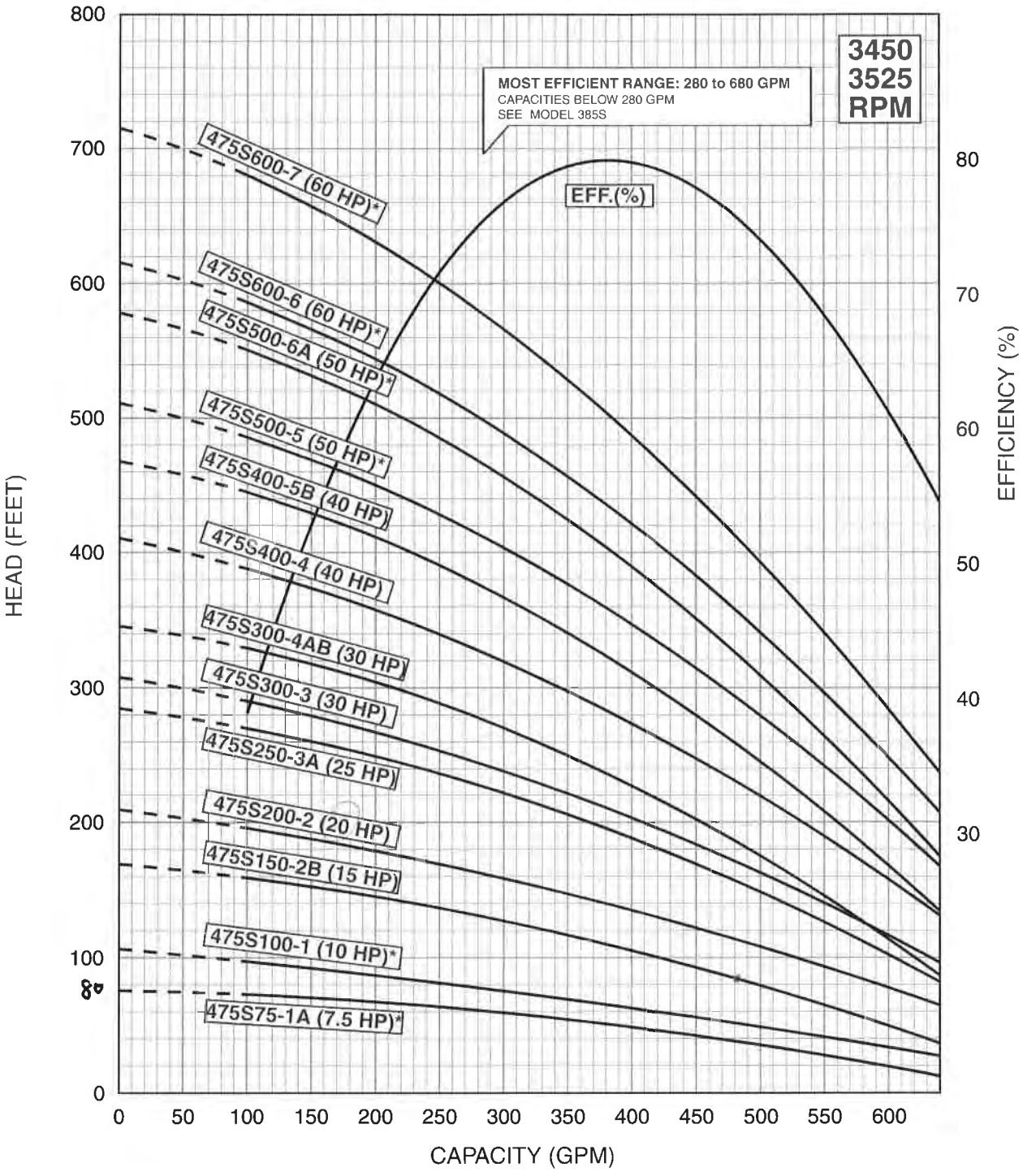
MATERIALS OF CONSTRUCTION

COMPONENT	CYLINDRICAL SHAFT (1-13 Stgs.)
Check Valve Housing	304 Stainless Steel
Check Valve	304 Stainless Steel
Diffuser Chamber	304 Stainless Steel
Split Cone Nut	304 Stainless Steel
Split Cone	304 Stainless Steel
Impeller	304 Stainless Steel
Suction Interconnector	304 Stainless Steel
Inlet Screen	304 Stainless Steel
Straps	304 Stainless Steel
Cable Guard	304 Stainless Steel
Coupling	316/329 Stainless Steel
Pump Shaft	431 Stainless Steel
Intermediate Bearings	NBR
Impeller Seal Ring	NBR/PPS
Check Valve Seat	NBR/316 Stainless Steel
Lower Bearing	NBR/316 Stainless Steel
Upthrust Washer	Carbon/Graphite HY22
Upthrust stop ring	304 S.S./Tungsten Carbide
O-Ring	NBR
Valve Seat	304 Stainless Steel
Lower Valve Seat Retainer	316 Stainless Steel
Upper Valve Seat Retainer	304 Stainless Steel
Valve Guide	304 Stainless Steel
Valve Cup Spring	304 Stainless Steel
NOTES: Specifications are subject to change without notice.	



