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December 21, 2015

Mr. William Welling, Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, New York 12233 - 7013

Re: Mr. C's Dry Cleaners Site, NYSDEC Site Number 9-15-157,
Work Assignment D007617-11, 2015 Long-term Groundwater Monitoring Results

Dear Mr. Welling:

Ecology and Environment Engineering, P.C. (EEEPC) is pleased to provide the 2015 Long-term Groundwater Monitoring Results Report for the Mr. C's Dry Cleaners Site. The groundwater monitoring effort, analytical requirements, and quality assurance/quality control (QA/QC) review were performed in accordance with the approved Site Management Plan (SMP, February 2015). At the request of the New York State Department of Environmental Conservation (NYSDEC), the complete results of the 2015 Long-term Groundwater Monitoring event will be presented in the 2015 Periodic Review Report (PRR). This letter report presents a summary of the analytical results, pertinent field information, and validation of the analytical results.

Groundwater monitoring around the Mr. C's site has been performed under EEEPC's Standby Contract since 2003. The groundwater beneath and around the Mr. C's site continues to contain elevated levels of several volatile organic compounds (VOCs), including chlorinated solvents, their breakdown by-products, and aromatic hydrocarbons. The primary contaminant of concern (COC) in the groundwater is tetrachloroethene (PCE). The SMP for the site requires monitoring the extent of the PCE and total VOC plume that resulted from previous dry cleaning operations at the Mr. C's Dry Cleaners site.

Fieldwork was performed by EEEPC personnel from October 21 through 30, 2015. A total of 28 wells and four piezometers were sampled during the 2015 long-term groundwater monitoring event. Duplicate samples for analytical quality control were taken from monitoring wells MPI-6S and MW-7.

Well Purging and Sampling Procedures

All sampled monitoring wells and piezometers were purged prior to sampling in accordance with Appendix I of the SMP, which requires that all wells are pumped using one of two methods: low-flow purging and sampling or standard purging and sampling. The bioremediation performance monitoring wells and piezometers were sampled using the low-flow sampling method, while all other wells were sampled using standard purging and sampling method.

The monitoring wells were purged using a submersible pump with new or dedicated polyethylene tubing or disposable polyethylene bailers on new polypropylene line. New polypropylene line was used for the bioremediation performance monitoring wells and piezometers. Before purging, static water levels were measured to within ±0.01 foot in each well using a Solinst water-level meter.

All of the monitoring wells were purged of approximately three to five times the volume (or more) of water standing in the well. Purged water from the monitoring wells was containerized and transported to the on-site treatment facility for processing. Temperature, pH, specific conductance, turbidity, and oxygen reduction potential (ORP) were measured and recorded, at a minimum, before purging, after each well volume was purged, and just before sampling using a LaMotte 2020 turbidity meter, YSI pro plus quarto flow-through cell, and/or a Myron 6P Ultrameter II (water parameter kit). Purging was performed until pH, specific conductance, and temperature had stabilized and turbidity was 50 nephelometric turbidity units (NTUs) or less. Purge records will be provided in the 2015 PRR. The individual well purge and sampling field records are presented in Attachment A.

The samples collected as part of the long-term monitoring program were analyzed for VOCs by Eurofins Spectrum Analytical, Inc. (formerly Spectrum Analytical, Inc.) using U.S. Environmental Protection Agency (EPA) Method 8260. A summary of the positive detections of VOCs is presented in Table 1. The complete analytical results will be provided in electronic form through EQUIS, and a copy of the laboratory reports will be provided in the 2015 PRR.

Groundwater Monitoring Results

Figures 1 and 2 summarize historical VOC concentrations detected across the site. Figures 3 and 4 summarize PCE and total chlorinated VOCs in groundwater and were generated using Surfer modeling software. Figure 3 is based on Surfer software modeling interpretation of the iso-contours and shows the PCE contaminant plume. The iso-contours on Figure 4 represent PCE and the total of all the other VOCs within the plume. These other VOCs include: trichloroethene (TCE), cis-1,2-dichloroethene (cis-DCE), trans-1,2-dichloroehtene (trans-DCE), 1,1-dichloroethene, and vinyl chloride. Figure 5 is a groundwater contour map developed from the depth to water level measurements at the time of sampling.

Table 1 provides the sample analytical results for the groundwater from each monitoring well. Bold values shown in the table denote positive analytical results. Highlighted boxes in the table denote either values that exceed NYSDEC groundwater standards or exceed groundwater guidance values.

The groundwater monitoring results are summarized below.

- Seven VOCs (1,2-dichloroethane, PCE, TCE, cis-DCE, trans-DCE, vinyl chloride, and methyl-tert-butyl [MTBE]) were detected in the 2015 groundwater samples at levels that exceed their NYSDEC Class GA groundwater standards and the guidance values[1] used to screen the groundwater data.
- Six VOCs (1,1,1-trichloroethane, 1,1-dichloroethane, acetone, carbon disulfide, and chloroform) were detected in the 2015 groundwater samples; these compounds either have no applicable standard or guidance value or were detected at levels below their NYSDEC Class GA groundwater standards and below the guidance values used to screen the groundwater data.
- PCE was detected above the groundwater standard (5 micrograms per liter [µg/L]) in 16 wells and three piezometer samples across the site. The highest concentration of PCE (2,300 µg/L, estimated) was detected in a sample collected from pumping well PW-5. Historically, the highest concentration of PCE has been detected in samples collected from monitoring wells MPI-6S and PW-6. PCE in MPI-6S has been reduced from 6,800 µg/L in 2012, before bioremediation, to non-detectable.
- TCE was detected above the groundwater standard (5µg/L) in ten wells and three piezometer sampled across the site. The highest concentration of TCE, 190 µg/L, was detected in a sample collected from piezometer PZ-6A.
- cis-DCE was detected above the groundwater standard (5 µg/L) in 14 wells and three piezometers sampled across the site. The highest concentration of cis-DCE, 720 µg/L, was detected in a sample collected from monitoring well MPI-4I.
- trans-DCE was detected above the groundwater standard (5 µg/L) in one well and one piezometer. The highest concentration of trans-DCE, 16 µg/L, was detected in a sample collected from monitoring well MW-8.
- Vinyl chloride was detected above its groundwater standard (2 µg/L) in eight wells and one piezometer. Vinyl chloride increased in concentration across the site since 2013. The highest concentration of vinyl chloride (180 µg/L) was detected in a sample collected from monitoring well MPI-64I.
- MTBE was detected in wells EE-2 (19 µg/L), EE-3 (22 µg/L), MPI-15B (1.1 µg/L), MPI-3S (35 µg/L), MPI-4I (310 µg/L), MPI-4S (1.3 µg/L), PW-4 (8.5 µg/L), PW-6 (1.4 µg/L), and PW-8 (2.7 µg/L). MTBE concentrations have not spread or changed much since 2013. It was also detected in piezometers PZ-6A (6.8µg/L) and PZ-8C (26 µg/L). The guidance value for MTBE is 10 µg/L.

Quality Control/ Quality Assurance and Data Review

The analytical data were independently validated by EEEPC using project requirements in the SMP Quality Assurance Plan (Appendix K of the SMP, February 2015). Any deviations from acceptable QC specifications are discussed in the data usability summary reports (DUSRs) in Attachment B. Field duplicates and matrix spike/matrix spike duplicates (MS/MSDs) were collected for QA/QC purposes. Several results were qualified and one QA/QC issue was noted:

[1] New York State Department of Conservation. 1998. Division of Water Technical and Operational Guidance Series (1.1.1): *Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations,* Division of Water, Albany, New York.

- The following samples were diluted and reported with elevated reporting limits for all analytes: ESI-6-OCT15, PZ-5B-OCT15, MW-7-OCT15, and MW-7-OCT15-Q. There are instances where the elevated reporting limit exceeds the screening level; therefore, analyte concentrations may exceed the screening limit.
- Cis-1,2-dichloroethene and vinyl chloride were qualified "J" (estimated) because precision in the field duplicate of MPI-6S-OCT15 was poor.
- Acetone also was qualified "J" (estimated) in MPI-6S-OCT15 and MPI-6S-OCT15-Q because of elevated recovery in the associated laboratory control samples (LCSs).
- Rinseate blanks were not collected from non-dedicated equipment.

In summary, no major concerns were encountered regarding the usability of the analytical data for the report.

If you have any questions or comments regarding this report, please contact me at (716) 684-8060.

Sincerely,

ECOLOGY AND ENVIRONMENT ENGINEERING, P.C.

Michael G. Steffan

Michael G. Steffan
Project Manager

Attachments

cc: Mr. Dave Szymanski, NYSDEC Region 9 – w/Attachments

TABLE

Table 1 Summary of Positive Analytical Results for Groundwater Samples
Mr. C's Dry Cleaners Site, East Aurora, New York

Analyte	Screening Criteria [1]	Notes	Location ID: / Sample Name: / Depth: / Date:					
			EE-2 / EE-2-OCT15 / 22 - 32 ft / 10/26/15	EE-3 / EE-3-OCT15 / 18 - 28 ft / 10/23/15	ESI-2-R / ESI-2-R-OCT15 / 9 - 19 ft / 10/26/15	ESI-3 / ESI-3-OCT15 / 7 - 17 ft / 10/28/15	ESI-5-R / ESI-5-R-OCT15 / 5 - 15 ft / 10/26/15	ESI-6 / ESI-6-OCT15 / 7 - 17 ft / 10/23/15
Volatile Organics by Method SW8260C (µg/L)								
1,1,1-Trichloroethane	5		0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	2.5 U
1,1-Dichloroethane	5		**0.82 J**	0.25 U	0.25 U	**0.98 J**	0.25 U	1.3 U
1,1-Dichloroethene	5		**0.80 J**	0.39 U	0.39 U	0.39 U	0.39 U	2.0 U
1,2-Dichloroethane	0.6		0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	2.1 U
Acetone	50	G	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	11 U
Carbon Disulfide	60	G	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	1.7 U
Chloroform	7		0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	1.7 U
Cis-1,2-Dichloroethylene	5		**230**	**15**	0.48 U	0.48 U	0.48 U	**32**
Methyl-Tert-Butyl Ether	10	G	**19**	**22**	0.24 U	0.24 U	0.24 U	1.2 U
Tetrachloroethylene (PCE)	5		**97**	**1.3 J**	0.65 U	**140**	0.65 U	**320**
Trans-1,2-Dichloroethene	5		**1.6 J**	0.65 U	0.65 U	0.65 U	0.65 U	3.3 U
Trichloroethylene (TCE)	5		**140**	0.36 U	0.36 U	0.36 U	0.36 U	**21 J**
Vinyl Chloride	2		**4.7 J**	0.50 U	0.50 U	0.50 U	0.50 U	2.5 U

Key:

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2. Bold values denote positive hits.

3. Shaded cell exceeds groundwater standard.

Source: Ecology and Environment Engineering, P.C. 2015

Table 1 Summary of Positive Analytical Results for Groundwater Samples
Mr. C's Dry Cleaners Site, East Aurora, New York

Analyte	Screening Criteria [1]	Notes	Location ID:	MPI-13B-R	MPI-14B-R	MPI-15B	MPI-1S	MPI-2S-R	MPI-3S
			Sample Name:	OCT15	OCT15	MPI-15B-OCT15	MPI-1S-OCT15	MPI-2S-R-OCT15	MPI-3S-OCT15
			Depth:	17 - 32 ft	15 - 30 ft	0 - 0 ft	9 - 19 ft	8 - 18 ft	8 - 18 ft
			Date:	10/22/15	10/22/15	10/27/15	10/23/15	10/26/15	10/23/15
Volatile Organics by Method SW8260C (µg/L)									
1,1,1-Trichloroethane	5		0.50 U	0.50 U	0.50 U	0.50 U	**3.0 J**	0.50 U
1,1-Dichloroethane	5		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,1-Dichloroethene	5		0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
1,2-Dichloroethane	0.6		0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	**2.2 J**
Acetone	50	G	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
Carbon Disulfide	60	G	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Chloroform	7		0.33 U	0.33 U	0.33 U	0.33 U	**4.4 J**	0.33 U
Cis-1,2-Dichloroethylene	5		0.48 U	0.48 U	0.48 U	**3.1 J**	0.48 U	0.48 U
Methyl-Tert-Butyl Ether	10	G	0.24 U	0.24 U	**1.1 J**	0.24 U	0.24 U	**35**
Tetrachloroethylene (PCE)	5		**6.7**	**2.3 J**	0.65 U	**45**	**1.9 J**	0.65 U
Trans-1,2-Dichloroethene	5		0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
Trichloroethylene (TCE)	5		0.36 U	0.36 U	0.36 U	**2.3 J**	0.36 U	0.36 U
Vinyl Chloride	2		0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U

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2. Bold values denote positive hits.

3. Shaded cell exceeds groundwater standard.

Source: Ecology and Environment Engineering, P.C. 2015

Table 1 Summary of Positive Analytical Results for Groundwater Samples
Mr. C's Dry Cleaners Site, East Aurora, New York

Analyte	Screening Criteria [1]	Notes	Location ID: MPI-4I Sample Name: MPI-4I-OCT15 Depth: 32 - 42 ft Date: 10/26/15	MPI-4S MPI-4S-OCT15 11 - 21 ft 10/27/15	MPI-5S MPI-5S-OCT15 8 - 18 ft 10/21/15	MPI-6S MPI-6S-OCT15 12 - 22 ft 10/27/15	MPI-6S MPI-6S-OCT15-Q 12 - 22 ft 10/27/15	MPI-7I-R MPI-7I-R-OCT15 29 - 39 ft 10/28/15
Volatile Organics by Method SW8260C (µg/L)								
1,1,1-Trichloroethane	5		0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	5		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,1-Dichloroethene	5		0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
1,2-Dichloroethane	0.6		0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Acetone	50	G	2.2 U	2.2 U	2.2 U	**12 J**	**8.4 J**	2.2 U
Carbon Disulfide	60	G	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Chloroform	7		0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Cis-1,2-Dichloroethylene	5		**720**	**41**	**8.4**	**18 J**	**35 J**	0.48 U
Methyl-Tert-Butyl Ether	10	G	**310**	**1.3 J**	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethylene (PCE)	5		**71**	**4.4 J**	**30**	0.65 U	0.65 U	**1.2 J**
Trans-1,2-Dichloroethene	5		**1.6 J**	0.65 U	**4.4 J**	0.65 U	**1.0 J**	0.65 U
Trichloroethylene (TCE)	5		**31**	**1.6 J**	**5.7**	0.36 U	0.36 U	0.36 U
Vinyl Chloride	2		**180**	**6.4**	**1.5 J**	**14 J**	**35 J**	0.50 U

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Source: Ecology and Environment Engineering, P.C. 2015

Table 1 Summary of Positive Analytical Results for Groundwater Samples
Mr. C's Dry Cleaners Site, East Aurora, New York

Analyte	Screening Criteria [1]	Notes	Location ID:	MPI-8S-R	MPI-9S-R	MW-11	MW-7	MW-7	MW-8
			Sample Name:	MPI-8S-R-OCT15	MPI-9S-R-OCT15	MW-11-OCT15	MW-7-OCT15	MW-7-OCT15-Q	MW-8-OCT15
			Depth:	8 - 18 ft	8 - 18 ft	10 - 20 ft	5 - 15 ft	5 - 15 ft	5 - 15 ft
			Date:	10/21/15	10/22/15	10/28/15	10/22/15	10/22/15	10/21/15
Volatile Organics by Method SW8260C (µg/L)									
1,1,1-Trichloroethane	5			0.50 U	0.50 U	0.50 U	5.0 U	5.0 U	0.50 U
1,1-Dichloroethane	5			0.25 U	0.25 U	0.25 U	2.5 U	2.5 U	0.25 U
1,1-Dichloroethene	5			0.39 U	0.39 U	0.39 U	3.9 U	3.9 U	0.39 U
1,2-Dichloroethane	0.6			0.41 U	0.41 U	0.41 U	4.1 U	4.1 U	0.41 U
Acetone	50	G		2.2 U	2.2 U	2.2 U	22 U	22 U	2.2 U
Carbon Disulfide	60	G		0.34 U	0.34 U	**1.9 J**	3.4 U	3.4 U	0.34 U
Chloroform	7			0.33 U	0.33 U	0.33 U	3.3 U	3.3 U	0.33 U
Cis-1,2-Dichloroethylene	5			**71**	0.48 U	0.48 U	4.8 U	4.8 U	**12**
Methyl-Tert-Butyl Ether	10	G		0.24 U	0.24 U	0.24 U	2.4 U	2.4 U	0.24 U
Tetrachloroethylene (PCE)	5			**150**	**1.2 J**	**1400**	**840**	**860**	0.65 U
Trans-1,2-Dichloroethene	5			**1.6 J**	0.65 U	0.65 U	6.5 U	6.5 U	**16**
Trichloroethylene (TCE)	5			**17**	0.36 U	**4.8 J**	3.6 U	3.6 U	0.36 U
Vinyl Chloride	2			0.50 U	0.50 U	0.50 U	5.0 U	5.0 U	**7.4**

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Mr. C's Dry Cleaners Site, East Aurora, New York

Analyte	Screening Criteria [1]	Notes	Location ID:	PW-2	PW-3	PW-4	PW-5	PW-6	PW-8
			Sample Name:	PW-2-OCT15	PW-3-OCT15	PW-4-OCT15	PW-5-OCT15	PW-6-OCT15	PW-8-OCT15
			Depth:	18 - 28 ft	18 - 28 ft	18 - 28 ft	18 - 28 ft	18 - 28 ft	18 - 28 ft
			Date:	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15
Volatile Organics by Method SW8260C (µg/L)									
1,1,1-Trichloroethane	5			0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloroethane	5			0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,1-Dichloroethene	5			0.39 U	0.39 U	0.39 U	0.39 U	**1.8 J**	0.39 U
1,2-Dichloroethane	0.6			0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Acetone	50	G		2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
Carbon Disulfide	60	G		0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Chloroform	7			0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Cis-1,2-Dichloroethylene	5			0.48 U	0.48 U	**81**	**99**	**61 J**	**150**
Methyl-Tert-Butyl Ether	10	G		0.24 U	0.24 U	**8.5**	0.24 U	**1.4 J**	**2.7 J**
Tetrachloroethylene (PCE)	5			**380**	**100**	**2000**	**2300**	**2000**	**170**
Trans-1,2-Dichloroethene	5			0.65 U	0.65 U	**1.4 J**	**3.5 J**	**0.84 J**	0.65 U
Trichloroethylene (TCE)	5			**1.8 J**	**2.1 J**	**110**	**31**	**130 J**	**8.4**
Vinyl Chloride	2			0.50 U	0.50 U	0.50 U	**8.8**	0.50 U	**8.9**

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Table 1 Summary of Positive Analytical Results for Groundwater Samples
Mr. C's Dry Cleaners Site, East Aurora, New York

