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September 7, 2012

Division of Environmental Remediation
Remedial Bureau E, 12th Floor
New York State Department of
Environmental Conservation
625 Broadway
Albany, New York 12233-7016

Attention: Mr. Matt Dunham, Project Manager

Subject: **Remedial Design Baseline Groundwater Sampling Letter Report**
Dinaburg Distributing Site – NYSDEC Site Number 8-28-103
MACTEC Engineering and Consulting, P.C. Project No. 3612112216

Dear Mr. Dunham,

MACTEC Engineering and Consulting, P.C., (MACTEC), under contract to the New York State Department of Environmental Conservation (NYSDEC) is pleased to present this Remedial Design (RD) Baseline Groundwater Sampling Letter Report (Report) documenting the July 2012 groundwater sampling activities and results associated with the Dinaburg Distributing Site (Dinaburg) NYSDEC site number 8-28-103 (Site). The baseline groundwater sampling was conducted to provide a status of groundwater quality in the area of the proposed site remedial action being planned in accordance with the NYSDEC Record of Decision (ROD) (NYSDEC, 2011) for the Site. The RD is being performed under NYSDEC Work Assignment Number D007619-6 in accordance with MACTEC's Scope of Work (MACTEC, 2012a).

The Site is located at 1012 South Clinton Avenue in the City of Rochester in Monroe County, New York (Figure 1). The property is located in a mixed commercial/residential area just inside the Rochester City limits. The Site occupies 0.25 acres on two parcels situated perpendicular to one another, and is currently surfaced by a combination of pavement, a concrete former building slab, and soil. The property is currently vacant and abuts several residential and commercial properties.

The property and buildings were reportedly used as an automobile repair shop from approximately 1950 to 1969. From 1971 to 1993, the Site was occupied by Dinaburg Distributing, Inc., which operated a dry cleaning supply company business and sold chemical solvents to various dry cleaners in the area. Dinaburg stored trichloroethene (TCE) and tetrachloroethene (PCE) in above ground storage tanks which were located in the northeast area of the Site building. The property has been vacant since 1995 and currently consists of a parking lot. The former Site building and an adjacent house (350 Benton Street) were demolished in 2004 by the property owner to allow access for remediation of the Site.

BACKGROUND

The Site has been inactive for approximately 17 years. The primary contaminant source areas are reportedly a result of leaks and spills from the historic storage tanks on the property, and spills to the ground surface in the vicinity of the Benton Street driveway. The primary source area (contaminated soil) is represented by an area where PCE in soil exceeds its' Soil Cleanup Objective (SCO) for unrestricted use as defined in NYSDEC Table 375-6.8(a): Unrestricted Use SCOs (MACTEC, 2012b).

An interim remediation measure (IRM) was conducted at the Site in 2005 and consisted of the excavation and removal of contaminated soils in an area measuring approximately 32 feet square by 8 feet deep. Soils on the periphery of the IRM removal area contained residual volatile organic compound (VOC) contamination; PCE was detected at a concentration of 1,500 milligrams per kilogram (mg/Kg). This contamination was evaluated by URS Corporation (URS) to be confined primarily to the upper stratified overburden and not extend into the till layer which was noted to be present at approximately 13 feet below ground surface. To remediate the remaining VOCs present in soil at concentrations above their SCOs for unrestricted use, URS installed a multi-phase extraction (MPE) system as an IRM. The MPE system consisted of 18 soil and groundwater extraction wells. The system began operating in February 2006 and was shut down in 2011. URS calculated that approximately 382 lbs of VOC contamination were removed via the MPE system between February 2006 and May 2010. Continued operation after 2006 had decreased rate of mass contaminant removal to a point where it was decided to cease operations.

High concentrations of VOC contamination (PCE was detected at a concentration of 1,700 mg/Kg in 2009) continue to be present in site soils. PCE and TCE were detected in groundwater at the Site at concentrations of 220,000 micrograms per liter (µg/L) and 170,000 µg/L, respectively in 2009. PCE and TCE were also detected in sub-slab soil vapor samples collected from below buildings adjacent to the Site. Concentrations of PCE and TCE detected in Site media (soil and groundwater) in 2008 and 2009 indicate possible continued presence of dense non-aqueous phase liquid at the Site (MACTEC, 2012b).

The ROD (NYSDEC, 2011) for the Site describes the site remedy as follows: "Installation of an in-situ electrical resistance heating system (ERH) in the area of the former Dinaburg building and the 350 Benton Street property to address on-site VOC soil contamination. Implementation of this alternative will include electrical resistance heating of on-site soil and groundwater to volatize VOC contamination and vapor recovery extraction wells for vapor recovery."

In addition, the ROD includes provisions for:

- imposition of an environmental easement for the property that certifies completion and maintenance of institutional and engineering controls
- development of a Site Management Plan that identifies property use restrictions and engineering controls and describes the steps necessary to assure compliance with the controls.

Because of the large extent of the groundwater plume extending far offsite, absolute remediation of groundwater is not a goal of ERH treatment. However, groundwater samples will also be collected to evaluate contaminant reduction and track the estimate mass remaining in groundwater before, during, and after treatment, while groundwater is available for sampling (MACTEC, 2012b). This Report presents the analytical results of groundwater samples collected from monitoring wells located within the treatment area to assist in evaluating contaminant reduction and track the estimated mass remaining in groundwater prior to treatment.

BASELINE JULY 2012 GROUNDWATER SAMPLING

This Report provides the results of the July 2012 groundwater sampling conducted at the Site. Groundwater sampling consisted of a synoptic round of groundwater elevation measurements and groundwater samples collected for VOC analysis from 31 monitoring wells located on and off of

the Site property. The July 2012 sampling locations are shown on Figure 2. Table 1 presents a summary of groundwater level measurements and monitoring well data. Figure 3 presents interpreted groundwater contours from the synoptic water level measurements collected in July 2012 for the overburden wells. Figure 4 presents groundwater elevations measured at the bedrock/overburden interface wells in July 2012; interpreted groundwater contours are not shown due to the relative consistency of the measurements.

July 2012 analytical groundwater results were compared to the New York State (NYS) Class GA Groundwater Quality Standards from Title 6 of the New York Codes, Rules, and Regulations Parts 700-705 (NYS, 1999), as well as to guidance values in the NYSDEC Technical and Operational Guidance Series 1.1.1 (NYSDEC, 1998), as appropriate. Validated groundwater VOC results detected in the July 2012 sampling event are presented in Table 2. A comparison of current groundwater conditions at the Site (July 2012) and those reported during the Remedial Investigation (May 2009) are presented in Table 3.

Groundwater monitoring field data records from the July 2012 sampling round are provided in Attachment 1. Data Usability Summary Reports (DUSRs) and laboratory analytical forms are included in Attachment 2.

If you have questions or concerns, please contact Mark Stelmack at 207-828-3592.

Sincerely,

MACTEC Engineering and Consulting, P.C.

Brandon A. Shaw
Project Scientist

Mark J. Stelmack, P.E.
Project Manager

Enclosures:

Attachment 1: July 2012 Groundwater Monitoring Field Data Records

Attachment 2: July 2012 DUSRs, including Laboratory Analytical Reports

REFERENCES

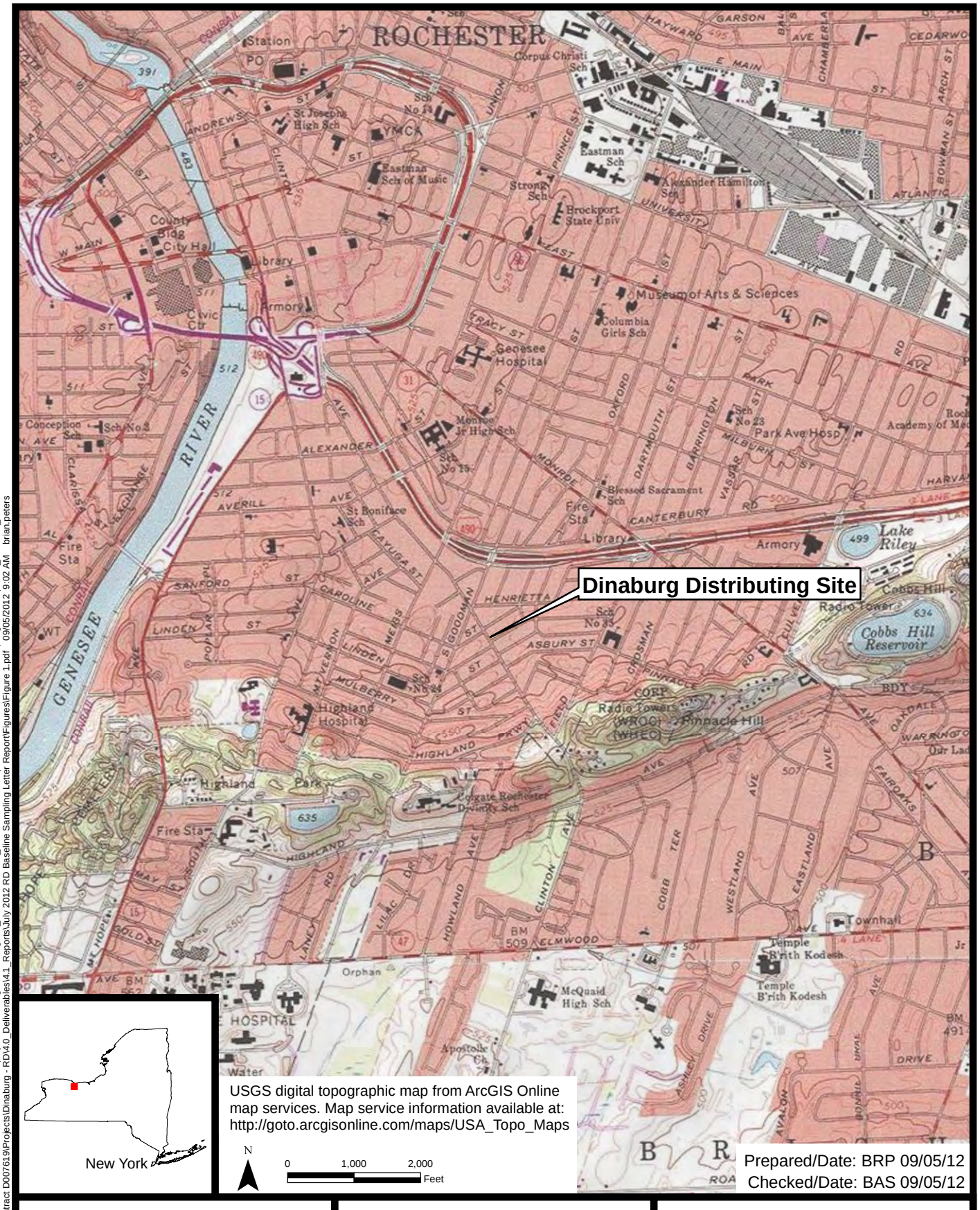
MACTEC Engineering and Consulting, P.C. (MACTEC), 2012a. Statement of Work included in Response to NYSDEC Work Assignment D007619-6, Schedule 2.11 Package Submittal. May 18, 2012.

MACTEC Engineering and Consulting, P.C. (MACTEC), 2012b. Final Remedial Design Basis Report for the Dinaburg Distributing Site, NYSDEC Site number 8-28-103. August 2012.

NYS, 1999. New York Codes, Rules, and Regulations, Title 6, Part 700-705 Water Quality Regulations Surface Water and Groundwater Classifications and Standards. Amended August 1999.

NYSDEC, 1998. Class GA Groundwater Quality Guidance Values from the Division of Water Technical and operational Guidance Series 1.1.1 "Ambient Water Quality Standards and Guidance Values", 1998.

New York State Department of Environmental Conservation (NYSDEC), 2011. Record of Decision, Dinaburg Distributing, Inc., Operable Unit Number: 01, State Superfund Project, Rochester, Monroe County, Site No. 828103. March 2011.



REMEDIAL DESIGN
BASELINE GROUNDWATER
SAMPLING LETTER REPORT
DINABURG DISTRIBUTING
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SITE LOCATION

Project 3612-11-2216 Figure 1

Document: P:\Projects\nysdec1\Contracts D004434 and D004444\Projects\Dinaburg Distributing\4.0_Deliverables\4.5_Databases\GIS\MapDocument\Baseline GW Sampling Letter Rpt\Site_Location_8.5x11P.mxd
PDF: P:\Projects\nysdec1\Contract D007619\Projects\Dinaburg - RD\4.0_Deliverables\4.1_Reports\July 2012 RD Baseline Sampling Letter Report\Figures\Figure 1.pdf 09/05/2012 9:02 AM brian.peters



Legend

- Overburden Well
- Interface Well
- Bedrock Well

N

0 15 30 Feet

Notes:
Well locations surveyed by Popli Design Group.
Bing Maps Aerial imagery from ArcGIS Online map services; map service information available at: http://www.arcgis.com/home/item.html?id=677cd0c509d842a98360c46186a2768e

Prepared/Date: BRP 09/05/12
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JULY 2012 SAMPLING LOCATIONS

Project 3612-11-2216 Figure 2



Legend

- Overburden Well
- Interpreted Shallow Groundwater Contours

N

0 15 30 Feet

Notes:
Water levels collected by MACTEC on 07/09/2012.
Elevations in feet above msl.
Yellow Shading indicates water level not used in contouring.
Well locations surveyed by Popli Design Group.
Bing Maps Aerial imagery from ArcGIS Online map services; map service information available at: http://www.arcgis.com/home/item.html?id=677cd0c509d842a98360c46186a2768e

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SHALLOW GROUNDWATER LEVELS

Project 3612-11-2216 Figure 3

Document: P:\Projects\nysdec1\Contracts D004434 and D004444\projects\Dinaburg Distributing\4.0_Deliverables\4.5_Databases\GIS\MapDocument\Baseline GW Sampling Letter Rpt\Baseline_GW_11x17LS.mxd PDF: P:\Projects\nysdec1\Contract D007619\Projects\Dinaburg - RD\4.0_Deliverables\4.1_Reports\July 2012 RD Baseline Sampling Letter Report\Figures\Figure 4.pdf 09/05/2012 8:30 AM brian.peters



Legend

Interface Well

N

0 15 30 Feet

Notes:
Water levels collected by MACTEC on 07/09/2012.
Elevations in feet above msl.
Well locations surveyed by Popli Design Group.
The overburden/bedrock interface groundwater flow direction is uncertain but presumed, based on anaylytical data collected during the 2009 Remedial Investigation, to flow primarily to the west.
Bing Maps Aerial imagery from ArcGIS Online map services; map service information available at: http://www.arcgis.com/home/item.html?id=677cd0c509d842a98360c46186a2768e

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INTERFACE GROUNDWATER ELEVATIONS

Project 3612-11-2216 Figure 4

Table 1: July 2012 Groundwater Elevation Summary

Well ID	Northing	Easting	Ground Elevation (ft)	Measuring Point Elevation (riser, ft)	Total Depth (ft)	Screen Length (ft)	Depth to Bedrock (ft bgs)	Screened Zone	07/09/2012 Event	
									Initial Water Levels (ft bmp)	Water Elevation (ft)
GPW-01	1145250.975	1412214.743	512.91	512.55	14.9	NA	NA	OB	8.08	504.47
GPW-02	1145177.747	1412238.261	512.79	512.51	14.1	NA	NA	OB	7.70	504.81
MW-01	1145163.180	1412088.140	513.43	513.06	20.4	5.0	NA	INT	8.94	504.12
MW-01A	1145167.680	1412095.540	513.52	513.05	8.0	5.0	NA	OB	6.40	506.65
MW-03C	1145186.360	1412204.990	513.14	512.72	32.7	5.0	22.7	BED	14.06	498.66
MW-03	1145182.300	1412208.190	513.34	513.10	21.2	15.0	NA	OB/INT	7.62	505.48
MW-04	1145082.530	1412145.890	513.30	513.01	24.1	15.0	23.1	OB/INT	9.60	503.41
MW-05	1145059.860	1412071.430	513.72	513.49	24.6	15.0	23.6	OB/INT	9.86	503.63
MW-06	1145321.340	1412126.450	512.06	511.54	20.6	15.0	19.9	OB/INT	8.04	503.50
MW-08K	1145200.500	1412282.750	512.57	512.24	19.2	10.0	17.8	INT	NM	NM
MW-08S	1145202.870	1412286.320	512.52	512.27	16.0	10.0	NA	OB	7.40	504.87
MW-09K	1145215.070	1412036.010	513.27	513.01	22.7	10.0	23.3	INT	9.52	503.49
MW-09S	1145222.490	1412032.240	513.27	512.87	16.0	10.0	NA	OB	8.28	504.59
MW-10K	1145249.960	1412155.070	512.84	512.49	21.8	10.0	22.0	OB/INT	8.63	503.86
MW-10S	1145262.120	1412157.040	512.70	512.25	16.0	10.0	NA	OB	7.00	505.25
MW-11K	1145145.600	1412256.610	512.60	512.12	18.2	10.0	17.5	OB/INT	NM	NM
MW-11S	1145151.970	1412267.480	512.60	512.36	14.0	10.0	NA	OB	8.00	504.36
MW-12K	1145115.833	1412212.976	513.09	512.67	19.5	5.0	19.3	INT	9.04	503.63
MW-12S	1145111.011	1412204.077	513.01	512.53	14.0	10.0	NA	OB	8.07	504.46
MW-13K	1145154.383	1412083.680	513.41	513.13	21.5	5.0	19.6	INT	9.50	503.63
MW-14K	1145228.232	1412224.055	513.04	512.66	25.0	5.0	22.4	INT	9.12	503.54
GWE-1	1145169.391	1412098.427	513.43	512.98	20.7	20.7	3.0	INT	9.32	503.66
GWE-2	1145151.952	1412176.256	513.35	512.94	23.0	23.0	3.0	INT	9.32	503.62
GWE-3	1145168.732	1412208.737	513.52	513.27	22.0	22.0	3.0	INT	9.65	503.62
MPE-1	1145189.131	1412143.937	513.91	513.40	13.5	10.0	20.7	OB	6.28	507.12
MPE-2	1145171.101	1412147.408	514.02	513.42	13.5	7.5	NA	OB	6.33	507.09
MPE-3	1145181.826	1412160.547	513.86	513.41	13.5	10.0	22.0	OB	6.32	507.09
MPE-4	1145200.455	1412161.402	513.76	513.39	12.5	9.5	NA	OB	6.33	507.06
MPE-5	1145190.103	1412179.153	513.82	513.43	11.5	8.5	NA	OB	6.54	506.89
MPE-6	1145211.171	1412177.812	513.63	513.22	12.0	9.0	NA	OB	10.40	502.82
MPE-7	1145220.677	1412160.767	513.86	513.30	11.0	8.0	NA	OB	7.16	506.14
MPE-8	1145231.196	1412177.912	513.91	513.48	10.0	7.0	NA	OB	7.54	505.94
MPE-9	1145229.693	1412207.771	513.64	513.14	10.0	7.0	NA	OB	7.71	505.43
MPE-10	1145199.558	1412195.892	513.54	513.12	12.0	9.0	NA	OB	6.93	506.19
MPE-11	1145211.468	1412213.412	513.35	513.02	10.0	4.0	NA	OB	7.25	505.77
MPE-12	1145216.466	1412230.869	513.24	512.90	10.0	4.0	NA	OB	7.21	505.69
MPE-13	1145189.518	1412201.528	513.21	512.89	11.5	5.0	NA	OB	6.58	506.31
MPE-14	1145180.741	1412231.490	512.69	512.23	11.0	5.0	NA	OB	6.82	505.41
MPE-15	1145171.414	1412213.047	513.30	512.97	11.0	5.0	NA	OB	7.39	505.58
MPE-16	1145159.523	1412199.499	513.60	513.31	12.0	9.0	NA	OB	7.64	505.67
MPE-17	1145160.217	1412170.783	513.47	512.97	13.5	7.5	NA	OB	6.25	506.72
MPE-18	1145181.518	1412197.696	513.55	513.12	11.0	8.0	NA	OB	6.71	506.41

Notes:
Wells surveyed by Popli Design Group.
Well data from URS, Inc. and MACTEC well logs.
NA = not available
Water levels collected by MACTEC on July 9, 2012
bmp = below measuring point
ft bgs = feet below ground surface
MPE = Multi-Phase-Extraction Well; MW = Monitoring Well; GWE = Groundwater Extraction Well
OB = overburden; BR = bedrock; INT = overburden/bedrock interface

Prepared by: BAS 08/01/2012
Checked by: JKR 08/06/2012

Table 2: July 2012 Groundwater VOC Results

Location ID		MW-01		MW-03		MW-03C		MW-03C		MW-06		MW-10K	
Field Sample Date		7/9/2012		7/10/2012		7/10/2012		7/10/2012		7/10/2012		7/11/2012	
Field Sample ID		828103-MW01015		828103-MW03010		828103-MW03C028		828103-MW03C028D		828103-MW06016		828103-MW10K018	
Field Sample Depth (ft bgs)		15		10		28		28		16		18	
QC Code		FS		FS		FS		FD		FS		FS	
Parameter Name	**Criteria**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	5	10	U	**6.3**	J	25	U	25	U	**0.47**	J	5	U
1,1-Dichloroethane	5	**4.1**	J	25	U	**49**		**50**		**1**		**4.1**	J
1,1-Dichloroethene	5	**4.9**	J	25	U	25	U	25	U	1	U	**2**	J
Acetone	50*	100	UJ	250	UJ	250	UJ	250	UJ	10	UJ	50	UJ
Benzene	1	10	U	25	U	25	U	25	U	**0.69**	J	5	U
Chloroform	7	10	U	**21**	J	**9.3**	J	**8.8**	J	1	U	5	U
Cis-1,2-Dichloroethene	5	**1700**		**29**		**180**		**180**		**38**		**190**	
Cyclohexane	NS	20	U	50	U	50	U	50	U	2	U	10	U
Ethyl benzene	5	10	U	25	U	25	U	25	U	1	U	5	U
Methyl cyclohexane	NS	10	U	25	U	25	U	25	U	1	U	5	U
Methyl Tertbutyl Ether	10*	10	U	25	U	25	U	25	U	1	U	5	U
Methylene chloride	5	**2.2**	J	25	U	25	U	25	U	1	U	5	U
Tetrachloroethene	5	**71**		**7200**	D	**940**		**950**		**11**		**77**	
Toluene	5	10	U	25	U	25	U	25	U	1	U	5	U
trans-1,2-Dichloroethene	5	**19**		25	U	25	U	25	U	**0.86**	J	**2**	J
Trichloroethene	5	**130**		**1300**		**3500**		**3500**		**15**		**490**	
Vinyl chloride	2	**300**		25	U	25	U	25	U	**4**		**4.8**	J
Xylenes (m&p)	5	20	U	50	U	50	U	50	U	2	U	10	U

Notes:
Results reported in micrograms per liter (µg/L)
Only detected compounds shown.
Samples analyzed for VOCs by EPA Method SW8260B
ft bgs = feet below ground surface
QC Code:
FS = Field Sample
FD = Field Sample
Qualifiers:
U = Not detected greater than the reporting limit
J = Estimated value
Criteria = Groundwater guidance or standard values from Technical and Operational Guidance Series (TOGS) 1.1.1, "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" (NYSDEC, 1998).
* = Guidance Value
NYS, 1999. New York Codes, Rules, and Regulations, Title 6, Part 700-705 Water Quality Regulations Surface Water and Groundwater Classifications and Standards. Amended August 1999
NS = No guidance value for compound
Bold = Compound detected in sample
Highlighted results exceed criteria

Table 2: July 2012 Groundwater VOC Results

Location ID		MW-12K		MW-12K		MW-13K		MW-14K		GPW-01		GPW-02	
Field Sample Date		7/11/2012		7/11/2012		7/9/2012		7/9/2012		7/10/2012		7/10/2012	
Field Sample ID		828103-MW12S016		828103-MW12S016D		828103-MW13K016		828103-MW14K019		828103GPW01013		828103GPW02012	
Field Sample Depth (ft bgs)		16		16		16		19		13		12	
QC Code		FS		FD		FS		FS		FS		FS	
Parameter Name	**Criteria**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	5	1	U	1	U	**71**	J	50	U	20	U	100	U
1,1-Dichloroethane	5	1	U	1	U	**34**	J	50	U	20	U	100	U
1,1-Dichloroethene	5	1	U	1	U	100	U	50	U	20	U	100	U
Acetone	50*	10	U	10	UJ	1000	U	500	UJ	200	UJ	1000	UJ
Benzene	1	1	U	1	U	100	U	50	U	20	U	100	U
Chloroform	7	1	U	1	U	**63**	J	50	U	**4.4**	J	**68**	J
Cis-1,2-Dichloroethene	5	1	U	1	U	**3000**		**230**		**63**		**410**	
Cyclohexane	NS	2	U	2	U	200	U	100	U	40	U	200	U
Ethyl benzene	5	1	U	1	U	100	U	50	U	20	U	100	U
Methyl cyclohexane	NS	1	U	1	U	100	U	50	U	20	U	100	U
Methyl Tertbutyl Ether	10*	1	U	1	U	100	U	50	U	20	U	100	U
Methylene chloride	5	1	U	1	U	100	U	50	U	**4.8**	J	100	U
Tetrachloroethene	5	1	U	1	U	**18000**		**670**		**6.4**	J	**2400**	
Toluene	5	1	U	1	U	100	U	50	U	20	U	100	U
trans-1,2-Dichloroethene	5	1	U	1	U	100	U	50	U	20	U	100	U
Trichloroethene	5	1	U	1	U	**3200**		**6700**		**2600**		**16000**	
Vinyl chloride	2	1	U	1	U	**390**		50	U	20	U	100	U
Xylenes (m&p)	5	2	U	2	U	200	U	100	U	40	U	200	U

Notes:
Results reported in micrograms per liter (µg/L)
Only detected compounds shown.
Samples analyzed for VOCs by EPA Method SW8260B
ft bgs = feet below ground surface
QC Code:
FS = Field Sample
FD = Field Sample
Qualifiers:
U = Not detected greater than the reporting limit
J = Estimated value
Criteria = Groundwater guidance or standard values from Technical and Operational Guidance Series (TOGS) 1.1.1, "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" (NYSDEC, 1998).
* = Guidance Value
NYS, 1999. New York Codes, Rules, and Regulations, Title 6, Part 700-705 Water Quality Regulations Surface Water and Groundwater Classifications and Standards. Amended August 1999
NS = No guidance value for compound
Bold = Compound detected in sample
Highlighted results exceed criteria

Table 2: July 2012 Groundwater VOC Results

Location ID		GWE-1		GWE-2		GWE-3		MPE-1		MPE-2		MPE-3	
Field Sample Date		7/10/2012		7/10/2012		7/10/2012		7/9/2012		7/9/2012		7/9/2012	
Field Sample ID		828103-GWE01019		828103-GWE02022		828103-GWE03021		828103-MPE01010		828103-MPE02010		828103-MPE03010	
Field Sample Depth (ft bgs)		19		22		21		10		10		10	
QC Code		FS		FS		FS		FS		FS		FS	
Parameter Name	**Criteria**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	5	**4.3**	J	1	U	250	U	**3.7**		**2**		**17**	
1,1-Dichloroethane	5	**20**		**2**		250	U	**1.8**		**0.24**	J	**8.8**	J
1,1-Dichloroethene	5	**14**		**1.2**		250	U	**0.39**	J	1	U	**5.4**	J
Acetone	50*	100	U	**2.5**	J	2500	U	**2**	J	10	UJ	100	U
Benzene	1	10	U	1	U	250	U	1	U	1	U	10	U
Chloroform	7	10	U	1	U	250	U	1	U	1	U	10	U
Cis-1,2-Dichloroethene	5	**1300**		**100**		**1200**		**41**		**3.1**		**28**	
Cyclohexane	NS	20	U	2	U	500	U	2	U	2	U	20	U
Ethyl benzene	5	10	U	1	U	250	U	1	U	1	U	10	U
Methyl cyclohexane	NS	10	U	1	U	250	U	1	U	1	U	10	U
Methyl Tertbutyl Ether	10*	10	U	**0.2**	J	250	U	1	U	1	U	10	U
Methylene chloride	5	10	U	1	U	250	U	1	U	1	U	10	U
Tetrachloroethene	5	**1900**		**160**	D	**10000**		**45**		**88**		**1400**	
Toluene	5	10	U	1	U	250	U	1	U	1	U	10	U
trans-1,2-Dichloroethene	5	**8.8**	J	**0.97**	J	250	U	1	U	1	U	10	U
Trichloroethene	5	**970**		**83**		**38000**		**37**		**23**		**330**	
Vinyl chloride	2	**110**		**6.1**		250	U	**7.5**		1	U	10	U
Xylenes (m&p)	5	20	U	2	U	500	U	2	U	2	U	20	U

Notes:
Results reported in micrograms per liter (µg/L)
Only detected compounds shown.
Samples analyzed for VOCs by EPA Method SW8260B
ft bgs = feet below ground surface
QC Code:
FS = Field Sample
FD = Field Sample
Qualifiers:
U = Not detected greater than the reporting limit
J = Estimated value
Criteria = Groundwater guidance or standard values from Technical and Operational Guidance Series (TOGS) 1.1.1, "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" (NYSDEC, 1998).
* = Guidance Value
NYS, 1999. New York Codes, Rules, and Regulations, Title 6, Part 700-705 Water Quality Regulations Surface Water and Groundwater Classifications and Standards. Amended August 1999
NS = No guidance value for compound
Bold = Compound detected in sample
Highlighted results exceed criteria

Table 2: July 2012 Groundwater VOC Results

Location ID		MPE-4		MPE-5		MPE-6		MPE-7		MPE-8		MPE-9	
Field Sample Date		7/9/2012		7/10/2012		7/10/2012		7/10/2012		7/9/2012		7/11/2012	
Field Sample ID		828103-MPE04010		828103-MPE05010		828103-MPE06010		828103-MPE07010		828103-MPE08010		828103-MPE09010	
Field Sample Depth (ft bgs)		10		10		10		10		10		10	
QC Code		FS		FS		FS		FS		FS		FS	
Parameter Name	**Criteria**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	5	**93**	J	**6.5**		**1500**		**24**		**1100**		10	U
1,1-Dichloroethane	5	**120**		**2.4**		**160**		**10**		**360**		10	U
1,1-Dichloroethene	5	**41**	J	2	U	**32**		**2**		**15**	J	10	U
Acetone	50*	1000	U	20	U	200	U	**3.5**	J	250	U	100	U
Benzene	1	100	U	2	U	20	U	**0.67**	J	25	U	10	U
Chloroform	7	100	U	2	U	20	U	1	U	25	U	10	U
Cis-1,2-Dichloroethene	5	**7200**		**17**		**190**		**160**		**970**		**34**	
Cyclohexane	NS	**71**	J	4	U	40	U	**2.1**		50	U	20	U
Ethyl benzene	5	**31**	J	2	U	20	U	1	U	25	U	10	U
Methyl cyclohexane	NS	**47**	J	2	U	20	U	**1.1**		25	U	10	U
Methyl Tertbutyl Ether	10*	100	U	2	U	20	U	1	U	25	U	10	U
Methylene chloride	5	100	U	2	U	20	U	1	U	25	U	10	U
Tetrachloroethene	5	**17000**		**230**		**1300**		**100**		**3100**		**1100**	
Toluene	5	**23**	J	2	U	20	U	1	U	25	U	10	U
trans-1,2-Dichloroethene	5	100	U	2	U	20	U	**0.54**	J	25	U	10	U
Trichloroethene	5	**6400**		**71**		2800	UJ	**94**		**2400**		**3600**	D
Vinyl chloride	2	**320**		2	U	20	U	**3.4**		25	U	10	U
Xylenes (m&p)	5	**110**	J	4	U	40	U	2	U	50	U	20	U

