



AMC Engineering PLLC

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June 28, 2023

Mr. Rafi Alam
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, Albany, New York 12233

***Re: Quarterly Groundwater Sampling Report
69-02 Queens Boulevard
46-09 69th Street and 46-10 70th Street Woodside, New York 11377
NYSDEC BCP Number: C241235***

Dear Mr. Alam:

Please find enclosed the Quarterly Groundwater Sampling Report for the above referenced project for the second quarter of 2023 (2Q2023). In accordance with the Site Management Plan (SMP), a round of groundwater sampling was performed on June 16th, 2023, for 19MW9, 20MW10, and 20MW11R.

If you have any questions or comments regarding the attached report, please do not hesitate to contact me.

Very truly yours,
Anjeza Harrington,
Environmental Engineer

69-02 QUEENS BOULEVARD SITE
NYSDEC BCP Number C241235
Project Status Report
First Quarter 2023

Reporting Summary

Report Date:	June 26, 2023
Reporting Period:	2nd Quarter of 2023
Site Status:	Construction of building is complete.
Work Performed this Quarter:	June 16 th , 2023 – Quarterly groundwater samples were collected from the three monitoring wells.
Remediation Status:	No chemical oxidant events were performed during this period.

Monitoring Program Summary

No. of Wells:	3 on-site monitoring wells (19MW9, 20MW10, 20MW11R).
Gauging Frequency:	Quarterly for the three monitoring wells.
Sampling Frequency:	Quarterly for the three monitoring wells (19MW9, 20MW10, and 20MW11R).
Reporting Frequency:	Groundwater Sampling Report (Quarterly).
Groundwater Depth:	7.05 to 7.24 ft (slab grade)
Monitoring Results:	No product was detected within any of the monitoring wells.
Sampling Results:	VOCs were detected above NYSDEC GQS in one of the three monitoring wells sampled during this event.

OXIDANT INJECTIONS:

No chemical oxidant injections were performed during this period. Chemical Oxidant Injections were last performed on September 3, 2020, and June 2, 2021.

LIQUID LEVEL MONITORING:

Depth to water readings were taken from the three monitoring wells with an electronic interface meter prior to purging the wells for sampling. No Liquid Phase Hydrocarbons (LPH) were detected in any of the monitoring wells during this quarter.

A top of casing survey was performed on 4/20/2023 by Control Point Associates Inc. to obtain the new top of casing elevation for the three wells, see **Appendix B**. Groundwater elevations, determined from the depth to water readings and casing elevation, can be found in **Table 1**. The groundwater flow direction was to the north-northeast during this quarter, see **Figure 2**.

GROUNDWATER SAMPLING:

The 2Q2023 groundwater sampling event was performed on June 16th of 2023. The groundwater samples were collected from 19MW9, 20MW10, and 20MW11R in accordance with the low-flow groundwater sampling procedures outlined within the SMP. The location of all site monitoring wells and historical exceedances can be found in **Figure 1**. Copies of the Well Purging-Field Water Quality Measurements Forms are attached as **Appendix A**. The groundwater samples were picked up by laboratory dispatched courier and delivered to Phoenix Environmental Laboratories (Phoenix) of 587 East Middle Turnpike, Manchester, CT 06040, a New York State ELAP-certified environmental laboratory (ELAP Certification No. 11301). The groundwater samples were submitted for laboratory analysis of volatile organic compounds (VOCs) via EPA Method 8260C.

Copies of the laboratory reports can be found in **Appendix C**. The laboratory results are summarized and compared to their appropriate standards/criteria in **Table 2** and to previous sampling events in **Table 3**.

GROUNDWATER SAMPLING RESULTS:

19MW9 – All VOC levels reported for the 2Q2023 sample are equal to or under limits defined by the NYSDEC GQS. Levels of n-Butylbenzene in 1Q2023 were in exceedance (5.4 ug/L) have been reported as non-detect in 2Q2023.

20MW10 – All VOC levels reported for the 2Q2023 sample are equal to or under limits defined by the NYSDEC GQS. Levels of Isopropylbenzene and n-Butylbenzene were reported to be in exceedance (7.4 ug/L and 53 ug/L respectively) in 1Q2023. Both compounds were found to be non-detect in 2Q2023.

20MW11R – 2Q2023 sample results for 1,2,4 – Trimethylbenzene (5.4 ug/L) was reported to be in exceedance of the limits defined by NYSDEC GQS (5.0 ug/L). All other VOC concentrations have been reported to meet or fall under the limits defined by NYSDEC GQS. 1Q2023 sample results reported no exceedances.

GROUNDWATER VOC CONCENTRATION TRENDS:

As shown in **Graphs 1-3**, total VOC concentrations slightly decreased in two of the wells (19MW9 and 20MW10) and slightly increased in one of the wells (20MW11R).

FUTURE PLANS / RECOMMENDATIONS:

On May 19, 2023, the Department responded to the 1Q Groundwater Sampling Report with comments that another round of injection of in-situ chemical oxidation is required to treat the petroleum related VOCs in groundwater. AMC responded that for this Site, additional injection is not recommended due to the asymptotic reduction trend of the concentrations measured since the project started. Recent results confirm that a downward trend is prevalent, and concentrations of VOCs are below NYSDEC GQS with the exception of one single parameter, 1,2,4 TMB, found at 5.4 ppb, on a 5 ppb limit. At this time, we recommend that groundwater to be discontinued, or at least be conducted annually.

TABLES



69-02 Queens Boulevard Site
62-02 Queens Boulevard, Queens, New York

Table 1
Well Survey Data

Depth to Water Readings								
Well No.	Well Diameter (in)	Total Well Depth (ft)	Screened Interval (ft)	Survey Reading (ft)	DTW (ft) 6/16/2023	DTP	PT	GW ELV 6/16/2023
19MW9	2	15.4	4 to 14	27.41	7.24	-	-	20.17
20MW10	2	10.25	3 to 13	27.49	7.05	-	-	20.44
20MW11R	1	8.9	4 to 14	27.44	7.19	-	-	20.25

Table 2
69-02 Queens Boulevard Site
69-02 Queens Boulevard, Queens, New York
Groundwater Analytical Results
Volatile Organic Compounds
2Q2023

Compound	NYSDEC Groundwater Quality Standards µg/L	19MW9		20MW10		20MW11R	
		6/16/2023		6/16/2023		6/16/2023	
		Results	RL	Results	RL	Results	RL
1,1,1,2-Tetrachloroethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,1,1-Trichloroethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,1,2,2-Tetrachloroethane	5	< 0.50	0.50	< 0.50	0.50	< 0.50	0.50
1,1,2-Trichloroethane	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,1-Dichloroethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,1-Dichloroethene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,1-Dichloropropene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2,3-Trichlorobenzene		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2,3-Trichloropropane	0.04	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2,4-Trichlorobenzene		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2,4-Trimethylbenzene	5	< 1.0	1.0	< 1.0	1.0	5.8	1.0
1,2-Dibromo-3-chloropropane	0.04	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2-Dibromoethane	0.0006	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2-Dichlorobenzene		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,2-Dichloroethane	0.6	< 0.60	0.60	< 0.60	0.60	< 0.60	0.60
1,2-Dichloropropane	1	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,3,5-Trimethylbenzene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,3-Dichlorobenzene	3	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,3-Dichloropropane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
1,4-Dichlorobenzene		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
2,2-Dichloropropane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
2-Chlorotoluene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
2-Hexanone	50	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
2-Isopropyltoluene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
4-Chlorotoluene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
4-Methyl-2-pentanone		< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Acetone	50	< 25	25	< 25	25	50	25
Acrylonitrile	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Benzene	1	< 0.70	0.70	< 0.70	0.70	< 0.70	0.70
Bromobenzene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Bromochloromethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Bromodichloromethane	50	< 0.50	0.50	< 0.50	0.50	< 0.50	0.50
Bromoform	50	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Bromomethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Carbon Disulfide		< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Carbon tetrachloride	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Chlorobenzene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Chloroethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Chloroform	7	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Chloromethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
cis-1,2-Dichloroethene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
cis-1,3-Dichloropropene	0.4	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40
Dibromochloromethane	50	< 0.50	0.50	< 0.50	0.50	< 0.50	0.50
Dibromomethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Dichlorodifluoromethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Ethylbenzene	5	< 1.0	1.0	< 1.0	1.0	4.3	1.0
Hexachlorobutadiene	0.5	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40
Isopropylbenzene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
m&p-Xylene		< 1.0	1.0	< 1.0	1.0	3.3	1.0
Methyl ethyl ketone	50	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Methyl t-butyl ether (MTBE)		< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Methylene chloride	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Naphthalene	10	< 1.0	1.0	< 1.0	1.0	10	1.0
n-Butylbenzene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
n-Propylbenzene	5	1.4	1.0	3.8	1.0	1.1	1.0
o-Xylene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
p-Isopropyltoluene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
sec-Butylbenzene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Styrene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
tert-Butylbenzene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Tetrachloroethene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Tetrahydrofuran (THF)	50	< 2.5	2.5	< 2.5	2.5	< 2.5	2.5
Toluene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Total Xylenes	5	< 1.0	1.0	< 1.0	1.0	3.3	1.0
trans-1,2-Dichloroethene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
trans-1,3-Dichloropropene	0.4	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40
trans-1,4-dichloro-2-butene	5	< 5.0	5.0	< 5.0	5.0	< 5.0	5.0
Trichloroethene	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Trichlorofluoromethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Trichlorotrifluoroethane	5	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
Vinyl chloride	2	< 1.0	1.0	< 1.0	1.0	< 1.0	1.0
BTEX		0.00		0.00		7.60	
Total PVOCs		1.40		3.80		21.20	
Total VOCs		1.40		3.80		24.50	

