

August 2021 Monthly Progress Report

Enclave on 241st Street Development
714 East 241st Street, Bronx, New York
Brownfield Cleanup Program Site #: C203077

1. Introduction

In accordance with Article XI – Progress Reports of the Brownfield Cleanup Agreement (BCA) for the above-referenced site, Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C. (Langan) prepared this monthly progress report, on behalf of Enclave on 241 Street, LLC (“Volunteer”), to summarize the work performed at 714 East 241st Street in the Wakefield section of the Bronx, New York (the “Site”) during August 2021.

The Volunteer originally entered into a BCA with NYSDEC on 17 August 2015 to investigate and remediate the approximate 24,060-square-foot site (Block 5087, Lot 1). Following completion of the Remedial Investigation Report (dated April 2016) and Remedial Action Work Plan (dated March 2016), a Decision Document was issued for the Subject Property on 31 March 2016. In a letter and Brownfield Cleanup Program Application to Amend Brownfield Cleanup Agreement and Amendment (dated 17 July 2016), the Volunteer requested the BCA be amended to include an adjacent 2,630-square-foot lot located at 4637 Furman Avenue (Block 5087, Lot 9) as this will be included in the proposed development. The amendment request was approved by NYSDEC on 18 October 2016.

The Site (Block 5087, Lots 1 and 9) encompasses approximately 26,690 square feet and includes approximately 100 feet of frontage along White Plains Road, 185 feet of frontage along 241st Street, and 171 feet of frontage along Furman Avenue. The New York City Transit Authority (NYCTA) #2 rail corridor and station platform are allocated above grade along the northwestern property line. Prior to demolition activities, the Site contained four buildings including an approximate 1,086-square-foot one-story office building with basement, an approximate 3,375-square foot one-story former auto body shop building, an approximate 1,500-square foot one-story former auto body shop building, and an approximate 2,400-square foot, two-story residential building with a basement. The Site also contains asphalt- and concrete-paved exterior driving/parking areas and sparsely vegetated undeveloped area. The Site is subject to NYSDEC review under the Spills Program (Spill No. 12-14956).

A Site Location Map is attached to this progress report as Attachment 1.

2. Remedial Actions Relative to the Site during this Reporting Period

Langan has been working on the tasks associated with preparation and planning for implementation of the forthcoming In-Situ Chemical Oxidation (ISCO) remedy, including securing vendor and subcontractor services, scheduling and coordinating field activities, reagent deliveries and pickups.

On 24 August 2021, Langan submitted the required notification to United States Environmental Protection Agency (USEPA) (along with the USEPA Form 7520-16) in connection with the ISCO remediation that will be implemented in September 2021.

3. Actions Relative to the Site Anticipated for the Next Reporting Period

The implementation of Langan's (ISCO) Remedial Design is anticipated to commence around 23 September 2021. In summary, the ISCO injections will be completed at 36 temporary injection points, to be installed between 15 and 23 feet below ground surface (bgs). The temporary injection points will be established using DPT. The ISCO injection mix containing sodium persulfate and sodium hydroxide will be injected at each injection location within Treatment zone 1 and 2. A total of 27,200 pounds of sodium persulfate, 60,000 pounds of 25% sodium hydroxide, and 11,220 gallons of injection mixture will be applied between the two treatment zones. Injections will be completed with services of a New York licensed driller and certified injection contractor and will be overseen by Langan staff. During injection activities, measurement of water levels and water quality (pH, ORP, dissolved oxygen, turbidity, temperature and conductivity) will be collected at the monitoring wells. Sulfate measurements will also be collected at temporary piezometers installed in each treatment zone. The previously NYSDEC-approved community air monitoring plan (CAMP) will be implemented during the DPT injection activities. Injection fluids that would potential surface will be collected in chemically compatible 55-gallon drums for off-site disposal. Injection activities are expected to last four to five weeks.

Following the injection event, the injection volumes, reagent dosage, injection and field monitoring data will be presented in a letter report for discussion with NYSDEC.

4. Approved Activity Modifications (changes of work scope and/or schedule)

None in this period.

5. Results of Sampling, Testing and Other Relevant Data

Three new monitoring wells (MW-40D, MW-41D, and MW-42D) were installed and sampled in connection with the forthcoming ISCO remedy. The baseline pre-injection groundwater samples were collected from newly installed wells (MW-40D, MW-41D and MW-42D) and existing wells (MW-7B, MW-08B, MW-29, MW-40, MW-41, MW-42, and MW-43) for analysis of volatile organic compounds (VOC), semivolatile organic compounds (SVOC), target analyte list (TAL) metals (filtered and unfiltered), total alkalinity and sulfate. The groundwater analytical results are included as Attachment 3.