Notes:
Results reported in micrograms per liter (µg/L)
Only detected compounds shown.
Samples analyzed for VOCs by EPA Method SW8260B
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QC Code:
FS = Field Sample
FD = Field Sample
Qualifiers:
U = Not detected greater than the reporting limit
J = Estimated value
Criteria = Groundwater guidance or standard values from Technical and Operational Guidance Series (TOGS) 1.1.1, "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" (NYSDEC, 1998).
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Highlighted results exceed criteria

Table 2: July 2012 Groundwater VOC Results

Location ID		MPE-10		MPE-11		MPE-11		MPE-12		MPE-13		MPE-14	
Field Sample Date		7/11/2012		7/11/2012		7/11/2012		7/11/2012		7/11/2012		7/10/2012	
Field Sample ID		828103-MPE10010		828103-MPE11010		828103-MPE11010D		828103-MPE12010		828103-MPE13010		828103-MPE14010	
Field Sample Depth (ft bgs)		10		10		10		10		10		10	
QC Code		FS		FS		FD		FS		FS		FS	
Parameter Name	**Criteria**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	5	5	U	50	U	50	U	1	U	2	U	1	U
1,1-Dichloroethane	5	5	U	50	U	50	U	1	U	2	U	1	U
1,1-Dichloroethene	5	5	U	50	U	50	U	1	U	2	U	1	U
Acetone	50*	50	U	500	U	500	U	**1.2**	J	**2.5**	J	**1.5**	J
Benzene	1	5	U	50	U	50	U	1	U	2	U	1	U
Chloroform	7	5	U	50	U	50	U	1	U	2	U	1	U
Cis-1,2-Dichloroethene	5	**4.2**	J	**2000**		**2200**		**0.46**	J	**6.8**		**1.2**	
Cyclohexane	NS	10	U	100	U	100	U	2	U	4	U	2	U
Ethyl benzene	5	5	U	50	U	50	U	1	U	2	U	1	U
Methyl cyclohexane	NS	5	U	50	U	50	U	1	U	2	U	1	U
Methyl Tertbutyl Ether	10*	5	U	50	U	50	U	1	U	2	U	1	U
Methylene chloride	5	**1.2**	J	50	U	50	U	1	U	2	U	1	U
Tetrachloroethene	5	**960**	D	**6200**		**6200**	J	**21**		**630**	D	**57**	
Toluene	5	5	U	50	U	50	U	1	U	2	U	1	U
trans-1,2-Dichloroethene	5	5	U	50	U	50	U	1	U	**0.5**	J	1	U
Trichloroethene	5	**820**		**8300**		**8400**	J	**16**		**190**		**80**	
Vinyl chloride	2	5	U	**62**		**61**		1	U	2	U	1	U
Xylenes (m&p)	5	10	U	100	U	100	U	2	U	4	U	2	U

Notes:
Results reported in micrograms per liter (µg/L)
Only detected compounds shown.
Samples analyzed for VOCs by EPA Method SW8260B
ft bgs = feet below ground surface
QC Code:
FS = Field Sample
FD = Field Sample
Qualifiers:
U = Not detected greater than the reporting limit
J = Estimated value
Criteria = Groundwater guidance or standard values from Technical and Operational Guidance Series (TOGS) 1.1.1, "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" (NYSDEC, 1998).
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Bold = Compound detected in sample
Highlighted results exceed criteria

Table 2: July 2012 Groundwater VOC Results

Location ID		MPE-15		MPE-16		MPE-17		MPE-18	
Field Sample Date		7/11/2012		7/10/2012		7/11/2012		7/11/2012	
Field Sample ID		828103-MPE15010		828103-MPE16010		828103-MPE17010		828103-MPE18010	
Field Sample Depth (ft bgs)		10		10		10		10	
QC Code		FS		FS		FS		FS	
Parameter Name	**Criteria**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	5	2	U	**170**	J	**1.3**		**150**	J
1,1-Dichloroethane	5	2	U	500	U	**1**		200	U
1,1-Dichloroethene	5	2	U	500	U	**0.78**	J	200	U
Acetone	50*	**2**	J	5000	U	10	U	2000	U
Benzene	1	2	U	500	U	1	U	200	U
Chloroform	7	2	U	500	U	**0.28**	J	200	U
Cis-1,2-Dichloroethene	5	**10**		500	U	**1.4**		**630**	
Cyclohexane	NS	4	U	1000	U	2	U	400	U
Ethyl benzene	5	2	U	500	U	1	U	200	U
Methyl cyclohexane	NS	2	U	500	U	1	U	200	U
Methyl Tertbutyl Ether	10*	2	U	500	U	1	U	200	U
Methylene chloride	5	2	U	500	U	1	U	200	U
Tetrachloroethene	5	**390**		**59000**		**9**		**28000**	
Toluene	5	2	U	500	U	1	U	200	U
trans-1,2-Dichloroethene	5	2	U	500	U	1	U	200	U
Trichloroethene	5	**48**		**2700**		**3.9**		**27000**	
Vinyl chloride	2	2	U	500	U	1	U	**170**	J
Xylenes (m&p)	5	4	U	1000	U	2	U	400	U

Notes:
Results reported in micrograms per liter (µg/L)
Only detected compounds shown.
Samples analyzed for VOCs by EPA Method SW8260B
ft bgs = feet below ground surface
QC Code:
FS = Field Sample
FD = Field Sample
Qualifiers:
U = Not detected greater than the reporting limit
J = Estimated value
Criteria = Groundwater guidance or standard values from Technical and Operational Guidance Series (TOGS) 1.1.1, "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" (NYSDEC, 1998).
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NS = No guidance value for compound
Bold = Compound detected in sample
Highlighted results exceed criteria

Table 3: Historical Groundwater VOC Results

Location ID		GPW-01								GPW-02							
Field Sample Date		11/14/2006		5/25/2009		5/18/2010		7/10/2012		11/14/2006		5/25/2009		5/17/2010		7/10/2012	
Field Sample ID		GPW-01		828103GPW0101309		GPW-01		828103GPW01013		GPW-02		828103GPW0201209		GPW-02		828103GPW02012	
QC Code		FS		FS		FS		FS		FS		FS		FS		FS	
Parameter Name	**Criteria**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	5	100	U	1	U	5	U	20	U	100	U	1	U	5	U	100	U
1,1-Dichloroethane	5	100	U	1	U	5	U	20	U	100	U	1	U	5	U	100	U
1,1-Dichloroethene	5	100	U	1	U	5	U	20	U	100	U	1	U	5	U	100	U
Acetone	50*	100	U	5	U	R		200	UJ	100	U	5	U	R		1000	UJ
Benzene	1	100	U	1	U	5	U	20	U	100	U	1	U	5	U	100	U
Chloroform	7	100	U	1	U	5	U	**4.4**	J	100	U	1	U	5	U	**68**	J
Cis-1,2-Dichloroethene	5	**22**	J	**38**		**23**		**63**		100	U	**81**		**45**		**410**	
Cyclohexane	NS	100	U	1	U	5	U	40	U	100	U	1	U	5	U	200	U
Dichlorodifluoromethane	5	100	U	1	U	5	U	20	U	100	U	1	U	5	U	100	U
Ethyl benzene	5	100	U	1	U	5	U	20	U	100	U	1	U	5	U	100	U
Isopropylbenzene	5	100	U	1	U	5	U	20	U	100	U	1	U	5	U	100	U
Methyl cyclohexane	NS	100	U	1	U	5	U	20	U	100	U	1	U	5	U	100	U
Methyl Tertbutyl Ether	10*	100	U	1	U	5	U	20	U	100	U	1	U	5	UJ	100	U
Methylene chloride	5	100	U	1	U	5	U	**4.8**	J	100	U	1	U	5	U	100	U
Tetrachloroethene	5	**110**		**7.4**		**35**		**6.4**	J	**920**		**830**	D	**670**	D	**2400**	
Toluene	5	100	U	1	U	5	U	20	U	100	U	1	U	5	U	100	U
trans-1,2-Dichloroethene	5	100	U	**2.6**		5	U	20	U	100	U	**1.2**		5	U	100	U
Trichloroethene	5	**1500**		**1600**	D	**410**	D	**2600**		**2800**		**5200**	D	**2400**	D	**16000**	
Vinyl chloride	2	100	U	1	U	5	U	20	U	100	U	**7.6**		5	U	100	U
Xylene, o	5	NR		1	U	NR		20	U	NR		1	U	NR		100	U
Xylenes (m&p)	5	NR		2	U	NR		40	U	NR		2	U	NR		200	U
Xylenes (total)	5	100	U	2	U	5	U	40	U	100	U	2	U	5	U	200	U

Notes:
Results reported in micrograms per liter (µg/L)
Only detected compounds shown.
Samples analyzed for VOCs by EPA Method SW8260B
ft bgs = feet below ground surface
QC Codes: FS = field sample; FD = field duplicate
Qualifiers:
U = Not detected greater than the reporting limit
J = Estimated value
D = result reported from a dilution run
R = Result was rejected during validation
Criteria = Groundwater guidance or standard values from Technical and Operational Guidance Series (TOGS) 1.1.1, "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" (NYSDEC, 1998).
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Highlighted results exceed criteria
2006 and 2010 groundwater VOC results from URS Environmental Data Assesment Summary

Table 3: Historical Groundwater VOC Results

Location ID		GWE-1						GWE-2				GWE-3			
Field Sample Date		11/8/2006		5/18/2010		7/10/2012		11/8/2006		7/10/2012		11/8/2006		7/10/2012	
Field Sample ID		GEW-01		GEW-01		828103-GWE01019		GEW-02		828103-GWE02022		GEW-03		828103-GWE03021	
QC Code		FS		FS		FS		FS		FS		FS		FS	
Parameter Name	**Criteria**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	5	**8**		**690**	D	**4.3**	J	5	U	1	U	5	U	250	U
1,1-Dichloroethane	5	**11**		**240**	DJ	**20**		**2**	J	**2**		**1**	J	250	U
1,1-Dichloroethene	5	**4**	J	**12**		**14**		**1**	J	**1.2**		5	U	250	U
Acetone	50*	5	U	9	J	100	U	5	U	**2.5**	J	5	U	2500	U
Benzene	1	5	U	**1.9**	J	10	U	5	U	1	U	5	U	250	U
Chloroform	7	5	U	5	U	10	U	5	U	1	U	5	U	250	U
Cis-1,2-Dichloroethene	5	**430**	D	**570**	D	**1300**		**44**		**100**		**21**		**1200**	
Cyclohexane	NS	5	U	5	U	20	U	5	U	2	U	5	U	500	U
Dichlorodifluoromethane	5	5	U	5	U	10	U	5	U	1	U	5	U	250	U
Ethyl benzene	5	5	U	5	U	10	U	5	U	1	U	5	U	250	U
Isopropylbenzene	5	5	U	5	U	10	U	5	U	1	U	5	U	250	U
Methyl cyclohexane	NS	5	U	5	U	10	U	5	U	1	U	5	U	250	U
Methyl Tertbutyl Ether	10*	5	U	5	U	10	U	5	U	**0.2**	J	5	U	250	U
Methylene chloride	5	5	U	5	U	10	U	5	U	1	U	5	U	250	U
Tetrachloroethene	5	**2300**	D	**5500**	D	**1900**		**300**	D	**160**	D	**280**	D	**10000**	
Toluene	5	5	U	5	U	10	U	5	U	1	U	5	U	250	U
trans-1,2-Dichloroethene	5	**2**	J	**2.6**	J	**8.8**	J	5	U	**0.97**	J	5	U	250	U
Trichloroethene	5	**1000**	D	**3000**	D	**970**		**160**		**83**		**810**	D	**38000**	
Vinyl chloride	2	**14**		5	U	**110**		**4**	J	**6.1**		5	U	250	U
Xylene, o	5	NR		NR		10	U	NR		1	U	NR		250	U
Xylenes (m&p)	5	NR		NR		20	U	NR		2	U	NR		500	U
Xylenes (total)	5	5	U	5	U	20	U	5	U	2	U	5	U	500	U

Notes:
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"Ambient Water Quality Standards and Guidance Values
and Groundwater Effluent Limitations" (NYSDEC, 1998)
* = Guidance Value
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Amended August 1999
NS = No guidance value for compound
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Highlighted results exceed criteria
2006 and 2010 groundwater VOC results from URS
Environmental Data Assesment Summary

Table 3: Historical Groundwater VOC Results

Location ID		MPE-1						MPE-2						MPE-3					
Field Sample Date		11/14/2006		5/18/2010		7/9/2012		11/14/2006		5/17/2010		7/9/2012		11/8/2006		5/17/2010		7/9/2012	
Field Sample ID		MPE-01		MPE-01		828103-MPE01010		MPE-02		MPE-02		828103-MPE02010		MPE-03		MPE-03		828103-MPE03010	
QC Code		FS		FS		FS		FS		FS		FS		FS		FS		FS	
Parameter Name	**Criteria**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	5	**73**	J	**37**		**3.7**		**61**	J	**24**		**2**		**110**		**600**	D	**17**	
1,1-Dichloroethane	5	**99**	J	**180**		**1.8**		**25**	J	**11**		**0.24**	J	**16**		**180**		**8.8**	J
1,1-Dichloroethene	5	**71**	J	**130**		**0.39**	J	100	U	**6.9**		1	U	**9**		**50**		**5.4**	J
Acetone	50*	100	U	R		**2**	J	100	U	**10**	J	10	UJ	5	U	**23**	J	100	U
Benzene	1	100	U	**6**		1	U	100	U	5	U	1	U	**1**	J	**1.9**	J	10	U
Chloroform	7	100	U	5	U	1	U	100	U	5	U	1	U	**2**	J	5	U	10	U
Cis-1,2-Dichloroethene	5	**600**		**470**	D	**41**		**200**		**45**		**3.1**		**250**	J	**200**	DJ	**28**	
Cyclohexane	NS	100	U	**1.8**	J	2	U	100	U	5	U	2	U	5	U	5	U	20	U
Dichlorodifluoromethane	5	100	U	5	U	1	U	100	U	5	U	1	U	5	U	5	U	10	U
Ethyl benzene	5	100	U	5	U	1	U	100	U	5	U	1	U	5	U	5	U	10	U
Isopropylbenzene	5	100	U	5	U	1	U	100	U	5	U	1	U	5	U	5	U	10	U
Methyl cyclohexane	NS	100	U	5	U	1	U	100	U	5	U	1	U	5	U	5	U	10	U
Methyl Tertbutyl Ether	10*	100	U	5	U	1	U	100	U	5	UJ	1	U	5	U	5	UJ	10	U
Methylene chloride	5	100	U	5	U	1	U	100	U	5	U	1	U	5	U	5	U	10	U
Tetrachloroethene	5	**1700**		**1400**	D	**45**		**1800**		**2900**	D	**88**		**11000**	D	**5700**	D	**1400**	
Toluene	5	100	U	5	U	1	U	100	U	5	U	1	U	**2**	J	2.4	U	10	U
trans-1,2-Dichloroethene	5	100	U	**2.6**	J	1	U	100	U	5	U	1	U	**3**	J	**1.3**	J	10	U
Trichloroethene	5	**3700**		**3600**	D	**37**		**1200**		**400**	D	**23**		**23000**	D	**3700**	D	**330**	
Vinyl chloride	2	100	U	**1.5**	J	**7.5**		100	U	5	U	1	U	5	U	5	U	10	U
Xylene, o	5	NR		NR		1	U	NR		NR		1	U	NR		NR		10	U
Xylenes (m&p)	5	NR		NR		2	U	NR		NR		2	U	NR		NR		20	U
Xylenes (total)	5	100	U	5	U	2	U	100	U	5	U	2	U	5	U	5	U	20	U

Notes:
Results reported in micrograms per liter (µg/L)
Only detected compounds shown.
Samples analyzed for VOCs by EPA Method SW8260B
ft bgs = feet below ground surface
QC Codes: FS = field sample; FD = field duplicate
Qualifiers:
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J = Estimated value
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Criteria = Groundwater guidance or standard values from
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Amended August 1999
NS = No guidance value for compound
NR = not reported
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2006 and 2010 groundwater VOC results from URS
Environmental Data Assesment Summary

Table 3: Historical Groundwater VOC Results

Location ID		MPE-4						MPE-5						MPE-6					
Field Sample Date		11/14/2006		5/17/2010		7/9/2012		11/14/2006		5/17/2010		7/10/2012		11/14/2006		5/17/2010		7/10/2012	
Field Sample ID		MPE-04		MPE-04		828103-MPE04010		MPE-05		MPE-05		828103-MPE05010		MPE-06		MPE-06		828103-MPE06010	
QC Code		FS		FS		FS		FS		FS		FS		FS		FS		FS	
Parameter Name	**Criteria**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	5	**34000**		**6300**	D	**93**	J	**37**		**48**		**6.5**		**1000**		**1200**	D	**1500**	
1,1-Dichloroethane	5	**1200**		**1100**	D	**120**		**3**	J	**22**		**2.4**		**74**	J	**450**	D	**160**	
1,1-Dichloroethene	5	**670**	J	**240**	DJ	**41**	J	**2**	J	**5**	J	2	U	75	U	**65**		**32**	
Acetone	50*	1000	U	**16**	J	1000	U	5	U	R		20	U	75	U	R		200	U
Benzene	1	1000	U	**7**		100	U	5	U	5	U	2	U	75	U	**3.8**	J	20	U
Chloroform	7	1000	U	5	U	100	U	5	U	5	U	2	U	75	U	5	U	20	U
Cis-1,2-Dichloroethene	5	1000	U	**750**	D	**7200**		**75**		**180**		**17**		**100**		**330**	D	**190**	
Cyclohexane	NS	1000	U	**38**		**71**	J	5	U	5	U	4	U	75	U	5	U	40	U
Dichlorodifluoromethane	5	1000	U	5	U	100	U	5	U	5	U	2	U	75	U	5	U	20	U
Ethyl benzene	5	1000	U	**23**		**31**	J	5	U	5	U	2	U	75	U	5	U	20	U
Isopropylbenzene	5	1000	U	**1.8**	J	100	U	5	U	5	U	2	U	75	U	5	U	20	U
Methyl cyclohexane	NS	1000	U	**27**		**47**	J	5	U	5	U	2	U	75	U	5	U	20	U
Methyl Tertbutyl Ether	10*	1000	U	5	UJ	100	U	5	U	5	UJ	2	U	75	U	5	UJ	20	U
Methylene chloride	5	1000	U	5	U	100	U	5	U	5	U	2	U	75	U	5	U	20	U
Tetrachloroethene	5	**26000**		**12000**	D	**17000**		**1000**	D	**1300**	D	**230**		**660**		**1800**	D	**1300**	
Toluene	5	**380**	J	96	U	**23**	J	5	U	5	U	2	U	75	U	5	U	20	U
trans-1,2-Dichloroethene	5	1000	U	**3.2**	J	100	U	5	U	5	U	2	U	75	U	5	U	20	U
Trichloroethene	5	**23000**		**9900**	D	**6400**		**670**	D	**530**	D	**71**		**1200**	D	**3700**	D	2800	UJ
Vinyl chloride	2	1000	U	**2.6**	J	**320**		5	U	5	U	2	U	75	U	5	U	20	U
Xylene, o	5	NR		NR		100	U	NR		NR		2	U	NR		NR		20	U
Xylenes (m&p)	5	NR		NR		**110**	J	NR		NR		4	U	NR		NR		40	U
Xylenes (total)	5	**410**	J	**140**		**110**	J	5	U	5	U	4	U	75	U	5	U	40	U

Notes:
Results reported in micrograms per liter (µg/L)
Only detected compounds shown.
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Table 3: Historical Groundwater VOC Results

Location ID		MPE-7				MPE-8						MPE-9			
Field Sample Date		5/17/2010		7/10/2012		11/8/2006		5/17/2010		7/9/2012		11/14/2006		7/11/2012	
Field Sample ID		MPE-07		828103-MPE07010		MPE-08		MPE-08		828103-MPE08010		MPE-09		828103-MPE09010	
QC Code		FS		FS		FS		FS		FS		FS		FS	
Parameter Name	**Criteria**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	5	**7.6**		**24**		**7**		**12**		**1100**		200	U	10	U
1,1-Dichloroethane	5	**11**		**10**		**4**	J	**11**		**360**		200	U	10	U
1,1-Dichloroethene	5	5	U	**2**		5	U	**1.4**	J	**15**	J	200	U	10	U
Acetone	50*	R		**3.5**	J	5	U	R		250	U	200	U	100	U
Benzene	1	5	U	**0.67**	J	5	U	**3.1**	J	25	U	200	U	10	U
Chloroform	7	5	U	1	U	5	U	5	U	25	U	200	U	10	U
Cis-1,2-Dichloroethene	5	**24**		**160**		**190**		**67**		**970**		200	U	**34**	
Cyclohexane	NS	5	U	**2.1**		5	U	5	U	50	U	200	U	20	U
Dichlorodifluoromethane	5	5	UJ	1	U	5	U	5	U	25	U	200	U	10	U
Ethyl benzene	5	5	U	1	U	5	U	5	U	25	U	200	U	10	U
Isopropylbenzene	5	5	U	1	U	5	U	5	U	25	U	200	U	10	U
Methyl cyclohexane	NS	5	U	**1.1**		5	U	5	U	25	U	200	U	10	U
Methyl Tertbutyl Ether	10*	5	U	1	U	5	U	5	UJ	25	U	200	U	10	U
Methylene chloride	5	5	U	1	U	5	U	5	U	25	U	200	U	10	U
Tetrachloroethene	5	**95**		**100**		**800**	J	**2700**	D	**3100**		**1800**		**1100**	
Toluene	5	5	U	1	U	5	U	5	U	25	U	200	U	10	U
trans-1,2-Dichloroethene	5	5	U	**0.54**	J	**2**	J	5	U	25	U	200	U	10	U
Trichloroethene	5	**130**		**94**		**1300**	J	**2600**	D	**2400**		**3900**		**3600**	D
Vinyl chloride	2	5	U	**3.4**		5	U	5	U	25	U	200	U	10	U
Xylene, o	5	NR		1	U	NR		NR		25	U	NR		10	U
Xylenes (m&p)	5	NR		2	U	NR		NR		50	U	NR		20	U
Xylenes (total)	5	5	U	2	U	5	U	5	U	50	U	200	U	20	U

Notes:
Results reported in micrograms per liter (µg/L)
Only detected compounds shown.
Samples analyzed for VOCs by EPA Method SW8260B
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Table 3: Historical Groundwater VOC Results

Location ID		MPE-10				MPE-11							
Field Sample Date		11/14/2006		7/11/2012		11/8/2006		5/17/2010		7/11/2012		7/11/2012	
Field Sample ID		MPE-10		828103-MPE10010		MPE-11		MPE-11		828103-MPE11010		828103-MPE11010D	
QC Code		FS		FS		FS		FS		FS		FD	
Parameter Name	**Criteria**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	5	1000	U	5	U	200	U	**9.5**		50	U	50	U
1,1-Dichloroethane	5	1000	U	5	U	200	U	**2**	J	50	U	50	U
1,1-Dichloroethene	5	1000	U	5	U	200	U	5	U	50	U	50	U
Acetone	50*	1000	U	50	U	200	U	**12**	J	500	U	500	U
Benzene	1	1000	U	5	U	200	U	5	U	50	U	50	U
Chloroform	7	1000	U	5	U	200	U	5	U	50	U	50	U
Cis-1,2-Dichloroethene	5	1000	U	**4.2**	J	200	U	**9.4**		**2000**		**2200**	
Cyclohexane	NS	1000	U	10	U	200	U	5	U	100	U	100	U
Dichlorodifluoromethane	5	1000	U	5	U	200	U	5	U	50	U	50	U
Ethyl benzene	5	1000	U	5	U	200	U	5	U	50	U	50	U
Isopropylbenzene	5	1000	U	5	U	200	U	5	U	50	U	50	U
Methyl cyclohexane	NS	1000	U	5	U	200	U	5	U	50	U	50	U
Methyl Tertbutyl Ether	10*	1000	U	5	U	200	U	5	U	50	U	50	U
Methylene chloride	5	1000	U	**1.2**	J	200	U	5	U	50	U	50	U
Tetrachloroethene	5	**19000**		**960**	D	**4300**		**13000**	D	**6200**		**6200**	J
Toluene	5	1000	U	5	U	200	U	**1**	J	50	U	50	U
trans-1,2-Dichloroethene	5	1000	U	5	U	200	U	5	U	50	U	50	U
Trichloroethene	5	**34000**		**820**		**7900**		**25000**	D	**8300**		**8400**	J
Vinyl chloride	2	1000	U	5	U	200	U	5	U	**62**		**61**	
Xylene, o	5	NR		5	U	NR		NR		50	U	50	U
Xylenes (m&p)	5	NR		10	U	NR		NR		100	U	100	U
Xylenes (total)	5	1000	U	10	U	200	U	5	U	100	U	100	U

Notes:
Results reported in micrograms per liter (µg/L)
Only detected compounds shown.
Samples analyzed for VOCs by EPA Method SW8260B
ft bgs = feet below ground surface
QC Codes: FS = field sample; FD = field duplicate
Qualifiers:
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Table 3: Historical Groundwater VOC Results

Location ID		MPE-12						MPE-13						MPE-14					
Field Sample Date		11/14/2006		5/17/2010		7/11/2012		11/14/2006		5/17/2010		7/11/2012		11/8/2006		5/17/2010		7/10/2012	
Field Sample ID		MPE-12		MPE-12		828103-MPE12010		MPE-13		MPE-13		828103-MPE13010		MPE-14		MPE-14		828103-MPE14010	
QC Code		FS		FS		FS		FS		FS		FS		FS		FS		FS	
Parameter Name	**Criteria**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	5	25	U	5	U	1	U	100	U	**1.4**	J	2	U	5	U	40	U	1	U
1,1-Dichloroethane	5	25	U	5	U	1	U	100	U	**1.1**	J	2	U	5	U	40	U	1	U
1,1-Dichloroethene	5	25	U	5	U	1	U	100	U	5	U	2	U	5	U	40	U	1	U
Acetone	50*	25	U	R		**1.2**	J	100	U	R		**2.5**	J	5	U	R		**1.5**	J
Benzene	1	25	U	5	U	1	U	100	U	5	U	2	U	5	U	40	U	1	U
Chloroform	7	25	U	5	U	1	U	100	U	5	U	2	U	5	U	40	U	1	U
Cis-1,2-Dichloroethene	5	25	U	5	U	**0.46**	J	**68**	J	**50**		**6.8**		**14**		**71**		**1.2**	
Cyclohexane	NS	25	U	5	U	2	U	100	U	5	U	4	U	5	U	40	U	2	U
Dichlorodifluoromethane	5	25	U	5	U	1	U	100	U	5	UJ	2	U	5	U	40	U	1	U
Ethyl benzene	5	25	U	5	U	1	U	100	U	5	U	2	U	5	U	40	U	1	U
Isopropylbenzene	5	25	U	5	U	1	U	100	U	5	U	2	U	5	U	40	U	1	U
Methyl cyclohexane	NS	25	U	5	U	1	U	100	U	5	U	2	U	5	U	40	U	1	U
Methyl Tertbutyl Ether	10*	25	U	5	U	1	U	100	U	5	U	2	U	5	U	40	U	1	U
Methylene chloride	5	25	U	5	U	1	U	100	U	5	U	2	U	5	U	40	U	1	U
Tetrachloroethene	5	**390**		**130**		**21**		**2300**		**4100**	D	**630**	D	**190**		40	U	**57**	
Toluene	5	25	U	5	U	1	U	100	U	5	U	2	U	5	U	40	U	1	U
trans-1,2-Dichloroethene	5	25	U	5	U	1	U	100	U	**1.6**	J	**0.5**	J	5	U	40	U	1	U
Trichloroethene	5	**270**		**65**		**16**		**1200**		**2500**	D	**190**		**220**	D	40	U	**80**	
Vinyl chloride	2	25	U	5	U	1	U	100	U	5	U	2	U	5	U	40	U	1	U
Xylene, o	5	NR		NR		1	U	NR		NR		2	U	NR		NR		1	U
Xylenes (m&p)	5	NR		NR		2	U	NR		NR		4	U	NR		NR		2	U
Xylenes (total)	5	25	U	5	U	2	U	100	U	5	U	4	U	5	U	40	U	2	U

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Table 3: Historical Groundwater VOC Results

Location ID		MPE-15				MPE-16						MPE-17					
Field Sample Date		11/8/2006		7/11/2012		11/8/2006		5/18/2010		7/10/2012		11/14/2006		5/18/2010		7/11/2012	
Field Sample ID		MPE-15		828103-MPE15010		MPE-16		MPE-16		828103-MPE16010		MPE-17		MPE-17		828103-MPE17010	
QC Code		FS		FS		FS		FS		FS		FS		FS		FS	
Parameter Name	**Criteria**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	5	5	U	2	U	**760**	J	**280**	J	**170**	J	**6**		100	U	**1.3**	
1,1-Dichloroethane	5	5	U	2	U	**11**		**4.2**	J	500	U	**8**		100	U	**1**	
1,1-Dichloroethene	5	5	U	2	U	**24**		**6.2**		500	U	**5**		100	U	**0.78**	J
Acetone	50*	5	U	**2**	J	5	U	R		5000	U	5	U	**530**	J	10	U
Benzene	1	5	U	2	U	**10**		**2.4**	J	500	U	5	U	100	U	1	U
Chloroform	7	5	U	2	U	**1**	J	5	U	500	U	5	U	100	U	**0.28**	J
Cis-1,2-Dichloroethene	5	**32**		**10**		**81**		**190**		500	U	5	U	**98**	J	**1.4**	
Cyclohexane	NS	5	U	4	U	5	U	**2.1**	J	1000	U	5	U	100	U	2	U
Dichlorodifluoromethane	5	5	U	2	U	5	U	5	UJ	500	U	5	U	100	U	1	U
Ethyl benzene	5	5	U	2	U	**17**		**6.3**		500	U	5	U	100	U	1	U
Isopropylbenzene	5	5	U	2	U	5	U	5	U	500	U	5	U	100	U	1	U
Methyl cyclohexane	NS	5	U	2	U	5	U	5	U	500	U	5	U	100	U	1	U
Methyl Tertbutyl Ether	10*	5	U	2	U	5	U	5	U	500	U	5	U	100	U	1	U
Methylene chloride	5	5	U	2	U	5	U	5	U	500	U	5	U	100	U	1	U
Tetrachloroethene	5	**400**	D	**390**		**120000**	DJ	**81000**	D	**59000**		**36**		100	U	**9**	
Toluene	5	5	U	2	U	**59**		**26**		500	U	5	U	100	U	1	U
trans-1,2-Dichloroethene	5	5	U	2	U	**8**		**2.6**	J	500	U	5	U	100	U	1	U
Trichloroethene	5	**780**	D	**48**		**9600**	DJ	**4800**	D	**2700**		**12**		100	U	**3.9**	
Vinyl chloride	2	5	U	2	U	5	U	**9.7**		500	U	5	U	**360**		1	U
Xylene, o	5	NR		2	U	NR		NR		500	U	NR		NR		1	U
Xylenes (m&p)	5	NR		4	U	NR		NR		1000	U	NR		NR		2	U
Xylenes (total)	5	5	U	4	U	**89**		**31**		1000	U	5	U	100	U	2	U