Analyte	Screening Criteria [1]	Notes	Location ID: PZ-3B Sample Name: PZ-3B-OCT15 Depth: 18 - 28 ft Date: 10/22/15	PZ-5B PZ-5B-OCT15 18 - 28 ft 10/21/15	PZ-6A PZ-6A-OCT15 18 - 28 ft 10/27/15	PZ-8C PZ-8C-OCT15 18 - 28 ft 10/27/15
Volatile Organics by Method SW8260C (µg/L)						
1,1,1-Trichloroethane	5		0.50 U	10 U	0.50 U	0.50 U
1,1-Dichloroethane	5		0.25 U	5.0 U	0.25 U	0.25 U
1,1-Dichloroethene	5		0.39 U	7.8 U	**4.2 J**	0.39 U
1,2-Dichloroethane	0.6		0.41 U	8.2 U	0.41 U	0.41 U
Acetone	50	G	2.2 U	44 U	2.2 U	2.2 U
Carbon Disulfide	60	G	0.34 U	6.8 U	**2.1 J**	**3.0 J**
Chloroform	7		0.33 U	6.6 U	0.33 U	0.33 U
Cis-1,2-Dichloroethylene	5		**1.2 J**	**14 J**	**410**	**56**
Methyl-Tert-Butyl Ether	10	G	0.24 U	4.8 U	**6.8**	**26**
Tetrachloroethylene (PCE)	5		**150**	**3000**	**670**	0.65 U
Trans-1,2-Dichloroethene	5		0.65 U	**20 J**	**3.0 J**	**1.1 J**
Trichloroethylene (TCE)	5		**8.4**	**70 J**	**190**	0.36 U
Vinyl Chloride	2		0.50 U	10 U	**0.85 J**	**110**

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Source: Ecology and Environment Engineering, P.C. 2015

FIGURES

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EE-2	6/04	8/07	5/09	5/10	2/12	10/13	10/14	10/15
Chloroform	0.346 ug/L	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	1660 ug/L	670 ug/L	130 ug/L	83 ug/L	54 ug/L	52 ug/L	31 ug/L	19 ug/L
Methylene chloride	0.208 ug/L	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene (PCE)	0.387 ug/L	ND	ND	ND	ND	ND	2.2 ug/L(J)	97 ug/L
Trihalomethanes, Total	0.346 ug/L	ND	ND	NA	ND	ND	ND	ND
Vinyl chloride	–	ND	38 ug/L	12 ug/L(J)	18 ug/L	9.9 ug/L(J)	8.2 ug/L	4.7 ug/L(J)
cis-1,2-Dichloroethene	–	ND	6.7 ug/L(J)	190 ug/L	210 ug/L	260 ug/L	260 ug/L	230 ug/L
1,1-Dichloroethene	NA	NA	NA	NA	1.0 ug/L(J)	ND	0.96 ug/L(J)	0.82 ug/L(J)
1,1-Dichloroethane	NA	NA	NA	NA	.98 ug/L(J)	ND	1.1 ug/L(J)	0.80 ug/L(J)
Chloramethane	NA	NA	NA	NA	1.0 ug/L(J)	ND	ND	ND
Trichloroethylene (TCE)	NA	NA	NA	NA	25 ug/L	71 ug/L	74 ug/L	160 ug/L
trans-1,2-Dichloroethene	NA	NA	NA	NA	1.2 ug/L(J)	ND	3.4 ug/L(J)	1.6 ug/L(J)
Tert-Butyl Methyl Ether	NA	NA	NA	NA	52 ug/L	NA	ND	

PW-6	5/02	10/03	6/04	8/07	5/09	5/10	2/12	10/14	10/15
Methyl tert-Butyl Ether	8 ug/L	ND	45.5 ug/L	18 ug/L	37 ug/L	27 ug/L	4.0 ug/L(J)	ND	1.4 ug/L(J)
Trichloroethylene (TCE)	3 J ug/L	ND	41.3 ug/L	100 ug/L	120 ug/L	82 ug/L	79 ug/L	0.97 ug/L(J)	130 ug/L(J)
Tetrachloroethene (PCE)	37 ug/L	ND	463 ug/L	1100 ug/L	340 ug/L(J)	970 ug/L(J)	1000 ug/L	23 ug/L	2000 ug/L
Ethylbenzene	5 J ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Xylene	2 J ug/L	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	NO	ND	11.6 ug/L	50 ug/L	300 ug/L(J)	130 ug/L	76 ug/L	7.9 ug/L	61 ug/L(J)
trans-1,2-Dichloroethene	NO	ND	0.400 ug/L	ND	3.9 ug/L(J)	ND	ND	ND	0.84 ug/L(J)
1,1-Dichloroethene	ND	ND	0.150 ug/L	ND	ND	ND	0.59 ug/L(J)	ND	ND
1,1-Dichloroethane	ND	ND	0.881 ug/L	ND	ND	ND	ND	ND	1.8 ug/L(J)

PZ-6A	10/14	10/15
Methyl tert-butyl ether	26 ug/L	6.8 ug/L
trans-1,2-Dichloroethene	5.8 ug/L	3.0 ug/L(J)
1,1-Dichloroethene	2.2 ug/L(J)	4.2 ug/L(J)
Vinyl chloride	1.1 ug/L(J)	0.85 ug/L(J)
cis-1,2-Dichloroethene	930 ug/L	410 ug/L
Trichloroethylene (TCE)	400 ug/L	190 ug/L
Tetrachloroethene (PCE)	1500 ug/L	670 ug/L
Carbon Disulfide	ND	2.1 ug/L(J)

PW-7	5/02	10/03	6/04	8/07	5/09	5/10	2/12	10/13	10/14	10/15
Acetone	280 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS
Methyl tert-Butyl Ether	85 J ug/L	ND	35.0 ug/L	5.2 ug/L(J)	ND	2.8 ug/L(J)	ND	ND	1.5 ug/L(J)	NS
2-Butanone	680 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS
Ethylbenzene	63 J ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS
Xylene	290 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS
Styrene	160 ug/L	ND	NA	ND	ND	ND	ND	ND	ND	NS
Trichloroethylene (TCE)	92 J ug/L	10 ug/L	41.5 ug/L	94 ug/L	29 ug/L	68 ug/L(J)	8.9 ug/L	8.5 ug/L(J)	1.1 ug/L(J)	NS
Tetrachloroethene (PCE)	4200 ug/L	800 ug/L	2760 ug/L	2400 ug/L	400 ug/L(J)	950 ug/L(J)	550 ug/L	300 ug/L(J)	4.0 ug/L(J)	NS
1,1-Dichloroethene	ND	ND	1.06 ug/L	ND	ND	ND	ND	ND	ND	NS
cis-1,2-Dichloroethene	ND	ND	7.92 ug/L	25 ug/L	5.7 ug/L	17 ug/L(J)	2.2 ug/L (J)	4.9 ug/L(J)	.99 ug/L	NS
Toluene	ND	ND	0.186 ug/L	ND	ND	ND	ND	ND	ND	NS
trans-1,2-Dichloroethene	ND	ND	0.776 ug/L	ND	ND	ND	ND	ND	ND	NS
Vinyl chloride	ND	ND	0.171 ug/L	ND	ND	ND	ND	ND	1.3 ug/L	NS

MPI-15B	5/02	6/04	8/07	5/09	5/10	2/12	10/13	10/14	10/15
2-Butanone	NS	1.61 ug/L	ND	ND	ND	180 ug/L	ND	ND	ND
Methyl tert-butyl ether	NS	6.39 ug/L	8.3 ug/L(J)	7.4 ug/L	3.3 ug/L(J)	4.1 ug/L(J)	7.4 ug/L	6.2 ug/L	1.1 ug/L(J)
Acetone	NA	NA	NA	NA	NA	2300 ug/L	ND	ND	ND
Chloromethane	NA	NA	NA	NA	NA	1.1 ug/L(J)	ND	ND	ND
Tetrachloroethene (PCE)	NA	NA	NA	NA	NA	1.1 ug/L(J)	ND	ND	ND

PW-8	5/02	9/03	6/04	8/07	5/09	5/10	2/12	10/13	10/14	10/15
1,1-Dichloroethene	ND	2 ug/L	0.302 ug/L	ND	ND	ND	ND	ND	1.6 ug/L(J)	ND
2-Butanone	ND	46 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene (TCE)	4 ug/L	66 ug/L	25.2 ug/L	15 ug/L	28 ug/L	12 ug/L	11 ug/L	20 ug/L(J)	23 ug/L	8.4 ug/L
trans-1,2-Dichloroethene	ND	2 ug/L	0.722 ug/L	ND	ND	ND	ND	ND	2.8 ug/L(J)	ND
Tetrachloroethene (PCE)	43 ug/L	110 ug/L	243 ug/L	150 ug/L	200 ug/L(J)	100 ug/L	140 ug/L	360 ug/L	260 ug/L	170 ug/L
cis-1,2-Dichloroethene	1 ug/L	5 ug/L	8.45 ug/L	13 ug/L	30 ug/L	15 ug/L	13 ug/L	91 ug/L	880 ug/L	150 ug/L
Methyl tert-Butyl Ether	16 ug/L	79 ug/L	10.1 ug/L	3.5 ug/L(J)	4.2 ug/L(J)	5.1 ug/L	2.3 ug/L(J)	4.4 ug/L(J)	14 ug/L	2.7 ug/L(J)
Acetone	28 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene	10 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	3 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	190 ug/L	8.9 ug/L
Carbon Disulfide	–	–	–	7.2 ug/L(J)	ND	ND	ND	ND	ND	ND

PZ-8C	10/14	10/15
Methyl tert-butyl ether	33 ug/L	26 ug/L
cis-1,2-Dichloroethene	30 ug/L	56 ug/L
Trichloroethylene (TCE)	2.0 ug/L(J)	ND
Tetrachloroethene (PCE)	22 ug/L	ND
trans-1,2-Dichloroethene	ND	1.1 ug/L(J)
Vinyl chloride	6.3 ug/L	110 ug/L
Carbon Disulfide	ND	3.0 ug/L(J)

MPI-3S	5/02	9/03	6/04	8/07	5/09	5/10	2/12	10/13	10/14	10/15
Benzene	ND	1 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-Butyl Ether	1700 ug/L	560 ug/L	390 ug/L	240 ug/L	190 ug/L (J)	110 ug/L(J)	81 ug/L	54 ug/L	45 ug/L	35 ug/L
Tetrachloroethene (PCE)	ND	ND	0.495 ug/L	ND	ND	2.6 ug/L(J)	ND	ND	1.9 ug/L(J)	ND
1,2-Dichloroethane	ND	1.4 ug/L	0.538 ug/L	ND	ND	ND	ND	2.2 ug/L (J)	ND	2.2 ug/L (J)
Tert-Butyl Methyl Ether	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND

MPI-4S	5/02	9/03	6/04	8/07	5/10	2/12	10/13	10/14	10/15
Tetrachloroethene (PCE)	2 ug/L	2 ug/L	1.63 ug/L	5.0 ug/L	2.3 ug/L(J)	ND	3.3 ug/L(J)	4.3 ug/L(J)	4.4 ug/L(J)
cis-1,2-Dichloroethene	14 ug/L	16 ug/L	17.8 ug/L	140 ug/L	61 ug/L	ND	65 ug/L	55 ug/L	41 ug/L
Methyl tert-Butyl Ether	8 ug/L	11 ug/L	4.26 ug/L	ND	ND	ND	ND	ND	1.3 ug/L(J)
Vinyl Chloride	4 ug/L	ND	5.53 ug/L	20 ug/L	6.0 ug/L	ND	11 ug/L	8.6 ug/L	6.4 ug/L
Acetone	9 ug/L	ND		ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	1 ug/L	ND		ND	ND	ND	ND	ND	ND
Benzene	5 ug/L	ND	1.22ug/L	ND	ND	ND	ND	ND	ND
2-Butanone	3 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	0.722 ug/L	ND	ND	2.7 ug/L(J)	ND	ND	ND
Isopropylbenzene	ND	ND	0.108ug/L	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	1.05 ug/L	ND	ND	ND	ND	ND	ND
Trichloroethylene (TCE)	ND	ND	4.27 ug/L	2.4 ug/L	1.1 ug/L(J)	ND	ND	1.2 ug/L(J)	1.8 ug/L(J)
Trihalomethanes, Total	NA	NA	0.722 ug/L	ND	NA	ND	ND	ND	ND
Bromodichloromethane	NA	NA	NA	NA	NA	3.4 ug/L(J)	ND	ND	ND
Bromoform	NA	NA	NA	NA	NA	1.2 ug/L(J)	ND	ND	ND
Dibromochloromethane	NA	NA	NA	NA	NA	3.5 ug/L(J)	ND	ND	ND

MPI-12B	5/02	9/03	6/04	8/07	5/09	5/10	10/15
cis-1,2-Dichloroethene	NS	NS	3.46 ug/L	9.4 ug/L(J)	16 ug/L	17 ug/L	NS
Methyl tert-butyl ether	NS	NS	341 ug/L	170 ug/L	90 ug/L	110 ug/L	NS
Tetrachloroethene (PCE)	NS	NS	0.422 ug/L	ND	2.8 ug/L(J)	ND	NS
Trichloroethylene (TCE)	NS	NS	0.294 ug/L	ND	ND	ND	NS

ESI-6	5/02	9/03	6/04	8/07	5/09	5/10	2/12	10/13	10/14	10/15
1,1-Dichloroethene	ND	0.67 ug/L	0.616 ug/L	ND	ND	ND	1.0 ug/L(J)	ND	1.3 ug/L(J)	ND
Trichloroethylene (TCE)	44 ug/L	16 ug/L	19.2 ug/L	14 ug/L	17 ug/L	10 ug/L(J)	13 ug/L	38 ug/L	22 ug/L	21 ug/L
Tetrachloroethene (PCE)	1180 ug/L	230 ug/L	514 ug/L	240 ug/L	320 ug/L(J)	140 ug/L(J)	200 ug/L(J)	480 ug/L	410 ug/L	320 ug/L
cis-1,2-Dichloroethene	130 ug/L	26 ug/L	23.6 ug/L	20 ug/L	27 ug/L	5.9 ug/L(J)	17 ug/L	160 ug/L	59 ug/L	32 ug/L
Methyl tert-Butyl Ether	48 ug/L	5.3 ug/L	29.2 ug/L	7.5 ug/L(J)	7.4 ug/L	3.5 ug/L(J)	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	0.290 ug/L	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	0.605 ug/L	ND	ND	ND	ND	ND	ND	ND

EE-3 (NEW)	2/12	10/13	10/14	10/15
cis-1,2-Dichloroethene	0.7 ug/L(J)	11 ug/L	20 ug/L	15 ug/L
Methyl tert-butyl ether	29 ug/L	18 ug/L	23 ug/L(J)	22 ug/L
Tetrachloroethene (PCE)	3.3 ug/L(J)	1.4 ug/L(J)	1.1 ug/L(J)	1.3 ug/L(J)
Vinyl chloride	13 ug/L	2.1 ug/L(J)	ND	ND
Tert-Butyl Methyl Ether	NA	NA	NA	ND

MPI-4I	5/02	9/03	6/04	8/07	5/09	5/10	2/12	10/14	10/15
Trichloroethylene (TCE)	120 ug/L	280 ug/L	137 ug/L	580 ug/L	180 ug/L	120 ug/L(J)	2.2 ug/L(J)	41 ug/L	31 ug/L
Tetrachloroethene (PCE)	160 ug/L	690 ug/L	556 ug/L	1300 ug/L	640 ug/L(J)	400 ug/L(J)	14 ug/L(J)	150 ug/L	71 ug/L
cis-1,2-Dichloroethene	16 ug/L	48 ug/L	49.4 ug/L	160 ug/L	780 ug/L(J)	880 ug/L(J)	74 ug/L	650 ug/L	720 ug/L
Methyl tert-Butyl Ether	140 ug/L	40 ug/L	26.3 ug/L	23 ug/L	13 ug/L	14 ug/L(J)	ND	240 ug/L	310 ug/L
trans-1,2-Dichloroethene	ND	ND	1.53 ug/L	21 ug/L	4.4 ug/L(J)	2.0 ug/L(J)	ND	2.1 ug/L(J)	1.6 ug/L(J)
Vinyl chloride	ND	ND	0.196 ug/L	ND	ND	ND	1.3 ug/L(J)	1.30 ug/L	180 ug/L
1,1-Dichloroethene	–	–	–	ND	ND	1.0 ug/L(J)	ND	ND	ND
Benzene	NA	NA	NA	NA	NA	.82 ug/L(J)	ND	ND	ND

PZ-5B	10/14	10/15
trans-1,2-Dichloroethene	8.0 ug/L(J)	20 ug/L(J)
cis-1,2-Dichloroethene	6.0 ug/L(J)	14 ug/L(J)
Trichloroethylene (TCE)	66 ug/L	70 ug/L
Tetrachloroethene (PCE)	2100 ug/L	3000 ug/L

MPI-8S/MPI-8SR	5/02	9/03	6/04	8/07	6/12	10/13	10/14	10/15
cis-1,2-Dichloroethene	NA	NA	NA	NA	5.0 ug/L	10 ug/L	37 ug/L	71 ug/L
Methyl tert-butyl ether	NA	NA	NA	NA	0.58 ug/L(J)	ND	ND	ND
Tetrachloroethene (PCE)	NA	NA	NA	NA	180 ug/L	120 ug/L	130 ug/L	150 ug/L
trans-1,2-Dichloroethene	NA	NA	NA	NA	1.6 ug/L(J)	1.3 ug/L(J)	1.8 ug/L(J)	1.8 ug/L(J)
Trichloroethylene (TCE)	NA	NA	NA	NA	22 ug/L	17 ug/L	18 ug/L	17 ug/L
Vinyl chloride	NA	NA	NA	NA	ND	ND	0.55 ug/L(J)	ND

MPI-9S/MPI-9SR	5/02	9/03	6/04	8/07	6/12	10/13	10/14	10/15
Tetrachloroethene (PCE)	NA	NA	NA	NA	75 ug/L(J)	ND	1.7 ug/L(J)	1.2 ug/L(J)

MPI-6S	5/02	9/03	6/04	8/07	5/09	5/10	2/12	10/13	10/14	10/15
Acetone	ND	20 ug/L	ND	ND	ND	ND	ND	ND	ND	12 ug/L(J)
Trichloroethylene (TCE)	ND	15 ug/L	125 ug/L	58 ug/L	94 ug/L	69 ug/L	30 ug/L(J)	32 ug/L(J)	1.5 ug/L(J)	ND
Tetrachloroethene (PCE)	ND	1200 ug/L	3480 ug/L	4900 ug/L	8100 ug/L	8200 ug/L(J)	6800 ug/L	40 ug/L	15 ug/L	ND
cis-1,2-Dichloroethene	ND	2 ug/L	3.26 ug/L	3.8 ug/L(J)	14 ug/L	27 ug/L	ND	27 ug/L	1300 ug/L	18 ug/L(J)
Methyl tert-Butyl Ether	1000 ug/L	23 ug/L	2.59 ug/L	ND	1.8 ug/L(J)	3.8 ug/L(J)	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	0.48 ug/L	ND	ND	ND	ND	16 ug/L	ND	ND
2-Butanone	NA	NA	1.28 ug/L	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	0.167 ug/L	ND	ND	ND	ND	3.2 ug/L(J)	ND	ND
Vinyl Chloride	–	–	–	–	–	–	–	1.5 ug/L(J)	380 ug/L	14 ug/L(J)

