FPM group Engineering and Environmental Science

An Olgoonik Company

CORPORATE HEADQUARTERS
909 Marconi Avenue
Ronkonkoma, NY 11779
631-737-6200
Fax 631-737-2410

November 29, 2021

Mr. Yuk Yin (Bryan) Wong
New York State Department of Environmental Conservation
Division of Environmental Remediation
47-40 21st Street
Long Island City, NY 11101-5407

Re: **Corrective Measure ISCO Pilot Test Report**
90-30 Metropolitan Avenue Site
Rego Park, Queens, NY
NYDEC Site V00253-2
FPM File No. 1066g-19-08

Dear Bryan:

FPM Group, on behalf of Regency Centers, is submitting this Corrective Measures Report to document the results of the In-Situ Chemical Oxidation (ISCO) Pilot test conducted at the above-referenced Site. The ISCO Pilot Test was performed in accordance with our NYSDEC approved Corrective Measures Work Plan dated December 2019. This report includes a summary of the injection activities, groundwater monitoring activities and discussion of the findings of the pilot testing. Site plans showing the existing well network and other pertinent data are attached.

Background

The contaminate of concern at this Site consists of tetrachloroethene (PCE) in groundwater at several depths beneath a portion of the onsite building (main site plume) and a second plume of PCE in groundwater at several depths that extends onto the western portion of the Site from the area of the adjoining former bowling alley building to the west. The AS/SVE remedial system for this Site was initially designed to address the main site plume. This design was modified to also treat the western (former bowling alley) plume for a limited time in response to a request to the NYSDEC from the former bowling alley owner.

The AS/SVE system was placed into service in August 2007 and has been in nearly continuous operation for the past twelve years. The western leg of the system was shut down on January 6, 2010, with NYSDEC concurrence, as the conditions for termination of this portion of the system had been met. The portion of the system that treats the main site plume continued to operate up until circa 2017 when the systems effectiveness had decreased significantly since startup and breakdowns of major components of the AS/SVE began to occur.

In December 2020, an ISCO pilot test, using PersulfOx™ as the chemical oxidant, was conducted to determine if this remedial approach would be effective at decreasing concentrations of chlorinated volatile organic compounds (CVOCs), primarily tetrachloroethylene (PCE) at the Site . The general reaction of PersulfOx™ and PCE is represented by: $PCE + 2Na_2S_2O_2 + 4H_2O \rightarrow 2CO_2 + 4NaCl + 4H_2SO_4$

Where:

PCE = Tetrachloroethylene	$Na_2S_2O_2$ = Sodium Persulfate (PersulfOx)
H_2O = Water	CO_2 = Carbon Dioxide
NaCl = Sodium Chloride	H_2SO_4 = Sulfuric Acid

Injection Parameter Testing

To evaluate conditions which may affect the reaction of PersulfOx™ with PCE, sampling was performed to evaluate select parameters following the testing and to establish a pre-testing baseline of conditions at monitoring wells A-05, A-06, A-08, ME-8 and ME-13. These parameters include chloride and sulfate to evaluate the breakdown of PCE, iron and manganese (total and dissolved) to evaluate potential precipitation effects from changes in pH, and alkalinity to assess the aquifer's ability to buffer itself from the generation of sulfuric acid. These data are summarized in Table 1 and Figures 12 through 15

- Backgrounds chloride concentrations in general were noted to be high, but within what would be expected in an urban environment. Chloride concentrations were noted to decrease initially following injection at the site of the injection, well A-06, and was noted to increase three months following the injection, this initial decrease appears to suggest that the injection fluid may have displaced the naturally occur concentrations of chloride initially and then the chloride concentration increased as conditions equilibrated. In the other wells, chloride concentrations were noted to be variable, but generally within an order of magnitude and not suggestive of any influences from the injected, with the exception of ME-8 which was noted to have an anomalies low concentration of chloride during one of the monitoring events conducted prior to the injection. Based on the observed trends in the data at the site, chloride was not an effective parameter for evaluating the breakdown of PCE by PersulfOx™.
- Sulfate concentrations were noted to significantly increase at the injection well, A-06, and moderately increase in intermediate well A-8 situated in proximity to well A-6 following the injection which is consistent with the application of PersulfOx™ in this area. No significant variations were noted in the other wells.
- Changes to alkalinity were noted to significantly increase in the injection well A-6 relative to background conditions. No significant changes were evident in the other sampled wells situated further from the injection well. The notable change in alkalinity at the injection site indicates that groundwater at the Site has a buffering capacity which is able to resist significant changes in pH and therefore significant changes in pH are not expected.
- Iron total concentrations for the injection well, A-06 were noted to increase following the injection of PersulfOx™. The increase in concentrations suggest that precipitation may be occurring. Concentration of total iron in wells A-05 and ME-13 appear to be related to sampling turbidity. No significant variations were noted in the other wells.

In summary the injection site well, A-06, and intermediate well A-08 in its proximity were noted to show the most significant responses during the pilot testing with changes to sulfate and alkalinity indicating that the reaction was occurring. Precipitation of iron from the reaction also appears to be occurring at the site of injection. No other responses were evident for the tested wells.

Injections Activities

Injection of the ISCO was conducted in shallow monitoring well A-06 on December 7, 8 ,9 and 11, 2020. The injection well was initially evaluated using fresh water from a municipal fire hydrant to evaluate the injection flow rate and pressure for the injection. Prior to each injection event a packer was set within the unsaturated screen zone and partially overlapped the saturated portion of the screen zone to channel the injection into water table aquifer. The testing indicated that the formation could safely be injected at a rate of approximately seven gallons per minute at a pressure of 40 PSI, the injection pressure required was more than what had been initially anticipated but was in line with the injection contractors experience in this area of Queens and these types of soils. Based on the higher injection pressures, Regenesis the PersulfOx™ supplier recommended that the amount of chaser water be reduced to what was necessary to purge the solution from the equipment and well each day following the injection.

Following completion of the initial clean water testing a 10% solution of PersulfOx™ (220 pounds PersulfOx™ powder to 264 gallons of fresh water) was prepared in batches of approximately 270 gallons in each of the two IBC type plastic tanks. The solution was then injected utilizing an air diaphragm pump into well A-06. This process was conducted each day until the complete amount of PersulfOx™ solution (8,394 gallons) was injected. Following the completion of each injection event approximately 100 gallons of freshwater was pumped though the injection system and into the injection well to remove residual solution in the injection equipment. During the injection events no evidence of surfacing or changes in water levels was evident in nearby wells.

Groundwater Monitoring

Groundwater monitoring to evaluate the results of the injection ability to improve PCE concentrations was conducted in January 2021, approximately four weeks following the injection at the injection well site in both the shallow and intermediate level wells, A-06 and A-08, respectively and shallow wells A-05, ME-8, ME-13 and A-09 located in proximity to the injection area. Following the January sampling, of select wells, routine quarterly monitoring was performed in March, June and October 2021. Persulfate testing was also conducted, following the injection at select wells, at the recommendation of the ISCO manufacturer, using a colorimetric test kit to evaluate the presence of remaining PersulfOx™. The results are summarized in the attached Tables 3.2.2.1 through 3.2.2.3 for PCE, and Figures 1 through 10; our observations are noted below. The complete laboratory packages are attached.

- A-06, the injection well, was noted to decrease in concentration from 400 to 130 ug/l, 30 days following the injection and then noted to rebound to 390 ug/l, approximately three months after the injection. Between approximately six months and nine months after the injection the concentration were noted to decrease to 270 ug/l, but then increased to 580 ug/l, which was higher than before it was injected. Persulfate concentrations were noted to be >70 ppm at three months, six months and nine months following the injection, indicating persulfate is not breaking down as quickly as anticipated, but remains available to further breakdown PCE.
- A-08, intermediate well screened below and in close proximity to the injection well, was noted to decrease in concentration from 990 to 750 ug/l, 30 days following the injection and then noted to rebound to 850 ug/l, approximately three months after the injection. Between approximately six months and nine months after the injection the concentration were noted to decrease to 380 ug/l. Persulfate concentrations were noted to be >70 ppm

at three months, six months and nine months following the injection, persulfate is not breaking down as anticipated, but remains available to further breakdown PCE.

- A-05, situated approximately 50 feet from the injection well, was noted to have been increasing prior to and after the injection from 400 to 570 ug/l, 30 days following the injection and then noted to further increase to 760 ug/l, approximately three months after the injection. Between approximately six months and nine months after the injection the concentration were noted to decrease from 760 ug/l to 460 ug/l. Persulfate concentrations were noted to increase from 0 ppm to >70 ppm during the three-to-six-month post injection period and decrease to 2.1 ppm from the six to nine-month post injection period. This data indicates that the PCE concentrations was increasing in the well prior to the injection and that sometime after three months persulfate migrated from the injection site to A-05. Based on a review of the data it appears PersulfOx™ migrated to the well and may have contributed to the degradation of PCE in its proximity.
- A-09, situated approximately 90 feet from the injection well, PCE concentrations were noted to have been increasing prior to the injection from 39 ug/l (Dec. 2019) to 510 ug/l (October 2020). Three months following the injection the well was noted to have decreased to 310 ug/l and continued to decrease to 28 ug/l , 9 months following the injection which is similar to the pre-injection levels at this well. Persulfate concentrations were noted to increase from 0.7 to 7 ppm during the six-to-nine-month post injection period. It is not clear if the decrease in PCE concentrations in this well is the result of the PersulfOx™ reaction or from continued fluctuations in the groundwater.
- Concentrations of PCE in wells ME-8 and ME-13, situated to the southeast and south of the injection site, were noted to generally fluctuate prior to and after the injection and no trends suggestive of any reactions with PersulfOx™ were evident. Limited testing for persulfate was performed in the wells and only ME-13 was noted to have a measurable amount of persulfate at a concentration of 0.2 ppm.
- No significant changes in concentrations of PCE in the intermediate depth screened wells, with the exception of A-08 in the injection area, and the deep screened wells were noted.

Summary and Conclusions

Based upon the analytical testing results performed prior to and following the PersulfOx™ ISCO injection as summarized above, it is not conclusive that the injection provided a significant improvement at the site as concentrations of PCE continue to vary at the injection site well. Wells A-09 and A-05, which were noted to be increasing prior to the testing were noted to decrease approximately three months following the testing; it is not clear if the improvement in these wells is a result of the injections or part of a continued variable and decreasing trend at the site. At well A-08, a general decreasing trend was noted prior to and following the testing although the larger decrease in PCE concentrations from six to nine months following the injection suggest that the injection may have increased the breakdown of PCE.

Given the continued presence of persulfate at the injection site and observed migration of persulfate to wells A-05 and A-09, FPM recommends that groundwater monitoring and persulfate testing continue to

further evaluate the performance of the injection. No further injection of PersulfOx™ is recommended at this time.