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Table 3: Historical Groundwater VOC Results

Location ID		MPE-18				MW-01							
Field Sample Date		11/14/2006		7/11/2012		11/8/2006		5/26/2009		5/18/2010		7/9/2012	
Field Sample ID		MPE-18		828103-MPE18010		MW-01		828103-MW0101509		MW-01		828103-MW01015	
QC Code		FS		FS		FS		FS		FS		FS	
Parameter Name	**Criteria**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	5	500	U	**150**	J	5	U	1	UJ	**7.5**		10	U
1,1-Dichloroethane	5	500	U	200	U	5	U	**4**		**1**	J	**4.1**	J
1,1-Dichloroethene	5	500	U	200	U	5	U	**2.5**	J	5	U	**4.9**	J
Acetone	50*	500	U	2000	U	5	U	5	U	R		100	UJ
Benzene	1	500	U	200	U	5	U	1	U	5	U	10	U
Chloroform	7	500	U	200	U	5	U	1	U	5	U	10	U
Cis-1,2-Dichloroethene	5	**420**	J	**630**		5	U	**450**	D	**81**		**1700**	
Cyclohexane	NS	500	U	400	U	5	U	1	U	5	U	20	U
Dichlorodifluoromethane	5	500	U	200	U	5	U	1	U	5	UJ	10	U
Ethyl benzene	5	500	U	200	U	5	U	1	U	5	U	10	U
Isopropylbenzene	5	500	U	200	U	5	U	1	U	5	U	10	U
Methyl cyclohexane	NS	500	U	200	U	5	U	1	U	5	U	10	U
Methyl Tertbutyl Ether	10*	500	U	200	U	5	U	1	U	5	U	10	U
Methylene chloride	5	500	U	200	U	5	U	1	U	5	U	**2.2**	J
Tetrachloroethene	5	**7600**		**28000**		**2**	J	**53**		**5000**	D	**71**	
Toluene	5	500	U	200	U	5	U	1	U	5	U	10	U
trans-1,2-Dichloroethene	5	500	U	200	U	5	U	**7**		**1.5**	J	**1.5**	J
Trichloroethene	5	**15000**		**27000**		**1**	J	**61**	D	**490**	D	**130**	
Vinyl chloride	2	500	U	**170**	J	5	U	**37**	D	5	U	**300**	
Xylene, o	5	NR		200	U	NR		1	U	NR		10	U
Xylenes (m&p)	5	NR		400	U	NR		2	U	NR		20	U
Xylenes (total)	5	500	U	400	U	5	U	2	U	5	U	20	U

Notes:
Results reported in micrograms per liter (µg/L)
Only detected compounds shown.
Samples analyzed for VOCs by EPA Method SW8260B
ft bgs = feet below ground surface
QC Codes: FS = field sample; FD = field duplicate
Qualifiers:
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Table 3: Historical Groundwater VOC Results

Location ID		MW-03								MW-06							
Field Sample Date		11/14/2006		5/26/2009		5/18/2010		7/10/2012		11/14/2006		5/25/2009		5/17/2010		7/10/2012	
Field Sample ID		MW-03		828103-MW0301009		MW-03		828103-MW03010		MW-06		828103-MW0601609		MW-06		828103-MW06016	
QC Code		FS		FS		FS		FS		FS		FS		FS		FS	
Parameter Name	**Criteria**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	5	5	U	**47**	J	**1.5**	J	**6.3**	J	5	U	1	U	5	U	**0.47**	J
1,1-Dichloroethane	5	5	U	**3.5**		5	U	25	U	5	U	1	U	5	U	**1**	
1,1-Dichloroethene	5	5	U	**16**	J	5	U	25	U	5	U	1	U	5	U	1	U
Acetone	50*	5	U	5	U	R		250	UJ	5	U	5	U	R		10	UJ
Benzene	1	5	U	1	U	5	U	25	U	5	U	1	U	5	U	**0.69**	J
Chloroform	7	5	U	**0.74**	J	5	U	**21**	J	5	U	1	U	5	U	1	U
Cis-1,2-Dichloroethene	5	**18**		**190**	D	**7.9**		**29**		**19**		**13**		5	U	**38**	
Cyclohexane	NS	5	U	1	U	5	U	50	U	5	U	1	U	5	U	2	U
Dichlorodifluoromethane	5	5	U	1	U	5	UJ	25	U	5	U	1	U	5	U	1	U
Ethyl benzene	5	5	U	1	U	5	U	25	U	5	U	1	U	5	U	1	U
Isopropylbenzene	5	5	U	1	U	5	U	25	U	5	U	1	U	5	U	1	U
Methyl cyclohexane	NS	5	U	1	U	5	U	25	U	5	U	1	U	5	U	1	U
Methyl Tertbutyl Ether	10*	5	U	1	U	5	U	25	U	5	U	1	U	5	U	1	U
Methylene chloride	5	5	U	1	U	5	U	25	U	5	U	1	U	5	U	1	U
Tetrachloroethene	5	**110**		**9100**	D	**1600**	D	**7200**	D	**13**		1.1	U	5	U	**11**	
Toluene	5	5	U	**1.1**		5	U	25	U	5	U	1	U	5	U	1	U
trans-1,2-Dichloroethene	5	5	U	**4.3**		5	U	25	U	5	U	1	U	5	U	**0.86**	J
Trichloroethene	5	**77**		**2200**	D	**480**	D	**1300**		**17**		**4.6**		**2**	J	**15**	
Vinyl chloride	2	5	U	1	U	5	U	25	U	5	U	**0.59**	J	5	U	**4**	
Xylene, o	5	NR		**1.9**		NR		25	U	NR		1	U	NR		1	U
Xylenes (m&p)	5	NR		2	U	NR		50	U	NR		2	U	NR		2	U
Xylenes (total)	5	5	U	2	U	5	U	50	U	5	U	2	U	5	U	2	U

Notes:
Results reported in micrograms per liter (µg/L)
Only detected compounds shown.
Samples analyzed for VOCs by EPA Method SW8260B
ft bgs = feet below ground surface
QC Codes: FS = field sample; FD = field duplicate
Qualifiers:
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Table 3: Historical Groundwater VOC Results

Location ID		MW-03C										MW-13K			
Field Sample Date		11/14/2006		5/26/2009		5/18/2010		7/10/2012		7/10/2012		5/26/2009		7/9/2012	
Field Sample ID		MW-03C		828103-MW03C02809		MW-03C		828103-MW03C028		828103-MW03C028D		828103-MW13K01609		828103-MW13K016	
QC Code		FS		FS		FS		FS		FD		FS		FS	
Parameter Name	**Criteria**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	5	250	U	1	UJ	5	U	25	U	25	U	**59**	J	**71**	J
1,1-Dichloroethane	5	250	U	**32**	J	**3.4**	J	**49**		**50**		**47**	J	**34**	J
1,1-Dichloroethene	5	250	U	**1.8**	J	5	U	25	U	25	U	**38**	J	100	U
Acetone	50*	250	U	5	U	R		250	UJ	250	UJ	5	U	1000	U
Benzene	1	250	U	**0.82**	J	5	U	25	U	25	U	1	U	100	U
Chloroform	7	250	U	1	U	5	U	**9.3**	J	**8.8**	J	1	U	**63**	J
Cis-1,2-Dichloroethene	5	**650**		**220**	D	**26**		**180**		**180**		**1100**	D	**3000**	
Cyclohexane	NS	250	U	1	U	5	U	50	U	50	U	1	U	200	U
Dichlorodifluoromethane	5	250	U	1	U	5	UJ	25	U	25	U	**2.6**	J	100	U
Ethyl benzene	5	250	U	1	U	5	U	25	U	25	U	**7**	J	100	U
Isopropylbenzene	5	250	U	1	U	5	U	25	U	25	U	**4**	J	100	U
Methyl cyclohexane	NS	250	U	1	U	5	U	25	U	25	U	1	U	100	U
Methyl Tertbutyl Ether	10*	250	U	1	U	5	U	25	U	25	U	1	U	100	U
Methylene chloride	5	250	U	1	U	5	U	25	U	25	U	1	U	100	U
Tetrachloroethene	5	**9400**		**370**	D	**100**		**940**		**950**		**5800**	D	**18000**	
Toluene	5	250	U	1	U	5	U	25	U	25	U	**2**	J	100	U
trans-1,2-Dichloroethene	5	250	U	**1.1**	J	5	U	25	U	25	U	**25**	J	100	U
Trichloroethene	5	**4100**		**1100**	D	**130**		**3500**		**3500**		**1300**	D	**3200**	
Vinyl chloride	2	250	U	**7.5**	J	5	U	25	U	25	U	**69**	D	**390**	
Xylene, o	5	NR		1	U	NR		25	U	25	U	**13**	J	100	U
Xylenes (m&p)	5	NR		2	U	NR		50	U	50	U	2	U	200	U
Xylenes (total)	5	250	U	2	U	5	U	50	U	50	U	2	U	200	U

Notes:
Results reported in micrograms per liter (µg/L)
Only detected compounds shown.
Samples analyzed for VOCs by EPA Method SW8260B
ft bgs = feet below ground surface
QC Codes: FS = field sample; FD = field duplicate
Qualifiers:
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Table 3: Historical Groundwater VOC Results

Location ID		MW-10K								MW-14K			
Field Sample Date		11/14/2006		5/26/2009		5/17/2010		7/11/2012		5/26/2009		7/9/2012	
Field Sample ID		MW-10K		828103-MW10K01809		MW-10K		828103-MW10K018		828103-MW14K01909		828103-MW14K019	
QC Code		FS		FS		FS		FS		FS		FS	
Parameter Name	**Criteria**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	5	40	U	1	U	5	U	5	U	1	U	50	U
1,1-Dichloroethane	5	40	U	**3.9**		**2**	J	**4.1**	J	1	U	50	U
1,1-Dichloroethene	5	40	U	1	U	**1.6**	J	**2**	J	1	U	50	U
Acetone	50*	**57**		5	U	R		50	UJ	5	U	500	UJ
Benzene	1	40	U	**0.61**	J	5	U	5	U	1	U	50	U
Chloroform	7	40	U	1	U	5	U	5	U	1	U	50	U
Cis-1,2-Dichloroethene	5	**48**		**100**	D	**51**		**190**		**98**		**230**	
Cyclohexane	NS	40	U	1	U	5	U	10	U	1	U	100	U
Dichlorodifluoromethane	5	40	U	1	U	5	U	5	U	1	U	50	U
Ethyl benzene	5	40	U	1	U	5	U	5	U	1	U	50	U
Isopropylbenzene	5	40	U	1	U	5	U	5	U	1	U	50	U
Methyl cyclohexane	NS	40	U	1	U	5	U	5	U	1	U	50	U
Methyl Tertbutyl Ether	10*	40	U	1	U	5	U	5	U	1	U	50	U
Methylene chloride	5	40	U	1	U	5	U	5	U	1	U	50	U
Tetrachloroethene	5	40	U	**39**		5	U	**77**		**250**	D	**670**	
Toluene	5	40	U	1	U	5	U	5	U	1	U	50	U
trans-1,2-Dichloroethene	5	40	U	**1.6**		5	U	**2**	J	**1.8**		50	U
Trichloroethene	5	**770**		**410**	D	**770**	D	**490**		**5100**	D	**6700**	
Vinyl chloride	2	40	U	**5.8**		5	U	**4.8**	J	1	U	50	U
Xylene, o	5	NR		1	U	NR		5	U	1	U	50	U
Xylenes (m&p)	5	NR		2	U	NR		10	U	2	U	100	U
Xylenes (total)	5	40	U	2	U	5	U	10	U	2	U	100	U

Notes:
Results reported in micrograms per liter (µg/L)
Only detected compounds shown.
Samples analyzed for VOCs by EPA Method SW8260B
ft bgs = feet below ground surface
QC Codes: FS = field sample; FD = field duplicate
Qualifiers:
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Table 3: Historical Groundwater VOC Results

Location ID		MW-12K							
Field Sample Date		5/26/2009		5/26/2009		7/11/2012		7/11/2012	
Field Sample ID		828103-MW12K01609		828103-MW12K01609D		828103-MW12S016		828103-MW12S016D	
QC Code		FS		FD		FS		FD	
Parameter Name	**Criteria**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	5	1	U	1	U	1	U	1	U
1,1-Dichloroethane	5	1	U	1	U	1	U	1	U
1,1-Dichloroethene	5	1	U	1	U	1	U	1	U
Acetone	50*	5	U	5	U	10	U	10	UJ
Benzene	1	1	U	1	U	1	U	1	U
Chloroform	7	1	U	1	U	1	U	1	U
Cis-1,2-Dichloroethene	5	1	U	1	U	1	U	1	U
Cyclohexane	NS	1	U	1	U	2	U	2	U
Dichlorodifluoromethane	5	1	U	1	U	1	U	1	U
Ethyl benzene	5	1	U	1	U	1	U	1	U
Isopropylbenzene	5	1	U	1	U	1	U	1	U
Methyl cyclohexane	NS	1	U	1	U	1	U	1	U
Methyl Tertbutyl Ether	10*	1	U	1	U	1	U	1	U
Methylene chloride	5	1	U	1	U	1	U	1	U
Tetrachloroethene	5	1	UJ	1	UJ	1	U	1	U
Toluene	5	1	U	1	U	1	U	1	U
trans-1,2-Dichloroethene	5	1	U	1	U	1	U	1	U
Trichloroethene	5	**8.2**		**6.9**		1	U	1	U
Vinyl chloride	2	1	U	1	U	1	U	1	U
Xylene, o	5	1	U	1	U	1	U	1	U
Xylenes (m&p)	5	2	U	2	U	2	U	2	U
Xylenes (total)	5	2	U	2	U	2	U	2	U

Notes:
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ATTACHMENT 1

JULY 2012 GROUNDWATER MONITORING FIELD DATA RECORDS

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME		LOCATION ID	DATE
Dinaburg Distributing RD		GWE-1	July 10, 2012
PROJECT NUMBER		START TIME	END TIME
3612112216-03.01		1115	1248
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
828103GWE01019	1235	828106	1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [X] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP): [ ] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	9.32 FT	FINAL DTW (BMP)	9.64 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	.58 FT
WELL DEPTH (BMP)	20.0 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	10.68 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	.21 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	7.00 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	4.14 GAL	DRAWDOWN/ TOTAL PURGED	0.05	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1126	BEGIN PURGING									
1131	9.51	170	19.27	1.437	7.12	1.60	98.4	-26.6		
1136	9.61	150	18.79	1.435	7.14	0.49	78.4	-32.0		
1141	9.71	155	18.90	1.456	7.14	1.02	104	-35.3		
1146	9.82	375	18.69	1.527	7.16	1.41	136	-39.5		
1151	9.94	385	16.13	1.497	7.23	0.66	108	-42.1		
1156	10.05	405	15.90	1.619	7.20	0.66	115	-43.3		
1201	10.05	400	15.70	1.703	7.17	0.45	105	-76.1		
1206	9.95	305	16.09	1.713	7.11	1.65	83.1	-80.2		
1211	9.81	155	16.67	1.701	7.07	1.78	73.7	-75.1		
1216	9.62	140	17.65	1.701	7.01	0.85	54.3	-66.1		
1221	9.64	190	17.94	1.704	7.01	0.82	48.3	-62.1		
1226	9.64	180	17.98	1.700	7.01	0.78	41.1	-60.5		
1231	9.64	180	18.02	1.692	7.01	0.77	46.1	-59.2		

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

	1.6	1.69	7.0	0.8	.59	
	~~18.02~~ (2)	~~1.692~~ (3)	~~7.01~~ (4)	~~0.77~~ (5)	46.1	~~59.2~~ (1)

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP		DECON FLUIDS USED		TUBING/PUMP/BLADDER MATERIALS				EQUIPMENT USED	
X	PERISTALTIC	X	LIQUINOX	X	SILICON TUBING		S. STEEL PUMP MATERIAL	X	WL METER: Solinst 100' probe
	SUBMERSIBLE	X	DEIONIZED WATER		TEFLON TUBING		PVC PUMP MATERIAL		PID
	BLADDER		POTABLE WATER		TEFLON LINED TUBING		GEOPROBE SCREEN	X	WQ METER: YSI MPS 556
			NITRIC ACID		HDPE TUBING		TEFLON BLADDER	X	TURB. METER: Hach 2100P
	WATTERA		HEXANE	X	LDPE TUBING	X	OTHER: None	X	PUMP: Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3x 40ml	Y	N	See above

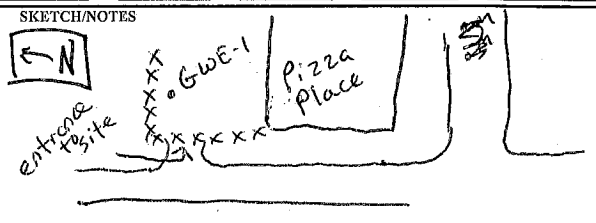
PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	X	
NO-PURGE METHOD UTILIZED		X

NUMBER OF GALLONS GENERATED: ~~4~~

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES



Sampler Signature: Jeri Kiburz Print Name: Jeri Kiburz

Checked By: RCM Date: 7/20/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME		LOCATION ID	DATE
Dinaburg Distributing RD		GWE-2	July 10, 2012
PROJECT NUMBER		START TIME	END TIME
3612112216-03.01		1550	1659
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
828103GWE02022	1650	828106	1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [X] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP): [✓] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	9.32 FT	FINAL DTW (BMP)	9.82 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	0.48 FT
WELL DEPTH (BMP)	22.10 FT	SCREEN LENGTH	FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	12.78 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	.33 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	8.4 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.21 GAL	DRAWDOWN/ TOTAL PURGED	0.15	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1555	BEGIN PURGING									
1559	9.69	245	16.04	1.462	7.36	2.13	70.0	-20.0		Good Recharge
1604	9.73	115	16.62	1.456	7.42	1.65	45.8	-26.5		
1609	9.73	150	17.33	1.458	7.38	1.54	38.5	-28.0		
1614	9.77	150	16.97	1.464	7.36	1.42	32.5	-30.0		
1619	9.78	150	17.07	1.481	7.30	1.32	22.6	-29.5		
1624	9.80	155	16.99	1.524	7.21	1.12	21.8	-27.8		
1629	9.81	150	17.00	1.556	7.13	0.86	12.0	-27.7		
1634	9.81	160	16.95	1.576	7.09	0.68	6.94	-30.1		
1639	9.82	155	16.92	1.593	7.08	0.55	8.62	-31.2		
1644	9.82	155	16.97	1.599	7.05	0.52	3.55	-31.6		
1649	9.82	150	16.92	1.605	7.04	0.52	3.91	-31.5		
									~20' btoc	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

	17 10.9 (A)	1.61 1.605 (A)	7.0	0.5	3.9	-32	

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP		DECON FLUIDS USED		TUBING/PUMP/BLADDER MATERIALS				EQUIPMENT USED	
[X]	PERISTALTIC	[X]	LIQUINOX	[X]	SILICON TUBING	[ ]	S. STEEL PUMP MATERIAL	[X]	WL METER Solinst 100' probe
[ ]	SUBMERSIBLE	[X]	DEIONIZED WATER	[ ]	TEFLON TUBING	[ ]	PVC PUMP MATERIAL	[ ]	PID
[ ]	BLADDER	[ ]	POTABLE WATER	[ ]	TEFLON LINED TUBING	[ ]	GEOPROBE SCREEN	[X]	WQ METER YSI MPS 556
[ ]	WATTERA	[ ]	NITRIC ACID	[ ]	HDPE TUBING	[ ]	TEFLON BLADDER	[X]	TURB. METER Hach 2100P
		[ ]	HEXANE	[X]	LDPE TUBING	[X]	OTHER None	[X]	PUMP Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3x40ml	Y	N	See above

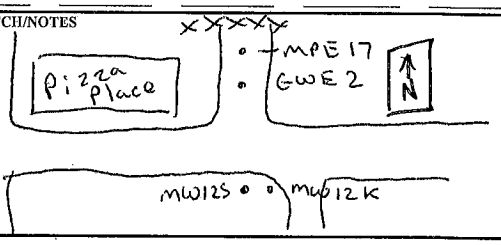
PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	X	
NO-PURGE METHOD UTILIZED		X

NUMBER OF GALLONS GENERATED: ~2.2

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES



Sampler Signature: ✓ Print Name: Jeni Kibuz

Checked By: RCM Date: 7/30/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Dinaburg Distributing RD
PROJECT NUMBER	3612112216-03.01
SAMPLE ID	828103-GWE03021
SAMPLE TIME	1240
LOCATION ID	GWE-3
DATE	July 10, 2012
START TIME	1100
END TIME	1245
SITE NAME/NUMBER	828106
PAGE	1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [X] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP): [X] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	9.67 FT	FINAL DTW (BMP)	9.81 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.33 FT
WELL DEPTH (BMP)	22.2 FT	SCREEN LENGTH	unknown FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	12.5 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	< 0.1 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	DAC ~~2.81~~ GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	~4 GAL	DRAWDOWN/ TOTAL PURGED	< 0.1	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1120	BEGIN PURGING									
1135	9.92	250	15.80	0.972	7.00	2.13	50.7	41.3	~20'	
1140	9.87	200	16.28	0.958	6.93	1.77	47.6	40.3		
1145	9.81	200	16.83	0.960	6.96	1.72	32.6	37.9		
1150	9.80	200	16.44	0.959	6.98	1.71	26.1	36.0		
1155	9.80	200	16.62	0.958	6.97	1.71	23.1	35.4		
1200										missed reading
1205	9.80	200	16.04	0.959	6.97	1.77	21.1	31.3	~20'	
1210	9.81	200	16.08	0.958	6.98	1.75	24.0	23.7		
1215	9.81	200	16.28	0.957	6.97	1.56	23.3	18.8		
1220	9.81	200	16.46	0.961	6.99	1.49	23.8	14.7		
1225	9.81	200	16.52	0.963	6.99	1.40	24.7	9.7		
1230	9.81	200	16.47	0.969	6.96	1.35	25.8	5.7		
1235	9.81	200	16.54	0.976	6.96	1.29	24.3	2.9		
1240	Collected VOC gw sample @ ~~MPE~~ GWE-3							—		
	Bags									

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

17	0.976	7.0	1.3	24	2.9	

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] WATTERA

DECON FLUIDS USED
- [X] LIQUINOX
- [X] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [ ] HDPE TUBING
- [X] LDPE TUBING
- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [X] OTHER None

EQUIPMENT USED
- [X] WL METER Solinst 100' probe
- [ ] PID
- [X] WQ METER YSI MPS 556
- [X] TURB. METER Hach 2100P
- [X] PUMP Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3 x 10 ml	Yes	NO	See above

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	X	
NO-PURGE METHOD UTILIZED		X

NUMBER OF GALLONS GENERATED: ~4

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES: See updated figure

Sampler Signature: Print Name: Brandon Shaw

Checked By: Charles W. Sym Date: 7/31/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	LOCATION ID	DATE
Dinaburg Distributing RD	GPW-01	July 9, 2012
PROJECT NUMBER	**START TIME**	**END TIME**
3612112216-03.01	1625	1635
SAMPLE ID / SAMPLE TIME	**SITE NAME/NUMBER**	**PAGE**
828103GPW01013 / 0820	828106	1 OF 1

7/10/12 ↳ Complete

WELL DIAMETER (INCHES): [X] 1 [ ] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP): [✓] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED			✓
COLLAR	✓		

INITIAL DTW (BMP)	7.90 FT	FINAL DTW (BMP)	~~14.55~~ 11.35 FT	PROT. CASING STICKUP (AGS)	FLUSH FT	TOC/TOR DIFFERENCE	10.5 IN
WELL DEPTH (BMP)	14.55 FT	SCREEN LENGTH (Assumed)	NA FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	6.65 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	~~1.0~~ 0.3 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1625	BEGIN PURGING									
1630	13.69		16.14	0.747	7.19	2.77	58.1	68.9		
		PURGED WELL DRY								
7/10/12 0810	Initial DTW = 8.09 bton									
0812	→ Began Purging									7/10/12
0815	→ Begin Collecting Samples									
0820	→ Sample time for GPW-01									
	↳ Final DTW = 11.35' bton									
0825	– Complete work @ GPW-01									
						RCA 7/10/12				

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

		NA				

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED
[X] PERISTALTIC	[X] LIQUINOX	[X] SILICON TUBING	[ ] S. STEEL PUMP MATERIAL	[X] WL METER Solinst 100' probe
[ ] SUBMERSIBLE	[X] DEIONIZED WATER	[ ] TEFLON TUBING	[ ] PVC PUMP MATERIAL	[ ] PID
[ ] BLADDER	[ ] POTABLE WATER	[ ] TEFLON LINED TUBING	[ ] GEOPROBE SCREEN	[X] WQ METER YSI MPS 556
[ ]	[ ] NITRIC ACID	[ ] HDPE TUBING	[ ] TEFLON BLADDER	[X] TURB. METER Hach 2100P
[ ] WATTERA	[ ] HEXANE	[X] LDPE TUBING	[X] OTHER None	[X] PUMP Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	Volatile Organic Compound	8260B	N	HCl/4 C	3x40ml	Y03	NO	See above
[ ]								
[ ]								

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[X]	[ ]
NO-PURGE METHOD UTILIZED	[ ]	[X]

NUMBER OF GALLONS GENERATED: –

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES

- Purged well Dry
- Came back @ 0810 on 7/10/12 to sample well – 90% Recharge

Sampler Signature: [signature] Print Name: Ryan Markowski

Checked By: [signature] Date: 7/30/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing RD		LOCATION ID: GPW-02	DATE: July 10, 2012
PROJECT NUMBER: 3612112216-03.01		START TIME: 0710	END TIME: 1710
SAMPLE ID: 828103GPW02012	SAMPLE TIME: 1705	SITE NAME/NUMBER: 828106	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [✓] 1 [✓] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP): [✓] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED			✓
COLLAR	✓		

INITIAL DTW (BMP)	7.62 FT	FINAL DTW (BMP)	13.27 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	0.24 FT
WELL DEPTH (BMP)	13.95 FT	SCREEN LENGTH (Historical)	NA FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	6.33 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	0.26 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	NA PSI

PVC Sch/Low TOC

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
0725	BEGIN PURGING →									
0730	13.32	110	16.01	0.628	7.06	0.98	27.5	223.8		
0735	13.65	110	16.43	0.526	6.92	3.09	21.4	194.3		
0740	→	Well	Went	Purged	Dry	→				
1655	8.26	→	13.95 - 7.62 =	6.33	x 0.90 = 5.70					
1705	Samples	Collected			13.95 - 5.70 = 8.25					
									~12' btoc	

7/10/12

RGM 7/10/12

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

NA

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED	
[X] PERISTALTIC	[X] LIQUINOX	[X] SILICON TUBING	[ ] S. STEEL PUMP MATERIAL	[X] WL METER	Solinst 100' probe
[ ] SUBMERSIBLE	[X] DEIONIZED WATER	[ ] TEFLON TUBING	[ ] PVC PUMP MATERIAL	[ ] PID	
[ ] BLADDER	[ ] POTABLE WATER	[ ] TEFLON LINED TUBING	[ ] GEOPROBE SCREEN	[X] WQ METER	YSI MPS 556
[ ]	[ ] NITRIC ACID	[ ] HDPE TUBING	[ ] TEFLON BLADDER	[X] TURB. METER	Hach 2100P
[ ] WATTERA	[ ] HEXANE	[X] LDPE TUBING	[X] OTHER None	[X] PUMP	Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	Volatile Organic Compound	8260B	N	HCl/4 C	3x40ml	YES	NO	See above
[ ]								
[ ]								

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[X]	[ ]
NO-PURGE METHOD UTILIZED	[ ]	[X]

NUMBER OF GALLONS GENERATED: _____

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES

Collected Grab Sample

Sampler Signature: [signature] Print Name: Ryan Mawhinney

Checked By: [signature] Date: 7/30/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME		LOCATION ID	DATE
Dinaburg Distributing RD		MW-01	July 9, 2012
PROJECT NUMBER		START TIME	END TIME
3612112216-03.01		1140	1310
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
828103-MW01015	1305	828106	1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [✓] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP): [✓] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED			✓
COLLAR	✓		

INITIAL DTW (BMP)	9.02 FT	FINAL DTW (BMP)	13.11 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	0.40 FT
WELL DEPTH (BMP)	20.40 FT	SCREEN LENGTH (Historical)	5.0 FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	11.38 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	0.67 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.9 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.95 GAL	DRAWDOWN/ TOTAL PURGED	0.34	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1145	BEGIN PURGING									
1150	11.55	100	17.60	0.887	6.75	0.29	26.0	-68.4		
1155	12.00	100	18.22	0.834	6.74	0.55	25.4	-53.0		
1200	12.40	100	18.54	0.857	6.72	0.33	23.9	-62.0		
1205	12.69	100	18.76	0.874	6.70	0.31	23.7	-63.2		
1210	12.95	100	18.55	1.011	6.72	0.33	~~93.3~~ 23.2	93.3		21.7
1215	13.10	100	18.37	1.079	6.73	0.27	22.0	-111.4		
1220	13.10	100	18.33	1.161	6.75	0.22	19.7	-127.2		
1225	13.11	100	18.23	1.354	6.78	0.21	19.1	-141.8		
1230	13.11	100	18.16	1.452	6.80	0.19	14.7	-155.7		
1235	13.11	100	18.21	1.535	6.81	0.21	10.9	-152.4		
1240	13.11	100	18.24	1.574	6.82	0.23	7.92	-151.9		
1245	13.11	100	18.24	1.595	6.83	0.18	7.69	-153.2		
1250	13.11	100	18.41	1.598	6.83	0.18	6.51	-130.0		
1255	13.11	100	18.46	1.612	6.82	0.18	5.68	-127.4		
1300	13.11	100	18.37	1.619	6.83	0.17	4.13	-133.7		
1305	Samples Collected									
	FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])		18	1.62	6.8	0.17	4.1	134		