Result Exceeds Criteria

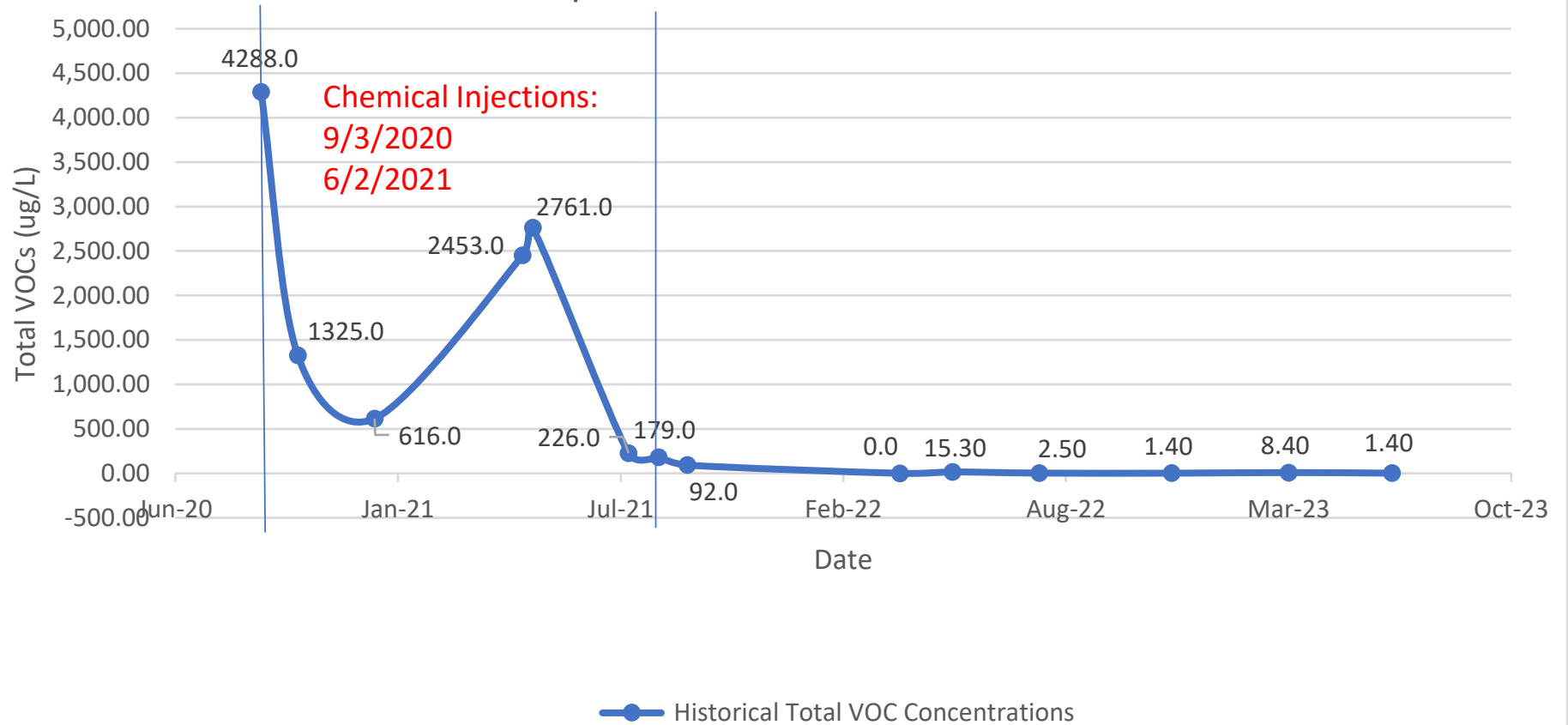
Table 3
69-02 Queens Boulevard Site
69-02 Queens Boulevard, Queens, New York
Groundwater Analytical Results
Volatile Organic Compounds
Aug 2022 - March 2023

Compound	NYSDEC Groundwater Quality Standards	19MW9		19MW9		19MW9		20MW10		20MW10		20MW10		20MW11		20MW11R		20MW11R	
		8/3/2022		11/30/2022		3/15/2023		8/3/2022		11/30/2022		3/15/2023		8/3/2022		11/30/2022		3/15/2023	
		Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL
1,1,1,2-Tetrachloroethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,1,1-Trichloroethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,1,2,2-Tetrachloroethane	5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5
1,1,2-Trichloroethane	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,1-Dichloroethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,1-Dichloroethene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,1-Dichloropropene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2,3-Trichlorobenzene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2,3-Trichloropropane	0.04	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2,4-Trichlorobenzene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2,4-Trimethylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	1.2	1	1.3	1	1.2	1	< 1.0	1	6.8	1	3.1	1
1,2-Dibromo-3-chloropropane	0.004	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2-Dibromoethane	0.0006	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2-Dichlorobenzene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,2-Dichloroethane	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6	< 0.60	0.6
1,2-Dichloropropane	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,3,5-Trimethylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,3-Dichlorobenzene	3	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,3-Dichloropropane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
1,4-Dichlorobenzene		< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
2,2-Dichloropropane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
2-Chlorotoluene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
2-Hexanone	50	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
2-Isopropyltoluene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	1.1	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
4-Chlorotoluene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
4-Methyl-2-pentanone		< 5.0	5	< 5.0	5	< 5.0	5	5.8	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Acetone	50	< 25	25	< 25	25	< 25	25	25	25	< 25	25	< 25	25	< 25	25	< 25	25	< 25	25
Acrylonitrile	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Benzene	1	< 0.70	0.7	< 0.70	0.7	< 0.70	0.7	< 0.70	0.7	< 0.70	0.7	0.91	0.7	< 0.70	0.7	< 0.70	0.7	< 0.70	0.7
Bromobenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Bromochloromethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Bromodichloromethane	50	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5
Bromoform	50	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Bromomethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Carbon Disulfide		< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5	< 5.0	5
Carbon tetrachloride	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Chlorobenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Chloroethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Chloroform	7	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Chloromethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
cis-1,2-Dichloroethene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
cis-1,3-Dichloropropene	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4	< 0.40	0.4
Dibromochloromethane	50	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5	< 0.50	0.5
Dibromomethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Dichlorodifluoromethane	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1
Ethylbenzene	5	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0	1	< 1.0									