PERFORMANCE CURVES 475 GPM MODEL 475S

FLOW RANGE: 95 - 680 GPM **OUTLET SIZE: 6" NPT** **NOMINAL DIA. 8"**

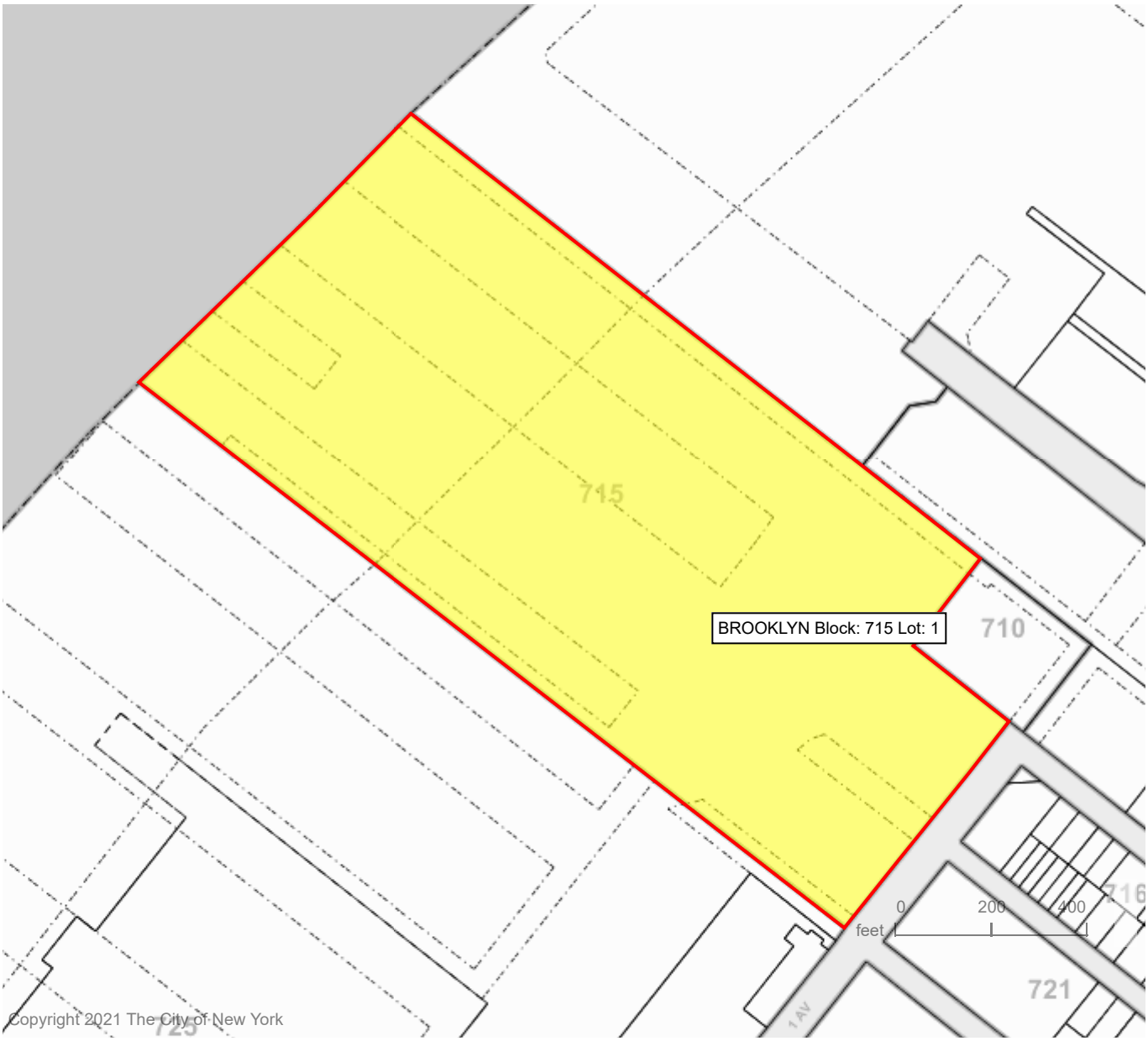


SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.
6" MOTOR STANDARD, 10-60 HP/3450 RPM
8" MOTOR STANDARD,75-125 HP/3525 RPM
* Alternate motor sizes available.

Performance conforms to ISO 9906 Annex A
@ 8 ft. min submergence.