6. Deliverables Submitted During This Reporting Period

On 24 August 2021, Langan submitted the required notification to USEPA (along with the USEPA Form 7520-16) in connection with the ISCO Remedial Design that will be implemented in September 2021.

7. Information Regarding Percentage of Completion

Approximately 12%

8. Unresolved Delays Encountered or Anticipated That May Affect the Schedule and Mitigation Efforts

None in this period.

9. Community Participation (CP) Plan Activities during This Reporting Period

None in this period.

10. Activities Anticipated in Support of the CP Plan for the Next Reporting Period

None in this period.

11. Miscellaneous Information

None in this period.

Enclosed:

Attachment 1 – Site Location Map

Attachment 2 – Site Layout Map

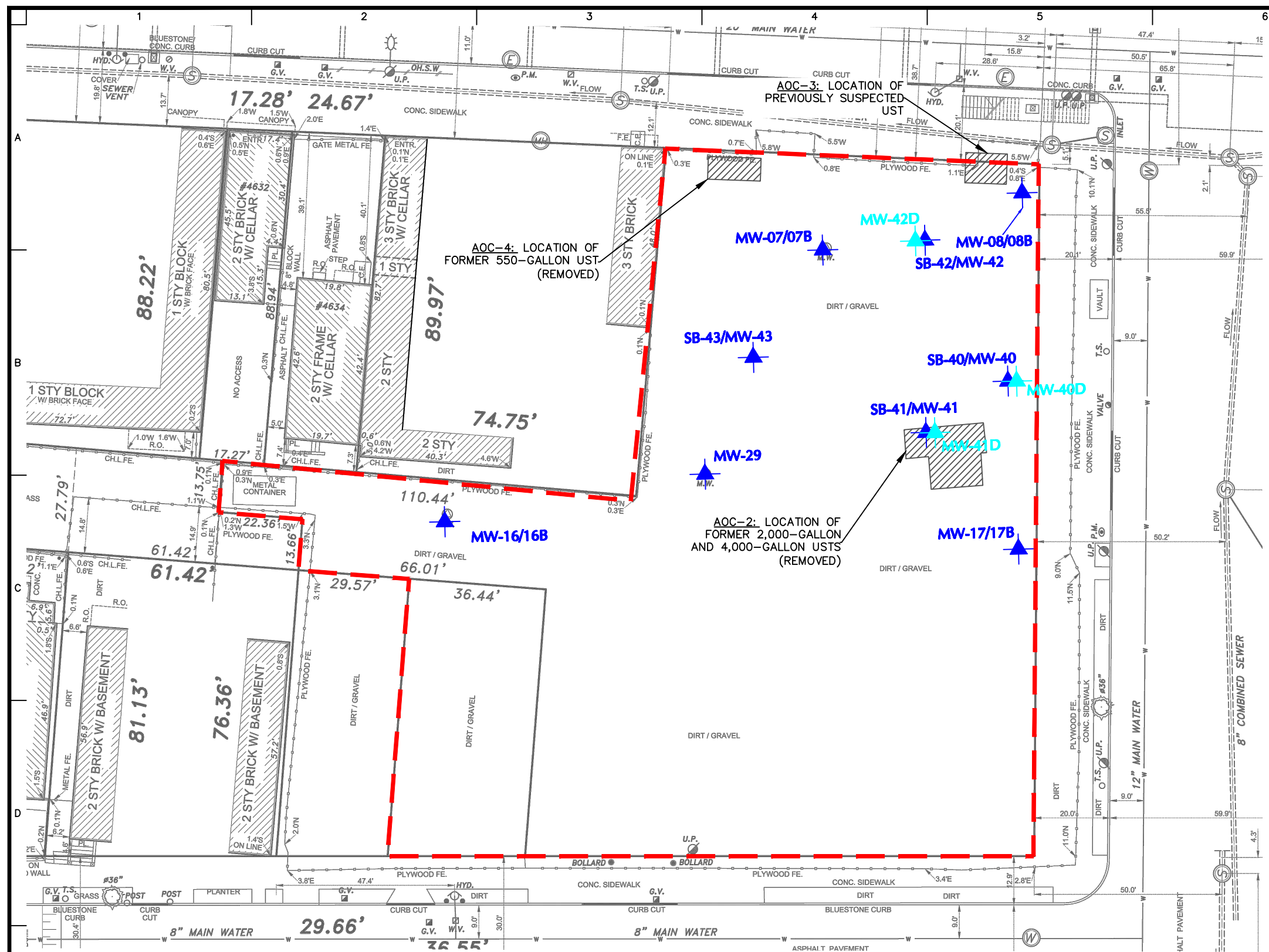
Attachment 3 – Baseline Groundwater Analytical Results