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP		DECON FLUIDS USED		TUBING/PUMP/BLADDER MATERIALS				EQUIPMENT USED	
[X]	PERISTALTIC	[X]	LIQUINOX	[X]	SILICON TUBING	[ ]	S. STEEL PUMP MATERIAL	[X]	WL METER: Solinst 100' probe
[ ]	SUBMERSIBLE	[X]	DEIONIZED WATER	[ ]	TEFLON TUBING	[ ]	PVC PUMP MATERIAL	[ ]	PID:
[ ]	BLADDER	[ ]	POTABLE WATER	[ ]	TEFLON LINED TUBING	[ ]	GEOPROBE SCREEN	[X]	WQ METER: YSI MPS 556
[ ]		[ ]	NITRIC ACID	[ ]	HDPE TUBING	[ ]	TEFLON BLADDER	[X]	TURB. METER: Hach 2100P
[ ]	WATTERA	[ ]	HEXANE	[X]	LDPE TUBING	[X]	OTHER: None	[X]	PUMP: Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	Volatile Organic Compound	8260B	N	HCl/4 C	3x40ml	✓	MO	See above
[ ]								
[ ]								

PURGE OBSERVATIONS

	YES	NO	
PURGE WATER CONTAINERIZED	[X]	[ ]	NUMBER OF GALLONS GENERATED: ~2
NO-PURGE METHOD UTILIZED	[ ]	[X]	If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES

Sampler Signature: Print Name: Ryan Markowski

Checked By: Charles H. Tyson Date: 7/30/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME		LOCATION ID	DATE
Dinaburg Distributing RD		MW-03	July , 2012
PROJECT NUMBER		**START TIME**	**END TIME**
3612112216-03.01		1315	1457
SAMPLE ID	**SAMPLE TIME**	**SITE NAME/NUMBER**	**PAGE**
828103-MW03	1445	828106	1 OF 1

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☑ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR	X		

INITIAL DTW (BMP)	7.67 FT	FINAL DTW (BMP)	10.19 FT	PROT. CASING STICKUP (AGS)	NA CHK -0.4 FT	TOC/TOR DIFFERENCE	-0.40 FT
WELL DEPTH (BMP) 14.5	~~8.63~~ FT	SCREEN LENGTH	15 FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	6.83 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	0.41 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	~~1 1/4 pol. VAS~~ GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.92 GAL	DRAWDOWN/ TOTAL PURGED	0.14	PRESSURE TO PUMP	NA PSI

4 gal measured

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1325	BEGIN PURGING									
1330	8.02	200	16.90	0.508	7.33	18.0	65.1	70.5		
1335	8.12	150	16.98	0.504	7.25	14.8	48.8	63.7		
1340	8.25	"	17.02	0.501	7.21	14.6	12.4	63.2		
1345	8.32	"	17.10	0.500	7.21	14.0	6.78	62.2		
1350	8.54	"	17.28	0.502	7.21	12.3	7.42	61.2		
1355	8.75	"	17.36	0.507	7.20	10.8	3.37	60.3		
1400	8.90	"	17.36	0.514	7.24	9.2	6.11	59.6		
1405	9.15	"	17.18	0.536	7.23	8.9	3.84	58.5		
1410	9.29	"	17.22	0.540	7.24	8.6	6.84	58.0		
1415	9.37	"	17.71	0.554	7.23	8.7	7.60	57.5		
1420	9.49	"	17.91	0.560	7.24	8.3	5.70	57.1		
1425	9.69	"	18.03	0.563	7.22	7.9	4.24	56.5		
1430	9.74	"	17.96	0.567	7.21	7.6	3.37	56.1		
1435	9.82	"	17.88	0.568	7.22	7.8	3.32	55.6		
1440	10.00	"	17.54	0.563	7.22	7.6	3.31	55.3		13' btoc
1445	10.19	"	17.31	0.555	7.21	7.6	3.31	56.0		Sampled
Sampled.	**FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])**									
			17	0.555	7.2	7.6	3.3	55		

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED	
X PERISTALTIC	X LIQUINOX	X SILICON TUBING	☐ S. STEEL PUMP MATERIAL	X	WL METER Solinst 100' probe
☐ SUBMERSIBLE	X DEIONIZED WATER	☐ TEFLON TUBING	☐ PVC PUMP MATERIAL	☐	PID
☐ BLADDER	☐ POTABLE WATER	☐ TEFLON LINED TUBING	☐ GEOPROBE SCREEN	X	WQ METER YSI MPS 556
☐ WATTERA	☐ NITRIC ACID	☐ HDPE TUBING	☐ TEFLON BLADDER	X	TURB. METER Hach 2100P
	☐ HEXANE	X LDPE TUBING	X OTHER None	X	PUMP Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3 x 40 ml	Yes	No	See above

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	X	
NO-PURGE METHOD UTILIZED		X

NUMBER OF GALLONS GENERATED: ~3

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES

see updated figure

Sampler Signature: Charles H. Lyman

Print Name: Charles H. Lyman

Checked By: RCM

Date: 7/30/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME		LOCATION ID	DATE
Dinaburg Distributing RD		MW-3C	July 10, 2012
PROJECT NUMBER		START TIME	END TIME
3612112216-03.01		1433	1610
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
828103-MW03C028	1605	828106	1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [✓] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP): [✓] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED			✓
COLLAR	✓		

INITIAL DTW (BMP)	13.99 FT	FINAL DTW (BMP)	15.23 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	0.35 FT (PVC Below TOC)
WELL DEPTH (BMP)	31.60 FT	SCREEN LENGTH (historical)	5.0 FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	17.51 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	0.20 RCM 0.001 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	2.9 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.0 GAL	DRAWDOWN/ TOTAL PURGED	0.1	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1450	BEGIN PURGING									
1455	15.05	110	15.81	1.578	7.21	8.00	71000	-17.9		
1500	15.04	110	15.32	1.561	7.25	1.53	124	-35.8		
1505	15.05	110	15.20	1.565	7.19	1.05	9.22	-34.2		
1510	15.05	110	15.34	1.581	7.17	0.88	7.59	-36.2		
1515	15.07	110	15.59	1.590	7.10	0.79	19.7	-31.2		
1520	15.10	110	15.24	1.601	7.09	0.83	25.9	-36.7		
1525	15.14	110	15.60	1.601	7.08	0.80	11.5	-39.6		
1530	15.14	110	15.82	1.600	7.05	0.78	6.51	-44.8		
1535	15.15	110	15.75	1.603	7.06	0.75	1.93	-49.0		
1540	15.18	110	15.44	1.598	7.13	0.74	5.12	-54.7		
1545	15.19	110	15.30	1.592	7.15	0.71	1.13	-59.7		
1550	15.21	110	15.22	1.587	7.13	0.68	6.07	-60.1		
1555	15.22	110	15.16	1.582	7.19	0.66	9.72	-63.4		
1600	15.23	110	15.20	1.578	7.19	0.63	8.87	-65.1	V	
1605	SAMPLES	Collected							~30' btoc	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

	15	1.58	7.2	0.6	8.9	-65	

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP		DECON FLUIDS USED		TUBING/PUMP/BLADDER MATERIALS				EQUIPMENT USED	
[X]	PERISTALTIC	[✓]	LIQUINOX	[X]	SILICON TUBING	[ ]	S. STEEL PUMP MATERIAL	[X]	WL METER: Solinst 100' probe
[ ]	SUBMERSIBLE	[✓]	DEIONIZED WATER	[ ]	TEFLON TUBING	[ ]	PVC PUMP MATERIAL	[ ]	PID:
[ ]	BLADDER	[ ]	POTABLE WATER	[ ]	TEFLON LINED TUBING	[ ]	GEOPROBE SCREEN	[X]	WQ METER: YSI MPS 556
[ ]	WATTERA	[ ]	NITRIC ACID	[ ]	HDPE TUBING	[ ]	TEFLON BLADDER	[X]	TURB. METER: Hach 2100P
		[ ]	HEXANE	[X]	LDPE TUBING	[X]	OTHER: None	[X]	PUMP: Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	Volatile Organic Compound	8260B	N	HCl/4 C	3x40ml	✓		See above
[✓]	"	"	"	"	"	✓	Yes	Dup
[ ]								

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[X]	[ ]
NO-PURGE METHOD UTILIZED	[ ]	[X]

NUMBER OF GALLONS GENERATED: ~2.0

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES

- Duplicate Collected

Sampler Signature: Print Name: Ryan Markowski

Checked By: Date: 7/30/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME		LOCATION ID	DATE
Dinaburg Distributing RD		MW-6	July 10, 2012
PROJECT NUMBER		**START TIME**	**END TIME**
3612112216-03.01		1630	1745
SAMPLE ID	**SAMPLE TIME**	**SITE NAME/NUMBER**	**PAGE**
B28103-MW06016	1730	828106	1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP): [✓] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	8.60 FT	FINAL DTW (BMP)	8.65 FT	PROT. CASING STICKUP (AGS)	NA FT	TOC/TOR DIFFERENCE	-0.52 FT
WELL DEPTH (BMP)	19.62 FT	SCREEN LENGTH	15 FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	11.62 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	0.11 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.9 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.17 GAL	DRAWDOWN/ TOTAL PURGED	0.09	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1640	BEGIN PURGING									
1645	8.59	100	16.62	1.884	6.75	9.7	19.2	62.1		
1650	8.62	"	16.52	1.882	6.75	4.0	12.6	58.0		
1655	8.65	"	16.32	1.871	6.76	2.9	10.9	56.5		
1700	8.65	100	16.25	1.886	6.76	2.4	7.65	55.6		
1705	8.65	"	16.19	1.860	6.77	1.9	8.02	55.3		
1710	8.65	"	16.12	1.858	6.78	1.9	4.28	54.8		
1715	8.65	"	16.02	1.851	6.78	1.9	5.20	54.1		
1720	8.65	"	16.06	1.853	6.78	1.7	4.18	53.9		
1725	8.65	"	16.03	1.851	6.78	1.7	5.47	53.5		
1730	Sampled								~18' btoA	

Charles H. Lyman 7/10/12

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

	16	1.85	6.8	1.7	5.5	54	

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: [X] PERISTALTIC [ ] SUBMERSIBLE [ ] BLADDER [ ] _____ [ ] WATTERA

DECON FLUIDS USED: [X] LIQUINOX [✓] DEIONIZED WATER [ ] POTABLE WATER [ ] NITRIC ACID [ ] HEXANE

TUBING/PUMP/BLADDER MATERIALS: [X] SILICON TUBING [ ] TEFLON TUBING [ ] TEFLON LINED TUBING [ ] HDPE TUBING [X] LDPE TUBING [ ] S. STEEL PUMP MATERIAL [ ] PVC PUMP MATERIAL [ ] GEOPROBE SCREEN [ ] TEFLON BLADDER [X] OTHER None

EQUIPMENT USED: [X] WL METER Solinst 100' probe [ ] PID [X] WQ METER YSI MPS 556 [X] TURB. METER Hach 2100P [X] PUMP Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3x40ml	YES	NO	See above

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [X] NO [ ]

NO-PURGE METHOD UTILIZED: YES [ ] NO [X]

NUMBER OF GALLONS GENERATED: ~ 1

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES

* observed a lot of floc (orange) in well

Sampler Signature: Charles H. Lyman

Print Name: Charles H. Lyman

Checked By: RLM

Date: 7/30/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing RD		LOCATION ID: MW-10K	DATE: July 10, 2012 & July 11, 2012
PROJECT NUMBER: 3612112216-03.01		START TIME: 1537 ~~1545~~	END TIME: 1040 7/11/12
SAMPLE ID: 828103-MW10K18	SAMPLE TIME: 10:45 (7-11-12)	SITE NAME/NUMBER: 828106	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [X] 2 [ ] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP): [✓] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR	X		

INITIAL DTW (BMP)	8.91 FT	FINAL DTW (BMP)	11.19 FT 7/11/12	PROT. CASING STICKUP (AGS)	~~0~~ FT	TOC/TOR DIFFERENCE	0.38 FT
WELL DEPTH (BMP)	22.6 FT	SCREEN LENGTH	unknown FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	13.69 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	~~0~~ GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	2.2 ~~8~~ GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	~~0~~ GAL	DRAWDOWN/ TOTAL PURGED	~~0~~	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1537	BEGIN PURGING									
1547	11.05	~200	16.26	1.377	6.62	0.95	322	24.8	~21'	
1552	12.85	~1000	14.29	1.381	6.61	0.29	80.11	28.8	↓	
1557	16.67	~1000	14.87	1.313	6.63	0.50	107	29.1	↓	
1602	20.09	~1000	15.15	1.275	6.75	2.19	173	23.5	22.5'	
1607	722.6	well dry; pump off	—	—	—	—	—	—	↓	
										MK
	7/11/12		Sample	Data						
8.67 DTW initial			10:20							
10:25	9.45	~~1000~~	16.76	1.393	6.97	3.02	42.9	32.7		
10:30	10.20	150	16.40	1.393	6.97	2.11	~~42.0~~	42.4		
10:35	10.75	150	17.30	1.389	6.98	2.28	17.3	48.9		
10:40	11.19	150	17.40	1.398	6.99	2.11	16.2	54.8		
1045	Samples Collected									

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

	17	1.40	~~7.0~~ OUT	2.1	16	55

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP		DECON FLUIDS USED		TUBING/PUMP/BLADDER MATERIALS				EQUIPMENT USED	
[X]	PERISTALTIC	[X]	LIQUINOX	[X]	SILICON TUBING	[ ]	S. STEEL PUMP MATERIAL	[X]	WL METER: Solinst 100' probe
[ ]	SUBMERSIBLE	[X]	DEIONIZED WATER	[ ]	TEFLON TUBING	[ ]	PVC PUMP MATERIAL	[ ]	PID:
[ ]	BLADDER	[ ]	POTABLE WATER	[ ]	TEFLON LINED TUBING	[ ]	GEOPROBE SCREEN	[X]	WQ METER: YSI MPS 556
[ ]	WATTERA	[ ]	NITRIC ACID	[ ]	HDPE TUBING	[ ]	TEFLON BLADDER	[X]	TURB. METER: Hach 2100P
		[ ]	HEXANE	[X]	LDPE TUBING	[X]	OTHER: None	[X]	PUMP: Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	Volatile Organic Compound	8260B	N	HCl/4 C	3x40ml	Y03	~0	See above
[ ]								
[ ]								

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[X]	[ ]
NO-PURGE METHOD UTILIZED	[ ]	[X]

NUMBER OF GALLONS GENERATED: ~3.

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES

- removed bailer
- purged well dry and sampled recharge next day

Sample Signature: Print Name: Brandon Shaw

Checked By: Date: 7/31/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing Erdle Perforating RD		LOCATION ID: MW12S	DATE: July 11, 2012
PROJECT NUMBER: 361211221-03.01		START TIME: 0730	END TIME: 0925
SAMPLE ID: 828103 MW12S010	SAMPLE TIME: 0905	SITE NAME/NUMBER: 828072	PAGE: 1 OF 1

828103 MW12S010D, 828103 MW12S010S, 828103 MW12S010M

WELL DIAMETER (INCHES): ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	8.12 FT	FINAL DTW (BMP)	11.31 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	0.48 FT
WELL DEPTH (BMP)	13.65 FT	SCREEN LENGTH (historical)	~10 FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	5.53 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	.5 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	.9 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.5 GAL	DRAWDOWN/ TOTAL PURGED	0.2	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
0745	BEGIN PURGING									
0747	8.80	150	15.35	0.991	6.93	1.89	12.5	30.1		
0752	8.91	145	15.22	0.987	6.97	0.65	5.60	-23.5		
0757	9.08	120	15.51	0.963	7.03	0.86	3.93	-50.2		
0802	9.27	115	15.59	0.945	7.05	1.02	2.50	-63.1		
0807	9.46	160	15.63	0.911	7.06	1.32	2.14	-71.3		
0812	9.69	180	15.61	0.886	7.06	1.24	1.42	-74.9		
0817	9.92	180	15.70	0.870	7.04	0.90	1.58	-77.6		
0822	10.14	175	15.67	0.874	7.01	0.83	1.06	-67.0		Peristaltic not operating properly
0827	10.45	250	15.52	0.901	6.98	0.50	~~3.21~~ 1.90	-71.8		
0832	10.77	245	15.44	0.933	6.96	0.40	2.88	-71.7		
0837	11.05	250	15.34	0.949	6.95	0.32	2.09	-75.7		reduced purge rate
0842	11.23	100	15.75	0.960	6.95	0.33	3.21	-73.1		
0847	11.25	110	15.81	0.967	6.95	0.38	2.49	-72.0		
0852	11.27	110	15.81	0.985	6.94	0.42	4.28	-69.6		
0857	11.29	110	15.81	0.991	6.95	0.41	3.88	-72.3		
0902	11.31	110	15.81	0.994	6.95	0.40	2.79	-73.5		12' btoc

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

~~15.8~~ 16	0.994	7.0	0.4	2.8	-74	

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED	
X PERISTALTIC	X LIQUINOX	X SILICON TUBING	☐ S. STEEL PUMP MATERIAL	X WL METER	Solinst 100' probe
☐ SUBMERSIBLE	X DEIONIZED WATER	☐ TEFLON TUBING	☐ PVC PUMP MATERIAL	☐ PID	
☐ BLADDER	☐ POTABLE WATER	☐ TEFLON LINED TUBING	☐ GEOPROBE SCREEN	X WQ METER	YSI MPS 556
☐ WATTBRA	☐ NITRIC ACID	☐ HDPE TUBING	☐ TEFLON BLADDER	X TURB. METER	Hach 2100P
	☐ HEXANE	X LDPE TUBING	X OTHER None	X PUMP	Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3 X 40ml	Y	Y	See above

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	☐	X
NO-PURGE METHOD UTILIZED	☐	X

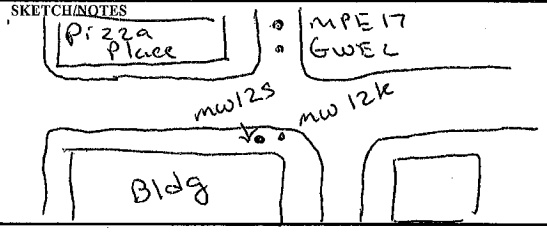
NUMBER OF GALLONS GENERATED: ~2.5

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

Sampler Signature: J. Kiburz Print Name: J. Kiburz

Checked By: RCM Date: 7/30/12

SKETCH/NOTES



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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME		LOCATION ID	DATE
Dinaburg Distributing RD		MW13K	July 9, 2012
PROJECT NUMBER		START TIME	END TIME
3612112216-03.01		11:20	12:35
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
828103-MW13K0616	12:40	828106	1 OF 1

WELL DIAMETER (INCHES): ☐ 1 ☑ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☑ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED			✓
COLLAR	✓		

INITIAL DTW (BMP)	9.65 FT	FINAL DTW (BMP)	9.64 FT	PROT. CASING STICKUP (AGS)	FLUSH FT	TOC/TOR DIFFERENCE	2.5 FT
WELL DEPTH (BMP)	21.5 FT	SCREEN LENGTH (History sheet)	5.0 FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	11.95 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	0.02 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	2 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	3.5 GAL	DRAWDOWN/ TOTAL PURGED	0.006	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
11:25	BEGIN PURGING									
11:30	9.65	200	16.42	2.195	6.80	0.11	89.6	-10.7		
11:35	9.66	200	16.29	2.166	6.83	0.12	65.7	-10.4		
11:40	9.67	200	16.20	2.146	6.86	0.15	40.0	-12.4		
11:45	9.68	[redacted]	16.14	2.140	6.86	0.17	32.5	-13.2		
11:50	9.68	200	16.00	2.106	6.86	0.95	22.0	-9.6		
11:55	9.67	200	16.28	2.076	6.87	0.54	15.8	-7.5		
12:00	9.67	200	16.20	2.048	6.87	0.44	13.6	-4.9		
12:05	9.67	175	16.07	1.999	6.87	0.36	11.5	-2.5		
12:10	9.66	125	15.97	1.947	6.88	0.34	12.4	-1.0		
12:15	9.66	200	15.96	1.938	6.89	0.33	10.5	-1.4		
12:20	9.66	175	16.31	1.922	6.90	0.28	13.6	-3.9		
12:25	9.65	175	16.79	1.917	6.92	0.23	7.73	-3.1		
12:30	9.64	175	16.83	1.889	6.93	0.21	9.52	-4.3		
12:35	9.64	175	16.87	1.878	6.94	0.17	6.65	-11.7		
1240	SAMPLES COLLECTED									
									2	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

17	1.88	6.9	0.2	6.7	-12	

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP		DECON FLUIDS USED		TUBING/PUMP/BLADDER MATERIALS				EQUIPMENT USED	
☒	PERISTALTIC	☒	LIQUINOX	☒	SILICON TUBING	☐	S. STEEL PUMP MATERIAL	☒	WL METER: Solinst 100' probe
☐	SUBMERSIBLE	☒	DEIONIZED WATER	☐	TEFLON TUBING	☐	PVC PUMP MATERIAL	☐	PID:
☐	BLADDER	☐	POTABLE WATER	☐	TEFLON LINED TUBING	☐	GEOPROBE SCREEN	☒	WQ METER: YSI MPS 556
☐	WATTERA	☐	NITRIC ACID	☐	HDPE TUBING	☐	TEFLON BLADDER	☒	TURB. METER: Hach 2100P
		☐	HEXANE	☒	LDPE TUBING	☒	OTHER: None	☒	PUMP: Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3x40mL	YES	NO	See above

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	X	
NO-PURGE METHOD UTILIZED		X

NUMBER OF GALLONS GENERATED: ~3.5

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES

Sampler Signature: [signature] Print Name: M. Miller

Checked By: Kim 7/30/12 Date: 7/9/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing RD		LOCATION ID: MW14K	DATE: July 9, 2012
PROJECT NUMBER: 3612112216-03.01		START TIME: 1700	END TIME: 1745
SAMPLE ID: 828103-MW14K0719	SAMPLE TIME: 1735	SITE NAME/NUMBER: 828106	PAGE: 1 OF 1

WELL DIAMETER (INCHES): ☐ 1 ☑ 2 ☐ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☑ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED			✓
COLLAR	✓		

INITIAL DTW (BMP)	9.15 FT	FINAL DTW (BMP)	9.16 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	4.0 IN FT
WELL DEPTH (BMP)	25.00 FT	SCREEN LENGTH (Historical)	5.0 FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	15.85 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	0.002 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	2.6 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.8 GAL	DRAWDOWN/ TOTAL PURGED	<0.001	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1700	BEGIN PURGING									
1705	9.15	725	14.45	1.120	7.13	1.39	28.1	-39.5		
1710	9.16	225	14.30	1.208	7.07	0.18	6.49	-39		
1715	9.16	225	14.49	1.247	7.08	0.10	3.95	-36.4		
1720	9.16	225	14.23	1.267	7.07	0.09	1.87	-35.8		
1725	9.16	225	14.35	1.280	7.08	0.12	0.86	-36.0		
1730	9.16	225	14.12	1.296	7.07	0.20	1.06	-36.3		
1735	SAMPLES COLLECTED									

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

	14	1.30	7.1	0.2	1.1	-36

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS	EQUIPMENT USED
☒ PERISTALTIC	☑ LIQUINOX	☒ SILICON TUBING	☐ WL METER Solinst 100' probe
☐ SUBMERSIBLE	☑ DEIONIZED WATER	☐ TEFLON TUBING	☐ PID
☐ BLADDER	☐ POTABLE WATER	☐ TEFLON LINED TUBING	☒ WQ METER YSI MPS 556
☐ WATTERA	☐ NITRIC ACID	☐ HDPE TUBING	☒ TURB. METER Hach 2100P
	☐ HEXANE	☒ LDPE TUBING	☒ PUMP Geopump
		☐ S. STEEL PUMP MATERIAL	
		☐ PVC PUMP MATERIAL	
		☐ GEOPROBE SCREEN	
		☐ TEFLON BLADDER	
		☒ OTHER None	

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3x40mL	YES	NO	See above

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	X	
NO-PURGE METHOD UTILIZED		X

NUMBER OF GALLONS GENERATED: ~1.6

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES

Sampler Signature: ✓ Print Name: Howie Miller

Checked By: RLM Date: 7/30/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing RD		LOCATION ID: MPE-1	DATE: July 9, 2012
PROJECT NUMBER: 3612112216-03.01		START TIME: 1620	END TIME: 1820
SAMPLE ID: 828103-MPE0100	SAMPLE TIME: 1800	SITE NAME/NUMBER: 828106	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [X] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP): [X] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	6.49 FT	FINAL DTW (BMP)	10.76 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.66 FT
WELL DEPTH (BMP)	13.1 FT	SCREEN LENGTH	unknown FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	6.6 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	2.7 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	4.4 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	~9.5 GAL	DRAWDOWN/ TOTAL PURGED	0.3	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1643	BEGIN PURGING									
1645	7.678	~1000	16.55	0.662	7.06	0.46	34.3	-2.2	~12'	
1650	7.25	~1000	16.59	0.654	6.99	0.57	10.2	-3.0		
1655	7.36	~1000	16.92	0.651	7.00	0.40	17.0	-6.1		
1700	7.49	~1000	17.75	0.657	6.99	0.29	44.6	-7.5		
1705	8.71	150	18.57	0.666	7.00	0.66	17.7	-16.0		
1710	8.79	~150	19.09	0.678	7.02	0.59	12.0	-13.7		
1715	9.13	~1000	18.71	0.671	7.01	0.41	10.1	-20.1		
1720	9.44	~1000	18.47	0.691	7.03	0.39	8.46	-29.6		plunged ~5 gallons
1725	10.38	~1000	18.35	0.683	7.04	0.36	11.2	-34.1		
1730	11.01	~150	18.80	0.671	7.04	0.36	12.9	-34.5		
1735	10.85	~150	18.86	0.668	7.06	0.35	16.0	-34.6		
1740	10.81	~150	18.81	0.666	7.05	0.35	9.18	-29.7		
1745	10.79	~150	18.71	0.663	7.06	0.37	4.12	-29.4		
1750	10.78	~150	18.61	0.663	7.07	0.38	3.40	-27.1		
1755	10.77	~150	18.52	0.664	7.07	0.42	2.69	-24.1		
1800	Collected VOC grab sample @ MPE-1						—	—		
FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])			19	0.664	7.1	0.42	2.7	-24		

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED	
[X] PERISTALTIC	[X] LIQUINOX	[X] SILICON TUBING	[ ] S. STEEL PUMP MATERIAL	[X] WL METER	Solinst 100' probe
[ ] SUBMERSIBLE	[X] DEIONIZED WATER	[ ] TEFLON TUBING	[ ] PVC PUMP MATERIAL	[ ] PID	
[ ] BLADDER	[ ] POTABLE WATER	[ ] TEFLON LINED TUBING	[ ] GEOPROBE SCREEN	[X] WQ METER	YSI MPS 556
[ ] WATTERA	[ ] NITRIC ACID	[ ] HDPE TUBING	[ ] TEFLON BLADDER	[X] TURB. METER	Hach 2100P
	[ ] HEXANE	[X] LDPE TUBING	[X] OTHER None	[X] PUMP	Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3 X 40ml	✓	NO	See above

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	X	
NO-PURGE METHOD UTILIZED		X

NUMBER OF GALLONS GENERATED: ~9.5

If yes, purged approximately 1 standing volume prior to sampling or N/A mL for this sample location.