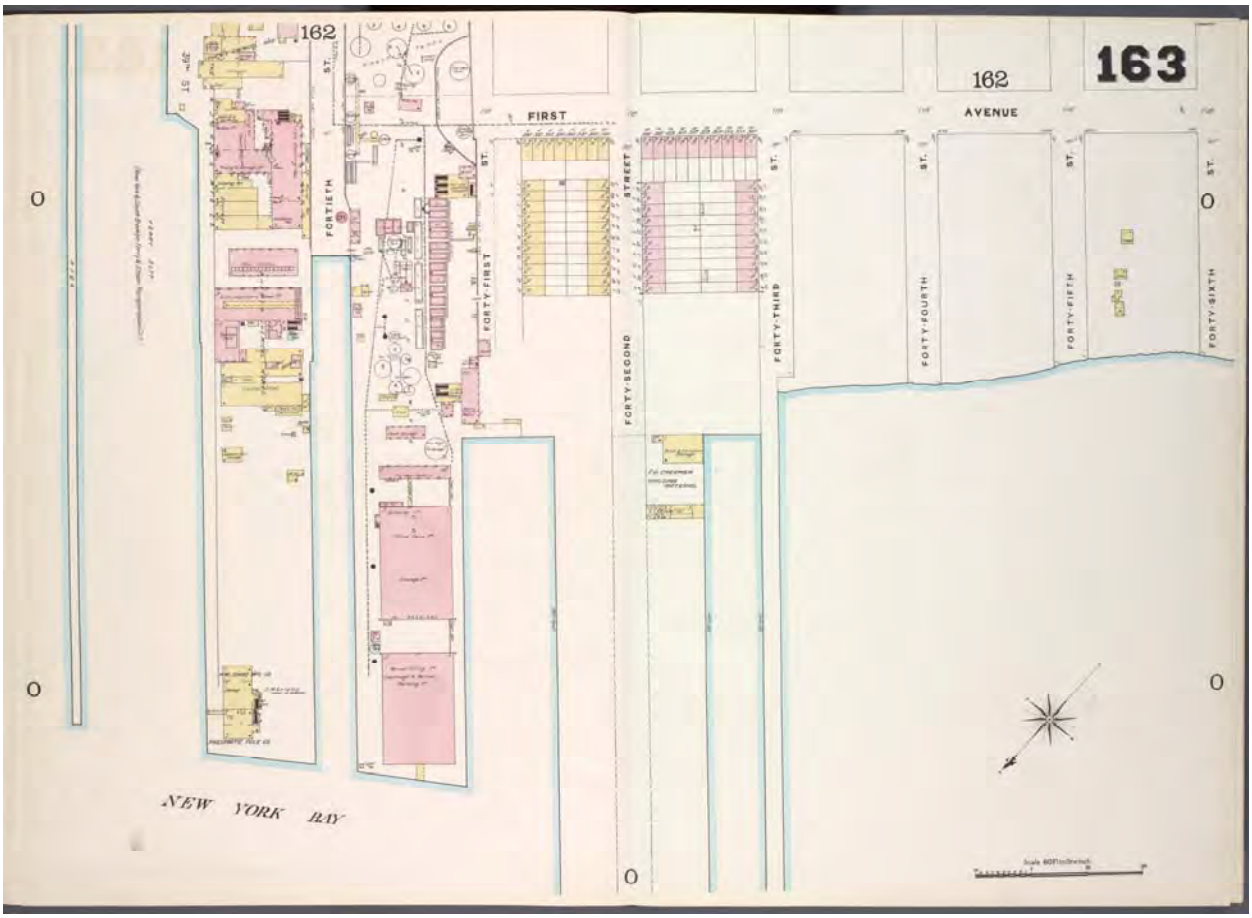
6. Digital Map

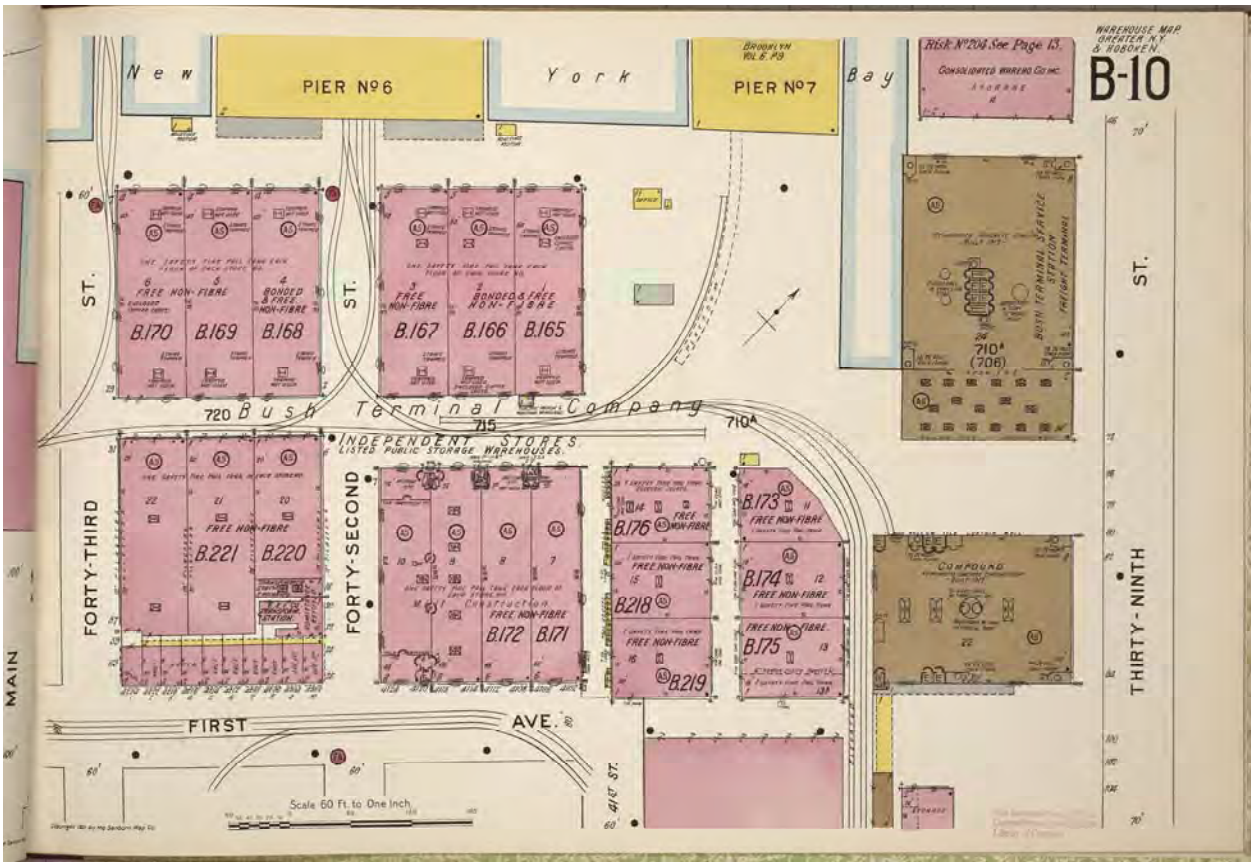
Bush Terminal - Digital Tax Map - New York City Dept. of Finance (6/1/2021)