ATTACHMENT 1



SITE LOCATION MAP
C203077
ENCLAVE ON 241ST STREET
DEVELOPMENT

ATTACHMENT 2



NOTES

1. BASE MAP PROVIDED BY PERFECT POINT LAND SURVEYING RT (DATED 4 APRIL 2019).
2. THIS PLAN SHOULD BE VIEWED AS A COLOR COPY AS THE BORING LOCATIONS AND BOUNDARIES ARE COLOR COORDINATED.

LEGEND

- SITE BOUNDARY
- ▲ EXISTING GROUNDWATER MONITORING WELL
- ▲ NEWLY INSTALLED GROUNDWATER MONITORING WELL - INSTALLED AUGUST 2021



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Project
ENCLAVE ON 241ST STREET DEVELOPMENT
NEW YORK
BRONX NEW YORK

Drawing Title
SITE LAYOUT MAP

Project No. 140115301	Drawing No. 2
Date SEPTEMBER 2021	
Drawn By JRF	
Checked By RJW	
Sheet 2 of 4	

ATTACHMENT 3

Attachment 3
Baseline Groundwater Analytical Results Summary
714 East 214th Street, Bronx, NY
Langan Project No.: 140115301

Sample Location Sample ID Sampling Date	NYSDEC TOGS Standards and Guidance Values - GA (µg/L)	MW-7B		MW-08		MW-29		MW-40		MW-40D				MW-41		MW-41D		MW-42		MW-42D		MW-43		Field Blank	
		MW-7B_2021.08.23 8/23/2021		MW-08_2021.08.23 8/23/2021		MW-29_2021.08.18 8/18/2021		MW-40_2021.08.23 8/23/2021		MW-40D_2021.08.18 8/18/2021		DUP-1_2021.08.18 8/18/2021		MW-41_2021.08.23 8/23/2021		MW-41D_2021.08.18 8/18/2021		MW-42_2021.08.18 8/18/2021		MW-42D_2021.08.18 8/18/2021		MW-43_2021.08.23 8/23/2021		8/18/2021	
		Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Compound																									
VOA, 8260 LOW MASTER (µg/L)																									
Dilution Factor				2				10		200		500		50		100		200		500				1	
1,2,4-Trimethylbenzene	5	NT		69.4	D	NT		450	D	1,020	D	6,200	D	934	D	1,100	D	1,180	D	1,620	D	NT		0.2	U
1,3,5-Trimethylbenzene	5	NT		21.1		NT		149	D	287	D	1,640	D	237	D	284	D	350	D	437	D	NT		0.2	U
2-Butanone	50	NT		0.2	U	NT		2	U	15.8	D	40	U	5	U	20	U	22.5	D	20	D	NT		0.71	
Acetone	50	NT		23.2		NT		87.9	D	35.5	JD	1,170	D	622	D	141	JD	39.8	JD	41.2	JD	NT		4.97	
Benzene	1	NT		3.63		NT		97.9	D	6,030	D	3,660	D	759	D	3,500	D	5,420	D	5,490	D	NT		0.2	U
Carbon disulfide	~	NT		0.66		NT		2	U	5	U	40	U	5	U	20	U	5	U	5	U	NT		0.2	U
Chloroform	7	NT		1.22		NT		2	U	5	U	40	U	17.2	D	20	U	5	U	5	U	NT		0.2	U
Cyclohexane	~	NT		26.9		NT		2	U	231	D	40	U	199	D	229	D	140	D	236	D	NT		0.2	U
Ethyl Benzene	5	NT		33.8		NT		249	D	1,580	D	9,820	D	1,230	D	1,640	D	1,020	D	3,250	D	NT		0.2	U
Isopropylbenzene	5	Base		7.59		NT		23.1	D	58.5	D	330	D	34.5	D	46	JD	63.5	D	94.5	D	NT		0.2	U
Methyl tert-butyl ether (MTBE)	10	NT		0.2	U	NT		2	U	3,680	D	3,580	D	1,050	D	3,520	D	2,710	D	1,150	D	NT		0.2	U
Methylcyclohexane	~	NT		15.5		NT		59.7	D	98	D	892	D	85.5	D	88	D	113	D	100	D	NT		0.2	U
n-Butylbenzene	5	NT		5.63		NT		2	U	5	U	40	U	14	D	20	U	5	U	5	U	NT		0.2	U
n-Propylbenzene	5	NT		17.1		NT		52.6	D	130	D	762	D	101	D	120	D	146	D	208	D	NT		0.2	U
o-Xylene	5	NT		4.56		NT		306	D	1,990	D	12,900	D	2,320	D	2,820	D	1,720	D	5,420	D	NT		0.2	U