Very truly yours,

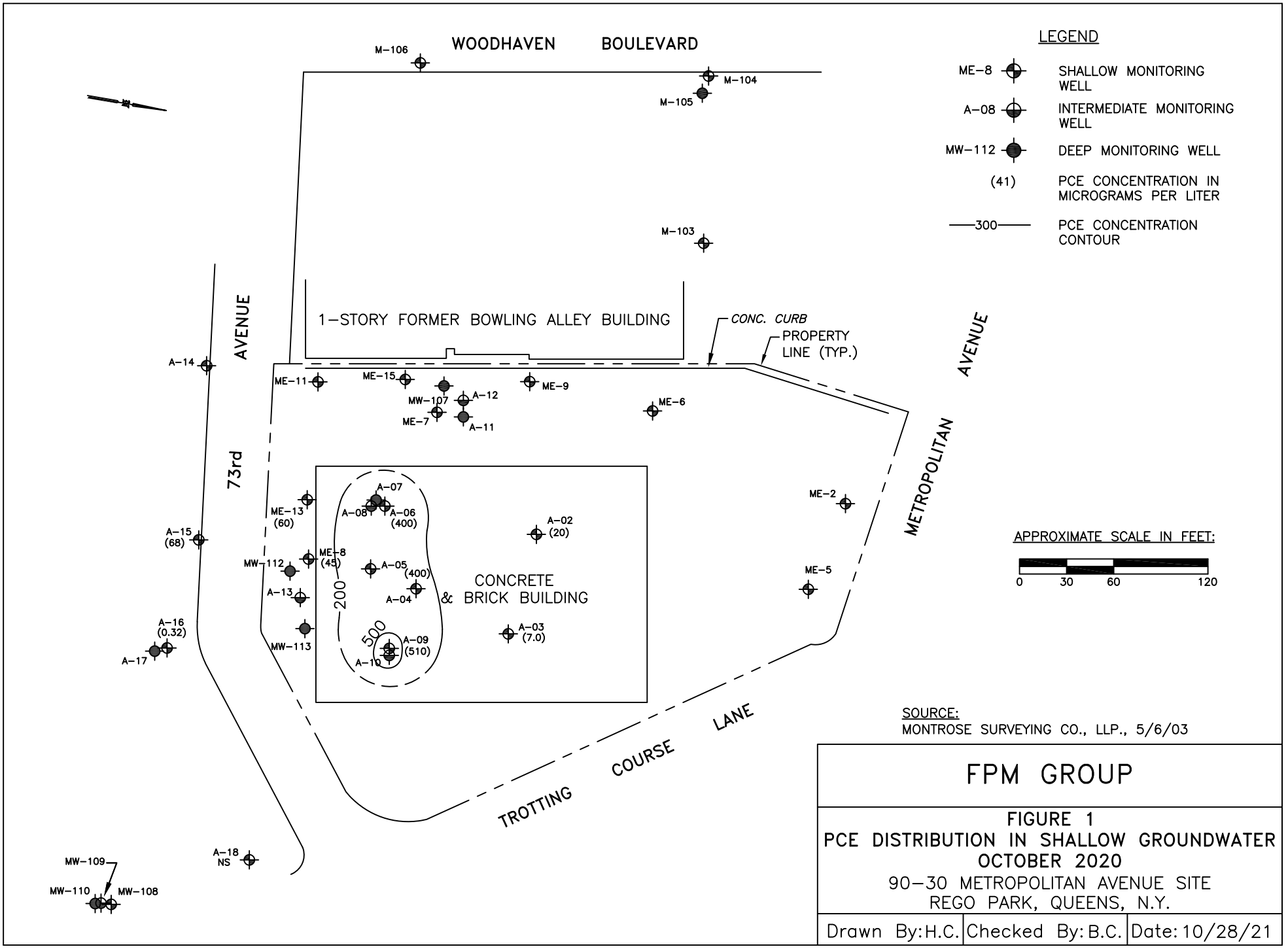
Ben T. Cancemi

Ben T. Cancemi, PG
Manager Hydrogeology
Vice President

BTC:btc
Attachments

S:\Equity One (Regency Centers)\90-30 Metropolitan\ISCO Report\ISCO Report.docx

ATTACHMENT A
LABORATORY REPORTS



SOURCE:
MONTROSE SURVEYING CO., LLP., 5/6/03

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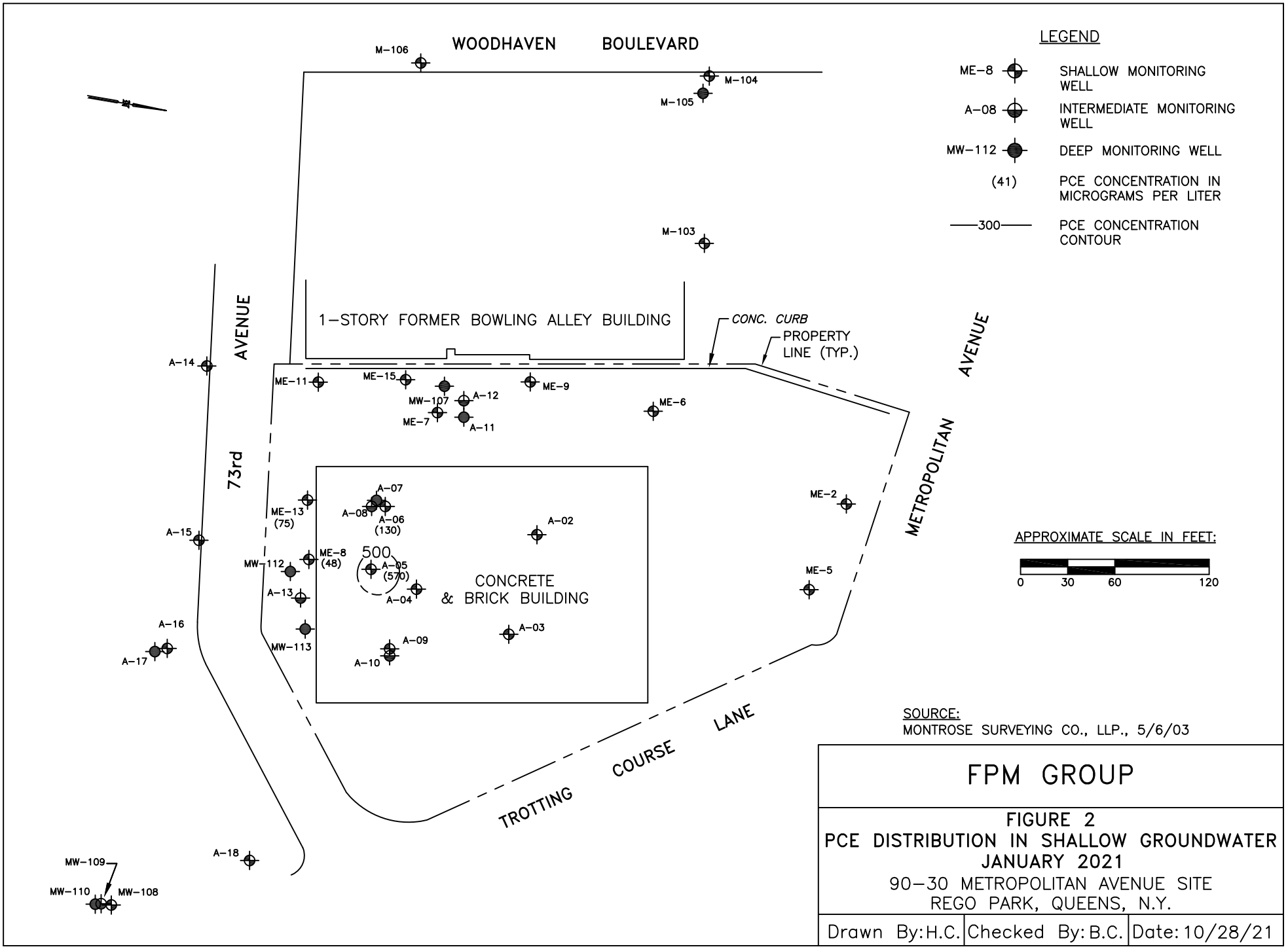
FIGURE 1
PCE DISTRIBUTION IN SHALLOW GROUNDWATER
OCTOBER 2020
90-30 METROPOLITAN AVENUE SITE
REGO PARK, QUEENS, N.Y.

Drawn By: H.C.	Checked By: B.C.	Date: 10/28/21

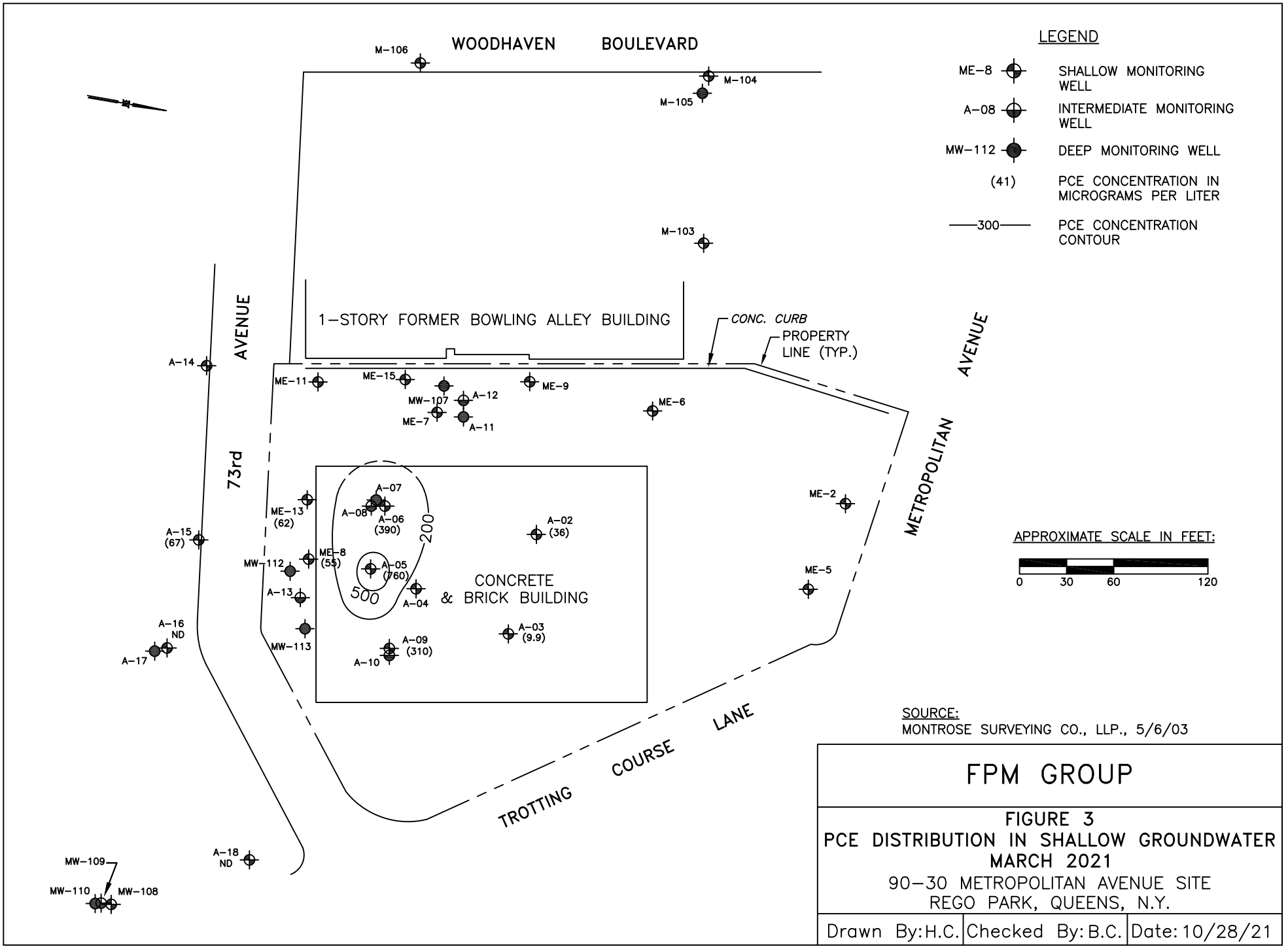


SOURCE:
MONTROSE SURVEYING CO., LLP., 5/6/03

FPM GROUP

FIGURE 2
PCE DISTRIBUTION IN SHALLOW GROUNDWATER
JANUARY 2021
90-30 METROPOLITAN AVENUE SITE
REGO PARK, QUEENS, N.Y.

Drawn By: H.C.	Checked By: B.C.	Date: 10/28/21



FPM GROUP

FIGURE 3
PCE DISTRIBUTION IN SHALLOW GROUNDWATER
MARCH 2021

90-30 METROPOLITAN AVENUE SITE
REGO PARK, QUEENS, N.Y.

Drawn By: H.C.	Checked By: B.C.	Date: 10/28/21

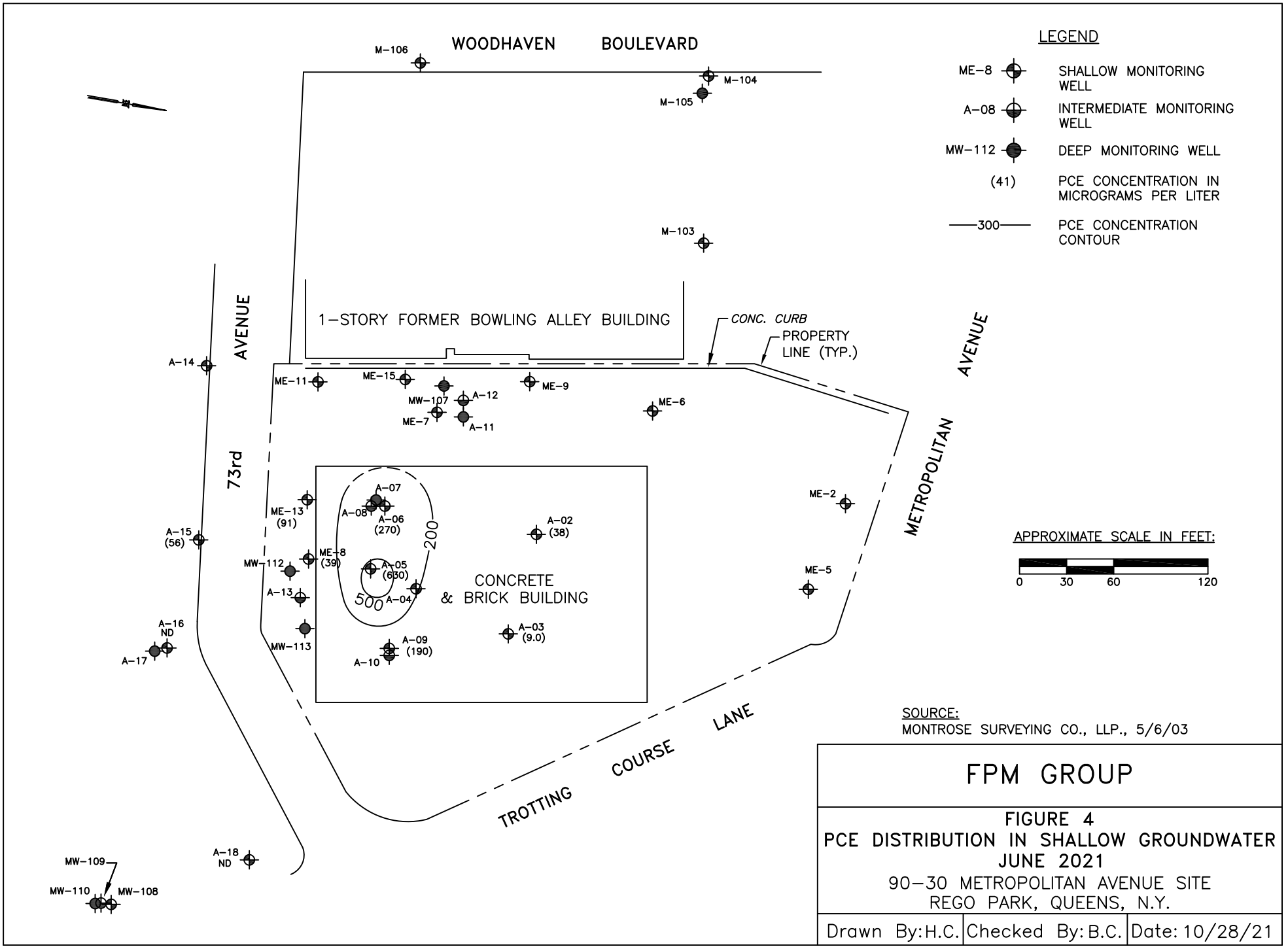


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FIGURE 4
PCE DISTRIBUTION IN SHALLOW GROUNDWATER
JUNE 2021

90-30 METROPOLITAN AVENUE SITE
REGO PARK, QUEENS, N.Y.