MPI-13B/MPI-13BR	5/02	9/03	6/04	8/07	6/12	10/13	10/14	10/15
Trichloroethylene (TCE)	ND	0.57 ug/L	ND	0.8 ug/L(J)	ND	0.81 ug/L(J)	NA	
Benzene	ND	1.4 ug/L	ND	ND	ND	ND	ND	NA
Tetrachloroethene (PCE)	ND	3.2 ug/L	0.403 ug/L	5.0 ug/L(J)	3.6 ug/L(J)	4.5 ug/L(J)	3.2 ug/L(J)	NA
2-Butanone	NA	NA	0.979 ug/L	ND	ND	ND	ND	NA
Acetone	NA	NA	4.01 ug/L	ND	ND	ND	ND	NA
Carbon disulfide	NA	NA	0.440 ug/L	ND	ND	ND	ND	NA

PW-4	5/02	10/03	6/04	8/07	5/09	5/10	2/12	10/13	10/14	10/15
Trichloroethylene (TCE)	ND	35 ug/L	57.9 ug/L	74 ug/L(J)	100 ug/L	120 ug/L	170 ug/L	110 ug/L	170 ug/L	110 ug/L
Tetrachloroethene (PCE)	50 ug/L	200 ug/L	2850 ug/L	1600 ug/L	2400 ug/L	2300 ug/L(J)	2200 ug/L(J)	1800 ug/L	2800 ug/L	2000 ug/L
cis-1,2-Dichloroethene	ND	490 ug/L	8.68 ug/L	19 ug/L	34 ug/L	36 ug/L	44 ug/L	28 ug/L(J)	190 ug/L(J)	81 ug/L(J)
Acetone	100 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	1400 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	210 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene	1200 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	360 ug/L	ND	NA	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	ND	ND	22.0 ug/L	23 ug/L	64 ug/L	33 ug/L	0.96 ug/L(J)	ND	9.3 ug/L	8.5 ug/L
Toluene	ND	ND	0.193 ug/L	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	0.981 ug/L	3.3 ug/L(J)	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	0.680 ug/L	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	0.485 ug/L	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	0.211 ug/L	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	0.121 ug/L	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	1.2 ug/L	ND	3.9 ug/L(J)	ND	1.8 ug/L(J)	ND	2.1 ug/L(J)	1.4 ug/L(J)
Carbon Disulfide	ND	ND	ND	ND	ND	ND	ND	ND	1.4 ug/L(J)	NA

PW-5	5/02	10/03	6/04	8/07	5/09	5/10	2/12	10/13	10/14	10/15
Acetone	200 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	3300 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene (PCE)	170 ug/L	2000 ug/L	3220 ug/L	2000 ug/L	4000 ug/L(J)	4300 ug/L(J)	3100 ug/L(J)	700 ug/L	2700 ug/L	2200 ug/L
Ethylbenzene	310 ug/L	ND	0.209 ug/L	ND	ND	ND	ND	ND	ND	ND
Styrene	510 ug/L	ND	NA	ND	ND	ND	ND	13 ug/L	ND	ND
Trichloroethene (TCE)	ND	99 ug/L	78.6 ug/L	95 ug/L	140 ug/L	190 ug/L	87 ug/L	ND	69 ug/L	31 ug/L
cis-1,2-Dichloroethene	ND	8 ug/L	8.17 ug/L	21 ug/L	21 ug/L	16 ug/L	16 ug/L	ND	170 ug/L	99 ug/L
Xylene	1100 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	0.801 ug/L	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	0.346 ug/L	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	0.194 ug/L	ND	ND	ND	ND	ND	0.82 ug/L(J)	ND
Benzene	ND	ND	0.114 ug/L	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	ND	ND	10.1 ug/L	3.7 ug/L(J)	2.6 ug/L(J)	4.8 ug/L(J)	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	2.61 ug/L	8.5 ug/L(J)	12 ug/L	6.4 ug/L	5.9 ug/L	ND	4.2 ug/L(J)	3.5 ug/L(J)
Vinyl chloride	ND	ND	0.415 ug/L	ND	ND	ND	ND	ND	ND	8.8 ug/L

MPI-14B/MW-14BR	5/02	9/03	6/04	8/07	2/12	10/13	10/14	10/15
Vinyl chloride	ND	ND	1.06 ug/L	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	2.93 ug/L	2.8 ug/L(J)	1.3 ug/L(J)	ND	ND	ND
Methyl tert-butyl ether	ND	ND	2.99 ug/L	ND	ND	ND	ND	ND
Tetrachloroethene (PCE)	1 ug/L	ND	0.175 ug/L	ND	10 ug/L(J)	2.3 ug/L(J)	6.2 ug/L	2.3 ug/L
Trichloroethylene (TCE)	ND	ND	0.191 ug/L	ND	1.0 ug/L(J)	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	1.60 ug/L	ND	ND	ND	ND	ND
Acetone	ND	ND	4.06 ug/L	9.6 ug/L(J)	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	0.340 ug/L	ND	ND	ND	ND	ND
Chloromethane	NA	NA	NA	NA	0.6 ug/L(J)	ND	ND	ND

LEGEND

- SANITARY SEWER MANHOLE
- MONITORING WELL
- PUMPING WELL
- PIEZOMETER
- EXISTING STRUCTURES AND FEATURES
- FENCE
- PAINE STREET — MAJOR AREA STREETS
- WELLS CIRCLED = NOT FOUND (EITHER ABANDONED, DECOMMISSIONED, OR MISSING)

WELL ABBREVIATIONS

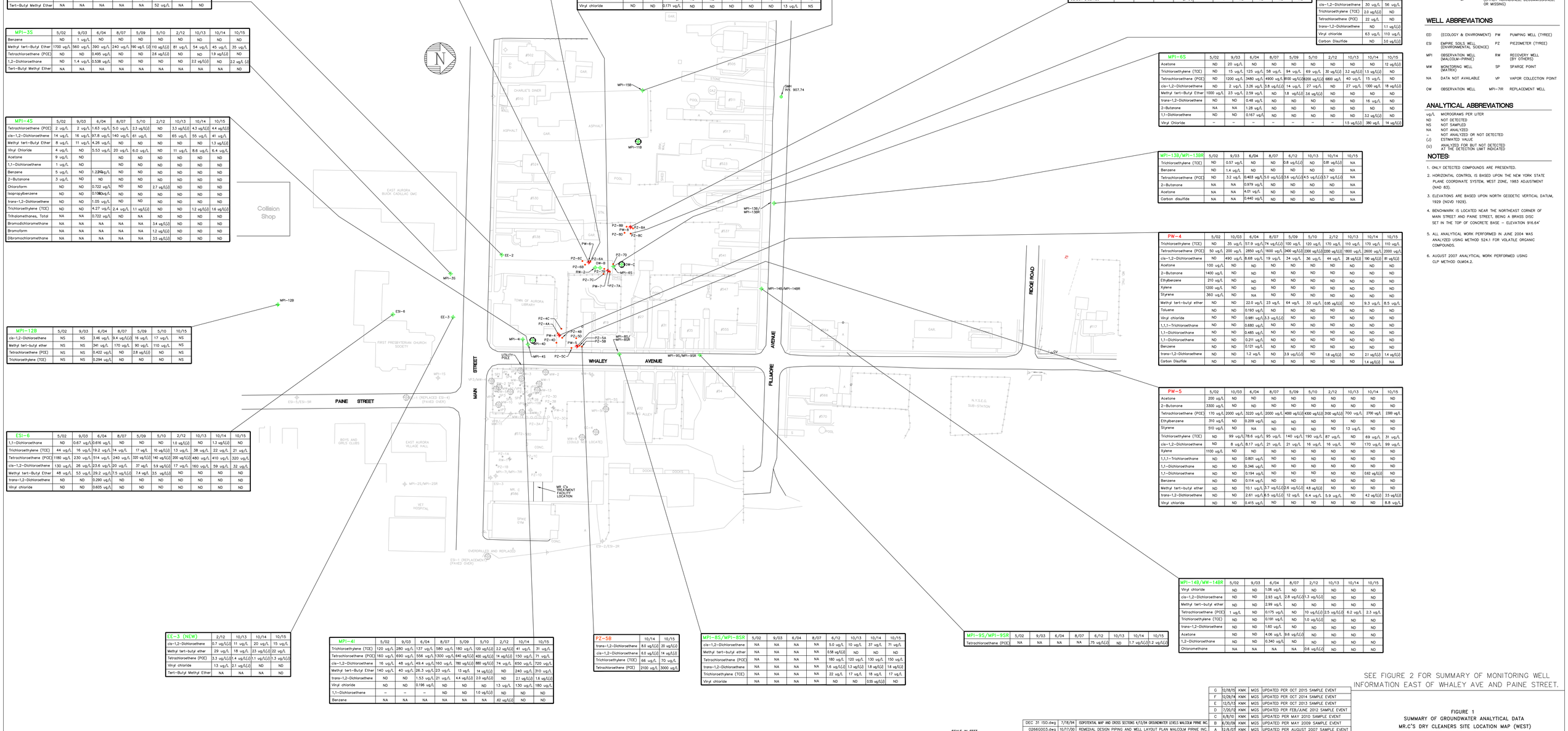
EE	(ECOLOGY & ENVIRONMENT)	PW	PUMPING WELL (TYREE)
ES	EMPIRE SOILS WELL (ENVIRONMENTAL SCIENCE)	PZ	PIEZOMETER (TYREE)
MPI	OBSERVATION WELL (MALCOLM-PIRNIE)	RW	RECOVERY WELL (BY OTHERS)
MW	MONITORING WELL (MATRIX)	SP	SPARGE POINT
NA	DATA NOT AVAILABLE	VP	VAPOR COLLECTION POINT
OW	OBSERVATION WELL	MPI-7IR	REPLACEMENT WELL

ANALYTICAL ABBREVIATIONS

ug/L	MICROGRAMS PER LITER
ND	NOT DETECTED
NS	NOT SAMPLED
NA	NOT ANALYZED
–	NOT ANALYZED OR NOT DETECTED
(J)	ESTIMATED VALUE
(U)	ANALYZED FOR BUT NOT DETECTED AT THE DETECTION LIMIT INDICATED

NOTES:

1. ONLY DETECTED COMPOUNDS ARE PRESENTED.
2. HORIZONTAL CONTROL IS BASED UPON THE NEW YORK STATE PLANE COORDINATE SYSTEM, WEST ZONE, 1983 ADJUSTMENT (NAD 83).
3. ELEVATIONS ARE BASED UPON NORTH GEODETIC VERTICAL DATUM, 1929 (NGVD 1929).
4. BENCHMARK IS LOCATED NEAR THE NORTHEAST CORNER OF MAIN STREET AND PAINE STREET, BEING A BRASS DISC SET IN THE TOP OF CONCRETE BASE – ELEVATION 916.64'
5. ALL ANALYTICAL WORK PERFORMED IN JUNE 2004 WAS ANALYZED USING METHOD 524.1 FOR VOLATILE ORGANIC COMPOUNDS.
6. AUGUST 2007 ANALYTICAL WORK PERFORMED USING CLP METHOD OLM04.2.



SEE FIGURE 2 FOR SUMMARY OF MONITORING WELL INFORMATION EAST OF WHALEY AVE AND PAINE STREET.

SCALE IN FEET
0 60 120 180

DWG NO.	DATE	REFERENCE DRAWINGS DESCRIPTION
DEC 31 ISO.dwg	7/18/94	ISOPOTENTIAL MAP AND CROSS SECTIONS 4/11/94 GROUNDWATER LEVELS MALCOLM PIRNIE INC.
0266G003.dwg	10/17/00	REMEDIAL DESIGN PIPING AND WELL LAYOUT PLAN MALCOLM PIRNIE INC.

NO.	DATE	DWN.	APP'D	REVISIONS DESCRIPTION
G	12/8/15	KMK	MQS	UPDATED PER OCT 2015 SAMPLE EVENT
F	12/29/14	KMK	MQS	UPDATED PER OCT 2014 SAMPLE EVENT
E	12/5/13	KMK	MQS	UPDATED PER OCT 2013 SAMPLE EVENT
D	7/20/12	KMK	MQS	UPDATED PER FEB/JUNE 2012 SAMPLE EVENT
C	8/8/10	KMK	MQS	UPDATED PER MAY 2010 SAMPLE EVENT
B	8/30/09	KMK	MQS	UPDATED PER MAY 2009 SAMPLE EVENT
A	12/8/07	KMK	MQS	UPDATED PER AUGUST 2007 SAMPLE EVENT

FIGURE 1
SUMMARY OF GROUNDWATER ANALYTICAL DATA
MR.C'S DRY CLEANERS SITE LOCATION MAP (WEST)
EAST AURORA, NEW YORK

F:\MC\cad Analysis December 2015\Results_revised 12-14-15_East.dwg

MW-4	5/02	9/03	6/04	9/05	8/07
Vinyl Chloride	ND	47 ug/L	41.0 ug/L	590 ug/L	ND
Trichloroethylene (TCE)	23 ug/L	54 ug/L	27.9 ug/L	7.0 ug/L	ND
Benzene	24 ug/L	46 ug/L	4.80 ug/L	21.0 ug/L	5.4 ug/L(J)
trans-1,2-Dichloroethene	1 ug/L	7 ug/L	2.87 ug/L	3.4 ug/L	ND
Tetrachloroethene (PCE)	130 ug/L	95 ug/L	278 ug/L	5.3 ug/L	ND
cis-1,2-Dichloroethene	200 ug/L	250 ug/L	515 ug/L	570 ug/L	2.5 ug/L(J)
Acetone	3 ug/L	ND	ND	ND	ND
Ethylbenzene	2 ug/L	ND	4.42 ug/L	7.7 ug/L	ND
Xylene-Total	170 ug/L	ND	0.704 ug/L	ND	1.3 ug/L
1,3,5 - Trimethylbenzene	120 ug/L	ND	NA	ND	ND
tert - Butylbenzene	2 ug/L	ND	0.447 ug/L	ND	ND
1,2,4 - Trimethylbenzene	10 ug/L	ND	0.243 ug/L	ND	ND
Isopropylbenzene	ND	ND	1.76 ug/L	3.4 ug/L	4.2 ug/L(J)
n-Propylbenzene	ND	ND	2.94 ug/L	ND	ND
m,p-Xylene	NA	ND	0.282 ug/L	0.55 ug/L	ND
o-Xylene	NA	ND	0.422 ug/L	0.8 ug/L	ND
sec-Butylbenzene	ND	ND	1.15 ug/L	ND	ND
Toluene	3 ug/L	ND	0.373 ug/L	2.3 ug/L	ND
1,1-Dichloroethene	ND	ND	0.320 ug/L	1.2 ug/L	ND
Cyclohexane	ND	ND	ND	75.0 ug/L	110 ug/L
Methylcyclohexane	ND	ND	ND	22.0 ug/L	22.0 ug/L
Methyl tert-butyl ether	ND	ND	ND	ND	ND

MW-6	5/02	9/03
Trichloroethene (TCE)	ND	2 ug/L
Tetrachloroethene (PCE)	68 ug/L	74 ug/L
cis-1,2-Dichloroethene	ND	2 ug/L

MW-7	5/02	9/03	6/04	9/05	8/07	5/09	5/10	2/12	10/13	10/14	10/15
Trichloroethylene (TCE)	ND	8 ug/L	4.34 ug/L	3.2 ug/L	ND	1.4 ug/L(J)	1.5 ug/L(J)	ND	ND	3.8 ug/L(J)	ND
Tetrachloroethene (PCE)	3300 ug/L	3300 ug/L	1170 ug/L	2000 ug/L	830 ug/L	700 ug/L(J)	770 ug/L(J)	670 ug/L(J)	910 ug/L	1100 ug/L	840 ug/L
cis-1,2-Dichloroethene	ND	ND	3.73 ug/L	0.76 ug/L	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	0.379 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	ND	ND	0.315 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	–	–	ND	ND	ND	1.7 ug/L(J)	1.9 ug/L(J)	ND	ND	ND	ND

PZ-3B	10/14	10/15
trans-1,2-Dichloroethene	0.78 ug/L(J)	ND
cis-1,2-Dichloroethene	1.9 ug/L(J)	1.2 ug/L(J)
Trichloroethylene (TCE)	7.9 ug/L	8.4 ug/L
Tetrachloroethene (PCE)	150 ug/L	150 ug/L

MW-8	5/02	9/03	6/04	9/05	8/07	5/09	5/10	2/12	10/13	10/14	10/15
Trichloroethylene (TCE)	720 ug/L	16 ug/L	10.4 ug/L	100.0 ug/L	590 ug/L	16 ug/L	14 ug/L	92 ug/L	12 ug/L	1.7 ug/L(J)	16 ug/L
trans-1,2-Dichloroethene	50 ug/L	1 ug/L	0.481 ug/L	3.8 ug/L	24 ug/L	12 ug/L	6.4 ug/L	11 ug/L(J)	28 ug/L	46 ug/L	ND
Tetrachloroethene (PCE)	310 ug/L	310 ug/L	299 ug/L	570.0 ug/L	960 ug/L	210 ug/L(J)	200 ug/L(J)	250 ug/L(J)	3.4 ug/L(J)	1.3 ug/L(J)	ND
cis-1,2-Dichloroethene	40 ug/L	5 ug/L	2.36 ug/L	15.0 ug/L	390 ug/L	9.4 ug/L	6.5 ug/L	15 ug/L(J)	81 ug/L	15 ug/L	12 ug/L
2-Butanone	NA	ND	1.88 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	0.157 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	ND	ND	0.135 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	35 ug/L	ND	2.0 ug/L(J)	ND	15 ug/L	7.2 ug/L	7.4 ug/L
Methylcyclohexane	–	–	–	–	2.5 ug/L	ND	ND	ND	ND	ND	ND
Acetone	–	–	–	–	–	–	–	–	22 ug/L	ND	ND