p- & m- Xylenes	5	NT		46.7		NT		794	D	4,400	D	28,900	D	4,620	D	5,640	D	3,380	D	11,300	D	NT		0.5	U
p-Isopropyltoluene	5	NT		0.55		NT		3.2	JD	5.25	JD	40	U	5	U	20	U	7	JD	5.25	JD	NT		0.2	U
sec-Butylbenzene	5	NT		2.86		NT		2	U	5	U	40	U	5	U	20	U	8.75	JD	8	JD	NT		0.2	U
Styrene	5	NT		0.2	U	NT		10.4	D	5	U	444	D	5	U	20	U	5	U	5	U	NT		0.2	U
tert-Butyl alcohol (TBA)	~	NT		0.5	U	NT		5	U	12.5	U	100	U	12.5	U	50	U	12.5	U	12.5	U	NT		1.87	J
Tetrachloroethylene	5	NT		0.2	U	NT		2	U	5	U	42	JD	5	U	20	U	5	U	5	U	NT		0.2	U
Toluene	5	NT		7.34		NT		177	D	8,150	D	6,760	D	3,380	D	4,290	D	5,720	D	15,000	D	NT		0.2	U
Trichloroethylene	5	NT		0.56		NT		2	U	5	U	90	JD	5	U	20	U	5	U	5	U	NT		0.2	U
Xylenes, Total	5	NT		51.3		NT		1,100	D	6,410	D	41,800	D	6,940	D	8,460	D	4,940	D	16,800	D	NT		0.6	U
SVOA, 8270 LOW MASTER (µg/L)																									
Dilution Factor				1				1		1		1		10		20		5		5				1	
2,4-Dimethylphenol	50	NT		3.03	U	NT		14.6		33.6		33.1		2.94	U	26		31.2		19.2		NT		2.5	U
2-Methylnaphthalene	~	NT		3.03	U	NT		3.03	U	31.6		27.4		28.4		57.2	JD	23.8		64.4	D	NT		2.5	U
2-Methylphenol	1	NT		3.03	U	NT		3.03	U	19		21.6		2.94	U	14.8		14.2		9.21		NT		2.5	U
3- & 4-Methylphenols	1	NT		3.03	U	NT		6.16		26.7		28.5		29.7		71.4	JD	10.8		12.9		NT		2.5	U
Benzoic acid	~	NT		3.03	U	NT		3.03	U	35		39.6		2.94	U	185	D	49.6	D	76.5	D	NT		2.5	U
Benzyl alcohol	~	NT		3.03	U	NT		3.03	U	2.5	U	2.5	U	2.94	U	2.5	U	2.5	U	2.5	U	NT		2.8	J
Diethyl phthalate	50	NT		3.03	U	NT		3.03	U	2.5	U	2.5	U	2.94	U	2.5	U	2.5	U	2.5	U	NT		3.31	J
Di-n-octyl phthalate	50	NT		3.03	U	NT		3.03	U	2.5	U	2.5	U	2.94	U	2.5	U	10.2		2.5	U	NT		2.5	U
Naphthalene	10	NT		NT		NT		NT		NT		NT		198	D	322	D	NT		NT		NT		NT	
Phenol	1	NT		3.03	U	NT		3.03	U	2.5	U	2.5	U	2.94	U	20.8		2.5	U	2.5	U	NT		2.5	U
SVOA, 8270 SIM MASTER (µg/L)																									
Acenaphthene	20	NT		0.0606	U	NT		0.0606	U	3.51		0.05	U	0.4		0.09		0.13		0.16		NT		0.05	U
Anthracene	50	NT		0.0606	U	NT		0.0606	U	0.05	U	0.05	U	0.176		0.05	U	0.16		0.05	U	NT		0.05	U
Benzo(a)anthracene	0.002	NT		0.0606	U	NT		0.0606	U	0.05	U	0.05	U	0.0706		0.05	U	0.05	U	0.05	U	NT		0.05	U
Benzo(a)pyrene	0.002	NT		0.0606	U	NT		0.0606	U	0.05	U	0.05	U	0.0706		0.05	U	0.05	U	0.05	U	NT		0.05	U
Benzo(b)fluoranthene	0.002	NT		0.0606	U	NT		0.0606	U	0.05	U	0.05	U	0.0588		0.05	U	0.05	U	0.05	U	NT		0.05	U
Bis(2-ethylhexyl)phthalate	5	NT		2.16		NT		0.655		0.5	U	0.5	U	0.588	U	0.67		0.52		0.5	U	NT		0.5	U
Chrysene	0.002	NT		0.0606	U	NT		0.0606	U	0.05	U	0.05	U	0.0706		0.05	U	0.05	U	0.05	U	NT		0.05	U
Fluoranthene	50	NT		0.0606	U	NT		0.0606	U	0.05	U	0.05	U	0.294		0.05	U	0.05	U	0.05	U	NT		0.05	U
Fluorene	50	NT		0.0727		NT		0.0606	U	2.68		0.05	U	0.165		0.15		0.22		0.26		NT		0.05	U
Naphthalene	10	NT		4.96		NT		0.606		NT		NT		NT		NT		NT		NT		NT		0.12	
Phenanthrene	50	NT		0.0606	U	NT		0.0606	U	0.05		0.05	U	0.518		0.23		0.16		0.21		NT		0.05	U
Pyrene	50	NT		0.0606	U	NT		0.0606	U	0.05	U	0.05	U	0.259		0.05	U	0.06		0.05	U	NT		0.05	U