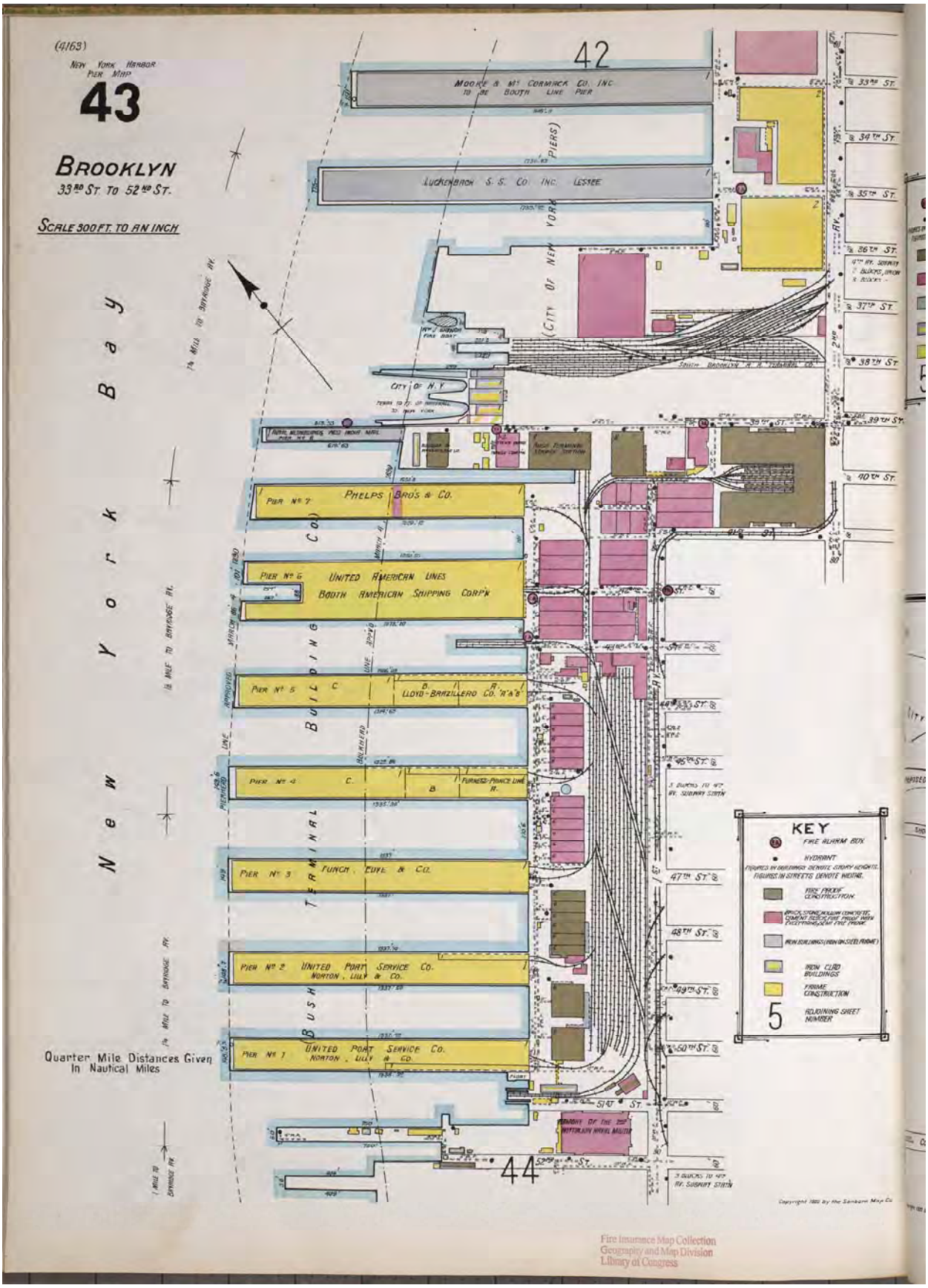


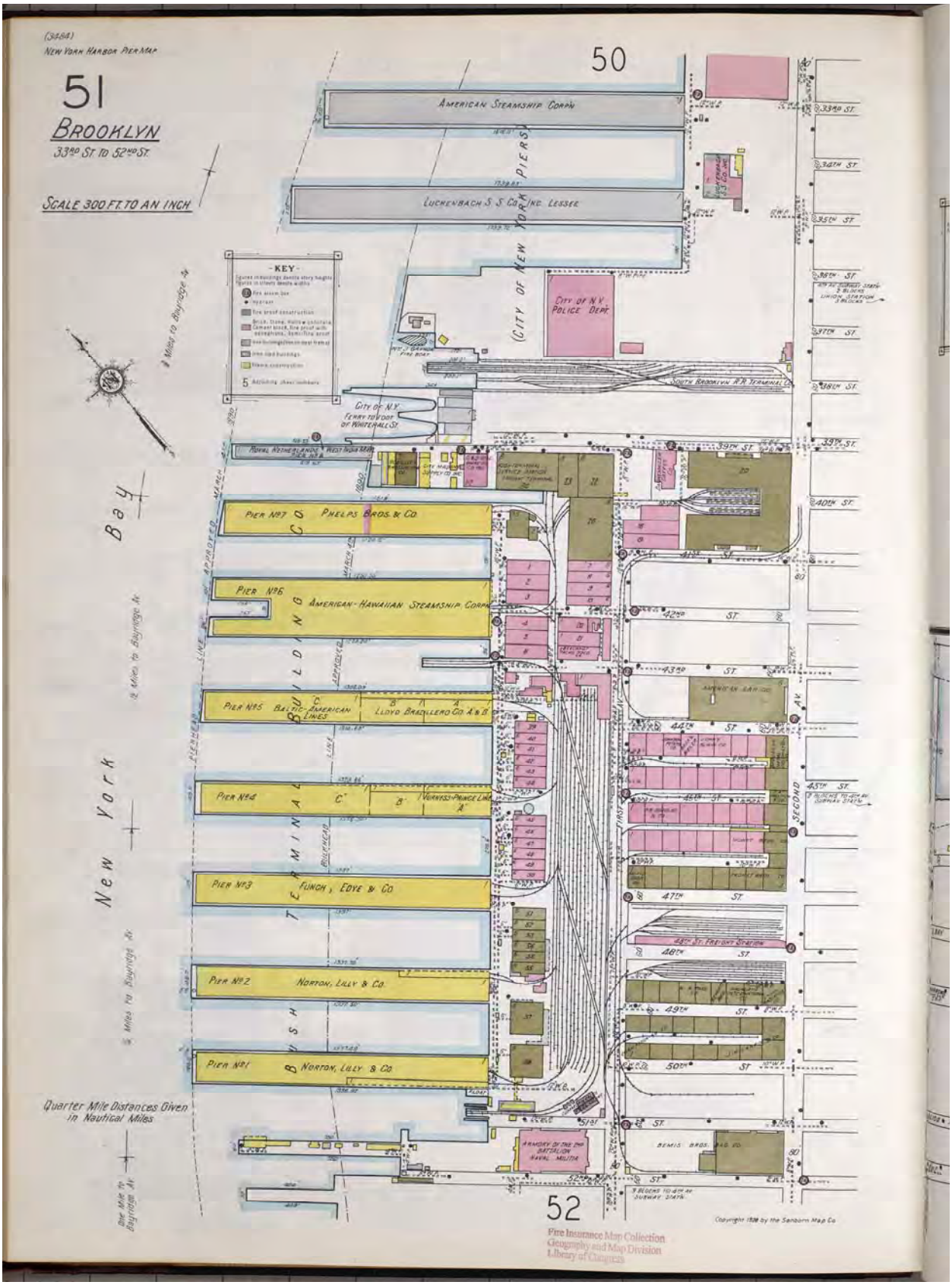
Borough Boundary		C50	Condo Flag/Condo Nunber
Tax Block Boundary		A50	Air Right Flag/Lot Number
50	Tax Block Number	S50	Subterranean Right Flag/Lot Number
Tax Lot Boundary		R	REUC Flag
50	Tax Lot Number		Under Water Tax Lot Boundary
~~50~~	Condo FKA Tax Lot Number		Other Boundary
50.5	Tax Lot Dimension		Possession Hook
+/-5.5	Approximate Tax Lot Dimension	Misc	Miscelaneous Text
1500 - 1550	Condo Units Range Label		Small Tax Lot Dimension
Building Footprint			Surface Water

7. Sanborn Maps


162
163
162
FIRST
AVENUE
FORTIETH ST.
FORTY-FIRST ST.
FORTY-SECOND STREET
FORTY-THIRD ST.
FORTY-FOURTH ST.
FORTY-FIFTH ST.
FORTY-SIXTH ST.
NEW YORK BAY


WAREHOUSE MAP GREATER N.Y. & HOBOKEN.
B-10
New
PIER Nº6
York
PIER Nº7
Bay
Risk Nº 204 See Page 13.
CONSOLIDATED WAREHS CO INC.
ST.
B.170
B.169
B.168
B.167
B.166
B.165
720 Bush Terminal Company
715
710A
INDEPENDENT STORES
LISTED PUBLIC STORAGE WAREHOUSES
FORTY-THIRD
FORTY-SECOND
B.221
B.220
B.172
B.171
B.176
B.218
B.219
B.173
B.174
B.175
COMPOUND
THIRTY-NINTH
MAIN
FIRST AVE.
41ST ST.
Scale 60 Ft. to One Inch