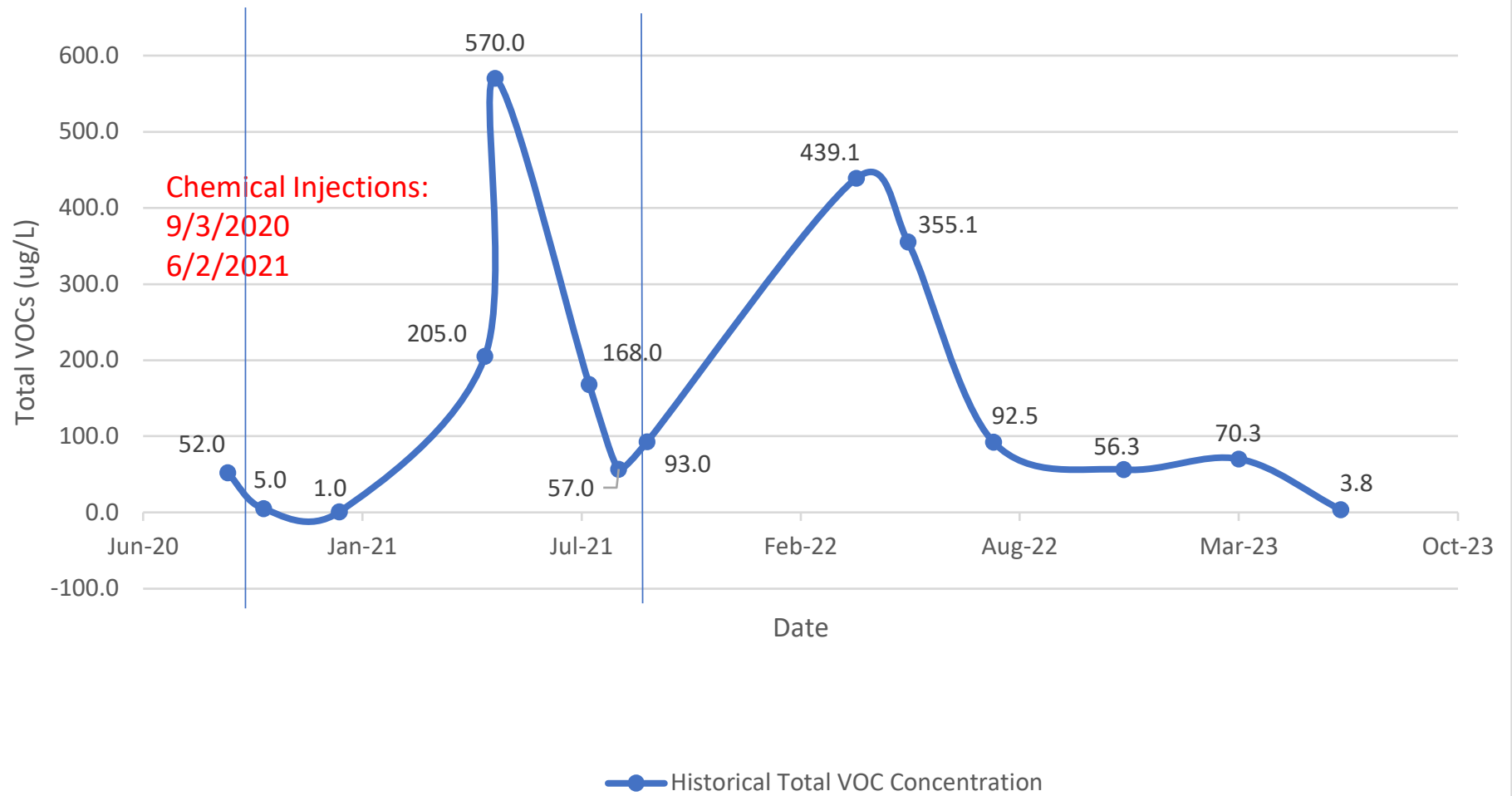
GRAPHS



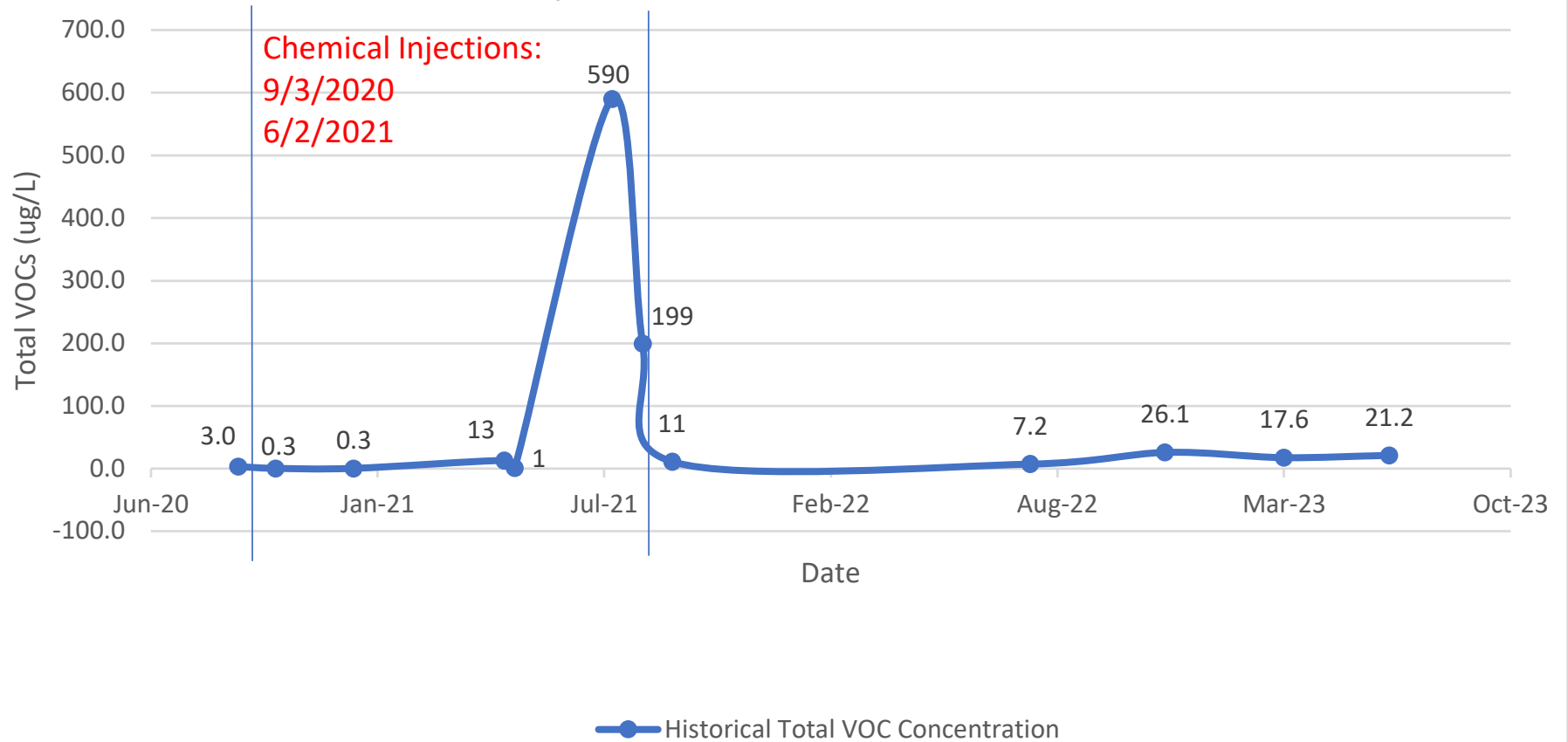
Graph 1
19MW9 VOCs
69-02 Queens Blvd, Queens NY
September 2020 - June 2023



Graph 2
20MW10 VOCs
69-02 Queens Blvd, Queens NY
September 2020 - June 2023

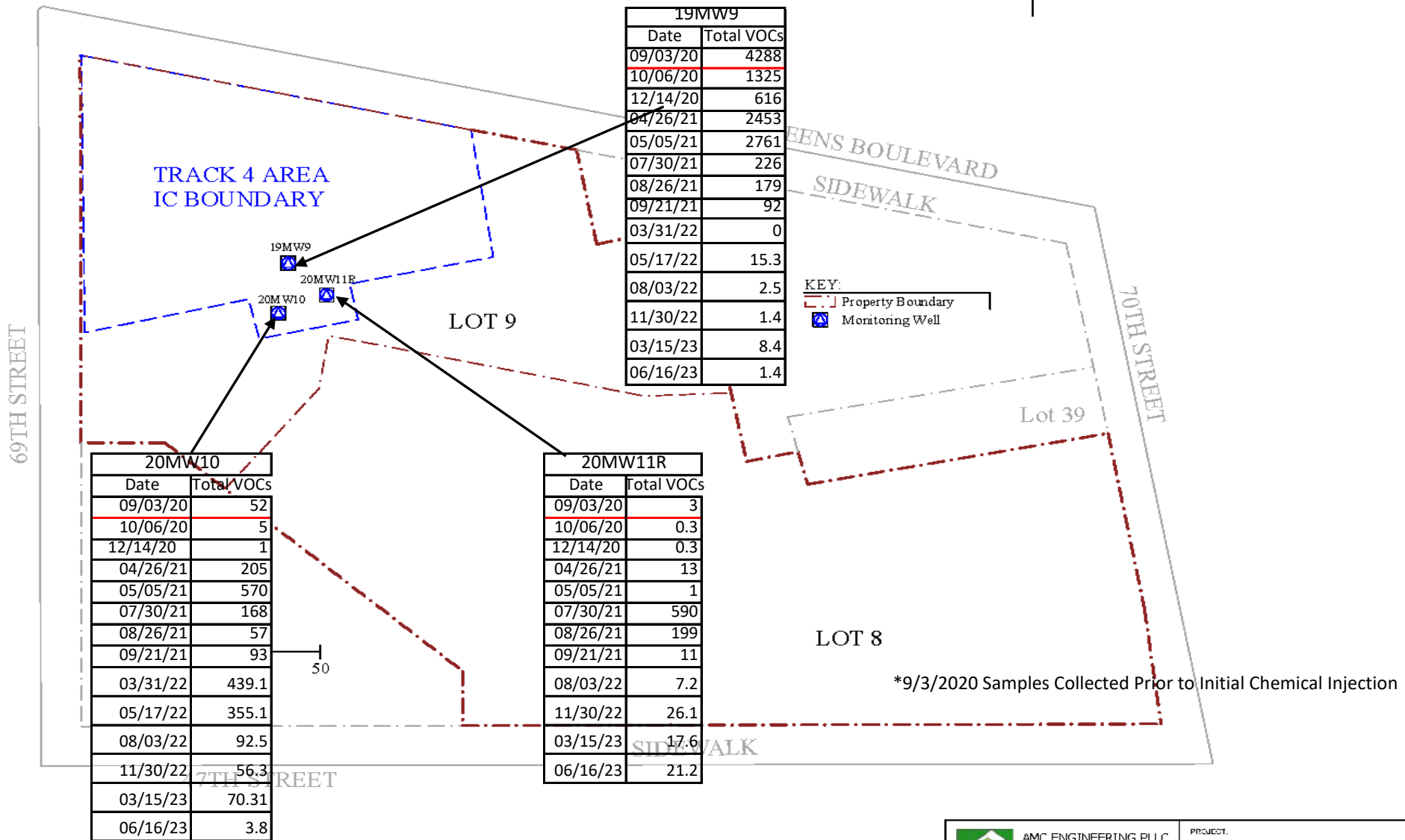


Graph 3
20MW11R VOCs
69-02 Queens Blvd, Queens NY
September 2020 - June 2023



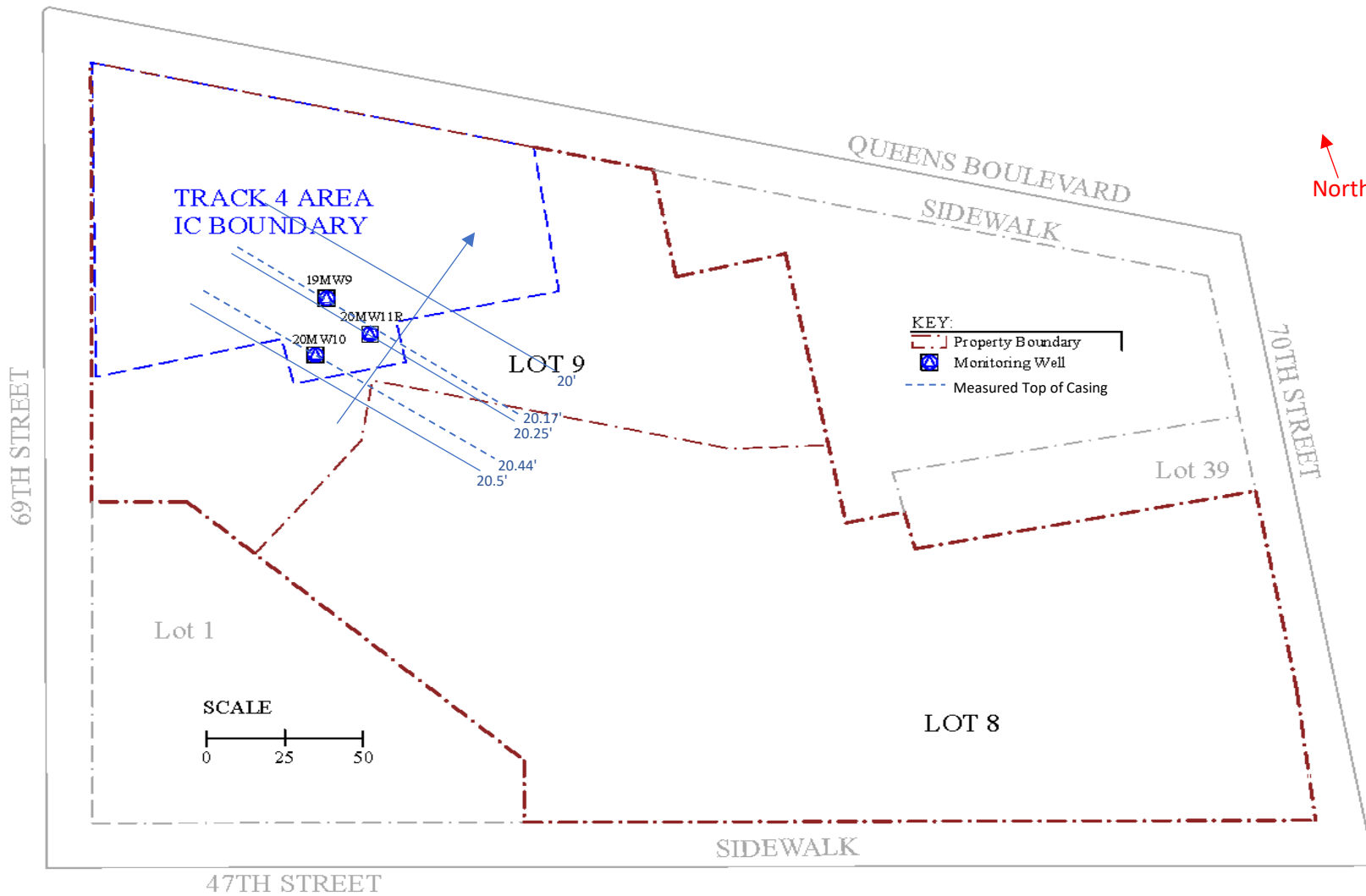
FIGURES





 AMC ENGINEERING PLLC 18-36 42ND STREET ASTORIA, NY 11105 718-545-0474	PROJECT: 69-02 QUEENS BOULEVARD 49-06 60TH STREET/46-10 70TH STREET, WOODSIDE, NY	
	DATE: 4/24/2023	DRAWN BY: AE