PW-3	5/02	9/03	6/04	9/05	8/07	5/09	5/10	2/12	10/13	10/14	10/15
Trichloroethylene (TCE)	ND	6 ug/L	7.32 ug/L	8.9 ug/L	7.2 ug/L(J)	6 ug/L	4.6 ug/L(J)	4.3 ug/L(J)	3.8 ug/L(J)	4.4 ug/L(J)	2.1 ug/L(J)
Tetrachloroethene (PCE)	820 ug/L	850 ug/L	595 ug/L	560 ug/L	290 ug/L	300 ug/L(J)	260 ug/L	220 ug/L(J)	170 ug/L	220 ug/L	100 ug/L
cis-1,2-Dichloroethene	ND	6 ug/L	6.43 ug/L	4.0 ug/L	2.8 ug/L(J)	4.3 ug/L(J)	3.5 ug/L(J)	ND	ND	ND	ND
Methyl tert-Butyl Ether	ND	4 ug/L	0.401 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	51 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	350 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	20 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene	120 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	11 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	0.407 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	0.148 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	0.133 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	2.94 ug/L	3.4 ug/L	5.0 ug/L(J)	6.2 ug/L	3.2 ug/L(J)	ND	ND	ND	ND
Trihalomethanes, Total	NA	NA	0.133 ug/L	ND	ND	NS	NA	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	1.7 ug/L	ND	ND	ND	ND	ND	ND	ND

MPI-1S	5/02	9/03	6/04	8/07	5/09	5/10	2/12	10/13	10/14	10/15
Trichloroethylene (TCE)	ND	1.5 ug/L	9.87 ug/L	6.5 ug/L(J)	1.2 ug/L(J)	ND	1.4 ug/L(J)	3.2 ug/L(J)	2.4 ug/L(J)	2.3 ug/L (J)
Tetrachloroethene (PCE)	10 ug/L	41 ug/L	123 ug/L	97 ug/L	34 ug/L	40 ug/L	44 ug/L(J)	49 ug/L	56 ug/L	45 ug/L
cis-1,2-Dichloroethene	ND	0.86 ug/L	3.90 ug/L	ND	1.1 ug/L(J)	1.3 ug/L(J)	1.3 ug/L(J)	2.4 ug/L(J)	2.8 ug/L (J)	3.1 ug/L (J)
Vinyl chloride	ND	ND	0.346 ug/L	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	0.337 ug/L	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NA	NA	NA	NA	NA	NA	.74 ug/L(J)	ND	ND	ND

MW-5	5/02	9/03	10/13	10/14	10/15
Xylene	5700 ug/L	ND	NS	NS	NS
Vinyl Chloride	ND	7 ug/L	NS	NS	NS
Trichloroethylene (TCE)	21 ug/L	ND	NS	NS	NS
Benzene	220 ug/L	15 ug/L	NS	NS	NS
trans-1,2-Dichloroethene	ND	ND	NS	NS	NS
Tetrachloroethene (PCE)	83 ug/L	2 ug/L	NS	NS	NS
cis-1,2-Dichloroethene	48 ug/L	16 ug/L	NS	NS	NS
Methyl tert-Butyl Ether	ND	3 ug/L	NS	NS	NS
Toluene	160 ug/L	3 ug/L	NS	NS	NS
Ethylbenzene	25 ug/L	ND	NS	NS	NS
1,3,5 - Trimethylbenzene	470 ug/L	ND	NS	NS	NS
1,2,4 - Trimethylbenzene	920 ug/L	ND	NS	NS	NS

ESI-5/ESI-5R	5/02	9/03	6/04	8/07	5/09	5/10	6/12	10/13	10/14	10/15
Tetrachloroethene (PCE)	ND	0.52 ug/L	0.196 ug/L	4.6 ug/L(J)	ND	ND	ND	ND	ND	ND

ESI-4/EE-1	5/02	9/03	6/04	8/07	5/09	5/10	10/15
Chloroform	ND	0.54 ug/L	0.521 ug/L	ND	ND	ND	NS
1,1,1-Trichloroethane	0.7 ug/L	2.4 ug/L	14.7 ug/L	8.6 ug/L(J)	12 ug/L	7.0 ug/L	NS
Trichloroethylene (TCE)	0.5 ug/L	3.6 ug/L	ND	ND	ND	ND	NS
Tetrachloroethene (PCE)	14 ug/L	63 ug/L	5.91 ug/L	3.1 ug/L(J)	4.5 ug/L(J)	3.8 ug/L(J)	NS
cis-1,2-Dichloroethene	ND	1.2 ug/L	ND	ND	ND	ND	NS
Methyl tert-butyl ether	ND	ND	8.51 ug/L	4.2 ug/L(J)	1.6 ug/L(J)	ND	NS
Trihalomethanes, Total	NA	NA	0.521 ug/L	ND	ND	NA	NS
1,1-Dichloroethane	ND	ND	1.16 ug/L	ND	ND	ND	NS
1,1-Dichloroethene	ND	ND	0.284 ug/L	ND	ND	ND	NS
2-Butanone	NA	NA	0.965 ug/L	ND	ND	ND	NS
Benzene	ND	ND	0.325 ug/L	ND	ND	ND	NS
Acetone	NA	NA	1.85 ug/L	ND	ND	ND	NS

MW-10	5/02	9/03	10/13	10/15
Acetone	ND	14 ug/L	NS	NS
cis-1,2-Dichloroethene	ND	3 ug/L	NS	NS
Tetrachloroethene (PCE)	12 ug/L	ND	NS	NS

PW-2	5/02	9/03	6/04	9/05	8/07	5/09	5/10	2/12	10/13	10/14	10/15
Trichloroethylene (TCE)	ND	11 ug/L	5.57 ug/L	4.4 ug/L	9.3 ug/L(J)	7.5 ug/L	6.5 ug/L	2.2 ug/L(J)	ND	3.4 ug/L(J)	1.8 ug/L(J)
Tetrachloroethene (PCE)	430 ug/L	400 ug/L	1090 ug/L	2000 ug/L	1300 ug/L	1200 ug/L(J)	990 ug/L(J)	770 ug/L(J)	770 ug/L	620 ug/L	380 ug/L
cis-1,2-Dichloroethene	ND	5 ug/L	3.82 ug/L	2.0 ug/L	ND	2.8 ug/L(J)	1.3 ug/L(J)	ND	ND	ND	ND
Methyl tert-Butyl Ether	ND	3 ug/L	0.617 ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	14 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	24 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene	65 ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	0.290 ug/L	ND	ND	4.1 ug/L(J)	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	0.344 ug/L	ND	ND	ND	ND	ND	ND	ND	ND

MPI-2S/MPI-2SR	4/94	1/95	6/04	2/12	10/13	10/14	10/15
1,1,1 Trichloroethane	14 ug/L	12 ug/L	NS	4.1 ug/L(J)	2.9 ug/L(J)	3.4 ug/L(J)	3.0 ug/L(J)
Benzene	ND	2 ug/L	NS	ND	ND	ND	ND
Chloroform	NA	NA	NA	1.8 ug/L(J)	1.4 ug/L(J)	1.3 ug/L(J)	1.4 ug/L(J)
Tetrachloroethene (PCE)	NA	NA	NA	1.9 ug/L(J)	2.4 ug/L(J)	2.9 ug/L(J)	1.9 ug/L(J)

MW-11	5/10	2/12	10/13	10/14	10/15
cis-1,2-Dichloroethene	3.4 ug/L(J)	1.2 ug/L(J)	ND	ND	ND
Trichloroethylene (TCE)	6 ug/L	5.8 ug/L	ND	5.2 ug/L	4.8 ug/L(J)
Tetrachloroethene (PCE)	1600 ug/L	500 ug/L(J)	2400 ug/L	1500 ug/L	1400 ug/L
Chloromethane	NA	0.68 ug/L(J)	ND	ND	ND
trans-1,2-Dichloroethene	NA	1.2 ug/L(J)	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND
Carbon Dioxide	NA	NA	NA	NA	1.9 ug/L(J)

MPI-10B	5/02	9/03	6/04	8/07	5/09	5/10	2/12	10/13	10/14	10/15
Trichloroethene (TCE)	ND	1 ug/L	5.03 ug/L	ND	5.1 ug/L	4.3 ug/L(J)	3.8 ug/L(J)	4.4 ug/L(J)	3.8 ug/L(J)	NS
Benzene	ND	3 ug/L	ND	ND	ND	ND	ND	ND	ND	NS
Tetrachloroethene (PCE)	82 ug/L	320 ug/L	1070 ug/L	790 ug/L	450 ug/L(J)	250 ug/L(J)	250 ug/L(J)	210 ug/L	220 ug/L	NS
cis-1,2-Dichloroethene	ND	2 ug/L	5.09 ug/L	ND	3.3 ug/L(J)	1.3 ug/L(J)	1.1 ug/L(J)	ND	ND	NS
Methyl tert-Butyl Ether	ND	2 ug/L	1.89 ug/L	ND	ND	ND	1.1 ug/L(J)	ND	ND	NS
Trihalomethanes, Total	NA	NA	0.149 ug/L	ND	ND	NA	ND	ND	ND	NS
trans-1,2-Dichloroethene	ND	ND	0.588 ug/L	ND	ND	ND	ND	ND	ND	NS
Chloroform	ND	ND	0.149 ug/L	ND	ND	ND	ND	ND	ND	NS
1,1-Dichloroethene	ND	ND	0.24 ug/L	ND	ND	ND	ND	ND	ND	NS
1,1,1-Trichloroethane	ND	ND	0.928 ug/L	ND	ND	ND	ND	ND	ND	NS

MW-14	5/02	9/03	6/04	10/15
Tetrachloroethene (PCE)	NS	NS	180 ug/L	NS

ESI-2/ESI-2R	5/92	4/94	2/12	10/13	10/14	10/15
Tetrachloroethene (PCE)	1 ug/L	NS	1.1 ug/L(J)	1.8 ug/L(J)	ND	ND
Chloromethane	NA	NA	.89 ug/L(J)	ND	ND	ND

ESI-1/ESI-1 (REPLACEMENT)	5/92	1/93	4/94	6/04	8/07	10/15
1,2 Dichloroethene	2 ug/L	ND	ND	NA	ND	NS
Trichloroethylene (TCE)	2 ug/L	ND	3 ug/L	1.28 ug/L	ND	NS
Tetrachloroethene (PCE)	2 ug/L	0.9 ug/L	ND	1.47 ug/L	9.3 ug/L(J)	NS
Carbon disulfide	NA	NA	ND	0.557 ug/L	ND	NS
Chloroform	NA	NA	ND	0.485 ug/L	ND	NS
cis-1,2-Dichloroethene	NA	NA	NA	0.103 ug/L	ND	NS

MPI-5S	5/02	9/03	6/04	8/07	5/09	5/10	2/12	10/13	10/14	10/15
Vinyl Chloride	NA	5 ug/L	1.98 ug/L	1.5 ug/L	2.7 ug/L(J)	2.9 ug/L(J)	6.1 ug/L	ND	ND	1.5 ug/L(J)
Trichloroethylene (TCE)	NA	6 ug/L	3.66 ug/L	2.7 ug/L(J)	3.6 ug/L(J)	3.7 ug/L(J)	6.9 ug/L	7.1 ug/L	5.3 ug/L	5.7 ug/L
trans-1,2-Dichloroethene	NA	2 ug/L	3.87 ug/L	6.0 ug/L(J)	10 ug/L	6.2 ug/L	6.8 ug/L	4.2 ug/L(J)	5.2 ug/L	4.4 ug/L(J)
Tetrachloroethene (PCE)	NA	36 ug/L	38.3 ug/L	4.9 ug/L(J)	15 ug/L(J)	16 ug/L	29 ug/L(J)	24 ug/L	24 ug/L	30 ug/L
cis-1,2-Dichloroethene	NA	5 ug/L	3.81 ug/L	8.4 ug/L(J)	7.7 ug/L	4.2 ug/L(J)	6.0 ug/L	8.5 ug/L	7.8 ug/L	8.4 ug/L
Methyl tert-butyl ether	NA	ND	0.114 ug/L	ND	ND	ND	ND	ND	ND	ND
2-Butanone	NA	ND	0.994 ug/L	ND	ND	ND	ND	ND	ND	ND
Benzene	NA	ND	0.304 ug/L	ND	ND	ND	ND	ND	ND	ND

MPI-5I	5/02	9/03	10/15
Methyl tert-Butyl Ether	NA	4 ug/L	NS

EE-4	2/12	10/13	10/14	10/15
cis-1,2-Dichloroethene	3.3 ug/L(J)	ND	ND	NS
trans-1,2-Dichloroethene	8.6 ug/L	1.2 ug/L(J)	1.9 ug/L(J)	NS
Tetrachloroethene (PCE)	68 ug/L(J)	ND	1.8 ug/L(J)	NS
Vinyl chloride	4.6 ug/L(J)	ND	1.2 ug/L(J)	NS
Cyclohexane	8.4 ug/L	5.3 ug/L	ND	NS
Isopropylbenzene	3.3 ug/L(J)	2.9 ug/L(J)	2.2 ug/L(J)	NS
Methylcyclohexane	17 ug/L	11 ug/L	8.3 ug/L	NS
Trichloroethylene (TCE)	81 ug/L(J)	ND	ND	NS

RW-1	5/02	9/03	6/04	8/07	5/09	5/10	2/12	10/13	10/14	10/15
Chloroform	ND	ND	0.839 ug/L	ND	1 ug/L(J)	ND	.61 ug/L(J)	ND	ND	NS
cis-1,2-Dichloroethene	ND	ND	2.31 ug/L	ND	2.4 ug/L(J)	ND	1.0 ug/L(J)	ND	ND	NS
1,1-Dichloroethene	ND	ND	0.275 ug/L	ND	ND	ND	ND	ND	ND	NS
1,1,1-Trichloroethane	ND	ND	0.531 ug/L	ND	1.3 ug/L(J)	ND	1.3 ug/L(J)	1.1 ug/L(J)	ND	NS
Trihalomethanes, Total	NA	NA	0.839 ug/L	ND	1 ug/L(J)	NA	ND	ND	ND	NS
Trichloroethylene (TCE)	ND	1 ug/L	2.09 ug/L	ND	1.5 ug/L(J)	ND	1.5 ug/L(J)	1.1 ug/L(J)	1.1 ug/L(J)	NS
Tetrachloroethene (PCE)	4 ug/L	74 ug/L	410 ug/L	140 ug/L	190 ug/L(J)	54 ug/L	250 ug/L(J)	94 ug/L	180 ug/L	NS
Methyl tert-Butyl Ether	ND	3 ug/L	1.03 ug/L	ND	ND	ND	ND	ND	ND	NS
Chloromethane	NA	NA	NA	NA	NA	NA	.91 ug/L(J)	ND	ND	NS

MPI-7I/MPI-7IR	5/02	9/03	6/04	8/07	5/09	5/10	2/12	10/13	10/14	10/15
Trichloroethylene (TCE)	NA	2 ug/L	1.54 ug/L	ND	6.5 ug/L	ND	ND	ND	ND	ND
Tetrachloroethene (PCE)	NA	4 ug/L	5.13 ug/L	2.9 ug/L(J)	690 ug/L(J)	ND	1.8 ug/L(J)	2.4 ug/L(J)	2.0 ug/L(J)	1.2 ug/L(J)
cis-1,2-Dichloroethene	NA	8 ug/L	8.53 ug/L	12 ug/L	18 ug/L	10 ug/L	ND	ND	ND	ND
2-Butanone	NA	ND	1.17 ug/L	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	NA	ND	0.178 ug/L	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	NA	ND	0.223 ug/L	ND	ND	ND	ND	ND	ND	ND
Chloroform	–	–	–	ND	11 ug/L(J)	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	–	–	–	ND	1.1 ug/L(J)	ND	ND	ND	ND	ND
Bromodichloromethane	–	–	–	ND	1.9 ug/L(J)	ND	ND	ND	ND	ND
Chloromethane	NA	NA	NA	NA	NA	NA	1.4 ug/L(J)	ND	ND	ND

ESI-3	5/02	9/03	6/04	8/07	5/10	2/12	10/13	10/14	10/15
1,1,1Trichloroethane	ND	1 ug/L	0.882 ug/L	2.0 ug/L(J)	ND	2.0 ug/L(J)	ND	ND	ND
Trichloroethylene (TCE)	ND	2 ug/L	7.03 ug/L	ND	ND	.77 ug/L(J)	ND	ND	ND
Tetrachloroethene (PCE)	220 ug/L	440 ug/L	655 ug/L	250 ug/L	250 ug/L(J)	200 ug/L(J)	280 ug/L	180 ug/L	140 ug/L
cis-1,2-Dichloroethene	ND	4 ug/L	12.4 ug/L	2.8 ug/L	ND	ND	ND	ND	ND
Methyl tert-Butyl Ether	9 ug/L	1 ug/L	1.02 ug/L	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	0.469 ug/L	ND	ND	.76 ug/L(J)	ND	1.1 ug/L(J)	0.98 ug/L(J)
Chloroform	ND	ND	1.14 ug/L	2.4 ug/L	ND	.84 ug/L(J)	ND	ND	ND
Trihalomethanes, Total	NA	NA	1.14 ug/L	ND	NA	ND	ND	ND	ND
Chloromethane	NA	NA	NA	NA	NA	.95 ug/L(J)	ND	ND	ND

LEGEND

- SANITARY SEWER MANHOLE
- MONITORING WELL
- PUMPING WELL
- PIEZOMETER
- EXISTING STRUCTURES AND FEATURES
- FENCE
- PAINE STREET — MAJOR AREA STREETS
- WELLS CIRCLED = NOT FOUND (EITHER ABANDONED, DECOMMISSIONED, OR MISSING)

WELL ABBREVIATIONS

EEI	(ECOLOGY & ENVIRONMENT)	PW	PUMPING WELL (THREE)
ESI	EMPIRE SOILS WELL (ENVIRONMENTAL SCIENCE)	PZ	PIEZOMETER (TYPREE)
MPI	OBSERVATION WELL (MALCOLM-PIRNIE)	RW	RECOVERY WELL (BY OTHERS)
MW	MONITORING WELL (MATRIX)	SP	SPARGE POINT
NA	DATA NOT AVAILABLE	VP	VAPOR COLLECTION POINT
OW	OBSERVATION WELL	MPI-7IR	REPLACEMENT WELL

ANALYTICAL ABBREVIATIONS

ug/L	MICROGRAMS PER LITER
ND	NOT DETECTED
NS	NOT SAMPLED
NA	NOT ANALYZED
–	NOT ANALYZED OR NOT DETECTED
(J)	ESTIMATED VALUE
(U)	ANALYZED FOR BUT NOT DETECTED AT THE DETECTION LIMIT INDICATED

NOTES:

1. ONLY DETECTED COMPOUNDS ARE PRESENTED.
2. HORIZONTAL CONTROL IS BASED UPON THE NEW YORK STATE PLANE COORDINATE SYSTEM, WEST ZONE, 1983 ADJUSTMENT (NAD 83).
3. ELEVATIONS ARE BASED UPON NORTH GEODETIC VERTICAL DATUM, 1929 (NGVD 1929).
4. BENCHMARK IS LOCATED NEAR THE NORTHEAST CORNER OF MAIN STREET AND PAINE STREET, BEING A BRASS DISC SET IN THE TOP OF CONCRETE BASE – ELEVATION 916.64'
5. ALL ANALYTICAL WORK PERFORMED IN JUNE 2004 WAS ANALYZED USING METHOD 524.1 FOR VOLATILE ORGANIC COMPOUNDS.
6. AUGUST 2007 ANALYTICAL WORK PERFORMED USING CLP METHOD OLM04.2.