SKETCH/NOTES: See updated figure

Sampler Signature: [signature] Print Name: Brandon Shaw

Checked By: [signature] Date: 7/31/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME		LOCATION ID	DATE
Dinaburg Distributing RD		MPE-02	July 9, 2012
PROJECT NUMBER		START TIME	END TIME
3612112216-03.01		1525	1650
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
828103-MPE02010	1645	828106	1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [✓] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP): [✓] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED			✓
COLLAR	✓		

INITIAL DTW (BMP)	6.39 FT	FINAL DTW (BMP)	6.93 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	0.75 FT (PVC below TOC)
WELL DEPTH (BMP)	13.50 FT	SCREEN LENGTH (historical)	7.5 FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	7.11 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	0.35 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	4.7 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.39 GAL	DRAWDOWN/ TOTAL PURGED	0.15	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1530	BEGIN PURGING									
1535	6.83	140	16.72	0.608	7.24	3.94	12.0	37.3		
1540	6.89	140	17.28	0.598	7.24	3.52	5.96	14.5		
1545	6.89	140	17.21	0.591	7.21	3.86	4.78	1.3		
1550	6.90	140	17.47	0.587	7.18	3.91	3.49	-6.2		
1555	6.90	140	17.41	0.589	7.17	3.82	2.73	-6.9		
1600	6.91	140	17.35	0.593	7.20	3.59	2.75	-9.9		
1605	6.91	140	17.29	0.598	7.22	3.40	2.27	-13.4		
1610	6.92	140	17.33	0.602	7.25	3.18	2.08	-16.7		
1615	6.92	140	17.50	0.606	7.25	3.00	2.21	-16.9		
1620	6.93	140	17.68	0.614	7.26	2.89	2.82	-20.2		
1625	6.93	140	17.72	0.625	7.25	2.71	2.68	-21.8		
1630	6.93	100	17.76	0.638	7.25	2.55	2.69	-23.6		
1635	6.93	100	17.73	0.648	7.25	2.48	3.49	-24.1		
1640	6.93	100	17.60	0.658	7.25	2.45	3.51	-23.9		
1645	Samples Collecting					~~2.5~~ cm				~12' btoc
	PAT						~~3.5~~ cm ~~14~~ cm			

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

18	0.658	7.3	2.5	3.5	24	

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED	
[X] PERISTALTIC	[X] LIQUINOX	[X] SILICON TUBING	[ ] S. STEEL PUMP MATERIAL	[X] WL METER	Solinst 100' probe
[ ] SUBMERSIBLE	[X] DEIONIZED WATER	[ ] TEFLON TUBING	[ ] PVC PUMP MATERIAL	[ ] PID	
[ ] BLADDER	[ ] POTABLE WATER	[ ] TEFLON LINED TUBING	[ ] GEOPROBE SCREEN	[X] WQ METER	YSI MPS 556
[ ] WATTERA	[ ] NITRIC ACID	[ ] HDPE TUBING	[ ] TEFLON BLADDER	[X] TURB. METER	Hach 2100P
	[ ] HEXANE	[X] LDPE TUBING	[X] OTHER None	[X] PUMP	Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3x40ml	✓	~6	See above

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	X	
NO-PURGE METHOD UTILIZED		X

NUMBER OF GALLONS GENERATED: ~2.4

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES

Sampler Signature: Print Name: Ryan MacKenzie

Checked By: Date: 7/30/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing RD	LOCATION ID: MPE-3 (SWE-3)
PROJECT NUMBER: 3612112216-03.01	DATE: July 9, 2012
SAMPLE ID: 828103-MPE03010	SAMPLE TIME: 1510
START TIME: 1345	END TIME: 1515
SITE NAME/NUMBER: 828106	PAGE: 1 OF 1

WELL DIAMETER (INCHES): ☐ 1 ☐ 2 ☑ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED			✓
COLLAR	✓		

PVC below TOC

INITIAL DTW (BMP)	6.32 FT	FINAL DTW (BMP)	6.89 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	-0.62 FT
WELL DEPTH (BMP)	13.50 FT (Historical)	SCREEN LENGTH	10 FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	7.18 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	0.37 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	4.71 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	4.5 GAL	DRAWDOWN/ TOTAL PURGED	0.08	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1400	BEGIN PURGING									
1405	~~400~~	400	16.75	1.543	7.15	0.44	15.5	36.1		
1410	7.20	505	16.78	1.500	7.16	0.15	9.13	22.7		
1415	7.38	500	16.88	1.477	7.16	0.17	6.64	13.5		
1420	7.50	500	16.88	1.456	7.16	0.25	4.07	9.6		
1425	7.35	140	17.06	1.438	7.16	0.35	4.57	7.3		
1430	7.02	140	17.62	1.455	7.15	0.31	4.62	4.0		
1435	6.94	140	17.51	1.480	7.15	0.20	3.20	2.3		
1440	6.90	140	17.58	1.467	7.16	0.21	1.89	~3.4		
1445	6.89	140	17.66	1.456	7.16	0.29	2.10	0.7		
1450	6.89	140	17.66	1.450	7.17	0.32	1.78	2.9		
1455	6.89	140	17.57	1.433	7.17	0.33	2.57	3.9		
1500	6.89	140	17.59	1.425	7.17	0.33	2.24	6.2		
1505	6.89	140	17.56	1.419	7.16	0.32	2.01	7.4		
1510	Samples Collected								~12' bTOC	
				RCM	7/9/12					

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

	18	1.42	7.2	0.3	2.0	7.4

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED	
☒ PERISTALTIC	☒ LIQUINOX	☒ SILICON TUBING	☐ S. STEEL PUMP MATERIAL	☒ WL METER	Solinst 100' probe
☐ SUBMERSIBLE	☐ DEIONIZED WATER	☐ TEFLON TUBING	☐ PVC PUMP MATERIAL	☐ PID	
☐ BLADDER	☐ POTABLE WATER	☐ TEFLON LINED TUBING	☐ GEOPROBE SCREEN	☒ WQ METER	YSI MPS 556
☐ WATTERA	☐ NITRIC ACID	☐ HDPE TUBING	☐ TEFLON BLADDER	☒ TURB. METER	Hach 2100P
	☐ HEXANE	☒ LDPE TUBING	☒ OTHER None	☒ PUMP	Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3x40ml	✓	~0	See above

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	X	
NO-PURGE METHOD UTILIZED		X

NUMBER OF GALLONS GENERATED: ~4.5

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES

see updated figure

Sampler Signature: [signature] Print Name: Ryan Markowski

Checked By: Charles W. Lyon Date: 7/30/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME		LOCATION ID	DATE
Dinaburg Distributing RD		MPE-4	July 9, 2012
PROJECT NUMBER		START TIME	END TIME
3612112216-03.01		1425	1625
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
828103-MPE04010	1615	828106	1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [X] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP): [X] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	6.39 FT	FINAL DTW (BMP)	11.60 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.151 FT
WELL DEPTH (BMP)	12.3 FT	SCREEN LENGTH	Unknown FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	5.9 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	~0.83 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	3.9 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	~8.5 GAL	DRAWDOWN/ TOTAL PURGED	0.9	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1442	BEGIN PURGING									
1450	7.91	~1000	18.26	0.776	7.00	0.45	>1000	-40.2	~12	
1500	8.04	150	20.20	0.777	7.03	0.51	218	-45.4		
1505	8.15	150	20.77	0.409	7.20	0.68	67.7	-93.5		
1510	8.22	150	20.69	0.780	7.08	0.42	54.7	-92.5		
1515	9.05	~1000	18.63	0.770	6.98	0.30	24.8	-114.5		
1520	9.71	~1000	17.70	0.801	7.02	0.61	132.4	-89.9		Purged 5 gallons
1525	10.54	~1000	17.01	0.817	6.99	0.12	>1000	-97.4		
1530	10.92	~1000	16.88	0.841	6.97	0.42	>1000	-47.1		
1540	11.81	~150	17.32	0.892	6.99	0.30	106	-60.5		
1545	11.65	~150	18.74	0.953	7.00	0.24	57.7	-80.8		
1550	11.61	~150	18.74	0.944	7.00	0.29	19.8	-82.9		
1555	11.60	~150	18.79	0.940	6.99	0.31	12.2	-82.4		
1600	11.60	~150	18.64	0.925	6.99	0.23	9.51	-82.9		
1605	11.60	~150	18.55	0.912	6.99	0.23	8.41	-82.2		
1610	11.60	~150	18.56	0.898	7.00	0.26	4.12	-80.6		
1615	Sample time @ MPE-4									

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

19	0.898	7.00	0.26	4.1	-81	

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP		DECON FLUIDS USED		TUBING/PUMP/BLADDER MATERIALS				EQUIPMENT USED	
[X]	PERISTALTIC	[X]	LIQUINOX	[X]	SILICON TUBING	[ ]	S. STEEL PUMP MATERIAL	[X]	WL METER: Solinst 100' probe
[ ]	SUBMERSIBLE	[X]	DEIONIZED WATER	[ ]	TEFLON TUBING	[ ]	PVC PUMP MATERIAL	[ ]	PID
[ ]	BLADDER	[ ]	POTABLE WATER	[ ]	TEFLON LINED TUBING	[ ]	GEOPROBE SCREEN	[X]	WQ METER: YSI MPS 556
		[ ]	NITRIC ACID	[ ]	HDPE TUBING	[ ]	TEFLON BLADDER	[X]	TURB. METER: Hach 2100P
[ ]	WATTERA	[ ]	HEXANE	[X]	LDPE TUBING	[X]	OTHER: None	[X]	PUMP: Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	Volatile Organic Compound	8260B	N	HCl/4 C	3 x 40 ml	✓	✓	See above
[ ]								
[ ]								

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[X]	[ ]
NO-PURGE METHOD UTILIZED	[ ]	[X]

NUMBER OF GALLONS GENERATED: ~8.5

If yes, purged approximately 1 standing volume prior to sampling or N/A mL for this sample location.

SKETCH/NOTES

See updated figure

Sampler Signature:

Print Name: Brandon Shaw

Checked By: Charles H Lyon

Date: 7/31/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing RD		LOCATION ID: MPE 5	DATE: July 9, 2012
PROJECT NUMBER: 3612112216-03.01		START TIME: 1405	END TIME: 1500
SAMPLE ID: 828103-MPE05010	SAMPLE TIME: 0915 – 7/10/12	SITE NAME/NUMBER: 828106	PAGE: 1 OF 2

ENDS 7/10/12

WELL DIAMETER (INCHES): ☐ 1 ☐ 2 ☒ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☑ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED			✓
COLLAR	✓		

INITIAL DTW (BMP)	6.50 FT	FINAL DTW (BMP)	10.5 FT	PROT. CASING STICKUP (AGS)	FLUSH FT	TOC/TOR DIFFERENCE	6.2 IN
WELL DEPTH (BMP)	10.5 FT	SCREEN LENGTH (historical)	8.5 FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	4 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	\ GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	2.6 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	\ GAL	DRAWDOWN/ TOTAL PURGED	\	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1405	BEGIN PURGING									
1410	7.23	425	16.88	0.584	7.26	4.45	6.09	116.9		
1415	7.73	425	17.28	0.578	7.21	4.07	5.82	114.1		
1420	8.03	425	17.59	0.578	7.20	4.21	7.15	110.4		
1425	8.40	425	17.76	0.564	7.20	3.61	5.61	106.0		
1430	8.75	250	17.69	0.554	7.20	2.31	6.26	102.9		
1435	9.15	250	17.44	0.551	7.21	1.59	6.43	98.9		
1440	9.53	250	17.31	0.554	7.20	1.55	16.6	96.6		
1445	9.75	325	17.09	0.561	7.20	1.61	15.5	93.7		
1450	9.98	325	16.90	0.571	7.22	1.30	13.6	90.5		
1455	10.21	325	16.70	0.574	7.23	1.13	27.7	87.3		
1500	Purged	well	dry							
0832	Initial DTW = 6.71	→	Begin	Purging						→ 7/10/12
0837	7.04	130	16.58	0.722	7.29	3.60	22.6	125.9		
0842	7.18	130	16.82	0.700	7.31	3.99	11.6	130.9		
0847	7.35	130	16.78	0.682	7.33	4.02	9.37	132.5		
0852	7.48	130	16.93	0.650	7.34	4.38	9.30	126.9		→ Lowest Pumping Rate
FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])			17	0.625	7.4	5.1	8.9	110		

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED	
X PERISTALTIC	X LIQUINOX	X SILICON TUBING	☐ S. STEEL PUMP MATERIAL	X WL METER	Solinst 100' probe
☐ SUBMERSIBLE	X DEIONIZED WATER	☐ TEFLON TUBING	☐ PVC PUMP MATERIAL	☐ PID	
☐ BLADDER	☐ POTABLE WATER	☐ TEFLON LINED TUBING	☐ GEOPROBE SCREEN	X WQ METER	YSI MPS 556
☐ WATTERA	☐ NITRIC ACID	☐ HDPE TUBING	☐ TEFLON BLADDER	X TURB. METER	Hach 2100P
	☐ HEXANE	X LDPE TUBING	X OTHER None	X PUMP	Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3x40mL	✓	✓	See above

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	X	
NO-PURGE METHOD UTILIZED		X

NUMBER OF GALLONS GENERATED: —

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES

purged well dry and sampled
recharge next day

Sampler Signature: [signature] Print Name: Ryan Markowski

Checked By: [signature] Date: 7/30/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing RD		LOCATION ID: MPE-5	DATE: July 10, 2012
PROJECT NUMBER: 3612112216-03.01	7/10	START TIME: 0830	END TIME: 0920
SAMPLE ID: 828103-MPE05010	SAMPLE TIME: 0915	SITE NAME/NUMBER: 828106	PAGE: 2 OF 2

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [✓] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP): [✓] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED			✓
COLLAR	✓		

INITIAL DTW (BMP)	6.71 FT (7/10/12)	FINAL DTW (BMP)	7.87 FT (7/10/12)	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	6.2" FT
WELL DEPTH (BMP)	10.5 FT	SCREEN LENGTH (Historical)	9.5 FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	3.79 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	2.5 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
	BEGIN PURGING									
0857	7.56	110	17.05	0.633	7.35	4.81	8.88	125.2		
0902	7.66	110	17.14	0.628	7.35	4.94	9.55	119.2		
0907	7.79	110	17.18	0.626	7.35	4.87	8.45	113.7		
0912	7.87	110	17.19	0.625	7.35	5.10	8.89	110.3		
0915	SAMPLE TIME								~9.5' btw	

FROM 7/10/12

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

	17	0.625	7.4	5.1	8.9	110

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED	
[X] PERISTALTIC	[✓] LIQUINOX	[X] SILICON TUBING	[ ] S. STEEL PUMP MATERIAL	[X] WL METER	Solinst 100' probe
[ ] SUBMERSIBLE	[✓] DEIONIZED WATER	[ ] TEFLON TUBING	[ ] PVC PUMP MATERIAL	[ ] PID	
[ ] BLADDER	[ ] POTABLE WATER	[ ] TEFLON LINED TUBING	[ ] GEOPROBE SCREEN	[X] WQ METER	YSI MPS 556
[ ] WATTERA	[ ] NITRIC ACID	[ ] HDPE TUBING	[ ] TEFLON BLADDER	[X] TURB. METER	Hach 2100P
	[ ] HEXANE	[X] LDPE TUBING	[X] OTHER None	[X] PUMP	Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	Volatile Organic Compound	8260B	N	HCl/4 C	3x40ml	✓	-0	See above

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[X]	[ ]
NO-PURGE METHOD UTILIZED	[ ]	[X]

NUMBER OF GALLONS GENERATED: ~5

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES

See updated figure

Sampler Signature: Print Name: Ryan Markowski

Checked By: Charles H Date: 7/30/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing RD	LOCATION ID: MPE-6
PROJECT NUMBER: 3612112216-03.01	DATE: July 10, 2012
SAMPLE ID: 828103-MPE6010	SAMPLE TIME: 0940
START TIME: 0805	END TIME: 0945
SITE NAME/NUMBER: 828106	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [X] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP): [X] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	7.28 FT	FINAL DTW (BMP)	7.53 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.55 FT
WELL DEPTH (BMP)	10.7 FT	SCREEN LENGTH	Unknown FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	3.4 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	<0.1 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	0.5 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	~8 GAL	DRAWDOWN/ TOTAL PURGED	<0.1	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
0814	BEGIN PURGING									
0820	7.87	~1000	17.14	0.493	6.79	2.15	13.6	232.5	~10'	
0825	8.41	~1000	17.41	0.549	6.85	1.78	40.0	207.7		
0830	8.62	~1000	17.59	0.590	6.97	1.37	3.68	188.6		
0835	8.65	~1000	17.68	0.607	7.03	1.14	2.24	172.6		purged ~5 gallons
0840	8.68	~150	17.72	0.610	7.06	1.01	1.91	164.2		
0845	7.75	~175	18.30	0.627	7.11	0.81	0.78	146.2		
0850	7.58	175	18.39	0.629	7.11	0.93	0.59	132.6		
0855	7.55	175	18.43	0.627	7.11	1.01	0.46	126.2		
0900	7.54	175	18.39	0.626	7.11	1.13	0.44	119.0		
0905	7.53	175	18.38	0.626	7.12	1.11	0.47	111.7		
0910	7.53	175	18.35	0.625	7.11	1.16	0.43	104.5		
0915	7.53	175	18.40	0.625	7.12	1.17	0.35	99.10		
0920	7.53	175	18.38	0.625	7.12	1.16	0.36	93.5		
0925	7.53	175	18.40	0.626	7.12	1.07	0.43	88.10		
0930	7.53	175	18.41	0.627	7.12	1.10	0.33	84.0		
0935	7.53	175	18.42	0.627	7.12	1.05	0.33	81.6		
	FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])		18	0.627	7.1	1.1	0.33	82		

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED	
[X] PERISTALTIC	[X] LIQUINOX	[X] SILICON TUBING	[ ] S. STEEL PUMP MATERIAL	[X] WL METER	Solinst 100' probe
[ ] SUBMERSIBLE	[X] DEIONIZED WATER	[ ] TEFLON TUBING	[ ] PVC PUMP MATERIAL	[ ] PID	
[ ] BLADDER	[ ] POTABLE WATER	[ ] TEFLON LINED TUBING	[ ] GEOPROBE SCREEN	[X] WQ METER	YSI MPS 556
[ ] WATTERA	[ ] NITRIC ACID	[ ] HDPE TUBING	[ ] TEFLON BLADDER	[X] TURB. METER	Hach 2100P
	[ ] HEXANE	[X] LDPE TUBING	[X] OTHER None	[X] PUMP	Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	Volatile Organic Compound	8260B	N	HCl/4 C	3x40ml	✓	No	See above
[ ]								
[ ]								

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[X]	[ ]
NO-PURGE METHOD UTILIZED	[ ]	[X]

NUMBER OF GALLONS GENERATED: ~8

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES: see updated figure

Sampler Signature: [signature] Print Name: Brandon Shaw

Checked By: Charles H. Lyon Date: 7/31/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME		LOCATION ID	DATE
Dinaburg Distributing RD		MPE-7	July 9, 2012 & July 10, 2012
PROJECT NUMBER		**START TIME**	**END TIME**
3612112216-03.01		1120	1335
SAMPLE ID	**SAMPLE TIME**	**SITE NAME/NUMBER**	**PAGE**
828107-MPE07010	1710 (07-10-12)	828106	1 OF 2

WELL DIAMETER (INCHES): ☐ 1 ☐ 2 ☒ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED		✓	
COLLAR	✓		

INITIAL DTW (BMP)	7.17 FT	FINAL DTW (BMP)	Dry FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.67 FT
WELL DEPTH (BMP)	10.2 FT	SCREEN LENGTH	unknown FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	~3 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	— GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	~2 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	~5 GAL	DRAWDOWN/ TOTAL PURGED	—	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1145	BEGIN PURGING									
1150	7.41	120	18.62	0.690	6.76	1.40	623	3.3	~10'	
1155	7.48	120	18.87	0.673	6.74	2.29	>1000	1.14		
1200	7.81	425	17.53	0.659	6.61	2.69	289	23.7		
1205	7.99	100	17.87	0.666	6.63	3.47	165	33.4		
1210	8.05	425	19.21	0.672	6.66	2.12	167	35.3		
1215	8.37	425	18.32	0.670	6.67	1.92	128	37.6		
1220	8.50	425	17.92	0.639	6.70	1.70	202	35.1		
1225	8.49	100	19.19	0.668	6.71	1.46	225	34.2		
1230	8.53	100	19.82	0.674	6.75	1.41	175	32.1		
1235	8.73	425	18.01	0.681	6.70	4.32	213	36.0		
1240	9.12	425	17.56	0.683	6.67	5.28	71000	39.4		
1250	9.51	100	16.70	0.747	6.78	1.37	71000	44.5		
1255	9.37	100	18.86	0.794	6.86	1.31	71000	11.2		
1300	9.36	100	18.40	0.797	6.88	1.28	565	11.9		
1305	9.44	100	18.48	0.811	6.89	1.12	312	12.3		
1310	9.48	400	18.51	0.851	6.87	1.09	215	14.4		

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

	CWL	CWL	CWL	CWL	CWL	CWL	CWL
NA	~~19~~	~~0.851~~	~~6.9~~	~~1.1~~	~~215~~	~~44~~	

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP		DECON FLUIDS USED		TUBING/PUMP/BLADDER MATERIALS				EQUIPMENT USED	
X	PERISTALTIC	✓	LIQUINOX	X	SILICON TUBING		S. STEEL PUMP MATERIAL	X	WL METER: Solinst 100' probe
	SUBMERSIBLE	✓	DEIONIZED WATER		TEFLON TUBING		PVC PUMP MATERIAL		PID:
	BLADDER		POTABLE WATER		TEFLON LINED TUBING		GEOPROBE SCREEN	X	WQ METER: YSI MPS 556
			NITRIC ACID		HDPE TUBING		TEFLON BLADDER	X	TURB. METER: Hach 2100P
	WATTERA		HEXANE	X	LDPE TUBING	X	OTHER: None	X	PUMP: Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3 X 40ml	✓	NO	See above

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	X	
NO-PURGE METHOD UTILIZED		X

NUMBER OF GALLONS GENERATED: ~5

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES: purged well dry & collected the recharge

Sampler Signature: [signature] Print Name: Brandon Shaw

Checked By: Charles H. Lee Date: 7/31/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing RD		LOCATION ID: MPE-7	DATE: July 9, 2012 & July 10, 2012
PROJECT NUMBER: 3612112216-03.01		START TIME: 1126	END TIME: 1335
SAMPLE ID: 828103-MPE07010	SAMPLE TIME: 1716 (07-10-12)	SITE NAME/NUMBER: 828106	PAGE: 2 OF 2

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [X] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP): [X] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED		✓	
COLLAR	✓		

INITIAL DTW (BMP)	7.17 FT	FINAL DTW (BMP)	Dry FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.67 FT
WELL DEPTH (BMP)	10.2 FT	SCREEN LENGTH	unknown FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	~3 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	— GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	~2 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	~5 GAL	DRAWDOWN/ TOTAL PURGED	—	PRESSURE TO PUMP	NA PSI

Date

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1312	~~BEGIN PURGING~~ BAS		Continued	from	page	1	of			
7-9-12 1315	9.76	400	16.78	0.795	6.84	0.87	317	11.4	~10'	
1320	10.1	400	16.76	0.829	6.79	1.18	>1000	11.7	↓	
— 1322	pump	off - well dry	—	—	—	—	—	—		
1640	7.27	—	—	—	—	—	—	—	~10'	
7-10-12 1650	7.27	pump	on @	MPE-7	—	—	—	—		
1655	7.67	~150	16.84	1.572	6.98	3.81	228	18.1		
1700	8.12	~150	16.54	1.275	6.84	1.07	>1000	7.6		
1705	8.49	~150	17.01	1.161	6.81	1.36	—	1.7		
1710	collected	VOC	grab	sample	@	MPE-7	—	—		

BAS

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

NA	—			215	14	

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED
[X] PERISTALTIC	[X] LIQUINOX	[X] SILICON TUBING	[ ] S. STEEL PUMP MATERIAL	[X] WL METER Solinst 100' probe
[ ] SUBMERSIBLE	[X] DEIONIZED WATER	[ ] TEFLON TUBING	[ ] PVC PUMP MATERIAL	[ ] PID
[ ] BLADDER	[ ] POTABLE WATER	[ ] TEFLON LINED TUBING	[ ] GEOPROBE SCREEN	[X] WQ METER YSI MPS 556
[ ] WATTERA	[ ] NITRIC ACID	[ ] HDPE TUBING	[ ] TEFLON BLADDER	[X] TURB. METER Hach 2100P
	[ ] HEXANE	[X] LDPE TUBING	[X] OTHER None	[X] PUMP Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	Volatile Organic Compound	8260B	N	HCl/4°C	3 x 40ml	✓		See above
[ ]								
[ ]								

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[X]	[ ]
NO-PURGE METHOD UTILIZED	[ ]	[X]

NUMBER OF GALLONS GENERATED: ~5

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES

Sampler Signature: Print Name: Brandon Shaw

Checked By: Date: 7/31/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME		LOCATION ID	DATE
Dinaburg Distributing RD		MPE-8	July 17, 2012
PROJECT NUMBER		START TIME	END TIME
3612112216-03.01		1520	1605
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
828103-MPE08010	1605	828106	1 OF 1

WELL DIAMETER (INCHES): ☐ 1 ☐ 2 ☒ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☑ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED			✓
COLLAR	✓		

INITIAL DTW (BMP)	7.51 FT	FINAL DTW (BMP)	~~7.0~~ 7.66 FT	PROT. CASING STICKUP (AGS)	FLUSH FT	TOC/TOR DIFFERENCE	6.5 IN
WELL DEPTH (BMP)	10.00 FT	SCREEN LENGTH (Historic)	7.0 FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	2.49 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	0.1 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.6 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.8 GAL	DRAWDOWN/ TOTAL PURGED	0.04	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1520	BEGIN PURGING									
1525	7.62	425	18.08	1.120	7.16	0.58	7.12	-56.1		
1530	7.69	425	18.32	0.841	7.13	0.47	3.60	14.5		
1535	7.70	450	18.45	0.803	7.13	0.58	2.20	30.4		
1540	7.64	175	19.05	0.785	7.13	0.66	4.23	28.0		
1545	7.64	175	19.22	0.779	7.13	0.68	3.22	21.7		
1550	7.65	175	19.06	0.776	7.13	0.70	4.12	20.0		
1555	7.65	175	19.19	0.773	7.13	0.69	2.05	20.7		
1600	7.66	175	19.22	0.770	7.13	0.67	1.65	21.6	↓	
1605	Samples Collected								2	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

19	0.770	7.1	0.7	1.7	22	

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS			EQUIPMENT USED	
X PERISTALTIC	X LIQUINOX	X SILICON TUBING	☐ S. STEEL PUMP MATERIAL	X	WL METER	Solinst 100' probe
☐ SUBMERSIBLE	X DEIONIZED WATER	☐ TEFLON TUBING	☐ PVC PUMP MATERIAL	☐	PID	
☐ BLADDER	☐ POTABLE WATER	☐ TEFLON LINED TUBING	☐ GEOPROBE SCREEN	X	WQ METER	YSI MPS 556
☐ _____	☐ NITRIC ACID	☐ HDPE TUBING	☐ TEFLON BLADDER	X	TURB. METER	Hach 2100P
☐ WATTERA	☐ HEXANE	X LDPE TUBING	X OTHER None	X	PUMP	Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3x 40mL	YES	NO	See above

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	X	
NO-PURGE METHOD UTILIZED		X

NUMBER OF GALLONS GENERATED: 2.8

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES

see updated figure

Sampler Signature: [signature] Print Name: Millard

Checked By: RCH 7/30/12 Date: 7/9/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing RD		LOCATION ID: MPE-9	DATE: July 10, 2012 / July, 11, 2012
PROJECT NUMBER: 3612112216-03.01		START TIME: 0945 / 0951	END TIME: 1101 / 1032
SAMPLE ID: 828103MPE09	SAMPLE TIME: 1028 (7-11-12)	SITE NAME/NUMBER: 828106	PAGE: 1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [X] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP): [X] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	7.71 FT	FINAL DTW (BMP)	10.25 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	NM FT
WELL DEPTH (BMP)	10.25 FT	SCREEN LENGTH (Historical)	10.00 FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	2.54 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	1.67 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.67 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	3.26 GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
7/10/12 1000	BEGIN PURGING									
1003	7.84	180	20.13	0.656	7.04	2.12	837	-8.9		
1008	7.92	110	20.18	0.646	7.06	3.17	304	4.0		
1013	8.02	110	20.36	0.639	7.08	3.56	118	-1.3		
1018	8.10	115	20.31	0.635	7.06	3.71	88.3	-5.0		
1023	8.18	110	20.42	0.631	7.06	4.11	56.9	-5.5		
1028	8.31	120	19.86	0.628	7.16	4.98	79.7	-4.2		
1033	8.44	260	19.20	0.629	7.17	4.53	50.7	-5.2		
1038	8.65	260	18.45	0.625	7.17	3.90	17.8	-10.5		
1043	8.86	250	18.38	0.625	7.20	4.02	6.70	-12.3		
1048	9.07	255	18.39	0.626	7.24	3.63	3.68	-13.9		
1053	9.45	420	17.55	0.626	7.35	6.72	16.0	-17.2		
1058	9.85	405	17.40	0.628	7.45	7.03	207	-17.8		
1010	Began Purging									
7/11/12 1014	9.16	150	19.27	0.676	6.89	4.87	328	-31.3		
1019	9.27	125	19.47	0.672	6.90	4.45	76.9	-27.3		
1024	9.42	125	19.31	0.673	6.93	3.96	45.7	-32.1		

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

(NM) 19.3	0.673	(NM) 7.0	4.0	45.7	-32	

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

19 6.9

EQUIPMENT DOCUMENTATION

TYPE OF PUMP		DECON FLUIDS USED		TUBING/PUMP/BLADDER MATERIALS				EQUIPMENT USED	
[X]	PERISTALTIC	[X]	LIQUINOX	[X]	SILICON TUBING	[ ]	S. STEEL PUMP MATERIAL	[X]	WL METER: Solinst 100' probe
[ ]	SUBMERSIBLE	[X]	DEIONIZED WATER	[ ]	TEFLON TUBING	[ ]	PVC PUMP MATERIAL	[ ]	PID:
[ ]	BLADDER	[ ]	POTABLE WATER	[ ]	TEFLON LINED TUBING	[ ]	GEOPROBE SCREEN	[X]	WQ METER: YSI MPS 556
[ ]	WATTERA	[ ]	NITRIC ACID	[ ]	HDPE TUBING	[ ]	TEFLON BLADDER	[X]	TURB. METER: Hach 2100P
		[ ]	HEXANE	[X]	LDPE TUBING	[X]	OTHER: None	[X]	PUMP: Geopump

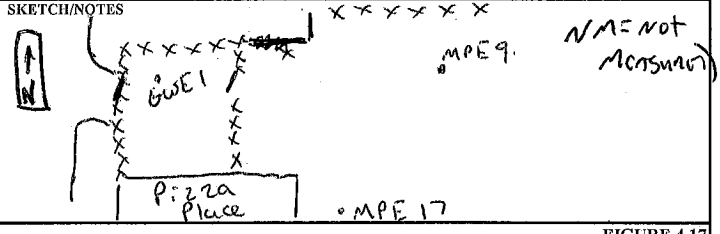
ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	Volatile Organic Compound	8260B	N	HCl/4 C	3 X 40ml	Y	N	See above
[ ]								
[ ]								

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED	YES [X]	NO [ ]	NUMBER OF GALLONS GENERATED	~3.3
NO-PURGE METHOD UTILIZED	YES [ ]	NO [X]	If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.	

SKETCH/NOTES



Sampler Signature: Jeri L. Kiburz Print Name: Jeri Kiburz

Checked By: RCM Date: 7/30/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME		LOCATION ID	DATE
Dinaburg Distributing RD		MPE-10	July 10, 2012
PROJECT NUMBER		START TIME	END TIME
3612112216-03.01		0950	0935 — 7/11/12
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
828103-MPE01010 — 7/11/12	0930	828106	1 OF 2

WELL DIAMETER (INCHES): ☐ 1 ☐ 2 ☑ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☑ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED			✓
COLLAR	✓		

INITIAL DTW (BMP)	8.96 FT	FINAL DTW (BMP) 7/11/12	8.73 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	0.55 FT — PVC below TOC
WELL DEPTH (BMP)	11.75 FT	SCREEN LENGTH (historical)	9.0 FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	4.79 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	3.14 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
0956	BEGIN PURGING									
0959	7.21	120	17.24	0.661	6.81	1.72	5.33	130.4		
1006	7.33	120	17.31	0.660	6.80	1.23	2.42	121.8		
1011	7.46	120	17.58	0.661	6.81	1.12	2.29	122.3		
1016	7.58	120	17.94	0.661	6.81	1.14	1.95	111.6		
1021	7.66	120	17.97	0.661	6.80	1.13	2.06	105.9		
1026	7.76	120	18.00	0.662	6.80	1.10	2.27	99.7		
1031	7.85	120	18.05	0.662	6.80	1.03	2.39	93.5		120ml/min is
1036	7.95	120	18.30	0.663	6.80	0.99	1.99	90.0		the lowest possible
1041	8.05	120	18.46	0.661	6.81	0.80	1.08	85.9		pumping rate
1046	8.14	120	18.38	0.658	6.82	0.64	0.93	83.0		
1051	8.23	120	18.33	0.655	6.84	0.51	0.77	79.1		
1056	8.33	130	18.39	0.654	6.84	0.45	0.75	76.2		
1101	8.42	130	18.39	0.653	6.84	0.39	0.95	72.8		
1106	8.52	130	18.24	0.654	6.84	0.42	0.71	71.6		
1111	8.62	130	18.24	0.653	6.84	0.40	0.59	68.7		
1116	8.72	130	18.24	0.653	6.84	0.40	0.67	66.6		
	FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])									

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP		DECON FLUIDS USED		TUBING/PUMP/BLADDER MATERIALS				EQUIPMENT USED	
X	PERISTALTIC	✓	LIQUINOX	X	SILICON TUBING		S. STEEL PUMP MATERIAL	X	WL METER Solinst 100' probe
	SUBMERSIBLE	✓	DEIONIZED WATER		TEFLON TUBING		PVC PUMP MATERIAL		PID
	BLADDER		POTABLE WATER		TEFLON LINED TUBING		GEOPROBE SCREEN	X	WQ METER YSI MPS 556
			NITRIC ACID		HDPE TUBING		TEFLON BLADDER	X	TURB. METER Hach 2100P
	WATTERA		HEXANE	X	LDPE TUBING	X	OTHER Nono	X	PUMP Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3x40ml	yes	✓	See above

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	X	
NO-PURGE METHOD UTILIZED		X

NUMBER OF GALLONS GENERATED: ~

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES

Collected Grab Sample

Sampler Signature: Print Name: Ryan Markowski.