FILE:
FIGURE 2: GROUNDWATER CONTOUR



	AMC ENGINEERING PLLC 18-36 42ND STREET ASTORIA, NY 11105 718-545-0474	PROJECT: 69-02 QUEENS BOULEVARD 49-06 60TH STREET/46-10 70TH STREET, WOODSIDE, NY
DATE: 4/24/2023	DRAWN BY: AE	FILE: FIGURE 2: GROUNDWATER CONTOUR

APPENDIX A

WELL PURGING-FIELD WATER QUALITY MEASUREMENTS FORMS



AMC Engineering PLLC18-36 42nd Street

Astoria, NY 11105

Phone: (718) 545-0474

Well ID: 19MW9
Well Depth (from TOC): 15.4 ft
Static Water Level (from TOC): 7.24 ft After: 13.5 ft
Height of Water in Well: 8.16 ft
Gallons of Water per Well Volume: 1.332 gal
Flow Rate: 0.07 gal/min

Date: 16-Jun-23
Equipment: Horiba and peristaltic pump

Field Sampler: Jonathan Yi

Time	Temp C	pH	pHmV	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)	Salinity (ppt)	Specific gravity (σ)	Pump Rate	Gal Removed	Comments
11:23	19.6	9.53	-147	23	2.09	1000	10.45	1.34	1.07	0	0.07	0.35	Clear, some silt
11:28	18.29	9.09	-121	23	2.13	1000	12.1	1.36	1.08	0	0.07	0.35	Clear, some silt
11:33	17.98	9.18	-126	34	2.1	1000	12.62	1.35	1.07	0	0.07	0.35	Clear, some silt
11:38	18.01	9.21	-128	39	2.07	1000	12.4	1.32	1.05	0	0.07	0.35	Clear, some silt
11:43	17.6	9.23	-129	40	2.07	630	12.61	1.32	1.05	0	0.07	0.35	Clear, some silt
11:48	17.59	9.24	-129	39	2.07	709	12.37	1.32	1.05	0	0.07	0.35	Clear, some silt
11:53	17.58	9.23	-129	38	2.06	1000	12.24	1.32	1.05	0	0.07	0.35	Clear, some silt
11:58	17.59	9.24	-129	37	2.06	1000	12.18	1.32	1.05	0	0.07	0.35	Clear, some silt

Other Notes / Comments:

Note: 250 mL = 0.07 gallons

AMC Engineering PLLC18-36 42nd Street

Astoria, NY 11105

Phone: (718) 545-0474

Well ID: 20MW10
Well Depth (from TOC): 10.25 ft
Static Water Level (from TOC): 7.05 ft After: 9.15 ft
Height of Water in Well: 3.2 ft
Gallons of Water per Well Volume: 0.522 gal
Flow Rate: 0.07 gal/min

Date: 16-Jun-23
Equipment: Horiba and peristaltic pump

Field Sampler: Jonathan Yi

Time	Temp C	pH	pHmV	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)	Salinity (ppt)	Specific gravity (σ _t)	Pump Rate	Gal Removed	Comments
12:35	17.91	12.54	-320	-74	2.05	471	7.04	1.31	1.04	0	0.07	0.35	Clear, some silt
12:40	17.92	12.49	-317	-102	2.1	242	10.4	1.34	1.07	0	0.07	0.35	Clear, some silt
12:45	17.97	12.48	-317	-101	2.09	224	10.53	1.34	1.07	0	0.07	0.35	Clear, some silt
12:50	18.04	12.46	-316	-99	2.08	203	10.22	1.33	1.05	0	0.07	0.35	Clear, some silt
12:55	18.08	12.47	-316	-96	2.07	189	10.38	1.33	1.06	0	0.07	0.35	Clear, some silt
13:00	18.18	12.48	-314	-87	2.05	153	10.46	1.33	1.04	0	0.07	0.35	Clear, some silt
13:05	18.19	12.42	-313	-87	2.05	225	10.35	1.31	1.04	0	0.07	0.35	Clear, some silt
13:10	18.21	12.44	-314	-83	2.04	188	10.55	1.30	1.04	0	0.07	0.35	Clear, some silt

Other Notes / Comments:

Note: 250 mL = 0.07 gallons

AMC Engineering PLLC18-36 42nd Street

Astoria, NY 11105

Phone: (718) 545-0474

Well ID: 20MW11R
Well Depth (from TOC): 8.9 ft
Static Water Level (from TOC): 7.19 ft After: 8.22 ft
Height of Water in Well: 1.71 ft
Gallons of Water per Well Volume: 0.279 gal
Flow Rate: 0.07 gal/min

Date: 16-Jun-23
Equipment: Horiba and peristaltic pump

Field Sampler: Jonathan Yi

Time	Temp C	pH	pHmV	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)	Salinity (ppt)	Specific gravity (ot)	Pump Rate	Gal Removed	Comments
2:00	18.36	11.48	-259	7	0.004	504	12.29	0.003	0	0	0.07	0.35	Cloudy
2:05	18.23	11.12	-238	37	0.004	526	11.73	0.003	0	0	0.07	0.35	Cloudy
2:10	18.17	11.06	-235	43	0.004	527	11.66	0.002	0	0	0.07	0.35	Cloudy
2:15	18.12	11.01	-231	49	0.004	526	11.61	0.003	0	0	0.07	0.35	Cloudy
2:20	18.06	10.91	-226	56	0.003	525	11.86	0.002	0	0	0.07	0.35	Cloudy
2:25	18.06	10.91	-226	56	0.003	525	11.86	0.002	0	0	0.07	0.35	Cloudy

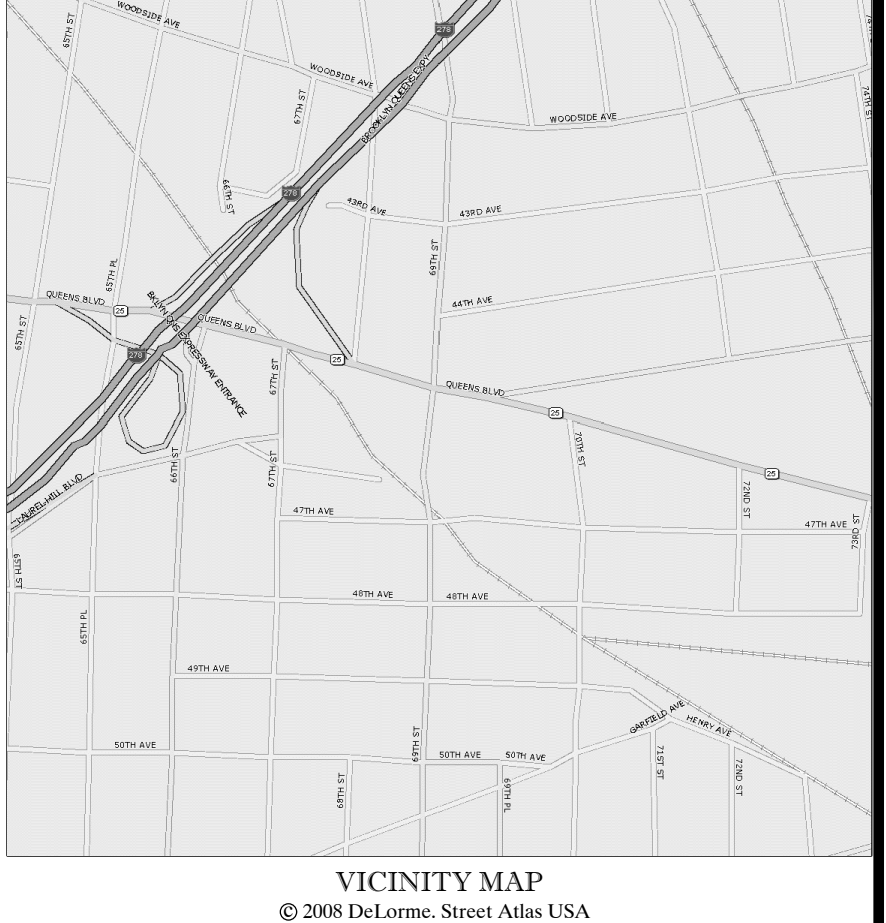
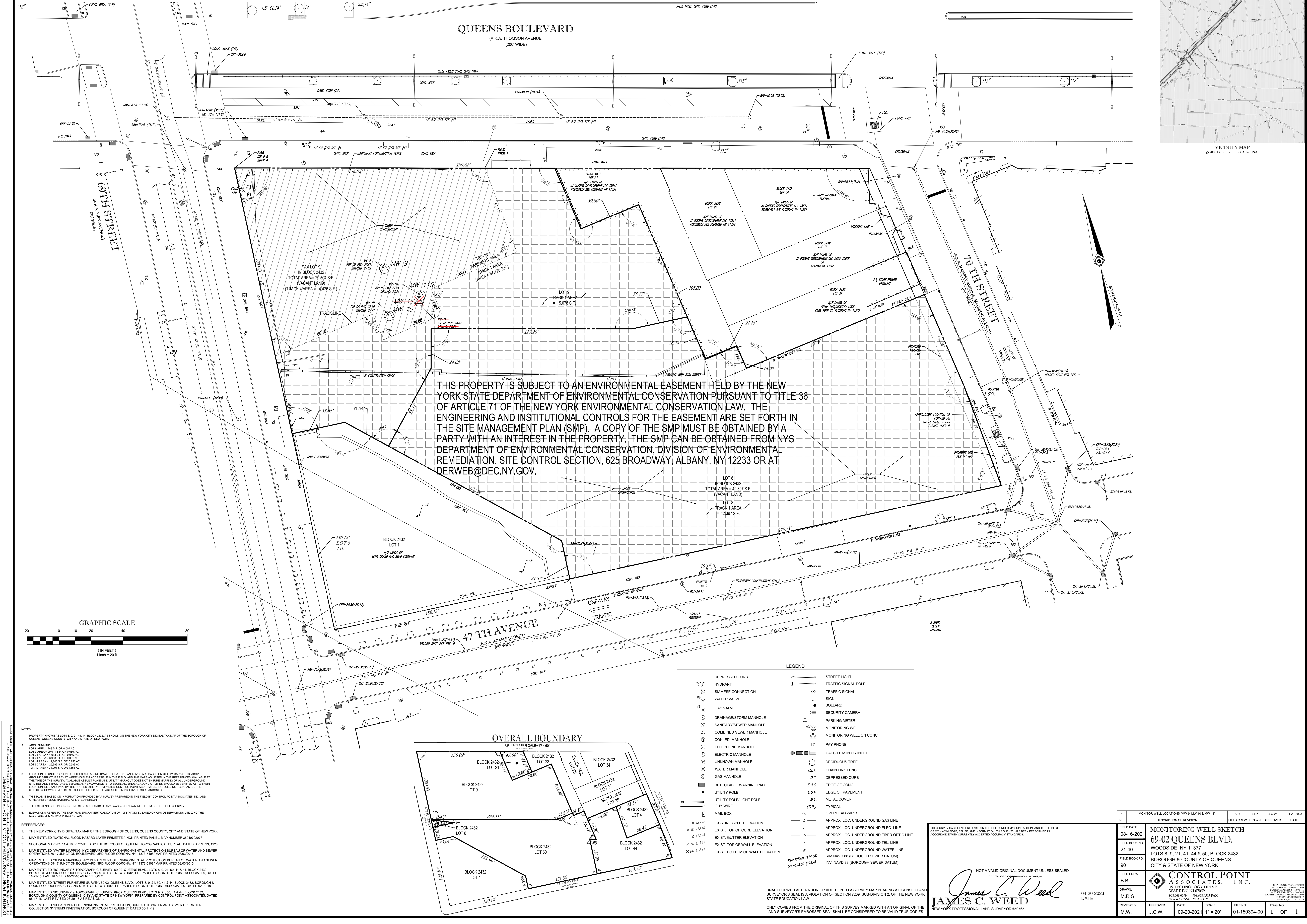
Other Notes / Comments:

Note: 250 mL = 0.07 gallons

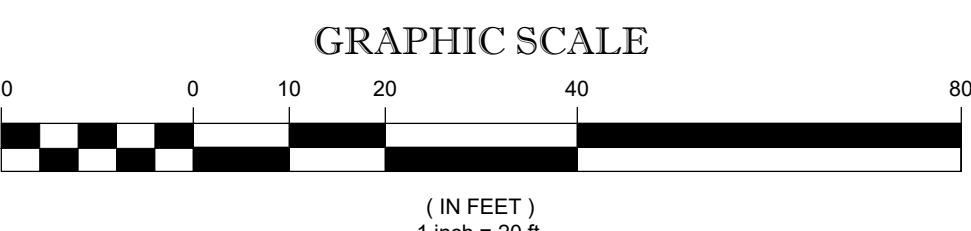
APPENDIX B

2023 Monitoring Well Survey

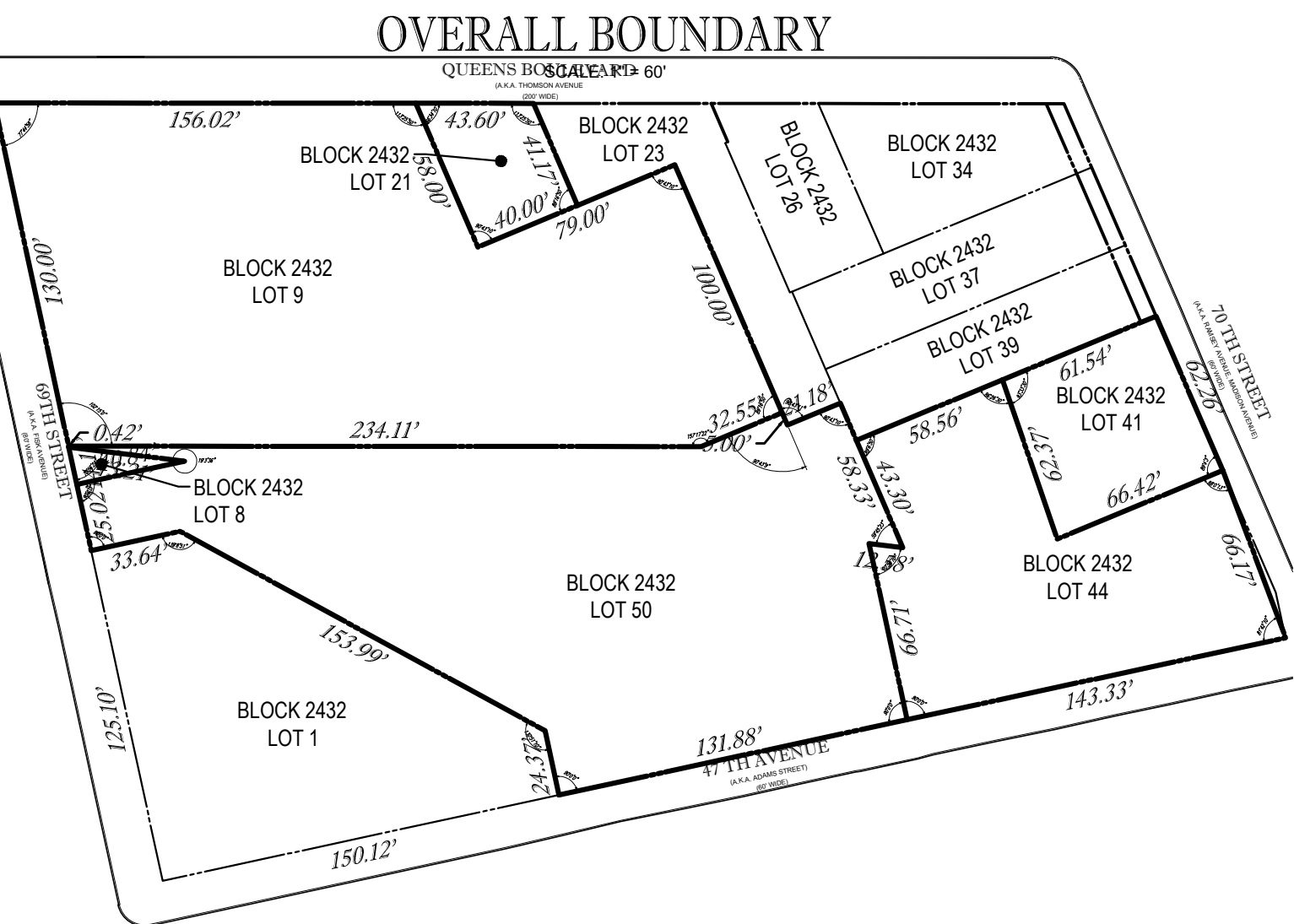




THIS PROPERTY IS SUBJECT TO AN ENVIRONMENTAL EASEMENT HELD BY THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION PURSUANT TO TITLE 36 OF ARTICLE 71 OF THE NEW YORK ENVIRONMENTAL CONSERVATION LAW. THE ENGINEERING AND INSTITUTIONAL CONTROLS FOR THE EASEMENT ARE SET FORTH IN THE SITE MANAGEMENT PLAN (SMP). A COPY OF THE SMP MUST BE OBTAINED BY A PARTY WITH AN INTEREST IN THE PROPERTY. THE SMP CAN BE OBTAINED FROM NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION, DIVISION OF ENVIRONMENTAL REMEDIATION, SITE CONTROL SECTION, 625 BROADWAY, ALBANY, NY 12233 OR AT DERWEB@DEC.NY.GOV.



LEGEND	
	DEPRESSED CURB
	HYDRANT
	SIAMESE CONNECTION
	WATER VALVE
	GAS VALVE
	DRAINAGE/STORM MANHOLE
	SANITARY/SEWER MANHOLE
	COMBINED SEWER MANHOLE
	CON. ED. MANHOLE
	TELEPHONE MANHOLE
	ELECTRIC MANHOLE
	UNKNOWN MANHOLE
	WATER MANHOLE
	GAS MANHOLE
	DETECTABLE WARNING PAD
	UTILITY POLE
	UTILITY POLE/LIGHT POLE
	GUY WIRE
	MAIL BOX
	EXISTING SPOT ELEVATION
	EXIST. TOP OF CURB ELEVATION
	EXIST. GUTTER ELEVATION
	EXIST. TOP OF WALL ELEVATION
	EXIST. BOTTOM OF WALL ELEVATION
	STREET LIGHT
	TRAFFIC SIGNAL POLE
	TRAFFIC SIGNAL
	SIGN
	BOLLARD
	SECURITY CAMERA
	PARKING METER
	MONITORING WELL
	MONITORING WELL ON CONC.
	PAY PHONE
	CATCH BASIN OR INLET
	DECIDUOUS TREE
	CHAIN LINK FENCE
	DEPRESSED CURB
	EDGE OF CONC.
	EDGE OF PAVEMENT
	METAL COVER
	TYPICAL
	OVERHEAD WIRES
	APPROX. LOC. UNDERGROUND GAS LINE
	APPROX. LOC. UNDERGROUND ELEC. LINE
	APPROX. LOC. UNDERGROUND FIBER OPTIC LINE
	APPROX. LOC. UNDERGROUND TEL. LINE
	APPROX. LOC. UNDERGROUND WATER LINE
	RIM NAVD 88 (BOROUGH SEWER DATUM)
	INV. NAVD 88 (BOROUGH SEWER DATUM)