SEE FIGURE 1 FOR SUMMARY OF MONITORING WELL INFORMATION WEST OF WHALEY AVE AND PAINE STREET.

FIGURE 2
SUMMARY OF GROUNDWATER ANALYTICAL DATA
MR.C'S DRY CLEANERS SITE LOCATION MAP (EAST)
EAST AURORA, NEW YORK

SCALE IN FEET
0 60 120 180

DWG NO.	DATE	DESCRIPTION
REFERENCE DRAWINGS		
DEC 31 ISD.dwg	7/18/94	ISOPOTENTIAL MAP AND CROSS SECTIONS 4/11/94 GROUNDWATER LEVELS MALCOLM PIRNIE INC.
0266G003.dwg	10/17/00	REMEDIAL DESIGN PIPING AND WELL LAYOUT PLAN MALCOLM PIRNIE INC.

NO.	DATE	DWN	APP'D	DESCRIPTION
REVISIONS				
G	12/14/15	KMK	MQS	UPDATED PER OCT 2015 SAMPLE EVENT
F	12/29/14	KMK	MQS	UPDATED PER OCT 2014 SAMPLE EVENT
E	12/5/13	KMK	MQS	UPDATED PER OCT 2013 SAMPLE EVENT
D	7/20/12	KMK	MQS	UPDATED PER FEB/JUNE 2012 SAMPLE EVENT
C	6/8/10	KMK	MQS	UPDATED PER MAY 2010 SAMPLE EVENT
B	8/30/09	KMK	MQS	UPDATED PER MAY 2009 SAMPLE EVENT
A	12/8/07	KMK	MQS	UPDATED PER AUGUST 2007 SAMPLE EVENT

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170003074.0011.04
MrC_PCE_in_GW_Oct2015.srf - 12/17/2015

FEET
0 120 240 360

Tetrachloroethene in micrograms per liter
5000
1000
500
100
50
10
5

Legend
< = not detected (reporting limit shown)
J = estimated value
blank = not sampled
PCE = Tetrachloroethene
(a.k.a. perchloroethylene)
PW-8 / 170 — Well ID with PCE concentration in µg/L

MPI-15B <0.65
MPI-13B-R 6.7
PW-8 170
PZ-8C <0.65
MPI-6S <0.65
EE-2 97
PZ-6A 670
PW-6 2000
PZ-7B
PW-7
MPI-14B-R 2.3 J
MPI-3S <0.65
MPI-12B
ESI-6 320
EE-3 1.3 J
PZ-4B
PW-4 2000
PZ-5B 3000
MPI-4I 71
MPI-4S 4.4 J
PW-5 2300
MPI-8S-R 150
MPI-9S-R 1.2 J
MW-8 <0.65
MPI-1S 45
PW-2 380
PZ-2B
PZ-3B 150
MPI-10B
MPI-5S 30
ESI-5-R <0.65
EE-1
MW-11 1400
MW-7 840
PW-3 100
EE-4
PZ-1B
RW-1
ESI-3 140
MPI-7I-R 1.2 J
MPI-2S-R 1.9 J
ESI-2-R <0.65

EAST AURORA BUICK CADILLAC GMC
Collision Shop
PAINE STREET
MAIN STREET
WHALEY AVENUE
FILLMORE AVENUE
RIDGE ROAD
BOYS AND GIRLS CLUBS
VET HOSPITAL
TOWN OF AURORA LIBRARY
MR. C's
AURORA OUTFITTERS
DOCKS
N.Y.S.E.G. SUB-STATION
ELEC. OUTLET

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Figure 3
Tetrachloroethene in Groundwater
Mr. C's Dry Cleaners Site
East Aurora, New York
October 2015

1703074.0011.04
MrC_cVOC_in_GW_Oct2015.srf - 12/17/2015

FEET
0 120 240 360

Total chlorinated VOCs in micrograms per liter
5000
1000
500
100
50
10
5

Legend
ND = not detected
blank = not sampled
cVOC = Sum of PCE + daughter product concentrations
PW-8 340 Well ID with cVOC concentration in µg/L

MPI-15B ND
MPI-13B-R 6.7
MPI-14B-R 2.3
MPI-9S-R 1.2
PW-8 340
PZ-8C 170
PZ-6A 1280
PZ-7B
MPI-6S 32
EE-2 480
PW-6 2190
PW-7
MPI-3S ND
MPI-12B
ESI-6 370
EE-3 1.3
PW-4 2190
PZ-4B
PZ-5B 3100
MPI-4I 1000
MPI-8S-R 240
MPI-4S 55
PW-5 2440
MW-8 35
MPI-1S 50
PW-2 380
PZ-2B
PZ-3B 160
MPI-10B
MPI-5S 42
ESI-5-R ND
EE-1
MW-11 1400
MW-7 840
PW-3 102
EE-4
PZ-1B
RW-1
ESI-3 140
MPI-7I-R 1.2
MPI-2S-R 1.9
ESI-2-R ND

EAST AURORA BUICK CADILLAC GMC
Collision Shop
PAINE STREET
MAIN STREET
WHALEY AVENUE
FILLMORE AVENUE
RIDGE ROAD
BOYS AND GIRLS CLUBS
VET HOSPITAL
AURORA OUTFITTERS
MR. C's #586
N.Y.S.E.G. SUB-STATION
ELEC. OUTLET

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Figure 4
Total Chlorinated VOCs in Groundwater
Mr. C's Dry Cleaners Site
East Aurora, New York
October 2015

1703074.0011.04
MrC_GW_Elevation_2015.srf - 12/16/2015

HORIZONTAL SCALE IN FEET
0 120 240 360

N W S E

Legend

MW-8
904.27
Well ID with Measured Groundwater Elevation in Feet Above Mean Sea Level

903
Estimated Groundwater Elevation Isopleth (Feet Above Mean Sea Level) Contour Interval = 1.0 Foot

Groundwater Flow Direction and Relative Magnitude of Gradient

MPI-15B 903.6
MPI-13B-R 902.8
MPI-14B-R 903.31
MPI-12B
MPI-3S 903.81
EE-2 903.42
PZ-8C 904.41
PZ-8A 903.78
MPI-6S 903.68
PW-6 900.92
PZ-7B
PW-7
PW-4 898.52
PZ-4B
PZ-5B 904.37
MPI-4S 904.39
MPI-4I 903.93
ESI-6 903.87
EE-3 903.53
MPI-8S-R
MPI-9S-R 903.75
903.84
MW-8 904.27
PW-2 901.43
PZ-2B
PZ-3B 904.03
MPI-10B
MPI-5S 904.43
PW-3 899.3
MW-11 904.4
MW-7 904.47
EE-4
MPI-1S 905.4
ESI-5-R 903.81
EE-1
PZ-1B
RW-1
ESI-3 904.56
MPI-2S-R 904.18
MPI-7I-R 904.15
ESI-2-R 904.15
PAINE STREET
MAIN STREET
FILLMORE AVENUE
HALEY AVENUE
RIDGE ROAD
EAST AURORA BUICK CADILLAC GMC
Collision Shop
FIRST PRESBYTERIAN CHURCH SOCIETY
BOYS AND GIRLS CLUBS
EAST AURORA VILLAGE HALL
VET HOSPITAL
AURORA OUTFITTERS
MR. C #586
ELEC. OUTLET
N.Y.S.E.G. SUB-STATION
FIRE PLACE
POOL
DOCKS
GAR.
CONC.

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Figure 5
Groundwater Elevation Isopleths
For the Outwash Aquifer, October 2015
Mr. C's Dry Cleaners Site
East Aurora, New York

ATTACHMENT A
PURGE LOG

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Tel: 716/684-8060, Fax: 716/684-0844

WELL PURGE & SAMPLE RECORD

Site Name/Location: MC C's / East Aurora
Well ID: MW-8
EEEPC Project No.: 10C3074.0011.04
Date: 10/21/15

Initial Depth to Water: 11.35 feet TOIC
Total Well Depth: 13.85 feet TOIC
Depth to Pump: 12.85 feet TOIC
Initial Pump Rate: 200 (mL/pm) / gpm
adjusted to: _____ at _____ minutes
adjusted to: _____ at _____ minutes

Start Time: 1019
End Time: 1100
☐ Bailer ☒ Pump
Pump Type: typhoon
Well Diameter: 2 inches
1x Well Volume: 0.4 gallons

Time	Purge Volume (gallons/liters	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
1020	0	6.69	16.7	-120.6	2.60	3.45	27.0	11.40
1025	1.0	6.74	16.7	-122.4	2.61	1.72	19.6	11.40
1030	2.0	6.80	16.7	-122.8	2.61	1.65	13.5	11.42
1035	3.0	6.83	16.6	-122.2	2.57	1.13	8.88	11.42
1040	4.0	6.85	16.6	-120.3	2.96	1.02	4.68	11.45
1045	5.0	6.85	16.6	-119.8	2.57	0.95	4.21	11.45
1050	6.0	6.85	16.6	-118.7	2.84	0.99	2.52	11.45
1055	7.0	6.84	16.6	-117.9	2.90	0.90	2.55	11.45
1100	8.0	6.84	16.6	-117.2	2.90	0.90	2.57	11.45
Final Sample Data:		6.84	16.6	-117.2	2.90	0.90	2.57	11.45

Sample ID: MW-8-OCT-15
Sample Time: 1103
~~Duplicate?~~ ☐
~~MS/MSD?~~ ☐
Dupe Samp ID: ~~~~

Analyses: Methods:
☒ VOCs ☐ CLP
☐ SVOCs ☐ SW846
☐ PCBs ☐ Drink. Wtr.
☐ Metals ☒ 8260C
☐ _____ ☐ _____

Comments: _____

Sampler(s): S. Craig, L. Reedl

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WELL PURGE & SAMPLE RECORD

Site Name/Location: MRC's / East Aurora — Well ID: PZ-5B
EEEPC Project No.: 10C3074.0011.04 — Date: 10/21/15

Initial Depth to Water: 10.84 feet TOIC — Start Time: 1130
Total Well Depth: 21.48 feet TOIC — End Time: 1205
Depth to Pump: 28.48 feet TOIC — ☐ Bailer ☒ Pump
Initial Pump Rate: 200 (mpm) gpm — Pump Type: typhoon
adjusted to: _____ at _____ minutes — Well Diameter: 2 inches
adjusted to: _____ at _____ minutes — 1x Well Volume: 3.03 gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
1130	0	7.32	13.5	11.3	3.22	0.76	42	10.91
1135	1.0	7.26	14.0	17.5	3.17	0.57	52.7	10.91
1140	2.0	7.25	13.9	20.6	3.12	0.42	30.8	10.91
1145	3.0	7.22	13.9	23.3	3.10	035	13.9	10.92
1150	4.0	7.20	14.0	24.3	3.10	0.33	13.2	10.92
1155	5.0	7.19	14.0	26.2	3.12	0.34	7.75	10.92
1200	6.0	7.18	14.0	28.1	3.12	0.41	5.26	10.92
1205	7.0	7.17	14.0	29.2	3.12	0.41	4.18	10.92
Final Sample Data:		7.17	14.0	29.2	3.12	0.41	4.18	10.92

Sample ID: PZ-5B-OCT 15 — ~~Duplicate?~~ ☐ — Dupe Samp ID: —
Sample Time: 1207 — ~~MS/MSD?~~ ☐

Analyses:	Methods:
☒ VOCs	☐ CLP
☐ SVOCs	☐ SW846
☐ PCBs	☐ Drink. Wtr.
☐ Metals	☒ 8260C
☐ _____	☐ _____

Comments: _____

Sampler(s): S. Craig, L. Reed

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WELL PURGE & SAMPLE RECORD

Site Name/Location: MrC's / East Aurora — Well ID: MPI-8SR
EEEPC Project No.: 10C3074.0011.04 — Date: 10/21/15

Initial Depth to Water: 10.12 feet TOIC — Start Time: 1224
Total Well Depth: 17.40 feet TOIC — End Time: 1249
Depth to Pump: 16.40 feet TOIC — ☐ Bailer ☑ Pump
Initial Pump Rate: 200 (mL/pm)/ gpm — Pump Type: typhoon
adjusted to: ____ at ____ minutes — Well Diameter: 2" inches
adjusted to: ____ at ____ minutes — 1x Well Volume: 1.18 gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
1224	0	7.26	15.0	50.0	3.25	1.12	11.42	10.70
1229	1.0	7.14	15.2	40.1	3.24	0.64	8.43	10.70
1234	2.0	7.14	15.2	33.7	3.22	0.60	7.61	10.70
1239	3.0	7.14	15.2	32.3	3.20	0.50	7.00	10.70
1244	4.0	7.13	15.3	32.8	3.21	0.50	7.33	10.70
1249	5.0	7.12	15.4	32.8	3.20	0.50	6.40	10.70
Final Sample Data:		7.12	15.4	32.8	3.20	0.50	6.40	10.70

Sample ID: MPI-8SR-OCT15 — ~~Duplicate?~~ ☐ — Dupe Samp ID: —
Sample Time: 1250 — ~~MS/MSD?~~ ☐

Analyses:	Methods:
☑ VOCs	☐ CLP
☐ SVOCs	☐ SW846
☐ PCBs	☐ Drink. Wtr.
☐ Metals	☑ 8260C
☐ ____	☐ ____

Comments: ____
Sampler(s): S. Craig, L. Roedl

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WELL PURGE & SAMPLE RECORD

Site Name/Location: MRC's / East Aurora — Well ID: MPI-5S
EEEPC Project No.: 10C3074.0011.04 — Date: 10/21/15

Initial Depth to Water: 12.02 feet TOIC — Start Time: 1400
Total Well Depth: 17.79 feet TOIC — End Time: 1440
Depth to Pump: 16.79 feet TOIC — ☐ Bailer ☒ Pump
Initial Pump Rate: 200 (mLpm) / gpm — Pump Type: typhoon
adjusted to: _____ at _____ minutes — Well Diameter: 2 inches
adjusted to: _____ at _____ minutes — 1x Well Volume: 0.94 gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
14:00	0	7.01	16.7	7.00	2.08	1.39	13.59	12.01
14:05	1.0	6.94	16.4	52.7	2.13	0.67	12.30	12.02
1410	2.0	6.93	16.3	30.4	1.88	0.40	7.09	12.02
1415	3.0	6.96	16.2	13.0	1.91	0.29	3.49	12.02
1420	4.0	6.98	16.2	3.3	1.91	0.27	2.97	12.02
1425	5.0	6.99	16.1	-2.4	1.95	0.24	2.11	12.02
1430	6.0	7.00	16.1	-8.9	1.94	0.22	1.98	12.02
1435	7.0	7.02	16.0	-15.3	1.94	0.19	1.95	12.02
1440	8.0	7.02	16.0	-17.1	1.94	0.18	1.65	12.02
Final Sample Data:		7.02	16.0	-17.1	1.94	0.18	1.65	12.02

Sample ID: MPI-5S-OCT15 — ~~Duplicate?~~ ☐ — Dupe Samp ID: ———
Sample Time: 1441 — ~~MS/MSD?~~ ☐

Analyses:	Methods:	Comments:
☒ VOCs	☐ CLP	
☐ SVOCs	☐ SW846	
☐ PCBs	☐ Drink. Wtr.	
☐ Metals	☐ _____	
☐ _____	☒ 8260VOC	Sampler(s): S. Craig, L. Reedl

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WELL PURGE & SAMPLE RECORD

Site Name/Location: Mr C'S | East Aurora
Well ID: MW7
EEEPC Project No.: 10C3074.0011.04
Date: 10/22/15

Initial Depth to Water: 11.49 feet TOIC
Start Time: 0847
Total Well Depth: 14.40 feet TOIC
End Time: 0927
Depth to Pump: 13.40 feet TOIC
☐ Bailer ☒ Pump
Initial Pump Rate: 200 (mLpm) / gpm
Pump Type: Typhoon
adjusted to: ______ at ______ minutes
Well Diameter: 2 inches
adjusted to: ______ at ______ minutes
1x Well Volume: 0.47 gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
0847	0	7.80	15.3	46.9	2.01	4.13	21.1	11.42
0853	1.0	7.38	15.3	75.3	1.94	3.21	18.5	11.43
0857	2.0	7.28	15.3	79.4	~~3.45~~ 1.78	3.43	11.1	11.44
0903	3.0	7.24	15.3	79.7	1.55	4.10	8.38	11.44
0907	4.0	7.23	15.3	80.3	1.37	4.53	5.21	11.45
0913	5.0	7.23	15.4	83.6	1.29	4.97	2.76	11.45
0917	6.0	7.23	15.3	84.7	1.26	5.04	1.99	11.45
0923	7.0	7.23	15.3	84.8	1.24	5.10	1.74	11.45
0927	8.0	7.23	15.3	85.1	1.22	5.13	1.72	11.45
Final Sample Data:		7.23	15.3	85.1	1.22	5.13	1.72	11.54

Sample ID: MW-7-OCT15
Duplicate? ☒
Dupe Samp ID: MW-7-OCT15-Q
Sample Time: 0929
MS/MSD? ☐

Analyses:
☒ VOCs
☐ SVOCs
☐ PCBs
☐ Metals
☐ ______

Methods:
☐ CLP
☐ SW846
☐ Drink. Wtr.
☒ 8260C
☒ ______

Comments: ______

Sampler(s): S. Craig, L. Reed

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WELL PURGE & SAMPLE RECORD

Site Name/Location: MPCIS / East Aurora — Well ID: MPI-13BR
EEEPC Project No.: 10C3074.0011.04 — Date: 10/22/15

Initial Depth to Water: 9.89 feet TOIC — Start Time: 0952
Total Well Depth: 30.88 feet TOIC — End Time: 1037
Depth to Pump: 29.88 feet TOIC — ☐ Bailer ☒ Pump
Initial Pump Rate: 200 (mLpm) gpm — Pump Type: Typhoon
adjusted to: _____ at _____ minutes — Well Diameter: 2 inches
adjusted to: _____ at _____ minutes — 1x Well Volume: 3.42 gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
0952	0	7.15	12.5	-17.3	1.73	1.00	804	9.62
0957	1.0	7.04	12.9	-52.4	1.74	0.47	1003	9.50
1002	2.0	7.03	12.6	-57.1	1.77	0.30	677	9.50
1007	3.0	7.02	12.7	-58.5	1.81	0.28	124	9.52
1012	4.0	7.01	12.6	-56.5	1.88	0.33	95.4	9.51
1017	5.0	7.01	12.6	-54.6	1.92	0.46	73.8	9.51
1022	6.0	7.01	12.6	-52.3	1.93	0.36	56.1	9.51
1027	7.0	7.01	12.6	-50.9	1.94	0.36	45.2	9.51
1032	8.0	7.01	12.6	-49.3	1.96	0.30	39.8	9.51
1037	9.0	7.02	12.7	-48.5	1.98	0.29	34.1	9.51
Final Sample Data:		7.02	12.7	-48.5	1.98	0.29	34.1	9.51