Checked By: Date: 7/30/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing RD	LOCATION ID: MPE-10
PROJECT NUMBER: 3612112216-03.01	START TIME: 0950
SAMPLE ID: 828103-MPE01010	SAMPLE TIME: 0930 (07-11-12)
SITE NAME/NUMBER: 828106	END TIME: 0935 — 7/11/12
	DATE: July 10, 2012
	PAGE: 2 OF 2

WELL DIAMETER (INCHES): ☐ 1 ☐ 2 ☑ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☑ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED			✓
COLLAR	✓		

INITIAL DTW (BMP)	6.96 FT	FINAL DTW (BMP) 7/11/12	8.73 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	0.55 FT (PVC Collar TOC)
WELL DEPTH (BMP)	11.75 FT	SCREEN LENGTH (Screen)	9.0 FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	4.79 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	3.14 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
	BEGIN PURGING									
1121	8.83	130	18.23	0.653	6.84	0.41	0.55	63.4		
1126	8.93	130	18.19	0.650	6.84	0.38	0.81	61.8		
1131	9.03	130	18.29	0.649	6.85	0.38	0.91	58.9		
1136	9.13	130	18.13	0.648	6.85	0.37	0.69	55.8		
1138	Begin Purging Well Dry									
1210	— 3 Purges MPE-10 Dry									
7/12/12 0825	8.03									
0906	Begin Purging MPE-10									
0911	8.32	140	16.49	0.651	6.83	4.75	4.82	210.8		
0916	8.44	140	16.61	0.650	6.83	4.46	4.77	198.2		
0921	8.58	140	16.80	0.649	6.83	4.48	4.99	186.1		
0926	8.70	140	16.90	0.647	6.83	4.59	8.89	173.3		
0930	Samples Collected									
									~10' btoc	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

	NA					

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS	EQUIPMENT USED
☒ PERISTALTIC	☒ LIQUINOX	☒ SILICON TUBING	☒ WL METER Solinst 100' probe
☐ SUBMERSIBLE	☒ DEIONIZED WATER	☐ TEFLON TUBING	☐ PID
☐ BLADDER	☐ POTABLE WATER	☐ TEFLON LINED TUBING	☒ WQ METER YSI MPS 556
☐ WATTERA	☐ NITRIC ACID	☐ HDPE TUBING	☒ TURB. METER Hach 2100P
	☐ HEXANE	☒ LDPE TUBING	☒ PUMP Geopump
		☒ S. STEEL PUMP MATERIAL	
		☐ PVC PUMP MATERIAL	
		☐ GEOPROBE SCREEN	
		☐ TEFLON BLADDER	
		☒ OTHER None	

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3x40ml	yes	✓	See above

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	X	
NO-PURGE METHOD UTILIZED		X

NUMBER OF GALLONS GENERATED: ~

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES: Collected Grab Samples

Sampler Signature: Print Name: Ryan Markowski

Checked By: Charles H. Flynn Date: 7/30/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing RD		LOCATION ID: MPE-11	DATE: July 9, 2012
PROJECT NUMBER: 3612112216-03.01		START TIME: 1655	END TIME: 0810
SAMPLE ID: 828103-MPE11010	SAMPLE TIME: 0805 (07-11-12)	SITE NAME/NUMBER: 828106	PAGE: 1 OF 1

started 7/11/12 END

WELL DIAMETER (INCHES): ☐ 1 ☐ 2 ☑ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

7/11/12 MEASUREMENT POINT (MP): ☑ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED			✓
COLLAR	✓		

7.41 PVC 3.61ow TOC

INITIAL DTW (BMP)	7.29 FT	FINAL DTW (BMP)	8.35 FT (7/11/12)	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	0.46 FT
WELL DEPTH (BMP)	8.74 FT	SCREEN LENGTH (Historical)	4.0 FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	1.45 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	0.95 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown.	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
7/9/12 1703	BEGIN PURGING									
1706	7.52	120	19.36	0.704	6.82	2.77	7.09	55.0		
1713	7.70	120	19.44	0.698	6.76	2.13	6.24	33.8		
1718	7.80	120	19.85	0.703	6.80	1.42	4.82	22.4		
1723	7.85	120	20.03	0.704	6.80	1.35	4.75	13.1		
1728	8.00	120	21.34	0.705	6.81	1.27	7.92	16.4		
1733	8.05	120	18.71	0.707	6.79	2.01	19.5	16.0		
1738	8.26	100	18.70	0.706	6.78	1.53	15.1	11.4		
1743	8.37	100	18.84	0.715	6.79	1.50	10.6	9.8		
1748	8.47	100	19.26	0.720	6.81	1.24	8.89	11.0		
1753	8.60	100	19.34	0.721	6.85	1.00	6.67	13.3		
1758	8.78	100	19.32	0.723	6.85	0.95	5.60	9.1		
1800	8.74	→	Well Went Purged			DRY				
7/11/12 0740	7.41	→ 8.74-7.29 = 1.45 X 0.90 = 1.305						→ 8.74-1.305	7.44	
0745	→ Began Purging									
0750	7.75	100	17.80	0.736	6.84	5.10	34.8	224.8		
0755	7.89	100	18.02	0.712	6.85	3.89	22.7	222.0		
FINAL STABILIZED FIELD PARAMETERS (~~to appropriate significant figures~~[SF])										TEMP.: nearest degree (ex. 10.1 = 10) COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696) pH: nearest tenth (ex. 5.53 = 5.5) DO: nearest tenth (ex. 3.51 = 3.5) TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101) ORP: 2 SF (44.1 = 44, 191 = 190)
0800	8.00	100	18.14	0.698	6.84	3.91	17.3	228.1		

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED
☒ PERISTALTIC	☐ LIQUINOX	☒ SILICON TUBING	☐ S. STEEL PUMP MATERIAL	☒ WL METER: Solinst 100' probe
☐ SUBMERSIBLE	☐ DEIONIZED WATER	☐ TEFLON TUBING	☐ PVC PUMP MATERIAL	☐ PID:
☐ BLADDER:	☐ POTABLE WATER	☐ TEFLON LINED TUBING	☐ GEOPROBE SCREEN	☒ WQ METER: YSI MPS 556
	☐ NITRIC ACID	☐ HDPE TUBING	☐ TEFLON BLADDER	☒ TURB. METER: Hach 2100P
☐ WATTERA	☐ HEXANE	☒ LDPE TUBING	☒ OTHER: None	☒ PUMP: Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3 x 40 mL	✓		See above
✓	"	"	"	"	"	✓	yes	Dup

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	X	
NO-PURGE METHOD UTILIZED		X

NUMBER OF GALLONS GENERATED: \

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES

- Collected Duplicate
- purged well dry; collected sample of recharged ; two days after

Sampler Signature: Print Name: Ryan Markowski

Checked By: Date: 7/30/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME		LOCATION ID	DATE
Dinaburg Distributing RD		MPE 12	July 11, 2012
PROJECT NUMBER		START TIME	END TIME
3612112216-03.01		8:40	9:10
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
828103-MPE12010	910	828106	2 OF 2

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [X] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP): [ ] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	7.31 FT	FINAL DTW (BMP)	8.40 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	FT
WELL DEPTH (BMP)	10.00 FT	SCREEN LENGTH (Historical)	4.0 FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	2.7 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	— GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.8 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	— GAL	DRAWDOWN/ TOTAL PURGED	—	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
845	BEGIN PURGING									
850	7.70	150	17.30	0.583	7.27	4.07	59.2	160.6		
855	7.91	150	17.40	0.549	7.30	3.87	55.2	156.7		
900	8.10	150	17.45	0.544	7.31	3.78	60.1	157.9		
905	8.40	150	17.47	0.540	7.33	3.73	40.4	152.7		
0910	Samples Collected									

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

17	0.540	7.3	3.7	40.4	150	

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED	
[X] PERISTALTIC	[ ] LIQUINOX	[X] SILICON TUBING	[ ] S. STEEL PUMP MATERIAL	[X] WL METER	Solinst 100' probe
[ ] SUBMERSIBLE	[ ] DEIONIZED WATER	[ ] TEFLON TUBING	[ ] PVC PUMP MATERIAL	[ ] PID	
[ ] BLADDER	[ ] POTABLE WATER	[ ] TEFLON LINED TUBING	[ ] GEOPROBE SCREEN	[X] WQ METER	YSI MPS 556
[ ] WATTERA	[ ] NITRIC ACID	[ ] HDPE TUBING	[ ] TEFLON BLADDER	[X] TURB. METER	Hach 2100P
	[ ] HEXANE	[X] LDPE TUBING	[X] OTHER None	[X] PUMP	Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3X40ml	Yes	NO	See above

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	X	
NO-PURGE METHOD UTILIZED		X

NUMBER OF GALLONS GENERATED: —

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES

purged well dry; collected recharge sample on July 11, 2012.

[redacted] - Missing page 1

Sampler Signature: [signature] Print Name: Miller

Checked By: [signature] Date: 7-11-12 7/11/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME		LOCATION ID	DATE
Dinaburg Distributing RD		MPE-13	July 10, 2012
PROJECT NUMBER		START TIME	END TIME
3612112216-03.01		1240	1005
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
828103-MPE13010	1000	828106	1 OF 2

7/11/12

WELL DIAMETER (INCHES): ☐ 1 ☐ 2 ☑ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☑ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED			✓
COLLAR	✓		

INITIAL DTW (BMP)	6.65 FT	FINAL DTW (BMP) 7/11/12	8.75 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	~0.45 FT (Arc Bolt TOC)
WELL DEPTH (BMP)	10.54 FT	SCREEN LENGTH (Historical)	5.0 FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	3.89 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	\ GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	2.55 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	\ GAL	DRAWDOWN/ TOTAL PURGED	\	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1250	BEGIN PURGING									
1255	6.93	100	17.54	0.639	6.92	3.59	40.5	10.7		
1300	7.03	100	17.59	0.637	6.94	3.23	39.8	-0.8		
1305	7.17	100	17.46	0.636	6.93	3.22	37.4	0.5		
1310	7.28	110	17.52	0.635	6.93	3.18	35.8	5.8		
1315	7.41	110	17.48	0.634	6.94	3.15	18.2	7.9		
1320	7.51	100	17.46	0.633	6.94	3.14	11.8	10.3		
1325	7.64	100	17.57	0.633	6.94	3.10	9.58	13.9		
1330	7.72	100	17.66	0.634	6.95	3.09	10.2	13.9		
1335	7.83	100	17.64	0.634	6.94	3.10	9.41	14.6		
1340	7.94	100	17.66	0.634	6.94	3.06	8.67	16.8		
1345	8.05	110	17.63	0.634	6.97	3.03	8.10	14.3		
1350	8.15	110	17.68	0.632	6.98	2.94	7.75	11.9		
1355	8.26	110	17.79	0.630	7.01	2.84	6.20	6.6		
1400	8.36	110	17.65	0.631	7.08	2.70	6.07	-5.5		
1403	Began Purging well DRY									
1424	Purged w/ well DRY									

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP		DECON FLUIDS USED		TUBING/PUMP/BLADDER MATERIALS				EQUIPMENT USED	
X	PERISTALTIC	X	LIQUINOX	X	SILICON TUBING		S. STEEL PUMP MATERIAL	X	WL METER Solinst 100' probe
	SUBMERSIBLE	X	DEIONIZED WATER		TEFLON TUBING		PVC PUMP MATERIAL		PID
	BLADDER		POTABLE WATER		TEFLON LINED TUBING		GEOPROBE SCREEN	X	WQ METER YSI MPS 556
			NITRIC ACID		HDPE TUBING		TEFLON BLADDER	X	TURB. METER Hach 2100P
	WATTERA		HEXANE	X	LDPE TUBING	X	OTHER None	X	PUMP Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3x40mL	yes	no	See above

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	X	
NO-PURGE METHOD UTILIZED		X

NUMBER OF GALLONS GENERATED: —

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES

- purged well dry on July 10, 2012;
- collected recharge sample on July 11, 2012

Sampler Signature: [signature] Print Name: Ryan Markowski

Checked By: [signature] Date: 7/30/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Dinaburg Distributing RD
PROJECT NUMBER	3612112216-03.01
SAMPLE ID	828103-MPE13010
SAMPLE TIME	1000
LOCATION ID	MPE-13
DATE	July 11, 2012
START TIME	1240
END TIME	1005
SITE NAME/NUMBER	828106
PAGE	2 OF 2

7/11/12

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [✓] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP): [✓] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED			✓
COLLAR	✓		

INITIAL DTW (BMP) 7/11/12	8.10 FT	FINAL DTW (BMP) 7/11/12	8.75 FT	PROT. CASING STICKUP (AGS)	flush FT	TOC/TOR DIFFERENCE	0.45 FT (PVC below TOC)
WELL DEPTH (BMP)	10.54 FT	SCREEN LENGTH	5.0 FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	2.44 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.60 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
0942	BEGIN PURGING									
0947	8.34	135	16.78	0.595	7.10	6.21	20.5	130.8		
0952	8.51	135	16.72	0.591	7.10	5.98	37.2	112.2		
0957	8.70	135	16.81	0.584	7.13	6.33	107	99.3		
1000	Samples Collected								~ 9 ft bTOR	

RCM 7/11/12

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF]) NA

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED	
[X] PERISTALTIC	[✓] LIQUINOX	[X] SILICON TUBING	[ ] S. STEEL PUMP MATERIAL	[X] WL METER	Solinst 100' probe
[ ] SUBMERSIBLE	[✓] DEIONIZED WATER	[ ] TEFLON TUBING	[ ] PVC PUMP MATERIAL	[ ] PID	
[ ] BLADDER	[ ] POTABLE WATER	[ ] TEFLON LINED TUBING	[ ] GEOPROBE SCREEN	[X] WQ METER	YSI MPS 556
[ ] WATTERA	[ ] NITRIC ACID	[ ] HDPE TUBING	[ ] TEFLON BLADDER	[X] TURB. METER	Hach 2100P
	[ ] HEXANE	[X] LDPE TUBING	[X] OTHER None	[X] PUMP	Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	Volatile Organic Compound	8260B	N	HCl/4 C	3x 40ml	yes	no	See above
[ ]								
[ ]								

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[X]	[ ]
NO-PURGE METHOD UTILIZED	[ ]	[X]

NUMBER OF GALLONS GENERATED: ~

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES: (collected) bottle Sample

Sampler Signature: Print Name: Ryan Markowski

Checked By: Charles H. Nye Date: 7/20/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME		LOCATION ID		DATE	
Dinaburg Distributing RD		MPE-14		July 10, 2012	
PROJECT NUMBER		START TIME		END TIME	
3612112216-03.01		1500		1610	
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER		PAGE	
B2B103-MPE14010	1605	828106		1 OF 1	

▲ Sample ID B2B103-MPE14010

WELL DIAMETER (INCHES): ☐ 1 ☐ 2 ☒ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☑ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED	X		
COLLAR	X		

INITIAL DTW (BMP)	6.89 FT	FINAL DTW (BMP)	7.34 FT	PROT. CASING STICKUP (AGS)	Flush FT	TOC/TOR DIFFERENCE	-.46 FT
WELL DEPTH (BMP)	9.60 CHK FT	SCREEN LENGTH	5 FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	2.71 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	0.3 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.78 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.5 GAL	DRAWDOWN/ TOTAL PURGED	0.2	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1515 CHK ~~1500~~	BEGIN PURGING									
1520	7.02	125	17.44	0.565	7.06	73.9	—	58.7		
1525	7.09	"	17.99	0.574	6.80	24.7	78.2	66.1		
1530	7.13	"	18.10	0.576	6.77	28.3	70.2	64.6		
1535	7.17	"	18.25	0.577	6.71	30.2	32.1	61.2		
1540	7.23	"	19.25	0.573	6.69	39.3	15.5	60.0		
1545	7.25	"	18.02	0.573	6.68	38.6	12.5	59.3		
1550	7.28	"	17.92	0.572	6.66	34.3	~~13.0~~	58.7		TURB 7.91
1555	7.32	"	17.92	0.571	6.66	29.4	CHK 7.90	58.0		
1600	7.34	"	17.89	0.571	6.66	29.8	7.85	57.7		
1605	Sampled								~8' btw	

Charles H Lym 7/10/12

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

18	0.571	6.7	30	7.9	58	

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED	
☒ PERISTALTIC	☐ LIQUINOX	☒ SILICON TUBING	☐ S. STEEL PUMP MATERIAL	☒ WL METER	Solinst 100' probe
☐ SUBMERSIBLE	☐ DEIONIZED WATER	☐ TEFLON TUBING	☐ PVC PUMP MATERIAL	☐ PID	
☐ BLADDER	☐ POTABLE WATER	☐ TEFLON LINED TUBING	☐ GEOPROBE SCREEN	☒ WQ METER	YSI MPS 556
☐ WATTERA	☐ NITRIC ACID	☐ HDPE TUBING	☐ TEFLON BLADDER	☒ TURB. METER	Hach 2100P
	☐ HEXANE	☒ LDPE TUBING	☒ OTHER None	☒ PUMP	Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3x40ml	Yes	NO	See above

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	X	
NO-PURGE METHOD UTILIZED		X

NUMBER OF GALLONS GENERATED: ~1.5

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES: see updated figure

Sampler Signature: Charles H Lym

Print Name: Charles H. Lyman

Checked By: RCM

Date: 7/16/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing RD		LOCATION ID: MPE-15	DATE: July 10, 2012 & July 11, 2012
PROJECT NUMBER: 3612112216-03.01		START TIME: 0950	END TIME: 10:00 7/11/12
SAMPLE ID: S28103-MPE15010	SAMPLE TIME: 9:50 (7-11-12)	SITE NAME/NUMBER: 828106	PAGE: 1 OF 1

WELL DIAMETER (INCHES): ☐ 1 ☐ 2 ☒ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED		✓	
COLLAR	✓		

INITIAL DTW (BMP)	7.44 FT	FINAL DTW (BMP)	Dry FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.43 FT
WELL DEPTH (BMP)	10.7 FT	SCREEN LENGTH	Unknown FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	3.3 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	– GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	2.2 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	4.6 GAL	DRAWDOWN/ TOTAL PURGED	–	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1012	BEGIN PURGING									
1020	8.45	~1000	15.71	0.673	6.79	3.11	136	66.3	~18'	
1025	9.25	~1000	16.19	0.672	6.72	3.01	83.8	76.4		
1030	10.05	~1000	15.79	0.671	6.77	2.40	29.3	78.8		
1035	10.41	~150	16.18	0.668	6.78	2.08	12.1	78.1		
1040	10.48	~150	16.68	0.668	6.81	2.06	7.75	76.3		
1045	7/10.5	130	16.90	0.667	6.80	2.27	10.5	74.6		
1050	7/10.5	130	17.48	0.665	6.76	3.42	39.4	79.8		
1052	Pump off; well dry @ MPE-15	–	–	–	–	–	–	–	–	
7/11/12	SAMPLE DATA								~10'	
8:07	INITIAL	9:25 START								
9:30	8.31	175	16.03	0.676	6.97	4.41	12.0	188.3		
9:35	8.57	175	16.10	0.672	6.95	3.62	12.6	191.5		
9:40	8.79	175	16.22	0.671	6.90	3.52	9.4	184.2		
9:45	9.05	175	16.41	0.670	6.93	3.47	57.7	174.8		

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

16	0.670	6.9	3.5	58	175	

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS	EQUIPMENT USED
☒ PERISTALTIC	☒ LIQUINOX	☒ SILICON TUBING	☒ WL METER: Solinst 100' probe
☐ SUBMERSIBLE	☒ DEIONIZED WATER	☐ TEFLON TUBING	☐ PID:
☐ BLADDER	☐ POTABLE WATER	☐ TEFLON LINED TUBING	☒ WQ METER: YSI MPS 556
☐ WATTERA	☐ NITRIC ACID	☐ HDPE TUBING	☒ TURB. METER: Hach 2100P
	☐ HEXANE	☒ LDPE TUBING	☒ PUMP: Geopump
		☒ OTHER: None	

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3x40ml	yes	No	See above

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	X	
NO-PURGE METHOD UTILIZED		X

NUMBER OF GALLONS GENERATED: ~4

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES: See updated figure

Sampler Signature: Print Name: Brandon Sherwood

Checked By: Date: 7/11/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Dinaburg Distributing RD
PROJECT NUMBER	3612112216-03.01
SAMPLE ID	828103-MPE1601O
SAMPLE TIME	1410
LOCATION ID	MPE-16
DATE	July 10, 2012
START TIME	1305
END TIME	1420
SITE NAME/NUMBER	828106
PAGE	1 OF 1

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [X] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP): [X] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	7.64 FT	FINAL DTW (BMP)	9.95 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.47 FT
WELL DEPTH (BMP)	11.4 FT	SCREEN LENGTH	Unknown FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	3.8 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	~1.4 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	~0.625 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	~4.5 GAL	DRAWDOWN/ TOTAL PURGED	~~0.31~~ 0.3 DR	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1309	BEGIN PURGING									
1320	8.68	~1000	16.12	1.109	6.95	0.69	197	26.7	~11'	
1325	9.31	~1000	16.26	1.107	6.98	1.02	160	20.4		
1330	10.05	~1000	15.86	1.100	6.99	0.57	183	18.1		
1335	9.97	~150	16.86	1.125	7.07	1.47	34.7	30.8		
1340	9.94	125	17.26	1.124	7.05	0.36	22.0	23.1		
1345	9.93	125	17.30	1.124	7.04	0.32	10.8	19.9		
1350	9.94	125	17.15	1.123	7.05	0.31	7.90	11.7		
1355	9.94	125	17.13	1.121	7.02	0.35	5.95	5.5		
1400	9.95	125	17.10	1.118	7.03	0.35	5.13	2.1		
1405	9.95	125	17.17	1.117	7.03	0.33	5.24	0.8		
1410	Collected VOC grab		Sample	—	—	—	—	—		

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

17	1.12	7.0	0.33	5.3	0.8	

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED
[X] PERISTALTIC	[X] LIQUINOX	[X] SILICON TUBING	[ ] S. STEEL PUMP MATERIAL	[X] WL METER Solinst 100' probe
[ ] SUBMERSIBLE	[X] DEIONIZED WATER	[ ] TEFLON TUBING	[ ] PVC PUMP MATERIAL	[ ] PID
[ ] BLADDER	[ ] POTABLE WATER	[ ] TEFLON LINED TUBING	[ ] GEOPROBE SCREEN	[X] WQ METER YSI MPS 556
[ ] WATTERA	[ ] NITRIC ACID	[ ] HDPE TUBING	[ ] TEFLON BLADDER	[X] TURB. METER Hach 2100P
	[ ] HEXANE	[X] LDPE TUBING	[X] OTHER None	[X] PUMP Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3 X 40 ml	✓	NO	See above

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	X	
NO-PURGE METHOD UTILIZED		X

NUMBER OF GALLONS GENERATED: ~4.5

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES

see updated figure

Sampler Signature: Print Name: Brandon Shaw

Checked By: Date: 7/31/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing RD		LOCATION ID: MPE-17	DATE: July 10, 2012 / July 11, 2012
PROJECT NUMBER: 3612112216-03.01		START TIME: 1257 / 0925	END TIME: 1550 / 0951
SAMPLE ID: 828103MPE17010	SAMPLE TIME: 0945 (07-11-12)	SITE NAME/NUMBER: 828106	PAGE: 1 OF 2

WELL DIAMETER (INCHES): ☐ 1 ☐ 2 ☒ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☑ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY

	YES	NO	N/A
CAP	X		
CASING	X		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	6.25 FT	FINAL DTW (BMP)	12.51 FT	PROT. CASING STICKUP (AGS)	NM FT	TOC/TOR DIFFERENCE	NM FT
WELL DEPTH (BMP)	13.25 FT	SCREEN LENGTH (Historical)	7.5 FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	7 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	4.4 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	4.59 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	5.58 GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1313	BEGIN PURGING									
1317	6.44	115	18.77	1.173	7.03	2.52	228	-22.8		
1322	6.56	120	18.82	1.166	7.03	1.87	152	-20.8		
1327	6.68	120	18.61	1.166	7.03	1.76	91.4	-20.3		
1332	6.85	190	17.82	1.163	7.03	1.81	44.1	-20.0		Increased purge rate
1337	~~6.~~ 7.04	230	17.53	1.161	7.04	1.66	22.9	-19.9		to reduce head
1342	7.26	235	17.77	1.158	7.04	1.93	(DW) 15.3	-19.0		to see if WL
1347	7.48	235	17.88	1.159	7.04	1.98	13.9	-18.6		would stabilize
1352	7.74	235	17.91	1.158	7.04	2.01	10.7	-18.6		
1357	8.21	310	17.64	1.163	7.05	1.79	10.8	-19.8		
1402	8.51	350	17.95	1.164	7.07	1.72	9.95	-21.4		
1407	8.75	325	17.98	1.167	7.08	1.55	11.3	-23.8		
1412	9.01	325	18.06	1.169	7.09	1.43	15.6	-24.7		
1417	9.26	340	17.91	1.166	7.09	1.31	9.28	-24.8		
1422	9.54	~~405~~ 330	17.89	1.146	7.09	0.94	8.44	-25.9		
1427	9.81	~~340~~ 405	17.62	1.121	7.09	0.80	6.47	-26.6		
1432	10.08	390	17.50	1.117	7.08	0.70	4.09	-26.6		
	FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])									
		—	—	—	—	—	—	—		

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ WATTERA

DECON FLUIDS USED
- ☒ LIQUINOX
- ☒ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE

TUBING/PUMP/BLADDER MATERIALS
- ☒ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☐ HDPE TUBING
- ☒ LDPE TUBING
- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☒ OTHER None

EQUIPMENT USED
- ☒ WL METER Solinst 100' probe
- ☐ PID
- ☒ WQ METER YSI MPS 556
- ☒ TURB. METER Hach 2100P
- ☒ PUMP Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3 X 40ml	Y	N	See above

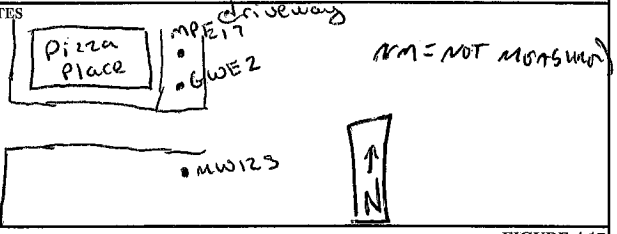
PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	X	
NO-PURGE METHOD UTILIZED		X

NUMBER OF GALLONS GENERATED: 45.5

If yes, purged approximately 1 standing volume prior to sampling or NA- mL for this sample location.