Drawn By: H.C.	Checked By: B.C.	Date: 10/28/21

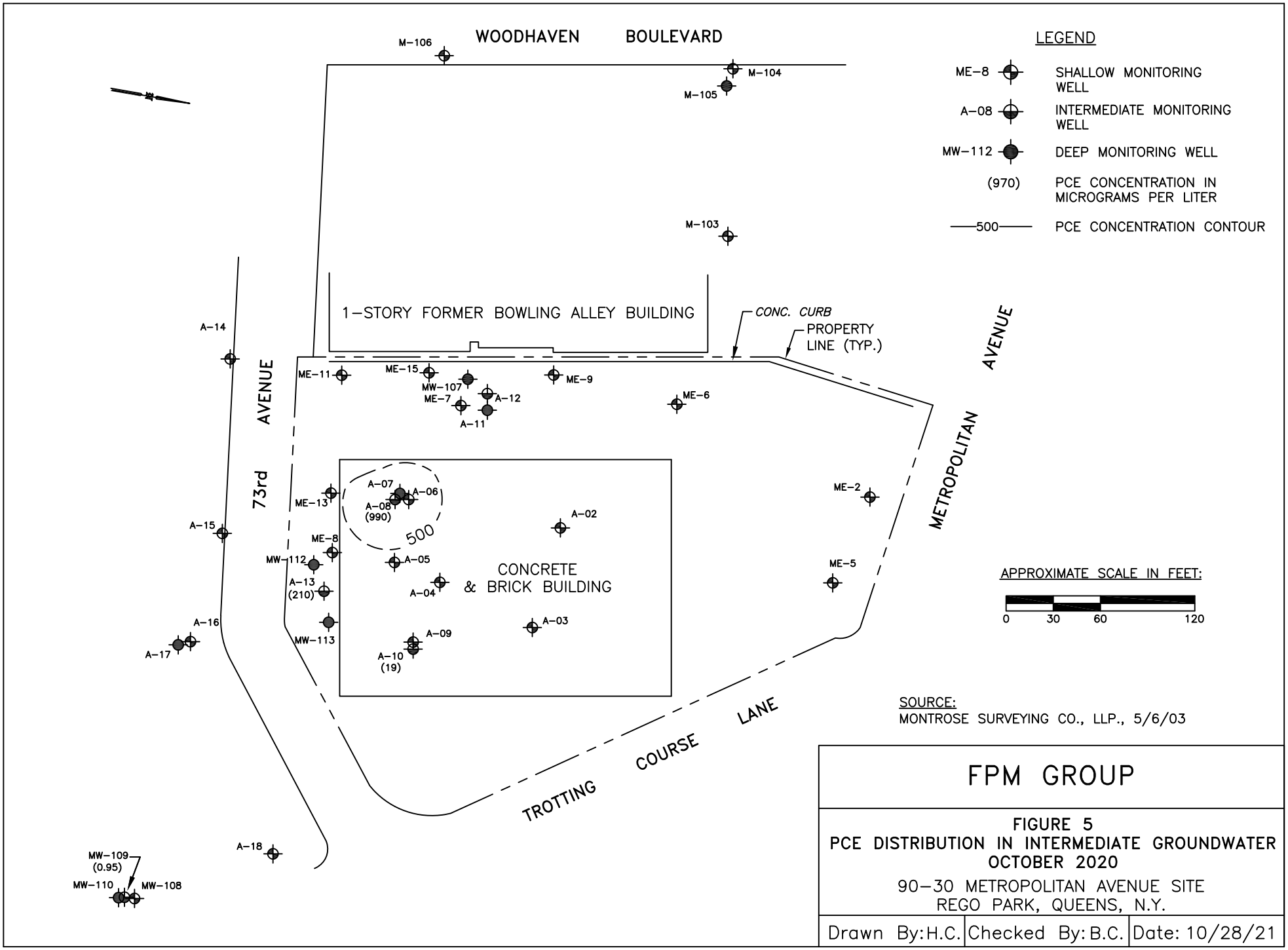

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FIGURE 5
PCE DISTRIBUTION IN INTERMEDIATE GROUNDWATER
OCTOBER 2020

90-30 METROPOLITAN AVENUE SITE
REGO PARK, QUEENS, N.Y.

Drawn By: H.C.	Checked By: B.C.	Date: 10/28/21

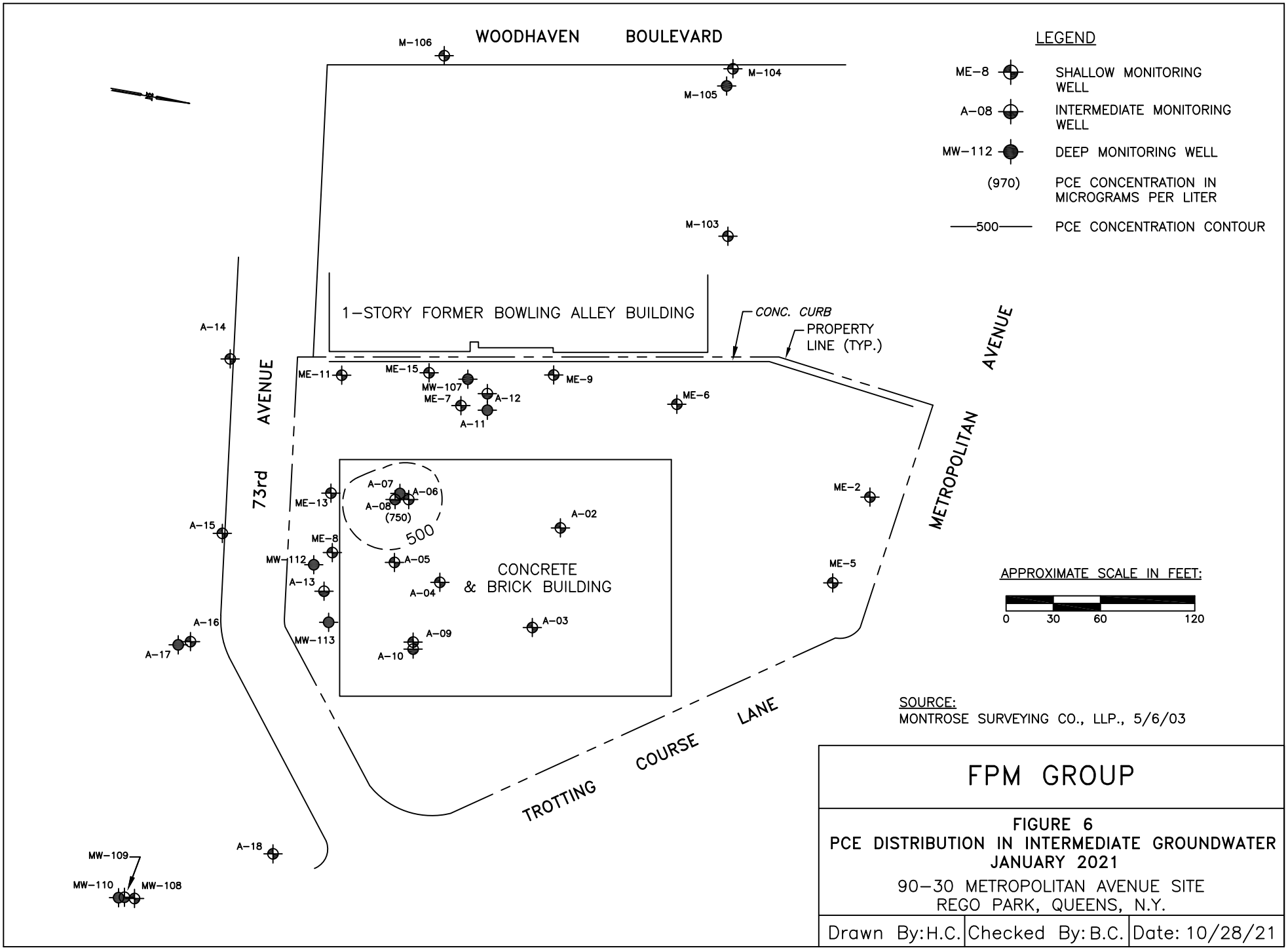

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FIGURE 6
PCE DISTRIBUTION IN INTERMEDIATE GROUNDWATER
JANUARY 2021

90-30 METROPOLITAN AVENUE SITE
REGO PARK, QUEENS, N.Y.