Sample ID: MPI-13BR-OCT15 — ~~Duplicate?~~ ☐ — Dupe Samp ID: _____
Sample Time: 1039 — ~~MS/MSD?~~ ☐

Analyses:	Methods:
☒ VOCs	☐ CLP
☐ SVOCs	☐ SW846
☐ PCBs	☐ Drink. Wtr.
☐ Metals	☒ 8260C
☐ _____	☐ _____

Comments: Needs new 2" plug
Sampler(s): S. Craig, L. Roedl

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WELL PURGE & SAMPLE RECORD

Site Name/Location: Mr C's / East Aurora
Well ID: MPI-14BR
EEEPC Project No.: 10C3074.0011.04
Date: 10/22/15

Initial Depth to Water: 10.40 feet TOIC
Total Well Depth: 28.20 feet TOIC
Depth to Pump: 27.20 feet TOIC
Initial Pump Rate: 200 (mL)pm / gpm
adjusted to: _____ at _____ minutes
adjusted to: _____ at _____ minutes

Start Time: 1100
End Time: 1200
☐ Bailer ☒ Pump
Pump Type: Typhoon
Well Diameter: 2 inches
1x Well Volume: 2.9 gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm,mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
1100	0	7.06	14.4	-96.0	2.03	0.95	1031	10.40
1105	1.0	6.99	14.8	-114.0	2.03	0.40	1233	10.40
1110	2.0	6.97	14.8	-115.9	2.04	0.29	1165	10.40
1115	3.0	6.97	14.8	-115.4	2.04	0.37	936	10.40
1120	4.0	6.97	14.8	-115.4	2.04	0.33	793	10.40
1125	5.0	6.96	14.9	-115.4	2.04	0.28	682	10.40
1130	6.0	6.96	14.8	-118.1	2.04	0.26	210	10.40
1135	7.0	6.96	14.7	-117.9	2.05	0.22	161	10.40
1140	8.0	6.96	14.7	-120.3	2.05	0.21	97.8	10.40
1145	9.0	6.97	14.7	-122.1	2.06	0.20	58.7	10.40
1150	10.0	6.97	14.7	-121.5	2.07	0.19	48.6	10.40
1155	11.0	6.97	14.7	-124.9	2.08	0.18	41.9	10.40
1200	12.0	6.97	14.7	-121.6	2.10	0.17	31.7	10.40
Final Sample Data:		6.97	14.7	-121.6	2.10	0.17	31.7	10.40

Sample ID: MPI-14BR-OCT15
Sample Time: 1202
Duplicate? ☐
MS/MSD? ☐
Dupe Samp ID: _____

Analyses:	Methods:
☒ VOCs	☐ CLP
☐ SVOCs	☐ SW846
☐ PCBs	☐ Drink. Wtr.
☐ Metals	☒ 8260C
☐ _____	☐ _____

Comments: _____

Sampler(s): S. Craig, L. Rood

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WELL PURGE & SAMPLE RECORD

Site Name/Location: NFC's / East Aurora — Well ID: MPI 9SR
EEEPC Project No.: 10C3074.0011.04 — Date: 10/22/15

Initial Depth to Water: 9.63 feet TOIC — Start Time: 1302
Total Well Depth: 17.45 feet TOIC — End Time: 1337
Depth to Pump: 16.45 feet TOIC — ☐ Bailer ☒ Pump
Initial Pump Rate: 200 (ml/min) gpm — Pump Type: Typhoon
adjusted to: _____ at _____ minutes — Well Diameter: 2 inches
adjusted to: _____ at _____ minutes — 1x Well Volume: 1.27 gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
1302	0	7.24	14.3	82.8	3.19	0.92	25.6	9.71
1307	1000cc	6.97	14.4	79.5	3.20	0.47	20.8	9.69
1312	2000cc	6.94	14.4	78.5	3.20	0.36	13.0	9.68
1317	3000cc	6.92	14.4	78.2	3.20	0.34	15.5	9.70
1322	4.0	6.91	14.7	77.0	3.19	0.50	11.76	9.71
1327	5.0	6.91	14.2	77.4	3.20	0.36	9.81	9.71
1332	6.0	6.91	14.2	77.9	3.20	0.31	7.24	9.72
1337	7.0	6.90	14.2	78.3	3.20	0.29	5.28	9.72
Final Sample Data:		6.90	14.2	78.3	3.20	0.29	5.28	9.72

Sample ID: MPI-9SR-OCT15 — Duplicate? ☐ — Dupe Samp ID: ———
Sample Time: 1337 — MS/MSD? ☐

Analyses:	Methods:
☒ VOCs	☐ CLP
☐ SVOCs	☐ SW846
☐ PCBs	☐ Drink. Wtr.
☐ Metals	☒ 8260C
☐ _____	☐ _____

Comments: Well needs new 2" J-plug
Sampler(s): S. Craig, L. Reed

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WELL PURGE & SAMPLE RECORD

Site Name/Location: MrC's / East Aurora
Well ID: PZ-3B
EEEPC Project No.: 10C3074.0011.04
Date: 10/22/15

Initial Depth to Water: 11.63 feet TOIC
Total Well Depth: 29.39 feet TOIC
Depth to Pump: 28.34 feet TOIC
Initial Pump Rate: 100 (mL)pm / gpm
adjusted to: _____ at _____ minutes
adjusted to: _____ at _____ minutes

Start Time: 1400
End Time: 1450
☐ Bailer ☒ Pump
Pump Type: typhoon
Well Diameter: 2 inches
1x Well Volume: 2.89 gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
1400	0	7.55	13.7	80.5	1.68	1.24	67	11.71
1405	.50	7.34	14.0	77.6	1.68	0.33	83	11.71
1410	1.0	7.33	13.9	74.7	1.68	0.26	77	11.71
1415	1.5	7.31	13.9	72.2	1.69	0.24	66.0	11.71
1420	2.0	7.30	13.8	70.3	1.69	0.23	77.5	11.74
1425	2.5	7.29	14.0	67.8	1.70	0.27	63.5	11.71
1430	3.0	7.28	14.0	65.7	1.70	0.24	54.3	11.71
1435	3.5	7.28	13.9	63.9	1.70	0.22	54.2	11.71
1440	4.0	7.28	13.9	61.8	1.70	0.20	43.4	11.71
1445	4.5	7.27	13.9	58.3	1.70	0.23	40.9	11.71
1450	5.0	7.27	14.0	55.6	1.70	0.22	33.2	11.71
					See			
Final Sample Data:		7.27	14.0	55.6	1.70	0.22	33.2	11.71

Sample ID: PZ-3B-OCT15
Sample Time: 1451
Duplicate? ☐
MS/MSD? ☐
Dupe Samp ID: _____

Analyses:	Methods:
☒ VOCs	☐ CLP
☐ SVOCs	☐ SW846
☐ PCBs	☐ Drink. Wtr.
☐ Metals	☒ 8260C
☐ _____	☐ _____

Comments: _____
Sampler(s): S. Craig, L. Reed

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WELL PURGE & SAMPLE RECORD

Site Name/Location: Mr C's — Well ID: EST 6
EEEPC Project No.: 10C3074.0011.04 — Date: 10/23/15

Initial Depth to Water: 10.61 feet TOIC — Start Time: 9:20
Total Well Depth: 16.31 feet TOIC — End Time: 1000
Depth to Pump: 15.31 feet TOIC — ☐ Bailer ☒ Pump
Initial Pump Rate: .200 Lpm / gpm (as/pm) — Pump Type: Typhoon
adjusted to: ____ at ____ minutes — Well Diameter: 1.5" inches
adjusted to: ____ at ____ minutes — 1x Well Volume: 0.92 gallons : 2.7 gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
920	0	7.11	10.9	189	3.81	—	>100	10.69
9:25	1.0	7.18	10.6	186	3.79	—	39.1	10.69
9:30	2.0	7.26	11.8	174	3.81	—	28.0	10.68
9:35	4.0	7.24	11.9	170	3.80	—	25.7	10.68
9:41	5.0	7.24	11.9	150	3.82	—	19.9	10.65
9:45	6.0	7.41	11.2	121	3.81	—	25.9	10.65
9:52	7.0	7.38	11.5	112	3.80	—	24.3	10.65
9:55	8.0	7.41	11.5	84	3.88	—	15.2	10.65
10:00	9.0	7.41	11.8	76	3.89	—	13.7	10.65
10:05	10.0	7.42	11.7	69	3.84	—	10.2	10.65
10:10	11.0	7.41	11.6	65	3.87	—	6.30	10.65
10:15 LW 10/23/15								
Final Sample Data:		7.41	11.6	65	3.87	—	6.30	10.65

Sample ID: EST-6-OCT 15 — Duplicate? ☐ — Dupe Samp ID: ____
Sample Time: 10:15 — MS/MSD? ☐

Analyses:	Methods:
☒ VOCs	☐ CLP
☐ SVOCs	☐ SW846
☐ PCBs	☐ Drink. Wtr.
☐ Metals	☒ 8260C
☐ ____	☐ ____

Comments: ____
Sampler(s): L. Bond

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WELL PURGE & SAMPLE RECORD

Site Name/Location: NFC's / East Aurora — Well ID: EE-3
EEEPC Project No.: 10C 3074.0011.04 — Date: 10/23/15

Initial Depth to Water: 11.11 feet TOIC — Start Time: 0910
Total Well Depth: ~~28.05~~ feet TOIC — End Time: 1000
Depth to Pump: 27.03 feet TOIC — ☐ Bailer ☒ Pump
Initial Pump Rate: 150 (mLpm) / gpm — Pump Type: Typhoon
adjusted to: _____ at _____ minutes — Well Diameter: 2" inches
adjusted to: _____ at _____ minutes — 1x Well Volume: 2.76 gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
0910	0	8.44	11.7	-19.0	4.66	4.07	135.0	11.24
0915	.75	7.31	14.0	10.8	4.73	3.22	107.9	11.24
0920	1.5	7.17	13.9	-1.4	4.74	2.47	92.2	11.24
0925	2.25	7.12	13.7	-29.5	4.74	1.68	87.1	11.24
0930	3.0	7.11	13.1	-51.9	4.74	1.19	80.7	11.24
0935	3.75	7.10	12.7	-61.9	4.74	0.82	106.1	11.25
0940	4.5	7.09	13.0	-69.2	4.73	0.54	56.1	11.25
0945	5.25	7.03	12.8	-62.7	4.74	0.40	36.9	11.25
0950	6.0	7.08	13.1	-64.3	4.72	0.31	30.7	11.25
0955	6.75	7.08	13.0	-70.1	4.72	0.28	23.9	11.25
1000	7.5	7.09	12.8	-70.5	4.72	0.24	15.6	11.25
Final Sample Data:		7.09	12.8	-70.5	4.72	0.24	15.6	11.25

Sample ID: EE-3-OCT15 — Duplicate? ☐ — Dupe Samp ID: _____
Sample Time: 1002 — MS/MSD? ☐

Analyses:	Methods:
☒ VOCs	☐ CLP
☐ SVOCs	☐ SW846
☐ PCBs	☐ Drink. Wtr.
☐ Metals	☒ 8260C
☐ _____	☐ _____

Comments: _____
Sampler(s): S. Craig

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WELL PURGE & SAMPLE RECORD

Site Name/Location: MCIS / East Aurora
Well ID: MPT-3S
EEEPC Project No.: 10C3074.0011.04
Date: 10/23/15

Initial Depth to Water: 10.59 feet TOIC
Total Well Depth: 17.87 feet TOIC
Depth to Pump: 16.87 feet TOIC
Initial Pump Rate: 150 (mL/pm) / gpm
adjusted to: _____ at _____ minutes
adjusted to: _____ at _____ minutes

Start Time: 1050
End Time: 1135
☐ Bailer ☒ Pump
Pump Type: Typhoon
Well Diameter: 2 inches
1x Well Volume: 1.18 gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
1050	0	7.52	13.5	-109.4	2.82	10.8	913	10.68
1055	750 ~~1500~~	7.29	13.9	-127.5	2.82	0.40	144	10.69
1100	1,500	7.28	13.9	-129.6	2.82	0.35	152	10.69
1105	2,250	7.24	14.0	-131.0	2.82	0.33	144	10.69
1110	3,000	7.22	14.1	-130.4	2.82	0.36	87.1	10.70
1115	3,750	7.21	14.1	-133.1	2.81	0.34	57.5	10.70
1120	4,500	7.21	14.0	-133.8	2.82	0.40	39.0	10.70
1125	5,250	7.21	14.0	-133.9	2.82	0.35	25.1	10.70
1130	6,000	7.20	14.0	-134.5	2.81	0.32	16.9	10.71
1135	6,750	7.20	14.0	-134.9	2.80	0.31	12.5	10.71
Final Sample Data:		7.20	14.0	-134.9	2.80	0.31	12.5	10.71

Sample ID: MPT-3S-OCT15
Sample Time: 1138
~~Duplicate?~~ ☐
MS/MSD? ☒
Dupe Samp ID: _____

Analyses: / Methods:
☒ ~~VOCs~~ / ☐ CLP
☐ SVOCs / ☐ SW846
☐ PCBs / ☐ Drink. Wtr.
☐ Metals / ☒ 8260C
☐ _____ / ☐ _____

Comments: _____
Sampler(s): S. Craig

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WELL PURGE & SAMPLE RECORD

Site Name/Location: MIC's
EEEPC Project No.: 10 3674.020 11.04
Well ID: MPI-15
Date: October 23, 2015

Initial Depth to Water: 9.68 feet TOIC
Total Well Depth: 18.99 feet TOIC
Depth to Pump: 17.99 feet TOIC
Initial Pump Rate: 200 Lpm / gpm (mL/rm)
adjusted to: 300 at 1:00 minutes
adjusted to: _____ at _____ minutes

Start Time: 10.45
End Time: 11:55
☐ Bailer ☒ Pump
Pump Type: Typhoon
Well Diameter: 2 inches
1x Well Volume: 1.5 gallons = 4.5

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
10:45	0	7.83	10.5	84	2.51	—	45.1	10.97
10:50	1.0	7.78	10.9	62	2.27	—	37.9	10.97
10:55	2.0	7.69	11.1	75	2.13	—	22.9	11.07
11:00	3.5	7.77	11.6	49	2.01	—	12.5	11.40
11:05	5.0	7.75	11.4	44	2.09	—	5.47	11.43
11:10	6.5	7.78	11.5	80	2.27	—	3.47	11.49
11:15	8.0	7.84	11.9	69	2.40	—	2.95	11.51
11:20	9.5	7.74	11.9	71	2.58	—	1.95	11.61
11:25	11.0	7.74	12.0	72	2.61	—	2.03	11.80
11:30	12.5	7.74	11.9	69	3.04	—	3.09	11.71
11:35	14.0	7.74	11.9	61	3.51	—	3.00	11.71
11:40	15.5	7.74	11.9	60	3.00	—	2.99	11.71
11:45	17.0	7.74	11.9	59	3.01	—	3.00	11.71
11:50	18.5	7.74	11.9	61	3.00	—	2.98	11.71
Final Sample Data:		7.74	11.9	61	3.00	—	2.98	11.71

Sample ID: MPI-15-Oct 15
Sample Time: 11:55
~~Duplicate?~~ ☐
MS/MSD? ☐
Dupe Samp ID: _____

Analyses: / Methods:
☒ VOCs / ☐ CLP
☐ SVOCs / ☐ SW846
☐ PCBs / ☐ Drink. Wtr.
☐ Metals / ☒ 8260C
☐ _____ / ☐ _____

Comments: _____
Sampler(s): L. Rood

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WELL PURGE & SAMPLE RECORD

Site Name/Location: MRC's / East Aurora — Well ID: EST-SR
EEEPC Project No.: 10C3074I.0011.04 — Date: 10/26/15

Initial Depth to Water: 8.38 feet TOIC — Start Time: 0850
Total Well Depth: 14.49 feet TOIC — End Time: 0930
Depth to Pump: 13.49 feet TOIC — ☐ Bailer ☒ Pump
Initial Pump Rate: 100 (mL/pm) / gpm — Pump Type: typhoon
adjusted to: _____ at _____ minutes — Well Diameter: 2 inches
adjusted to: _____ at _____ minutes — 1x Well Volume: 0.99 gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
0850	0	7.89	15.4	93.5	5.39	0.96	411.2	8.40
0855	0.5	7.47	15.5	109.3	5.37	0.83	31.3	8.43
0900	1.0	7.35	15.1	119.8	5.32	1.27	22.0	8.43
0905	1.5	7.19	16.2	124.8	5.23	0.78	14.8	8.43
0910	2.0	7.15	16.5	125.8	5.15	0.68	11.12	8.43
0915	2.5	7.14	16.6	124.8	5.10	0.67	7.99	8.43
0920	3.0	7.13	16.7	123.0	5.08	0.73	5.62	8.43
0925	3.5	7.12	16.8	119.0	5.07	0.79	4.06	8.43
0930	4.0	7.12	17.0	112.8	5.08	0.77	3.87	8.43
Final Sample Data:		7.12	17.0	112.8	5.05	0.77	3.87	8.43

Sample ID: EST-SR-OCT15 — Duplicate? ☐ — Dupe Samp ID: —
Sample Time: 0932 — MS/MSD? ☐

Analyses:	Methods:
☒ VOCs	☐ CLP
☐ SVOCs	☐ SW846
☐ PCBs	☐ Drink. Wtr.
☐ Metals	☒ 8260C
☐ _____	☐ _____

Comments: _____

Sampler(s): S. Craig, L. Reed

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WELL PURGE & SAMPLE RECORD

Site Name/Location: MrC's / East Aurora
Well ID: MPI-2SR
EEEPC Project No.: 10C3074.0011.04
Date: 10/26/15

Initial Depth to Water: 11.45 feet TOIC
Total Well Depth: 18.37 feet TOIC
Depth to Pump: 18.37 feet TOIC
Initial Pump Rate: 200 (M)pm/ gpm
adjusted to: _____ at _____ minutes
adjusted to: _____ at _____ minutes

Start Time: 0955
End Time: 1030
☐ Bailer ☒ Pump
Pump Type: typhoon
Well Diameter: 2 inches
1x Well Volume: 1.12 gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
0955	0	7.88	12.7	100.5	6.71	6.64	15.7	11.45
1000	1.0 Gal	7.57	12.8	114.8	1.24	6.15	17.1	11.46
1005	2.0	7.48	12.9	116.6	1.22	6.05	14.4	11.45
1010	3.0	7.45	13.0	116.6	1.21	6.06	13.2	11.45
1015	4.0	7.43	13.0	116.3	1.21	6.06	13.3	11.45
1020	5.0	7.43	13.0	116.6	1.20	6.09	12.4	11.45
1025	6.0	7.43	13.0	116.3	1.20	6.10	12.5	11.45
1030	7.0	7.43	13.0	116.3	1.20	6.11	11.9	11.45
Final Sample Data:		7.43	13.0	116.3	120	6.11	11.9	11.45