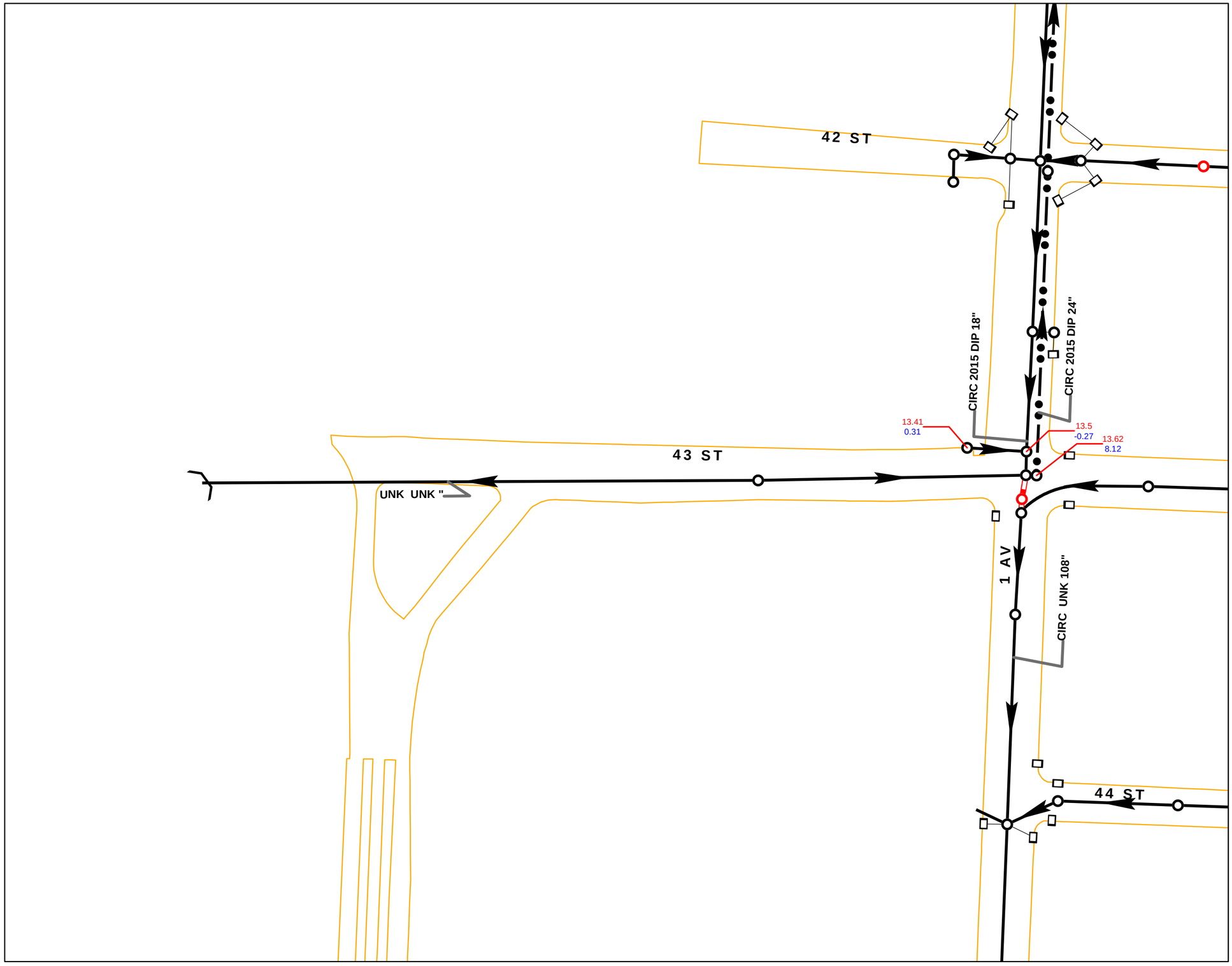




8. Geotechnical Report

(Submitted Separately)

9. DEP Sewer Map



LEGEND:

NYC DEP

- Sanitary Sewer
- Storm Sewer
- Combined Sewer
- Combined Sewer Overflow
- Relief Storm Sewer
- Relief Combined Sewer
- Highway Drain
- Intercepting Sewer
- Intercepting Collector
- Branch Intercepting
- Intercepting Force Main
- Force Main
- Emergency Construction Sewer
- Catch Basin Connector
- Unknown Sewer
- Manhole
- Catch Basin
- Chamber
- Weir Chamber
- Regulator
- Tide Gate
- Outfall
- Headwall
- Culvert
- Bulkhead
- Pumping Station

NYS DOT

- Sewer
- Trough
- Catch Basin\Scupper Connector
- Temporary Connection and Plumber's Drain
- Flow Direction
- Manhole
- Catch Basin
- Chamber
- Outfall
- Headwall
- Culvert
- Bulkhead
- Pumping Station

Sewer Shape	Abbreviation
Double Circular	DCIR
Egg	EGG
Elliptical	ELP
Vertical Elliptical	VELP
Horizontal Elliptical	HELP
Box	BOX
Double Barrel	DB
Triple Barrel	TB
Quadruple Barrel	QB
Circular Barrel	CIRB
Oval	OVL
Flat Top	FT
Double Flat Top	DFT
Tunnel	TUN
Double Tunnel	DTUN
Circular Pipe	CIRC
Arch	ARCH
Irregular	IRRG
Unknown	UNK

Sewer Ownership	Abbreviation
Private	Pvt
Temporary Connection	TC
Plumber's Drain	PID
Triborough Bridge & Tunnel Authority	TBTA
Work Progress Administration	WPA

PIPE ANNOTATION
Pipe shown as shape, year of installation, material and pipe diameter.
Example; CIRC 1945 VCP 24"
Pipes with a second or height dimension will be displayed with the height dimension, in inches, directly after the diameter
Example BOX 1955 CIP 48" x 32"

RESPECTIVE BOROUGH HIGHWAY AND SEWER DATUMS
(ABOVE MEAN SEA LEVEL AT SANDY HOOK, NEW JERSEY)

BOROUGH	SEWER DATUM	HIGHWAY DATUM
BRONX	2.608 FEET	2.608 FEET
BROOKLYN	1.720 FEET	2.560 FEET
MANHATTAN	2.750 FEET	2.750 FEET
QUEENS	2.725 FEET	2.725 FEET
STATEN ISLAND	3.192 FEET	3.192 FEET

MANHOLE RIM AND INVERT ELEVATIONS,
WHERE AVAILABLE, ARE DISPLAYED BY COLOR

25.67 = Manhole Rim elevation

25.67 = Manhole Invert elevation

Sewer Mapping

NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
59-17 Junction Boulevard, 3rd Floor
Corona, NY 11373-5108