Drawn By: H.C.	Checked By: B.C.	Date: 10/28/21

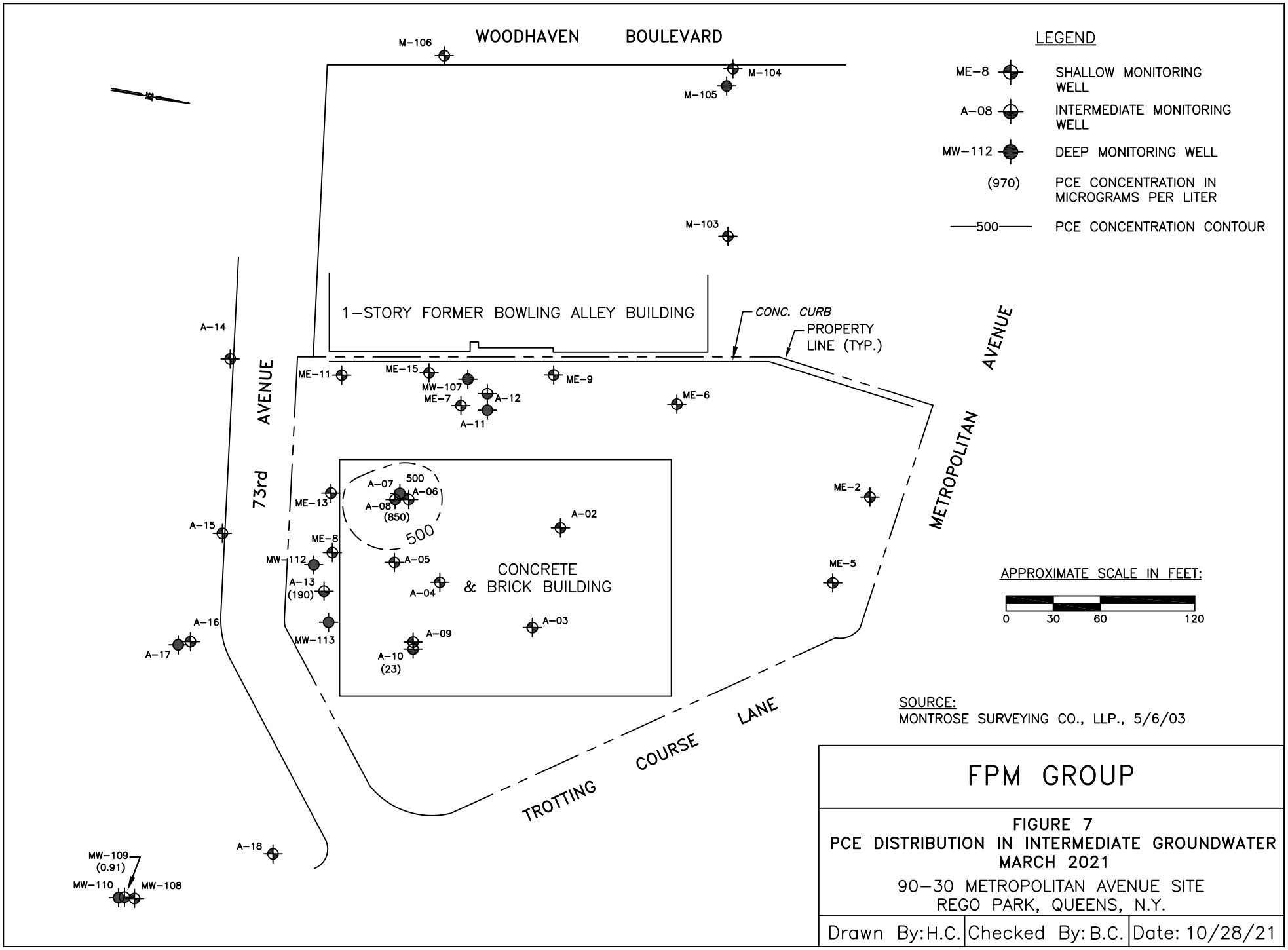

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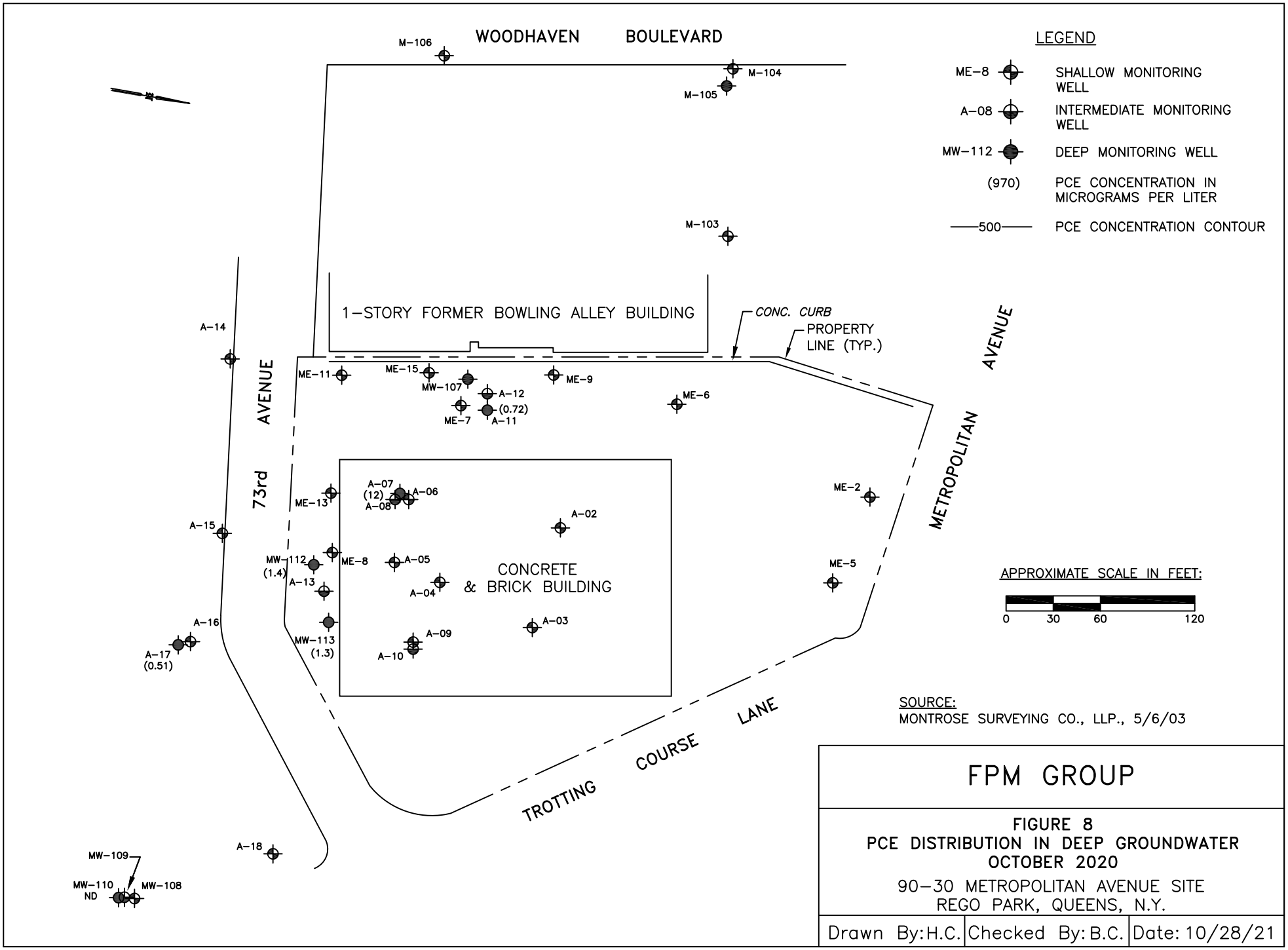
FIGURE 7
PCE DISTRIBUTION IN INTERMEDIATE GROUNDWATER
MARCH 2021

90-30 METROPOLITAN AVENUE SITE
REGO PARK, QUEENS, N.Y.

Drawn By: H.C.	Checked By: B.C.	Date: 10/28/21



FPM GROUP

FIGURE 8
PCE DISTRIBUTION IN DEEP GROUNDWATER
OCTOBER 2020

90-30 METROPOLITAN AVENUE SITE
REGO PARK, QUEENS, N.Y.

Drawn By: H.C.	Checked By: B.C.	Date: 10/28/21

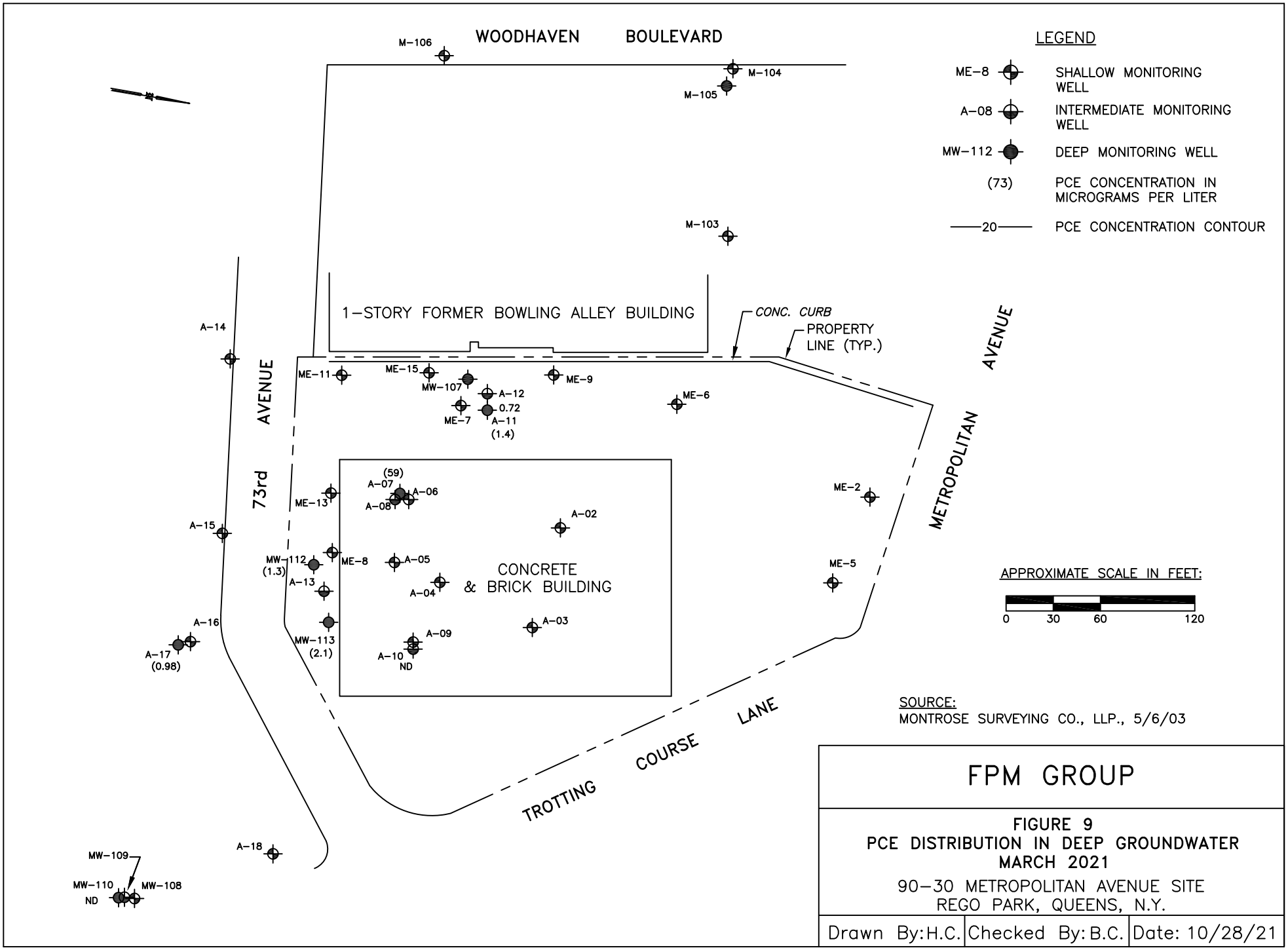


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FIGURE 9
PCE DISTRIBUTION IN DEEP GROUNDWATER
MARCH 2021

90-30 METROPOLITAN AVENUE SITE
REGO PARK, QUEENS, N.Y.

Drawn By: H.C.	Checked By: B.C.	Date: 10/28/21

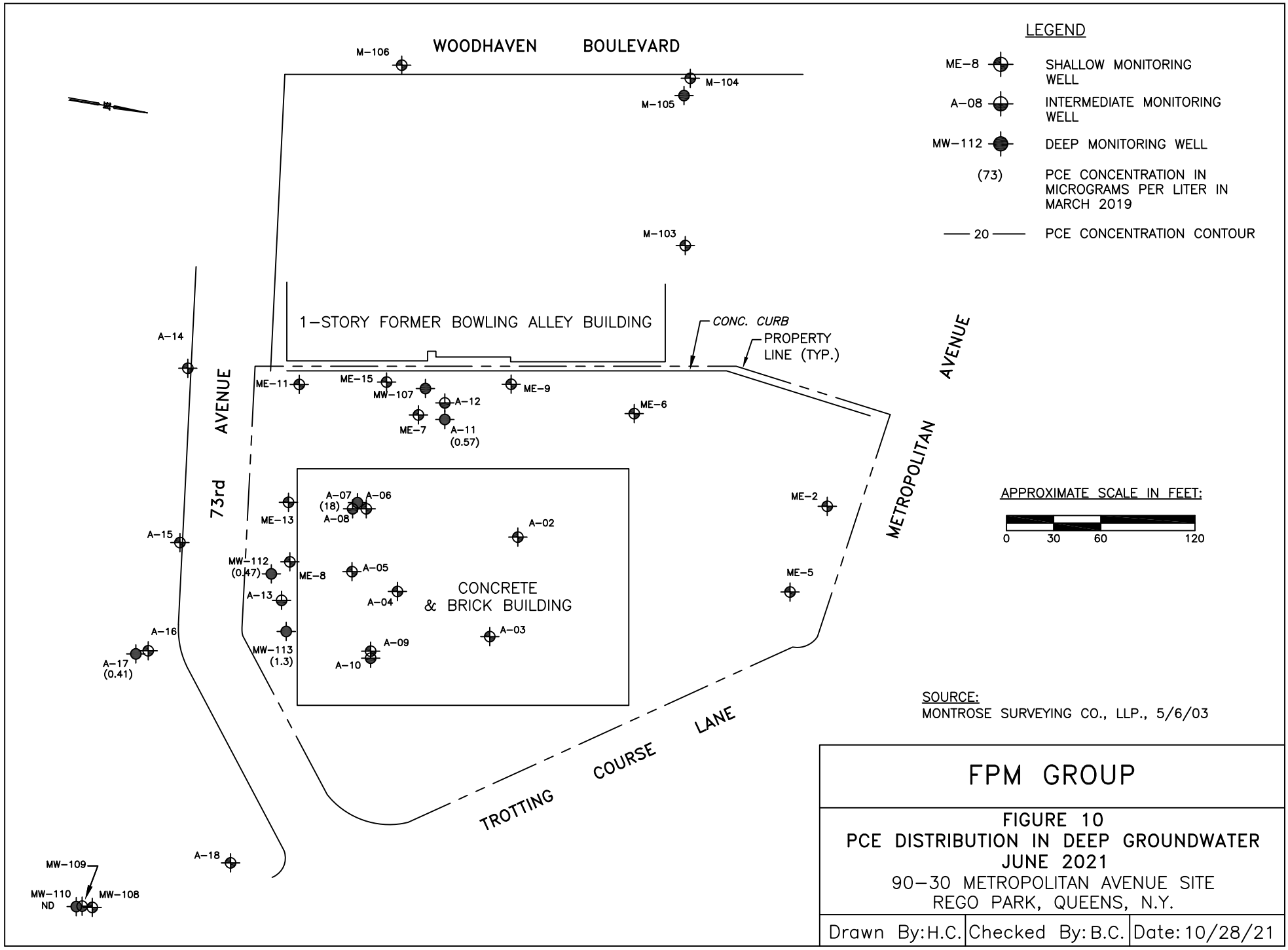

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FIGURE 10
PCE DISTRIBUTION IN DEEP GROUNDWATER
JUNE 2021
90-30 METROPOLITAN AVENUE SITE
REGO PARK, QUEENS, N.Y.