SKETCH/NOTES



NM = NOT MEASURED

Sampler Signature: Jeri Kiburz Print Name: Jeri Kiburz

Checked By: RCM Date: 7/30/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing RD		LOCATION ID: MPE-17	DATE: July 10, 2012 / July 11, 2012
PROJECT NUMBER: 3612112216-03.01		START TIME: 1257 / 0925	END TIME: 1550 / 0951
SAMPLE ID: 828103MPE17010[illegible]	SAMPLE TIME: 0945 (07-11-12)	SITE NAME/NUMBER: 828106	PAGE: 2 OF 2

WELL DIAMETER (INCHES): [ ] 1 [ ] 2 [X] 4 [ ] 6 [ ] 8 [ ] OTHER

TUBING ID (INCHES): [ ] 1/8 [X] 1/4 [ ] 3/8 [ ] 1/2 [ ] 5/8 [ ] OTHER

MEASUREMENT POINT (MP): [✓] TOP OF RISER (TOR) [ ] TOP OF CASING (TOC) [ ] OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	✓		
CASING			
LOCKED		✓	
COLLAR	✓		

INITIAL DTW (BMP)	6.25 FT	FINAL DTW (BMP)	12.51 FT	PROT. CASING STICKUP (AGS)	NM FT	TOC/TOR DIFFERENCE	NM FT
WELL DEPTH (BMP)	13.25 FT	SCREEN LENGTH (Historical)	7.5 FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	7 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	4.4 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	4.59 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	5.58 GAL	DRAWDOWN/ TOTAL PURGED		PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
7/10/12	BEGIN PURGING									
1437	10.39	385	17.28	1.116	7.09	0.69	2.78	-27.4		
1442	10.68	385	16.97	1.123	7.07	0.70	2.21	-27.2		
1447	10.81	115	17.57	1.118	7.05	0.68	1.36	-27.2		
1452	10.85	100	18.39	1.119	7.05	0.77	0.17	-26.9		
1457	10.88	100	18.89	1.120	7.04	0.84	1.47	-26.3		
1502	10.93	100	19.19	1.121	7.04	0.86	1.55	-26.2		Increased purge
1507	11.15	475	16.65	1.126	7.04	0.90	1.95	-25.2		rate to purge dry
1512	11.50	460	16.47	1.121	7.04	0.66	2.45	-26.9		
1517	12.02	450	16.41	1.120	7.06	0.57	6.46	-27.5		
1522	12.51	450	16.75	1.122	7.06	0.54	75.6	-27.9		
7/11/12										
0928	Began Purging		DTW 7.61'							
0931	7.82	155	17.33	1.168	7.06	3.24	7.71	-56.7		
0936	8.03	160	17.16	1.166	7.06	1.66	6.82	-58.9		
0941	8.27	160	17.17	1.164	7.07	1.74	6.38	-56.6		
									~	12' bfor
FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])			17 (17.2)	1.16 (1.164)	7.1	1.7	6.4	-57		

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED
[X] PERISTALTIC	[X] LIQUINOX	[X] SILICON TUBING	[ ] S. STEEL PUMP MATERIAL	[X] WL METER: Solinst 100' probe
[ ] SUBMERSIBLE	[X] DEIONIZED WATER	[ ] TEFLON TUBING	[ ] PVC PUMP MATERIAL	[ ] PID:
[ ] BLADDER	[ ] POTABLE WATER	[ ] TEFLON LINED TUBING	[ ] GEOPROBE SCREEN	[X] WQ METER: YSI MPS 556
[ ] WATTERA	[ ] NITRIC ACID	[ ] HDPE TUBING	[ ] TEFLON BLADDER	[X] TURB. METER: Hach 2100P
	[ ] HEXANE	[X] LDPE TUBING	[X] OTHER: None	[X] PUMP: Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[X]	Volatile Organic Compound	8260B	N	HCl/4 C	3 X 40ml	Y	N	See above

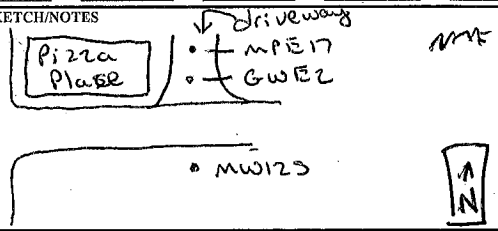
PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	[X]	[ ]
NO-PURGE METHOD UTILIZED	[ ]	[X]

NUMBER OF GALLONS GENERATED: ~5.5

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES



NM NOT MEASURED

Sampler Signature: [signature] Print Name: Jeri Kibura

Checked By: RCM Date: 7/30/12

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FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME		LOCATION ID	DATE
Dinaburg Distributing RD		MPE ~~MW~~-18	July 10, 2012
PROJECT NUMBER		**START TIME**	**END TIME**
3612112216-03.01		1125	0825 7/11/12
SAMPLE ID	**SAMPLE TIME**	**SITE NAME/NUMBER**	**PAGE**
828103-MPE18010	0825 (7/11/12)	828106	1 OF 3

WELL DIAMETER (INCHES): ☐ 1 ☐ 2 ☒ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☑ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED		X	
COLLAR	X		

INITIAL DTW (BMP)	6.80 FT	FINAL DTW (BMP)	9.9 FT	PROT. CASING STICKUP (AGS)	~~-0.6~~ cite FT	TOC/TOR DIFFERENCE	-0.6 FT
WELL DEPTH (BMP)	10.0 FT	SCREEN LENGTH	8 FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	3.2 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	2.07 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	2.1 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	~~2.1~~ 1.56 GAL	DRAWDOWN/ TOTAL PURGED	~~0.96~~ 1.3 cite	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1130	BEGIN PURGING	Pumping @ max (300 RPM) ≈ 1 min. Cleared up.								
1135	7.12	150	17.21	1.013	6.91	41.1	—	85.4	~9'	
1140	7.26	"	17.25	1.011	6.87	18.7	298	67.9		
1145	~~7.51~~	4	17.39	1.016	6.84	23.8	319	63.0		
1150	7.62	100	17.53	1.018	6.84	23.4	803	62.4		
1155	7.81	100	17.50	1.016	6.83	24.5	71000	61.6		
1200	7.99	100	17.38	1.012	6.83	21.4	75	61.2		
1205	8.12	"	17.37	1.012	6.83	22.3	22	61.0		
1210	8.28	"	17.39	1.012	6.83	20.6	19	60.7		
1215	8.42	"	17.65	1.017	6.83	17.8	15	60.2		
1220	8.57	"	17.88	1.020	6.86	16.5	16	59.7		
1225	8.69	"	17.97	1.020	6.88	13.7	11	59.3		
1230	8.79	"	18.01	1.019	6.89	13.4	9	59.1		
1235	8.92	"	18.03	1.016	6.89	12.8	7	59.4		
1240	9.00	"	17.94	1.014	6.89	11.4	6.27	59.6		
1245	Turned to max	Discharge - Purging to Dry								
1255	Well is making water ✓		9.88							

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

	16	~~1.079~~ 1.05	7.2	4.7	173	~~180~~ 184	

TEMP.: Nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP
- [X] PERISTALTIC
- [ ] SUBMERSIBLE
- [ ] BLADDER
- [ ] WATTERA

DECON FLUIDS USED
- [X] LIQUINOX
- [X] DEIONIZED WATER
- [ ] POTABLE WATER
- [ ] NITRIC ACID
- [ ] HEXANE

TUBING/PUMP/BLADDER MATERIALS
- [X] SILICON TUBING
- [ ] TEFLON TUBING
- [ ] TEFLON LINED TUBING
- [ ] HDPE TUBING
- [X] LDPE TUBING
- [ ] S. STEEL PUMP MATERIAL
- [ ] PVC PUMP MATERIAL
- [ ] GEOPROBE SCREEN
- [ ] TEFLON BLADDER
- [X] OTHER None

EQUIPMENT USED
- [X] WL METER Solinst 100' probe
- [ ] PID
- [X] WQ METER YSI MPS 556
- [X] TURB. METER Hach 2100P
- [X] PUMP Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3x40mL	Yes	NO	See above

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	X	
NO-PURGE METHOD UTILIZED		X

NUMBER OF GALLONS GENERATED: 21.6

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES

☐ Sampled after purging Dry & allowed to Recharge over night.

Sampler Signature: Charles H. Lyman

Print Name: Charles H. Lyman

Checked By: RCM

Date: 7/30/12

MACTEC
511 Congress Street, Portland Maine 04101

FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME		LOCATION ID		DATE	
Dinaburg Distributing RD		MPE-18		July 10, 2012	
PROJECT NUMBER		START TIME		END TIME	
3612112216-03.01				825 (7/11/12	
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER		PAGE	
828103-MPE18010	0825 (7/11/12)	828106		2 OF 3	

WELL DIAMETER (INCHES): ☐ 1 ☐ 2 ☒ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☑ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED		✓	
COLLAR	✓		

INITIAL DTW (BMP)	6.80 FT	FINAL DTW (BMP)	9.9 FT	PROT. CASING STICKUP (AGS)	NA FT	TOC/TOR DIFFERENCE	-0.6 FT
WELL DEPTH (BMP)	10.0 FT	SCREEN LENGTH	8 FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	3.2 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	2.03 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	2.1 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	~1.6 GAL	DRAWDOWN/ TOTAL PURGED	1.3	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
	BEGIN PURGING									
1300	9.88	~100	18.78	1.003	6.86	13.5	71000	60.5	~9'	
1305	9.90	50	18.41	1.011	6.99	16.2	71000	59.3	↓	
~~1310~~	~~9.92~~	CHG								
1315	stopped	low	flow	ATTEN.	(75 ml/min)		Purged to dry.			

Charles H. Lyman 7/10/12

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED	
X PERISTALTIC	X LIQUINOX	X SILICON TUBING	☐ S. STEEL PUMP MATERIAL	X WL METER	Solinst 100' probe
☐ SUBMERSIBLE	X DEIONIZED WATER	☐ TEFLON TUBING	☐ PVC PUMP MATERIAL	☐ PID	
☐ BLADDER	☐ POTABLE WATER	☐ TEFLON LINED TUBING	☐ GEOPROBE SCREEN	X WQ METER	YSI MPS 556
☐ WATTERA	☐ NITRIC ACID	☐ HDPE TUBING	☐ TEFLON BLADDER	X TURB. METER	Hach 2100P
	☐ HEXANE	X LDPE TUBING	X OTHER None	X PUMP	Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3x40ml	yes	NO	See above

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	X	
NO-PURGE METHOD UTILIZED		X

NUMBER OF GALLONS GENERATED: ~1.6

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES

See page 1 of 3.

Charles H. Lyman
Sampler Signature:

Charles H. Lyman
Print Name:

Checked By: 7/30/12

Date: 7/30/12

MACTEC
511 Congress Street, Portland Maine 04101

FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME		LOCATION ID	DATE
Dinaburg Distributing RD		MPE-18	July 11, 2012
PROJECT NUMBER		START TIME	END TIME
3612112216-03.01		8:00	8:25
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
828103 MPE1B010	8:25	828106	3 OF 3

WELL DIAMETER (INCHES): ☐ 1 ☐ 2 ☒ 4 ☐ 6 ☐ 8 ☐ OTHER

TUBING ID (INCHES): ☐ 1/8 ☒ 1/4 ☐ 3/8 ☐ 1/2 ☐ 5/8 ☐ OTHER

MEASUREMENT POINT (MP): ☒ TOP OF RISER (TOR) ☐ TOP OF CASING (TOC) ☐ OTHER

WELL INTEGRITY	YES	NO	N/A
CAP	✓		
CASING	✓		
LOCKED		✓	
COLLAR	✓		

INITIAL DTW (BMP)	7.11 FT	FINAL DTW (BMP)	9.9 FT	PROT. CASING STICKUP (AGS)	NA FT	TOC/TOR DIFFERENCE	-0.6 FT
WELL DEPTH (BMP)	10.0 FT	SCREEN LENGTH	8 FT	PID AMBIENT AIR	NA PPM	REFILL TIMER SETTING	NA SEC
WATER COLUMN	2.89 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	2.03 GAL	PID WELL MOUTH	NA PPM	DISCHARGE TIMER SETTING	NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	2" DIA GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.5 GAL	DRAWDOWN/ TOTAL PURGED	1.3	PRESSURE TO PUMP	NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O_2 (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
8:00	BEGIN PURGING									
8:05	7.65	175	15.76	1.082	7.04	5.79	277	213.4		
8:10	7.85	175	15.90	1.081	7.06	5.26	237	204.8		
8:15	8.03	125	16.07	1.080	7.12	5.04	196	194.7		
8:20	8.25	125	16.13	1.079	7.16	4.69	173	184.0	~ 9.5 ft	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

	16	1.08	7.2	4.7	178	180

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP	DECON FLUIDS USED	TUBING/PUMP/BLADDER MATERIALS		EQUIPMENT USED
☒ PERISTALTIC	☑ LIQUINOX	☒ SILICON TUBING	☐ S. STEEL PUMP MATERIAL	☒ WL METER Solinst 100' probe
☐ SUBMERSIBLE	☑ DEIONIZED WATER	☐ TEFLON TUBING	☐ PVC PUMP MATERIAL	☐ PID
☐ BLADDER	☐ POTABLE WATER	☐ TEFLON LINED TUBING	☐ GEOPROBE SCREEN	☒ WQ METER YSI MPS 556
☐ WATTERA	☐ NITRIC ACID	☐ HDPE TUBING	☐ TEFLON BLADDER	☒ TURB. METER Hach 2100P
	☐ HEXANE	☒ LDPE TUBING	☒ OTHER None	☒ PUMP Geopump

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	Volatile Organic Compound	8260B	N	HCl/4 C	3x40ml	YES	NO	See above

PURGE OBSERVATIONS

	YES	NO
PURGE WATER CONTAINERIZED	X	
NO-PURGE METHOD UTILIZED		X

NUMBER OF GALLONS GENERATED: -1.6

If yes, purged approximately 1 standing volume prior to sampling or NA mL for this sample location.

SKETCH/NOTES

see page 1 of 3,

Sampler Signature: Print Name: Miller

Checked By: MCM 7/30/12 Date: 7/11/12

MACTEC
511 Congress Street, Portland Maine 04101

FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

ATTACHMENT 2

JULY 2012 DATA USABILITY SUMMARY REPORTS, INCLUDING LABORATORY ANALYTICAL REPORT

DATA USABILITY SUMMARY REPORT
JULY 2012 GROUNDWATER SAMPLING PROGRAM
DINABURG DISTRIBUTING SITE
ROCHESTER, NEW YORK

1.0 INTRODUCTION

Groundwater samples were collected on July 9 through July 11, 2012 at the Dinaburg Distributing Site (Site) in Rochester, New York and submitted to Columbia Analytical Services in Rochester, New York. Samples were analyzed for volatile organic compounds (VOCs) by USEPA Method 8260C and reported in sample delivery group (SDG) R1204414. A listing of samples included in this data usability summary report is presented in Table 1. A summary of the analytical results is presented in Table 2. A summary of sample results qualified during this review is presented in Table 3 (Summary of Data Validation Actions). Tentatively identified compound (TICs) were not evaluated or reported by the laboratory for these samples.

Deliverables by the laboratory included a Category B deliverable as defined in the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocols (NYSDEC, 2005).

A project chemist review was completed based on NYSDEC Division of Environmental Remediation guidance for Data Usability Summary Reports (NYSDEC, 2010). Quality control (QC) limits from USEPA Region 2 validation guidelines (USEPA, 2008) were used during the data evaluation unless noted otherwise. The project chemist review included evaluations of:

- Data Package Narrative Review
- Data Package Completeness and COC records (Table 1 verification)
- Sample Preservation and Holding Times
- Initial and Continuing Calibration (including tunes for GC/MS)
- QC Blanks
- Laboratory Control Samples (LCS)
- Matrix Spike/Matrix Spike Duplicates (MS/MSD)
- Surrogate Spikes (if applicable)
- Internal Standard Response and Retention Times
- Field Duplicates
- Raw Data (chromatograms), Calculation Checks and Transcription Verifications
- Reporting Limits
- Electronic Data Qualification and Verification

U = target analyte is not detected at the reported detection limit
J = concentration is estimated
UJ = target analyte is not detected at the reported detection limit and is estimated
D = Result reported from a secondary dilution analysis

Results are interpreted to be usable as reported by the laboratory unless discussed in the following sections.

2.0 VOLATILE ORGANIC COMPOUNDS (VOCS) by METHOD 8260B

Continuing Calibration Standards

The USEPA Region 2 control limit of 20 percent for the percent difference (%D) calculated between the initial calibration average relative response factor and the continuing calibration response factor was used to evaluate the lab data.

In the continuing calibration analyzed on July 12, 2012 (11:37) and July 13, 2012 (09:46), the following compounds had a %D outside the control limit: 2-butanone (-21 and -21) and acetone (-22 and -23). Results for 2-butanone and acetone were qualified as estimated (J/UJ) in associated samples.

In the continuing calibration analyzed on July 13, 2012 (10:49), the following compounds had a %D above the control limit: 1,2,4-trichlorobenzene (-22) and methyl acetate [acetic acid methyl ester] (22). 1,2,4-Trichlorobenzene and methyl acetate were not detected in associated samples and reporting limits were qualified estimated (UJ) in the final data set.

In the continuing calibration analyzed on July 16, 2012 (12:22), the following compounds had a %D above the control limit: bromomethane (26), chloromethane (25), and methyl acetate (22). Bromomethane, chloromethane, and methyl acetate were not detected in associated samples and reporting limits were qualified estimated (UJ) in the final data set.

Matrix Spike/Matrix Spike Duplicates (MS/MSD)

Sample 828103-MW12S016 was submitted for MS/MSD analysis. The laboratory also performed matrix spike analyses (batch QC) on field samples 828103-MPE06010 and 828103-MPE11010D. The USEPA Region 2 percent recovery control limits of 70 – 130 (RPD of 20) were used to evaluate the MS/MSD results.

The percent recovery of bromomethane (65) and RPD of 34 between the MS and MSD percent recoveries were outside of control limits in the spikes analyzed on 828103-MW12S016. Bromomethane was not detected in sample 828103-MW12S016 and reporting limit was qualified estimated (UJ) in the final data set.

The percent recoveries of the following compounds were outside of the control limits in the MS/MSD analyzed on sample 828103-MPE06010: acetone (138 and 137), methyl acetate (131 and 132), and trichloroethene (36). Acetone and methyl acetate were not detected in the un-spiked sample and no qualification action was necessary. The final result for trichloroethene at 2800 ug/L was qualified estimated (J) in sample 828103-MPE06010.

The percent recoveries of the following compounds were outside of the control limits in the MS/MSD analyzed on sample 828103-MPE11010D: methyl acetate (131 and 131), trichloroethene (26), and tetrachloroethene (46). Methyl acetate was not detected in the un-spiked sample and no qualification action was necessary. The final results for trichloroethene at 8400 µg/L and tetrachloroethene at 6200 µg/L were qualified

estimated (J) in sample 828103-MPE11010D. Qualified results are summarized in Table 3 with validation reason codes MS-L and/or MS-RPD.

Reporting Limits - Dilutions

The laboratory analyzed the following samples at a dilution due to elevated levels of target compounds. For target compounds that were not detected in diluted samples, the reporting limits were elevated by a factor equal to the dilution factor for the sample analysis:

field_sample_id	qc_code	lab_sample_id	Dilution Factor
828103GPW01013	FS	R1204414-001	20
828103GPW02012	FS	R1204414-002	100
828103-GWE01019	FS	R1204414-015	10
828103-GWE03021	FS	R1204414-017	250
828103-MPE03010	FS	R1204414-020	10
828103-MPE04010	FS	R1204414-021	100
828103-MPE05010	FS	R1204414-022	2
828103-MPE06010	FS	R1204414-023	20
828103-MPE08010	FS	R1204414-025	25
828103-MPE09010	FS	R1204414-026	10
828103-MPE10010	FS	R1204414-027	5
828103-MPE11010	FS	R1204414-028	50
828103-MPE11010D	FD	R1204414-029	50
828103-MPE13010	FS	R1204414-031	2
828103-MPE15010	FS	R1204414-033	2
828103-MPE16010	FS	R1204414-034	500
828103-MPE18010	FS	R1204414-036	200
828103-MW01015	FS	R1204414-003	10
828103-MW03010	FS	R1204414-004	25
828103-MW03C028	FS	R1204414-005	25
828103-MW03C028D	FD	R1204414-006	25
828103-MW10K018	FS	R1204414-008	5
828103-MW13K016	FS	R1204414-013	100
828103-MW14K019	FS	R1204414-014	50

Reference:

New York State Department of Environmental Conservation (NYSDEC), 2005. "Analytical Services Protocols"; July 2005.

New York State Department of Environmental Conservation (NYSDEC), 2010. "Technical Guidance for Site Investigation and Remediation-Appendix 2B"; DER-10; Division of Environmental Remediation; May 2010.

USEPA Region 2, 2008. "Validating Volatile Organic Compounds by SW-846 Method 8260B"; SOP # HW-24, Revision 2, Hazardous Waste Support Branch; August 2008.

Data Validator: Tige Cunningham, NRCC-EAC

Date: 8/6/2012

Reviewed by Chris Ricardi, NRCC-EAC
Quality Assurance Officer

Date: 8/20/2012

Table 1 - Sample Summary
JULY 2012 GROUNDWATER SAMPLING PROGRAM
DINABURG DISTRIBUTING SITE
ROCHESTER, NEW YORK

					Class	VOC
					Analysis Method	SW8260C
					Fraction	T
SDG	Media	Location	Sample Date	Sample ID	Qc Code	Sampled
R1204414	GW	GPW-01	7/10/2012	828103GPW01013	FS	49
R1204414	GW	GPW-02	7/10/2012	828103GPW02012	FS	49
R1204414	GW	GWE-1	7/10/2012	828103-GWE01019	FS	49
R1204414	GW	GWE-2	7/10/2012	828103-GWE02022	FS	49
R1204414	GW	GWE-3	7/10/2012	828103-GWE03021	FS	49
R1204414	GW	MPE-1	7/9/2012	828103-MPE01010	FS	49
R1204414	GW	MPE-10	7/11/2012	828103-MPE10010	FS	49
R1204414	GW	MPE-11	7/11/2012	828103-MPE11010	FS	49
R1204414	GW	MPE-11	7/11/2012	828103-MPE11010D	FD	49
R1204414	GW	MPE-12	7/11/2012	828103-MPE12010	FS	49
R1204414	GW	MPE-13	7/11/2012	828103-MPE13010	FS	49
R1204414	GW	MPE-14	7/10/2012	828103-MPE14010	FS	49
R1204414	GW	MPE-15	7/11/2012	828103-MPE15010	FS	49
R1204414	GW	MPE-16	7/10/2012	828103-MPE16010	FS	49
R1204414	GW	MPE-17	7/11/2012	828103-MPE17010	FS	49
R1204414	GW	MPE-18	7/11/2012	828103-MPE18010	FS	49
R1204414	GW	MPE-2	7/9/2012	828103-MPE02010	FS	49
R1204414	GW	MPE-3	7/9/2012	828103-MPE03010	FS	49
R1204414	GW	MPE-4	7/9/2012	828103-MPE04010	FS	49
R1204414	GW	MPE-5	7/10/2012	828103-MPE05010	FS	49
R1204414	GW	MPE-6	7/10/2012	828103-MPE06010	FS	49
R1204414	GW	MPE-7	7/10/2012	828103-MPE07010	FS	49
R1204414	GW	MPE-8	7/9/2012	828103-MPE08010	FS	49
R1204414	GW	MPE-9	7/11/2012	828103-MPE09010	FS	49
R1204414	GW	MW-01	7/9/2012	828103-MW01015	FS	49
R1204414	GW	MW-03	7/10/2012	828103-MW03010	FS	49
R1204414	GW	MW-03C	7/10/2012	828103-MW03C028	FS	49
R1204414	GW	MW-03C	7/10/2012	828103-MW03C028D	FD	49
R1204414	GW	MW-06	7/10/2012	828103-MW06016	FS	49
R1204414	GW	MW-10K	7/11/2012	828103-MW10K018	FS	49
R1204414	GW	MW-12K	7/11/2012	828103-MW12S016	FS	49
R1204414	GW	MW-12K	7/11/2012	828103-MW12S016D	FD	49
R1204414	GW	MW-13K	7/9/2012	828103-MW13K016	FS	49
R1204414	GW	MW-14K	7/9/2012	828103-MW14K019	FS	49
R1204414	BW	QC	7/9/2012	828103-TB070912	TB	49

Notes:
Number listed under method indicates number of target analytes reported.

P:\Projects\nysdec1\Contract D007619\Projects\Dinaburg - RD\3.0_Site_Data\3.4_Test_Results\Validation Files\
Dinaburg_R1204414_Table_1-rev1
Produced byL BJS 8/1/12
Checked by: TLC 8/13/12

Table 2 - Results Summary
JULY 2012 GROUNDWATER SAMPLING PROGRAM
DINABURG DISTRIBUTING SITE
ROCHESTER, NEW YORK

		Sample Delivery Group	R1204414		R1204414		R1204414		R1204414		R1204414	
		Location	GPW-01		GPW-02		GWE-1		GWE-2		GWE-3	
		Sample Date	7/10/2012		7/10/2012		7/10/2012		7/10/2012		7/10/2012	
		Sample ID	828103GPW01013		828103GPW02012		828103-GWE01019		828103-GWE02022		828103-GWE03021	
		Qc Code	FS		FS		FS		FS		FS	
Analysis	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,1,1-Trichloroethane	ug/l	20	U	100	U	4.3	J	1	U	250	U
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	1,1,2-Trichloroethane	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	1,1-Dichloroethane	ug/l	20	U	100	U	20		2		250	U
SW8260C	1,1-Dichloroethene	ug/l	20	U	100	U	14		1.2		250	U
SW8260C	1,2,4-Trichlorobenzene	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	1,2-Dibromo-3-chloropropane	ug/l	40	U	200	U	20	U	2	U	500	U
SW8260C	1,2-Dibromoethane	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	1,2-Dichlorobenzene	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	1,2-Dichloroethane	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	1,2-Dichloropropane	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	1,3-Dichlorobenzene	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	1,4-Dichlorobenzene	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	2-Butanone	ug/l	100	UJ	500	UJ	50	U	5	UJ	1300	U
SW8260C	2-Hexanone	ug/l	100	U	500	U	50	U	5	U	1300	U
SW8260C	4-Methyl-2-pentanone	ug/l	100	U	500	U	50	U	5	U	1300	U
SW8260C	Acetic acid, methyl ester	ug/l	200	U	1000	U	100	U	10	U	2500	U
SW8260C	Acetone	ug/l	200	UJ	1000	UJ	100	U	2.5	J	2500	U
SW8260C	Benzene	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	Bromodichloromethane	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	Bromoform	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	Bromomethane	ug/l	40	U	200	U	20	U	2	U	500	U
SW8260C	Carbon disulfide	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	Carbon tetrachloride	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	Chlorobenzene	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	Chlorodibromomethane	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	Chloroethane	ug/l	40	U	200	U	20	U	2	U	500	U
SW8260C	Chloroform	ug/l	4.4	J	68	J	10	U	1	U	250	U
SW8260C	Chloromethane	ug/l	40	U	200	U	20	U	2	U	500	U
SW8260C	Cis-1,2-Dichloroethene	ug/l	63		410		1,300		100		1,200	
SW8260C	cis-1,3-Dichloropropene	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	Cyclohexane	ug/l	40	U	200	U	20	U	2	U	500	U
SW8260C	Dichlorodifluoromethane	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	Ethyl benzene	ug/l	20	U	100	U	10	U	1	U	250	U

Table 2 - Results Summary
JULY 2012 GROUNDWATER SAMPLING PROGRAM
DINABURG DISTRIBUTING SITE
ROCHESTER, NEW YORK

		Sample Delivery Group	R1204414		R1204414		R1204414		R1204414		R1204414	
		Location	GPW-01		GPW-02		GWE-1		GWE-2		GWE-3	
		Sample Date	7/10/2012		7/10/2012		7/10/2012		7/10/2012		7/10/2012	
		Sample ID	828103GPW01013		828103GPW02012		828103-GWE01019		828103-GWE02022		828103-GWE03021	
		Qc Code	FS		FS		FS		FS		FS	
Analysis	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	Isopropylbenzene	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	Methyl cyclohexane	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	Methyl Tertbutyl Ether	ug/l	20	U	100	U	10	U	0.2	J	250	U
SW8260C	Methylene chloride	ug/l	4.8	J	100	U	10	U	1	U	250	U
SW8260C	Styrene	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	Tetrachloroethene	ug/l	6.4	J	2,400		1,900		160	D	10,000	
SW8260C	Toluene	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	trans-1,2-Dichloroethene	ug/l	20	U	100	U	8.8	J	0.97	J	250	U
SW8260C	trans-1,3-Dichloropropene	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	Trichloroethene	ug/l	2,600		16,000		970		83		38,000	
SW8260C	Trichlorofluoromethane	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	Vinyl chloride	ug/l	20	U	100	U	110		6.1		250	U
SW8260C	Xylene, o	ug/l	20	U	100	U	10	U	1	U	250	U
SW8260C	Xylenes (m&p)	ug/l	40	U	200	U	20	U	2	U	500	U

Notes:
ug/L = microgram per Liter
Qualifiers
U = not detected at the reporting limit
J = estimated concentration
UJ = not detected at the reporting limit
and the reporting limit is considered to be estimated
QC Code
FS = Field Sample
FD = Field Duplicate

Table 2 - Results Summary
JULY 2012 GROUNDWATER SAMPLING PROGRAM
DINABURG DISTRIBUTING SITE
ROCHESTER, NEW YORK

		Sample Delivery Group	R1204414		R1204414		R1204414		R1204414		R1204414	
		Location	MPE-1		MPE-10		MPE-11		MPE-11		MPE-12	
		Sample Date	7/9/2012		7/11/2012		7/11/2012		7/11/2012		7/11/2012	
		Sample ID	828103-MPE01010		828103-MPE10010		828103-MPE11010		828103-MPE11010D		828103-MPE12010	
		Qc Code	FS		FS		FS		FD		FS	
Analysis	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,1,1-Trichloroethane	ug/l	3.7		5	U	50	U	50	U	1	U
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	1,1,2-Trichloroethane	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	1,1-Dichloroethane	ug/l	1.8		5	U	50	U	50	U	1	U
SW8260C	1,1-Dichloroethene	ug/l	0.39	J	5	U	50	U	50	U	1	U
SW8260C	1,2,4-Trichlorobenzene	ug/l	1	U	5	UJ	50	U	50	U	1	UJ
SW8260C	1,2-Dibromo-3-chloropropane	ug/l	2	U	10	U	100	U	100	U	2	U
SW8260C	1,2-Dibromoethane	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	1,2-Dichlorobenzene	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	1,2-Dichloroethane	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	1,2-Dichloropropane	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	1,3-Dichlorobenzene	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	1,4-Dichlorobenzene	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	2-Butanone	ug/l	5	UJ	25	U	250	U	250	U	5	U
SW8260C	2-Hexanone	ug/l	5	U	25	U	250	U	250	U	5	U
SW8260C	4-Methyl-2-pentanone	ug/l	5	U	25	U	250	U	250	U	5	U
SW8260C	Acetic acid, methyl ester	ug/l	10	U	50	UJ	500	UJ	500	UJ	10	UJ
SW8260C	Acetone	ug/l	2	J	50	U	500	U	500	U	1.2	J
SW8260C	Benzene	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	Bromodichloromethane	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	Bromoform	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	Bromomethane	ug/l	2	U	10	U	100	UJ	100	UJ	2	U
SW8260C	Carbon disulfide	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	Carbon tetrachloride	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	Chlorobenzene	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	Chlorodibromomethane	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	Chloroethane	ug/l	2	U	10	U	100	U	100	U	2	U
SW8260C	Chloroform	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	Chloromethane	ug/l	2	U	10	U	100	UJ	100	UJ	2	U
SW8260C	Cis-1,2-Dichloroethene	ug/l	41		4.2	J	2000		2200		0.46	J
SW8260C	cis-1,3-Dichloropropene	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	Cyclohexane	ug/l	2	U	10	U	100	U	100	U	2	U
SW8260C	Dichlorodifluoromethane	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	Ethyl benzene	ug/l	1	U	5	U	50	U	50	U	1	U

Table 2 - Results Summary
JULY 2012 GROUNDWATER SAMPLING PROGRAM
DINABURG DISTRIBUTING SITE
ROCHESTER, NEW YORK

		Sample Delivery Group	R1204414		R1204414		R1204414		R1204414		R1204414	
		Location	MPE-1		MPE-10		MPE-11		MPE-11		MPE-12	
		Sample Date	7/9/2012		7/11/2012		7/11/2012		7/11/2012		7/11/2012	
		Sample ID	828103-MPE01010		828103-MPE10010		828103-MPE11010		828103-MPE11010D		828103-MPE12010	
		Qc Code	FS		FS		FS		FD		FS	
Analysis	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	Isopropylbenzene	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	Methyl cyclohexane	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	Methyl Tertbutyl Ether	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	Methylene chloride	ug/l	1	U	1.2	J	50	U	50	U	1	U
SW8260C	Styrene	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	Tetrachloroethene	ug/l	45		960	D	6,200		6,200	J	21	
SW8260C	Toluene	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	trans-1,2-Dichloroethene	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	trans-1,3-Dichloropropene	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	Trichloroethene	ug/l	37		820		8,300		8,400	J	16	
SW8260C	Trichlorofluoromethane	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	Vinyl chloride	ug/l	7.5		5	U	62		61		1	U
SW8260C	Xylene, o	ug/l	1	U	5	U	50	U	50	U	1	U
SW8260C	Xylenes (m&p)	ug/l	2	U	10	U	100	U	100	U	2	U

Notes:
ug/L = microgram per Liter
Qualifiers
U = not detected at the reporting limit
J = estimated concentration
UJ = not detected at the reporting limit
and the reporting limit is considered to be estimated
QC Code
FS = Field Sample
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Table 2 - Results Summary
JULY 2012 GROUNDWATER SAMPLING PROGRAM
DINABURG DISTRIBUTING SITE
ROCHESTER, NEW YORK