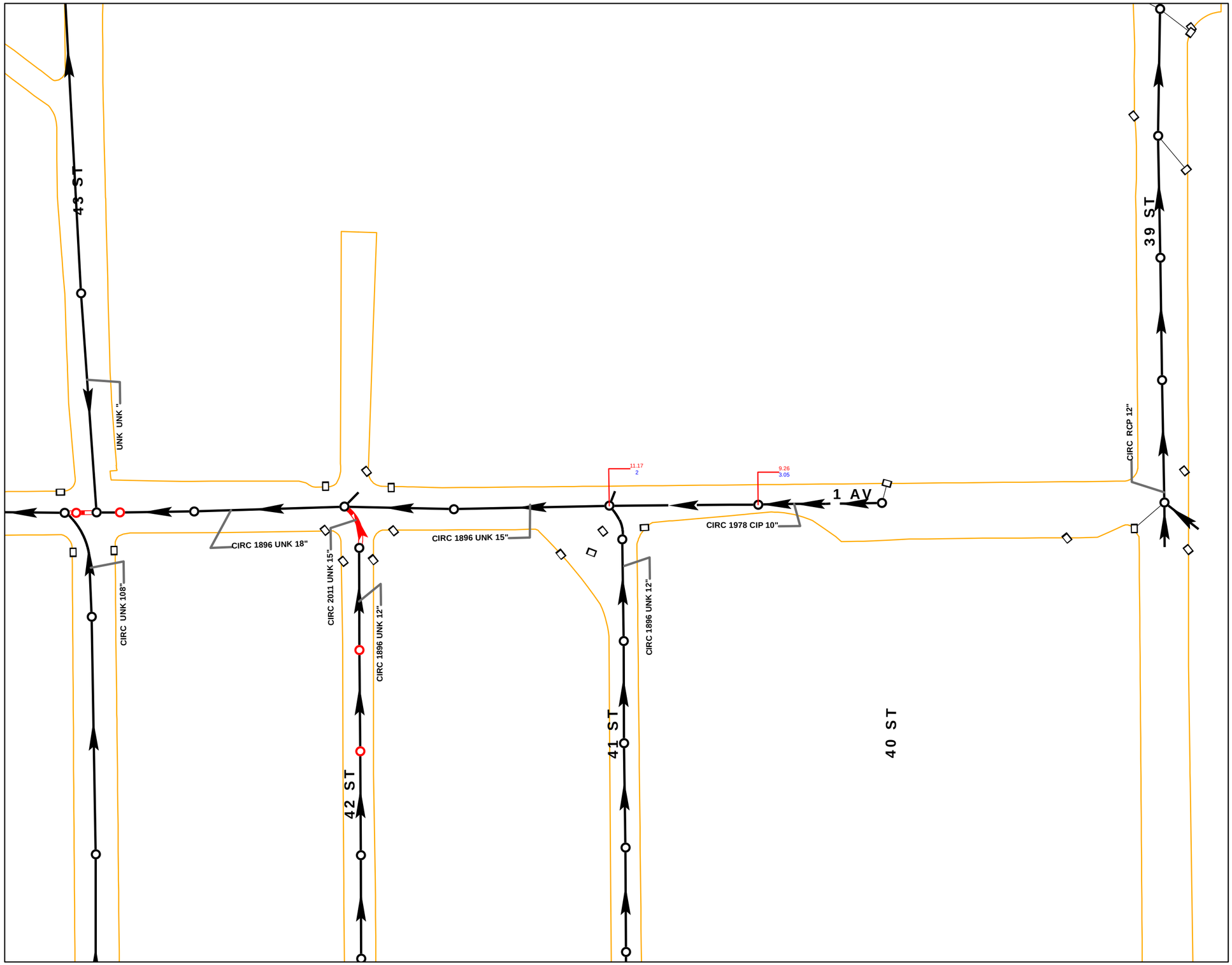
Map Print Date: 6/10/2022

50 25 0 50 100 150 200 250 300
Feet

Sewer Material	Abbreviation																	
Brick	BRK	*Concrete Pipe*	CRTP	*Reinforced Concrete Culvert Pipe*	RCCP	*Wood*	WD	*Steel*	STL	*Liner Plate*	LRPL	*Block*	BLK
Reinforced Concrete Brick	RC/BR	*Reinforced Concrete*	RC	*Corrugated Metal Pipe*	CMP	*Wood Pipe*	WDP	*Steel Pipe*	STLP	*Reinforced Concrete Liner Plate*	RC LRPL	*Tile*	TILE
Cement Pipe	CMTP	*Reinforced Concrete Pipe*	RCP	*High Density Polyethylene Pipe*	HDPEP	*Clay Pipe*	CP	*Cast Iron*	CI	*Steel Liner Plate*	STL LRPL	*Stone*	STON
Asbestos Cement Pipe	ASBCMTP	*Precast Reinforced Concrete*	PRC	*Corrugated High Density Polyethylene Pipe*	CHDPEP	*Vitrified Clay Pipe*	VCP	*Cast Iron Pipe*	CIP	*Cast Iron Liner Plate*	CI LRPL	*Fiberglass*	FBGL
Concrete	CRT	*Precast Reinforced Concrete Pipe*	PRCP	*Polyvinyl Chloride Pipe*	PVCP	*Extra Strength Vitrified Clay Pipe*	ESVP	*Ductile Iron Pipe*	DIP	*Ductile Liner Plate*	DI LRPL	*Unknown*	UNK

This map is intended to be a schematic representation of the sewer system ONLY, and is not warranted to be accurate for construction and/or surveying purposes and is based on the best information available.

All warranties, UCC and otherwise, express or implied, including, warranties as to accuracy of data shown hereon and merchantability and fitness for a particular purpose are expressly disclaimed. All incidental, consequential or special damages arising out of or in connection with the use or performance of the data shown on the map are expressly disclaimed. Map is not for public dissemination and is agreed by recipient not to be copied.



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NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
59-17 Junction Boulevard, 3rd Floor
Corona, NY 11373-5108