Drawn By: H.C.	Checked By: B.C.	Date: 10/28/21

Figure 11
PCE in Groundwater
90-30 Metropolitan Avenue, Rego Park, NY

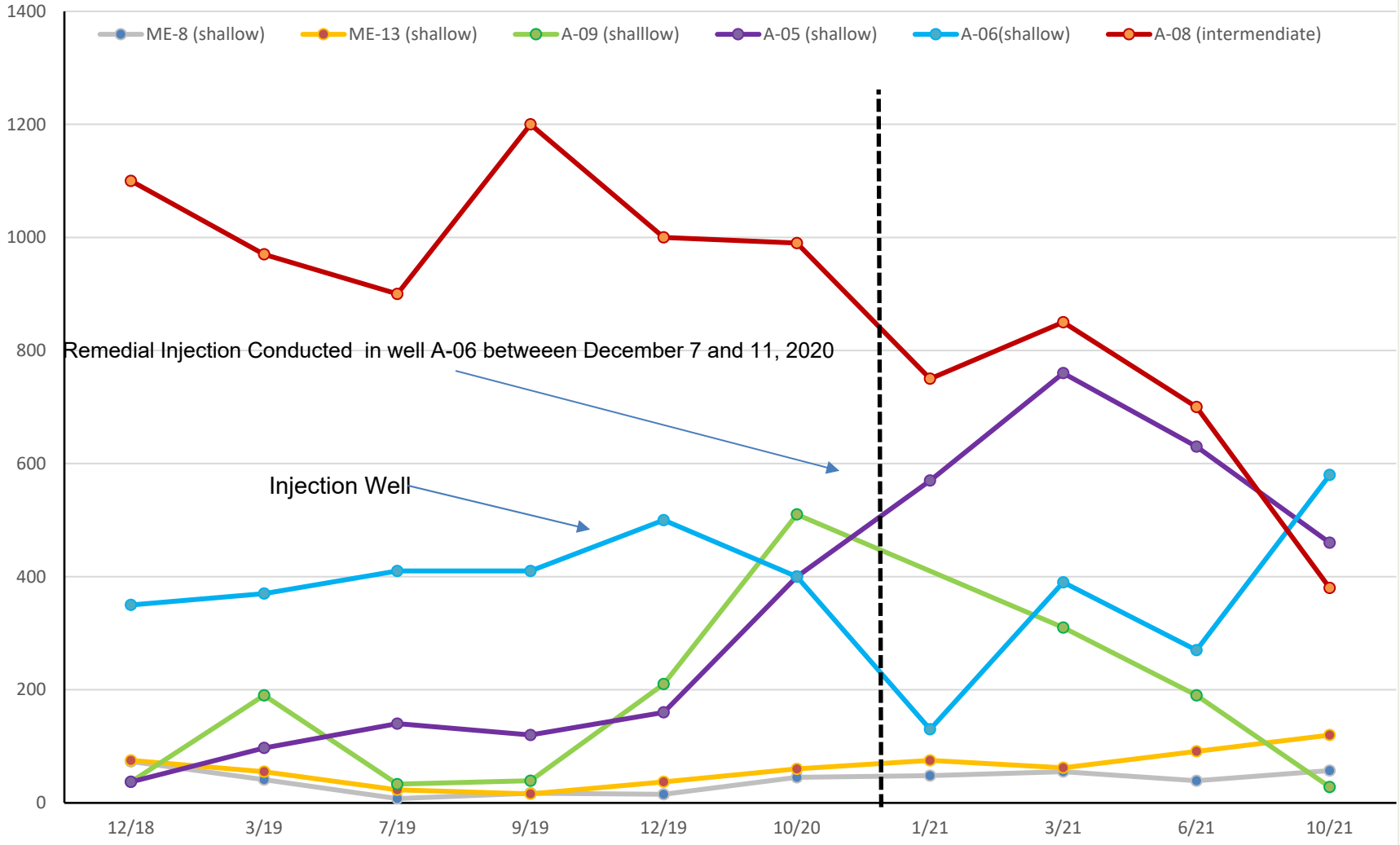

Figure 12
Chloride in Select Wells
90-30 Metropolitan Avenue, Rego Park, NY

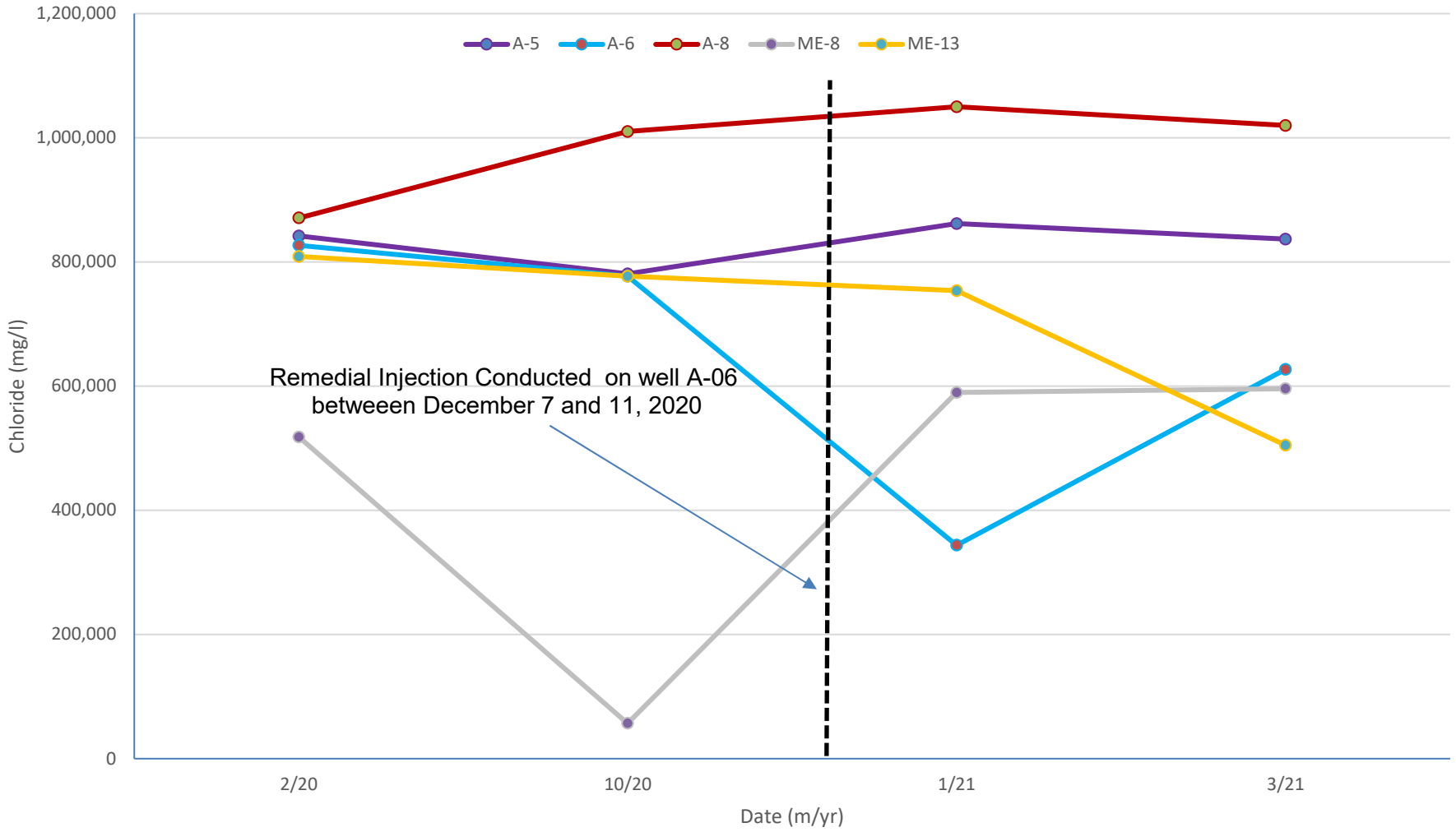

Figure 13
Sulfate in Select Wells
90-30 Metropolitan Avenue, Rego Park, NY

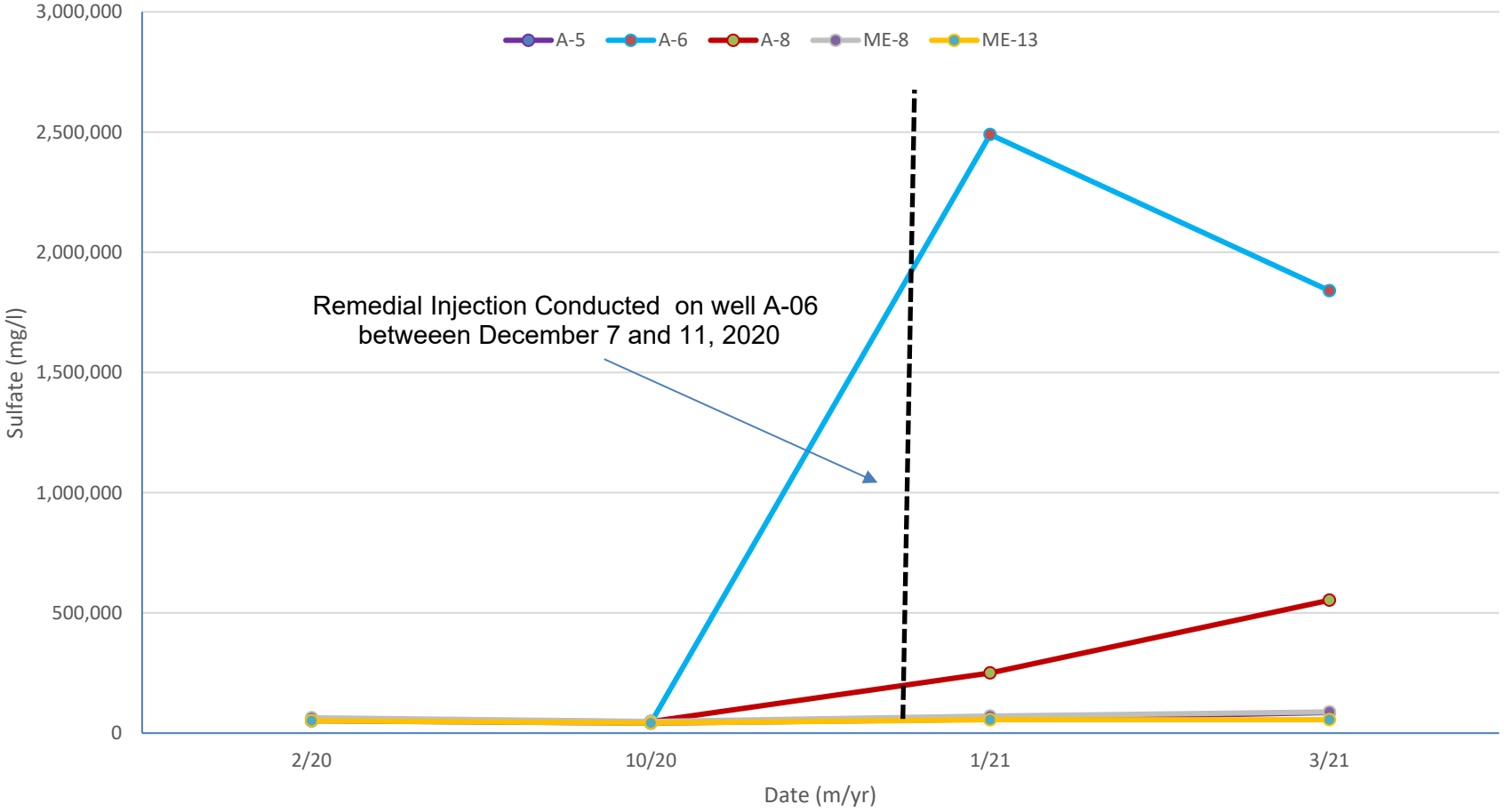

Figure 14
Alkalinity in select Wells
90-30 Metropolitan Avenue, Rego Park, NY

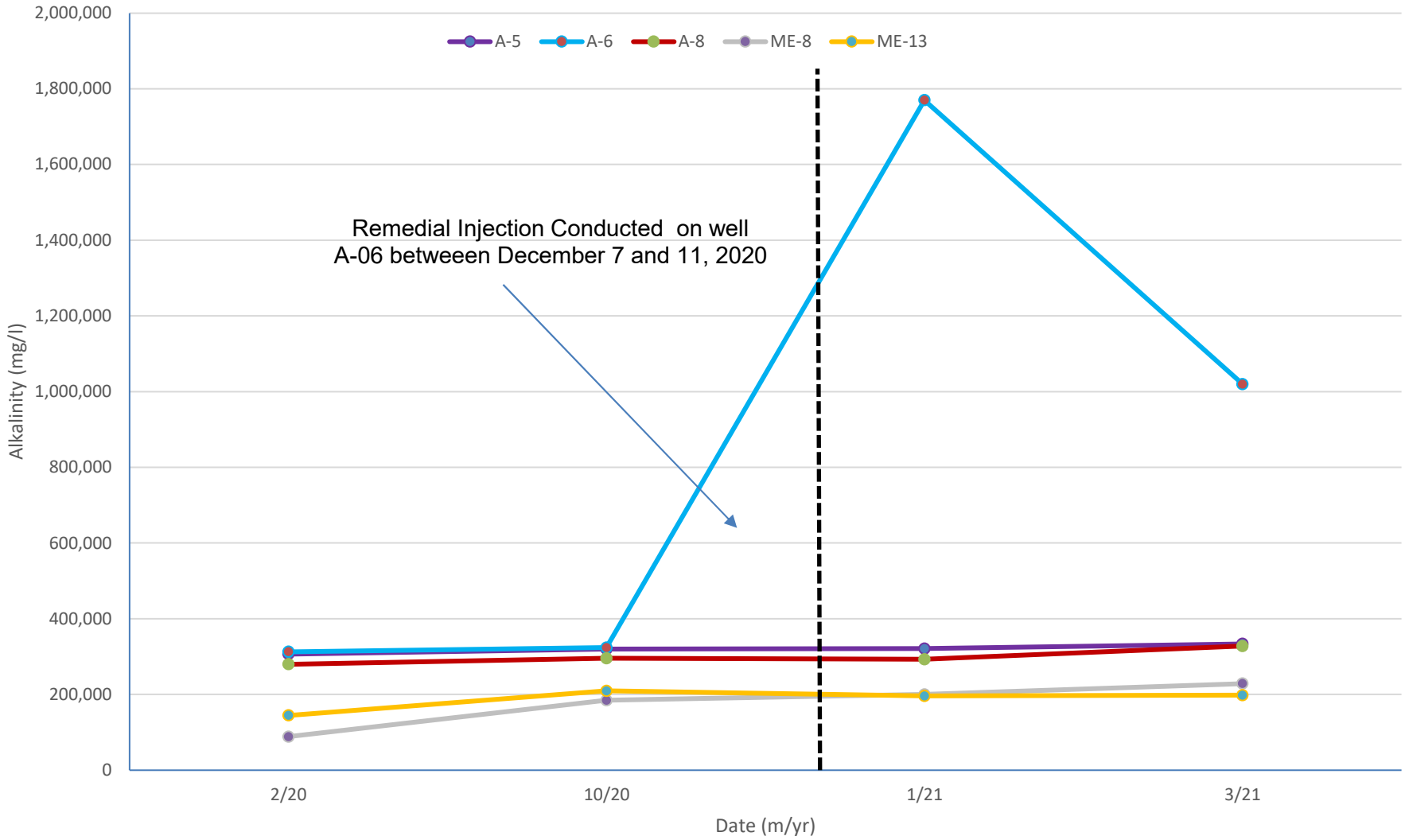

Figure 15
Total Iron in Select Wells
90-30 Metropolitan Avenue, Rego Park, NY

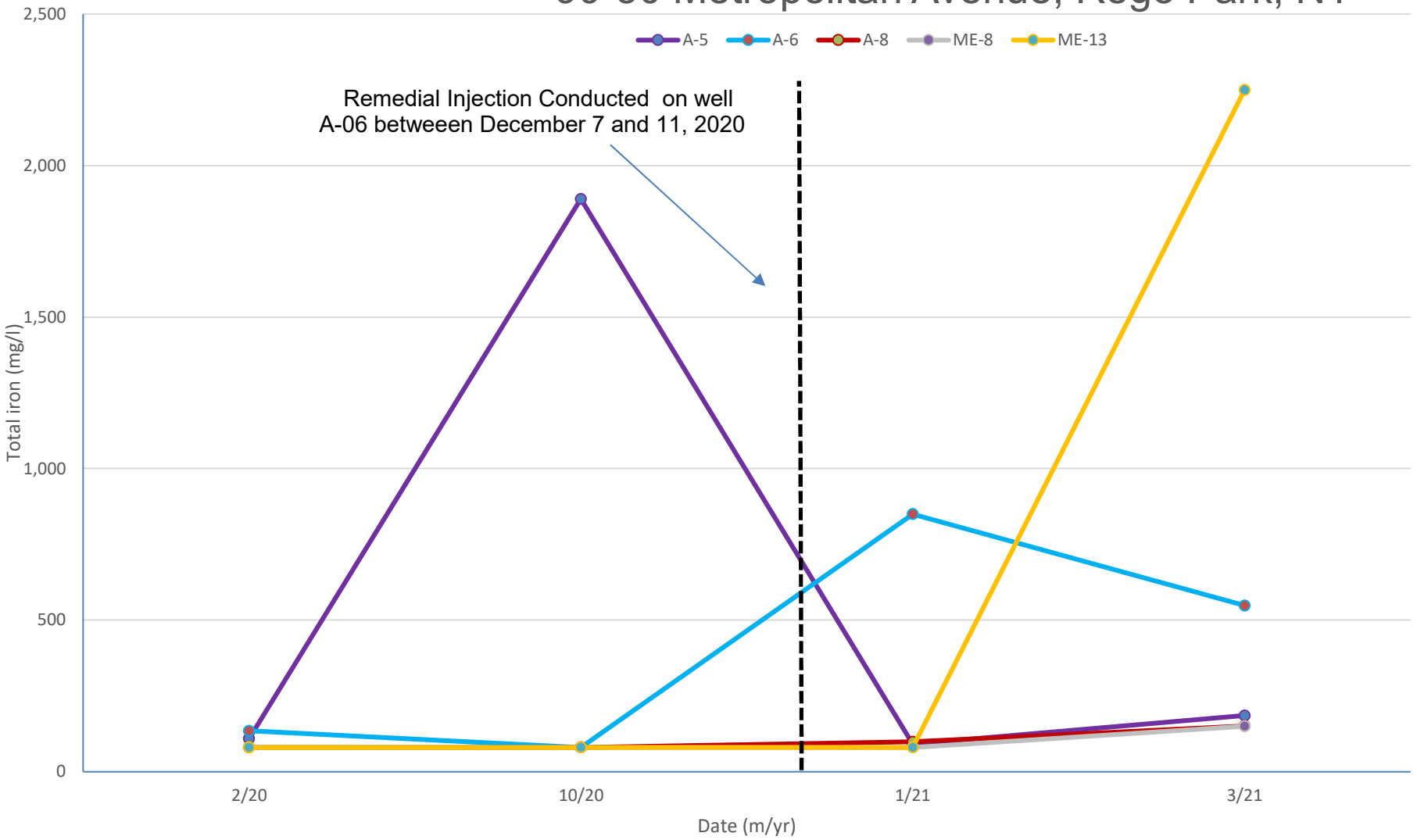

TABLE 1
GROUNDWATER CHEMICAL ANALYTICAL DATA
ISCO MONITORING PARAMETERS
90-30 METROPOLITAN AVENUE, REGO PARK, NEW YORK

Well Number	A-5				A-6				A-8				ME-8				ME-13			
	Preinjection		Post Injection		Preinjection		Post Injection		Preinjection		Post Injection		Preinjection		Post Injection		Preinjection		Post Injection	
Sample Date	2/20	10/20	1/21	3/21	2/20	10/20	1/21	3/21	2/20	10/20	1/21	3/21	2/20	10/20	1/21	3/21	2/20	10/20	1/21	3/21
ISCO Monitoring Paramaters (micrograms per liter)																				
Chloride	842,000	781,000	862,000	837,000	827,000	777,000	344,000	627,000	871,000	1,010,000	1,050,000	1,020,000	518,000	57,000	590,000	596,000	809,000	777,000	754,000	505,000
Sulfate	51,200	41,700	58,000	85,700	57,600	43,700	2,490,000	1,840,000	54,500	48,000	250,000	553,000	63,900	48,500	70,800	88,100	51,500	41,900	55,200	55,900
Alkalinity	307,000	320,000	321,000	334,000	313,000	324,000	1,770,000	1,020,000	280,000	296,000	293,000	328,000	88,800	185,000	200,000	229,000	145,000	210,000	196,000	198,000
Iron-Total	109 J	1,890	90.6 J	185	135 J	<0.76	850	548	<80.8	<80.8	98.3 J	151	<80.8	<80.8	<80.8	<80.8	<80.8	<80.8	<80.8	2,250
Iron-Dissolved	<80.8	<80.8	<80.8	<80.8	<80.8	<80.8	186	106 J	<80.8	<80.8	<80.8	<80.8	<80.8	<80.8	<80.8	<80.8	<80.8	<80.8	<80.8	<80.8
Manganese - Total	2.3 J	11.6	3.9 J	13.4 J	7.2 J	70.8	22.2	27.0	3.3 J	2.8 J	8.8 J	25.5	<0.76	<0.76	<0.76	0.88 J	<0.76	<0.76	<0.76	434
Manganese - Dissolved	0.95 J	<0.76	<0.76	<0.76	2.2 J	0.79 J	<0.76	<0.76	<0.76	1.0 J	<0.76	<0.76	<0.76	<0.76	<0.76	<0.76	<0.76	<0.76	<0.76	3.2 J

Notes:

J = Estimated concentration below reporting limit

FPM

TABLE 3.2.2.1
GROUNDWATER CHEMICAL ANALYTICAL DATA
SHALLOW WELLS
90-30 METROPOLITAN AVENUE, REGO PARK, NEW YORK

MAIN SITE PLUME

Well Number	ME-8																															
Sample Date	5/03	6/05	7/07	1/08	5/08	8/08	11/08	2/09	5/09	8/09	11/09	3/10	9/10	4/11	10/11	5/12	11/12	5/13	11/13	5/16	12/16	2/18	12/18	3/19	7/19	9/19	12/19	10/20	1/21	3/21	6/21	10/21