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Baseline Groundwater Analytical Results Summary
714 East 214th Street, Bronx, NY
Langan Project No.: 140115301

Sample Location Sample ID Sampling Date	NYSDEC TOGS Standards and Guidance Values - GA (µg/L)	MW-7B		MW-08		MW-29		MW-40		MW-40D		MW-41		MW-41D		MW-42		MW-42D		MW-43		Field Blank	
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Compound		Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Metals, Target Analyte, ICP (µg/L)																							
Aluminum	~	3,710		2,400		309		241		404		541		12,600		361	U	240		1,130		55.6	U
Barium	1,000	151		143		240		110		333		327		331		386		173		99.5		27.8	U
Calcium	~	97,100		80,100		126,000	B	83,900		116,000	B	116,000	B	89,900		113,000		115,000	B	289,000	B	227	B
Chromium	50	13.3		10.7		5.56	U	5	U	5.56	U	5.56	U	5	U	5.56	U	5.96		7.48		5.56	U
Cobalt	~	6.43		5.08		4.44	U	4	U	4.44	U	4.44	U	4	U	4.44	U	4	U	4	U	4.44	U
Copper	200	20	U	109		22.2	U	54.4		22.2	U	22.2	U	559		20	U	22.2	U	20	U	22.2	U
Iron	~	9,910		5,390		11,600		5,320		13,300		13,400		23,700		11,400		12,400		1,940		278	U
Lead	25	5	U	8.83		5.56	U	6.83		5.56	U	5.56	U	160		5	U	5.56	U	34.7		5.56	U
Magnesium	35,000	20,900		14,400		20,400		3,080		20,800		21,000		25,900		45,500		11,000		84,000		55.6	U
Manganese	300	957		861		837		468		3,680		3,710		2,580		158		4,180		3,020		5.56	U
Nickel	100	12.4		14.1		11.1	U	10	U	11.1	U	11.1	U	77.5		10	U	11.1	U	10	U	11.1	U
Potassium	~	1,320	B	5,050	B	16,300	B	11,900	B	6,280	B	6,340	B	43,000	B	8,680	B	8,400	B	5,040	B	111	B
Sodium	20,000	20,100		30,700		15,900	B	49,400		329,000	B	330,000		185,000		187,000		294,000	B	73,400		712	B
Vanadium	~	11.3		12.1		11.1	U	10	U	11.1	U	83.7		10	U	11.1	U	11.1	U	10	U	11.1	U
Zinc	2,000	41.8		120		56.5		86.4		27.8	U	27.8	U	307		25	U	27.8	U	37.1		27.8	U
Metals, Target Analyte, ICP Dissolved (µg/L)																							
Aluminum	~	50	U	50	U	103		50	U	547		2,350		50	U	50	U	50	U	754		50	U
Barium	1,000	57.4		113		274		115		314		291		55.1		285		120		88		25	U
Calcium	~	89,400		72,300		143,000		81,400		107,000		97,500		55,800		107,000		106,000		87,200		116	
Chromium	50	5	U	5	U	6.25	U	5	U	5	U	7.59		5	U	5	U	5	U	14.6		5	U
Iron	~	250	U	250	U	12,800		250	U	12,300		13,000		256		250	U	11,300		250	U	250	U
Lead	25	5	U	5	U	6.25	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Magnesium	35,000	18,400		12,500		23,500		2,810		19,600		18,200		16,000		46,100		10,300		81,200		50	U
Manganese	300	5.37		765		968		474		3,520		3,210		777		133		3,980		25.7		5	U