Map Print Date: 3/12/2020

50 25 0 50 100 150 200 250 300
Feet

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Asbestos Cement Pipe	ASBCMTP	*Precast Reinforced Concrete*	PRC	*Corrugated High Density Polyethylene Pipe*	CHDPEP	*Vitrified Clay Pipe*	VCP	*Cast Iron Pipe*	CIP	*Cast Iron Liner Plate*	CI LRPL	*Fiberglass*	FBGL
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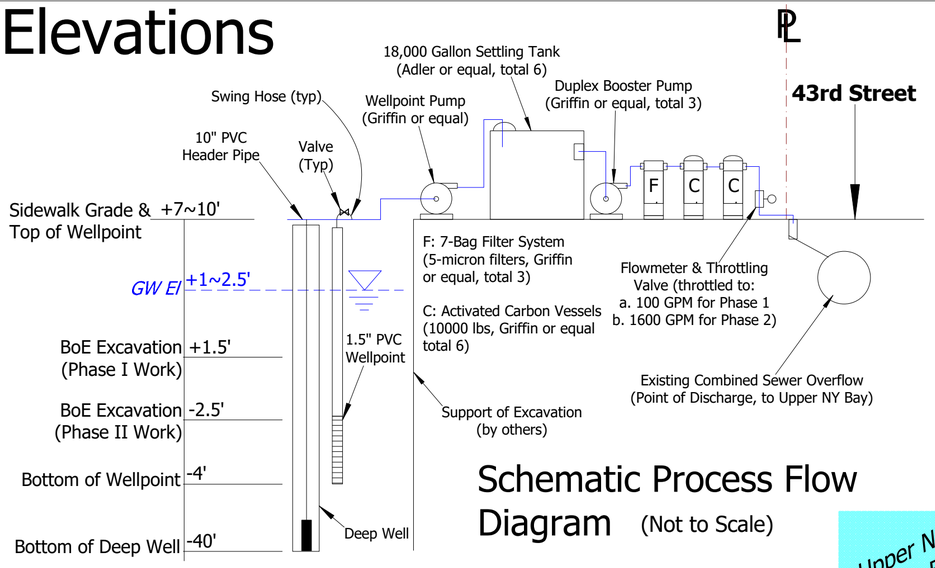
10. Proposed Dewatering Plan (DW-1)

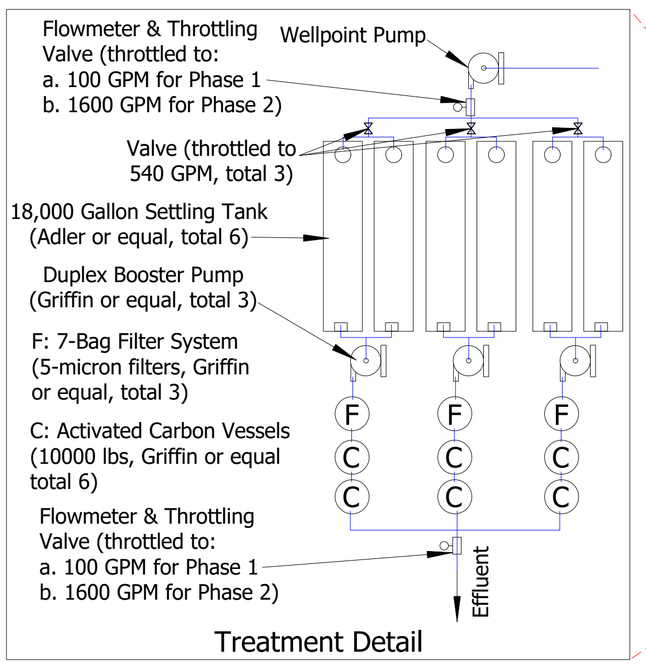
Elevations



Schematic Process Flow Diagram (Not to Scale)

ENGINEERING NOTES:
1. Treatment consists of six (6) settling tanks, three (3) duplex filter unit fitted with 5-micron filters, and six (6) 10,000-lb activated carbon vessels (see plan for details).
2. Treatment to be located on grade as indicated.
3a. Wellpoints to be installed as shown on the plan.
3b. Deep wells to be installed on First Avenue, as shown on the plan.
4. The effluent will be discharged from the treatment into the existing Combined Sewer Overflow on 43rd Street, which feeds into the Upper New York Bay.
5. Exposed hoses (if any) can be manifolded into a main PVC header provided that each connection is fitted with a check valve and an adjustable flow valve.

DEWATERING NOTES:
1. Obtain approval from EOR to position treatment where indicated.
2. Dewatering activities are required for the new utility work across the property (Phase 1), and for sewer/utility work on First Avenue (Phase 2).
3. Groundwater El was measured approximately El: +1' to +2.5'.
4. Bottom of excavation is El: +1.5' for Phase 1 activities, and El: -2.5' for Phase 2 activities.
5. Monitor movement of adjacent structures: Vibration settling and optical monitoring (by others). Coordinate these activities with geotechnical engineer.
6. Using pumps will require a continuous power supply, and back up generators to ensure continuous pumps operation.