Sample ID: MPI-2SR-OCT15 (~~MPI-2S~~)
Sample Time: 1032
Duplicate? ☐ Dupe Samp ID: _____
MS/MSD? ☐

Analyses:	Methods:
☒ VOCs	☐ CLP
☐ SVOCs	☐ SW846
☐ PCBs	☐ Drink. Wtr.
☐ Metals	☒ 8260C
☐ _____	☐ _____

Comments: _____
Sampler(s): S. Craig, L. Reed

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WELL PURGE & SAMPLE RECORD

Site Name/Location: Mr C's / East Aurora
Well ID: ESI-2R
EEEPC Project No.: 10C 3074.0011.04
Date: 10/26/15

Initial Depth to Water: 13.29 feet TOIC
Total Well Depth: 19.04 feet TOIC
Depth to Pump: 18.04 feet TOIC
Initial Pump Rate: 200 (mLpm) / gpm
adjusted to: _____ at _____ minutes
adjusted to: _____ at _____ minutes

Start Time: 1057
End Time: 1132
☐ Bailer ☒ Pump
Pump Type: typhoon
Well Diameter: 2 inches
1x Well Volume: 0.94 gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
1057	0	6.90	11.4	-54.6	2.97	2.0	789	13.31
1102	1	6.86	11.8	-55.8	3.45	1.74	760+	13.31
1107	2	6.87	12.1	-37.9	2.90	2.22	87	13.31
1112	3	6.85	12.5	-22.9	2.44	2.69	79.3	13.31
1117	4	6.85	12.4	-18.9	2.47	2.66	61.5	13.31
1122	5	6.85	12.5	-11.1	2.45	2.67	34.5	13.31
1127	6	6.85	12.5	-10.1	2.47	2.68	26.7	13.31
1132	7	6.85	12.5	-7.5	2.41	2.69	24.2	13.31
Final Sample Data:		6.85	12.5	-7.5	2.41	2.69	24.2	13.31

Sample ID: ESI-2R-OCT 15
Sample Time: 11:40
Duplicate? ☐ MS/MSD? ☐ Dupe Samp ID: _____

Analyses: / Methods:
☒ VOCs ☐ CLP
☐ SVOCs ☐ SW846
☐ PCBs ☐ Drink. Wtr.
☐ Metals ☒ 8260C
☐ _____ ☐ _____

Comments: _____

Sampler(s): S. Craig, L. Roedl

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WELL PURGE & SAMPLE RECORD

Site Name/Location: McC's
Well ID: EE-2
EEEPC Project No.: 10C3074.0001.03
Date: 10/26/15

Initial Depth to Water: 12.88 feet TOIC
Total Well Depth: 31.75 feet TOIC
Depth to Pump: 30.75 feet TOIC
Initial Pump Rate: 200 (mL/pm / gpm)
adjusted to: _____ at _____ minutes
adjusted to: _____ at _____ minutes

Start Time: 13:20
End Time: 1435
☐ Bailer ☑ Pump
Pump Type: Typhoon
Well Diameter: 2 inches
1x Well Volume: 3.07 gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
13:20	0	7.27	16.0	-74.5	3.07	5.78	71000	12.96
13:25	1.0	7.22	15.6	-85.0	3.10	0.63	>1000	12.93
13:30	2	7.21	15.7	-78.3	3.11	0.47	>1000	12.90
13:35	3	7.21	15.6	-75.3	3.13	0.44	>1000	12.90
13:40	4	7.21	15.5	-76.7	3.12	0.50	71000	12.90
13:45	5	7.20	15.4	-80.0	3.14	0.32	152	12.90
13:50	6	7.20	15.4	-88.4	3.15	0.37	162	12.90
13:55	7	7.20	15.3	-93.4	3.16	0.40	159	12.90
1400	8	7.20	15.2	-99.6	3.16	0.35	88.3	12.90
1405	9	7.20	15.1	-102.2	3.16	0.36	88.7	12.90
1410	10	7.20	15.3	-105.2	3.15	0.25	64.3	12.90
1415	11	7.20	15.4	-104.6	3.15	0.25	55.9	12.91
1420	12	7.20	15.3	-86.9	3.15	0.22	50.5	12.90
1425	13	7.19	15.3	-89.7	3.15	0.21	43.3	12.90
1430	14	7.19	15.2	-96.3	3.15	0.21	37.2	12.98
1435	15	7.19	15.2	-95.2	3.15	0.21	36.8	12.90
Final Sample Data:		7.19	15.2	-95.2	3.15	0.21	36.8	12.90

Sample ID: EE-2-OCT15
Sample Time: 14:40
Duplicate? ☐ Dupe Samp ID: _____
MS/MSD? ☐

Analyses:	Methods:
☒ VOCs	☐ CLP
☐ SVOCs	☐ SW846
☐ PCBs	☐ Drink. Wtr.
☐ Metals	☑ 8260C
☐ _____	☐ _____

Comments: _____
Sampler(s): S. Craig, L. Rowe

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WELL PURGE & SAMPLE RECORD

Site Name/Location: NFC's / East Aurora
Well ID: MPI-4I
EEEPC Project No.: 10C3074.0011.03
Date: 10/26/15

Initial Depth to Water: 11.73 feet TOIC
Total Well Depth: 41.91 feet TOIC
Depth to Pump: 40.91 feet TOIC
Initial Pump Rate: 200 (mL/pm) gpm
adjusted to: _____ at _____ minutes
adjusted to: _____ at _____ minutes

Start Time: 1457
End Time: 1557
☐ Bailer ☒ Pump
Pump Type: typhoon
Well Diameter: 2 inches
1x Well Volume: 4.9 gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
1457	0	7.69	12.7	102.7	0.651	3.75	12.32	11.99
1502	1.0	7.21	12.6	129.6	0.660	3.21	10.28	11.99
1507	2.0	7.01	12.5	140.1	0.67	3.09	8.12	11.99
1512	3.0	6.91	12.6	142.9	0.68	3.02	7.67	11.99
1517	4.0	6.84	12.4	143.1	0.70	2.98	6.55	11.99
1522	5.0	6.87	12.4	139.8	0.71	2.97	6.58	11.99
1527	6.0	6.78	12.3	111.2	0.75	2.82	7.98	11.99
1532	7.0	6.82	12.3	-40.3	1.48	1.49	7.78	11.99
1537	8.0	6.96	12.3	-91.3	1.76	1.12	7.95	11.99
1542	9.0	7.07	12.4	-112.3	2.03	0.81	5.07	11.99
1547	10.0	7.06	12.4	-125.3	2.29	0.60	3.95	11.99
1552	11.00	7.14	12.4	-128.5	2.31	0.58	3.57	11.99
1557	12.0	7.18	12.4	-133.1	2.37	0.55	2.78	11.99
				see				
Final Sample Data:		7.18	12.4	-133.1	2.37	0.55	2.78	11.99

Sample ID: MPI-4I-OCT 15
Sample Time: 1559
~~Duplicate?~~ ☐
~~MS/MSD?~~ ☐
Dupe Samp ID: —

Analyses: / Methods:
☒ VOCs / ☐ CLP
☐ SVOCs / ☐ SW846
☐ PCBs / ☐ Drink. Wtr.
☐ Metals / ☒ 8260C
☐ _____ / ☐ _____

Comments: _____

Sampler(s): S. Craig, L. Roedl

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WELL PURGE & SAMPLE RECORD

Site Name/Location: Mr C's / East Aurora
Well ID: MPI-6S
EEEPC Project No.: 10C3074.0011.04
Date: 10/27/15

Initial Depth to Water: 11.35 feet TOIC
Total Well Depth: 21.45 feet TOIC
Depth to Pump: 20.45 feet TOIC
Initial Pump Rate: 200 (Mlpm) gpm
adjusted to: _____ at _____ minutes
adjusted to: _____ at _____ minutes

Start Time: 0900
End Time: 0945
☐ Bailer ☒ Pump
Pump Type: typhoon
Well Diameter: 2 inches
1x Well Volume: 1.64 gallons

Time	Purge Volume (gallons/liters)	pH (S.U.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
0900	0	6.46	12.7	-148.1	5.41	2.72	14.3	11.38
0905	1.0	6.54	12.7	-165.8	5.40	1.44	11.16	11.39
0910	2.0	6.60	13.0	-180.5	5.41	1.33	8.74	11.39
0915	3.0	6.60	12.9	-198.5	5.46	1.10	7.38	11.39
0920	4.0	6.59	12.7	-210.6	5.47	1.05	7.13	11.40
0925	5.0	6.56	12.5	-222.9	5.60	1.00	5.90	11.40
0930	6.0	6.53	12.6	-231.4	5.12	1.01	5.02	11.40
0935	7.0	6.51	12.6	-237.8	5.32	0.99	4.93	11.40
0940	8.0	6.49	12.5	-242.6	5.29	1.00	4.12	11.40
0945	9.0	6.48	12.6	-247.7	5.28	1.01	3.81	11.40
				SOC				
Final Sample Data:		6.48	12.6	-247.7	5.28	1.01	3.81	11.40

Sample ID: MPI-6S-OCT15
Sample Time: 0948
Duplicate? ☒
Dupe Samp ID: MPI-6S-OCT15-Q
~~MS/MSD?~~ ☐

Analyses:	Methods:
☒ VOCs	☐ CLP
☐ SVOCs	☐ SW846
☐ PCBs	☐ Drink. Wtr.
☐ Metals	☒ 8260C
☐ _____	☐ _____

Comments: Needs new J-plug
Sampler(s): S. Craig, L. Roedl

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WELL PURGE & SAMPLE RECORD

Site Name/Location: Mr C's / East Aurora
Well ID: PZ-8C
EEEPC Project No.: 10C3074.0011.04
Date: 10/27/15

Initial Depth to Water: 7.29 feet TOIC
Total Well Depth: 29.40 feet TOIC
Depth to Pump: 28.40 feet TOIC
Initial Pump Rate: 200 (mLpm) gpm
adjusted to: _____ at _____ minutes
adjusted to: _____ at _____ minutes

Start Time: 1005
End Time: 1030
☐ Bailer ☒ Pump
Pump Type: Typhoon
Well Diameter: 2 inches
1x Well Volume: 3.60 gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
1005	0	7.29	11.0	-161.1	3.73	1.65	17.1	7.71
1010	1.0	7.20	11.2	-193.4	3.73	0.58	12.05	7.96
1015	2.0	7.18	11.4	-178.9	3.73	0.40	9.00	7.96
1020	3.0	7.18	11.4	-188.4	3.73	0.37	7.79	7.96
1025	4.0	7.18	11.4	-188.9	3.72	0.38	6.21	7.96
1030	5.0	7.18	11.4	-189.5	3.71	0.38	5.62	7.96
Final Sample Data:		7.18	11.4	-189.5	3.71	0.38	5.62	7.96

Sample ID: PZ-8C-OCT15
Sample Time: 1033
Duplicate? ☐
MS/MSD? ☐
Dupe Samp ID: _____

Analyses:	Methods:
☑ VOCs	☐ CLP
☐ SVOCs	☐ SW846
☐ PCBs	☐ Drink. Wtr.
☐ Metals	☑ 8260C
☐ _____	☐ _____

Comments: _____
Sampler(s): S. Craig, L. Reed

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WELL PURGE & SAMPLE RECORD

Site Name/Location: Mr C's / East Aurora — Well ID: PZ-6A
EEEPC Project No.: 10C3074.0011.04 — Date: 10/27/15

Initial Depth to Water: 11.78 feet TOIC — Start Time: 1055
Total Well Depth: 28.91 feet TOIC — End Time: 1135
Depth to Pump: 27.91 feet TOIC — ☐ Bailer ☒ Pump
Initial Pump Rate: 200 (mLpm) gpm — Pump Type: typhoon
adjusted to: _____ at _____ minutes — Well Diameter: 2 inches
adjusted to: _____ at _____ minutes — 1x Well Volume: 2.79 gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
1055	0	7.37	12.7	-64.6	3.38	0.75	84.3	12.10
1100	1.0	7.31	12.8	-81.1	3.41	0.53	83.2	12.10
1105	2.0	7.28	12.9	-91.8	3.49	0.42	65.1	12.10
1110	3.0	7.26	12.9	-97.3	3.49	0.37	47.0	12.10
1115	4.0	7.25	12.8	-100.4	2.67	0.35	29.3	12.12
1120	5.0	7.24	12.8	-103.4	3.87	0.54	20.2	12.12
1125	6.0	7.23	12.8	-105.2	3.79	0.37	17.5	12.12
1130	7.0	7.23	12.8	-106.7	3.79	0.31	14.8	12.12
1135	8.0	7.23	12.8	-108.3	3.79	0.29	12.9	12.12
Final Sample Data:		7.23	12.8	-108.3	3.79	0.29	12.9	12.12

Sample ID: PZ-6A-OCT15 — ~~Duplicate?~~ ☐ — Dupe Samp ID: _____
Sample Time: 1137 — ~~MS/MSD?~~ ☐

Analyses:	Methods:
☒ VOCs	☐ CLP
☐ SVOCs	☐ SW846
☐ PCBs	☐ Drink. Wtr.
☐ Metals	☒ 8260C
☐ _____	☐ _____

Comments: _____
Sampler(s): S. Craig, L. Reed

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WELL PURGE & SAMPLE RECORD

Site Name/Location: Mr. C's / East Aurora
Well ID: MPI-4S
EEEPC Project No.: 10C3074.0011.04
Date: 10/27/15

Initial Depth to Water: 10.43 feet TOIC
Total Well Depth: 20.72 feet TOIC
Depth to Pump: 19.72 feet TOIC
Initial Pump Rate: 200 (mL/pm) / gpm
adjusted to: _____ at _____ minutes
adjusted to: _____ at _____ minutes

Start Time: 1300
End Time: 1335
☐ Bailer ☒ Pump
Pump Type: typhoon
Well Diameter: 2 inches
1x Well Volume: 1.67 gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
1300	0	7.02	13.2	-4.7	6.94	2.54	607	10.97
1305	1.0	6.95	13.3	-24.4	6.96	0.54	42.8	11.10
1310	2.0	6.94	13.4	-42.5	6.97	0.39	24.4	11.15
1315	3.0	6.97	13.5	-64.5	6.94	0.28	21.4	11.21
1320	4.0	6.97	13.5	-68.1	6.94	0.26	21.9	11.21
1325	5.0	6.98	13.5	-76.1	6.96	0.24	22.1	11.21
1330	6.0	6.98	13.5	-79.8	6.95	0.23	14.2	11.21
1335	7.0	6.99	13.5	-82.5	6.96	0.23	8.71	11.21
Final Sample Data:		6.99	13.5	-82.5	6.96	0.23	8.71	11.21

Sample ID: MPI-4S-OCT15
Sample Time: 1338
~~Duplicate?~~ ☐
~~MS/MSD?~~ ☐
Dupe Samp ID: ———

Analyses:	Methods:
☒ VOCs	☐ CLP
☐ SVOCs	☐ SW846
☐ PCBs	☐ Drink. Wtr.
☐ Metals	☒ 8260C
☐ _____	☐ _____

Comments: _____
Sampler(s): S. Craig, L. Reed

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WELL PURGE & SAMPLE RECORD

Site Name/Location: Mr C's / East Aurora
Well ID: MPI-15B
EEEPC Project No.: 10C 3074.0011.04
Date: 10/27/15

Initial Depth to Water: 10.12 feet TOIC
Total Well Depth: 18.30 feet TOIC
Depth to Pump: 17.30 feet TOIC
Initial Pump Rate: 200 (mL/pm) / gpm
adjusted to: _____ at _____ minutes
adjusted to: _____ at _____ minutes

Start Time: 1402
End Time: 1447
☐ Bailer ☒ Pump
Pump Type: typhoon
Well Diameter: 2 inches
1x Well Volume: 1.33 gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
1402	0	7.70	13.6	-18.4	1.56	3.83	11.12	10.69
1407	1.0	7.50	13.7	-5.9	1.55	2.84	7.14	10.74
1412	2.0	7.41	13.7	0.1	1.55	2.56	8.32	10.74
1417	3.0	7.38	13.5	-31.2	1.55	2.31	7.20	10.74
1422	4.0	7.34	13.5	-89.8	1.54	1.85	21.9	10.74
1427	5.0	7.28	13.3	-114.9	1.54	1.20	19.3	10.74
1432	6.0	7.27	13.3	-124.3	1.54	0.86	15.7	10.74
1437	7.0	7.24	13.3	-133.8	1.54	0.62	11.8	10.74
1442	8.0	7.23	13.3	-136.2	1.54	0.60	10.45	10.74
1447	9.0	7.23	13.3	-139.6	1.54	0.61	8.76	10.74
Final Sample Data:		7.23	13.3	-139.6	1.54	0.61	8.76	10.74

Sample ID: MPI-15B-OCT15
Sample Time: 1450
Duplicate? ☐
MS/MSD? ☐
Dupe Samp ID: _____

Analyses:	Methods:
☒ VOCs	☐ CLP
☐ SVOCs	☐ SW846
☐ PCBs	☐ Drink. Wtr.
☐ Metals	☒ 8260C
☐ _____	☐ _____

Comments: _____
Sampler(s): S. Craig L. Roedl

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WELL PURGE & SAMPLE RECORD

Site Name/Location: MrC's / East Aurora — Well ID: ESI-3
EEEPC Project No.: 10C3074.0011.01 — Date: 10/28/15

Initial Depth to Water: 11.29 feet TOIC — Start Time: 0820
Total Well Depth: 15.21 feet TOIC — End Time: 0855
Depth to Pump: 14.21 feet TOIC — ☐ Bailer ☑ Pump
Initial Pump Rate: 200 (M)lpm / gpm — Pump Type: Typhoon
adjusted to: _____ at _____ minutes — Well Diameter: 2 inches
adjusted to: _____ at _____ minutes — 1x Well Volume: 0.63 gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
0820	0	8.00	12.5	22.4	1.40	1.94	57.3	11.31
0825	1.0	7.52	13.7	64.7	1.36	1.27	101.1	11.35
0830	2.0	7.38	14.3	85.0	1.33	0.90	58.6	11.35
0835	3.0	7.29	14.6	84.8	1.33	0.78	29.8	11.35
0840	4.0	7.27	14.7	79.0	1.32	0.73	16.3	11.35
0845	5.0	7.27	14.6	72.6	1.32	0.74	9.20	11.35
0850	6.0	7.27	14.7	65.7	1.32	0.76	5.92	11.35
0855	7.0	7.28	14.7	61.2	1.32	0.78	4.21	11.35
Final Sample Data:		7.28	14.7	61.2	1.32	0.78	4.21	11.35

Sample ID: ESI-3-OCT15 — ~~Duplicate?~~ ☐ — Dupe Samp ID: ____
Sample Time: 0857 — MS/MSD? ☒

Analyses:	Methods:
☒ VOCs	☐ CLP
☐ SVOCs	☐ SW846
☐ PCBs	☐ Drink. Wtr.
☐ Metals	☒ 8260C
☐ _____	☐ _____