		Sample Delivery Group	R1204414		R1204414		R1204414		R1204414		R1204414	
		Location	MPE-13		MPE-14		MPE-15		MPE-16		MPE-17	
		Sample Date	7/11/2012		7/10/2012		7/11/2012		7/10/2012		7/11/2012	
		Sample ID	828103-MPE13010		828103-MPE14010		828103-MPE15010		828103-MPE16010		828103-MPE17010	
		Qc Code	FS		FS		FS		FS		FS	
Analysis	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,1,1-Trichloroethane	ug/l	2	U	1	U	2	U	170	J	1.3	
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	1,1,2-Trichloroethane	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	1,1-Dichloroethane	ug/l	2	U	1	U	2	U	500	U	1	
SW8260C	1,1-Dichloroethene	ug/l	2	U	1	U	2	U	500	U	0.78	J
SW8260C	1,2,4-Trichlorobenzene	ug/l	2	UJ	1	UJ	2	UJ	500	U	1	U
SW8260C	1,2-Dibromo-3-chloropropane	ug/l	4	U	2	U	4	U	1000	U	2	U
SW8260C	1,2-Dibromoethane	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	1,2-Dichlorobenzene	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	1,2-Dichloroethane	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	1,2-Dichloropropane	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	1,3-Dichlorobenzene	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	1,4-Dichlorobenzene	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	2-Butanone	ug/l	10	U	5	U	10	U	2500	U	5	U
SW8260C	2-Hexanone	ug/l	10	U	5	U	10	U	2500	U	5	U
SW8260C	4-Methyl-2-pentanone	ug/l	10	U	5	U	10	U	2500	U	5	U
SW8260C	Acetic acid, methyl ester	ug/l	20	UJ	10	UJ	20	UJ	5000	UJ	10	UJ
SW8260C	Acetone	ug/l	2.5	J	1.5	J	2	J	5000	U	10	U
SW8260C	Benzene	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	Bromodichloromethane	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	Bromoform	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	Bromomethane	ug/l	4	U	2	U	4	U	1000	UJ	2	UJ
SW8260C	Carbon disulfide	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	Carbon tetrachloride	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	Chlorobenzene	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	Chlorodibromomethane	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	Chloroethane	ug/l	4	U	2	U	4	U	1000	U	2	U
SW8260C	Chloroform	ug/l	2	U	1	U	2	U	500	U	0.28	J
SW8260C	Chloromethane	ug/l	4	U	2	U	4	U	1000	UJ	2	UJ
SW8260C	Cis-1,2-Dichloroethene	ug/l	6.8		1.2		10		500	U	1.4	
SW8260C	cis-1,3-Dichloropropene	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	Cyclohexane	ug/l	4	U	2	U	4	U	1000	U	2	U
SW8260C	Dichlorodifluoromethane	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	Ethyl benzene	ug/l	2	U	1	U	2	U	500	U	1	U

Table 2 - Results Summary
JULY 2012 GROUNDWATER SAMPLING PROGRAM
DINABURG DISTRIBUTING SITE
ROCHESTER, NEW YORK

		Sample Delivery Group	R1204414		R1204414		R1204414		R1204414		R1204414	
		Location	MPE-13		MPE-14		MPE-15		MPE-16		MPE-17	
		Sample Date	7/11/2012		7/10/2012		7/11/2012		7/10/2012		7/11/2012	
		Sample ID	828103-MPE13010		828103-MPE14010		828103-MPE15010		828103-MPE16010		828103-MPE17010	
		Qc Code	FS		FS		FS		FS		FS	
Analysis	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	Isopropylbenzene	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	Methyl cyclohexane	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	Methyl Tertbutyl Ether	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	Methylene chloride	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	Styrene	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	Tetrachloroethene	ug/l	630	D	57		390		59,000		9	
SW8260C	Toluene	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	trans-1,2-Dichloroethene	ug/l	0.5	J	1	U	2	U	500	U	1	U
SW8260C	trans-1,3-Dichloropropene	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	Trichloroethene	ug/l	190		80		48		2,700		4	
SW8260C	Trichlorofluoromethane	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	Vinyl chloride	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	Xylene, o	ug/l	2	U	1	U	2	U	500	U	1	U
SW8260C	Xylenes (m&p)	ug/l	4	U	2	U	4	U	1000	U	2	U

Notes:
ug/L = microgram per Liter
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and the reporting limit is considered to be estimated
QC Code
FS = Field Sample
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Table 2 - Results Summary
JULY 2012 GROUNDWATER SAMPLING PROGRAM
DINABURG DISTRIBUTING SITE
ROCHESTER, NEW YORK

		Sample Delivery Group	R1204414		R1204414		R1204414		R1204414		R1204414	
		Location	MPE-18		MPE-2		MPE-3		MPE-4		MPE-5	
		Sample Date	7/11/2012		7/9/2012		7/9/2012		7/9/2012		7/10/2012	
		Sample ID	828103-MPE18010		828103-MPE02010		828103-MPE03010		828103-MPE04010		828103-MPE05010	
		Qc Code	FS		FS		FS		FS		FS	
Analysis	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,1,1-Trichloroethane	ug/l	150	J	2		17		93	J	6.5	
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	1,1,2-Trichloroethane	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	1,1-Dichloroethane	ug/l	200	U	0.24	J	8.8	J	120		2.4	
SW8260C	1,1-Dichloroethene	ug/l	200	U	1	U	5.4	J	41	J	2	U
SW8260C	1,2,4-Trichlorobenzene	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	1,2-Dibromo-3-chloropropane	ug/l	400	U	2	U	20	U	200	U	4	U
SW8260C	1,2-Dibromoethane	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	1,2-Dichlorobenzene	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	1,2-Dichloroethane	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	1,2-Dichloropropane	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	1,3-Dichlorobenzene	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	1,4-Dichlorobenzene	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	2-Butanone	ug/l	1000	U	5	UJ	50	U	500	U	10	U
SW8260C	2-Hexanone	ug/l	1000	U	5	U	50	U	500	U	10	U
SW8260C	4-Methyl-2-pentanone	ug/l	1000	U	5	U	50	U	500	U	10	U
SW8260C	Acetic acid, methyl ester	ug/l	2000	UJ	10	U	100	U	1000	UJ	20	UJ
SW8260C	Acetone	ug/l	2000	U	10	UJ	100	U	1000	U	20	U
SW8260C	Benzene	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	Bromodichloromethane	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	Bromoform	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	Bromomethane	ug/l	400	UJ	2	U	20	U	200	UJ	4	UJ
SW8260C	Carbon disulfide	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	Carbon tetrachloride	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	Chlorobenzene	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	Chlorodibromomethane	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	Chloroethane	ug/l	400	U	2	U	20	U	200	U	4	U
SW8260C	Chloroform	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	Chloromethane	ug/l	400	UJ	2	U	20	U	200	UJ	4	UJ
SW8260C	Cis-1,2-Dichloroethene	ug/l	630		3.1		28		7200		17	
SW8260C	cis-1,3-Dichloropropene	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	Cyclohexane	ug/l	400	U	2	U	20	U	71	J	4	U
SW8260C	Dichlorodifluoromethane	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	Ethyl benzene	ug/l	200	U	1	U	10	U	31	J	2	U

Table 2 - Results Summary
JULY 2012 GROUNDWATER SAMPLING PROGRAM
DINABURG DISTRIBUTING SITE
ROCHESTER, NEW YORK

		Sample Delivery Group	R1204414		R1204414		R1204414		R1204414		R1204414	
		Location	MPE-18		MPE-2		MPE-3		MPE-4		MPE-5	
		Sample Date	7/11/2012		7/9/2012		7/9/2012		7/9/2012		7/10/2012	
		Sample ID	828103-MPE18010		828103-MPE02010		828103-MPE03010		828103-MPE04010		828103-MPE05010	
		Qc Code	FS		FS		FS		FS		FS	
Analysis	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	Isopropylbenzene	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	Methyl cyclohexane	ug/l	200	U	1	U	10	U	47	J	2	U
SW8260C	Methyl Tertbutyl Ether	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	Methylene chloride	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	Styrene	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	Tetrachloroethene	ug/l	28,000		88		1400		17000		230	
SW8260C	Toluene	ug/l	200	U	1	U	10	U	23	J	2	U
SW8260C	trans-1,2-Dichloroethene	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	trans-1,3-Dichloropropene	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	Trichloroethene	ug/l	27,000		23		330		6,400		71	
SW8260C	Trichlorofluoromethane	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	Vinyl chloride	ug/l	170	J	1	U	10	U	320		2	U
SW8260C	Xylene, o	ug/l	200	U	1	U	10	U	100	U	2	U
SW8260C	Xylenes (m&p)	ug/l	400	U	2	U	20	U	110	J	4	U

Notes:
ug/L = microgram per Liter
Qualifiers
U = not detected at the reporting limit
J = estimated concentration
UJ = not detected at the reporting limit
and the reporting limit is considered to be estimated
QC Code
FS = Field Sample
FD = Field Duplicate

Table 2 - Results Summary
JULY 2012 GROUNDWATER SAMPLING PROGRAM
DINABURG DISTRIBUTING SITE
ROCHESTER, NEW YORK

	Sample Delivery Group		R1204414		R1204414		R1204414		R1204414		R1204414	
	Location		MPE-6		MPE-7		MPE-8		MPE-9		MW-01	
	Sample Date		7/10/2012		7/10/2012		7/9/2012		7/11/2012		7/9/2012	
	Sample ID		828103-MPE06010		828103-MPE07010		828103-MPE08010		828103-MPE09010		828103-MW01015	
	Qc Code		FS		FS		FS		FS		FS	
Analysis	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,1,1-Trichloroethane	ug/l	1500		24		1100		10	U	10	U
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	20	U	1	U	25	U	10	U	10	U
SW8260C	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	20	U	1	U	25	U	10	U	10	U
SW8260C	1,1,2-Trichloroethane	ug/l	20	U	1	U	25	U	10	U	10	U
SW8260C	1,1-Dichloroethane	ug/l	160		10		360		10	U	4.1	J
SW8260C	1,1-Dichloroethene	ug/l	32		2		15	J	10	U	4.9	J
SW8260C	1,2,4-Trichlorobenzene	ug/l	20	UJ	1	UJ	25	UJ	10	UJ	10	U
SW8260C	1,2-Dibromo-3-chloropropane	ug/l	40	U	2	U	50	U	20	U	20	U
SW8260C	1,2-Dibromoethane	ug/l	20	U	1	U	25	U	10	U	10	U
SW8260C	1,2-Dichlorobenzene	ug/l	20	U	1	U	25	U	10	U	10	U
SW8260C	1,2-Dichloroethane	ug/l	20	U	1	U	25	U	10	U	10	U
SW8260C	1,2-Dichloropropane	ug/l	20	U	1	U	25	U	10	U	10	U
SW8260C	1,3-Dichlorobenzene	ug/l	20	U	1	U	25	U	10	U	10	U
SW8260C	1,4-Dichlorobenzene	ug/l	20	U	1	U	25	U	10	U	10	U
SW8260C	2-Butanone	ug/l	100	U	5	U	130	U	50	U	50	UJ
SW8260C	2-Hexanone	ug/l	100	U	5	U	130	U	50	U	50	U
SW8260C	4-Methyl-2-pentanone	ug/l	100	U	5	U	130	U	50	U	50	U
SW8260C	Acetic acid, methyl ester	ug/l	200	UJ	10	UJ	250	UJ	100	UJ	100	U
SW8260C	Acetone	ug/l	200	U	3.5	J	250	U	100	U	100	UJ
SW8260C	Benzene	ug/l	20	U	0.67	J	25	U	10	U	10	U
SW8260C	Bromodichloromethane	ug/l	20	U	1	U	25	U	10	U	10	U
SW8260C	Bromoform	ug/l	20	U	1	U	25	U	10	U	10	U
SW8260C	Bromomethane	ug/l	40	U	2	U	50	U	20	U	20	U
SW8260C	Carbon disulfide	ug/l	20	U	1	U	25	U	10	U	10	U
SW8260C	Carbon tetrachloride	ug/l	20	U	1	U	25	U	10	U	10	U
SW8260C	Chlorobenzene	ug/l	20	U	1	U	25	U	10	U	10	U
SW8260C	Chlorodibromomethane	ug/l	20	U	1	U	25	U	10	U	10	U
SW8260C	Chloroethane	ug/l	40	U	2	U	50	U	20	U	20	U
SW8260C	Chloroform	ug/l	20	U	1	U	25	U	10	U	10	U
SW8260C	Chloromethane	ug/l	40	U	2	U	50	U	20	U	20	U
SW8260C	Cis-1,2-Dichloroethene	ug/l	190		160		970		34		1700	
SW8260C	cis-1,3-Dichloropropene	ug/l	20	U	1	U	25	U	10	U	10	U
SW8260C	Cyclohexane	ug/l	40	U	2.1		50	U	20	U	20	U
SW8260C	Dichlorodifluoromethane	ug/l	20	U	1	U	25	U	10	U	10	U
SW8260C	Ethyl benzene	ug/l	20	U	1	U	25	U	10	U	10	U

Table 2 - Results Summary
JULY 2012 GROUNDWATER SAMPLING PROGRAM
DINABURG DISTRIBUTING SITE
ROCHESTER, NEW YORK

		Sample Delivery Group	R1204414		R1204414		R1204414		R1204414		R1204414	
		Location	MPE-6		MPE-7		MPE-8		MPE-9		MW-01	
		Sample Date	7/10/2012		7/10/2012		7/9/2012		7/11/2012		7/9/2012	
		Sample ID	828103-MPE06010		828103-MPE07010		828103-MPE08010		828103-MPE09010		828103-MW01015	
		Qc Code	FS		FS		FS		FS		FS	
Analysis	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	Isopropylbenzene	ug/l	20	U	1	U	25	U	10	U	10	U
SW8260C	Methyl cyclohexane	ug/l	20	U	1.1		25	U	10	U	10	U
SW8260C	Methyl Tertbutyl Ether	ug/l	20	U	1	U	25	U	10	U	10	U
SW8260C	Methylene chloride	ug/l	20	U	1	U	25	U	10	U	2.2	J
SW8260C	Styrene	ug/l	20	U	1	U	25	U	10	U	10	U
SW8260C	Tetrachloroethene	ug/l	1300		100		3100		1100		71	
SW8260C	Toluene	ug/l	20	U	1	U	25	U	10	U	10	U
SW8260C	trans-1,2-Dichloroethene	ug/l	20	U	0.54	J	25	U	10	U	19	
SW8260C	trans-1,3-Dichloropropene	ug/l	20	U	1	U	25	U	10	U	10	U
SW8260C	Trichloroethene	ug/l	2,800	J	94		2,400		3,600	D	130	
SW8260C	Trichlorofluoromethane	ug/l	20	U	1	U	25	U	10	U	10	U
SW8260C	Vinyl chloride	ug/l	20	U	3.4		25	U	10	U	300	
SW8260C	Xylene, o	ug/l	20	U	1	U	25	U	10	U	10	U
SW8260C	Xylenes (m&p)	ug/l	40	U	2	U	50	U	20	U	20	U

Notes:
ug/L = microgram per Liter
Qualifiers
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J = estimated concentration
UJ = not detected at the reporting limit
and the reporting limit is considered to be estimated
QC Code
FS = Field Sample
FD = Field Duplicate

Table 2 - Results Summary
JULY 2012 GROUNDWATER SAMPLING PROGRAM
DINABURG DISTRIBUTING SITE
ROCHESTER, NEW YORK

		Sample Delivery Group	R1204414		R1204414		R1204414		R1204414		R1204414	
		Location	MW-03		MW-03C		MW-03C		MW-06		MW-10K	
		Sample Date	7/10/2012		7/10/2012		7/10/2012		7/10/2012		7/11/2012	
		Sample ID	828103-MW03010		828103-MW03C028		828103-MW03C028D		828103-MW06016		828103-MW10K018	
		Qc Code	FS		FS		FD		FS		FS	
Analysis	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,1,1-Trichloroethane	ug/l	6.3	J	25	U	25	U	0.47	J	5	U
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	1,1,2-Trichloroethane	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	1,1-Dichloroethane	ug/l	25	U	49		50		1		4.1	J
SW8260C	1,1-Dichloroethene	ug/l	25	U	25	U	25	U	1	U	2	J
SW8260C	1,2,4-Trichlorobenzene	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	1,2-Dibromo-3-chloropropane	ug/l	50	U	50	U	50	U	2	U	10	U
SW8260C	1,2-Dibromoethane	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	1,2-Dichlorobenzene	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	1,2-Dichloroethane	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	1,2-Dichloropropane	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	1,3-Dichlorobenzene	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	1,4-Dichlorobenzene	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	2-Butanone	ug/l	130	UJ	130	UJ	130	UJ	5	UJ	25	UJ
SW8260C	2-Hexanone	ug/l	130	U	130	U	130	U	5	U	25	U
SW8260C	4-Methyl-2-pentanone	ug/l	130	U	130	U	130	U	5	U	25	U
SW8260C	Acetic acid, methyl ester	ug/l	250	U	250	U	250	U	10	U	50	U
SW8260C	Acetone	ug/l	250	UJ	250	UJ	250	UJ	10	UJ	50	UJ
SW8260C	Benzene	ug/l	25	U	25	U	25	U	0.69	J	5	U
SW8260C	Bromodichloromethane	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	Bromoform	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	Bromomethane	ug/l	50	U	50	U	50	U	2	U	10	U
SW8260C	Carbon disulfide	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	Carbon tetrachloride	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	Chlorobenzene	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	Chlorodibromomethane	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	Chloroethane	ug/l	50	U	50	U	50	U	2	U	10	U
SW8260C	Chloroform	ug/l	21	J	9.3	J	8.8	J	1	U	5	U
SW8260C	Chloromethane	ug/l	50	U	50	U	50	U	2	U	10	U
SW8260C	Cis-1,2-Dichloroethene	ug/l	29		180		180		38		190	
SW8260C	cis-1,3-Dichloropropene	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	Cyclohexane	ug/l	50	U	50	U	50	U	2	U	10	U
SW8260C	Dichlorodifluoromethane	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	Ethyl benzene	ug/l	25	U	25	U	25	U	1	U	5	U

Table 2 - Results Summary
JULY 2012 GROUNDWATER SAMPLING PROGRAM
DINABURG DISTRIBUTING SITE
ROCHESTER, NEW YORK

		Sample Delivery Group	R1204414		R1204414		R1204414		R1204414		R1204414	
		Location	MW-03		MW-03C		MW-03C		MW-06		MW-10K	
		Sample Date	7/10/2012		7/10/2012		7/10/2012		7/10/2012		7/11/2012	
		Sample ID	828103-MW03010		828103-MW03C028		828103-MW03C028D		828103-MW06016		828103-MW10K018	
		Qc Code	FS		FS		FD		FS		FS	
Analysis	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	Isopropylbenzene	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	Methyl cyclohexane	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	Methyl Tertbutyl Ether	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	Methylene chloride	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	Styrene	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	Tetrachloroethene	ug/l	7200	D	940		950		11		77	
SW8260C	Toluene	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	trans-1,2-Dichloroethene	ug/l	25	U	25	U	25	U	0.86	J	2	J
SW8260C	trans-1,3-Dichloropropene	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	Trichloroethene	ug/l	1,300		3,500		3,500		15		490	
SW8260C	Trichlorofluoromethane	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	Vinyl chloride	ug/l	25	U	25	U	25	U	4		4.8	J
SW8260C	Xylene, o	ug/l	25	U	25	U	25	U	1	U	5	U
SW8260C	Xylenes (m&p)	ug/l	50	U	50	U	50	U	2	U	10	U

Notes:
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and the reporting limit is considered to be estimated
QC Code
FS = Field Sample
FD = Field Duplicate

Table 2 - Results Summary
JULY 2012 GROUNDWATER SAMPLING PROGRAM
DINABURG DISTRIBUTING SITE
ROCHESTER, NEW YORK

		Sample Delivery Group	R1204414		R1204414		R1204414		R1204414		R1204414	
		Location	MW-12K		MW-12K		MW-13K		MW-14K		QC	
		Sample Date	7/11/2012		7/11/2012		7/9/2012		7/9/2012		7/9/2012	
		Sample ID	828103-MW12S016		828103-MW12S016D		828103-MW13K016		828103-MW14K019		828103-TB070912	
		Qc Code	FS		FD		FS		FS		TB	
Analysis	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,1,1-Trichloroethane	ug/l	1	U	1	U	71	J	50	U	1	U
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	1,1,2-Trichloroethane	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	1,1-Dichloroethane	ug/l	1	U	1	U	34	J	50	U	1	U
SW8260C	1,1-Dichloroethene	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	1,2,4-Trichlorobenzene	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	1,2-Dibromo-3-chloropropane	ug/l	2	U	2	U	200	U	100	U	2	U
SW8260C	1,2-Dibromoethane	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	1,2-Dichlorobenzene	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	1,2-Dichloroethane	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	1,2-Dichloropropane	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	1,3-Dichlorobenzene	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	1,4-Dichlorobenzene	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	2-Butanone	ug/l	5	U	5	UJ	500	U	250	UJ	5	U
SW8260C	2-Hexanone	ug/l	5	U	5	U	500	U	250	U	5	U
SW8260C	4-Methyl-2-pentanone	ug/l	5	U	5	U	500	U	250	U	5	U
SW8260C	Acetic acid, methyl ester	ug/l	10	U	10	U	1000	U	500	U	10	U
SW8260C	Acetone	ug/l	10	U	10	UJ	1000	U	500	UJ	10	U
SW8260C	Benzene	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	Bromodichloromethane	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	Bromoform	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	Bromomethane	ug/l	2	UJ	2	U	200	U	100	U	2	U
SW8260C	Carbon disulfide	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	Carbon tetrachloride	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	Chlorobenzene	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	Chlorodibromomethane	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	Chloroethane	ug/l	2	U	2	U	200	U	100	U	2	U
SW8260C	Chloroform	ug/l	1	U	1	U	63	J	50	U	1	U
SW8260C	Chloromethane	ug/l	2	U	2	U	200	U	100	U	2	U
SW8260C	Cis-1,2-Dichloroethene	ug/l	1	U	1	U	3000		230		1	U
SW8260C	cis-1,3-Dichloropropene	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	Cyclohexane	ug/l	2	U	2	U	200	U	100	U	2	U
SW8260C	Dichlorodifluoromethane	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	Ethyl benzene	ug/l	1	U	1	U	100	U	50	U	1	U

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Dinaburg_R1204414_Table_2
Produced byL BJS 8/10/12
Checked by: TLC 8/13/12

Table 2 - Results Summary
JULY 2012 GROUNDWATER SAMPLING PROGRAM
DINABURG DISTRIBUTING SITE
ROCHESTER, NEW YORK

		Sample Delivery Group	R1204414		R1204414		R1204414		R1204414		R1204414	
		Location	MW-12K		MW-12K		MW-13K		MW-14K		QC	
		Sample Date	7/11/2012		7/11/2012		7/9/2012		7/9/2012		7/9/2012	
		Sample ID	828103-MW12S016		828103-MW12S016D		828103-MW13K016		828103-MW14K019		828103-TB070912	
		Qc Code	FS		FD		FS		FS		TB	
Analysis	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	Isopropylbenzene	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	Methyl cyclohexane	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	Methyl Tertbutyl Ether	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	Methylene chloride	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	Styrene	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	Tetrachloroethene	ug/l	1	U	1	U	18,000		670		1	U
SW8260C	Toluene	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	trans-1,2-Dichloroethene	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	trans-1,3-Dichloropropene	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	Trichloroethene	ug/l	1	U	1	U	3,200		6,700		1	U
SW8260C	Trichlorofluoromethane	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	Vinyl chloride	ug/l	1	U	1	U	390		50	U	1	U
SW8260C	Xylene, o	ug/l	1	U	1	U	100	U	50	U	1	U
SW8260C	Xylenes (m&p)	ug/l	2	U	2	U	200	U	100	U	2	U

Notes:
ug/L = microgram per Liter
Qualifiers
U = not detected at the reporting limit
J = estimated concentration
UJ = not detected at the reporting limit
and the reporting limit is considered to be estimated
QC Code
FS = Field Sample
FD = Field Duplicate

P:\Projects\nysdec1\Contract D007619\Projects\Dinaburg - RD\3.0_Site_Data\3.4_Test_Results\Validation Files\
Dinaburg_R1204414_Table_2
Produced byL BJS 8/10/12
Checked by: TLC 8/13/12

Table 3 - Qualification Summary
JULY 2012 GROUNDWATER SAMPLING PROGRAM
DINABURG DISTRIBUTING SITE
ROCHESTER, NEW YORK

SDG	Analysis Method	Lab Sample Id	Field Sample ID	Paramater Name	Lab Result	Lab Qualifier	Validated Result	Validation Qualifier	Val Reason Code	Result Units	Lab Id
R1204414	SW8260C	R1204414-001	828103GPW01013	2-Butanone	100	U	100	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-001	828103GPW01013	Acetone	200	U	200	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-002	828103GPW02012	2-Butanone	500	U	500	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-002	828103GPW02012	Acetone	1000	U	1,000	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-003	828103-MW01015	2-Butanone	50	U	50	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-003	828103-MW01015	Acetone	100	U	100	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-004	828103-MW03010	2-Butanone	130	U	130	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-004	828103-MW03010	Acetone	250	U	250	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-005	828103-MW03C028	2-Butanone	130	U	130	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-005	828103-MW03C028	Acetone	250	U	250	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-006	828103-MW03C028D	2-Butanone	130	U	130	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-006	828103-MW03C028D	Acetone	250	U	250	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-007	828103-MW06016	2-Butanone	5	U	5	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-007	828103-MW06016	Acetone	10	U	10	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-008	828103-MW10K018	2-Butanone	25	U	25	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-008	828103-MW10K018	Acetone	50	U	50	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-009	828103-MW12S016	Bromomethane	2	U	2	UJ	MS-L, MS-RPD	ug/l	CASR
R1204414	SW8260C	R1204414-010	828103-MW12S016D	2-Butanone	5	U	5	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-010	828103-MW12S016D	Acetone	10	U	10	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-014	828103-MW14K019	2-Butanone	250	U	250	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-014	828103-MW14K019	Acetone	500	U	500	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-016	828103-GWE02022	2-Butanone	5	U	5	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-016	828103-GWE02022	Acetone	2.5	J	2.5	J	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-018	828103-MPE01010	2-Butanone	5	U	5	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-018	828103-MPE01010	Acetone	2	J	2	J	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-019	828103-MPE02010	2-Butanone	5	U	5	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-019	828103-MPE02010	Acetone	10	U	10	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-021	828103-MPE04010	Acetic acid, methyl ester	1000	U	1,000	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-021	828103-MPE04010	Bromomethane	200	U	200	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-021	828103-MPE04010	Chloromethane	200	U	200	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-022	828103-MPE05010	Acetic acid, methyl ester	20	U	20	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-022	828103-MPE05010	Bromomethane	4	U	4	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-022	828103-MPE05010	Chloromethane	4	U	4	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-023	828103-MPE06010	1,2,4-Trichlorobenzene	20	U	20	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-023	828103-MPE06010	Acetic acid, methyl ester	200	U	200	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-023	828103-MPE06010	Trichloroethene	2800		2,800	J	MS-L	ug/l	CASR
R1204414	SW8260C	R1204414-024	828103-MPE07010	1,2,4-Trichlorobenzene	1	U	1	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-024	828103-MPE07010	Acetic acid, methyl ester	10	U	10	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-025	828103-MPE08010	1,2,4-Trichlorobenzene	25	U	25	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-025	828103-MPE08010	Acetic acid, methyl ester	250	U	250	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-026	828103-MPE09010	1,2,4-Trichlorobenzene	10	U	10	UJ	CCV%D	ug/l	CASR

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Dinaburg_R1204414_Table_3
Produced byL BJS 8/10/12
Checked by: TLC 8/13/12

Table 3 - Qualification Summary
JULY 2012 GROUNDWATER SAMPLING PROGRAM
DINABURG DISTRIBUTING SITE
ROCHESTER, NEW YORK

SDG	Analysis Method	Lab Sample Id	Field Sample ID	Paramater Name	Lab Result	Lab Qualifier	Validated Result	Validation Qualifier	Val Reason Code	Result Units	Lab Id
R1204414	SW8260C	R1204414-026	828103-MPE09010	Acetic acid, methyl ester	100	U	100	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-027	828103-MPE10010	1,2,4-Trichlorobenzene	5	U	5	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-027	828103-MPE10010	Acetic acid, methyl ester	50	U	50	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-028	828103-MPE11010	Acetic acid, methyl ester	500	U	500	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-028	828103-MPE11010	Bromomethane	100	U	100	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-028	828103-MPE11010	Chloromethane	100	U	100	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-029	828103-MPE11010D	Acetic acid, methyl ester	500	U	500	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-029	828103-MPE11010D	Bromomethane	100	U	100	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-029	828103-MPE11010D	Chloromethane	100	U	100	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-029	828103-MPE11010D	Tetrachloroethene	6200		6,200	J	MS-L	ug/l	CASR
R1204414	SW8260C	R1204414-029	828103-MPE11010D	Trichloroethene	8400		8,400	J	MS-L	ug/l	CASR
R1204414	SW8260C	R1204414-030	828103-MPE12010	1,2,4-Trichlorobenzene	1	U	1	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-030	828103-MPE12010	Acetic acid, methyl ester	10	U	10	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-031	828103-MPE13010	1,2,4-Trichlorobenzene	2	U	2	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-031	828103-MPE13010	Acetic acid, methyl ester	20	U	20	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-032	828103-MPE14010	1,2,4-Trichlorobenzene	1	U	1	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-032	828103-MPE14010	Acetic acid, methyl ester	10	U	10	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-033	828103-MPE15010	1,2,4-Trichlorobenzene	2	U	2	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-033	828103-MPE15010	Acetic acid, methyl ester	20	U	20	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-034	828103-MPE16010	Acetic acid, methyl ester	5000	U	5,000	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-034	828103-MPE16010	Bromomethane	1000	U	1,000	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-034	828103-MPE16010	Chloromethane	1000	U	1,000	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-035	828103-MPE17010	Acetic acid, methyl ester	10	U	10	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-035	828103-MPE17010	Bromomethane	2	U	2	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-035	828103-MPE17010	Chloromethane	2	U	2	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-036	828103-MPE18010	Acetic acid, methyl ester	2000	U	2,000	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-036	828103-MPE18010	Bromomethane	400	U	400	UJ	CCV%D	ug/l	CASR
R1204414	SW8260C	R1204414-036	828103-MPE18010	Chloromethane	400	U	400	UJ	CCV%D	ug/l	CASR

Notes:
ug/L = microgram per Liter
Qualifiers
U = not detected at the reporting limit
J = estimated concentration
UJ = not detected at the reporting limit and the reporting limit is considered to be estimated
R = Result rejected
Val reason Code
LCS-L - LCS recovery less than control limit
MS-L - MS and/or MSD recovery less than control limit
MS-RPD - MS/MSD RPD limit exceeded
CCV%D = Continuing Calibration %D exceeds control limit

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