NOTES:
1. PROPERTY SHOWN AS LOTS 8, 9, 21, 41, 44, BLOCK 2432, AS SHOWN ON THE NEW YORK CITY DIGITAL TAX MAP OF THE BOROUGH OF QUEENS, QUEENS COUNTY, CITY AND STATE OF NEW YORK.
2. AREA SUMMARY:
LOT 8 AREA = 338 S.F. OR 0.007 AC.
LOT 9 AREA = 29,511 S.F. OR 0.668 AC.
LOT 21 AREA = 1,383 S.F. OR 0.031 AC.
LOT 41 AREA = 3,383 S.F. OR 0.077 AC.
LOT 44 AREA = 11,343 S.F. OR 0.259 AC.
TOTAL AREA = 25,000 S.F. OR 0.576 AC.
3. LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE. LOCATIONS AND SIZES ARE BASED ON UTILITY MARK-OUTS ABOVE GROUND STRUCTURES THAT WERE VISIBLE IN THE FIELD AND THE MAPS AS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. AVAILABLE ASBESTOS PLANS AND UTILITY MARK-OUTS DOES NOT ENSURE MAPPING OF ALL UNDERGROUND UTILITIES AND STRUCTURES. BEFORE ANY EXCAVATION TO BEGIN, ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE AND TYPE BY THE PROPER UTILITY COMPANIES. CONTROL POINT ASSOCIATES, INC. DOES NOT GUARANTEE THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED.
4. THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD BY CONTROL POINT ASSOCIATES, INC. AND OTHER REFERENCE MATERIAL AS LISTED HEREON.
5. THE EXISTENCE OF UNDERGROUND STORAGE TANKS, IF ANY, WAS NOT KNOWN AT THE TIME OF THE FIELD SURVEY.
6. ELEVATIONS REFER TO THE NORTH AMERICAN DATUM OF 1988 (NAVD88), BASED ON GPS OBSERVATIONS UTILIZING THE KEYSTONE VRS NETWORK (KEYNETGPS).
REFERENCES:
1. THE NEW YORK CITY DIGITAL TAX MAP OF THE BOROUGH OF QUEENS, QUEENS COUNTY, CITY AND STATE OF NEW YORK.
2. MAP ENTITLED "NATIONAL FLOOD HAZARD LAYER FRIMETTE" - NON PRINTED PANEL, MAP NUMBER 360470207F.
3. SECTIONAL MAP NO. 11 & 16, PROVIDED BY THE BOROUGH OF QUEENS TOPOGRAPHICAL BUREAU, DATED: APRIL 23, 1920.
4. MAP ENTITLED "WATER MAPPING, NYC DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER AND SEWER OPERATIONS 50-17 JUNCTION BOULEVARD, 3RD FLOOR CORONA, NY 11373-5108" MAP PRINTED 08/03/2015.
5. MAP ENTITLED "SEWER MAPPING, NYC DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER AND SEWER OPERATIONS 50-17 JUNCTION BOULEVARD, 3RD FLOOR CORONA, NY 11373-5108" MAP PRINTED 08/03/2015.
6. MAP ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY, 69-02 QUEENS BLVD., LOTS 8, 9, 21, 50, 41 & 44, BLOCK 2432, BOROUGH OF QUEENS, CITY AND STATE OF NEW YORK", PREPARED BY CONTROL POINT ASSOCIATES, DATED 02-20-18.
7. MAP ENTITLED "STREET FURNITURE SURVEY, 69-02 QUEENS BLVD., LOTS 8, 9, 21, 50, 41 & 44, BLOCK 2432, BOROUGH OF QUEENS, CITY AND STATE OF NEW YORK", PREPARED BY CONTROL POINT ASSOCIATES, DATED 05-17-18, LAST REVISED 05-25-18 AS REVISION 1.
8. MAP ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY, 69-02 QUEENS BLVD., LOTS 8, 9, 21, 50, 41 & 44, BLOCK 2432, BOROUGH OF QUEENS, CITY AND STATE OF NEW YORK", PREPARED BY CONTROL POINT ASSOCIATES, DATED 05-17-18, LAST REVISED 05-25-18 AS REVISION 1.
9. MAP ENTITLED "DEPARTMENT OF ENVIRONMENTAL PROTECTION, BUREAU OF WATER AND SEWER OPERATION, COLLECTION SYSTEMS INVESTIGATION, BOROUGH OF QUEENS", DATED 05-11-18.

NOT A VALID ORIGINAL DOCUMENT UNLESS SEALED

James C. Weed

JAMES C. WEED

NEW YORK PROFESSIONAL LAND SURVEYOR #00765

1	MONITOR WELL LOCATIONS (MW-8, MW-10 & MW-11)	K.R.	J.L.K.	J.C.W.	04-20-2023
No.	DESCRIPTION OF REVISION	FIELD CREW	DRAWN	APPROVED	DATE
FIELD DATE	08-16-2021	MONITORING WELL SKETCH			
FIELD BOOKING	21-40	69-02 QUEENS BLVD.			
FIELD BOOK PS	90	WOODSIDE, NY 11377			
FIELD CREW	B.B.	LOTS 8, 9, 21, 41, 44 & 50, BLOCK 2432			
DRAWN	M.R.G.	BOROUGH & COUNTY OF QUEENS			
REVIEWED	M.W.	CITY & STATE OF NEW YORK			
APPROVED	J.C.W.	DATE	09-20-2021	SCALE	1" = 20'
FILE NO.	01-150394-00	DWG. NO.	1	OF	1

APPENDIX C

LABORATORY REPORTS





Monday, June 26, 2023

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

Project ID: 69-02 QUEENS BOULEVARD, QUEENS
SDG ID: GCO32967
Sample ID#s: CO32967 - CO32970

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,

A handwritten signature in black ink, appearing to read "Phyllis Shiller".

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
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



Sample Id Cross Reference

June 26, 2023

SDG I.D.: GCO32967

Project ID: 69-02 QUEENS BOULEVARD, QUEENS

Client Id	Lab Id	Matrix
19MW9	CO32967	GROUND WATER
20MW10	CO32968	GROUND WATER
20MW11R	CO32969	GROUND WATER
TRIP BLANK	CO32970	GROUND WATER



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



Analysis Report

June 26, 2023

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

Sample Information

Matrix: GROUND WATER
Location Code: AMC-ENG
Rush Request: Standard
P.O.#:

Custody Information

Collected by:
Received by: CP
Analyzed by: see "By" below

Date

06/16/23
06/20/23

Time

12:00
17:28

Laboratory Data

SDG ID: GCO32967
Phoenix ID: CO32967

Project ID: 69-02 QUEENS BOULEVARD, QUEENS
Client ID: 19MW9

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1	06/21/23	MH	SW8260C
1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,1-Dichloroethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,1-Dichloroethene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,1-Dichloropropene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2-Dibromoethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2-Dichloroethane	ND	0.60	ug/L	1	06/21/23	MH	SW8260C
1,2-Dichloropropane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,3-Dichloropropane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
2,2-Dichloropropane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
2-Chlorotoluene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
2-Hexanone	ND	5.0	ug/L	1	06/21/23	MH	SW8260C
2-Isopropyltoluene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
4-Chlorotoluene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
4-Methyl-2-pentanone	ND	5.0	ug/L	1	06/21/23	MH	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Acetone	ND	25	ug/L	1	06/21/23	MH	SW8260C
Acrylonitrile	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Benzene	ND	0.70	ug/L	1	06/21/23	MH	SW8260C
Bromobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Bromochloromethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Bromodichloromethane	ND	0.50	ug/L	1	06/21/23	MH	SW8260C
Bromoform	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Bromomethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Carbon Disulfide	ND	5.0	ug/L	1	06/21/23	MH	SW8260C
Carbon tetrachloride	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Chlorobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Chloroethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Chloroform	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Chloromethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
cis-1,2-Dichloroethene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
cis-1,3-Dichloropropene	ND	0.40	ug/L	1	06/21/23	MH	SW8260C
Dibromochloromethane	ND	0.50	ug/L	1	06/21/23	MH	SW8260C
Dibromomethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Dichlorodifluoromethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Ethylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Hexachlorobutadiene	ND	0.40	ug/L	1	06/21/23	MH	SW8260C
Isopropylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
m&p-Xylene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Methyl ethyl ketone	ND	5.0	ug/L	1	06/21/23	MH	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Methylene chloride	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Naphthalene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
n-Butylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
n-Propylbenzene	1.4	1.0	ug/L	1	06/21/23	MH	SW8260C
o-Xylene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
p-Isopropyltoluene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
sec-Butylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Styrene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
tert-Butylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Tetrachloroethene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Tetrahydrofuran (THF)	ND	2.5	ug/L	1	06/21/23	MH	SW8260C
Toluene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Total Xylenes	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
trans-1,2-Dichloroethene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
trans-1,3-Dichloropropene	ND	0.40	ug/L	1	06/21/23	MH	SW8260C
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	1	06/21/23	MH	SW8260C
Trichloroethene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Trichlorofluoromethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Trichlorotrifluoroethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Vinyl chloride	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
<u>QA/QC Surrogates</u>							
% 1,2-dichlorobenzene-d4	101		%	1	06/21/23	MH	70 - 130 %
% Bromofluorobenzene	96		%	1	06/21/23	MH	70 - 130 %
% Dibromofluoromethane	99		%	1	06/21/23	MH	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Toluene-d8	96		%	1	06/21/23	MH	70 - 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

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

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

June 26, 2023

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



Analysis Report

June 26, 2023

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

Sample Information

Matrix: GROUND WATER
Location Code: AMC-ENG
Rush Request: Standard
P.O.#:

Custody Information

Collected by:
Received by: CP
Analyzed by: see "By" below

Date

06/16/23
06/20/23

Time

14:00
17:28

Laboratory Data

SDG ID: GCO32967
Phoenix ID: CO32968

Project ID: 69-02 QUEENS BOULEVARD, QUEENS
Client ID: 20MW10

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
<u>Volatiles</u>							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1	06/21/23	MH	SW8260C
1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,1-Dichloroethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,1-Dichloroethene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,1-Dichloropropene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2-Dibromoethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2-Dichloroethane	ND	0.60	ug/L	1	06/21/23	MH	SW8260C
1,2-Dichloropropane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,3-Dichloropropane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
2,2-Dichloropropane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
2-Chlorotoluene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
2-Hexanone	ND	5.0	ug/L	1	06/21/23	MH	SW8260C
2-Isopropyltoluene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
4-Chlorotoluene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
4-Methyl-2-pentanone	ND	5.0	ug/L	1	06/21/23	MH	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Acetone	ND	25	ug/L	1	06/21/23	MH	SW8260C
Acrylonitrile	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Benzene	ND	0.70	ug/L	1	06/21/23	MH	SW8260C
Bromobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Bromochloromethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Bromodichloromethane	ND	0.50	ug/L	1	06/21/23	MH	SW8260C
Bromoform	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Bromomethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Carbon Disulfide	ND	5.0	ug/L	1	06/21/23	MH	SW8260C
Carbon tetrachloride	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Chlorobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Chloroethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Chloroform	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Chloromethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
cis-1,2-Dichloroethene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
cis-1,3-Dichloropropene	ND	0.40	ug/L	1	06/21/23	MH	SW8260C
Dibromochloromethane	ND	0.50	ug/L	1	06/21/23	MH	SW8260C
Dibromomethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Dichlorodifluoromethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Ethylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Hexachlorobutadiene	ND	0.40	ug/L	1	06/21/23	MH	SW8260C
Isopropylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
m&p-Xylene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Methyl ethyl ketone	ND	5.0	ug/L	1	06/21/23	MH	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Methylene chloride	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Naphthalene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
n-Butylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
n-Propylbenzene	3.8	1.0	ug/L	1	06/21/23	MH	SW8260C
o-Xylene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
p-Isopropyltoluene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
sec-Butylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Styrene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
tert-Butylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Tetrachloroethene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Tetrahydrofuran (THF)	ND	2.5	ug/L	1	06/21/23	MH	SW8260C
Toluene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Total Xylenes	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
trans-1,2-Dichloroethene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
trans-1,3-Dichloropropene	ND	0.40	ug/L	1	06/21/23	MH	SW8260C
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	1	06/21/23	MH	SW8260C
Trichloroethene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Trichlorofluoromethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Trichlorotrifluoroethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Vinyl chloride	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
<u>QA/QC Surrogates</u>							
% 1,2-dichlorobenzene-d4	101		%	1	06/21/23	MH	70 - 130 %
% Bromofluorobenzene	99		%	1	06/21/23	MH	70 - 130 %
% Dibromofluoromethane	97		%	1	06/21/23	MH	70 - 130 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Toluene-d8	97		%	1	06/21/23	MH	70 - 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

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

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

June 26, 2023

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



Analysis Report

June 26, 2023

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

Sample Information

Matrix: GROUND WATER
Location Code: AMC-ENG
Rush Request: Standard
P.O.#:

Custody Information

Collected by:
Received by: CP
Analyzed by: see "By" below

Date

06/16/23
06/20/23

Time

16:00
17:28

Laboratory Data

SDG ID: GCO32967
Phoenix ID: CO32969

Project ID: 69-02 QUEENS BOULEVARD, QUEENS
Client ID: 20MW11R

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
<u>Volatiles</u>							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1	06/21/23	MH	SW8260C
1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,1-Dichloroethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,1-Dichloroethene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,1-Dichloropropene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2,4-Trimethylbenzene	5.8	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2-Dibromoethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2-Dichloroethane	ND	0.60	ug/L	1	06/21/23	MH	SW8260C
1,2-Dichloropropane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,3-Dichloropropane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
2,2-Dichloropropane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
2-Chlorotoluene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
2-Hexanone	ND	5.0	ug/L	1	06/21/23	MH	SW8260C
2-Isopropyltoluene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
4-Chlorotoluene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
4-Methyl-2-pentanone	ND	5.0	ug/L	1	06/21/23	MH	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Acetone	50	S 25	ug/L	5	06/22/23	MH	SW8260C
Acrylonitrile	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Benzene	ND	0.70	ug/L	1	06/21/23	MH	SW8260C
Bromobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Bromochloromethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Bromodichloromethane	ND	0.50	ug/L	1	06/21/23	MH	SW8260C
Bromoform	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Bromomethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Carbon Disulfide	ND	5.0	ug/L	1	06/21/23	MH	SW8260C
Carbon tetrachloride	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Chlorobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Chloroethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Chloroform	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Chloromethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
cis-1,2-Dichloroethene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
cis-1,3-Dichloropropene	ND	0.40	ug/L	1	06/21/23	MH	SW8260C
Dibromochloromethane	ND	0.50	ug/L	1	06/21/23	MH	SW8260C
Dibromomethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Dichlorodifluoromethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Ethylbenzene	4.3	1.0	ug/L	1	06/21/23	MH	SW8260C
Hexachlorobutadiene	ND	0.40	ug/L	1	06/21/23	MH	SW8260C
Isopropylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
m&p-Xylene	3.3	1.0	ug/L	1	06/21/23	MH	SW8260C
Methyl ethyl ketone	ND	5.0	ug/L	1	06/21/23	MH	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Methylene chloride	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Naphthalene	10	1.0	ug/L	1	06/21/23	MH	SW8260C
n-Butylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
n-Propylbenzene	1.1	1.0	ug/L	1	06/21/23	MH	SW8260C
o-Xylene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
p-Isopropyltoluene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
sec-Butylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Styrene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
tert-Butylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Tetrachloroethene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Tetrahydrofuran (THF)	ND	2.5	ug/L	1	06/21/23	MH	SW8260C
Toluene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Total Xylenes	3.3	1.0	ug/L	1	06/21/23	MH	SW8260C
trans-1,2-Dichloroethene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
trans-1,3-Dichloropropene	ND	0.40	ug/L	1	06/21/23	MH	SW8260C
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	1	06/21/23	MH	SW8260C
Trichloroethene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Trichlorofluoromethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Trichlorotrifluoroethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Vinyl chloride	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
<u>QA/QC Surrogates</u>							
% 1,2-dichlorobenzene-d4	101		%	1	06/21/23	MH	70 - 130 %
% Bromofluorobenzene	98		%	1	06/21/23	MH	70 - 130 %
% Dibromofluoromethane	100		%	1	06/21/23	MH	70 - 130 %

1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Toluene-d8	96		%	1	06/21/23	MH	70 - 130 %
% 1,2-dichlorobenzene-d4 (5x)	99		%	5	06/22/23	MH	70 - 130 %
% Bromofluorobenzene (5x)	96		%	5	06/22/23	MH	70 - 130 %
% Dibromofluoromethane (5x)	102		%	5	06/22/23	MH	70 - 130 %
% Toluene-d8 (5x)	96		%	5	06/22/23	MH	70 - 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

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

S - Laboratory solvent, contamination is possible.

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

June 26, 2023

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



Analysis Report

June 26, 2023

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

Sample Information

Matrix: GROUND WATER
Location Code: AMC-ENG
Rush Request: Standard
P.O.#:

Custody Information

Collected by:
Received by: CP
Analyzed by: see "By" below

Date

06/16/23

Time

17:28

Laboratory Data

SDG ID: GCO32967
Phoenix ID: CO32970

Project ID: 69-02 QUEENS BOULEVARD, QUEENS
Client ID: TRIP BLANK

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,1,1-Trichloroethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1	06/21/23	MH	SW8260C
1,1,2-Trichloroethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,1-Dichloroethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,1-Dichloroethene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,1-Dichloropropene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2,3-Trichloropropane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2,4-Trimethylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2-Dibromoethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2-Dichlorobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,2-Dichloroethane	ND	0.60	ug/L	1	06/21/23	MH	SW8260C
1,2-Dichloropropane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,3,5-Trimethylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,3-Dichlorobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,3-Dichloropropane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
1,4-Dichlorobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
2,2-Dichloropropane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
2-Chlorotoluene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
2-Hexanone	ND	5.0	ug/L	1	06/21/23	MH	SW8260C
2-Isopropyltoluene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
4-Chlorotoluene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
4-Methyl-2-pentanone	ND	5.0	ug/L	1	06/21/23	MH	SW8260C

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Acetone	ND	25	ug/L	1	06/21/23	MH	SW8260C
Acrylonitrile	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Benzene	ND	0.70	ug/L	1	06/21/23	MH	SW8260C
Bromobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Bromochloromethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Bromodichloromethane	ND	0.50	ug/L	1	06/21/23	MH	SW8260C
Bromoform	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Bromomethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Carbon Disulfide	ND	5.0	ug/L	1	06/21/23	MH	SW8260C
Carbon tetrachloride	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Chlorobenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Chloroethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Chloroform	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Chloromethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
cis-1,2-Dichloroethene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
cis-1,3-Dichloropropene	ND	0.40	ug/L	1	06/21/23	MH	SW8260C
Dibromochloromethane	ND	0.50	ug/L	1	06/21/23	MH	SW8260C
Dibromomethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Dichlorodifluoromethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Ethylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Hexachlorobutadiene	ND	0.40	ug/L	1	06/21/23	MH	SW8260C
Isopropylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
m&p-Xylene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Methyl ethyl ketone	ND	5.0	ug/L	1	06/21/23	MH	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Methylene chloride	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Naphthalene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
n-Butylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
n-Propylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
o-Xylene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
p-Isopropyltoluene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
sec-Butylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Styrene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
tert-Butylbenzene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Tetrachloroethene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Tetrahydrofuran (THF)	ND	2.5	ug/L	1	06/21/23	MH	SW8260C
Toluene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Total Xylenes	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
trans-1,2-Dichloroethene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
trans-1,3-Dichloropropene	ND	0.40	ug/L	1	06/21/23	MH	SW8260C
trans-1,4-dichloro-2-butene	ND	5.0	ug/L	1	06/21/23	MH	SW8260C
Trichloroethene	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Trichlorofluoromethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Trichlorotrifluoroethane	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
Vinyl chloride	ND	1.0	ug/L	1	06/21/23	MH	SW8260C
<u>QA/QC Surrogates</u>							
% 1,2-dichlorobenzene-d4	99		%	1	06/21/23	MH	70 - 130 %
% Bromofluorobenzene	92		%	1	06/21/23	MH	70 - 130 %
% Dibromofluoromethane	93		%	1	06/21/23	MH	70 - 130 %

Client ID: TRIP BLANK

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
% Toluene-d8	95		%	1	06/21/23	MH	70 - 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.

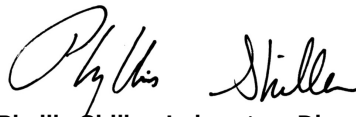
RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

TRIP BLANK INCLUDED.