Target Compound List Volatile Organic Compounds in micrograms per liter																																
Acetone	ND	ND	ND	ND	23	ND	ND	ND	ND	7.1 J	ND	2.9 JB	ND	ND	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	16	ND	ND	ND	ND	ND
Methylene chloride	**16 JB**	**54 JB**	ND	ND	6.7 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.12 J	ND	NS	ND	ND	ND	ND	ND	ND	0.49 J	0.41 J	0.45 J	ND	ND
Tetrachloroethene	**2200**	**3600**	**250**	**420**	**350**	**340**	**290**	**330**	**300**	**290**	**210**	**130**	**100**	**150**	**99**	**84**	**130**	**200**	**180**	**810**	NS	**34**	**73**	**41**	**7.6**	**17**	**15**	**45**	**48**	**55**	**39**	**57**
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	0.45 J	0.36 J	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.51J	0.51J	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs*	2,200	3,600	250	420	350	340	290	330	300	290	210	130	100	150	99	84	130	200	180	810	NS	34	73	41	8	17	31	45	49	55	39	57

Well Number	ME-13																																NYSDEC Class GA Ambient Water Quality Standards
Sample Date	5/03	6/05	7/07	1/08	5/08	8/08	11/08	2/09	5/09	8/09	11/09	3/10	9/10	4/11	10/11	5/12	11/12	5/13	11/13	5/16	12/16	2/18	12/18	3/19	7/19	9/19	12/19	10/20	1/21	3/21	6/21	10/21	
Acetone	ND	15 J	ND	ND	8.1 J	ND	ND	ND	ND	5.3 J	ND	4.4 JB	ND	ND	21 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND	ND	ND	ND	ND	50
Methylene chloride	59 JB	**17 JB**	ND	ND	**5.8 JB**	ND	ND	ND	ND	ND	ND	ND	**5.2 JB**	**7.4 JB**	**17 JB**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
cis-1,2-Dichloroethene	ND	**48 J**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.55 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
Chloroform	ND	ND	ND	0.98 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.22 J	0.40 J	0.30 J	0.84 J	0.97 J	0.97 J	ND	ND	ND	ND	ND	0.34 J	ND	ND	ND	0.61 J	7
Tetrachloroethene	**2700**	**960**	**54**	**270**	**200**	**250**	**190**	**230**	**260**	**290**	**110**	**380**	**330**	**380**	**470**	**230**	**390**	**450**	**420**	**120**	**98**	**87**	**75**	**55**	**23**	**16**	**37**	**60**	**75**	**62**	**91**	**120**	5
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.69 J	0.57 J	0.78 J	0.75 J	0.68 J	0.25 J	0.30 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.33 J	5
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.65 J	ND	ND	ND	5
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Total VOCs*	2,700	1,008	54	270.98	200	250	190	230	260	290	110	380	330	380	470	231	391	451	421	122	99	87	75	55	23	16	49	60	76	62	91	120.94	-