Nickel	100	10	U	10	U	12.5	U	10	U	10	U	10	U	13.3		10	U	10	U	10	U	10	U
Potassium	~	963	B	4,070	B	18,500	B	11,600	B	5,900	B	6,080	B	52,900	B	9,580	B	7,810	B	4,820	B	92.8	B
Sodium	20,000	20,400		33,600		16,500		48,500		288,000		267,000		211,000		190,000		259,000		76,200		500	U
Vanadium	~	10	U	10	U	12.5	U	10	U	10	U	10	U	31.8		10	U	10	U	10	U	10	U
Zinc	2,000	29.8		109		39.2		86		30.100		42.6		26.9		32.800		25	U	40.3		25	U
Metals, Target Analyte, ICPMS (µg/L)																							
Antimony	3	1.11	U	1.53		1.27		1.52		1.11	U	1.11	U	1.91		1	U	1.11	U	1.11	U	1.11	U
Arsenic	25	1.11	U	19.6		3.38		7.9		28.3		27.4		17.6		20.1		20.4		13.2		1.11	U
Beryllium	3	0.333	U	1.16		0.333	U	0.396		0.333	U	0.333	U	0.333	U	0.3	U	0.333	U	0.333	U	0.333	U
Cadmium	5	0.556	U	1.96		0.556	U	0.556	U	0.556	U	0.556	U	0.556	U	0.5	U	0.556	U	0.556	U	0.556	U
Selenium	10	1.95		111		1.11	U	21.8		1.11	U	1.11	U	4.4		1	U	1.11	U	27.7		1.11	U
Metals, Target Analyte, ICPMS Dissolved (µg/L)																							
Antimony	3	1	U	1.42		1.11	U	2.17		1.11	U	1.11	U	2.75		1	U	1.11	U	1	U	1.11	U
Arsenic	25	1	U	1.02		3.05		1.15		28.7		27.3		16.8		7.71		19.2		1	U	1.11	U
Selenium	10	1.25		1	U	7.38	B	1		11.1	B	7.38	B	1.58		1	U	9.8	B	9.05		4.6	B
Mercury by 7470/7471 (µg/L)																							
Mercury	0.7	0.2	U	0.2	U	0.2	U	0.2	U	0.2		0.2	U	0.3		0.2		0.2	U	0.2		0.2	U
Mercury, Dissolved (µg/L)																							
Mercury	0.7	0.2	U	0.2	U	0.2	U	0.2	U	0.5		0.6		0.2	U	0.2	U	0.5		0.6		0.2	U
Alkalinity, Total (µg/L)																							
Alkalinity, total	~	280,000		490,000		420,000		300,000		710,000		690,000		600,000		710,000		740,000		640,000		350,000	
Sulfate as SO4 (µg/L)																							
Dilution Factor		5		1		1		1		1		1		1		1		1		20		1	
Sulfate	~	56,300	D	28,000		6,490		40,200		5,450		5,260		2,470		1,000	U	2,050		1,150		1,000	U

NOTES:
~ = This indicates that no regulatory limit has been established for this analyte
B = Analyte found in the analysis batch blank
D = Result is from an analysis that required a dilution
J = Analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated
NT = This indicates the analyte was not a target for this sample
NYSDEC TOGS = New York State Department of Environmental Conservation Technical and Operational Guidance Series
Q = Qualifier Column
U = Analyte not detected at or above the level indicated
µg/L = Microgram per liter

Indicates a detection above reporting limits
Indicates an exceedance of NYSDEC TOGS Standards and Guidance Values - GA