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

June 26, 2023

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



QA/QC Report

June 26, 2023

QA/QC Data

SDG I.D.: GCO32967

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 683679 (ug/L), QC Sample No: CO32970 (CO32967, CO32968, CO32969, CO32970)										
Volatiles - Ground Water										
1,1,1,2-Tetrachloroethane	ND	1.0	113	110	2.7				70 - 130	30
1,1,1-Trichloroethane	ND	1.0	108	106	1.9				70 - 130	30
1,1,2,2-Tetrachloroethane	ND	0.50	118	113	4.3				70 - 130	30
1,1,2-Trichloroethane	ND	1.0	115	113	1.8				70 - 130	30
1,1-Dichloroethane	ND	1.0	107	107	0.0				70 - 130	30
1,1-Dichloroethene	ND	1.0	108	107	0.9				70 - 130	30
1,1-Dichloropropene	ND	1.0	110	109	0.9				70 - 130	30
1,2,3-Trichlorobenzene	ND	1.0	127	125	1.6				70 - 130	30
1,2,3-Trichloropropane	ND	1.0	110	109	0.9				70 - 130	30
1,2,4-Trichlorobenzene	ND	1.0	124	122	1.6				70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0	112	111	0.9				70 - 130	30
1,2-Dibromo-3-chloropropane	ND	1.0	127	117	8.2				70 - 130	30
1,2-Dibromoethane	ND	1.0	120	118	1.7				70 - 130	30
1,2-Dichlorobenzene	ND	1.0	111	110	0.9				70 - 130	30
1,2-Dichloroethane	ND	1.0	115	111	3.5				70 - 130	30
1,2-Dichloropropane	ND	1.0	110	108	1.8				70 - 130	30
1,3,5-Trimethylbenzene	ND	1.0	111	111	0.0				70 - 130	30
1,3-Dichlorobenzene	ND	1.0	109	109	0.0				70 - 130	30
1,3-Dichloropropane	ND	1.0	116	116	0.0				70 - 130	30
1,4-Dichlorobenzene	ND	1.0	109	107	1.9				70 - 130	30
2,2-Dichloropropane	ND	1.0	111	105	5.6				70 - 130	30
2-Chlorotoluene	ND	1.0	113	112	0.9				70 - 130	30
2-Hexanone	ND	5.0	114	117	2.6				70 - 130	30
2-Isopropyltoluene	ND	1.0	109	111	1.8				70 - 130	30
4-Chlorotoluene	ND	1.0	112	111	0.9				70 - 130	30
4-Methyl-2-pentanone	ND	5.0	120	114	5.1				70 - 130	30
Acetone	ND	5.0	106	105	0.9				70 - 130	30
Acrylonitrile	ND	5.0	115	110	4.4				70 - 130	30
Benzene	ND	0.70	109	108	0.9				70 - 130	30
Bromobenzene	ND	1.0	114	113	0.9				70 - 130	30
Bromochloromethane	ND	1.0	109	110	0.9				70 - 130	30
Bromodichloromethane	ND	0.50	114	110	3.6				70 - 130	30
Bromoform	ND	1.0	109	107	1.9				70 - 130	30
Bromomethane	ND	1.0	119	124	4.1				70 - 130	30
Carbon Disulfide	ND	1.0	102	101	1.0				70 - 130	30
Carbon tetrachloride	ND	1.0	107	106	0.9				70 - 130	30
Chlorobenzene	ND	1.0	108	108	0.0				70 - 130	30
Chloroethane	ND	1.0	109	105	3.7				70 - 130	30
Chloroform	ND	1.0	105	104	1.0				70 - 130	30
Chloromethane	ND	1.0	114	116	1.7				70 - 130	30
cis-1,2-Dichloroethene	ND	1.0	112	112	0.0				70 - 130	30

QA/QC Data

SDG I.D.: GCO32967

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
cis-1,3-Dichloropropene	ND	0.40	115	114	0.9				70 - 130	30
Dibromochloromethane	ND	0.50	116	113	2.6				70 - 130	30
Dibromomethane	ND	1.0	119	116	2.6				70 - 130	30
Dichlorodifluoromethane	ND	1.0	123	123	0.0				70 - 130	30
Ethylbenzene	ND	1.0	110	109	0.9				70 - 130	30
Hexachlorobutadiene	ND	0.40	111	114	2.7				70 - 130	30
Isopropylbenzene	ND	1.0	112	113	0.9				70 - 130	30
m&p-Xylene	ND	1.0	110	110	0.0				70 - 130	30
Methyl ethyl ketone	ND	5.0	112	110	1.8				70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	115	109	5.4				70 - 130	30
Methylene chloride	ND	1.0	105	102	2.9				70 - 130	30
Naphthalene	ND	1.0	136	130	4.5				70 - 130	30
n-Butylbenzene	ND	1.0	114	116	1.7				70 - 130	30
n-Propylbenzene	ND	1.0	111	112	0.9				70 - 130	30
o-Xylene	ND	1.0	114	114	0.0				70 - 130	30
p-Isopropyltoluene	ND	1.0	112	115	2.6				70 - 130	30
sec-Butylbenzene	ND	1.0	111	112	0.9				70 - 130	30
Styrene	ND	1.0	116	117	0.9				70 - 130	30
tert-Butylbenzene	ND	1.0	113	113	0.0				70 - 130	30
Tetrachloroethene	ND	1.0	109	108	0.9				70 - 130	30
Tetrahydrofuran (THF)	ND	2.5	112	107	4.6				70 - 130	30
Toluene	ND	1.0	110	109	0.9				70 - 130	30
trans-1,2-Dichloroethene	ND	1.0	106	105	0.9				70 - 130	30
trans-1,3-Dichloropropene	ND	0.40	116	115	0.9				70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0	100	97	3.0				70 - 130	30
Trichloroethene	ND	1.0	109	106	2.8				70 - 130	30
Trichlorofluoromethane	ND	1.0	112	110	1.8				70 - 130	30
Trichlorotrifluoroethane	ND	1.0	101	100	1.0				70 - 130	30
Vinyl chloride	ND	1.0	112	113	0.9				70 - 130	30
% 1,2-dichlorobenzene-d4	101	%	101	100	1.0				70 - 130	30
% Bromofluorobenzene	96	%	100	101	1.0				70 - 130	30
% Dibromofluoromethane	102	%	99	102	3.0				70 - 130	30
% Toluene-d8	96	%	101	100	1.0				70 - 130	30

Comment:

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

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%, 25-160% for Chloroethane-HL and Trichlorofluoromethane-HL.

QA/QC Batch 683912 (ug/L), QC Sample No: CO34116 (CO32969 (5X))

Volatiles - Ground Water

Acetone	ND	5.0	102	103	1.0				70 - 130	30
% 1,2-dichlorobenzene-d4	102	%	100	101	1.0				70 - 130	30
% Bromofluorobenzene	96	%	103	101	2.0				70 - 130	30
% Dibromofluoromethane	102	%	102	99	3.0				70 - 130	30
% Toluene-d8	96	%	100	100	0.0				70 - 130	30

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%, 25-160% for Chloroethane-HL and Trichlorofluoromethane-HL.

I = This parameter is outside laboratory LCS/LCSD specified recovery limits.

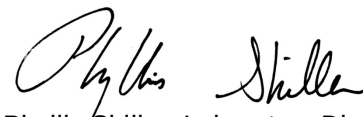
QA/QC Data

SDG I.D.: GCO32967

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

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
June 26, 2023

Monday, June 26, 2023

Criteria: None
State: NY

Sample Criteria Exceedances Report
GCO32967 - AMC-ENG

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

June 26, 2023

SDG I.D.: GCO32967

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report:

VOA Narration

CHEM17 06/21/23-1: CO32967, CO32968, CO32969, CO32970

Chem 17 is a 25ml purge instrument. The laboratory minimum response factor is set at 0.01 instead of 0.05 for the 25ml purge instruments. EPA method 8260D Table 4 supports this approach.

The following Initial Calibration compounds did not meet RSD% criteria: Naphthalene 24% (20%), trans-1,4-dichloro-2-butene 23% (20%)

The following Initial Calibration compounds did not meet maximum RSD% criteria: None.

The following Initial Calibration compounds did not meet recommended response factors: 1,2-Dibromo-3-chloropropane 0.038 (0.05), 2-Hexanone 0.045 (0.1), 4-Methyl-2-pentanone 0.064 (0.1), Acetone 0.027 (0.1), Acrylonitrile 0.032 (0.05), Methyl ethyl ketone 0.042 (0.1), Tetrahydrofuran (THF) 0.024 (0.05)

The following Initial Calibration compounds did not meet minimum response factors: 1,2-Dibromo-3-chloropropane 0.038 (0.05), 2-Hexanone 0.045 (0.05), Acetone 0.027 (0.05), Acrylonitrile 0.032 (0.05), Methyl ethyl ketone 0.042 (0.05), Tetrahydrofuran (THF) 0.024 (0.05)

The following Continuing Calibration compounds did not meet recommended response factors: 1,2-Dibromo-3-chloropropane 0.041 (0.05), 2-Hexanone 0.047 (0.05), Acetone 0.027 (0.05), Acrylonitrile 0.034 (0.05), Methyl ethyl ketone 0.041 (0.05), Tetrahydrofuran (THF) 0.025 (0.05)

The following Continuing Calibration compounds did not meet minimum response factors: 1,2-Dibromo-3-chloropropane 0.038 (0.05), 2-Hexanone 0.045 (0.05), Acetone 0.027 (0.05), Acrylonitrile 0.032 (0.05), Methyl ethyl ketone 0.042 (0.05), Tetrahydrofuran (THF) 0.024 (0.05)

Up to eight compounds can be outside of ICAL %RSD criteria and up to sixteen compounds can be outside of CCAL %Dev criteria if less than 40%.

CHEM17 06/22/23-1: CO32969

Chem 17 is a 25ml purge instrument. The laboratory minimum response factor is set at 0.01 instead of 0.05 for the 25ml purge instruments. EPA method 8260D Table 4 supports this approach.

The following Initial Calibration compounds did not meet recommended response factors: Acetone 0.027 (0.1)

The following Initial Calibration compounds did not meet minimum response factors: Acetone 0.027 (0.05)

The following Continuing Calibration compounds did not meet recommended response factors: Acetone 0.028 (0.05)

The following Continuing Calibration compounds did not meet minimum response factors: Acetone 0.027 (0.05)

Up to eight compounds can be outside of ICAL %RSD criteria and up to sixteen compounds can be outside of CCAL %Dev criteria if less than 40%.



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NY Temperature Narration

June 26, 2023

SDG I.D.: GCO32967

The samples in this delivery group were received at 1.2°C.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