Well Number	A-02																												
Sample Date	7/07	1/08	5/08	8/08	11/08	2/09	5/09	8/09	11/09	3/10	9/10	4/11	10/11	5/12	11/12	5/13	11/13	5/16	12/16	2/18	12/18	3/19	7/19	9/19	12/19	10/20	3/21	6/21	10/21
Target Compound List Volatile Organic Compounds in micrograms per liter																													
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	ND	1.6 J,B	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	0.47 J	0.36 J	ND	0.86 J	1.2 J	ND	1.1 J	1.0 J	0.93 J	0.74 J	ND	ND	ND	0.16 J	ND	ND	NS	ND	0.29 J	0.45 J	0.33 J	0.49 J	0.25 J	0.47 J	ND	ND	ND	ND
Tetrachloroethene	**32**	**13**	**14**	**24**	**15**	**44**	**37**	**27**	**32**	**40**	**33**	**42**	**26**	**30**	**26**	**22**	**29**	NS	**20**	**21**	**19**	**20**	**22**	**27**	**28**	**29**	**36**	**38**	**6.3**
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.20 J	0.18 J	0.28 J	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	1.4	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs*	32	13.47	14.36	24	15.86	45.2	37	28.1	33	40.9	33	42	26	30	26	22	29	NS	20	23	20	20	22	27	28	30	36	38	6.3

Well Number	A-03																														NYSDEC Class GA Ambient Water Quality Standards
Sample Date	5/03	7/07	1/08	5/08	8/08	11/08	2/09	5/09	8/09	11/09	3/10	9/10	4/11	10/11	5/12	11/12	5/13	11/13	5/16	12/16	2/18	12/18	3/19	7/12	9/19	12/19	10/20	3/21	6/21	10/21	
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2 J	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.85 JB	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
Chloroform	**9**	1.4	0.81 J	0.68 J	ND	0.68 J	ND	ND	ND	ND	0.72 J	1.0 J	0.82 J	0.81 J	0.43 J	0.23 J	0.16 J	ND	NS	ND	ND	0.33 J	ND	ND	ND	ND	ND	ND	ND	ND	7
Tetrachloroethene	**17**	**14**	**8.4**	**11**	**12**	**12**	**15**	**15**	**19**	**10**	**17**	**14**	**18**	**14**	**16**	**15**	**18**	**14**	NS	**9.3**	**9.2**	**5.9**	**9.2**	**8.0**	**8.4**	**9.5**	**7.0**	**9.9**	**9.0**	**6.7**	5
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.14 J	0.22 J	0.11 J	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	nd	ND	ND	5
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Total VOCs*	26	15.4	9.21	11.68	12	12.68	15	15	19	10	17.72	14	18.82	14.81	16.43	15.37	18	14	NS	9	9	6	9	8	8	10	7	10	9	6.7	-

Well Number	A-05																															
Sample Date	5/03	6/05	7/07	1/08	5/08	8/08	11/08	2/09	5/09	8/09	11/09	3/10	9/10	4/11	10/11	5/12	11/12	5/13	11/13	5/16	12/16	2/18	12/18	3/19	7/19	9/19	12/19	10/20	1/21	3/21	6/21	8/21
Target Compound List Volatile Organic Compounds in micrograms per liter																																
Acetone	ND	ND	ND	30	3.4	ND	ND	ND	5.2 J	ND	6.9 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	2.0 JB	ND	ND	**7.8 JB**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	ND	0.65 J	0.97 J	1.0	0.92 J	0.38 J	ND	ND	ND	0.36 J
Tetrachloroethene	**330**	**150**	**39**	**240**	**170**	**6**	**58**	**62**	**110****	**150**	**130**	**170**	**53**	**62**	**82**	**74**	**54**	**42**	**110**	**300**	**430**	**71**	**37**	**97**	**140**	**120**	**160**	**400**	**570**	**760**	**630**	**460**
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.12 J	ND	0.35 J	0.54 J	ND	ND	ND	ND	0.35 J	0.32 J	0.49 J	0.56 J	ND	ND	ND	0.47 J
Cloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.51 J	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs*	332	150	39	240	170	5.5	58	62	110	150	130	170.0	53	62	82	74	54.12	42	110	300	430	71.3	37	97.7	141.32	121	162	401	570	760	630	460.83

Well Number	A-06																																NYSDEC Class GA Ambient Water Quality Standards
Sample Date	5/03	6/05	7/07	1/08	5/08	8/08	11/08	2/09	5/09	8/09	11/09	3/10	9/10	4/11	10/11	5/12	11/12	5/13	11/13	5/16	12/16	2/18	12/18	3/19	7/19	9/19	12/19	10/20	1/21	3/21	6/21	8/21	
Acetone	ND	20 JB	ND	ND	19 J	ND	ND	ND	ND	ND	ND	13 JB**	ND	ND	10 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**110**	**100**	**78**	**35**	50
Methylene chloride	ND	**16 JB**	ND	ND	**13 JB**	ND	ND	ND	ND	5.0 JB	ND	ND	**5.1 JB**	**6.8 JB**	**18 JB**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
2-Butanone	ND	21 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.1	9.6 J	ND	ND	50
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21 J	0.19 J	ND	ND	ND	ND	ND	1.0 J	ND	0.60 J	ND	0.42 J	0.51 J	**8.7**	2.8	1.6	**11**	7
Tetrachloroethene	**8,000**	**730**	**290**	**1,200**	**720**	**760.00**	**500.00**	**660**	**540**	**490**	**430**	**580**	**460**	**520**	**800**	**550 E**	**770**	**470**	**550**	**770**	**780**	**710**	**350**	**370**	**410**	**410**	**500**	**400**	**130**	**390**	**270**	**580**	5
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	1.9 J	1.1 J	1.1 J	0.83 J	0.83 J	0.59 J	ND	ND	0.54 J	ND	0.58 J	0.56 J	ND	ND	ND	ND	5
Cloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.51 J	0.66 J	2.7	ND	ND	5
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.97 J	1.6 J	ND	ND	5
Total VOCs*	8,000	730	290	1,200	720	760	500	660	540	495	430	580	460	520	800	552	772	471	551	771	781	711	351	370	411	410	501	401	258.43	507	350	626	-

Notes:

ND = Not detected
NS = Not sampled
VOCs = Volatile Organic Compounds
*Excluding suspected field/lab contamination

Bold shaded values exceed NYSDEC Class GA Ambient Water Quality Standards
NYSDEC = New York State Department of Environmental Conservation
J = Estimated concentration below reporting limit

B = Analyte detected in an associated blank sample
- = Not established
** = Associated laboratory QC sample exceeds control limits.

TABLE 3.2.2.1 (CONTINUED)
GROUNDWATER CHEMICAL ANALYTICAL DATA
SHALLOW WELLS
90-30 METROPOLITAN AVENUE, REGO PARK, NEW YORK

MAIN SITE PLUME

Well Number	A-09																														
Sample Date	5/03	6/05	7/07	1/08	5/08	8/08	11/08	2/09	5/09	8/09	11/09	3/10	9/10	4/11	10/11	5/12	11/12	5/13	11/13	5/16	12/16	2/18	12/18	3/19	7/19	9/19	12/19	10/20	3/21	6/21	10/21
Target Compound List Volatile Organic Compounds in micrograms per liter																															
Acetone	ND	2.9 JB	ND	ND	3.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4 J	ND	ND	ND	ND	ND	ND	1.2 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	**15 JB**	1.8 JB	ND	ND	0.53 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	0.33 J	ND	1.2	ND	ND	1.2	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5 J	ND	ND	ND
Tetrachloroethene	**2,600**	**200**	**23**	**49**	**72**	**34**	**49**	**43**	**40****	**35**	**39**	**62**	**57**	**80**	**55**	**32**	**53**	**56**	**52**	**37**	**38**	**210**	**37**	**190**	**33**	**39**	**210**	**510**	**310**	**190**	**28**
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.52 J	0.16 J	0.13 J	0.16 J	ND	ND	0.36 J	1.1	0.32 J	0.93 J	0.55 J	0.43 J	ND	ND	ND	0.53 J
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs*	2,600	200	23	49	72	34	49	43	40	35	39	62	57	80	55	32.52	53.16	56	52	37	38	212	38	192	34	40	212.0	512.0	310.0	190.0	28.53

Well Number	A-15																															NYSDEC Class GA Ambient Water Quality Standards
Sample Date	5/03	6/05	7/07	1/08	5/08	8/08	11/08	2/09	5/09	8/09	11/09	3/10	9/10	4/11	10/11	5/12	11/12	5/13	11/13	5/16	12/16	2/18	12/18	3/19	7/12	9/19	12/19	10/20	3/21	6/21	10/21	
Target Compound List Volatile Organic Compounds in micrograms per liter																																
Acetone	ND	ND	ND	ND*	19 J	ND	4.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.9	ND	ND	ND	ND	50
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.1**	1
Methylene chloride	ND	ND	ND	ND	7.0 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
2-Butanone	ND	ND	ND	ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
Chloroform	ND	1.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.12 J	0.12 J	0.11 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.20 J	ND	ND	ND	ND	ND	ND	ND	5
Tetrachloroethene	**40**	**16**	**10**	**180**	**180**	**310**	**250**	**100**	**110****	**230**	**63**	**55**	**73**	**69**	**89**	**56**	**66**	**210**	**210**	**310**	**98**	**85**	**82**	**83**	**34**	**64**	**76**	**68**	**67**	**56**	**43**	5
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.22 J	0.39 J	0.34 J	0.45 J	ND	0.27 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.61 J	5
Total VOCs*	40	17.3	10	180	180	310	250	100	110	230	63	55	73	69	89	56	66.34	211	210	310	98	85	82	83.2	34	64	84	68	67	56	44.71	-

Well Number	A-16																														
Sample Date	5/03	6/05	7/07	1/08	5/08	8/08	11/08	2/09	5/09	8/09	11/09	3/10	9/10	4/11	10/11	5/12	11/12	5/13	11/13	5/16	12/16	2/18	12/18	3/19	7/19	9/19	12/19	10/20	3/21	6/21	10/21
Target Compound List Volatile Organic Compounds in micrograms per liter																															
Acetone	ND	ND	ND	ND*	ND	ND	ND	ND	ND	ND	ND	1.2 JB	ND	ND	1.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	0.74 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	0.6 J	ND	ND	**25**	**23**	4.7 J	ND	1.9 J	ND	ND	0.90 J	1.2 J	ND	1.1 J	0.91 J	2.30	0.66 J	0.52 J	0.98 J	0.92 J	0.84 J	0.98 J	0.68 J	0.38 J	ND	1.1	1.1	0.32 J	ND	ND	0.27 J
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs*	0.6	0.74	ND	25	23	4.7	ND	1.9	ND	ND	0.9	1.2	ND	1.1	0.91	2.3	0.66	0.52	0.98	0.92	0.84	0.98	0.68	0.38	ND	1	1	1	ND	ND	0.27

Well Number	A-18																															NYSDEC Class GA Ambient Water Quality Standards
Sample Date	5/03	6/05	7/07	1/08	5/08	8/08	11/08	2/09	5/09	8/09	11/09	3/10	9/10	4/11	10/11	5/12	11/12	5/13	11/13	5/16	12/16	2/18	12/18	3/19	7/19	9/19	12/19	10/20	3/21	6/21	10/21	
Target Compound List Volatile Organic Compounds in micrograms per liter																																
Acetone	ND	ND	ND	ND	ND	2.0 J	1.1 J	ND	ND	ND	ND	ND	ND	ND	1.1 J	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
Methylene chloride	ND	0.40 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Tetrachloroethene	ND	ND	ND	**6.5**	**58**	**25**	3.7 J	4.2 J	2.0 J**	1.4 J	2.3 J	2.7 J	2.5 J	1.9 J	2.6 J	0.8 J	0.66 J	1.4	1.5	NS	1.1	0.97 J	0.41 J	1.7	0.27 J	0.51 J	ND	NS	ND	ND	0.51 J	5
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Total VOCs*	ND	ND	ND	6.5	58	25	3.7	4.2	2.0	1.4	2.3	2.7	2.5	1.9	2.6	0.8	0.66	1.4	1.5	NS	1.1	0.97	0.41	1.7	0.27	ND	ND	ND	ND	ND	ND	-

Notes:

ND = Not detected
NS = Not sampled
VOCs = Volatile Organic Compounds
*Excluding suspected field/lab contamination

Bold shaded values exceed NYSDEC Class GA Ambient Water Quality Standards
NYSDEC = New York State Department of Environmental Conservation
J = Estimated concentration below reporting limit

B = Analyte detected in an associated blank sample
- = Not established
** = Associated laboratory QC sample exceeds control limits.