Comments: _____

Sampler(s): S. Craig, L. Roedl

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WELL PURGE & SAMPLE RECORD

Site Name/Location: MrC's / East Aurora
Well ID: MPI-7IR
EEEPC Project No.: 10C3074.0011.04
Date: 10/28/15

Initial Depth to Water: 11.29 feet TOIC
Total Well Depth: 36.28 feet TOIC
Depth to Pump: 37.28 feet TOIC
Initial Pump Rate: 200 (mL/pm) gpm
adjusted to: _____ at _____ minutes
adjusted to: _____ at _____ minutes

Start Time: 0914
End Time: 0959
☐ Bailer ☒ Pump
Pump Type: typhoon
Well Diameter: 2 inches
1x Well Volume: 4.4 gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
0914	0	7.30	12.5	72.4	3.06	2.12	13.9	11.71
0919	1.0	7.54	13.0	62.7	3.56	0.51	26.9	12.01
0924	2.0	7.27	13.0	-15.3	3.59	0.52	21.6	12.02
0929	3.0	7.12	13.1	-49.8	3.60	1.04	18.6	12.02
0934	4.0	7.10	13.0	-68.9	3.59	0.71	16.0	12.02
0939	5.0	7.04	13.0	-82.7	3.57	0.58	12.6	12.02
0944	6.0	7.04	13.2	-89.4	3.54	0.47	12.8	12.02
0949	7.0	7.10	13.2	-92.3	3.53	0.41	15.3	12.02
~~1004~~ 0954	8.0	7.10	13.2	-92.3	3.51	0.38	19.5	12.02
~~1009~~ 0959	9.0	7.10	13.2	-92.2	3.51	0.36	21.3	12.02
				See				
Final Sample Data:		7.10	13.2	-92.2	3.51	0.36	21.3	12.02

Sample ID: MPI-7IR-0015
Sample Time: 1001
~~Duplicate?~~ ☐ Dupe Samp ID: —
~~MS/MSD?~~ ☐

Analyses:	Methods:
☒ VOCs	☐ CLP
☐ SVOCs	☐ SW846
☐ PCBs	☐ Drink. Wtr.
☐ Metals	☒ 8260C
☐ _____	☐ _____

Comments: _____
Sampler(s): S. Craig, L. Rood

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WELL PURGE & SAMPLE RECORD

Site Name/Location: MrC's / East Aurora — Well ID: MW-11
EEEPC Project No.: 10C3074.0011.04 — Date: 10/28/15

Initial Depth to Water: 9.99 feet TOIC — Start Time: 1307
Total Well Depth: 16.15 feet TOIC — End Time: 1347
Depth to Pump: 17.15 feet TOIC — ☐ Bailer ☒ Pump
Initial Pump Rate: 200 (mLpm) / gpm — Pump Type: typhoon
adjusted to: ____ at ____ minutes — Well Diameter: 2 inches
adjusted to: ____ at ____ minutes — 1x Well Volume: ____ gallons

Time	Purge Volume (gallons/liters)	pH (s.u.)	Temp. (°C/°F)	ORP (mV)	Conductivity (µS/cm mS/cm)	DO (mg/L)	Turbidity (NTU)	Water Level (feet)
@1307	0	7.53	14.9	81.4	3.53	2.96	24.7	9.99
1312	1.0	7.47	14.7	78.2	2.17	1.43	32.1	9.99
1317	2.0	7.43	14.7	75.0	1.46	1.25	39.6	9.99
1322	3.0	7.37	14.6	70.3	1.65	1.29	16.5	9.99
1327	4.0	7.35	14.6	64.5	1.64	1.31	14.3	9.99
1332	5.0	7.34	14.6	59.9	1.65	1.34	10.17	9.99
1337	6.0	7.34	14.6	56.1	1.66	1.34	9.72	9.99
1342	7.0	7.33	14.6	54.3	1.67	1.38	8.00	9.99
1347	8.0	7.33	14.6	53.5	1.66	1.39	7.21	9.99
Final Sample Data:		7.33	14.6	53.5	1.66	1.39	7.21	9.99

Sample ID: MW-11-OCT 15 — Duplicate? ☐ — Dupe Samp ID: ____
Sample Time: 1350 — MS/MSD? ☐

Analyses: ☒ VOCs ☐ SVOCs ☐ PCBs ☐ Metals ☐ ____
Methods: ☐ CLP ☐ SW846 ☐ Drink. Wtr. ☒ 8260C ☐ ____

Comments: Well is located 10' straight out from side of Snap Fitness, 19.2' from green standup pipe in grass next to building (Between first air conditioner and basement window)

Sampler(s): S. Craig, L. Roedl

ATTACHMENT B
DATA USABILITY SUMMARY REPORTS

Data Usability Summary Report	Project: Mr. C's Dry Cleaners Site Annual Groundwater Sampling
Date Completed: December 09, 2015	Completed by: Lynne Parker

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- EPA Region 2 Data Validation SOPs

Specific criteria for QC limits were obtained from the master QAPP. Compliance with the project QA program is indicated in the checklist and tables below. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

Project ID	Lab Work Order	Laboratory
10C3074.0011.04	P1550 P1570	Eurofins: Spectrum Analytical

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
P1550	WG	EE-3-OCT15	P1550-12	10/23/2015 10:02			
P1550	WG	ESI-6-OCT15	P1550-13	10/23/2015 10:15			
P1550	WG	MPI-13BR-OCT15	P1550-08	10/22/2015 10:39			MPI-13B-R-OCT15
P1550	WG	MPI-14BR-OCT15	P1550-09	10/22/2015 12:02			MPI-14B-R-OCT15
P1550	WG	MPI-1S-OCT15	P1550-15	10/23/2015 11:55			
P1550	WG	MPI-3S-OCT15	P1550-14	10/23/2015 11:38		MS/MSD	
P1550	WG	MPI-5S-OCT15	P1550-05	10/21/2015 14:41			
P1550	WG	MPI-8SR-OCT15	P1550-04	10/21/2015 12:50			MPI-8S-R-OCT15
P1550	WG	MPI-9SR-OCT15	P1550-10	10/22/2015 13:39			MPI-9S-R-OCT15
P1550	WG	MW-7-OCT15	P1550-06	10/22/2015 09:29			
P1550	WG	MW-7-OCT15-Q	P1550-07	10/22/2015 09:29			
P1550	WG	MW-8-OCT15	P1550-02	10/21/2015 11:03			
P1550	WG	PZ-3B-OCT15	P1550-11	10/22/2015 14:51			
P1550	WG	PZ-5B-OCT15	P1550-03	10/21/2015 12:07			
P1550	WQ	TB20151021	P1550-12	10/21/2015 09:30			TB-20151021
P1570	WG	EE-2-OCT15	P1570-04	10/26/2015 14:40			
P1570	WG	ESI-2R-OCT15	P1570-03	10/26/2015 11:40			ESI-2-R-OCT15
P1570	WG	ESI-3-OCT15	P1570-13	10/28/2015 08:57		MS/MSD	
P1570	WG	ESI-5R-OCT15	P1570-01	10/26/2015 09:32			ESI-5-R-OCT15
P1570	WG	MPI-15B-OCT15	P1570-12	10/27/2015 14:50			
P1570	WG	MPI-2SR-OCT15	P1570-02	10/26/2015 10:32			MPI-2S-R-OCT15
P1570	WG	MPI-4I-OCT15	P1570-05	10/26/2015 15:59			
P1570	WG	MPI-4S-OCT15	P1570-11	10/27/2015 13:38			
P1570	WG	MPI-6S-OCT15	P1570-06	10/27/2015 09:48			
P1570	WG	MPI-6S-OCT15-Q	P1570-07	10/27/2015 09:48			

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Date Completed: December 09, 2015	Completed by: Lynne Parker

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/ MSD	ID Corrections
P1570	WG	MPI-7IR-OCT15	P1570-14	10/28/2015 10:01			MPI-7I-R-OCT15
P1570	WG	MW-11-OCT15	P1570-21	10/28/2015 13:50			
P1570	WG	PW-2-OCT15	P1570-16	10/28/2015 10:35			
P1570	WG	PW-3-OCT15	P1570-15	10/28/2015 10:30			
P1570	WG	PW-4-OCT15	P1570-18	10/28/2015 10:55			
P1570	WG	PW-5-OCT15	P1570-17	10/28/2015 10:50			
P1570	WG	PW-6-OCT15	P1570-19	10/28/2015 11:15			
P1570	WG	PW-8-OCT15	P1570-20	10/28/2015 11:21			
P1570	WG	PZ-6A-OCT15	P1570-09	10/27/2015 11:37			
P1570	WG	PZ-8C-OCT15	P1570-08	10/27/2015 10:33			
P1570	WQ	TB-20151026	P1570-10	10/26/2015 08:00			
P1570	WQ	TW-20151028	P1570-22	10/28/2015 08:10			TB-20151028

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
P1550	WG	SW8260C	Volatile Organics	14	N/FD
P1550	WG	SW8260C	Volatile Organics	1	TB
P1570	WG	SW8260C	Volatile Organics	20	N/FD
P1570	WG	SW8260C	Volatile Organics	2	TB

General Sample Information	
Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes. Several name corrections were made as noted in the ID Corrections column of Table 1 due to incorrect well names used on COC and to maintain consistent nomenclature across sampling events.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	No. The cooler associated with SDG P1550 was received at 1.0℃. There was no indication of the samples being frozen. There is no impact to data usability.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples Trip Blank - Every cooler with VOCs waters only Equipment Blank - 1/ set of samples per day?	No. 2 field duplicate per 32 samples 2 MS/MSD per 32 samples 1 trip blank/cooler Rinsate blanks were not collected.
Case narrative present and complete?	Yes.
Any holding time violations (See table below)?	No.

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- Surrogates Outside Limits (Table 3)
- MS/MSD Outside Limits (Table 4)
- LCS Outside Limits (Table 5)
- Reanalysis Results (Table 6)
- Field Duplicate Results (Table 7)

Go to Tables List

Volatile Organics by GC/MS	
Description	**Notes and Qualifiers**
Any compounds present in method, trip, or, field blanks (see Table 2)?	No.
For samples, if results are < 5 times the blank or < 10 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	No qualification required.
Are surrogates for method blanks and LCS within limits?	Yes.
Are surrogates for samples and MS/MSD within limits? (See Table 3). If not, were all samples reanalyzed for VOCs?	Yes.
Is Laboratory QC frequency at least one blank and LCS with each batch and one set of MS/MSD per 20 samples?	Yes.
Is MS/MSD within QC criteria (see Table 4)? If out and LCS is compliant, then "J" flag positive data in original sample due to matrix.	Yes.
Is LCS within QC criteria (see Table 5)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. See Table 5. Acetone and/or 2-hexanone were recovered high in several of the LCSs. The analytes are poor performing compounds in a multi-parameter spike. Most of the associated results were non-detect; therefore, no qualification was required. However, acetone was detected in samples MPI-6S-OCT15 and MPI-6S-OCT15-Q; therefore, the results were J qualified as estimated.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 6)?	Yes.
Is initial calibration for target compounds <20% RSD or curve fit?	No. Methyl acetate exceeded 20% RSD in the initial calibration of instrument V1 on 10/27/15. Bromomethane exceeded 20% RSD in the initial calibration of instrument V10 on 11/02/15, and the initial calibration of instrument V10 on 11/06/15. The analytes are poor performing compounds in a multi-parameter spike. Region 2 EPA SOP HW-33 allows up to 40% RSD for poor performing compounds. The analytes were not detected in the samples, and no qualification of the data was made.

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Volatile Organics by GC/MS	
Description	**Notes and Qualifiers**
Is continuing calibration for target compounds < 20.5% D.	No. The following analytes were outside 20% D in the CCV's listed below: V1N8232: acetone (31.8%), 2-butanone (34.8%), 2-hexanone (20.1%). V1N8283: 1,3-dichlorobenzene (-21.5%). V8E2181: acetone (36.4%) V8E2242: chloromethane (-20.8%), bromomethane (-28.1) V8E2212: bromomethane (-32.5), V8E2302: chloroethane (-20.4), 4-methyl-2-pentanone (-21.9), 2-hexanone (-22.9), 1,1,2,2-tetrachloroethane (-20.4), 1,2-dibromo-3-chloropropane (-20.4), methyl acetate (-24.3) Acetone, 2-butanone, 2-hexanone, bromomethane, chloromethane, 4-methyl-2-pentanone, 2-dibromo-3-chloropropane, and methyl acetate are poor performing compounds in a multi-parameter spike and allowed up to 40 %D in CCVs per Region 2 EPA SOP HW-33. 1,1,2,2-tetrachloroethane and 1,3-dichlorobenzene are normal analytes and allowed up to 25 %D in CCVs per Region 2 EPA SOP HW-33. No qualification of the data was made.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	Yes. See Table 6 Several samples were analyzed at dilutions to bring target analytes within the calibration curve. Generally only the exceeding analyte was reported from the dilution; however, the following samples were reported with elevated reporting limits: ESI-6-OCT15, PZ-5B-OCT15, MW-7-OCT15, and MW-7-OCT15-Q.
For TICs are there any system related compounds that should not be reported?	N/A
Do field duplicate results show good precision for all compounds (see Table 7)?	No. Cis-1,2-dichloroethene and vinyl chloride exhibited poor precision in the field duplicate of MPI-6S-OCT15. The results were qualified J as estimated.

Summary of Potential Impacts on Data Usability
• The following samples were diluted and reported with elevated reporting limits for all analytes: ESI-6-OCT15, PZ-5B-OCT15, MW-7-OCT15, and MW-7-OCT15-Q. There are instances where the elevated reporting limit exceeds the screening level; therefore, analyte concentrations may exceed the screening limit. • Cis-1,2-dichloroethene and vinyl chloride were qualified J as estimated due to poor precision in the field duplicate of MPI-6S-OCT15. • Acetone was qualified J as estimated in MPI-6S-OCT15 and MPI-6S-OCT15-Q due to elevated recovery in the associated LCSs. • Rinsate blanks were not collected from non-dedicated equipment.

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Table 2 - List of Positive Results for Blank Samples
None

Table 2A - List of Samples Qualified for Method Blank Contamination
None

Table 2B - List of Samples Qualified for Field Blank Contamination
None

Table 3 - List of Samples with Surrogates outside Control Limits
None

Table 4 – List of MS/MSD Recoveries and RPDs outside Control Limits
None

Table 5 - List of LCS Recoveries outside Control Limits

Method	Sample ID	Analyte	Rec.	Low Limit	High Limit	Sample Qualifier
SW8260	LCS-83425_P1550	2-Hexanone	132	55	130	None: High & ND
SW8260	LCS-83425_P1550	Acetone	164	40	140	None: High & ND
SW8260	LCS-83475_P1570	Acetone	150	40	140	J Flag Detects
SW8260	LCS-83482_P1570	Acetone	150	40	140	J Flag Detects
SW8260	LCS-83507_P1570	Acetone	144	40	140	None: High & ND

Table 6 –Samples that were Re-analyzed

Sample ID	Lab ID	Method	Sample Type	Action
MW-11-OCT15	P1570-21ADL	SW8260	GW	40X– Sample diluted to bring PCE within the calibration curve. Only the exceeding analyte was reported at the dilution.
ESI-6-OCT15	P1550-13A	SW8260	GW	5X– Sample diluted to bring target analytes within the calibration curve. Elevated reporting limits provided.
PZ-5B-OCT15	P1550-03A	SW8260	GW	20X– Sample diluted to bring target analytes within the calibration curve. Elevated reporting limits provided.

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Sample ID	Lab ID	Method	Sample Type	Action
PW-5-OCT15	P1570-17ADL	SW8260	GW	20X– Sample diluted to bring PCE within the calibration curve. Only the exceeding analyte was reported at the dilution.
PZ-6A-OCT15	P1570-09ADL	SW8260	GW	8X– Sample diluted to bring cis-1,2-DCE and PCE within the calibration curve. Only the exceeding analyte was reported at the dilution.
MPI-4I-OCT15	P1570-05ADL	SW8260	GW	8X– Sample diluted to bring cis-1,2-DEC and MTBE within the calibration curve. Only the exceeding analyte was reported at the dilution.
EE-2-OCT15	P1570-04ADL	SW8260	GW	2X– Sample diluted to bring cis-1,2-DEC and TCE within the calibration curve. Only the exceeding analyte was reported at the dilution.
PW-4-OCT15	P1570-18ADL	SW8260	GW	20X– Sample diluted to bring PCE within the calibration curve. Only the exceeding analyte was reported at the dilution.
PW-2-OCT15	P1570-16ADL	SW8260	GW	20X– Sample diluted to bring PCE within the calibration curve. Only the exceeding analyte was reported at the dilution.
PW-6-OCT15	P1570-21ADL	SW8260	GW	50X– 20X– Sample diluted to bring cis-1,2-DCE, PCE and TCE within the calibration curve. Only the exceeding analyte was reported at the dilution.
MW-7-OCT15	P1550-06A	SW8260	GW	10X– Sample diluted to bring target analytes within the calibration curve. Elevated reporting limits provided.
MW-7-OCT15-Q	P1550-07A	SW8260	GW	10X– Sample diluted to bring target analytes within the calibration curve. Elevated reporting limits provided.

Table 7 – Summary of Field Duplicate Results

Method	Analyte	Unit	Matrix	PQL	MPI-6S-OCT15	MPI-6S-OCT15-Q	RPD	RPD Rating	Sample Qual
SW8260	Acetone	ug/L	GW	5.0	12	8.4	35.3%	Good	None
SW8260	cis-1,2-Dichloroethene	ug/L	GW	5.0	18	35	64.2%	Poor	J Flag
SW8260	trans-1,2-Dichloroethene	ug/L	GW	5.0	ND	1.0	NC	--	--
SW8260	Vinyl chloride	ug/L	GW	5.0	14	35	85.7%	Poor	J Flag

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Method	Analyte	Unit	Matrix	PQL	MW-7-OCT15	MW-7-OCT15-Q	RPD	RPD Rating	Sample Qual
SW8260C	Tetrachloroethene	ug/L	GW	5.0	840	860	2.4%	Good	None

Acronym List and Table Key:

Cis-1,2-DCE	=	Cis-1,2-dichloroethene
CCV	=	continuing calibration verification
COC	=	chain of custody
DUSR	=	data usability summary report
GC/MS	=	gas chromatography / mass spectrometry
LCS	=	laboratory control sample
MBLK	=	method blank
MS	=	matrix spike
MSD	=	matrix spike duplicate
NYSDEC	=	New York State Department of Environmental Conservation
PCE	=	tetrachloroethene
PQL	=	practical quantitation limit
QA	=	quality assurance
QAPP	=	quality assurance project plan
QC	=	quality control
RPD	=	relative percent difference
SDG	=	sample delivery group
TCE	=	trichloroethene
TIC	=	tentatively identified compound
VOC	=	volatile organic compound