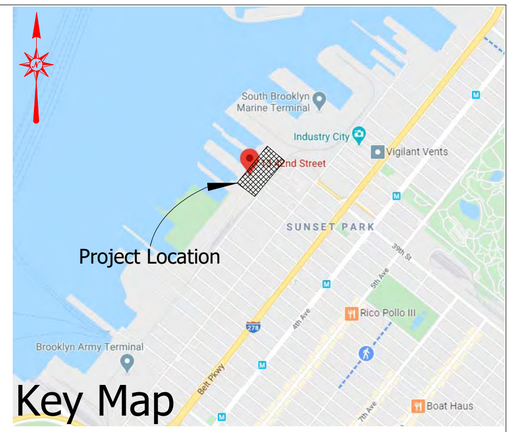


Treatment Detail

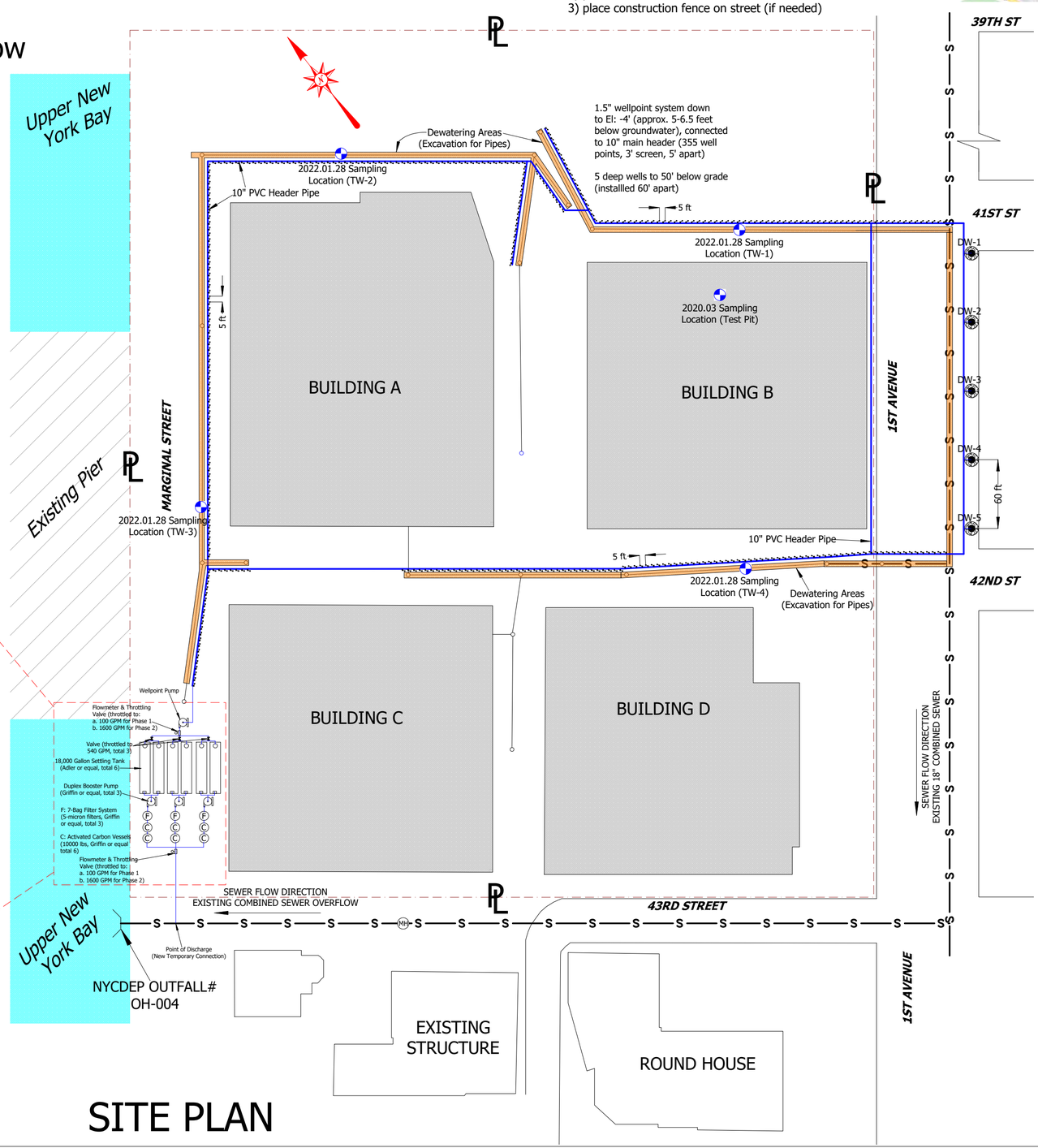
Disclaimer:
This plan has been prepared for the purpose of obtaining a dewatering permit from the overseeing agency. This plan (and supplemental documents) have been prepared based on the information provided by others and through reasonable engineering assumptions. The recommendations expressed in this plan are not an opinion concerning the compliance of any past or present owner or operator of the site with any federal, state, or local law or regulation. No warranty or guarantee, whether express or implied, is made with respect to the data reported or conclusions expressed in this plan. The project construction manager and thereabouts the project owner hereby agree to indemnify and to save harmless AMC Engineering, PLLC and its professionals from and against any and all claims, suits, actions, proceedings, and losses that may arise after the date of this agreement from the construction, maintenance, operation, or use of any equipment (direct or indirect) for the purpose of dewatering at this location. Additionally, AMC Engineering, PLLC is held harmless due to any harmful side effects of lowering the water table, such as but not limited to: impact of drawdown on the perimeter of the site, salt water intrusion, movement of adjacent structures, movement of contaminated groundwater, backflow due to surcharge of outlet sewer and effect on any wetlands. Monitoring procedures for securing adjacent structures against any impacts during dewatering such as settlement, drawing of fines from beneath existing structures, and formation of cracks should be adopted.

NOTES TO GC:
1. ENSURE THAT ALL UTILITIES ARE MARKED OUT AND SITE IS SAFE FOR EXCAVATION. FOLLOW ALL CITY, STATE AND FEDERAL REGULATIONS WHEN WORKING AT THIS SITE.
2. PROVIDE PROOF OF UTILITY MARK OUT TO ENGINEER OF RECORD.
3. OBTAIN APPROVAL FROM OWNER OR STRUCTURAL ENGINEER THAT LOCATION OF TREATMENT SYSTEM IS ADEQUATELY SUPPORTED. DO NOT PLACE TREATMENT EQUIPMENT UNTIL INDICATED SO BY STRUCTURAL ENGINEER.
4. A DEWATERING PERMIT WILL BE OBTAINED FROM NYCDEP. DO NOT COMMENCE DISCHARGE UNTIL SUCH PERMIT IS SECURED.
5. ALL CONDITIONS MUST BE VIF. ANY DISCREPANCIES MUST BE BROUGHT UP TO THE ATTENTION OF THE DEWATERING CONTRACTOR AND ENGINEER.
6. SINCE DISCHARGE EXCEEDS 45 GPM, A LONG ISLAND WELL PERMIT MUST BE OBTAINED FROM THE NYSDEC.
7. If excavation / construction activities occur within 200 ft of a rail line (MTA), then plans must be filed with respective MTA agency to obtain letter of no exception.
8. Site information and elevations obtained from plans by permission from owner.
9. Contractor to ensure dewatering activities comply with all rules and regulations set forth by the Port Authority of New York and New Jersey.

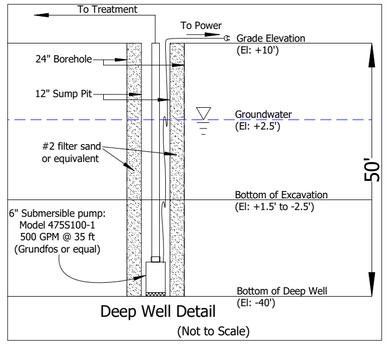
Important Note: Dewatering system may affect subsurface conditions on adjacent properties, and must be continuously monitored. Precautions will be needed to limit the risk of cracks, heave or settlement of adjacent structures.

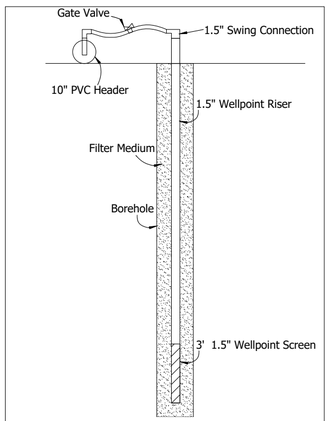


Plan Notes:
Contractor to obtain permits from NYC DOT to:
1) close off sidewalk and street for treatment (if needed)
2) place treatment on street
3) place construction fence on street (if needed)



SITE PLAN





Property Owner:
NYCEDC
One Liberty Plaza
New York, NY 10006

AMC ENGINEERING PLLC
18-36 42nd Street
Astoria, NY 11105
718 545-0474

PROJECT
NYCEDC Project #50106760
Bush Terminal (North Campus)
13 42nd Street
Brooklyn, NY 11232
Block: 715 Lot: 1

TITLE:
SPDES & LI Well Permit
Proposed Dewatering Plan

SEAL & SIGNATURE:
STATE OF NEW YORK · ANGEL ZEMENIDES · LICENSED PROFESSIONAL ENGINEER

DATE: SEP 13, 2022
PROJECT No:
DRAWING BY: AS
CHK BY:
DWG No:
DW-1.03
1 of 1