TABLE 3.2.2.2
GROUNDWATER CHEMICAL ANALYTICAL DATA
INTERMEDIATE WELLS
90-30 METROPOLITAN AVENUE, REGO PARK, NEW YORK

Well Number	A-08																															
Sample Date	5/03	6/05	7/07	1/08	5/08	8/08	11/08	2/09	5/09	8/09	11/09	3/10	9/10	4/11	10/11	5/12	11/12	5/13	11/13	5/16	12/16	2/18	12/18	3/19	7/19	9/19	12/19	10/20	1/21	3/21	6/21	10/21
Target Compound List Volatile Organic Compounds in micrograms per liter																																
Acetone	ND	**450 B**	**97 J**	ND	**190 B**	ND	ND	ND	ND	ND	ND	28 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25	20	ND	ND
Methylene chloride	ND	**57 JB**	ND	ND	**32 JB**	ND	ND	ND	ND	**14 JB**	ND	ND	7.9 JB	**14 JB**	**34 JB**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2J	0.99 J	0.78 J	0.51 J
Tetrachloroethene	**8,500**	**3,300**	**4,400**	**1,700**	**1,000**	**1,800**	**1,400**	**1,400**	**1,600****	**1,700**	**1,300**	**1,200**	**1,400**	**1,600**	**1,800**	**1,600**	**1,400**	**1,500**	**990**	**1,800**	**1,300**	**1,100**	**1,100**	**970**	**900**	**1,200**	**1,000**	**990**	**750**	**850**	**700**	**380**
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.6 J	2.5 J	2.7 J	1.8 J	1.8 J	1.2 J	1.4 J	3.3 J	ND	ND	1.7 J	ND	ND	ND	1.1 J	ND	0.95 J
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.4	ND	**31**	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2 J	0.87 J	ND	ND
Total VOCs*	8,500	3,300	4,400	1,700	1,000	1,800	1,400	1,400	1,600	1,700	1,300	1,200	1,400	1,600	1,800	1,604.6	1,402.5	ND	991	1,102	1,302	1,102	1,104	970	900	1,202	1,000	990	883	873	732	ND

Well Number	A-10																															NYSDEC Class GA Ambient Water Quality Standards
Sample Date	5/03	6/05	7/07	1/08	5/08	8/08	11/08	2/09	5/09	8/09	11/09	3/10	9/10	4/11	10/11	5/12	11/12	5/13	11/13	5/16	12/16	2/18	12/18	3/19	7/12	9/19	12/19	10/20	3/21	6/21	10/21	
Acetone	ND	3.0 JB	ND	ND	ND	3.0 J	ND	ND	ND	ND	ND	ND	1.7 JB	ND	35	ND	ND	ND	ND	ND	ND	1.5 J, B	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
Methylene chloride	ND	1.7 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.26 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	0.17 J	ND	ND	ND	ND	1.3	0.31 J	0.88 J	0.40 J	ND	ND	ND	ND	ND	7
Tetrachloroethene	**630**	**200**	**10**	**12**	**15**	**30**	**25**	**47**	**44****	**40**	**68**	**60**	**37**	**74**	**26**	**49**	**30**	**43**	**25**	**23**	**26**	**26**	**200**	**26**	**190**	**140**	**34**	**19**	**23**	**15**	**24**	5
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.66 J	ND	ND	ND	ND	0.34 J	0.57 J	0.34 J	0.57 J	0.63	0.54 J	0.46 J	0.57 J	0.39 J	ND	0.79 J	0.49 J	0.52 J	0.42 J	ND	5
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.94 J	ND	ND	ND	
Total VOCs*	630	200	10	12	15	30	25	47	44	40	68	60.66	37	74	26	49	30.49	44	25	24	27	28	202	57.6	191.27	140	34	20	23.52	15.42	24	-

Well Number	A-13																										
Sample Date	1/08	5/08	8/08	11/08	2/09	5/09	8/09	11/09	3/10	9/10	4/11	10/11	5/12	11/12	5/13	11/13	5/16	12/16	2/18	12/18	3/19	9/19	12/19	10/20	3/21	6/21	10/21
Target Compound List Volatile Organic Compounds in micrograms per liter																											
Acetone	ND	ND	ND	ND	ND	ND	3.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2 J	0.13 J	0.14 J	0.11 J	0.24 J	ND	ND	ND	ND	ND	ND	0.36 J	0.38 J	ND	0.40 J
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	**190.00**	**120.00**	**160.00**	**110.00**	**160.00**	**200.00**	**110.00**	**89.00**	**56.00**	**33.00**	**75.00**	**72.00**	**57.00**	**72.00**	**41.00**	**60.00**	**460.00**	**280.00**	2.00	**76.00**	**27.00**	**110.00**	**140.00**	**210.00**	**190.00**	**180.00**	**190**
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.36 J	0.15 J	0.27 J	0.47 J	0.33 J	1.4	0.32 J	ND	0.32 J	0.34 J	0.34 J	0.34 J	ND	ND
Total VOCs*	190	120	160	110	160	200	110	89	56	33	75	72	57.2	72.5	41	60	461	281	3.0	77	27	110	140	210	190.72	180	190.4

Well Number	MW-109																													NYSDEC Class GA Ambient Water Quality Standards
Sample Date	5/03	7/07	1/08	5/08	8/08	11/08	2/09	5/09	8/09	11/09	3/10	9/10	4/11	10/11	5/12	11/12	5/13	11/13	5/16	12/16	2/18	12/18	3/19	9/19	12/19	10/20	3/21	6/21	10/21	
Acetone	ND	ND	ND	ND	2.2 J	ND	ND	ND	ND	1.8 J	ND	ND	ND	1.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.27 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.13 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND	ND	1.4	ND	ND	ND	
Tetrachloroethene	5 J	2.6 J	2.4 J	2.2 J	2.0 J	1.3 J	3.0 J	1.5 J**	2.5 J	1.6 J	2.2 J	1.7 J	1.8 J	1.6 J	2	2.0	2.1	1.8	1.3	**7.8**	1.3	1.3	1.9	1.4	0.9	0.95 J	0.91 J	0.79 J	0.93 J	5
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Total VOCs*	5.0	2.6	2.4	2.2	2.0	1.3	3.0	1.5	2.5	1.6	2.2	1.7	1.8	1.6	1.9	2.1	2.0	2.0	2.0	8.0	1.3	1.3	1.9	1.4	1	2.4	0.91	0.79 J	0.93	-

Notes:

ND = Not detected

VOCs = Volatile Organic Compounds

*Excluding suspected field/lab contamination

Bold shaded values exceed NYSDEC Class GA Ambient Water Quality Standards

NYSDEC = New York State Department of Environmental Conservation

J = Estimated concentration below reporting limit

B = Analyte detected in an associated blank sample

- = Not established

** = Associated laboratory QC sample exceeds control limits.

TABLE 3.2.2.3
GROUNDWATER CHEMICAL ANALYTICAL DATA
DEEP WELLS
90-30 METROPOLITAN AVENUE, REGO PARK, NEW YORK

MAIN SITE PLUME

Well Number	A-07																														
Sample Date	5/03	6/05	7/07	1/08	5/08	8/08	11/08	2/09	5/09	8/09	11/09	3/10	9/10	4/11	10/11	5/12	11/12	5/13	11/13	5/16	12/16	2/18	12/18	3/19	7/19	9/19	12/19	10/20	3/21	6/21	10/21
Target Compound List Volatile Organic Compounds in micrograms per liter																															
Acetone	ND	3.2 JB	ND	ND	ND	**59 B**	1.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J,B	ND	ND	ND	ND	ND	ND	20	ND	ND
Methylene chloride	**13 JB**	1.8 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	7.0 JB	26	ND	ND	**230 B**	ND	**5.6 J**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.12 J	0.17 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.33 J	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.0	0.43 J	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	**1,600**	**170**	**41**	1.5 J	0.68 J	**5.4 J**	ND	1.7 J	ND	ND	ND	ND	1.1 J	1.7 J	**5.0**	1.2	4.5	3.0	**14.0**	**16**	**22**	1.8	3.5	3	**12**	**17**	**16**	**12**	**59**	**18**	3.3
1,1,2,2-Tetrachloroethane	**18 J**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs*	1,618	170	41	1.5	0.68	5.4	ND	1.7	ND	ND	ND	ND	1.1	1.7	5.0	1.2	4.6	3	14	16	22	3	4	3	12.0	3.5	3.0	14.0	59.8	18.0	3.3

Well Number	A-17																															NYSDEC Class GA Ambient Water Quality Standards
Sample Date	5/03	6/05	7/07	1/08	5/08	8/08	11/08	2/09	5/09	8/09	11/09	3/10	9/10	4/11	10/11	5/12	11/12	5/13	11/13	5/16	12/16	2/18	12/18	3/19	7/10	9/19	12/19	10/20	3/21	6/21	10/21	
Target Compound List Volatile Organic Compounds in micrograms per liter																																
Acetone	ND	ND	ND	ND	ND	ND	1.3 J	ND	ND	ND	ND	ND	ND	ND	1.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
Methylene chloride	ND	0.57 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6
2-Butanone	43	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Tetrachloroethene	0.5 J	ND	0.79	**7.8**	ND	ND	3.6 J	3.7 J	ND	**5.8**	3.1 J	3.8 J	1.9 J	5.0	1.9 J	2.1	1.5	1.5	1.4	1.6	1.9	1.9	1.6	1.1	1.3	1.4	1.3	0.51 J	0.98 J	0.41 J	0.68 J	5
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Total VOCs*	0.5	ND	0.79	7.8	ND	ND	3.6	3.7	ND	5.8	3.1	3.8	1.9	5.0	1.9	2.1	1.5	1.5	1.4	1.6	1.9	1.9	1.6	1.1	1.3	1.4	1.3	0.5	1.0	0.41 J	0.68 J	-

Well Number	MW-110																														NYSDEC Class GA Ambient Water Quality Standards
Sample Date	5/03	7/07	1/08	5/08	8/08	11/08	2/09	5/09	8/09	11/09	3/10	9/10	4/11	10/11	5/12	11/12	5/13	11/13	5/16	12/16	2/18	12/18	3/19	7/19	9/19	12/19	10/20	3/21	6/21	10/21	
Target Compound List Volatile Organic Compounds in micrograms per liter																															
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.4**	ND	**1.6**	**2.7**	**2.4**	**2.8**	0.41 J	**2.2**	**2.8**	**2.2**	**1.9**	ND	0.6
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.56 J	0.86 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Tetrachloroethene	ND	ND	ND	ND	ND	ND	0.99 J	ND	1.8 J	ND	ND	ND	0.82 J	ND	ND	0.64 J	0.40 J	0.27 J	ND	1.3	ND	0.26 J	0.75 J	ND	2.2	ND	ND	ND	ND	ND	5
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Total VOCs*	ND	ND	ND	ND	ND	ND	0.99	ND	1.8	ND	ND	ND	0.82	ND	ND	1.2	0.4	0.3	1.4	1.3	1.6	3.0	3.2	2.8	2.6	2.2	2.8	2.2	1.9	0.0	-

Well Number	MW-112																													
Sample Date	5/03	6/05	7/07	1/08	5/08	8/08	11/08	2/09	5/09	8/09	11/09	3/10	9/10	4/11	10/11	5/12	11/12	5/13	11/13	5/16	12/16	2/18	12/18	3/19	9/19	12/19	10/20	3/21	6/21	10/21
Target Compound List Volatile Organic Compounds in micrograms per liter																														
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15	ND	ND	ND	ND
Methylene chloride	ND	0.75 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21 J	0.13 J	0.14 J	ND	ND	0.36 J	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	**72**	3.2 J	1.3 J	3.2 J	ND	ND	1.1 J	2.5 J	4.7 J	2.3 J	3.1 J	**11**	3.1 J	2.9 J	2.1 J	3.9	2.0	1.9	3.5	**5.8**	4.5	**73**	4.2	2.6	2.0	**17**	1.4	1.3	0.47 J	**5.7**
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs*	72	3.2	1.3	3.2	ND	ND	1.1	2.5	4.7	2.3	3.1	11	3.1	2.9	2.1	3.9	2.2	2.0	3.6	5.8	4.5	73	4.2	2.6	2	32	1.4	ND	0.47 J	5.7

Well Number	MW-113																													NYSDEC Class GA Ambient Water Quality Standards
Sample Date	6/05	7/07	1/08	5/08	8/08	11/08	2/09	5/09	8/09	11/09	3/10	9/10	4/11	10/11	5/12	11/12	5/13	11/13	5/16	12/16	2/18	12/18	3/19	9/19	12/19	10/20	3/21	6/21	10/21	
Target Compound List Volatile Organic Compounds in micrograms per liter																														
Acetone	ND	3.4 JB	ND	ND	ND	1.4 J	ND	ND	1.4 J	ND	ND	ND	ND	26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17	ND	ND	ND	ND	50
Methylene chloride	0.62 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.13 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Tetrachloroethene	1.4 J	**8.70**	**23.00**	1.4 J	**38.00**	2.2 J	**5.10**	**6.40**	4.8	**7.20**	**9.90**	**8.30**	4.3 J	**7.50**	4.6	4.5	4.7	4.3	4.3	4.4	**85.00**	**90.00**	**29.00**	**4.30**	**40.00**	1.3	2.1	1.3	1.6	5
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Total VOCs*	1.4	8.7	23	1.4	38	2.2	5.1	6.4	4.8	7.2	9.9	8.3	4.3	7.5	4.6	4.63	5	4.3	4.3	4.4	85	90	90	4.3	57	1.3	ND	1.3	1.6	-

Notes:

ND = Not detected
VOCs = Volatile Organic Compounds
*Excluding suspected field/lab contamination
Bold shaded values exceed NYSDEC Class GA Ambient Water Quality Standards

NYSDEC = New York State Department of Environmental Conservation
J = Estimated concentration below reporting limit
B = Analyte detected in an associated blank sample
\- = Not established

ATTACHMENT A
LABORATORY REPORTS